CONTEMPORARY FINANCIAL GLOBALISATION IN HISTORICAL PERSPECTIVE: DIMENSIONS, PRECONDITIONS AND CONSEQUENCES OF THE RECENT AND UNPRECEDENTED SURGE IN GLOBAL FINANCIAL ACTIVITY

ALEXANDRE OTTONI TEATINI SALLES

A thesis submitted in partial fulfilment of the requirements of the University of Hertfordshire for the Degree of Doctor of Philosophy

The programme of research has been carried out in the Department of Statistics, Economics, Accounting & Management Science, Business School, University of Hertfordshire

October 2007

In everlasting love

Therezinha Ottoni Teatini Salles ✯16-03-1928 ✞ 04-07-1996

André Francisco Salles ✯30-11-1907 ✞ 05-08-2000

To my beloved wife Andréia Mansk

Abstract

The subject of this thesis is financial globalisation in historical perspective, and its key contribution is to demonstrate the J-curve as an alternative depiction of financial globalisation since the classical Gold Standard period. As a preliminary and essential step, some definitions and clarifications on globalisation are provided in a literature review. Then, fundamental issues are considered to assess financial globalisation, so that both the goals and the boundaries of the thesis are clearly stated.

Throughout the historical period in debate, there were two waves of financial globalisation: the first one occurring during the 1870-1914 period, and the second lasting from the end of the Bretton Woods agreements until the present day. The dominant approach in economics asserts that the degree of commercial and financial integration corresponds over time to a U-shaped pattern, i.e. markets presented high levels of integration during the forty years before WWI. Then, this integration collapsed in the years between the wars, recovering gradually after the Bretton Woods agreements until it reached again in the 1990s the same pre-1914 level of integration. The thesis approaches this model focusing on the financial side. Then, according to the U-curve, contemporary financial globalisation is not unprecedented. This thesis proposes an alternative view. In contrast to the mainstream U-curve, the empirical data provided indicates that today's financial integration is unprecedented and more pervasive in some key financial markets than it was during the pre-1914 era.

The empirical evidence provided proposes that a J-shaped pattern is a more appropriate way to interpret how financial markets have evolved since the late 19th century. The J-shape suggests that in some financial achieved a huge surge from the 1990s to 2005, surpassing the previous level of integration. So, in these markets, contemporary financial globalisation is unprecedented from the 1990s onwards. The J-curve does not mean that all financial markets became more globalised during the late 20th century in comparison to the Gold Standard era, but only some that presented the U-shape from 1870 to 1995. Qualitative aspects of the J-curve are examined. The different institutional frameworks underlying each historical period are discussed revealing that new institutional arrangements, policy changes, technological advances in ICT and a wide range of financial innovations are the key driving forces that have spurred today's financial globalisation to higher levels than in the past. Finally, the last chapter assesses the key macroeconomic implications of this new era for the world economy.

Contents

List of Figures

List of Tables

Acronyms and Abbreviations[1]

AEA	American Economic Association
AREAER	Report on Exchange Arrangements and Exchange Restrictions
BIRD	Bank of International Reconstruction
BIS	Bank for International Settlements
BOP	Balance-of-payments
CAPSTRANS	Centre for Asia Pacific Social Transformation Studies
CGG	Center for Globalization & Governance
CGSD	Center on Globalization and Sustainable Development
CHF	Swiss Frank
CIS	Commonwealth of Independent States
CRITO	Center for Research on Information Technology and Organizations
CSGR	Centre for the Study of Globalisation and Regionalisation
DIR	Research Centre for Development and International Relations
DISS	Dissertation Abstracts
DIW Berlin	German Institute for Economic Research
DSL	Digital Subscriber Line
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
EEC	European Economic Community
EMH	Efficient Markets Hypothesis
ESRC	Economic & Social Research Council
EU	European Union
FDI	Foreign Direct Investment
FDIC	Federal Deposit Insurance Corporation

[1] All acronyms and abbreviations are overtly introduced in the text.

FED	Federal Reserve System
FIH	Financial Instability Hypothesis
FPI	Foreign Portfolio Investment
FTAA	Free Trade Area of the Americas
G7	Group of Seven
G8	Group of Eight
G10	Group of Ten
GAD	Globalization and Democracy
GATT	General Agreement on Tariffs and Trade
GBP	Great Britain Pound
GCS	Centre for Globalization and Cultural Studies
GDAE	Global Development and Environment
GDP	Gross Development Product
GGP	Globalization, Growth and Poverty
GLODEM	Center for Research on Globalization and Democratic Governance
GMM	Generalized Method of Moments
GNP	Gross National Product
GPRS	Globalization of Protracted Refugee Situations
GRC	Globalization Research Center
GRC-A	Research Center-Africa
GRN	Globalization Research Network
GVC	Global Value Chain
GWCSG	George Washington Center for the Study of Globalization
HBR	Harvard Business Review
IBD	Inter-American Development Bank
ICB	International Clearing Banking

ICT	Information Communication Technology
IDE-JETRO	Institute of Developing Economies Japan External Trade Organization
IFPRI	International Food Policy Research Institute
IGO	Intergovernmental Organisation
IFS	International Financial Statistics
IMF	International Monetary Fund
IMM	International Monetary Market
INGO	International Non-governmental Organisation
IOSCO	International Organization of Securities Commissions
IPC	Industrial Performance Center
IPE	International Political Economy
ISDA	International Swaps and Derivatives Association
ISDN	Integrated Services Digital Network
IR	Interest Rate
ISI	Institute for Scientific Information
ISI	Import Substitution Industrialization
IT	Information Technology
IUFRO	Internet Union of Forest Research Organization
IV	Instrumental Variables
JEI	Journal of Economic Issues
KS	Kaminsky and Schmukler measure
LFI	Less Financially Integrated
LIIKE	Research Programme on Finnish Companies and the Challenges of Globalization
LSE	London Stock Exchange
MFA	Multi-Fiber Agreement

MFI	More Financially Integrated
MIT	Massachusetts Institute of Technology
MNC	Multinational Company
MNE	Multinational enterprise
NBER	National Bureau of Economic Research
NGO	Non-governmental Organisation
NIE	New Institutional Economics
NLLS	Non-Linear Least Squares
NSF	A National Science Foundation
NYSE	New York Stock Exchange
OECD	Organization for Economic Cooperation and Development
OED	Oxford English Dictionary
OEEC	Organisation for European Economic Cooperation
OIE	Original or Old Institutional Economics
OLS	Ordinary Least Squares
OTC	Over-the-Counter
PERI	Political Economy Research Institute
PROGRIS	Program on Globalization and Regional Innovation Systems
R&D	Research and Development
RE	Random Effects
ROPE	Review of Political Economy
RPGP	Religion, Politics and Globalization Program
SEC	Securities and Exchange Commission
SMLD	Stock Market Liberalization (Official) Date
SSCI	Social Science Citation Index
STAGE	Science, Technology, America, and the Global Economy

STG	Science, Technology and Globalization Project
SUR	Seemingly Unrelated Regressions
TCE	Transaction Cost Economics
TFP	Total Factor Productivity
TRIPs	Trade Related Intellectual Property Rights
UCLA	University of California, Los Angeles
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference for Trade and Development
UNDP	United Nations Development Programme
UNRISD	United Nations Research Institute for Social Development
US	United States
USF	University South Florida
USSR	Union of Soviet Socialist Republics
VAT	Value-added tax
WLS	Weighted Least Squares
WTO	World Trade Organization
WWI	First World War
WWII	Second World War
WWW	World Wide Web
YCSG	Yale Center for the Study of Globalization

Acknowledgments

I am deeply grateful to do my PhD under the supervision of a scholar as Professor Geoff Hodgson. I thank him for his accurate comments, encouragements and criticisms on my work and for the environment of intellectual independence he provides. I also greatly benefited from the direction and valuable discussion with my second supervisor Dr Hulya Dadvegiren. I would like to express my heartfelt gratitude and appreciation of their dedication, advice and support.
I would like to thank to Dr Arlindo Villaschi Filho, Dr Octavio Conceição and Dr David Dequech who encouraged me to do my PhD in England when I still was thinking in my "local village". When this thesis was only a research project, I greatly benefited from encouragement of Dr Russell P. Shedd. He gave me brief but quite fruitful advice. In that initial phase, Francisco Ogeda encouraged me to go ahead too. I am deeply honoured by having received advice from these two wise men.

I must thank friends whose support and warm friendship were essential to make of these years such a valuable experience for me: Letice Barbosa, Josué and Raquel Campanhã, Oliveira and Alzira Araújo, Francisco José Cordeiro Neto, Adriana and Huáscar Pessali, Cristiane, Fabiano, and Helena Dalto, Daniela and Luis Silva, Evangeline and Declan Cheng, Rose and Joe Wall, Samah and Mandhu, Philip Forbes, Oliver Spencer, Rados Voica, Rex Morton, Chris Doré, Glads and Godfrey Mhone, Soo and Pin, June and Richard, Mary and Terry, David Crawley, Colin Brokes, James Parker, Randall Staley, Trudy Hardy and Marcelo Aguiar. Moreover, throughout this period of PhD I have the fortune to meet these people in the Business School: Jeremy Ho, Michael Lesnik, Jianlu Shang, Denise Dollimore, Zhen Ye, Mariano Matilla, Francesca Gagliardi, Bola Salami, Antony Kasozi, Pam Pinnington, Georgios Katechos, Pavel Luksha, Beatrice Boulu, Grigorios Theodosopoulos and Norbert Morawetz. I am indebted also to the Business School staff for their kind and patient help, especially Ruth Grillo, Susanne Jennings, Kathy Lee, Angela Digby, Susan Grey, Mick Broadbent, and Margot Tetsell.

My colleague at the Department of Economics of the Federal University of Espírito Santo Dr Rogério Arthmar read some chapters of the thesis and gave me advice and generous encouragement. Dr Antonio Carlos Macedo Cintra and Dr Antonio Licha generously discussed key topics of the thesis and suggested me appropriate literature. The usual caveats obviously apply. I also would like to express a special thanks to Jeremy and the librarians of The British Library, and the librarians at the London School of Economics library for being quite attentive to my requests.

I have also received unreserved encouragement from my family in Brazil, especially Andrea, Angela, Evandro and Cristiano Salles; Walter, Vanilda and Vania Boone. All of them were a kind and steadfast source of love and support.

There are some other people, most of them I never met, but who I have read and paid attention in what they have said. They have encouraged me to endure despite the circumstances. Indeed, they have taught me to be something that I always dreamed, which is a "prisoner of hope": Joyce Meyer, Silas Malafaia, Hernandes Dias Lopes, Mike Cleaveland, Lisânias Moura, Paulo Solonca, Paulo Moreira Filho, Ricardo Agreste, Marcelo Gualberto, Silmar Coelho, Nélio DaSilva, Mike Murdock, Ricardo Gondim, Carlos Barcelos, Joel Osteen, Charles Swindoll, Max Lucado, and John Stott, among others. Thank you all. I am, now and forever, a prisoner of hope. I simply cannot stop hoping. I am locked in!

Financial support from the Brazilian Research Agency CAPES is thankfully acknowledged.

A place of honour is dedicated to my relentless wife Andréia. She has been a constant and reassuring presence in my life during these past four years. Her love, endurance, support and help gave me the confidence I needed to complete this thesis. She also was a source of inspiration when time and patience were too short. Eventually, we are going to live what is written in Ecclesiasts 9:9. To her I dedicate this thesis.

To Jesus, closest friend, beginning and end, I would like to express my special and eternal gratitude.

“The plans of the diligent lead to profit as surely as haste leads to poverty.

A fortune made by a lying tongue is a fleeting vapour and a deadly snare.”

King Solomon, *Proverbs*

I. INTRODUCTION

1. General overview and motivation

From time to time along the history of economic thought particular themes have attracted special attention and gained wider recognition from the scientific community. Some of them have been on the agenda of scholars worldwide for decades but others have been neglected for various reasons after earlier years of investigation. For instance, during the 1960s and 1970s, the wide-ranging monetarism-Keynesian controversies were the number one debate within academia. This was developed in an attempt to explain a new economic phenomenon, stagflation, which occurred in most of the developed world. Academics were concerned with how to solve the disruptive combination of stagnation (slow economic growth and rising unemployment) and inflation. Meanwhile, the debate on how to finance development in rich and poor countries occupied the research agenda of economists. In the mid-1970s and 1980s many scholars were striving to solve the problems raised by enduring high inflation in various countries (and hyper-inflation, as was the case in Latin America). Since the 1990s, globalisation has become a buzzword in academia.

Globalisation and financial globalisation, its most contentious aspect, have increasingly stimulated the interest of scholars from within and outside economics. Empirical and theoretical literature quickly developed in different and more and more specialised strands to deal with the issues and repercussions related to the increased global commercial and financial connectivity developed over time.

The current increased use of the term *globalisation* does not mean that the phenomenon is actually new. Considerable literature has flourished, suggesting that the occurrence of greater global connectivity involving many areas of human activity and social interaction has occurred at times in history since a century (or even centuries) ago. Since then, international integration has grown significantly in a number of ways, shaping a non linear historical process, receiving different taxonomies and depictions. Nevertheless, most scholars have discussed the causes and consequences of globalisation based on what has taken place in the last few decades, normally starting in the late 1970s.

Although the term currently used to represent contemporary global integration is new, the phenomenon has precedents in history. Globalisation is not an exclusive occurrence of the capitalism of the late 20th century. There is arguably a growing consensus amongst scholars that it began when the Gold Standard promoted a monetary integration of many countries in the late 19th century. In this sense, a well-quoted indicator such as merchandise exports as a percentage of world GDP is usually mentioned to illustrate the historical development of globalisation since it shows the tendency to internationalisation of the world economy.

According to Findlay & O'Rourke (2001:46), in 1820, merchandise exports as a share of world GDP was only 1 per cent. As the 19th century drew to a close, this ratio presented higher values but retreated after World War II, i.e. it rose from 4.6 per cent in 1870 to 7.9 per cent in 1913, but accounted for only 5.5 per cent in 1950. In 1973 this percentage was 10.5 per cent, twice as much as its 1950 level, rising to 17.2 per cent in 1998 (Maddison 2001:363). Thus, the 1870 ratio of exportations in the world economy had approximately quadrupled by the end of the 1990s. This increasing movement of international transactions reflects the rapid global transformations that have taken place during the modern era.

Needless to say, this indicator represents just one single hint that larger and more intricate occurrences are taking place underneath. Globalisation issues (in its various aspects and dimensions) have been high on the agenda of the New Millennium, whereas economic and political isolationism have become unfashionable and increasingly hard to sustain.

Focusing on the current episode, the impacts promoted by the wave of liberalisation that occurred over the last quarter of the 20th century is one central argument frequently mentioned and emphasised as an important pillar of the contemporary event. Starting in key developed countries in America, Europe and Asia, and spreading to many developing nations during the 1980s and the 1990s, commercial and capital market liberalisation have been hotly debated as a key element responsible for spurring global market integration. During these years, free market policy advice dominated the international economic and political scenario. As a result, liberal measures influenced domestic policy worldwide (but especially in developing and emerging countries) in various ways and intensities. These nations implemented a great deal of reforms following those liberalising policies. As a whole, they lowered the barriers to the international trade of goods, opened their capital accounts and liberalised their domestic financial markets, significantly strengthening global financial and commercial integration.

Multi-national companies and credit institutions took advantage of decreasing state regulations in different sectors and developed a variety of strategies (joint ventures, mergers, acquisitions, inter-firm alliances, subcontracting arrangements, outsourcing, new financial products, etc) to overcome national frontiers, aiming to reach remote and wide markets. Accordingly, over the past few decades, these corporations have significantly increased their ability to operate in different cultures and transcend ethnic divisions in order to achieve their investment goals on a global scale.

Nevertheless, the stance supported in this thesis is that globalisation (the current and the former episodes) is (and were) a phenomenon of multiple causes. The liberalisation policy was just one of those, but in fact many other institutional, political and economic changes, and successive technological innovations resulting from the information technology revolution, are on the basis of the recent process of higher and extensive global market connectivity. On this matter, a couple of other key determinants can be alluded to just to briefly illustrate the case: more advanced semiconductors, fibre optics and the Internet have radically cut the costs of transmitting information and drastically expanded global telecommunications; the sharp decrease in the cost of international shipping (especially in the air and ocean freight transportation sector); a series of breakthroughs in computer science and its applications to productive and financial activities; international finance becoming central to support the range of production activities around the globe; changes in the global power structure towards a liberal right-wing economic model, etc.

As a matter of fact, the debate on globalisation has been much wider and more multifaceted than discussed within economics. Its causes and effects are not only confined to economic aspects but also involve many different aspects combining political, institutional, cultural, ecological, technological, spatial and sociological dimensions. Evoking these and other aspects, globalisation has therefore become a multidimensional theme and an interdisciplinary topic within academia, that is to say, a considerable challenge for any scientist to approach.

As an academic subject, globalisation has been vigorously scrutinised from a variety of angles and thus multiple facets of it have emerged. This detailed examination has led many scholars from different fields of research to engage in further investigation. Accordingly, as authors strive for attention, economists and other scientists have been studying an extensive range of topics proposing a variety of taxonomies. They have been claiming different definitions, causations, dimensions, historical precedents and periodisations, theoretical approaches, empirical measures, suggesting numerous consequences, and eventually proposing an array of policy prescriptions to deal with its disruptive or/and beneficial outcomes. In current literature, all of these argumentations are entwined to a certain extent. In the words of Keohane & Nye Jr. (2000:107): "the division of globalism [read globalisation] into separate dimensions is inevitably somewhat arbitrary".

One of the main economic dimensions of globalisation concerns the financial aspects of the phenomenon. Broadly speaking, financial globalisation is the progressive integration of the domestic financial markets of most countries into one (Arestis & Basu 2002a), and it is the core topic of this thesis. Financial globalisation is also not a recent phenomenon. In this thesis, the contemporary occurrence and the Gold Standard era will be discussed. Since financial activity, past and present, is widely pervasive, i.e. involves large structural linkages and interactions amongst markets, other institutions and agents, several characteristics of the historical context in these two periods will be taken into account in order to accomplish the key research purpose proposed by the thesis.

2. Key arguments

While the general outcomes of globalisation are currently one of the most debated topics on the international political and economic agenda, financial globalisation is its most untamed dimension. It has been changing the conventional behaviour of markets as a whole, creating new ways for domestic economic policies (sometimes because the international political pressures, creating a "one-way" economic policy for some countries), and redefining the global financial architecture.

Both globalisation and financial globalisation have produced an impressive amount of literature in recent years. However, this thesis does not intend to discuss all aspects of financial globalisation, but rather some specific ones related to the process of global financial integration from a historical perspective, i.e. the classical Gold Standard era and the period following the end of the Bretton Woods agreements in 1971 to the present day.

There is a body of literature suggesting that there were two waves of financial globalisation from the classical Gold Standard period up to 1995. The key premise for this makes use of the U-shaped pattern to describe this phenomenon during the two waves. The U-shaped pattern states that global (trade and) financial integration was very high from 1870 to 1914, collapsed between the wars, and then gradually returned to pre-1914 levels. In a few words, the essential message proposed by the U-curve is that nothing new has happened in terms of global financial (and commercial) integration in comparison with the 1870-1914 period.

However, analysing the historical financial data, I noticed that after 1995, global financial integration was unprecedented for some key markets. That is to say, the U-pattern properly described the financial globalisation phenomenon for 1870-1995, but this depiction becomes inadequate for the representation of the post-1995 period. Updating the time series for the period between mid-1990s and early 2000s, another shape occurs and seems to be more appropriate for representing cross-border financial activity. After organising the empirical evidence collected, I concluded that the process of financial globalisation since the Gold Standard resembles more that of a J-curve than a U-pattern.

Up to this point, it is important to state clearly the core objectives to be pursued by this thesis, and its central argument. There are three central objectives. Firstly, to propose an alternative view of the development of the two waves of financial globalisation which began in the 1870s. Secondly, to scrutinise the institutional aspects of financial globalisation underlying these ages and, finally, evaluate the key macroeconomic consequences of the contemporary financial globalisation.

The central argument of the thesis and its main original contribution is the rejection of the mainstream claim that the global financial markets followed the U-shaped pattern in favour of a J-shaped pattern. That means, the integration of the current episode of financial globalisation is unprecedented and significantly higher than the former one.

3. Methodology

As can be seen above, empirical evidence plays an important role as a methodological tool to substantiate the J-shaped proposal. However, the establishment of this proposition goes beyond gathering this sort of evidence inasmuch as it also requires a qualitative explanation of the phenomenon. Authors have developed different interpretations and methods to deal with the complexity of the subject based on diverse theoretical approaches, empirical tests and econometric models. However, many of them overlook the role played by the institutional aspects of financial market integration from a historical perspective.

The J-curve shows that the degree of financial integration increased between the first and second eras, so that the second episode became more prominent than the first. Therefore, financial globalisation did not progress steadily toward the same point in time, so it can be considered a path-dependent process. Hence, in this thesis, the analysis of the two historical eras of financial globalisation is considered to be an evolutionary process of financial market transformations, which is surrounded by institutional changes. In other words, the historical context and the particular institutional, social, cultural and technological conditions of each one of them will be examined to describe the dynamics of the two financial globalisation episodes. [2]

More precisely, the explanation for the J-curve must deal with the problem of the historical specificity, since its crucial underlying determinants took place at different times in history. As I have said, the J-curve involves two episodes of financial globalisation that took place at different moments in history. More than half a century separates the end of the first era from the beginning of the second. The analysis of the evolution of these phenomena requires both specific empirical data and specific investigation of each historical context in the dimensions mentioned in the previous paragraph. A specific historical analysis means that history matters in the sense that the changes that occurred throughout time are crucial to explaining why current integration now is higher than in the past.

In this thesis I will use a historical method to deal with the historical specificities that takes into account the importance of the role played by the evolution of institutions, developed by Geoff Hodgson (2001, 2002a, 2007), one of the scholars who have been developing the old institutionalist theory.

Institutionalism is a multidisciplinary research programme opposite to neoclassicism[3] and related to evolutionism (Hodgson, 1998:168 and 1993:19) and other non-

[2] William Dugger (1990) asserted that one of the six (arguably) unifying characteristics of institutionalist authors who followed both John R. Commons and Thorstein Veblen is what he called "the evolutionary approach to social provisioning." According to him (p. 427) "the evolutionary approach means the historical approach, the study of change and process through historical epochs, the study of social process and continual change, the study of the dynamic interaction between technology and institutions, and between progress and cultural lag."

[3] Samuels shows the common points between the research programme of institutionalist and evolutionist scholars (1995:576): "All have an interest in topics that are institutionalist in substance and have no

mainstream schools such as the post-Keynesianism.[4] The underpinnings of the so-called "old" North American institutionalism are attributed to Thorstein Veblen, John Commons, and Wesley Mitchell. Its basic notional element lays on the concept of institution understood as habits, rules and its evolution. The constitution of an "economic theory with institutions" derived from the theoretical effort to understand the human activity through the examination of the human interaction in its cultural context. In doing so, institutions and the evolutionary nature of the economic process would define different types of economic systems (Hodgson, 1998:168), thus a "general institutionalist theory" should indicate how to develop specific or varied analyses related to particular phenomena. It poses the problem of historical specificity, which is defined by Hodgson (2007:122), in this way:

> It first acknowledges the fact that there are different types of socio-economic system, in historical time and geographic space. The problem of historical specificity addresses the limits of explanatory unification in social science: substantially different socio-economic phenomena may require theories that are in some respects different. If different socio-economic systems have features in common then, to some extent, the different theories required to analyse different systems might reasonably share some common characteristics. But sometimes there will be important differences as well. Concepts and theoretical frameworks appropriate for one real object may not be best suited for another. The problem of historical specificity starts from a recognition of significant underlying differences between different objects of analysis. One theory may not fit all.

The explanation of the essential argument proposed by the J-curve fits this sort of analysis. Based on the definition above, there are three key reasons to taken into account when considering Hodgson's take on the problem of historical specificity. First, because the analytical scope underlying the J-curve is inherently focused on "different socio-economic systems, in historical time and geographic space". Second, history matters in the J-curve proposal because there are significant underlying

---

particular interest in contributing to the neoclassical paradigm. Some are specialists in particular areas of study, such as evolutionary analysis, organisation theory, and technology. These subjects require, as they see it, modes and methods of analysis often quite different from, though not necessarily totally in conflict with, neoclassical approaches to their subject. These modes and methods of analysis are more congruent with those of the US institutionalists, although they sometimes use tools and concepts originally developed by neoclassicists, such as transaction costs."

[4] According to Samuels (1995:576): "Intellectually close to institutional economics are Post Keynesian economists working in the fields of monetary and macroeconomics. Many of them are associated with or have published in the Journal of Post Keynesian Economics but many have published in JEI [Journal of Economic Issues], ROPE [Review of Political Economy], and Challenge, as well as this journal [Cambridge Journal of Economics]."

differences between the objects of analysis. Then the interpretation of the J-curve "must explore the particularities of the past" (Hodgson, 2007:112).

The third point worth emphasising is the little scientific significance of a single general theory to interpret different historical socio-economic phenomena, given that one theory may not fit all the issues that may be raised. For instance, the last chapter aims to evaluate the consequences of the second wave of financial globalisation to the world economy. On this account, the post-Keynesian author Hyman Minsky developed an influential theory concerning the nature of capitalist instability not necessarily within the hard core of the institutionalist approach but intellectually related to it as asserted by Samules (1995). Minsky's theory will be important to clarify the relationship between financial development and economic performance.

In summary, the interpretation proposed to investigate the J-curve is focused on the specific characteristics and underlying institutions of each era. I will look for stylised facts of the macroeconomic system, aiming to disclose the structural basic features and specific groups of embedded institutions that can explain the nature and the evolutive process of cross-border capital movement throughout the historical period. This analysis does not linger merely on statistics, but aims to explain the institutional scope and the causal processes of the financial integration in both eras.

The problem of historical specificity is considered even in one of Hodgson's definitions of institutionalism and institutions. Hodsgon (1998:168) states that: "The core ideas of institutionalism concern institutions, habits, rules, and their evolution. However, institutionalists do not attempt to build a single, general model on the basis of those ideas. Instead, these ideas facilitate a strong impetus toward specific and historically located approaches to analysis."[5] The theoretical and methodological elements summarised in this section will be the basic premises for the interpretation of the historical aspects of financial globalisation.

Having said that, it is important to mention at the end of this section that one of the main implications of the J-curve model is to call attention to the fact that "something"

[5] Hodgson (2003:163) presents another definition that adds other essential characteristics of institutions: "Institutions are durable systems of established and embedded social rules that structure social interactions. Language, money, systems of weights and measures, table manners, firms (and other organizations) are all institutions. In part, the durability of institutions stems from the fact that they can usefully create stable expectations of the behaviour of others. Generally institutions enable ordered thought, expectation and action, by imposing form and consistency on human activities. They depend upon the thoughts and activities of individuals but are not reducible to them."

new and unprecedented related to the behaviour of the global financial system must have happened in the world financial scenario from the mid-1990s onwards. In my point of view, this “something” should be understood as a historical process closely related to the numerous developments in the world of finance caused by economic, institutional, political, social and cultural transformations. In other words, tracking the evolution of institutions would provide useful insights to reinforce the validity of the empirical evidence gathered to sustain the J-curve hypothesis.

The evolution of institutions designates the time, catching hold of public and private sentiment, leading us to understand the mind of the era, revealing key aspects of the phenomenon that have been neglected in several historical investigations. Therefore, scrutinizing the globalisation of finance through the lense of the role played by institutions in the process of the development of global financial integration, this thesis offers a different angle of examining the phenomenon that may complement one of the sides of the research on this subject.

4. The structure of the thesis

To present the J-curve and deal with its implications for the debate on financial globalisation in a historical perspective, this thesis is divided into six chapters. Following this introduction, chapter two provides a literature review on globalisation. Ten years ago, a survey like that already would be considered a challenge even for experienced researchers. For a researcher writing in 2007 it demands a careful bibliographical selection due to the enormous volume of literature produced recently. Nonetheless, the chapter aims to set out some core issues spanning the literature. Then, in its first part, the chapter presents the definition of globalisation, the debate on myth or reality, its periodisation and the macroeconomic measures that have been used in academia to describe globalisation (and financial globalisation too). Its second part is dedicated to present the three theoretical interpretations on globalisation, i.e. the hyper-globalists, the sceptical and the transformationalists.

An important observation must be done as for the discussion about the definition of globalisation. Jan Aart Scholte (2001:613) affirms that the evidence of globalisation are much more noticeable in the recent experience than the previous globalisation episode occurred during the Gold Standard period. Accordingly, this topic is discussed based on the characteristics of contemporary globalisation.

The debate carried out in this chapter can be well summarised by these words of the Austrian-American economist Fritz Machlup (1941:30). He pointed out that “criticism and polemics are ingredients which can make a discussion interesting”. This statement accurately characterises the literature review on globalisation presented in chapter two.

While chapter two discusses what globalisation means, the first part of chapter three is dedicated to scrutinising outstanding key aspects on financial globalisation. Afterwards, the chapter presents empirically the J-curve as an alternative to the mainstream U-shaped pattern to represent financial globalisation in historical perspective. More precisely, the chapter explore the historical statistical data on stocks of foreign assets and outward FDI and find another shape different to the conventional one. Aiming to establish statistically the J-shaped proposition, chapter three is not focused on qualitative explanations on the J-curve. Although the discussion in this chapter do not to provide qualitative explanations, the statistical data shows that the second wave of financial globalisation is historically unprecedented in the markets researched.

The difference in the degree of global financial integration between the two eras can be interpreted in many ways. Chapter four proposes an explanation focused on the institutional change underlying the two eras. It suggests that behind the J-curve lie institutional and technological changes that are take into account to explain the unequal level of integration throughout the Gold Standard to now. In other words, the chapter scrutinises how the institutional arrangements and the technological transformations of the two eras contribute to the explanation of the J-curve.

In summary, the key message proposed by the J-curve is that the global financial activity in the current era is unprecedented for certain key financial markets where scholars found the “nothing is new” scenario. The advent of this new era has consequences for both developed and developing countries, although these effects have not spread uniformly. So that chapter five investigates the key macroeconomic implications of this novel age for the world economy. The debate on the impacts of financial globalisation is discussed in different strands of the literature. This chapter aims to piece together evidence collected from different authors and then to interpret the results according to two different theoretical approaches summarised in the beginning of the chapter. Finally, chapter six draws the main conclusions reached by the thesis.

Therefore, historical examination, empirical data and theoretical interpretation are ever present in the thesis. In the introduction of his *History of Economic Analysis* (1954) (published posthumously by Elisabeth B. Schumpeter), Joseph A. Schumpeter reasoned that the economic facts should be addressed by arguments that reconcile theory, history and empirical evidence. This research looks to bring together these three elements in order to examine the financial globalisation phenomenon that marked two eras of the modern capitalist history.

At the end of this introduction, the main limitations of this study are outlined. This thesis involves two major difficulties: 1. To deal with long period of analysis that is marked by a paucity of data. For this reason series of data are often incomplete, variables are heterogeneous, and comparisons of historical periods and/or geographic areas are problematic; and, 2. To discuss general aspects of a phenomenon that involves the world economy, and that has been widely studied worldwide. To tackle these issues, some measures were in place. For example, in order to gather the data needed it was necessary to conciliate historical time series that were not available in statistical yearbooks, or in specialised books, and on the Internet. Additionally, the analysis of the data required readings of different (frequently opposed) theoretical and historical approaches. But despite of these efforts, it was inevitable to reach general conclusions without however focusing on certain countries (or regions) in great detail.

It is worth emphasising however that this thesis is not supposed to be a case study. As suggested by its title, the aim of the analysis is to scrutinise the dimensions, preconditions and consequences of the recent and unprecedented surge in the global financial activity. In the end, a wide picture of the historical aspects and the repercussions of the financial globalisation are presented, and the conclusions reached may invite critical revisions and amendments. I also hope that my research will stimulate researchers to consider the necessity of examining the institutional underpinnings and the effects of current financial globalisation in specific countries or regions at great length.

Last but not least, when I started to write this thesis, I decided to write the word *globalisation* with *s* to follow the British English spelling. At the time I concluded this thesis, I realised that both the *–zation* and *–sation* spellings are in current use in British English.

II. THE GLOBALISATION DEBATE

1. Introduction

Over the past two decades, the debate on globalisation has elbowed its way right to the top of economic, social and political agendas worldwide. Globalisation has also acquired a wide-reaching audience in academic circles during this period.[6] Never before has a phenomenon produced such an extensive range of debates, concerns, policy changes, controversies, convergences, dissensions and even passions (Rogalski 1997) to such a broad group of people, and in such a short time. The globalisation theme itself is now globalised. Due to the rapid transformations in many areas of the human life and its ambiguous consequences throughout the last decades, some have associated globalisation with the end of mankind's ideological evolution, the end of renewable natural resources, the end of the state, even the end of the world, and this has promoted alarmists claims in certain sectors of society. Nevertheless, fashionable interpretations about the theme are not the main goal of this chapter.

The overall picture on the globalisation literature provided in Appendix 2 points to an increased interdisciplinary audience outside economics and at its borders with other disciplines. The term globalisation can be used with different meanings and, as with any controversial theme, the phenomenon has been studied within different theoretical and empirical frameworks. Numerous authors have dealt with the diversity of issues that have arisen, creating areas of agreement and controversy. However, it is also not the objective of this chapter to put together and to sum up many definitions and taxonomies on globalisation. The chapter aims to address scholarly contributions of economists and other social scientists on key aspects of the globalisation debate, intending to gain a better understanding of the core concepts and theories involved. Therefore, this chapter is more focused on presenting the general concepts than to examine the historical context. The study of the historical specificities of each one of the two eras will be done in chapter four.

In doing so, this chapter further aims to underpin the subsequent work in this thesis. Accordingly, the assessment of key features of globalisation as proposed below can add a better understanding of financial globalisation. There are reasons for this. For

[6] Appendix 2 provides a broad view of the groundbreaking scholars, and the groundwork of the globalisation debate between the 1970-2005 period.

instance, the concepts of enmeshment and interconnectedness presented in this chapter will be included in the definition of financial globalisation displayed in the next one. Furthermore, as a whole, globalisation is considered a situation of higher integration between markets of several countries scattered around the world. Therefore, the understanding of what globalisation means should appreciate how diverse markets work in a context of global integration. In an autarkical world, markets behave differently from the way they behave in a global open economy. For this reason, it is important to understand the intricate framework underlying globalisation (causes and effects) in order to explore and understand financial globalisation. That is by investigating the key issues of globalisation, the chapter also aims to reveal important specific aspects (as mentioned above) related to financial globalisation. Thus, it paves the way for the debate in the next chapter.

Amongst many of the matters in vogue, some core questions can be raised in order to explore the cornerstones of the globalisation debate, such as: What does globalisation mean? When did it start? Is it a reality in course or a rhetoric discourse of global elites? How can it be measured? This chapter aims to present a literature review on these key subjects.

This chapter starts with a brief contextualisation of the emergence of globalisation in the contemporary era. The next section is divided into four parts aiming to discuss the aspects of the globalisation debate proposed above. In this way, as a preliminary and essential step, the definition of globalisation will be the first topic to be considered. This section will then deal with its periodisation, the myth or reality question and globalisation measurements, respectively. Section three represents an examination of three theoretical interpretations of globalisation. The fourth section draws the main conclusions.

2. Embedded globalisation

First of all, it is worth noting that this thesis is concentrated in the economic aspects of globalisation (and financial globalisation) in historical perspective. According to the historical interpretation adopted in the thesis, I acknowledge the existence of various historical episodes of globalisation throughout the centuries of human interaction.

However the historical scope and the research hypothesis of the thesis is concentrated in two historical eras, namely, the classic Gold Standard and the period following the end of the Bretton Woods agreements up to the present time. Both episodes are important to the argument developed in this thesis, but the study of the definition of globalisation will be focused on the developments of the current period. There are specific historical reasons for that.

It does not mean that the evidence of economic globalisation before WWI was less important but that some characteristics in the current episode better reveal what globalisation means in its current denotation. These core characteristics are related to the geo-political scenario and the intricate economic transformations in course after WWII. Jan Aart Scholte (2001:617) pointed out historical circumstances that marked the 1950s and the 1960s, which played a key role in the present-day process of globalisation. Even recognising that "more tangible and sustainable manifestations of globalisation" occurred during the late 19th century, he asserted that these "manifestations" became even more "tangible and sustainable" after the 1950s. The ensuing decades manifested many events and inventions that spurred the growth of global linkages, spreading and accelerating the worldwide integration of markets, people and so on in an unprecedented way in history.

> Commercial jets, satellites and intercontinental missiles all arrived on the scene at this time [from the late 1950s]. The first transoceanic telephone cable was laid in 1956 and transborder direct dialling first became available in 1963. Radio and television receivers became household items the world over mainly after 1960, while the forerunner of the internet was set up in 1969. … Transborder production processes and associated intra-firm trade were practically unknown before 1940s and most global products gained their transborder markets from the 1960s onwards. In the era of finance, the first Eurodollar deposits appeared in the early 1950s, the first Eurocurrency loan in 1957, the first Eurobond in 1963, the first financial derivatives in 1972 and the first transborder electronic link between stock exchanges in 1985.

In the above quotation, Scholte mentions fourteen cutting-edge innovations that appeared between the 1950s and 1980s. Half of these are closely connected with technological developments in telecommunications and the media, while the others are related to new micro and macroeconomic (institutional) arrangements. As a matter of fact, there could be many more items on this list, but the point is that their repercussions spurred the global connectivity in productive, commercial and financial markets to unparalleled levels in history. Altogether, they provided resources for intercontinental mass transportation of people, goods, thoughts and information in real time, roads for conducting financial transactions worldwide; they also provided infrastructure for military rivalries and conflicts between nations. Consequently, a significant transformation occurred in the global connectivity in comparison to the interwar period and the Gold Standard era. An unmatched global scenario has been created.

Gradually, but at the same time increasingly, the key events mentioned above (and many of their repercussions) strengthened the interconnectivity between both developed and developing economies. Therefore, the term was coined when the process of supra-territorial enmeshment gained momentum. These more robust manifestations of a globalised world may be one of the reasons that explain the appearance of the word *globalisation* in contemporary times rather than during the early stage of 19th century capitalism.[7]

Due to these more vigorous manifestations occurring throughout the present time, globalisation became deeply embedded in contemporary society after the 1980s. Hence, I call the current experience the *embedded globalisation era*. This means that the global interconnectedness that has been developed during these recent decades has become a permanent and noticeable feature of contemporary society, and is historically unique. Even in this preliminary stage of the debate there is not a single episode of globalisation throughout history; rather there are different historical forms. In fact, section 2.2 of this chapter presents a summary of different historical manifestations of globalisation since ancient times (see also Table 1). Globalisation is a historically determined process that is impelled by several complex causing factors. The current episode is more pervasive and deep than the other previous manifestations due to the current historical circumstances (that will be examined in this chapter and in chapter four). These singular historical conditions make the *embedded globalisation era* more suitable for surveying the globalisation concept. Moreover, this study presents other important related concepts that will be reviewed in the following chapters.

The term *embedded globalisation* does not mean that the current episode corresponds to an "ideal" or "ultimate" globalisation stage. What it does mean is that globalisation is

[7] Appendix 1 presents a diachronic study of the word globalisation.

deeply embedded in present society due to the more dense and extensive network of global connectivity developed over these past few decades involving economic, political, technological, and institutional aspects. The interaction of the changes in these spheres has created new institutions and changed the old ones, transforming post-modern society and promoting a more intense globalisation in comparison with that of Victorian times.

3. Key aspects of the globalisation debate

3.1. Definition

In December 1996, Anthony Giddens delivered a speech at the United Nations Research Institute for Social Development (UNRISD) Conference on Globalization and Citizenship. His opening sentence was both revealing and provocative: “There are few terms that we use so frequently but which are in fact as poorly conceptualized as globalization.” That statement may have been correct in 1996, but after over a decade of intense research, the definition of the term has been scrutinised thoroughly by thinkers from several disciplines. As Scholte (2002:5) pointed out “today the concept of globalization is deployed across disciplines, across the world, across theoretical approaches, and across the political spectrum.” It does not mean that all controversies concerning the subject have been solved; it means that there are currently a n umber of alternatives (complementary or not) that argue the theme academically.

Although it is true that globalisation is a well-defined concept currently, this debate cannot be taken for granted. Anyone looking into its definition is confronted with a series of puzzles. Globalisation evokes many phenomena simultaneously and, as a result, it can be defined in different ways since it has different meanings and approaches, depending on the point of view of the analyst. Scientific endeavour has grown substantially recently (Appendix 2), and experts in economics, history, sociology, political science, geography and others, have provided scientifically accurate thoughts on its description. For this reason, any attempt to provide a general and a single definition, a definitive approach or a unique interpretation about what globalisation means will be avoided as it is not pointing to something singular but plural. Hence, the section intends to present the general approach relating to the topic and to contrast different viewpoints instead of attempting to grasp an alleged consensual meaning.[8]

As a multidimensional and multidisciplinary subject, the word itself implies multiple associations, and then accepts contributions from different areas. The following paragraphs present a bird's-eye view of globalisation in what are arguably its main dimensions. The section addresses its definition as an invitation to scrutinise many other intricate aspects of the academic debate on globalisation. Scholte (2002:3) correctly asserted that "knowledge of globalization is substantially a function of how the word is defined. Thus, every study of globalization should include a careful and critical examination of the term itself." In the section, contributions from scholars with different backgrounds are welcomed, but it would be impossible to survey the existing literature dealing with it. A swift review of the literature would suffice to identify the core aspects of the phenomenon.

At least three aspects have been frequently included in the numerous definitions of globalisation available in the current literature, namely: the possible causes, the scope and the thickness of the phenomenon. The biggest disagreements and controversies on the subject are located in these points since they involve the subjective interpretation of what are the main driving forces behind the phenomenon, and the impact of their transformation over the *status quo ante*.

Economists and other social scientists suggest that globalisation is defined as a process of growing integration of national economies tending to constitute a worldwide market for goods, services, labour and capital. In this way, Harris (1993:755) pointed out very accurately: "To economists globalization is generally thought of as the increasing internationalization of the production, distribution and marketing of goods and services." Thus, for many writers the phenomenon is most visible as a process of global

[8] Reich (1998:2) described an example of this difficulty. He reported that at a symposium held at the University of Pittsburgh in 1996, recent developments of globalisation were discussed by five distinguished scholars, in areas such as finance, technology transfer, transnationalism, multilateralism, and regionalism. "All the speakers systematically presaged their commentaries by suggesting that, while they had no idea what globalization was, they could address descriptive and analytic questions in their own areas of speciality. The audience participants as the symposium (an informed group of scholars and practitioners, numbering over seventy) candidly admitted that they could provide no better insight in addressing this definitional issue. In fact there is not only disagreement on the definition of globalization; there is also no clear consensus on whether the term 'globalization' is employed as a historical epoch, a process, a theory, or as a new paradigm. Its meaning remained unspecified."

commercial, productive, migrating or financial integration. It embodies a wide scope of markets and interconnection of national economies on an international scale caused by a range of policy, institutional, social and technological changes. More precisely, it encompasses the erosion of a number of tariff (or other institutional) barriers, the drop in transportation costs, technological improvements in telecommunications and microelectronics, and the development of new competitive strategies by banks, non-banking institutions and multinational corporations (outsourcing, maquiladoras, mergers and acquisitions for instance).

Jeffrey Frankel (2000:2) highlighted the importance of technological and policy changes as core aspects of current globalisation. According to him, there are two major drivers of economic globalisation in the post war period, which are associated with an international policy change: the reduced costs to transportation and communication in the private sector, and reduced policy barriers to trade and investment on the part of the public sector. The quotation below summarises the broad picture he painted to support his assertion. Despite his description is now a bit out of date, it is still an enlightening historical depiction of key elements that spurred the process of global market integration during the period.

> Technological progress and innovation have long been driving the costs of transportation and communication steadily lower. In the post-war period we have seen major further cost-saving advances, even within ocean shipping: supertankers, roll-on-roll-off ships, and containerized cargo. Between 1920 and 1990 the average ocean freight and port charges per short ton of U.S. import and export cargo fell from $95 to $29 (in 1990 dollars). An increasing share of cargo goes by air. Between 1930 and 1990, average air transport revenue per passenger mile fell from $0.68 to $0.11. Jet air shipping and refrigeration have changed the status of goods that had previously been classified altogether as not tradable internationally. Now fresh-cut flowers, perishable broccoli and strawberries, live lobsters, and even ice cream are sent between continents. Communications costs have fallen even more rapidly. Over this period the cost of a 3-minute telephone call from New York to London fell from $244.65 to $3.32. Recent inventions such as faxes and the internet require no touting.

Jan Kregel (1994) was one of the first voices amongst economists who proposed a notional concept of the progressive evolution of firms towards a global organisation. He identified three sequential prior stages that firms had passed to reach the "truly" globalised level. These stages are known as international, multinational and transnational.

The first stage occurred during the 1960s when foreign trade expanded faster than domestic output growth. In response, firms took advantage of the wide range of opportunities abroad, selling their marginal domestic product to foreign markets. This is what he called the internationalisation of markets. Then, the greater importance acquired by the exports to the development of the global economy, and also the formation of economic trade blocs such as the EEC, spurred firms on to the second stage of global integration. Therefore, firms moved from the international to the transnational arena. This means that, instead of increasing their exportations continuously, firms strategically decentralised the production process by building industrial plants in foreign markets. This decentralisation was meant to distribute "different stages of production to different national facilities to produce final products which are assembled and sold in specific targeted national markets" (Kregel 1994:30).

Finally, the period of globalisation is reached when firms have constituted an integrated and flexible process of production and distribution around the world. In Kregel's words (1994:30) "the final step in the process of 'globalisation' comes as firms consider specific national markets as part of a single undifferentiated world or global market in which a single product line may be sold." More simply, transnational corporations have decentralised the final assembly process, spread it to different countries according to the availability of raw materials and semi-finished goods, and sold the output through an integrated global distribution system, reaching the world as a whole. In this stage, truly globalised transnational firms use "raw materials and half-finished goods from producers in a wide range of countries, with the final assembly process decentralized across a number of regional centres producing a unified product" (p. 30).

Kregel did not mention it explicitly in his 1994 piece, but these "regional centres" were inspired by the factories run by US companies (*maquiladoras*) in Mexico, but can also be the special economic zones (SEZ) founded in the early 1980s in China, which subsequently spread around the world. Most recently, the creation of the WTO played an important role in stimulating this process of corporate globalisation because the reduction in tariffs imposed (*sic*) on developing countries eliminated the costs and encouraged a wider integration of formerly dispersed production chains.[9]

---

[9] Clarification of what the author meant with the term "regional centres producing a unified product" was obtained through correspondence. I sent an email to Professor Jan Kregel on 10th September, 2007 saying that "You did not mention explicitly that these 'centres producing a unified product' are the special economic zones (SEZ) founded in the early 1980s in China. I think that your idea about these 'centres' is

In short, Kregel (1994) defines globalisation as a gradual process of increasing global interconnection led by firms as an adaptive process of their competitive strategies to the historical changes that have taken place in the world economy. This adaptation determined the change in their scope in such a way that they can be considered the vehicle of globalisation.

One of the most illustrative examples of this corporate strategy of the global commodity chain nowadays is the production of the "global Barbie" referred to by Giddens (2006). The most profitable toy in history created by the US-based Mattel Corporation is made from oil extracted and refined into ethylene in Saudi Arabia. Then the Chinese Petroleum Corporation (owned by the Taiwanese state) buys the ethylene and sells it to the Taiwanese Formosa Plastic Corporation, which converts the ethylene into the PVC pellets that will be shaped to make the Barbie's body. The pellets are shipped to one of four factories in Asia that make the Barbie (two in southern China, one in Indonesia and one in Malaysia). The plastic mould injection machines that shape her body are made in the US and shipped to those factories. Once she is moulded, her nylon hair comes from Japan, and her cotton dresses from China. According to Giddens (2006:58), "nearly all the material used in her manufacture is shipped into Hong Kong – one of the world's largest ports – and then trucked to the factories in China".

Economists have been emphasising that contemporary economic policy, technological and institutional changes have been progressively overcoming the constraints of geography and gradually establishing a denser network of global linkages. The width of those changes may not be universal (Scholte 2002:8) or homogeneous but transnational connections have been purposely established and have been changing economic, social and political international affairs. In a nutshell, globalisation is usually associated with a process of the integration of national economies into a wider (global) sphere involving their productive and financial markets.

---

different from the free trade zones but I was speculating whether the modern free zones are compatible or can even be considered as an unfolding of the transnational firms' strategies you described." He replied to me on 14th September, 2007 with this answer: "No, I was thinking more in general of the inbound reexport zones in Mexico, then regular maquiladoras, as well as the now more famous Chinese and Indian SEZs. But even more important was the reduction in tariffs imposed on developing countries with the creation of the WTO. This eliminated the costs of integrated geographically dispersed production chains -- costs that had previously led transnationals to locate in developing countries inside their ISI [Import Substitution Industrialization] tariff walls."

One of those economists is Michael D. Bordo. He has written scholarly papers touching on various aspects concerning the debate on globalisation. Bordo (2002:20) proposed the following definition of globalisation: "I define globalization as the increasingly close international integration of markets for goods, services and factors of production, labour and capital." He emphasised the role played by the WTO (GATT until 1994) spurring the process of global integration through the continuous reduction of non-tariff barriers and protection, mainly since the post WWII period.[10] In general, his analysis is supported by extensive data and econometric tests and he focuses on changes that have been occurring in world trade, foreign direct investment (FDI) and cross-border financial capital flows. In his latest articles, he has been expressing his concerns about the growing importance of financial markets as the key driving force of modern globalisation (Bordo 2000, Bordo, Eichengreen & Irwin 1999).

Similarly, Nobel laureate Joseph Stiglitz (2002:9) states that globalisation means the closer integration of countries and people, made possible by technological developments and institutional changes. In the passage below, he highlights the importance of actual and new institutions to the progression of contemporary global integration. In his words:

> Globalization is the closer integration of the countries and peoples of the world which has been brought about by enormous reduction of costs transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and (to a lesser extent) people across borders. Globalization has been accompanied by the creation of new institutions that have joined with existing ones to work across borders. … Globalization is powerfully driven by international corporations, which move not only capital and goods across borders but also long-established international *intergovernmental* institutions (Italics original).

The role played by institutions, technological developments in various areas and policy issues have been emphasised currently not only by Stiglitz but by many others (aforementioned and not) as important aspects driving forward the process of global integration. However, instead of integration, some scholars (Held *et al* 1999) have used another term to illustrate different aspects of current globalisation, which is *enmeshment*. The noun enmeshment comes from the verb enmesh used to describe a

[10] Bordo (2002:22) stated: "Successive rounds of tariff negotiations from 1947 to the present have virtually eliminated tariffs on manufactured goods in advanced countries. The WTO, which succeeded GATT in 1994, is currently engaged in reducing non-tariff barriers and protection in areas not covered by GATT."

situation when someone or something is caught or entangled as in a net, and which is not easy to escape from. Applied to globalisation, some scholars prefer to use it instead of the general and arguably vague term *integration* because enmeshment involves the formation of a network that intertwines markets, institutions, companies, private agents, governments, contracts, agreements, etc, and all apparatus underlying the diverse dimensions of globalisation.

Scholars have also been using another term close to *enmeshment* but more related to the effects that the (in progress) deep global interaction have been empowering companies and institutions to develop partnerships and facilities worldwide. This term is *interconnectedness*. According to Duvall (2001:786), interconnectedness is "a condition in which otherwise separate social units are linked together through material exchanges and information flows. The interlinkage is such that occurrences in one unit have effects on others: consequences of actions and decisions are transmitted beyond the unit in which they are taken. In that respect, units are interconnected." Thus, interconnectedness has been used in the globalisation literature to express the notion that economies are not only integrated, but interdependent, i.e. decisions taken in certain countries or markets affected others and can result in a domino effect if this level of interconnectedness is high. In the sense defined above, countries are interconnected when their policy decisions reciprocally affect each other. It is worth noting that Duvall (2001) asserted that the term is meaningful and serves as a necessary, albeit not sufficient, condition to describe integration, interdependence and globalisation.

In a nutshell, the words *enmeshment* and *interconnectedness* have been preferred of integration to illustrate globalisation more precisely. While enmeshment emphasises the network aspect established by globalisation, interconnectedness also highlights another characteristic, which is the interdependence between economies entangled in the globalisation network. Therefore, despite being connected, these two terms cannot be used interchangeably since they complement each other to describe the global interface of things and people across the globe. They will be used in this thesis to emphasise these aspects (networking and interdependence) that are not explicit when the term *global integration* is used as a synonym of globalisation.

In a broad sense, both terms aim to highlight the importance of the network of international linkages that globalisation involves. In the most competitive economies, goods, services, and financial assets are no longer targeted at local markets, but at the wider global marketplace, i.e. the degree of interdependency has increased significantly. This "wide thread" includes international law, regulatory organisations, vested interests, non vested interests, economic policy reforms, a large range of multilateral institutions, ideology, non-profit organisations, highly profitable speculative activities, global technological partnerships and programmes and many other aspects connected to the globalised affairs. The consequences of this enmeshment and interconnectedness could be either good or bad. The terms simply underline two important features of the phenomenon: connectivity and interdependence.

To illustrate their applicability, the terms *interconnectedness* and *enmeshment* could be used by Kregel to describe the third stage of his taxonomy which is the globalisation phase. Just to refresh the memory, Kregel (1994:30) affirmed that in a global economy, transnational firms consider specific national markets as part of a "single undifferentiated … global market in which a single product line may be sold". Thus, "truly" globalised transnational firms use "raw materials and half-finished goods from producers in a wide range of countries, with the final assembly process decentralized across a number of regional centres producing a unified product". The corporate strategy of transnational firms promotes narrow interconnection among countries, and then it becomes increasingly difficult for a nation to avoid changing or being affected by the economic policy of others. More and more countries have become involved in the production and commercialisation of goods, assets and services as part of the new capitalism. Therefore, a strong interdependence and interconnection amongst countries has developed.

The expression *new capitalism* above does not mean that globalisation represents a more advanced system in terms of promoting something like a global welfare state. It means that since the barriers to commercialising goods and assets in this new phase have been lowered, transnational corporations have commanded their productive activities through a wide network of facilities distributed around the world, searching for increased profitability. In fact, left wing Canadian writer Naomi Klein has just published her new book in which, among many other complaints about the effects of globalisation in developing nations, she classified new capitalism as "disaster capitalism".[11]

Robert Keohane & Joseph S. Nye Jr. (2000) suggested that at the turn of the millennium, the word globalisation would replace the word interdependence, which was used to discuss matters of world politics during the 1980s and 1990s. They suggested that globalisation and interdependence have many meanings and both concepts are meant to cover a variety of phenomena from economics to politics and so on. In fact, they disagree with the current usage within academia of the word "globalisation". According to them, globalism is more appropriate because it means "a condition that can increase or decrease". Their definition of globalism is "a state of the world involving networks of interdependence at multicontinental distances." (Keohane & Nye 2000:105). In agreement, Giddens (2006:50) also emphasises this reciprocal dependence as a salient characteristic that defines globalisation. He states that "globalization refers to the fact that we all increasingly live in one world, so that individuals, groups and nations become interdependent."

British political theorist David Held (2001:427) describes present globalisation as a spatial phenomenon that interlinks communities, but transforms core dimensions of human life such as power, criminal, financial and environmental aspects.

> Globalization is fundamentally a spatial phenomenon; it lies on a spectrum with the local and national at one end, and the (supranational) regional and global at the other. It is about the stretching of connections, relations and networks between human communities, an increase in the intensity of these, and a general speeding up of all these phenomena. Globalization denotes transcontinental or interregional flows and networks of activity, interaction and power. It is, in short, about the interconnections between different regions of the world - from the cultural to the criminal, the financial to the environmental - and the ways in which they change over time.

Globalisation is not simply an amalgamation of markets, but a process of ongoing intercontinental enmeshment of people bringing transformations in culture, language, habits and traditions, as well as changing the world in many other dimensions, such as geography, politics, economic and legal systems, corporate oligopolies, formal institutions, and technology. In this sense, globalisation is an institutionalised concept. Its dynamic historical progress involves institutions in general and its evolution, and

[11] Klein, N. (2007) *The shock doctrine: The rise of disaster capitalism*. New York, Metropolitan Books.

has been changing many areas of human life. In accordance, Perraton (2003:38) pointed out:

> Globalisation can be conceived as a process, or a set of processes, which embodies a transformation in the spatial organisation of social relations engendering a shift in the spatial reach of network and systems of social relations to transcontinental patterns of human organisation, activity and the exercise of social power. More specifically … [it is] the emergence of global product and financial markets and the international organisation of business.

Perraton's definition includes an important novel contribution in comparison to the other authors summarised. He identifies three specific features of the phenomenon: the emergence of global product, of global financial markets, and the international organisation of business. Arguably he is referring to them because in his opinion they are the most salient feature of the regime.

Taking into account the explanations summarised above, in this thesis the phenomenon is not considered a process of adding previously isolated countries or regions into a larger space of interaction, formed and fed by the interface of numerous dimensions, constituting a system that is mutually correlated. Globalisation is a process ("or a set of processes") in continuous transformation running across the spheres of human interaction, subject to the action of evolutive institutions, contradictions, advances and retreats. That means that in addition to the productive, commercial and financial dimensions, its technological, cultural, and legalistic aspects will be considered here, and briefly presented below.

a) Some core dimensions of globalisation outside economics

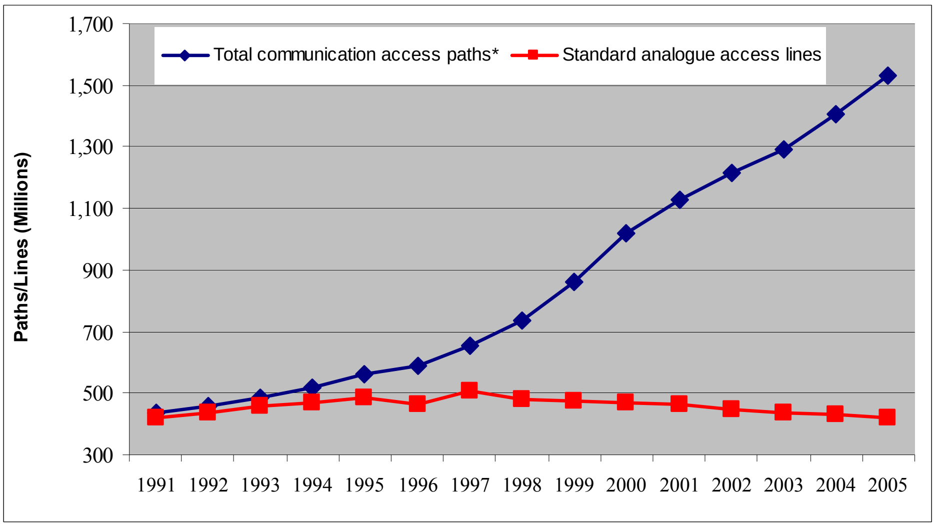
A key feature related to the current of globalisation is the advent of numerous advanced technological breakthroughs and devices for commuting information and data worldwide. Over the past three decades, deep transformations in information and communication technologies (ICTs) have gained momentum. They have changed the nature of human interaction, affecting corporations, governments, institutions, cross-country cultural differences and the everyday life of ordinary people. One of the major achievements of this revolution is that these technological innovations have created an enormous potential for transmission of information in real time and at unprecedented speed, reaching areas of the world hitherto considered remote.

Indeed, the most remarkable technological progresses of the 20th century were the developments in ICTs. The most significant technologies created in both areas respectively were communication via satellites and fibre optic cables (including submarine cables), and also the development of computer-based information systems, chiefly software applications, and computer hardware. The Internet is one of most successful results of the interaction between telecommunications and computation, so that nowadays it is virtually impossible to expand the development of telecommunications without computational support. These technologies have allowed the traffic of a great amount of data (based on the exponential capacity of fibre optics), covering continental distances through the use of satellites. As is well-known, there are other technologies of data transmission based on copper wires and broadcasting, but the amount of information they once transmitted and the range of these transmissions cannot be compared with the performance of the satellite and optical fibre.

Certainly, an isolated change does not make a revolution. Rather, these new technologies have interacted with each other and developed in parallel to the digital revolution. The digital revolution is sweeping all analogue media before it, allowing unparalleled success in long distance data transmission. Digital communication works by converting electronic signals (data, voice, music) into digital (binary) code. Digital data transmission can be broadcast through fibre optics and satellites, controlled by computers. This technology vastly reduces the potential for signal corruption during transmission by weather conditions, and other problems that can interfere with the quality of reception. As a result, the volume of information exchanged is not only much greater than the analogue system but is also much more reliable. The technological advances resulting from ICT devices have been making use of digital technology (and vice versa) and providing a massive exchange of data transmission worldwide.

The figure below demonstrates the evolution of a family of scientific developments in digital communication technology, which emerged from the 1980s. Integrated Services Digital Network (ISDN), Digital Subscriber Line (DSL) and cable modem are different technologies used to send or receive information, data, etc., via telephone and computers. Both ISDN and DSL are signal modulation systems: ISDN transmits data digitally, resulting in very clear transmission quality; DSL provides digital data transmission over the wires of a local telephone network; cable modem is an electronic device that makes possible the transmission of data to or from a computer via telephone or other communication lines in long distance (for instance cable TV). The figure plotted below shows the quick adherence to the digital system in OECD countries since the early 1990s. In 1991, the magnitude of standard analogue and digital paths respectively were in use evenly in those countries, whereas in 2005, the figures changed dramatically to 417 and 1,113 accesses respectively (ISDN and DSL lines, cable modem and mobile subscribers).

Figure 1. Telecommunication access paths in OECD countries: 1991-2005[12]



Source: Source: OECD Key ICT Indicators [available at: www.oecd.org/sti/ICTindicators]
* Total communication access paths = Standard analogue access lines + ISDN lines + DSL + cable modem + mobile subscribers.

Internet, satellites, computer systems and fibre optics revolutionise modern telecommunications, providing a high-quality and low-cost service of data transmission for users who have access to the sophisticated equipment. Companies, banks, central banks, stock markets and households can interact electronically at any time, twenty four hours a day, seven days a week, carrying out a wide variety of productive, commercial and financial activities.

The payoffs from such breakthroughs have been enormous. By satellite, data transmission between telephones and computers is almost instantaneous in virtually any

[12] This figure is based on data in Appendix 3.

part of the world, and as a result the use of these technologies in productive, commercial and financial activities has been extensive. But there is a crucial difference between the uses of these technologies in such activities. The nature of financial activity does not involve the same formal and bureaucratic proceedings as commercial ones. That means that the time to conclude a transaction is the key determinant variable that differentiates both activities. The time required to conclude a financial deal is much less than what is necessary in a commercial transaction. Consequently, the time of re-contraction is also much less. In this way, applications of ICT in finance and accounting have been encouraging better processing and easier dissemination of information than in other globalised activities, so one can conclude that its potential to increase is higher.

The World Wide Web (www) has changed the lifestyle and working environment of people all over the world. Communication through the internet has been an icon of global integration, not only for searching for and exchanging information but also through the use of internet telephony provided by companies such as Skype, Google Talk, Yahoo! Messenger and MSN Messenger, to mention only the most well-known enterprises. These companies allow the broadband user to call landlines in any country via computer devices at a very low cost in comparison to traditional telephone companies. A broadband circuit costs typically around £15 to £20 a month, a speaker microphone and headset approximately £10. Once the users have acquired these basic devices there is no additional cost for the calls to places around the world covered by these companies. Even if the user wishes to make a call to a traditional telephone landline, the cost is only around 1-2 pence per minute within Europe and 15 pence to mobiles in the UK (Talk'07:5). The providers mentioned above also allow local/international calls and teleconferences between computers with broadband connections. They also provide communication services on wireless or wired internet service provision without additional costs or any value-added tax (VAT) charge for broadband users.

Technological developments have become increasingly enmeshed in contemporary society, and have been affecting a wide range of areas, from medicine to sports, from culture to finance. Progress in this field has made a profound impact on global integration, both positive and negative since ambiguities are inherent in any process of technological change. Nevertheless, it is worth emphasising that technology is not a panacea or a "free lunch", and it is also not capable of bringing the world to Utopia. As a matter of fact, ICTs are distributed unevenly worldwide. More recently, prompted by the uneven geographical diffusion of ICTs and the Internet, multilateral institutions such as the UN, the World Bank and the OECD have turned their attention to the inequalities of access to information. This is the well-known topic of Digital Divide.[13]

The problem promoted by the digital divide is not only geographical but social (DiMaggio *et al.*, 2004). Technology *per se* is one important dimension of globalisation but it has neither an even worldwide spread nor the capacity to eliminate social inequalities, conversely it has been widening the gap between rich and poor nations. Hence, reducing the digital divide is often considered as a major political matter in the world (digital) economy.

Changes in international law have also played an important role in the current process of globalisation. This dimension can be seen through the development of multilateral agreements in a variety of areas such as trade, finance, human rights, property rights, international crime, environment, terrorism, money laundering, etc. From the end of WWII to the 1960s, these issues had mostly lain within domestic jurisdiction, i.e. domestic states were dealing with some of these issues isolatedly. However, the idea of nation-state sovereignty has greatly changed since those days.

The erosion of nation-state autonomy, especially in the wake of the contemporary liberalisation era, has transformed international law from the "law of the state" to the "law of the international community". The increased international connectivity in various areas, (including especially the rapid growth of internet business) has also brought to light a variety of legal issues that have been solved through adjustments in the former established legal apparatus. In other words, most of the aforementioned prominent legal matters such as international trade, finance, human rights, business

[13] Rallet & Rochelandet (2007:694) define Digital Divide as follows: "The speech on Digital Divide starts at the early nineties with the distinction between Information haves and Information have-nots. The debate in the field of telecommunications is not a new one as it takes root in the problem of universal service in the USA and the telephone gap1. It has then been extended to gaps in computer equipment rates, Internet access inequalities and more recently to broadband networks inequalities. In addition, the debate which was initially restricted to OECD countries, now involves all countries by adding a new dimension to international inequalities as far as economic development is concerned. From the early nineties, American studies on the Digital Divide emphasize the risks linked to the exclusion of some social groups from ICTs. But the Digital Divide phrase itself would have been evoked in 1995 by Long-Scott (1995) who showed the risks of excluding the poorest people and minorities from communication technologies with regard to the participation in democratic life."

crime and terrorism are no longer domestic concerns, but concerns of the international community.

These changes have urged the necessity to codify some rules to deal with a variety of problems raised. These rules have been addressed by the establishment of new regulations, codes, international conventions and multilateral agreements to adapt previous international law in order to deal with the new judicial *status quo*. The absence of international regulation and multilateral agreements in the light of these developments could lead the global society to a chaotic state. All these procedures, put into operation by legal institutions, are an indication of the striking transformations caused by the recent surge of globalisation.

Culture is another dimension that has been changing considerably under the current globalisation. Mostly spurred by the rapid progress in commuting information, globalisation has been promoting greater international cultural exchange, which can be seen in music concerts of all types, in science, art, and even in the dialogue between religious groups that had historically kept their distance from one another due to their different doctrines (this is referred to as ecumenism).

Language plays a key role in the globalisation of culture. As English is the predominant world language, the aforementioned aspects (especially music, films and science) have been widely spread around the world, influencing (not eliminating) these cultural activities in many countries. English became the world language primarily as a result of colonisation and the huge British Empire both in the Indian sub-continent and Africa. In those days, French was the language used in the diplomatic service but became marginalised by the growth of English over the years.

Although both France and Germany were themselves colonists, their Empires in the late 19th and early 20th century were not as widespread as that of Britain, particularly in Africa. These areas used English not only as their second language, but also their first language or common language. That happened because of the numerous languages/dialects spoken, so that the only language common to all was English. After WWII, the US became a great power, spreading its culture to Latin America and also to South East Asia because of their involvement in WWII. Of course, there are more Chinese speakers in the world than speakers of other languages, but China has never played such an economically and politically significant role in world affairs as Britain did before WWI and the US has played since WWII.

It is worth emphasising that all the databases researched in Appendix 2 are primarily English language references. As a matter of fact, English has become the common language through which scientists from many disciplines have chosen to communicate their thoughts, achievements and criticisms. Therefore, nowadays, English-language journals and books are preferred as a vehicle for exchanging scientific knowledge. This fact reinforces the accuracy of the evidence displayed in the aforementioned appendix.

The scientific evidence presented below is evidence of the point made above. The British Linguist David Crystal has researched the rise of English as a global language since the end of WWII. Crystal (2003:111) presents evidence to the fact that English is currently a global medium of communication of the world's scientific knowledge, especially in areas such as science and technology. More research could provide the same evidence in economics but there is no reason to think that the picture described below is much different or less significant in economics or in most other social science fields.

> A 1980 study of the use of English in scientific periodicals showed that 85 per cent of papers in Biology and physics were written in English at that time, whereas medical papers were same way behind (73 per cent), and papers in mathematics and chemistry further behind still (69 per cent and 67 per cent) respectively. However, all these areas had shown a significant increase in their use of English during the preceding fifteen years – over 30 per cent, in the case of chemistry, and over 40 per cent, in the case of medicine – and the figures twenty years further on would certainly be much higher. This can be seen even in a language-sensitive subject such as linguistics, where in 1995 nearly 95 per cent of the 1,500 papers listed in the journal *Linguistics Abstracts* were in English. In computer science, the proportion is even higher.

Another example is the development of computer software and the number of sites on the internet written in English. According to Robertson & Scholte (2007:714) 68 per cent of Web pages were in English in 2004. This figure is huge when compared with sites in Japanese (7 per cent), German (6 per cent), Chinese (4 per cent), or French (3 per cent). It clearly shows that not all the users who visit Web sites in English are native speakers, which is an additional indication of the role played by English as a world language, shaping a distinct cultural aspect of contemporary society.

3.2 Chronology

The debate on globalisation chronology is strongly related with its definition. If we had a general and unique definition of the term, its periodisation would be probably general and unique too. However, as it was argued in the section above, there is a myriad of definitions, thus the debate on its chronological aspects also have several different interpretations.

Most scholars who address globalisation from a historical perspective recognise three major starting points for the onset of the phenomenon: from the 15th century, in the last quarter of the 19th century, or from the last quarter of the 20th century. Furthermore, David Held *et al* (1999), Scholte (2001, 2002) and Robertson & Scholte (2007) have mentioned that some writers also consider that the new term *globalisation* describes historical tendencies that can be traced back to ancient times even before the Middle Ages.

Norman Gall & Rubens Ricupero (1997) asserted that globalisation started with the expansion of the European mercantilist system following the so-called *Age of Discovery* from the early 15th century to the early 17th century. According to them, starting in Western European countries, maritime expansion hailed the onset of a truly world economy since it promoted long-distance commercial linkages between Europe and several regional economic areas spread over all the continents. Those commercial routes, and the deep transformations in production, transport and communications they promoted, characterised the beginning of the globalisation era, which was consolidated in the 19th century under Britain's economic dominance.

Contrasting with this view, K. O'Rourke & J. Willimanson (2002:24) found evidence of globalisation in the 1820s in terms of trade price convergence. However, Bordo, Eichengreen & Irwin (1999:3) and Bordo (2002:21) assert that the first age began *circa* 1870, encouraged by the British Gold Standard regime, and the second after the 1980s, which was based on the worldwide spread of liberalisation and deregulation policies, spurred by the technological revolution in telecommunications systems. More precisely, Eichengreen and Bordo (2002:3) mentioned Charles Goodhart's viewpoint saying that the first age of globalisation occurred when the transatlantic telegraph cable was laid between England and North America in 1866, because it revolutionised the intercontinental trade of assets. “Financial markets are markets in information; by speeding transatlantic communication, the advent of the cable in the 1860s thus transformed their operation”.

This is the general perspective that is largely found in the literature. Considering the alternative periodisation sustained by some scholars about the ancient roots of globalisation, two examples could be preliminarily mentioned to illustrate the phenomenon during this earlier period. First, one can recall the outstanding economic, political and social achievements of Alexander (*Alexander the Great*), king of Macedonia during the years 336–323 BC, who was the conqueror of Greek city-states, and the Persian Empire from Asia Minor and Egypt to India. Likewise, Justinian I (*Justinian the Great*), Byzantine emperor during the 527–565 AD, who extended the boundaries of the Greek-speaking Roman Empire of the Middle Ages far beyond its extension of that time.

The title *the Great* was awarded not only because of the extraordinary geographic expansion they promoted despite the logistic resources of the time, but also because the territorial increase of their empires introduced and encouraged important changes to over-distant areas in diverse aspects of human society such as: overseas trade, civil law and judicial practices, administrative and political reforms, culture (especially in sciences, arts and language), religious practices and doctrines, military tactics of conquest war, to name but a few of the most important aspects. In fact, this could be one of the possible meanings related to globalisation, that is, a historical process of territorial expansion headed in general by one nation (followed by others afterwards), which end up promoting great transformations to a larger extent, spreading them out over long distances and to a wide range of aspects, eventually changing societies from one state of affairs to another. This may be a more inclusive approach on globalisation in historical perspective.

This seems to be the approach proposed by Held *et al* (1999) in the book *Global transformations*, although they search the roots of the phenomenon through a historical inquiry that dates back many years before the two examples mentioned above. The authors extensively studied the chronology of globalisation and distinguished seven historical forms of the phenomenon divided into four subsequent eras. The eight chapters of the book are dedicated to presenting in great detail the main characteristics of these different forms of globalisation, hence it is impossible to make an outline of the arguments developed by them within the scope of this section. However, since it is a unique contribution to the debate, table 1 shows synthetically the historical division they proposed and it is followed by a brief outline of the main characteristics of each phase.

Table 1. Chronology of historical forms of globalisation

	Historical forms of globalisation						
Periodisation	***Political***	***Military***	***Financial***	***Production***	***Migration***	***Cultural***	***Environmental***
A) Pre-modern							
1) Pre-1500					√	√	√
B) Early modern, circa 1500-1850							
1) Early modern (14th-18th century)	√	√					
2) Early modern approx. 1500-1760				√	√		√
3) Early modern approx. 1500-1850						√	
4) Early modern Pre-industrial Revolution			√				
C) Modern, circa 1850-1945							
5) Modern (late 19th-early 20th century)	√	√	√	√			
6) Modern approx. 1760-1945					√		√
7) Modern approx, 1850-1945						√	
D) Contemporary, 1945 to date							
1) Contemporary approx. 1945 on	√	√			√	√	√
2) Contemporary Bretton Woods period (1945 to 1973)			√	√			
3) Contemporary approx. 1973 on			√	√			

Source: Adapted from Held *et al* (1999: 80, 135, 222, 272, 306, 364, 392)

Held *et al* (1999) propose that globalisation is not a recent phenomenon but a historical process that has been progressively disclosed in diverse forms throughout history. Therefore, there is not one but various forms of globalisation that change over time. They selected the most salient characteristics in each period and demonstrated how the development of human relations promoted an increasing enmeshment of economic, social, cultural and political activities across countries. In this way, they explain the emergence of various periods of globalisation based on the study of human interaction since ancient times.

As presented in the table above, Held *et al* (1999) proposed a fourfold periodisation of globalisation: pre-modern (pre-1500), early modern (circa 1500-1850), modern (circa 1850-1945) and contemporary (1945 to date). Each form of globalisation reflects the spatio-temporal conditions of the time. The first form of globalisation lasted thousands of years since human interaction and the emergence of any long distance activity was severely restricted by the limited technology of transport and communication. As a result of the development of adequate knowledge and equipment, the transformation process became faster, more intense and with greater scope.

The pre-modern period began with the formation of agrarian centres in Eurasia, Africa and the Americas around 9,000 to 11,000 years ago. Without a doubt, the targets of the global interactions and consequently the social and infrastructural transformations were strictly limited by the technology available. The main characteristics of this age of globalisation were interregional or inter-civilisational encounters within Eurasia, since Oceania and the Americas remained autonomous civilisations. The key sources of globalisation at this time were political and military empires, world religions and the migratory movements of both nomadic people and farming societies. Due to transport limitations, long distance trade between regions and civilisations was less intensive. Political, military or cultural interaction was far more difficult to establish, hence this era is described as a form of “thin globalisation”.

During the early modern era, globalisation progressed, motivated mainly by the European ultramarine conquests and the demographic, environmental and epidemiological flows between Europe, the Americas and Oceania. European innovation and expansion resulted more from the importation and adaptation of Eurasian technologies than on the development of indigenous innovations. European expansion in this era was not truly global but was significantly located in the Americas and Oceania. Political and military relationships and the formation of European global empires reinforced the channels of interconnection between continents. In addition, great trading companies related to the new empires (British East India Company, Hudson Bay Company and British Royal Africa Company) gave birth to new forms of economic globalisation.

This modern globalisation period marked the onset of industrialisation and the enormous progress of military weapons, naval technologies and increasingly powerful state institutions. Accordingly, the intensity of intercontinental relationships increased significantly in terms of trade, investment and human migration. During this era, European power stretched to almost all areas of the globe.

Finally, Held *et al* consider contemporary globalisation as a distinctive historical form of globalisation in terms of economics, politics, law, governance, military affairs, cultural linkages and human threats, in contrast to the allegation supported by sceptics who argued that current globalisation represents a return to the 19^{th} century patterns. "This era has experienced extraordinary innovations in the infrastructures of transport and communication, and an unparalleled density of institutions of global governance and regulation" (Held et al 1999:425). The contemporary era represents a historically unique confluence of certain key aspects such as the Bretton Woods collapse in the early 1970s, the OPEC oil crises, the flow of petrodollars into international banking institutions, combined with new telecommunications infrastructures and a global wave of global neoliberal deregulation from the 1980s onwards. These factors encouraged a surge in global trade, investment and financial flows especially between North America, Western Europe and Asia. A detailed discussion of these aspects will be found in Chapter five.

3.3 Myth or reality

According to the Oxford English Dictionary, one of the meanings of the word *myth* is "ideas or beliefs about something that someone considers imaginary, fictitious or impossible". To illustrate this, one can consider two experts in front of an art picture in a museum. One considers that it is really not art at all; while another looking at the same picture becomes astonished by such a stunning masterpiece. Likewise, the authors quoted below (and others) are experienced researchers who have been looking at the same world, raising and questioning the evidence but reaching contrasting conclusions about the reality of the phenomenon.

For some scholars, globalisation is more than a phenomenon in its due course, "it is the way we now live" (Giddens 2002:19). Scholars who think that globalisation is now a reality and who think that its progress had produced improvements in the economic and social conditions in most countries have been labelled as *radicals*. Differently, I will use the term *critics* to refer to authors who believe that recent globalisation represents a new and unprecedented phase in the history of capitalism, but that claim a critical position to the possible positive effects of globalisation.

Similarly, in my opinion, there are two groups with two claims approaching globalisation as a myth. These authors are called the sceptics. They reason that globalisation is a myth because the empirical evidence proves that the bulk of commercial, productive and financial activities is heavily concentrated in only a few countries, i.e., Western Europe, North America and Japan (the Triad). Consequently, the domestic income of most economies does not come from their external activities. Therefore, the use the term is political-ideological, promoted especially by global corporations interested in encouraging liberal economic policies worldwide, mainly in developing countries that had adopted protectionist policies based on state-oriented development programmes. As a result, to use the word globalisation is not only a semantic mistake but an inaccurate analytical interpretation. The word is then empty of meaning and for this reason cannot be used to describe the state of arts in international affairs.

Other sceptics believe that globalisation is a myth because the current level of market integration is not unprecedented, i.e., a similar ratio of trade and financial flows by GDP was already attained during the *Belle Époque* period. On this account, nothing new is happening in the contemporary international scenario. It is important to recognise that some sceptics (Hirst & Thompson, 1996) uphold both points of view, this one and the interpretation presented in the previous paragraph. As most current writers are critics, this section provides more space for the arguments developed by scholars who treat it as a myth.

As mentioned before, sceptics consider globalisation to be local or even regional, but not a global event. By this they mean the word itself bears the meaning of worldwide integration, but in reality the most significant amount of cross-border transactions reach and benefit only a small number of countries and do not represent a multicontinental phenomenon. The contemporary surge in massive international flows of trade, foreign direct investment (FDI) and speculative capital can be deceptive since it is heavily concentrated in a handful of developed countries (most of which belong to the Triad), and does not represent a conclusive indication of "true" globalisation.

Hirst & Thompson (1996) are two of the foremost sceptical authors who consider globalisation to be a myth. They developed a critical analysis towards the conventional interpretation of globalisation proposed by apologists such as Kenichi Ohmae (1991, 1995a, 1995b). Hirst & Thompson's propositions were quite influential in the development of the sceptic's viewpoint by the late 1990s. They set out their criticisms in a number of ways in the book, so it would be impossible to summarise all their arguments in this section. However, the key points of their reasoning must be addressed.

An attempt to grasp the main conclusions of Hirst & Thompson (1996) may be summarised in two assertions: 1. current globalisation is not truly global; and 2. the mid-1990s international flows of goods, people, and capital have historical precedents going back to the late 19th century, which was nothing new. What they consider new is the higher growth of world FDI from the 1980s until the early 1990s compared to the performance of world trade in the same period, especially in industrialised countries. The widespread deregulation of capital controls throughout that time is the one of the main reasons that encouraged such performance. Moreover, conventional scholars hold that FDI had played a more important role than trade in terms of international integration throughout that period but they disagree with this opinion. Then Hirst & Thompson raise a key point of their analysis based on the interpretation of the table below.

Table 2. Investment flows and populations: 1981-91

	Population		***Investment flows, 1990-91***
Total world	5,292,195	100	
A			
USA and Canada	275.865		
EC and EFTA	357.767	14	75
Japan	123.460		
B			
Ten most important developing	1,519,380	29	16.5 (66% of total flows to
C			
Nine most important developing	758.820	14	
A + B		43	91.5 (approx.)
A + C		28	

A: Singapore, Mexico, China, Brazil, Malasya, Hong Kong, Argentina, Thailand, Egypt, Taiwan.
B: Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong.
Source: *World Population Prospects*, 1990, UN, 1991 various tables; *China Statistical Yearbook*, 1991, table T3.3; *Statistical Yearbook of the Republic of China*, 1991, p. 5. table 1; *TNCs and Integrated International Production*, UN, 1993, np. 255, annex table 4. Extracted from Hirst & Thompson (1996:68)

Table 2 shows the amount of investment flows and population rates during 1981-91 for three groups of countries: A. USA, Canada, EC and EFTA, and Japan (representing the

"Triad countries"); B. The ten most important developing countries in terms of FDI flows; and C. The nine most important developing countries plus the nine main Chinese coastal provinces. Throughout this period, 75 per cent of all FDI was invested within the Triad countries, which account for only 14 per cent of the world population. In contrast, 16.5 per cent of FDI was allocated to the ten major developing countries, which account for 29 per cent of the world population. Therefore, this quick look at the table is enough to conclude that during the period considered, the FDI flows were highly concentrated in just a few developed countries.

In fact, this concentration is higher because the ten "B" countries (i.e., almost a third of the world population) received 66 per cent of all non-Triad flows. Adding the population to the amount of FDI invested in A and B, one can conclude that 43 per cent of the world population received 91.5 per cert of FDI flows in this period. As FDI in China is highly concentrated in the coastal provinces, Hirst & Thompson add the population and the investment of A and C. Then the same 91.5 per cent of FDI flows was allocated to 28 per cent of the world population. As a result, only 8.5 per cent of global FDI was invested in a ratio that involves 57 to 72 per cent of the world population.

Despite the authors' acknowledging that the Chinese data are not quite reliable, the argument they made based on the table above is the data showing a high concentration of investment in a few countries and therefore it is not really global. Furthermore, this kind of geographical distribution creates a situation of severe inequality in terms of spreading the possible benefits of this type of investment. This is evidence that a key alleged aspect proposed by the radicals concerning globalisation is not sustainable, nor has it brought the expected benefits in terms of boosting income, employment, and output. The sceptical meant that the consequences of FDI cannot be felt everywhere since B and C countries achieved small shares in comparison to the industrial economies. Consequently, judging by the time period in question, the world amount of FDI could be considered local at most, contemplating mainly the Triad countries.

This table is only a part of their arguments, but it plays an important role in Hirst & Thompson's argumentation developed in *Globalisation in Question*. However, the inference presented above cannot be understood in isolation. Another important part of Hirst & Thompson's analysis concerns the importance of domestic firms for internal economic development, and the role played by the nation-states. According to them, national markets are preponderant relative to external markets in the sense that domestic demand absorbs a predominant portion of production (goods and services) and is responsible for the creation of most domestic employment. As a result, the decision process of companies (including the multinationals) is decided predominantly from their countries of origin. For this reason, many of them cannot be considered "transnational" but national companies that develop external economic activities. Additionally, despite recognising that nation-states have lost rooms for intervention over the last decades of the 20th century, Hirst & Thompson assert that nation-states are still able to control domestic economic performance and also enforce domestic development programmes.

In short, according to Hirst & Thompson's viewpoint, the growth in current international economic activities cannot be thought of as a genuine process of globalisation, but rather a myth. In their opinion, the allegation of globalisation was aimed mainly at establishing neo-liberal economic policies and to reduce the development initiatives from nation-states - especially in developing countries - in favour of the commercial and political interests of the Triad countries. All things considered, it is worth noting that their argumentation was developed *circa* 1996, and consequently the data presented in a variety of tables and figures do not cover the second half of the 1990s.

In the same year, Bairoch & Kozul-Wright also presented a paper bearing sceptical arguments. The table below claims that current globalisation is not a new historical phase in cross-border trade activity. As can be seen in table 3, Western developed countries, the US and Western European economies reached two peaks over the 1870-1992 period: the first one in 1913 and the second in 1992. This indicates that the level of commercial integration in 1992 is not new in comparison to the Gold Standard period. Once again, the figures are outdated, i.e. they cover only the very beginning of the 1990s.

Table 3. Merchandise exports as a percentage of GDP, 1870-1992 (Three year annual average, except for 1950)

Year	*Western developed countries*	*United States*	*Western*	*Japan*
1870	…	5.4	13.6	…
1890	11.7	6.7	14.9	5.1
1913	12.9	6.4	18.3	12.5
1929	9.8	5.0	14.5	13.6
1938	6.2	3.7	7.1	13.0
1950	7.8	3.8	13.4	6.8
1970	10.2	4.0	17.4	9.7
1992	14.3	7.5	21.7	8.8

Source: Bairoch & Kozul-Wright (1996), extracted from Bairoch (1996:176, 179).

Alfred Kleinknecht & Jan ter Wengel (1998) made an analysis of the integration process in developed countries focusing on the regional integration of the European Union (EU). They examined data of exports and imports by region from origin to destination covering the 1960-1995 period. They presented the exports of EU countries towards other EU countries (as a percentage of GDP), and then compared the exports of EU countries to non-EU countries. The authors observed high volumes of transactions among EU countries and much lower volumes between EU and non-EU economies. Accordingly, they concluded that there is a closer integration (read: "globalisation") between all EU countries in terms of trade but not between the EU and the rest of the world.

Based on those results, Kleinknecht & Wengel used the term *Europeanisation* to describe the robust commercial integration that existed between European countries during the period in question. According to them, the relative importance of trade between European and non-European partners is modest, and has stagnated since 1960. From the viewpoint of these authors, if globalisation can be reduced to an *Europeanisation* phenomenon, it is a reality, at least in terms of trade. If not, it is a myth.

Hirst & Thompson (2003) supported Kleinknecht & Wengel's (1998) conclusion. Based on the methodology developed in chapter three of their *Globalization in Question* (1996) (see especially table 3.3 on page 69), they re-elaborated and updated the data of merchandise trade flows in terms of GDP in a book organised by Jonathan Michie in 2003. The revamped table is reproduced below.

Table 4. Merchandise trade flows as a percentage of originating Triad bloc/country GDP: 1998

To	*North America*	*Western Europe*	*Japan (J)*	*East Asian Traders*	*J + EAT*
North America	3.8	2.0	0.7	1.1	1.8
European[a] Economic Area	2.3	18.0	0.4	1.0	1.4
Japan (J)	3.3	2.0	-	3.0	3.0
East Asian Traders[b] (EAT)	10.7	6.9	4.1	na	na
J + EAT	14.0	8.9	4.1	Na	na

Source: WTO Annual Report 2000, Volume II, International Trade Statistics, derived from various tables; World Economic Indicators 2000, World Bank, Table 4.2; Taiwan Statistical Data Book 2000. Extracted from Hirst & Thompson (2003:27)
Notes: [a] European Economic Area (EEA) = EU + Switzerland, Turkey, Norway, Malta, Liechtenstein and states of the former Yugoslavia.
[b] East Asian Traders (EAT): China, Hong Kong, Taiwan, South Korea, Malaysia, Thailand and Singapore.
na = not available.

The figures show that in 1998 a small part of merchandise trade flows as a percentage of GDP of the main developed countries is destined to overseas areas of the globe, except for the EEA and Western Europe. According to Hirst & Thompson (2003), if the globalists were correct, the figures should be much higher because the chosen countries are the most technologically developed in the world and the leaders in terms of international trade. The top mark is reached exactly by the trade within the EEA and Western Europe, confirming the *Europeanisation* thesis presented above. The "second best" mark was achieved by East Asian traders and North America but, even so, the value was almost half of that achieved by European economies. All the other figures are very low and comparatively inexpressive. These results strengthen the point of view that the alleged "globalisation" phenomenon is non-pervasive; conversely it is concentrated in local areas of the globe.

On the other hand, other authors have taken into account the recent transformations in institutional and technological spheres, and updated some data pertaining to merchandise exports related to GDP, providing different argumentation. According to them, the current configuration of global productive and financial enmeshment has never before been experienced. There are some key arguments always mentioned in this respect, for instance, the emergence of technological progress in data transmission and telecommunications; multi-layered governance structures; the reconfiguration of political power in favour of liberalisation and deregulation policies; the wide range of financial innovations, and so on.

Grazia Ietto-Gilles (1997:80) concludes that the international integration of large companies has been an increasingly progressive trend since the past decades and this upward tendency is likely to go on. Similarly, Susan Strange (1998:706) reasons that structural changes in course in the world economy have encouraged the growth of global trade and capital towards a global market configuration. Both seem to adhere to the propositions of the critical scholars presented above. Likewise, Jonathan Perraton (2003:42) pointed out that international trade has reached unprecedented levels relative to output over the 1870-1998 period. Table 5 shows the upward trend of trade relative to the output for the most developed countries between 1870 and 1998.

Table 5. Export-GDP ratios, 1870-1998

	Merchandise exports as per cent of GDP (1990 prices)					
Year/country	***1870***	***1913***	***1929***	***1950***	***1973***	***1998***
France	4.9	7.8	8.6	7.6	15.2	28.7
Germany	9.5	16.1	12.8	6.2	23.8	38.9
Japan	0.2	2.4	3.5	2.2	7.7	13.4
UK	12.2	17.5	13.3	11.3	14.0	25.0
United States	2.5	3.7	3.6	3.0	4.9	10.1
World	4.6	7.9	9.0	5.5	10.5	17.2

Source: Maddison (2000:363). Extracted from Perraton (2003:42)

Perraton concludes that trade-GDP ratios are clearly higher now in comparison with the Gold Standard age, which is opposed to the viewpoint that claims that "nothing is new" in current globalisation. According to Table 5, the growth rate of trade for goods and services oscillated in cyclical movements during the period 1870-1950, but since then this growth was upright and in 1998 greatly surpassed in all countries the ratio reached in 1913.

In order to highlight the tendency of the worldwide spread of trade from 1890 to 2000 for selected developed countries, Perraton (2003) draws on the table below. He uses the merchandise trade as a percentage of merchandise value-added. Except in the case of Britain, considered "anomalous", the figures present a clear increase in the trade of goods related to output, especially in the US. This is evidence that at least in these countries, the "nothing is new" scenario cannot be confirmed.

Table 6. Merchandise trade as percentage of merchandise value-added: 1890-2000

Country/year	*1890*	*1913*	*1960*	*1970*	*1980*	*1990*	*2000*
France	18.5	23.3	16.8	25,7	44.0	53.5	68.0
Germany	22.7	29.2	24.6	31.3	48.5	57.8	78.5
Japan	10.2	23.9	15.3	15.7	25.8	18.9	27.5
Sweden	42.5	37.5	39.7	48.8	72.9	73.1	87.5
United Kingdom	61.5	76.3	33.8	40.7	52.6	62.8	63.5
United States	14.3	13.2	9.6	13.7	30.9	35.8	48.3

Source: Feenstra (1998); World Bank, World Development Indicators data base; US *Economic Report to the President*, 1999. Extracted from Perraton (2003:43)

Still on the subject of the evidence of contemporary globalisation as a new scenario, Perraton (2003) considers "extraordinary" the growth of the FDI since the 1970s. As Perraton (2003:50) observes: "in the early 1970s the ratio of foreign exchange trading to world trade was around 2:1, by the early 1990s this ratio had risen to 50:1 and is around 70:1 today". In this passage, he does not make comparisons between the current performance of the FDI and its performance in the early 20th century. Nevertheless, the data he presents cannot be considered a mere historical coincidence, but rather an indication that an unusual growth has occurred worldwide in the 1990s, in this case, in terms of the volume of the FDI. It can also be considered an invitation to put together the historical FDI data in order to assess whether this tendency is exclusive of the 1990s or if it has antecedents in the first globalisation age. This comparison will be conducted in the next chapter. In doing so, history can serve as a guide to discern better whether the contemporary era is unprecedented or if nothing is new.

To sum up, this section does not aim to enter into a semantic debate, although it is in fact difficult to avoid mentioning some aspects related to the meaning of the word globalisation. Dictionaries of any language define the word global as "pertaining to the whole world, worldwide or universal". As the act of globalising or to make global, globalisation is understood literally by some scholars, whilst others prefer to identify the signs of the times as an indication of the best way to approach the topic. In that case, the theoretical analysis made by Scholte (2002) is fruitful and clarifies this point. He points out that globalisation does not mean universalisation. Globalisation could not be associated with “experiences to people at all inhabited parts of the earth.” According to him, it leads the debate to a cul-de-sac because in that way globalisation is identified with cultural, economic, legal and political convergence, which he believes to be deceptive. He does not deny that there has been substantial cultural destruction in recent times, but, in fact, globalisation has not gone that far. Last but not least, it is worth mentioning that since Karl Marx’s classical exposition on the concentration and centralisation of capital, it is no wonder that capital in productive and financial spheres has been concentrated in some key countries.

3.4 Measurement

As asserted in the previous section, scholars from different backgrounds have been forwarding theoretical interpretations, collecting and (re)organising data and reporting the results as they strive to conduct their tests and prove their hypotheses. Echoing Schumpeter (1954), they have been putting together theoretical approaches, empirical evidence and statistical indicators in order to reach scientific relevance. Accordingly, their efforts to achieve more robust results have been producing a broad theoretical and empirical argumentation on globalisation, also encouraging the creation of new forms to evaluate statistically the dimensions that the phenomenon has assumed. Therefore, there is a wide variety of statistical information available, but the interpretation of this data varies significantly since the decision of which should be the most appropriate indicator to show the important changes is not straightforward (Sutcliffe & Glyn 2003).

All indicators, from a macro to a microeconomic perspective have advantages and disadvantages, as in other fields of scientific research. Therefore, thus researchers should take some risks in order to present their assertions. Sudden unfortunate occurrences in the global scenario such as the financial crisis in East Asia impel authors to rethink their theoretical approaches and the evidence. This section aims to present some critical points about the major indicators found in much of the globalisation literature.

Economists have been assessing globalisation mostly in its commercial, productive and financial spheres. Trade integration is commonly measured by the external trade divided by GDP. Global production has been addressed by data concerning mergers, acquisitions, and foreign direct investment (FDI). As a result of the recent surges in global commercial and productive activities, foreign exchange markets became fashionable as a financial indicator that reflects the rise in global activity.

Financial markets are another important sector to be considered. They are formed by primary (newly issued securities) and secondary markets (trade of existing securities). Due to the important process of financial diversification after the 1980s, the range of financial assets grew dramatically and it would be somewhat difficult to present most of them. Nonetheless, there are some key ones that have been in frequent use for economists in their analysis that can be mentioned. For instance, stock and bond markets have been taken into account to assess the financial activity in capital markets. Scholars have also been using the ratio of equity and debt flows, gross stocks of foreign assets and liabilities, cross-border transactions in bonds and equities, and FDI as a percentage of GDP to assess the amount of productive and speculative capital that has been traded amongst countries. In their 2004 book, Obstfeld & Taylor presented a range of indicators to assess what they believe are the main aspects of the globalisation of finance, such as: cross-border flows and stocks, savings-investment correlations, current account positions and asset price movements.

Especially after the 1970s, derivative markets have been developing steadily as instruments for the management of financial risk. Derivative markets are composed of future markets (options, futures and a wide range of underlying products), and over-the-counter markets (OTC market, hedge funds, swaps, etc). Insurance markets have been less quoted in the academic literature but they are also a part of global financial flows. Table 21 presents a variety of financial openness measures (*de facto* and especially *de jure* measures) developed throughout decades of research. All these data have been applied to a diverse historical and methodological perspective and for this reason the pictures provided by scholars diverge considerably.

The indicators quoted above have been feeding the analysis presented in numerous books and articles with scientific bases for different examinations of the phenomenon but, as expected, they present pros and cons. A point in question is the indicator trade/GDP ratio. It shows the relative importance of foreign trade measured by the size of imports and exports as a percentage of GDP. Therefore, when trade growth is greater than GDP growth, it demonstrates the rising importance of trade, i.e. greater international trade integration (read globalisation). This indicator has been broadly used for assessing a tendency of spreading world trade markets. Nevertheless, there are at least two major criticisms against this measure. One of these was made by Went (1997:41), who noticed that the service sector was largely non-tradable and much bigger than it was at the beginning of the last century. For this reason, trade as a percentage of GDP can be underestimated.

Another criticism was drawn from Sutcliffe & Glyn (2003). They criticise the convenience of this indicator calculated at constant prices. In order to make their claim clear, they present an example of trade-GDP ratios in the European economy during the period 1950-99. In 1950, this ratio was 9 per cent while in 1992 it had reached 30 per cent. At first glance, it would be reasonable to extrapolate from these figures that the participation of trade in production had grown three times during this period. This means, measured at constant prices, that a rising share of exports signifies that the volume of exports has grown faster than the volume of internal output and then the exports triplicate its importance in comparison to the output. However, this procedure exaggerates changes in the weight of exports in the economy "because the prices of exports rise systematically more slowly than do prices for output as a whole" (p. 63). This indicator would reflect the degree of trade integration more exactly if the prices of export and GDP presented a more regular behaviour during the period. Otherwise, it shows a misrepresentative measure of the reality, limiting their relevance. An argument pointed out by Sutcliffe & Glyn is that labour productivity in the export sector is different compared to the economy as a whole.

In their opinion, despite the fact that the current price of exports to GDP ratio is the best measure of this tendency, it must be corrected because the export content can exaggerate the value-added contribution to them. Therefore, the import content should be subtracted before comparing exports at current price to GDP. In doing so, they believe that this measure shows more appropriately the direct importance of international trade for the domestic economy. However, even this measure exaggerates the trade-GDP ratio at current price because it includes the import content of exports. That is why the authors elaborate another way to measure the impact of international competition within domestic economies named "imported penetration of the domestic market for manufactures" (see Sutcliffe & Glyn 2003:64, 65).

As discussed above, globalisation is a multi-sided theme and can be measured in many other ways. Apart from the most common indicators presented here, there are indicators of labour markets, migration, technology, politics, environment, and culture. Among them, technological development has been a fashionable trend, currently well-elaborated by multilateral institutions. The progression of globalisation can no longer be understood without taking into account the widespread repercussions and applications of ICTs. Technological breakthroughs put into operation over the past three decades in processing, diffusion and transmission of information have greatly facilitated the progress of cross-border activities. Especially in finance, agents are able to deal with a wide variety of short and long term contracts, and to move billions in many currencies through computers in just a few seconds.

As Woodward (2003:311) pointed out: "Scientific advances in communications and technology have permitted political, social and economic processes to be organised on a global scale generating alternative forms of social organization."[14] These elements have been powerful driving forces in increasing the degree of enmeshment amongst countries, and have also been triggering the occurrence of speculative bubbles and the spread of crises through the contagion effect.

Recently, multilateral institutions such as UNCTAD and the World Bank have been creating a range of ICT indicators. Generally, they have provided indicators based on the access to those technologies by individuals, households and enterprises. The possibilities of creating indicators in that area are enormous due to the abundance of applications of the technology in the most diverse international activities, and the cumulative process of development and consequently, the speed of technological improvements in the development of new products. Therefore, amongst the numerous combinations possible, these core indicators on ICT can broadly describe the magnitude of issues involved through the adoption of the ICTs, such as mobile phone subscribers, mobile phone penetration, number of internet users, internet penetration, internet penetration and website ownership, modes of internet access, broadband subscribers, broadband penetration, e-commerce, use of internet for e-business, component of ICT-enabled services, impact of ICT on GDP growth, number of personal computers, personal computers penetration, e-commerce sales, internet sales and internet banking (see UNCTAD 2006).

[14] About the effects of the communications and computational developments during the past two decades for the international capital-market integration see also James R. Lothian 2000, section 4.3.

As a matter of fact, UNCTAD reports present multiple variations of these ICTs since they can be classified by region, countries, level of development and gender. Whatever the case may be, one should take into account that these indicators have been developed recently, and for this reason they have not been widely used in the literature on globalisation.

Additionally, private institutions have been offering globalisation indicators with various methodological approaches. On this account, there are two major indicators available: the KOF Index of Globalisation[15] and the A. T. Kearney index.[16] The former is calculated by the Swiss Institute for Business Cycle Research, aiming to measure what are considered the three main dimensions of globalisation: economic, social and political. The index encompasses an overall index of globalisation and sub-indices referring to "actual economic flows, economic restrictions, data on information flows, data on personal contact, and data on cultural proximity". The latter is calculated by the global management consulting firm A. T. Kearney in association with *Foreign Policy*. They created the "Globalisation Index", an annual study that aims to evaluate the extent to which the world's most populated nations are becoming more or less globally connected using the traditional indicators of economic integration presented here, adding other variables such as political and personal contact variables.

3. Three key theoretical interpretations about globalisation

The review presented thus far has helped to consider the key premises that became noteworthy in different strands of present-day globalisation literature, as well as its dimensions, complexity and controversies. As concluded above, globalisation is an interdisciplinary subject that has been researched within various theoretical frameworks. Consequently, the theme is too complicated and many-sided to be described by a single theoretical outlook. Important theoretical contributions have been made by scholars of social sciences such as Keohane (2000), Robertson (1992), and Scholte (2000, 2002) among others. However, due to the purposes of this thesis, this section will consider the key approaches developed by scholars working in economics that have developed their thoughts based on different theoretical backgrounds.

[15] Available at: http://globalization.kof.ethz.ch.
[16] Available at: http://www.atkearney.com/main.taf?p=5,4,1,116.

The globalisation debate amongst economists has been developed by the strong version, the sceptical school, and the transformationalist approach.[17] In fact, some of the core ideas surrounding the theoretical debate on globalisation have already been presented in this chapter in section 2.1, thus this section will avoid repetitions and will concentrate in the important points that have not yet been studied. The radicals are known as the strong version (Hirst & Thompson 1996), or hyper-globalists (Perraton & Goldblatt 1997), or even as the strong globalisation school (Rowthorn & Kozul-Wright 1998). Some other critical authors may be represented by the transformationalists. This section aims to outline more precisely the main characteristics of these three theoretical approaches.

A preliminary introduction to hyper-globalist thought can be grasped through the meaning of the prefix to the noun. The prefix *hyper* means over, above, or beyond, usually expressing excess or exaggeration. While the sceptics believe that the globalisation effects are concentrated in a few countries, the hyper-globalists believe the opposite, that is, that globalisation has produced significant economic changes in almost the entire world. Globalisation is seen as a definitive trend that has been changing once and for all the role of the nation-states and the typical power of trade unions in favour of the dominance of free market forces. For most authors, globalisation is a benign phenomenon that leads to the convergence of world incomes, institutions and political systems. According to them, it affects heavily the economic status quo of developing and less developed economies. Therefore, if they open up their economies and practice "sound" macroeconomic policies, it will lead them to higher level of income and spur their economic growth.

According to the hyper-globalists, the market itself is a more efficient mechanism of coordination than nation-states and, therefore, active public policies are not required (or welcome). In order to make globalisation work, a wide range of liberal political reforms such as deregulation, liberalisation, privatisation and restrictive monetary policy to guarantee price stability is encouraged, as was the case of the "monetarist counterrevolution" at the beginning of the 1970s (also called the end of the "Keynesian era") and hastened after 1989. As a result, the world economy has gradually become

[17] Perraton & Goldblatt (1997) and Giddens (2002:8) identify two opposing groups of researchers in the debate on globalisation: the radicals and the sceptics. However, Held *et al* (1999:10), Perraton (2003:37) and Giddens (2006:60) define another one, known as the transformationalist school, which is supposed to develop a critical approach to these two already established views.

one common marketplace capable of integrating productive activity, trade, services, labour and financial flows until it reaches the final (ideal) stage, in which national markets are replaced by global ones. Consequently, nation-states lose their autonomy in favour of multilateral organisations built on international rules. Nation-states are supposed to preserve carefully the stability of the key macroeconomic aggregates (the "fundamentals"), especially external accounts, in order to sustain the economic and institutional stability necessary to attract international capital. Accordingly, nation-states invest less in social policies or undertake very little in this area. In fact, the title of one of the books that support this thesis well summarises this argument in its title, which is *The Borderless World* (Ohmae 1991).

By strengthening a global free market economy, countries have been able to develop their productive potential in terms of maximisation of their natural comparative advantages. This mechanism has increased competition and therefore the efficiency of markets, resulting in the convergence of a higher level of global growth.[18] Transnational companies play a relevant role in this free market context because they perform optimal outcomes in line with the world market and more efficiently than nation-states do. For this reason, national policies and institutional governance are unnecessary.

Some authors from this school describe globalisation as a process marked by periods of convergence and divergence in terms of living standards in different countries throughout time. They focus their analysis on the changes caused by the flow of capital and labour across national frontiers. According to these authors, there is convergence in terms of living standards when countries promote an opening period for trade and capital flow, and divergence when this situation is reversed to periods of protectionism (which signifies de-globalisation). In this sense, there is a positive correlation between globalisation, free capital mass migration and income convergence.

Globalisation or de-globalisation, convergence or divergence are measured in different ways, such as the changes in the GDP per worker or in terms of the factor price

[18] Williamson (1996:279) defines convergence in the following way: "The critical bottom line for me is whether the living standard gap between rich and poor countries falls over time. Convergence implies an erosion of this gap, at least in percentage terms." Likewise, Bordo (2002:25) defined convergence as "the ability of countries to reach the living standards, industrial structure, and productivity levels of the leading countries - Britain in the nineteenth-century and the U.S. in the twentieth."

equalisation theorem (Heckscher-Ohlin Paradigm).[19] This approach typically adopts a neoclassical view of international trade and international capital movements in which diminishing returns play a leading role. The emphasis on trade and capital flows focuses attention on factor price convergence. Population growth, capital formation and technical change were the main intertwined factors that caused the convergent/divergent state in the world economy.

Conversely, the key point of the sceptics' arguments is that globalisation is an exaggeration. According to them, the globalisation debate is full of ideological arguments and in fact the world economy is far from being truly globalised (Went 1997:51). Accordingly, the term "highly (or strongly) internationalised" is preferred to "fully globalised". It is widely recognised in the literature that Hirst & Thompson's (1996) aforementioned book, *Globalization in Question*, is closely related to the appearance and development of this school. A spate of scholarly books and articles followed their ideas, arguing against the reality of globalisation as supported by the hyper-globalists. Some key arguments supported by the sceptics have already been given in section 2.3, so here only new key arguments will be displayed.

The sceptics question the existence of a current globalisation process. According to them, as a rule, most of the world's economic activity (trade and finance) is developed nationally rather than being carried out through companies or banks localised abroad. The competitive performance of firms is determined substantially by processes occurring at a national level, i.e. decisions made by national economies dominate over those made at an international level. In contrast, a globalised economy is characterised by different national economies articulated into the global system by international processes and transactions. Much of the increased international activity (trade and capital flows) reflects decisions taken nationally, and the most powerful decisions are heavily concentrated in a small group of countries. Consequently, the existing situation

[19] According to Robert Rowthorn & Richard Kozul-Wright (1996:5): "This theory teaches that under free trade countries will specialize in those activities in which they have a comparative advantage. Other things being equal, a country which is rich in a particular resource will export products whose production utilizes this resource intensively and import other products. The resulting efficiency gains lead to a higher level of global welfare as well as to optimal resource use for each individual economy. Moreover, according to traditional trade theory, even in the absence of capital and labour mobility, convergence of factor prices should accompany greater openness; workers of comparable skill will be paid the same in the developed and developing worlds and owners of capital will likewise obtain the same rate of return on their investments."

in the global integration scenario is closer to the inter-national economy rather than a fully globalised one.

Even recognising that the state's abilities for governance have changed and weakened considerably, they believe that the role of the nation-states remains pivotal in providing legitimacy for supra-national and sub-national governance mechanisms. Global markets do not eliminate global inequalities and, as a result, additional public policies are necessary to bridge this gap. This is the alleged new historical role of the state. In comparison to the period before the current surge of internationalisation, governments have less autonomy to operate their economic policies but state that there is not absolute loss of control over them.

Cursory reading of the sceptical literature may conclude that they support an ascetic rejection of any change in the world economy in the last three decades. But this is not really what they mean. In the conclusion of *Globalization in Question*, Hirst & Thompson (1996:196) made a synthesis of their main arguments against the idea of the globalised world defined by the hyper-globalisation school: "We remain sceptical about the more extreme claims for economic globalisation, whilst at the same time accepting that the international economy has changed radically in structure and forms of governance from those that prevailed in the long boom from the early 1950s to the 1973 oil crisis".

They recognise that asymmetries generated by liberalisation and deregulation may produce new global oligopolies and damage the nation-state autonomy and political sovereignty. Therefore, unlike what the strong version suggests, there is a great tendency for decreasing in global (economic and political) actors and, consequently, an increase in the market shares of transnational firms, which means that the alleged globalisation promotes a more uneven world, instead of global convergence. To deal with this progressive unevenness, they claim that an international governance system must be an important instrument to be at the top of the world political agenda.

According to the sceptics, not only are market forces impotent to govern the world economy alone, but the role of nation-states and of non-state actors remains important, acting as relevant institutional instruments of global governance, despite having less legitimacy to implement development policies. The power of nation-states weakens over time, but they do not disappear as an active actor capable of intervening in the economic scenario and participating in international governance (Hirst & Thompson 1996:191).

On the contrary, because of the increased global integration, nation-states should be an effective agent in the governance structure to promote regional governance for the same reasons alleged by the globalists, albeit in the opposite direction. Governments, not the market, have the role of harmonising social conflicts, and are able to mobilise, for instance, the military forces to protect the nation against external conflict and internal disorder. The political survival of private businesses depends on the successful performance of the nation-states in real activities of governance, instead of being the minimalist state proposed by globalists. In the same way, one should remember that the state alone possesses a seat in key international organisations for the economic coordination of the world. These are some examples to show that public forces and public instruments of governance presents a great advantage in relation to the private sector.

In order to avoid the negative impacts of economic globalisation, global governance requires effective bodies to enforce regulations throughout a particular region or worldwide. Several United Nations (UN) agencies were created to monitor working conditions worldwide, resolving internal tensions thereby avoiding violent conflicts, preserving respect to human rights, pollution problems, etc (Brown 2003). On the other hand, the responsibility for overseeing international trade remains largely with groups such as the WTO and GATT (Sinclair 2003) and that of regulating international finance with the World Bank and the International Monetary Fund (Toye 2003). Nevertheless, possibilities for economic governance still remain, and there is still a role for nation-states to play, especially in terms of creating ground conditions for effective national and international governance. Therefore, governments remain an essential institution and retain their status as crucial structures of authority in world affairs.

In summary, scepticals and hyper-globalists support antagonist theoretical interpretations concerning the core aspects of globalisation, disputing the character of the market and, consequently, the rationality of the necessary interventions. However, advocates and foes alike share the assumption that the world economy has changed significantly since the 1970s and has veered towards a supranational system. Hirst (Hirst & Held, 2002:4) maintained: “I’m not saying that nothing has changed. What I’m saying is that there are certain fundamental foundations which remain. Of course, today supranational processes are stronger than they were before. But it is a mistake to over-emphasise this." In the same way, non-radical authors like Sutcliffe & Glyn (2003:61) assert: "We do not question that globalisation in one of its meanings – the world-wide spread of capitalist relations in production and distribution – has been a major feature of the last 50 years."

The transformationalist view is expressed by the newer school that discusses globalisation from a theoretical perspective. The transformationalists' essential philosophy points out that globalisation cannot simply be a synonym of trade and finance-led integration, but must be seen as an innovative interdisciplinary research programme combining history, law, sociology and other similar academic fields. Briefly, they conceive of globalisation as a historical process (or a "set of processes") in dynamic transformation, which is still in the course of unfolding. They emphasise that globalisation is a phenomenon in continuous motion since its developments involve a series of changes taking place through time. These authors identify the general movement of the global economic system through the major international macroeconomic indicators such as global output, global financial markets and international business organisation.

Perraton & Goldblatt (1997) and Perraton (2003) have key thoughts concerning the transformationalist approach. Their description on globalisation may be better summarised by what they say globalisation is not. Globalisation is not a singular condition, a linear process or a final end-state.[20] Moreover, they refute the radical and the sceptical interpretations. According to them, for the hyper-globalisation school, global markets are now perfectly integrated, even for non-tradable goods and services. Conversely, sceptics have asserted that the recent developments of globalisation are far from being considered entirely integrated in the productive and/or financial sense. Although both interpretations are defending divergent viewpoints, sceptics and globalists use similar conceptions in terms of perfectly integrated international markets. According to the radicals, global markets are already integrated, while for others globalisation can only be real when this ideal situation is attained. In other words, the

[20] Held (Hirst & Held, 2002:2) supports this interpretation in the following way: "Globalisation is not an end state, or a single thing, any more than is democracy or industrialisation. These are processes, involving changing relations of human affairs - which means it is wrong to say that the local doesn't matter any more. It matters in a different way. It is being re-contextualised in a more complex world of economics, politics, culture and migration."

analyses of both schools fail by conceiving the phenomenon working in the same idealistic (extreme) situation.

Transformationalists elaborate an alternative approach to describe globalisation using historical background and empirical evidence. Accordingly, globalisation must be understood as a systematic series of changes that moves social relations from the regional to the transcontinental (or interregional) level. This process changes human organisation, shapes new institutions, and affects at least the seven aspects mentioned in Table 1 above, i.e. economic, political, cultural, military and environmental. In this sense, globalisation has different historical forms, multiple causes, and multiple equilibria.

In the book *Global Transformations* (1999) Held *et al* put together various aspects of political science, economic history and sociology to describe the past and current forces that have been changing the world and transforming societies, nation-states, multinational and supranational organisations, and social relations as a whole. They recognise that globalisation is not just an economic matter, but a confluence of factors interpreted in a historical perspective which results in significant transformations of different globalisation regimes that have occurred since ancient times. The authors are interested in putting into context the nature of the global transformations, their causes and consequences for the social, political and economic tissue. Held *et al*., (1999:7) provide a good summary of the transformationalist theoretical interpretation with these words:

> At the heart of the transformationalist thesis is a conviction that, at the dawn of a new millennium, globalization is a central driving force behind the rapid social, political and economic changes that are reshaping modern societies and world order. According to proponents of this view, contemporary processes of globalization are historically unprecedented such that governments and societies across the globe are having to adjust a world in which there is no longer a clear distinction between international and domestic, external and international affairs. … Globalization is conceived as a powerful transformative force which is responsible for a 'massive shake-out' of societies, economies, institutions of governance and world order. In the transformationalist account, however, the direction of this 'shake-out' remains uncertain, since globalization is conceived as an essentially contingent of historical process replete with contradictions. … Transformationalist accounts emphasize globalization as a long-term historical process which is inscribed with contradictions and which is significantly shaped by conjunctural factors. Such caution about the exact future of globalization is matched, nonetheless, by the conviction that contemporary patterns of global

> economic, military, technological, ecological, migratory, political and cultural flows are historically unprecedented.

In short, this brief summary shows that theoretical literature on globalisation has evolved significantly in the past two decades. As explained in the previous chapter, by the early 1980s, notions of globalisation were developed without a definite pattern in several academic fields. However, in the 1990s, many researchers in social sciences shifted their focus to accomplish a systematic study of globalisation as a theoretical research.

The list of publications is extensive but when dealing with the groundbreaking publications, it is worth mentioning that the mainstream view of globalisation was well summarised by Francis Fukuyama in his 1989 article *The end of history?*. In this controversial paper, he challenges the Marxist philosophy of history suggesting that the end of the Cold War marked the "triumph of the West", "the total exhaustion of viable systematic alternatives to Western liberalism", "the end point of mankind's ideological evolution and the universalisation of Western liberal democracy as the final form of human government" (p. 1).[21] *The borderless world* and *The End of the Nation State* written by Ohmae in 1991 and 1995, respectively, also present core elements of the hyper-globalist approach. Despite having written numerous books and articles, Ohmae has dedicated his career not to academia but to business and socio-political analyses, and as a public speaker and management consultant. He worked for twenty-three years as a partner in McKinsey & Company Inc., an international management consulting firm and, for these reasons, he attracted the attention of the mass media and his words echo in the minds of current international market makers and global political leaderships.

Fukuyama's and Ohmae's interpretation have been criticised, especially from the left-wing segments within academia. These critics were important to the debate because they led to the development of new interpretations of globalisation, although they were given less welcome in the wide circles of global marketing and the media. Accordingly, in 1996 Hirst & Thompson wrote *Globalization in Question*, detailing a systematic body of criticism to the hyperglobalist position. In 1999, *Global*

[21] Fukuyama's thesis about the end of history was developed further in the book: Fukuyama, F. (1992) *The end of history and the last man*. New York: Avon Books.

Transformations appeared, presenting key points developed by the transformationalist approach, which is one more school of thought in the globalisation debate that criticises the optimistic and the pessimistic globalists. These scholars emphasise the intensity and the extensity of global flows in various areas outside economics, and in several ages in history. Numerous articles followed, pushing the understanding of globalisation one big step forward.

4. Conclusions

This chapter has displayed a panoramic view on some qualitative aspects surrounding the academic debate on globalisation. It has addressed key issues such as its concept, periodisation, the debate on myth or reality, and its indicators. Despite the effort to present a concise and wide picture of the theme, the chapter naturally did not cover all the areas of the debate. Nevertheless, the broad picture painted shows the essential thoughts that will be referred to in some degree in the rest of this thesis. Globalisation is a multi-faceted topic and has brought a relevant transformation in the organisation of contemporary society. It has influenced the policies of local authorities, transformed the spectrum of global power, changed the notion of space, the decisions of private investors, the behaviour of transnational corporations, the actions of multilateral institutions, and the social interactions of many people around the world.

This chapter then presented a review of the three main theoretical approaches that have been used by economists to scrutinise globalisation. The theoretical debate involves three distinct groups of authors. The first approach examined was that of the so-called hyper-globalists. They claim that actual global integration is thorough and, consequently, the production factors (capital, technology, and labour) are globally mobile, and the notions of national products, national industries and national corporations have become redundant. Government intervention must be avoided since it distorts information embedded within the price system, thereby bringing about inefficient market functioning. Moreover, since globalisation has weakened the ability of governments to regulate economic activity and rule transnational corporations, the actual stage marks the end of the nation-states. The sceptics are of the belief that, historically speaking, the present economic world order remains far from being closely integrated, in addition to the fact that the actual net flows between major economies are similar to or even lower than a century ago.

Finally, there are scholars known as transformationalists supporting a “third way” interpretation considering that the contemporary global economic position is much more intricate now than during the classical Gold Standard era, i.e. the levels of interconnectedness (read: interdependence) and enmeshment (read: networks of integration) are higher and have been reaching more countries than ever before. Consequently, business activity is now more embedded in regional and global networks, and the transnational economic flows are unprecedented in history.

The chapter represents an essential role in this thesis. The core aspects of globalisation studied lay the groundwork for the task ahead, which focuses on the debate on financial globalisation.

III. An empirical assessment of financial globalisation in a historical perspective: contrasting the U-shaped pattern with the J-shaped proposition

1. Introduction

In recent globalisation literature, economists and economic historians have been comparing the growth of world trade with the expansion of global financial transactions relative to the world GDP, concluding that at particular times in history global financial activities have largely exceeded world trade. In fact, the growth of cross-border financial flows in certain markets during the last three decades of the 20th century has been much higher than other key macroeconomic aggregates, such as world GDP and world exports or imports. The increasing importance of international capital flows over much of the post-war period has brought the debate on the globalisation of finance to a prominent place in current academic literature.

Recently, scholars have studied financial globalisation in a historical perspective, i.e., from the classical Gold Standard era until the 1990s - and have found the so-called U-shaped pattern. Researching the historical data referring to this period, I have found a different form, referred to in this thesis as the J-curve. Therefore the main purpose of this chapter is to present empirically the J-curve as an alternative way to interpret financial globalisation in historical perspective.

The J-curve not only differs in shape but it has a series of qualitative implications for the interpretation of the development of financial globalisation since the 1870s. However this chapter is not the place to discuss qualitative issues underlying the J-shaped proposition. Institutional arrangements, economic policies and other non-quantitative aspects will be discussed in the next chapter. More precisely, this one has two core objectives: 1. to underline some key descriptive aspects of financial globalisation; and 2. to present data on international capital flows as the first step in constructing the research hypothesis of this research, which is an alternative way to interpret financial globalisation in a historical perspective.

After this introduction, the second section examines some outstanding core characteristics of financial globalisation. Section 3 is divided into two subsections: the first one briefly presents the mainstream U-shaped pattern, and the second presents and interprets the statistical evidence proposed to establish the J-shaped curve.

2. Financial globalisation under debate

As a first attempt to grasp the key aspects of the financial globalisation phenomenon, the term was searched for in dictionaries of economics. The results however were not promising. The latest edition so far of the four-volume *New Palgrave Dictionary of Economics* edited by John Eatwell, Murray Milgate and Peter Newman in 1998, does not include an entry for it. The four listed entries that use the term *financial* (*financial crisis*, *financial intermediaries*, *financial journalism*, and *financial markets*) discuss a range of themes related to financial globalisation but they do not address the core aspects of the phenomenon surveyed in current specialised literature. Likewise, no direct reference could be found in the recent four-volume *Encyclopedia of Globalization* (2007). Even close substitute terms such as *financial integration* or *global financial integration* were not found in both of the publications quoted above and in other specialised books.[22]

There are many possible explanations for this deficiency. Some may be purely commercial, i.e. possibly during the 1990s there were not enough commercial reasons to include a definition of the term in new editions. But there are other reasons, for example Scholte, one of the editors of *The Encyclopedia of Globalization*, affirmed that this entry was not included because the Encyclopedia had already provided other entries such as “offshore, IOSCO, hedge funds, G30, economic globalisation”, which arguably cover the meaning behind the term financial globalisation.[23]

Whatever the case may be, the purpose of the first part of the chapter is not to speculate on the reasons why financial globalisation has not been included in the specialised

[22] I found a definition of financial integration in: Jones, R. J. Barry (ed). (2001) *Routledge Encyclopedia of International Political Economy*. Routledge: London and New York. However nothing similar was found in the dictionaries below: Greenwald, D. (ed) (1994). *The McGraw-Hill Encyclopedia of Economics*. New York: McGraw-Hill, second edition; Magill, F. N. (ed) (1997). *International Encyclopedia of Economics*. London: Fitzroy Dearborn Publishers; Newman, P., Milgate, M. & Eatwell, J. (eds) (1992). *The new Palgrave dictionary of money and finance*. London: Macmillan Press; Pass, C., Lowes, B. & Davies, L. (2005). *Collins Dictionary of Economics*. Glasgow: HarperCollins Publishers, fourth edition.

[23] This information was not published anywhere. I sent an email to Professor Scholte on 7th June 2007 asking him why *financial globalisation* was not included as a separate entry in the *Encyclopedia*. He replied to me on 11th June 2007. This was his answer: “I think we decided that a separate entry on financial globalisation was not necessary after having various other entries on offshore, IOSCO, hedge funds, G30, economic globalisation, etc.”

dictionaries but to investigate the central aspects of the phenomenon based on the academic literature. With reference to globalisation, financial globalisation is also a multidimensional topic, therefore no one can expect to find a consensual description of it. Additionally, it is worth emphasising that the same caveat made in the previous chapter on the definition of globalisation is also applied here: the descriptive analysis of financial globalisation will be focused on the characteristics of the recent episode.

2.1 What does financial globalisation mean?

a) The general approach

Since the collapse of the Bretton Woods system in 1971, expressive changes have occurred in cross-border capital flows, capital mobility and market connectivity. Various closely connected historically determined factors have been propelling current financial globalisation to higher levels of global financial enmeshment and interconnectedness. These factors have been affecting the nature, the magnitude and the timing of the phenomenon and they have been occurring essentially in economic, political, institutional and technological fields.

The most salient could be summarised as: a) the growth of cross-border financial flows being much higher than the growth of world GDP or international trade; b) change in the regime of exchange rates, from fixed to floating; c) financial liberalisation and deregulation policies spread around the world, reaching major industrial economies in 1970s and most developing economies from the 1980s; d) significant domestic and international structural changes in the banking system (off-shore facilities, merger and acquisitions, liquidations, bankruptcies); e) stringent competition between financial agents (banks and non-banking institutions); g) development of numerous new products, markets and services (financial innovation); h) the appearance of new agents professionally managed by institutional investors; i) larger levels of interconnectivity amongst financial markets through ICTs.

The linkages developed by the interaction of these elements have been tightening international financial market arrangements, creating new markets, new products, lowering home bias, accelerating the development of the disclosure practices and legal procedures of banking regulation and supervision. As a consequence, financial flows have increased their global enmeshment. These events are not exclusive to the present era but most of these characteristics can be found in today's financial globalisation. Historically speaking, financial globalisation is a process that has not been linear, but has developed in waves surrounded by periods of booms and crises.

The repercussions of all these factors over the global financial system have produced a rare consensus amongst economists, advocates and critics of globalisation alike. Notwithstanding their disagreements concerning the causal reasons of these changes, they have agreed that over the past decades, profound transformations in global finance have veered domestic markets towards a supraterritorial arrangement. Some call this globalisation, others use different names and taxonomies - but in general most authors agree that an impressive volume of money has been traded worldwide, and that contemporary financial activity has become complex and pervasive. Little consensus exists as to the correlation between this new international financial configuration and the occurrence of recent bubbles, panics and crises, but in fact the management and control of global financial affairs has become rather multifaceted. It certainly requires an attentive and detailed study. For this reason, scholars strive to describe the essential aspects of recent financial globalisation.

Financial globalisation is generally described as being a process of the integration of domestic financial markets into one of global scope. In other words, domestic markets keep their facilities based locally but modern electronic communication networks and computer based systems have allowed them to trade globally in a large variety of public and private assets and liabilities, currencies, commodities, a variety of financial services, instruments of risk management and the like. Since the scope of financial activities is wider, portfolio positions of public and private agents have become increasingly internationalised. Financial globalisation implies, however, the organisation of an increasingly interlinked network of markets that are able to negotiate products and services in larger areas of the world, and do so more quickly.

In the previous chapter, Scholte (2002:8) asserted that globalisation might not be adequately described as internationalisation. Similarly, some authors make a clear distinction between financial globalisation and financial internationalisation. Shirakawa, Okima & Shiratsuka (1997:2) claim that internationalisation describes a situation where certain external transactions increase, whereas globalisation encompasses a collective tendency of financial market integration in each country towards a single world market.

Despite sustaining in essence the same argument as the three Japanese economists above, Benjamin J. Cohen (1996:269) uses both terms interchangeably. In his opinion "financial globalization (or internationalization) refers to the broad integration of national markets associated with both innovation and deregulation in the post-war era and is manifested by increasing movements of capital across national frontiers". Despite this difference, which seems to be merely semantic, the authors follow the tendency of most economists and define financial globalisation as a process of universal integration of national markets.

Similarly, Prasad *et al* (2003:2) have employed the concepts of financial globalisation and integration interchangeably, despite recognising that the former is, by definition, different from financial integration. They have addressed the financial globalisation concept in this way:

> Financial globalization and financial integration are, in principle, different concepts. Financial globalization is an aggregate concept that refers to increasing global linkages created through cross-border financial flows. Financial integration refers to an individual country's linkages to international capital markets. Clearly, these concepts are closely related. For instance, increasing financial globalization is perforce associated with increasing financial integration on average.

Nevertheless, opinions diverge regarding the degree of integration of domestic markets. Arestis & Basu (2003:2) support the same viewpoint that financial globalisation is an ongoing process tending to integrate local markets into a single one. However, they propose that the operation of a truly global financial market requires the establishment of a single currency managed by a single global monetary authority. This status would be achieved through the emergence and coexistence of various institutions designed to deal with possible inconsistencies created by such an open international financial system.

Tobin (1999) alerts us of the difficulties to be surpassed for national monetary authorities to keep the stability of their currencies due to the frequent threats provoked by the globalisation of financial markets in the 1990s. According to him, the key elements that have encouraged the phenomenon are "the liberalization and deregulation of international financial transactions" (p. 66). Cohen (1996), quoted above, also highlighted that extensive financial capital mobility encouraged by both innovation and deregulation has played an important role in today's financial globalisation. This opinion is shared by most scholars.

The historical importance of domestic policies to adjust internal financial markets into a global shape has been remarkable. Over time, national economies have adjusted their fiscal and monetary policies in order to become part of a "global discipline". In both globalisation eras this policy adaptation (whether voluntary or not) played an important role in the process of the gradual international interconnectedness of a number of nations. The reasons for this vary greatly according to the historical moments and the historical specificities of each time. The increasing adherence to the "rules of the game" after the 1870s during the classical Gold Standard were determined by the circumstances surrounding that period, such as the political, economic and monetary dominance of Britain; the importance of central banks; political instabilities in Europe and the US concerning the bimetallic system, and so on. As will be discussed in the next chapter, a variety of policy changes were in place at that time and it spurred the developed and developing countries became more (but not evenly) internationally integrated.

Moving to the second wave, after the 1980s, a sea change pushed the overwhelming majority of countries to adjust their domestic policies towards an open system. One of the most outstanding examples of it was the large number of countries that liberalised the capital account of their balance-of-payment. This reveals once more that governments have followed intentionally and/or adapted involuntarily their policy stances to the pressures and decisions set up by the leading nations.

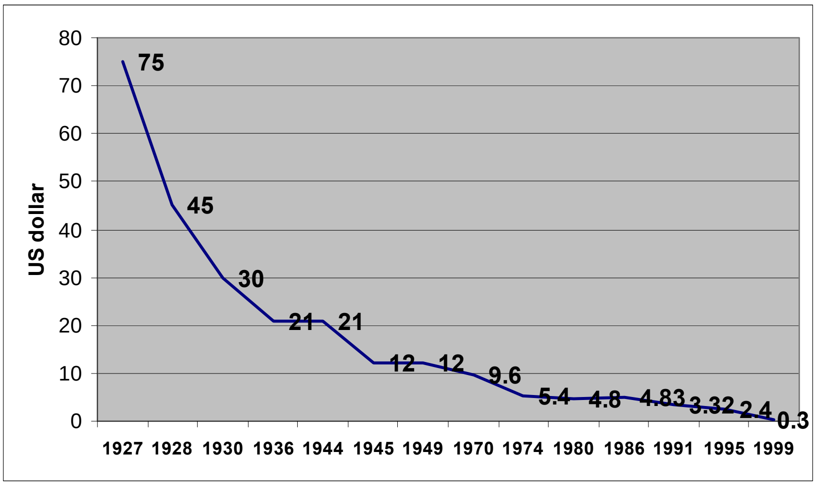
Apart from the policy motives, various financial instruments were created and developed as alternatives to deal with the high macroeconomic instability that characterised the global economy during the period. In the wake of this process, derivative instruments were created, such as futures, options and swaps aiming to minimise the risks in financial transactions and to create a potential return to the agents involved. Derivative contracts are divided into two distinct groups: over-the-counter (OTC) derivatives are contracts traded directly between the two parties involved, hence they are not negotiated in a specific exchange market or through intermediaries. The other group is the derivatives traded in specialised markets. Accordingly, financial market participants had also changed significantly by that time. Institutional investors such as banks, credit unions, insurance companies, hedge, mutual and pension funds, executives or even professionals who had a certain amount of income were integrated as financial actors buying tailor-made assets in the marketplace.

Financial globalisation is closely related to the development of new financial services (financial diversification). An augmented flow of money has been negotiated in an enlarged variety of financial operations, forming a wider (read: global) network of businesses. This process of improvement and diversification of financial services is closely related to the historical specificity of contemporary capitalism. During the 1980s, but mainly in the 1990s, the world economy was marked by severe financial crises, which had spread rapidly across the world through contagion as never happened before in world's financial history. For this reason, banks, institutional investors and financiers have applied sophisticated techniques of financial engineering to develop varied products and services to accommodate this increasing volume of capital that searches for profitable opportunities and security.

Microeconomic aspects have also encouraged intercontinental financial integration. For instance, multinational companies have been aggressively entered in increasingly larger financial positions and a growing number of employees have become shareholders through the intervention of institutional investors. They have begun to manage a broader range of securities, a variety of OTC derivatives, and a large amount of FDI. Securitisation and derivative contracts are the main private institutional arrangements created by today's financial globalisation. For this reason, a policy maker like Alan Greenspan (2003) considered the present era as the most advanced stage of financial globalisation so far.

Kregel (1996:55) and Tobin (2000:1001) emphasise a key characteristic that explains the rapid globalisation of the financial markets, which is the fact that there are no physical frontiers to be crossed by financial assets, but only national regulations. Since these regulation barriers fell drastically throughout the last quarter of the 20th century, the process of globalisation was able to progress quickly. Due to their intangible nature, financial transactions do not involve physical transport costs, and that is why intangible assets are much easier and faster to globalise than commodities and labour (Kregel 1996:55). In fact, transfer costs exist, but they are negligible nowadays in comparison to the past (see figure 2 below).

Figure 2. Standard rate for 3-minute call from New York City to London: 1927-99 (in current dollars)[24]



Source: Odlyzko (2001:509)

In addition, the phenomenon in the current era has benefited greatly from other distinctive technological breakthroughs that have lowered the cost of telecommunications and have promoted a rapid international movement of highly liquid assets. Information and communication technologies have made the financial transactions "easy, fast and cheap" (Tobin 1999:1001).

The process of financial globalisation entails not only the transport of assets and debts over long distances but also quotations of assets that can vary several times a day. Along with country-specific differences in terms of national regulations, imperfect information has been a barrier to the development of global financial transactions. Therefore, effective channels of data transmission are important to reduce the ever-present problem of asymmetric information, spreading the relevant information required to guide private decisions as quickly and accurately as possible.

Revolutions in telecommunications and computer technology have enabled the spread of information over long distances at an unprecedented speed. From 1970 onwards, satellite communication, (transoceanic) fibre optic cables, and the use of micro processing in manipulation and data processing produced by digital communication have been widely used in the integration process of distinct financial markets. This has dramatically lowered the cost and time of transmissions, revolutionising intercontinental communication and allowing instantaneous transactions of financial

[24] This figure is based on data in Appendix 4.

flows. Over time, networks of information throughout the world have redesigned borders, eliminating difficulties in the transport of assets and information. Accordingly, markets have been extended and investment opportunities have risen, mostly in advanced countries.

In a nutshell, technological advances in telecommunications and computer-based information systems have played an important role allowing instantaneous communication and transactions all around the world. That is to say, instant direct 24 hour intercontinental connectivity has matched a larger variety of new tailor-made services. But high speed intercontinental communication is a double-edged sword. On the one hand, it has boosted closer connections amongst financial centres worldwide, but on the other hand it has increased the risk of crisis contagion. Therefore, like globalisation, financial globalisation also implies increasing interconnectedness, i.e. interdependence amongst local markets. The high level of integration allows investors to react immediately when disturbances occur in any market and, in consequence, the speed and volume of business are affected, spreading waves of pessimism that often lead to nontrivial consequences for the system as a whole. The financial crises in Asia and Latin America during the 1990s prove the fact that the contagion effect is fast and expensive not only for the countries in crisis, but for the world economy in general.

Technological progress as applied to innovative products has also been an important incentive for the globalisation of finance since the transaction costs of financial services have been reduced, thereby encouraging new developments in portfolio diversification.

As mentioned in the previous chapter, advanced communication technology is not a panacea. Despite its effectiveness in terms of cost-cutting and technological improvements, disappointments and frustration have occurred because the global financial game is too complicated to be solved solely by technological apparatus. Many other instruments must be taken into account, such as adequate disclosure practices, corporate governance, restrictive norms defined locally by nation-states or by global institutions, and the development of institutions that fight against corruption and money laundering.

In the wake of this process of technological interconnection of financial systems worldwide, changes have also emerged in the nature of the intermediaries and market instruments. Institutional investors (pension funds and mutual funds) have played a relevant role as banks have in terms of financial intermediation. As mentioned above, especially after the 1970s, a wide variety of financial innovations such as derivative markets was introduced into the system. This represented a significant difference in relation to the previous financial globalisation period since not only did it allow agents to manage a larger volume of capital in a much broader range of securities, but it also permitted the simultaneous management of financial transactions with different maturities.

Although all the changes mentioned have facilitated capital mobility, some authors have emphasised the flip side of the coin, which is that, freed from the limitations of national controls or regulations, and under the impacts of modern communications, capital has become more vulnerable to financial crises. Thereby it has affecting especially economies that were not adequately adapted to the new policy scenario of financial liberalisation and deregulation. On this account, Eichengreen (2000:1113) correctly asserts:

> Changes in information and communications technologies similarly make it [the international capital transactions] more difficult to operate effective controls. Securitization and the proliferation of derivative instruments undermine any effort to impose selective controls meant to apply to some types of capital flows but not others. Consequently, any attempt to halt flows at the border must become increasingly comprehensive, onerous and, one fears, distortionary.

In brief, non-mainstream authors are sceptical about the efficiency of free markets in achieving convergence of products and income as predicted by mainstream economists. In general, they define financial globalisation as a process which evolves gradually until financial markets become integrated as one. They assert that legal procedures, the electronic communication apparatus and some degree of convergence in terms of economic policy have been occurring but it is not enough to argue that free markets are the core of the system. Markets are not entirely efficient but failed, and institutional arrangements have played a key role in the process of global integration. Consequently, they have expressed many concerns about the net results of this alleged effectiveness. While recognising a trend towards a growing interconnection amongst national economies during the Gold Standard and over the last quarter of the 20th century, they assert that it does not necessarily lead to a rapid growth of economic convergence worldwide. On the contrary, for many countries, output growth rates have slowed down and income levels have diverged (Baldwin & Martin 1999; Nayyar 2006).

Unconventional economists agree that the removal of barriers to international capital mobility is one of the key reasons for the increased cross-border capital flows in both eras. However, they argue that financial liberalisation is not a sufficient condition to constitute financial globalisation (Arestis & Basu 2003, 2004; Arestis & Basu & Mallick 2005; Davidson 2003). According to them, it is merely one step towards empowering globalised markets, and even so it is not free from market inconsistencies.

Another important source of disagreement between these scholars and the mainstream theoretical perspective is the one regarding the role played by nation-states. According to non-mainstream scholars, the pressure coming from international financial markets has changed the scope of the domestic political economy but it has not eliminated the autonomy of nation-states. Even agreeing that governments have lost some degree of manoeuvrability to manage their economic policies during periods of high capital integration (past and present), the aforementioned authors sustain that this does not mean the end of nation-states and the absence of political alternatives against the process of economic policy homogenisation (see also Chang & Grabel 2004). In other words, domestic financial systems are still regulated and managed by public policies, although the political and economic power of nation-states may vary over time from country to country.

Those scholars believe that the institutional role of nation-states is still relevant and they also emphasise the need for worldwide institutional coordination, which means that all markets should be under the coordination of a universal Central Bank, managing a single currency and a uniform credit system. On this account, Arestis, Basu & Mallick (2005:529) highlight the fact that the lack of full institutional coordination by an effective global central bank and the absence of a single international currency may put at risk what they call “true financial globalisation”.

In a nutshell, financial globalisation is a transformation of national financial systems within a network of linkages closely connected by macro/microeconomic factors, institutional changes in policy terrain, legal multilateral agreements, regulations and norms, and technological breakthroughs. It is also a result of global political changes, all things considered together within its historical specificities. Therefore, the phenomenon is closely connected to geopolitics, international diplomacy, vested interests and the ideological influence of hegemonic nations. In the current era, its development is heavily determined by the power and leadership of the US, as will be discussed in the next chapter.

b) An interpretation proposal on financial globalisation

In this thesis, financial globalisation is interpreted as a historical process resulting from economic, institutional, legal, political and technological changes occurring in the international scenario and influencing one another. As a response to these international tendencies, decisive changes follow in national economies, such as: a) financial liberalisation (disintegration of regulatory and/or monopolistic barriers); b) restrictions in the effectiveness of domestic economic policies due to the diminished role played by nation-states; c) financial diversification; d) institutional adaptations, especially in terms of the establishment of new institutions, new legal procedures and/or revision of the old ones; d) larger connectivity between most domestic financial markets; f) larger propensity to contagion and systemic crises.

This historical process has not been homogeneous. Since the emergence of a world financial order during the classical Gold Standard, financial flows have been heavily concentrated in a small number of leading Western European countries. Most economies adjusted their economic policies to adapt themselves to the Gold Standard's rules. Therefore, some nations have had privileged access to the international financial system and were thus able to develop more advanced markets of asset transactions. One might remember that global capital flows have been heavily concentrated in some areas of the globe, but it is worth noting that the high concentration of capital is an intrinsic characteristic of world capitalist development. Despite being heavily concentrated in developed countries, capital flows reached roughly all continents during this period, which means that capital markets are unevenly globalised. In fact, neither industrial nor financial capitals were thoroughly or evenly disseminated resources in this initial stage of capitalism. Historical specificities then and now have constrained most countries to be far apart from the benefits of global financial flows.

The point made above is crucial to establishing my own interpretation of financial globalisation. Authors have questioned the concept of financial globalisation because of the current geographical concentration of capital movements worldwide. In my interpretation, this concentration does not invalidate the use of the term *globalisation* because in the first era, as well as in the second, the structural factors that allowed the establishment of financial contracts around the world were ready and working and thus the conditions for capital mobility (were) are achieved. The point is that all the key financial centres in most important countries were connected, so agents were able to make deals everywhere in the world. As Scholte (2002) has asserted, globalisation is not a synonym of universalisation.

The problem is that, under the capitalist system, capital does not necessarily go everywhere. If the country is not profitable, if there are enormous risks, no matter how globalised it may be, no matter what sort of technological facilities are there, capital will not go there. Capital is choosy, so financial globalisation does not necessarily mean even distribution of financial flows. But what financial globalisation means on the contrary is that capital can flow wherever is deemed profitable. Capital avoids places where macroeconomic instability is high, or where the policy, legal, social or political conditions are quite unstable. Needless to say that globalisation (read global *enmeshment* and *interconnectedness* of finance) does not eliminate systemic risk. Risk exists in investment and the greater the risk the less motivation for capital to flow in certain areas.

Following most scholars' interpretations, it is recognised that economic history has experienced two remarkable eras of high financial integration, the Gold Standard and the last two decades of the 20th century. However, unlike some viewpoints, this study also recognises that special characteristics have been in progress during the second era, which makes a clear distinction between both periods. The collapse of the Bretton Woods agreements marked the end of an international monetary order and the beginning of a dramatic increase in world financial instability. The consequent economic scenario was characterised by a high level of uncertainty on the international monetary landscape, increased world inflation till the late 1980s and early 1990s and a growth in international interest rates throughout the entire period. Since then, a wide range of private reactions have triggered a significant development of the aforementioned financial globalisation linkages (financial liberalisation and deregulation, securitisation, OTC markets, institutional investors, universal banks, rapid development of computer science and communications technology).

These institutional and technological apparatus have allowed a larger flexibility of financial markets and contributed to a deeper and more pervasive financial integration. The statistics that characterise the financial markets during this period show that in certain markets, the degree of financial integration was surpassed in comparison with the pre-1914 financial globalisation. This leads to a new perception of its secular movement, i.e. instead of the well-known U-shaped pattern, a new pattern is arguably more appropriate to represent the contemporary performance of globalised markets. It is therefore imperative to briefly summarise below the well-known U-shaped pattern and to present the data that can support a new way of interpreting financial globalisation in a historical perspective.

3. Contrasting the U-shaped pattern with the J-shaped proposition: some empirical evidence

3.1 The U-shaped pattern

Scholars such as Michel Bordo, Barry Eichengreen, Maurice Obstfeld, Alan Taylor, and Michael Twomey have been studying international market integration since the advent of the classical Gold Standard era. They have examined historical literature and data pertaining to global capital mobility and have identified that the degree of commercial and financial integration has oscillated in long waves since then. The empirical evidence of their investigation suggests a specific pattern of international market development, which corresponds to a U-shaped pattern. According to the U-shaped pattern, financial markets presented high levels of integration during the forty years prior to WWI. This integration declined sharply in the years between the wars, recovering gradually after the Bretton Woods agreements until it reached again, in the 1990s, the comparably high levels of financial integration attained before 1914. Therefore, scholars have concluded that, comparing the late 19^{th} and the late 20^{th} century, the recent high levels of trade and financial integration are not unprecedented.

Obstfeld and Taylor (2002) have been explaining the U-shaped pattern in terms of the policy trilemma. The trilemma arises because a macroeconomic policy regime for each country can include at most two elements of the three policy goals: 1. set free the cross-border capital flows; 2. keep the exchange rate fixed; and 3. manage monetary policy according to domestic objectives. Policymakers cannot sustain all of these policies simultaneously. Under these circumstances, the economic policy scope is especially limited, then antagonistic decisions of political economy must be taken causing an uneven tendency for capital mobility. It means, capital flows have progressed and regressed over time according to decisions made under these policy constraints. The net result of this process accounts for a long term cyclical movement of the global capital market. The authors aforementioned have applied statistical and/or econometric models to support their argumentation towards the U-curve. Most commonly, they have used data on current accounts relative to GDP ratios, real and nominal interest rate differentials (1998) and on the relationship between domestic savings and investment (Taylor 1996).

Although agreeing with the role played by the policy trilemma, Bordo & Eichengreen & Irwin (1999) and Bordo (2000) provide another approach to explain the ebb and flow of financial capital through time. According to them, this is a consequence of information asymmetries, contracting problems, and macroeconomic risks. As a matter of fact, Bordo, Eichengreen & Kim (1998) reconsidered the U-shaped pattern as an suitable for of reflecting international market integration. In their paper, they conclude that changes in operation in global financial markets induced by new information technologies and financial innovations reduced the "market-segmenting effects" of asymmetric information encouraging a wide range of financial securities, thus broadening the international financial linkages. Nonetheless, they do not present statistical evidence showing the impacts of these broader global financial linkages on the level of current financial activities in comparison to the pre-1914 era.

The U-shaped pattern has been considered a conventional wisdom on the evolution of international capital mobility since roughly half a century before WWI (Obstfeld & Taylor 2004:85). The U-shaped trend line points out two key messages: 1) The first era of financial globalisation lasted from 1870 to 1914 and the second from the 1980s to the mid-1990s; and 2) The level of capital integration before 1914 was comparable to or even higher than that of the 1990s. In short, contemporary financial globalisation is not unprecedented, therefore there is nothing new in the contemporary international financial scenario.

The literature on the U-shaped pattern is widely known in academic circles, and for this reason this section presented only a short review of its main aspects. Before starting the next section, it is worth emphasising that examining this literature, it can be seen that the data that has been used to outline the U-curve does not include all of the 1990s, i.e. scholars have been arriving at the U-shaped trend using data from the late 19th century up to 1995. Expanding these figures to 2000 or more, certain measures that had held the U-trend line assumed a J-shape format. Hence, the next section aims to present this statistical evidence that raises an argument for proposing an alternative interpretation of the historical course of global finance since the Gold Standard. The empirical evidence I surveyed suggests that in some respects the financial integration of the contemporary financial markets is higher than in the past. Even in markets where scholars have achieved the U-shaped pattern, I propose that, updated to the end of the 1990s and into the early years of the 21st century, another shape would be found that is closely related to the so called J-curve.

3.2 The J-shaped proposition

The U-shaped pattern has not been represented in all financial indicators. Maurice Obstfeld & Alan Taylor draw upon a range of indicators such as cross-border flows and stocks, saving-investment correlations, current account positions and asset price movements to describe financial globalisation as a phenomenon formed by multiple indicators. But they did not assert that a U-curve is achieved in all these indicators. Conversely, Obstfeld & Taylor (2002) compiled the data on the stocks of foreign assets and liabilities concerning world GDP at benchmark years over the period of 1825 to 1995, and found a U-shaped pattern for the period 1870-1995. Moreover, Michael Twomey (2000) claimed a U-shaped pattern for the ratio stock of outward FDI/GDP between the 1913 and 1995.

Several authors have agreed with the existence of the U-curve but not all of them have provided statistical evidence to demonstrate it (Eichengreen 1996). This way, apart from the stock of foreign assets and outward FDI, I did not find in the literature another statistical demonstration of the U-shaped pattern. This is understandable because accurate financial data for the period of the Gold Standard is quite scarce. Hence, this section aims to present quantitative evidence challenging the U-shaped pattern in those two markets where the U-curve was found, the stocks of foreign assets and liabilities and stock of outward FDI. According to the data collected here, in those markets, financial flows were bulkier during the 1990s and beyond than during the peak of the Gold Standard. Therefore, instead of a U-curve, this new configuration resembles a J-shaped pattern. It is worth emphasising that in this thesis, the J-curve is also not represented in all financial markets, but in the two mentioned above.

The J-shaped pattern proposal could be described as follows: these two financial markets were globally integrated during the classical Gold Standard era; their activities collapsed in the period between the wars; after a gradual post-war recovery they reached a higher level of activity starting from the 1960s, reaching a peak from the second half of the 1990s and onwards. In contrast to the U-shaped pattern, the global financial flows during the contemporary era have been unprecedented and much more voluminous in these markets than they were in the classical Gold Standard era. In this case, the J-curve draws attention to a uniqueness stage of financial integration in the late 20th and early 21st centuries.

The appearance of the J-curve is closely related to the fact that the data presented by Obstfeld & Taylor (2002) and Twomey (2000) is outdated. Their calculations included data up to 1995, but I have updated these calculations to 2004 and 2005 (stocks of foreign assets and liabilities and stocks of outward FDI respectively). Thus, the J-shaped curve appears to be more robust to indicate the historical trajectory of these markets.

There are two major reasons why it was not possible to search other indicators. Firstly, empirical tests to assess the performance of some markets are hindered because there is a scarcity of historical data to gauge the financial markets in the 19th century; and, secondly, some contemporary financial markets did not exist at that time. These difficulties obstruct further statistical tests involving the two ages. As a matter of fact, Rajan & Zingales (2003) suggest three main difficulties in obtaining reliable sources of historical information on financial markets: 1. primary sources are often lost or inaccessible; 2. secondary sources are contradictory or uncritically repeat the same primary sources; and 3. the type of statistical information changed from the late nineteenth to the late 20th century.

In the following section, I shall present the statistical evidence collected in order to establish the alternative hypothesis proposed by this thesis.

a) Evidence of Foreign Assets and Liabilities

The J-curve concerns a huge surge of financial activity during the 1990s and the early 21st century, and this section presents an important piece of evidence towards the J-shape proposition. Since the second half of the 1990s, Obstfeld and Taylor have published (in partnership and individually) books and articles on international capital mobility starting from the classical Gold Standard until 2000. Their 2002 piece examined the stocks foreign investment to GDP between 1825 and 1995 in an attempt to assess the historical extent of global capital mobility in this market. Furthermore, in chapter two of their 2004 book, they presented the same model but updated the data to 2000. In the 2002 article they achieved the U-curve but in 2004 nothing was asserted about it.

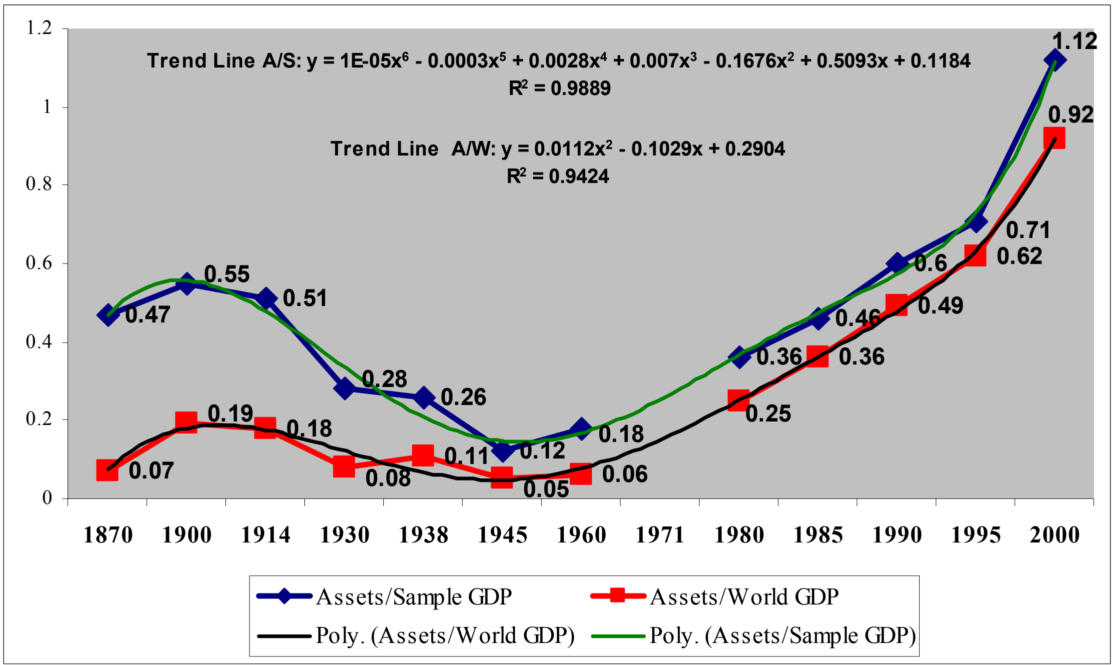
The results obtained by the calculations made in 2004 help to present a piece of empirical evidence for the J-curve. However, some preliminary considerations about the methodology of their model are important beforehand in order to make clear in which sense their figures provide evidence for the J-curve.

When they first presented the model, Obstfeld & Taylor (2004) intended to divide the stock of foreign-owned capital by the "seemingly ideal denominator", which is the total stock of capital (financial or real) aiming to assess the size of global foreign investment. However, two major problems related to the denominator arose. First, the number of countries that have reliable data to estimate capital stocks is very limited. In addition Obstfeld & Taylor (2002:19) claim that:

> The problem with using financial capital measures is that they have greatly multiplied over the long run as financial development has expanded the number of balance sheets in the economy, thanks to the rise of numerous financial intermediaries. This trend, in principle, could happen at any point in time without any underlying change in the extent of foreign asset holdings.

Given these limitations, they chose a straightforward and available measure as a denominator, that is, the level of output calculated in current prices in US dollars. As a result, their equation comprises a measure capable of evaluating the variations of capital-output ratio throughout time. The nominal foreign data was classified into two categories: foreign assets and liabilities. Their results relating to the ratio of foreign assets and liabilities to the world GDP are especially noteworthy for the purpose of the J-curve and should be carefully examined. The figure below is based on Obstfeld & Taylor (2004) and represents the foreign assets in the world economy between 1870 and 2000. It represents the best global indication for this kind of indicator achieved in the literature on financial globalisation until 2004. As can be seen, the curve below resembles a "J" rather than a "U" curve.

Figure 3. Foreign assets in world economy: 1870-2000[25]



Source: Obstfeld & Taylor (2004:52, 53)

Firstly, focusing on the asset side, during the classical Gold Standard era the ratio of foreign assets to world GDP rose from 7 per cent in 1870 to 18 per cent in 1914. As expected, the ratio fell sharply during the interwar period, reaching a mere 5 per cent in 1945, which was its lowest level during the interwar period. Only in 1980 did foreign assets regain a similar volume of transactions to that of 1914. In this year, 25 per cent of world output was invested in foreign assets, i.e. this mark is comparable to the 18 per cent achieved in 1914 and therefore a U-shaped pattern of foreign assets to world GDP is formed from 1870 to 1980.

[25] This figure is based on data in Appendix 5.

However, from the mid-1980s until the end of the 1990s, the growth of this indicator was historically unprecedented. As figure 3 shows, foreign assets in 1985 were twice as high as the 1914 figure. In 1990, it was 49 per cent of world GDP, 62 per cent in 1995 and 92 per cent in 2000, five times higher than in 1914. This means that in 1990 about half of world output was invested in foreign assets. Only ten years later, an impressive figure of 92 per cent of world output was invested in these assets. In comparison, this amount was only 18 per cent at the peak of the classical Gold Standard.

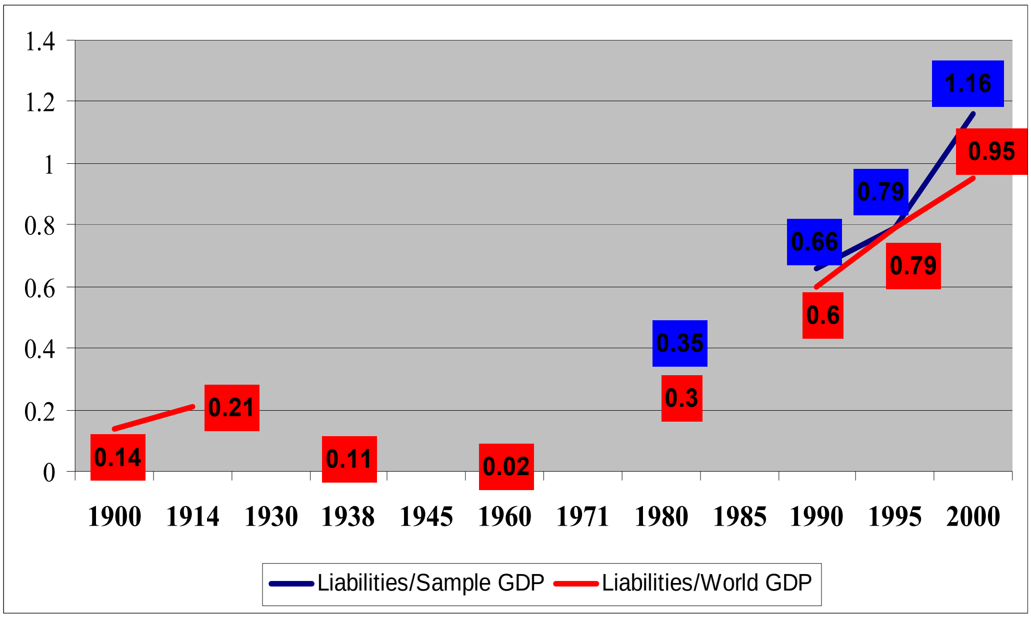
The exponential growth presented above could be considered an unprecedented historical event, and thus provides evidence of a J-curve in the foreign assets to world GDP ratio but this evidence is not yet sufficiently robust. Obstfeld & Taylor (2002, 2004) recognise the existence of a problem in the numerator. According to them, for many countries there is no information about foreign investments, hence the authors add zero to the numerator but include their output in the denominator to compose the world GDP. Consequently, the estimation based on foreign assets to world output becomes underestimated. For this reason, they call it the "lower bound" of the true ratio.

An alternative to solve this problem is to include in the denominator the GDP of the same number of countries that have data for foreign investment. Thus, the sample from 1870 to 1960 was considerably reduced, including only seven major economies (UK, France, Germany, the Netherlands, US, Canada and Japan). After 1980, up to thirty countries that have both foreign investment and GDP data were included, based on IMF calculations. By the year 2000, the sample was expanded to over 60 countries. It provides an alternative estimation called "foreign assets to sample GDP". Despite being more precise than the "lower bound" ratio, this measure is overestimated according to the authors because not many countries were included throughout the analysed time period. This overestimation is higher between 1870 and 1960 because the sample includes only the seven "principal players", i.e. countries that have more diversified foreign portfolios than the other economies of the world. For this reason, they called this estimation the "upper bound" of the true ratio.

As can be seen in Figure 3, the foreign assets to sample GDP (upper bound ratio) measure represents a higher but similar picture as that presented by the foreign assets to world GDP (lower bound ratio), also conforming more to the J-shape. The ratios presented are still much higher in the second globalisation era than during the first one. In 1870, the relative amount reached 47 per cent, rising to 55 in 1900 and falling slightly to 51 per cent in 1914. It collapsed to only 12 per cent in 1945, ascending gradually to 18 per cent in 1960, 36 per cent in 1980, and reached 60 per cent in 1990, similar to the circa 1914 figure. Therefore, a U-curve is formed in terms of foreign assets to sample GDP for the period 1870-1990. In 1995 this figure was 71 per cent, and in 2000 it reached 112 per cent. Again, the same unprecedented level of financial integration can be observed since the 2000 figure is twice as big as the figure reached at the zenith of the first era (55 per cent in 1900). This means an amount equivalent to more than the whole world output was invested in foreign assets in 2000 in comparison to 1900.

The data collected for foreign liabilities is much more fragmented than for foreign assets, as can be seen in figure 4 below.

Figure 4. Foreign liabilities in the world economy: 1870-2000[26]



Source: Obstfeld & Taylor (2004:52, 53)

The foreign liabilities to world GDP in 1900 was 14 per cent, then reached its peak during the Gold Standard with 21 per cent in 1914, increasing slightly to 30 per cent in 1980, but sharply in 1995 (79 per cent). It reached the year 2000 presenting 95 per

[26] This figure is based on data in Appendix 5.

cent, four times bigger than the 1900 figure. In this case, a U-curve was formed from 1900 to 1980, earlier than the pattern observed above in the assets side. However, taking into account the period from 1900 to 2000, it can be seen that the picture resembles a J-curve. During the 1990s, the growth of foreign liabilities by world GDP was particularly faster and again unprecedented. Despite being fragmented, this could be another piece of evidence regarding the J-shape proposal. Conversely, secular comparisons are not possible regarding the ratio of liabilities to sample GDP since there are only four observations available.

As mentioned above, Obstfeld & Taylor originally developed this model in their 2002 article. In their paper, their time series lasted from 1825 to 1995. They interpret their results as providing further evidence for the U-shaped pattern for global financial markets. On this account, Obstfeld & Taylor (2002:26) concluded that:

> Data on gross international asset positions seem broadly consistent with the idea of a U-shape in the evolution of international capital mobility since the late nineteenth century, though it is less clear how we should compare the degree of diversification attained by some countries then with today's apparently significant, albeit declining, home bias in foreign asset holdings. Figuring whether too much or too little diversification existed at any point must remain conjectural, and conclusions would hinge on calibrated and estimated portfolio model applied historically. This is certainly an object for future research.

Observing the results up to 1995, this conclusion may be sound. However, using the updated model, one realises that in any case the ratios of foreign capital stocks in 2000 returned to levels comparable to the Gold Standard era. Conversely, in 2000 all coefficients were much larger than those observed prior to WWI. That is why these figures suggest an unprecedented level of global financial activity in the 1990s, resembling the J-pattern much more than the U-curve.

In fact, comparing the conclusions presented in their 2002 article with their analysis displayed in chapter two of the 2004 book, they clearly change their interpretation regarding the applicability of the U-shape. As mentioned in the quotation above, using the data up to 1995, they asserted that the results are "broadly consistent" with the U-shaped pattern. However in the book there is no reference to the existence of the U-curve related to foreign assets and liabilities. Therefore, their latest calculations indicate that something different from the U-shaped pattern is happening in the international financial scenario in terms of foreign assets in the world economy. The quantitative survey pinpointed a time when a surge of foreign capital stocks occurred in the 1990s, and this discovery points to an alternative standard, referred to in this thesis as the J-curve.

As noted above, Obstfeld & Taylor (2002, 2004) already recognised the shortcomings of their indicators basically regarding to the limited number of countries in their sample. However, they asserted that despite being fragmentary, their results were still a "potentially illuminating historical description" (2002:21, 2004:51).

Indeed, as Obstfeld & Taylor recognised, both foreign assets and liabilities ratios (as a sample GDP and world GDP) are not truly global, especially for the 1870-1960 period. The "upper bound" is overestimation and the "lower bound" represents an underestimation of the true ratio. Nonetheless, it is important to note that up to the present moment, no scholar had put together a reliable empirical estimation for foreign assets and liabilities for more countries than the seven economies included in Obstfeld & Taylor's sample for 1870-1960. Therefore, this is the best sample and then the best indication available of this kind of cross-border transaction so far.

Since it is not possible to overcome this problem at the present time, one can consider that the true ratio is certainly somewhere in between the "upper bound" and the "lower bound", although it is not possible to define exactly at which point. Nevertheless, for the subsequent period to 1970, this problem is already solved. As will be presented in section 3.1.d, Lane & Milesi-Ferretti (2006) calculated the external assets and liabilities for one hundred and forty-five countries (almost global coverage) for the 1970-2004 period. As can be seen in that figure, the level of international equity integration spanning these years increased significantly over the years analysed.

Unfortunately, it is not possible to interpolate the Obstfeld & Taylor figures from 1870-1960 to the Lane & Milesi-Ferretti calculation after the 1970s. But just for the sake of argument, let us suppose that the data on stock of foreign assets were available from 1870 onwards, thereby providing a robust sample of 145 countries like the Lane & Milesi-Ferretti's (2006) sample. In this supposition, the empirical problem in the numerator identified by Obstfeld & Taylor would be resolved. As a result, the value of the numerator will increase significantly, probably not as much as the value of the denominator, because the countries included certainly do not have as many external assets as the "principal players", but the coefficient will be much more representative of the true line. The new ratios will promote an upward movement in the assets to the world GDP line. The precise magnitude of this growth is impossible to foresee without the data, but surely it will be traced in between the lower and upper bounds. This supposition obviously cannot be considered as evidence but provides an illustrative picture of a J-curve for the entire period.

There is a further indication suggesting that after the updated calculations the authors had indeed changed their mind. Taylor (2004:29) replicated the same figure presented in this book for foreign assets and liabilities to 2000 and affirmed that "we now know that trade has flourished ever since, as has finance, with both now flowing at volumes that, *by some yardsticks*, exceed the peak reached in 1913" (Italics added). The part of this sentence related to finance could be in fact an excellent short expression of the key message underlying the J-curve, as we present it at this stage of the thesis. In summary, the empirical result accrued is a piece of evidence pointing to an unprecedented surge in global foreign assets during the 1990s.

This section satisfied one of the objectives proposed at the beginning of section 3.2 concerning the establishment of the J-curve. The next and final step will be to investigate the historical behaviour of the FDI. As mentioned before, Twomey (2000) achieved the U-curve through the stock of outward FDI using data from 1913 to 1995. Using the authoritative historical sources available, I have collected FDI data from 1913 to 2005 and I have achieved a contrasting picture. This picture is demonstrated in the next section.

b) Evidence about Foreign Direct Investment

The second main step in establishing the J-curve proposal is to demonstrate the J-shape through historical FDI data. Therefore, this section focuses on statistically presenting the J-curve based on FDI figures rather than discussing its dynamics, development and effects on home and recipient countries; neither is it the intention of this section to examine the FDI driving forces, nor to compare it with other sorts of investments such as portfolio investments. Some of these aspects will be discussed in the appropriate historical context in the next chapter. Nevertheless, some preliminary clarifications should be made to explain the central characteristics of FDI.

There are many definitions available for FDI. Multilateral organisations such as the IMF, OECD, United Nations, and also scholars have defined FDI according to various criteria. The definition of FDI is based on balance-of-payments transactions between residents and non-residents. For the purpose of this section, it is enough to state that it is an investment made by a resident entity devoted to acquiring long-term interest in enterprises operating outside of the economy of the investor (its foreign affiliate). The parent company and its affiliates form a Multinational Company (MNC). The resident must have control over the affiliate, i.e., 10 per cent or more of the ordinary shares or voting power of an incorporated firm, or its equivalent for an unincorporated firm. Lower ownership shares are known as foreign portfolio investments (FPI). In principle, as the main company obtains a lasting interest in a resident entity in another country, FDI can be considered an internalised investment flow, and includes capital and intangible assets. The investor keeps control of the subsidiary that it has established and derives benefits from its investment. There are two types of FDI according to its direction: inward FDI occurs when foreign capital is invested in local resources, and outward FDI when local capital is invested in foreign areas.

In most of the specialised literature there is little doubt as to the importance of FDI to economic development and global capital integration during the 20th century. The academic debate on FDI is very extensive and controversial. Many of these aspects do not lie within the scope of this thesis, but there are some related to the focal point proposed by the J-format.

Controversies also exist in terms of the choice of the more accurate historical FDI data. Scholars have debated what the more appropriate figures should be to describe the evolution of FDI during the Gold Standard and the interwar period. So far, empirical evidence about stocks and flows during this period is scarce. Data collected by John Dunning, one of the most prominent scholars in this field, show that only ten percent of British overseas investments were direct investments on the eve of WWI. This may be an indication that the global volume of FDI was not relevant at that time. According to this author (and more recently to Nayyar 2006:147), there are no reliable statistics available for stocks of FDI before 1914. Dunning (1988:71) states:

> We have still only a rough idea of the number of MNEs operating in 1914, or the value of their foreign investment at that time; and even today few countries publish the kind of information which scholars need to evaluate properly either the causes or the effects of international production. Thus the present statistical

portrait of the growth of MNE activity, which might enable us to test our new theories – or even the old ones – in any rigorous way, is not possible.

This section assembles authoritative historical estimates of FDI stocks and flows spanning almost a hundred years, namely between 1914 and 2005. Surveying the literature dealing with empirical evidence, one realises that the data organised by Dunning (1988) is a well-quoted reference for assessing the figures of the early 20th century. Dunning brought together estimates of inward and outward direct investment for developed and developing countries from 1914 to 1983 at benchmark years. Therefore, during this period, the thesis trusts in his data. Since the 1970s, multilateral institutions have been providing reliable statistical information about it. In this section, the data published by UNCTAD will be quoted.

Table 7 shows the outward stock of FDI for the world economy and developed and developing countries provided by Dunning at benchmark years up to 1983. UNCTAD data was added to complete the two subsequent decades.

Table 7. Outward stock of foreign direct investment: 1914-2003
(billions of dollars)

	1914	1938	1960	1973	1983	1993	2003
World	14.48	26.35	66.10	210.50	572.80	2,241.84	8,196.86
Developed Countries	14.30	26.35	62.90	204.40	555.20	2,033.61	7,272.32
Developing countries	neg	neg	0.70	6.10	17.60	203.35	858.68

Sources of Tables 3.1 and 3.2: The data contained in these tables have been derived from a large number of sources but the main ones have been as follows:
1914: Allen and Donnithorne (China and Japan, 1954), Bagchi (India, 1972), Callis (South East Asia, 1942), Frankel, S. H. (Africa, 1938), Hou (China, 1965), Houston and Dunning (UK, 1976), Lewis (various 1938, 1945), McKay (Russia, 1970), Pamuk (Ottomon Empire, 1981), Paterson (Canada, 1976), Rippy (Latin America, 1959), Svedberg (various, 1978), Wilkins (various, 1988).
1938: Allen and Donnithorne (China and Japan, 1954), Bagchi (India, 1972), Callis (South East Asia, 1942), Conan (Sterling Area, 1960), Hou (China, 1965), Lewis (various 1938, 1945), Svedberg (various data collected by him, 1978), Teichova (East Europe, 1974), United Nations (1949).
1960: Various government publications are cited in United Nations (UNCTC) (1981) and especially those of the United States (Department of Commerce), United Kingdom (Department of Trade), and Canada (Dominion Bureau of Statistics). See also Conan (Sterling Area, 1960) and Kidron (India, 1965). 1971: OECD (various dates), United Nations (UNCTC) (1978), (1981) and various government publications as cited therein. 1938: US Department of Commerce (1986), Dunning and Cantwell (1987). (Dunning, 1988:75)
Source: From 1914 to 1983: Dunning (1988:74). From 1993 onwards: UNCTAD, World Investment Report, online database.

From 1914 to 2003, the world stock of outward FDI presented two markedly different growth patterns. The first lasted from 1914 to 1960, the second from 1973 to 2003. One can see that at each two-decade interval between the benchmark years of 1914, 1938 and 1960, the outward stock of FDI doubled. However, this growth accelerated considerably during the subsequent phase, especially after 1983. Between 1973 and 1983 it increased by 172 per cent, during the period 1983-1993 it grew by 291 per cent, and finally for 1993-2003 it increased by 265 per cent, i.e. the amount invested was much higher than in the interwar period, as is to be expected (table 10). Considering the last thirty years, the world outward stock of FDI increased an incredible thirty-seven fold. Taking into account the paucity of data for the period before 1914 and Dunning's estimations, this extraordinary increase denotes that activity in this market gained momentum after the 1980s.

Table 7 also reveals that, up to 1960, the volume of investment in developing countries was negligible. However, from the 1970s to 2003, the accumulated growth rate for these economies was almost three times higher than for developed countries, and more than twice the rate of world growth. Whilst developing countries had little more than 10 per cent of the world FDI in 2003, the figures in Table 10 show that they made significant progress throughout this period, even though a considerable part of this investment is concentrated in some emerging countries such as China, India and Brazil.

Table 8. Rate of growth of outward stock of foreign direct investment: 1973-83.

Year	World		Developed		Developing	
	Rate of growth %	Accumulated rate %	Rate of growth %	Accumulated rate %	Rate of growth %	Accumulated rate %
1973	-	-	-	-	-	-
1983	172.11	172.11	171.62	171.62	188.52	188.52
1993	291.38	463.50	266.28	437.91	1,055.40	1,243.92
2003	265.63	729.13	257.61	695.51	322.27	1,566.19

Source: Table 7.

A similar pattern of two distinct phases occurred with the world inward stock of FDI from 1914 to 2003. Table 9 reveals that in each of the intervals between the benchmark years up to 1960, the inward stock grew twofold but the rate of growth was much higher in the second phase. From 1973 to 1983, world inward stock increased by 231 per cent, 321 per cent and 254 per cent respectively (Table 10). Taking into account the three decades, the growth of world inward stock of FDI was forty-eight fold, even more impressive than the outward growth figure.

Table 9. Inward stock of foreign direct investment: 1914-2003
(Billions of dollars)

	1914	*1938*	*1960*	*1973*	*1983*	*1993*	*2003*
World	14.09	24.32	54.50	166.70	552.60	2,329.05	8,245.07
Developed Countries	5.24	8.35	36.70	121.30	416.90	1,595.68	5,701.63
Developing Countries	neg	neg	17.60	45.20	135.60	715.64	2,280.17

Source: From 1914 to 1983: Dunning (1988:74). From 1993 onwards: UNCTAD, World Investment Report, online database.

Likewise, developing countries had a very small amount during the first phase. However, in the thirty years following 1973, the accumulated rate of growth was not as inclusive as the rate observed in outward stocks, although it was still much higher than the rate for developed economies and the world economy (Table 10).

It is beyond the scope of this chapter to delve into explanations of this phenomenon. The central point to be highlighted here is that the tables above present another piece of evidence regarding a rapid rate of increase for both outward and inward stock of FDI from the 1980s to 2003. The stock of FDI gradually became more important during the course of the 20th century, but it reached an unprecedented level of transaction by the end of the 1990s and beginning of the 21st century. The 1914 amount was only surpassed in the late 1980s, and the stocks of outward and inward FDI became much higher (in absolute terms) at the end of the 1990s. On account of the figures presented above, this could be considered another piece of evidence pointing to the J-curve.

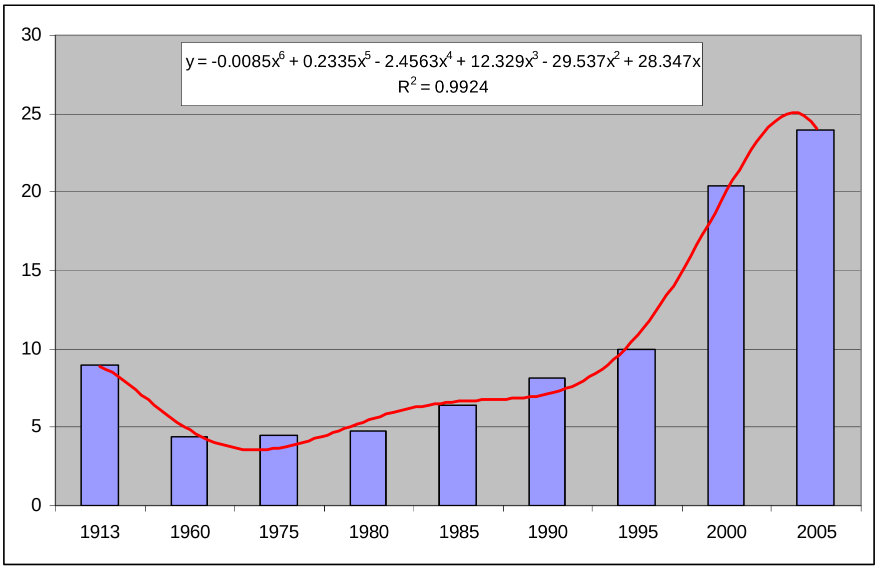
Table 10. Rate of growth of inward stock of foreign direct investment: 1973-83.

Year	**World**		**Developed**		**Developing**	
	Rate of growth %	Accumulated rate %	Rate of growth %	Accumulated rate %	Rate of growth %	Accumulated rate %
1973	-	-	-	-	-	-
1983	231.49	231.49	243.69	243.69	200.00	200.00
1993	321.47	552.96	282.75	526.44	427.76	627.76
2003	254.01	806.97	257.32	783.76	218.62	846.38

Source: Table 7.

As a rule, comparisons made only in absolute values do not properly characterise the phenomenon in question. As can be seen in Table 7, Dunning (1988) pieced together a large number of sources to derive the outward and inward estimations of FDI. He did not calculate the share of world FDI stock to world GDP, and his calculation in the 1988 book stopped in 1983. In order to avoid methodological problems, I decided to use only one source of data to plot Figure 5 below, which represents a J-curve for FDI stocks. Therefore, the figure is based on the UNCTAD (1994) data on world stock of outward FDI relative to world GDP. UNCTAD calculations are based on its own databases and on the estimation of scholars such as Dunning and Bairoch. The 1913 figure is an estimate. From 1960 to 1985, the statistics are based on UNCTAD (1994:130), but from 1990 onwards, the data were collected from online statistical databases. Despite the wide gap between 1913 and 1960, one can suppose that between the wars, the amount of world FDI should be much lower than the figures presented for 1913 and 1960.

Figure 5. FDI as a percentage of world economic activity: 1913-2005 (in percentage)[27]



Source: UNCTAD (1994:130). From 1995 onwards extracted from UNCTAD, World Investment Report, online database

[27] This figure is based on data in Appendix 6. The most significant R^2 was found with a polynomial trend line of order 6.

According to UNCTAD data, the stock of FDI was 9 per cent of world GDP in 1913 and dropped to 4.4 per cent in 1960. UNCTAD did not provide any figure before this year but one can suppose that this percentage might be lower in between these two benchmark years due to the assertion in the quotation of Dunning (1988) at the beginning of this section. The ratio of FDI by world GDP did not change from 1960 until 1975. It then climbed slowly to 4.8 per cent in 1980, rising to 6.4 per cent in 1985. In 1990, the share of FDI stock was around 9 per cent, the same figure as 1913. As a result, a U-curve could be traced from 1913 to 1990. Similarly to what happened in the foreign capital stocks discussed in the previous section, this share increased quickly during the 1990s, especially after the second half of the decade. It reached 20 per cent in 2000 and was at a peak of 24 per cent in 2005. In summary, the 1914 ratio of FDI outward stock to world output was equalled in 1990 and is now roughly three times higher. The results indicate a J-shaped curve for the period in analysis.

In conclusion, statistical comparisons between the two ages of financial globalisation cannot be made because of the absence of pre-1914 data. On the other hand, the 1913 and 1914 figures are based on the UNCTAD Division of Transnational Corporations and Investment and on the work of prominent scholars. In the previous section, the data produced by Obstfeld & Taylor allowed comparisons between the 19th and the 20th centuries. In the case of FDI, this is not possible, but on the other hand the sample of countries is much greater. Obstfeld & Taylor's sample comprised seven developed countries for the 1870-1960 period.

Dunning's figures for the benchmark years 1914, 1938, 1960 and 1973 are not only higher than the sample provided by Obstfeld & Taylor for this era, but also encompass developing economies. Dunning's sample included in North America: the US and Canada; in Western Europe: the UK, Germany, France, Belgium, Italy, the Netherlands, Sweden and Switzerland; and other developed countries such as Russia, Japan, Australia, New Zealand, South Africa and others (not specified). Dunning's sample therefore includes at least fifteen developed economies. The number of developing countries was not specified but consists of countries from Latin America, Africa, Asia (China, India and Ceylon, now Sri Lanka), Southern Europe and the Middle East. Altogether, his sample has a considerably higher international coverage. Additionally, not only his research but other studies such as Wilkins (1988) indicate that the value of FDI was modest for the world economy from 1870-1914.

All things considered, Figure 5 illustrates that while the ratio of FDI in world economic activity was less than 10 per cent in 1913, it is now more than 20 per cent, therefore providing another piece of evidence for the J-curve.

3.3. New financial markets: additional indication of a huge surge of global financial activity after the 1970s

A recurrent difficulty to all who research long historical series is the availability of consistent statistics. The figures are frequently unavailable because the historical records were not compiled in the past or simply because they did not exist. There are possible reasons for this, such as a lack of scientific techniques, the existence of few research institutes well prepared to collect, process and publish data reports, scant volume of transactions, difficulties in commuting reliable information from country to country, thereby exacerbating the constant problem of under-report or over-report, and missing information due to great disturbances such as wars, natural disasters, etc.

Moreover, current methods of data gathering and classification are quite different from the past, which makes the data of the 1870-1914 period unrelated to the present data. The problem of data inconsistency occurs not only in statistics for international finances but also in all other measurable economic activities. For these reasons, the dearth of historical data hinders comparisons between 19th and 20th century financial indicators.

Recently, some international institutions such as the BIS, IMF, OECD, UNCTAD, World Bank and others headquartered in most countries have been making a great effort to provide a consistent source of historical statistical information. In addition, scholars (Dunning, Lane & Milesi-Ferretti, Obstfeld & Taylor, among others) have been developing interpolation techniques with a view to standardising 19th and 20th century data, as well as organising dispersed estimates and improving methods of data presentation in order to allow long-term comparisons. Nevertheless, the historical statistics that have been provided by those institutions date back to the 1970s or to the 1980s, and therefore, the problem of historical comparability between the two eras of financial globalisation remains. Likewise, despite the scientific endeavour made by scholars, the historical data series for the late 19th and early 20th centuries have not yet been completed for various key financial markets. In some cases, the data from that period is available only for some benchmark years, as noted in the two sections above.

One of the characteristics of the 1970s was the emergence of international financial diversification. Financial diversification was one of the characteristics of the floating exchange regime that emerged after the demise of the Bretton Woods agreements. The sequence of crises occurring in the international scenario (oil crises in the 1970s, debt crises and stock exchange crash in the 1980s) encouraged private agents to develop techniques that reduced risk by allocating investments among various financial instruments. Financial diversification combines a wide variety of investments within a portfolio, although it is not a guarantee against loss. Investors have been spreading their portfolio among multiple investment vehicles such as foreign exchange, stocks, bonds, mutual funds, and many others. The institutions quoted above have developed indicators for measuring these new markets in vogue, meaning that there is plenty of evidence of the growth of the current global financial market.

Throughout the last thirty years, many new financial contracts, intermediaries and markets have appeared and quickly developed. This has contributed to an increase in the level of financial enmeshment over these decades. Accordingly, certain financial statistics that are based on new financial markets cannot show whether or not the world economy has currently returned to pre-1914 levels of financial integration because those markets did not exist in the first wave of financial globalisation. Therefore, no historical comparisons are possible. Even so, these present data can reveal, in absolute and in relative numbers, the explosive growth in international finance since the demise of the Bretton Woods agreements. For this reason, this section proposes to present additional evidence of a huge surge of financial activity from the 1990s onwards. Essentially, this is the main message underlying the J-shaped proposal.

In the recent literature on finance it has become common to describe the last twenty years of the 20th century as the era of financialisation. The term has been used with increasing frequency over the past few years to describe the increasing importance of financial markets in the performance and prospective direction of the world economy. Financial markets have experienced a dramatic growth since the 1970s. The resurgence of the international financial markets did not happen by accident, but has been shaped by a whole set of historically specific transformations that had already taken place during the 1970s. These aspects will be discussed in the next chapter while this last section aims to present some of these indicators.

The first indicator to be presented is the cross-broder transactions in bonds and equities. Figures for cross-border transactions in bonds and equities as a percentage of GDP are not available from a single source. Therefore, the table below combines IMF and BIS figures to show growth from 1970 until the end of the 1990s. The BIS provided a provisory figure for 1999 then ceased publishing this information. Nevertheless, Table 11 presents the dramatically increasing performance of this market.

Table 11. Cross-border transactions in bonds and equities* as a percentage of GDP

	1970[1]	*1975*	*1980*	*1985*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
USA	2.8	4	9	35	89	96	107	129	131	135	159	213	230
Japan	-	2	8	62	119	92	72	78	60	65	79	96	91
Germany	3.3	5	7	33	57	55	85	170	158	172	200	257	334
France	-	n.a.	5	21	54	79	122	187	197	187	258	314	415
Italy	-	1	1	4	27	60	92	192	207	253	470	677	640
Canada	5.7	3	9	27	65	83	114	153	206	187	251	355	331
Average	3.9	3.0	6.5	30.3	68.5	77.5	98.7	151.5	159.8	166.5	236.2	318.7	340.2

*Gross purchases and sales of securities between residents and non-residents
1 IMF, 1997:60.
Source: BIS 1999:118.

Cross-border transactions represented around 3 per cent of the GDP for these core countries during the early 1970s. Ten years later, this ratio had crawled to 6.5 per cent but by the following decade it had risen to 68.5 per cent. In 1992, these countries invested on average roughly 100 per cent of their GDP in bonds and equities. This accelerated growth was maintained until the end of this decade (especially from 1995 onwards) when these economies were investing more than three times their GDP in financial cross-border transactions. The sample is limited but reveals a strong tendency in terms of strategic decisions in international finance taken in key countries in three continents. In 1975, this ratio was an inexpressive 3 per cent but had reached 340 percent of GDP in 1998, i.e., it had grown at a rate of 11,333 per cent. During the same period, their GDP rose by 196 per cent and their gross fixed capital formation increased by only 193 per cent.[28]

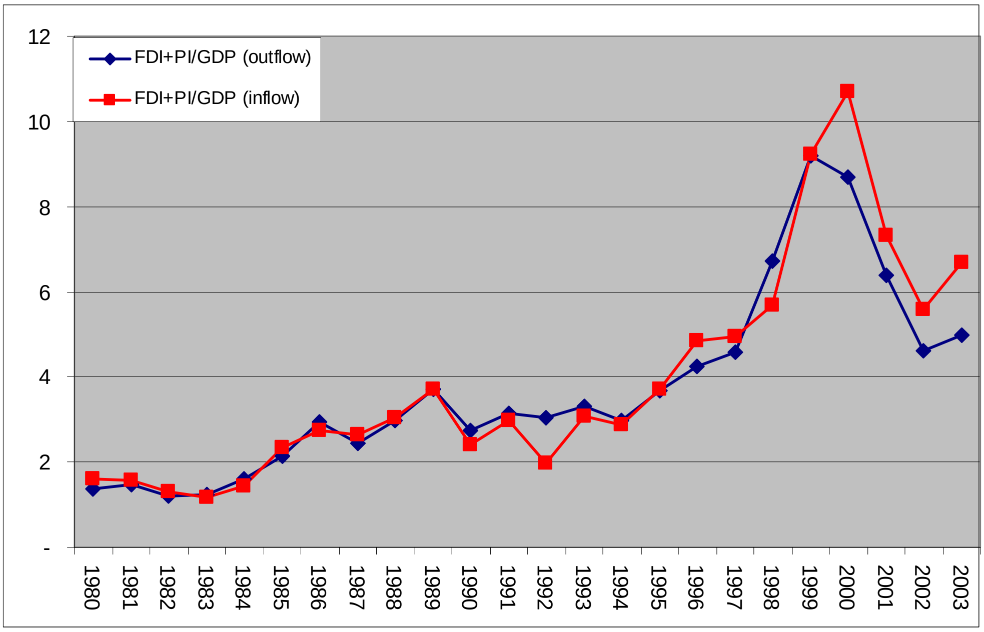
[28] Cf. UNCTAD, *World Investment Report*, online database.

Another key indicator that has been progressing significantly since the last quarter of the 20th century is the net international bank loans. The amount of bank lending is a chief international macroeconomic indicator to present the level of activities in current financial markets. Nayyar (2006:142) searched for the performance of the banking activity from the 1960s to 2000. The results once more confirm the trend of extraordinary activity in this market.

> As a proportion of world output, net international bank loans rose from 0.7% in 1964 to 8.0% in 1980 and 13.5% in 2000. As a proportion of world trade, net international bank loans rose from 7.5% in 1964 to 42.6% in 1980 and 66.9% in 2000. As a proportion of world gross fixed capital formation, net international bank loans rose from 6.2% in 1964 to 51.1% in 1980 and 62.8% in 2000. It is worth noting that the gross size of the international banking market, which includes claims on (or liabilities to) banks, was more than double that of net international bank lending. Cross-border inter-bank liabilities rose from a modest \$455bn in 1970 to \$5,560bn in 1990 and \$8,998bn in 2000.

Additionally, the growth of FDI and portfolio investment (PI) have marked the contemporary era. The chart below represents the flows of FDI and PI relative to the GDP for some developed countries. The rate of growth for each period grew slowly up to 1985. Starting from the second half of the 1980s, this growth became more accelerated and achieved its highest point in 2000. In 2002, it fell significantly before recovering again the following year.

Figure 6. Portfolio investment plus FDI: selected developed economies 1980-2003[29]



Source: UNCTAD database online.

As a consequence of the macroeconomic instability and substantial degree of uncertainty embedded in the world economy after the 1970s, the international financial scenario of the late 20th century was marked by the introduction of an enormous amount of financial innovations such as derivatives (futures, swaps and options). As noted above, derivative markets are negotiated in two different ways: exchange traded derivatives and over-the-counter derivatives. The former are futures, options and swaps. In contrast, tailor-made derivatives are traded on over-the-counter (OTC) markets. Corporations, investment and commercial banks, hedge funds, government agencies, etc have been the main clients of those markets. They have been using derivatives as a tool to transfer risk due to the multiple possibilities of contracting and re-contracting payments in the future against commodities or even other assets.[30]

The OTC market is assessed in notional amounts. The table describes its evolution from 1987 to 2005 and contrasts its annual growth rate with the performance of the world GDP. The rate of world GDP growth was placed as a parameter to measure the acceleration of the activity in the OTC market over the past two decades. The

[29] This figure is based on data in Appendix 7.

[30] The characteristics and the repercussions of this market will be discussed in the next chapter. The present chapter concentrates on providing statistical evidence of the great surge of this activity over the last two decades.

difference between them is substantial. While the OTC market grew by 37 per cent on average, world GDP grew by only 5 per cent.

Table 12. Notional amounts of OTC derivative transactions at year-end and world GDP: 1987-2005

Year	OTC billion $ Total	OTC in percentage Annual growth	OTC in percentage Accumulated	World GDP in percentage Annual growth	World GDP in percentage Accumulated
1987	865.60	-	-	-	-
1988	1,654.30	91	91	-	
1989	2,474.80	50	141	12	12
1990	3,450.37	39	180	5	17
1991	4,449.97	29	209	7	24
1992	5,345.70	20	229	5	29
1993	8,474.57	59	288	7	36
1994	11,303.21	33	321	2	37
1995	17,712.63	57	378	7	44
1996	24,953.15	41	419	10	54
1997	29,035.06	16	435	2	56
1998	50,997.00	76	511	(1)	56
1999	58,265.00	14	525	(1)	55
2000	63,009.00	8	533	4	59
2001	69,207.30	10	543	3	61
2002	101,318.49	46	589	(1)	61
2003	142,306.92	40	630	4	65
2004	183,583.27	29	659	12	77
2005	213,195.58	16	675	12	89

Source: OTC figures are based on ISDA – available at: http://www.isda.org/statistics/pdf/ISDA-Market-Survey-annual-data.pdf. GDP is based on UNCTAD database online.

One of the indicators frequently quoted as demonstrative of the impressive growth of international financial activity is the global foreign exchange market turnover. It was only in 1989 that the BIS began reporting data for this indicator with a global coverage of countries. Every three years since then, the institution provides a figure that represents an average day of the year for the global foreign exchange market, with April as the benchmark month.

Table 13. Foreign exchange market turnover[1] daily averages in April: 1989-2007 (in billions of US dollars)

Global foreign exchange market turnover	1989	1992	1995	1998	2001	2004	2007
Spot transactions	317	394	494	568	386	621	1,005
Outright forwards	27	58	97	128	130	208	362
Foreign exchange swaps	190	324	546	734	656	944	1,714
Estimated gaps in reporting	56	44	53	61	28	107	129
Total "traditional" turnover	590	820	1,190	1,490	1,200	1,880	3,210
Memo: Turnover at April 2007 exchange rates[2]	650	880	1,150	1,650	1,420	1,950	3,210

Source: BIS (2005:5) and (2007:5).

[1] Adjusted for local and cross-border double counting

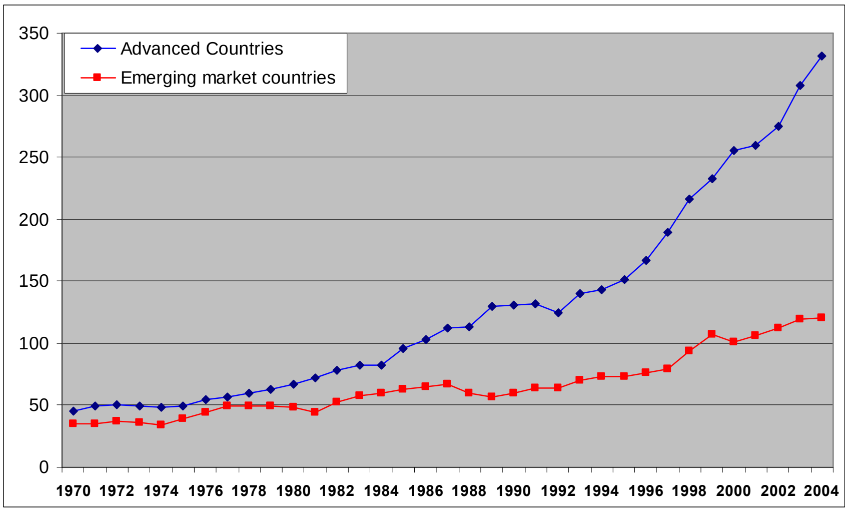
[2] Non-US dollar legs of foreign currency transactions were converted into original currency amounts at average exchange rates for April of each survey year and then reconverted into US dollar amounts at average April 2007 exchange rates.

Once more, the figures presented in Table 13 show an impressive increase in exchange markets since 1989. Average daily turnover rose steadily from 1989 to 1998. In 2001, it experienced a slight fall but increased dramatically until 2007, reaching the impressive amount of $3.2 trillion. Giddens (2002:9) made an intriguing illustration that can be used to illustrate how dramatic this figure is. According to him, measured in terms of a pile of hundred-dollar notes, a trillion dollars would be over 120 miles high – an impressive 20 times higher than Mount Everest. The data collected by Giddens however, needs to be updated for present-day readers. Therefore, taking the 2007 turnover, the dollar stack will reach a staggering 60 times higher than Mount Everest on a daily basis. This shows a volume of external transactions without precedent. To a large extent this reflects a number of mergers, acquisitions, exports, hedges contracts and an unrestrained variety of financial activities in general that marked the world economy during the post-1970s era.

On top of the indicators presented above, this section will consider another dimension of the international financial integration measured by gross holdings of foreign assets and foreign liabilities. The development of the empirical research on statistical measures to evaluate financial integration can be perceived by the study of Lane & Milesi-Ferreti (2006). They constructed a comprehensive and up-to-date dataset of external assets and liabilities for 145 countries for the 1970-2004 period, providing new evidence on global financial integration. The external assets and liabilities are divided in 4 categories: portfolio equity; FDI; debt (portfolio debt plus other investment); and financial derivatives.

In the globalisation literature, one well-accepted way to measure the level of financial integration is adding the foreign assets and liabilities. In this section, I made this calculation using a sample of 24 developed countries and 36 emerging economies divided by the total amount of GDP of those countries (see footnote 61). The results are plotted in the figure below.

Figure 7. International equity integration, advanced countries and emerging markets: 1970-2004[31] (in percentage)



Source: Lane & Milesi-Ferretti (2006)

The results express the degree of importance of overseas financial transactions in these economies. The figure shows a strong tendency towards increased growth in financial integration amongst those countries. This movement began in the second half of the 1980s, but sped up in the following decade. The tendency of globalisation is much stronger in the developed countries than in emerging markets: across industrialized countries, foreign assets and liabilities have increased sevenfold as a share of GDP,

[31] This figure is based on data in Appendix 8. The sample of countries was selected according to the classification provided by Choi *et all* (2007:32). They classifiy as emerging Market Group the following 36 countries: Argentina, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Czech Republic, Egypt, Estonia, Hungary, India, Indonesia, Israel, Jordan, Kazakhstan, Latvia, Lithuania, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Romania, Russia, Slovak Republic, Slovenia, South Africa, South Korea, Taiwan, Thailand, Turkey, Ukraine, Uruguay and Venezuela. Likewise, they classify as advanced country group the following 24 countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, United Kingdom and United States.

while emerging markets, despite having a smaller global share of privately-held assets, nearly doubled their economic internationalisation throughout the period. Overall, Figure 7 shows clearly that over the past quarter of century, both foreign assets and liabilities to GDP ratio have increased significantly, and this growth accelerated since the mid-1990s, being even higher for advanced economies.

This section has considered several salient dimensions of contemporary international financial integration. The evidence provided here suggests that the relative pace of international financial integration has lagged behind the expansion in trade integration and the growth of world GDP. They point out linking patterns to strengthen the argument to describe financial globalisation in a historical perspective proposed by the J-curve.

4. Conclusions

This chapter began with a discussion about the core conceptual and historical aspects in the debate on financial globalisation. After that, the mainstream empirical interpretation of the phenomenon in a historical perspective, namely the U-shaped pattern, was briefly presented. Empirically, authors have arrived at the U-curve for stocks of foreign assets and liabilities and stocks of outward FDI using data from the late 19th early 20th centuries up to 1995 (Obstfeld & Taylor 2002; Twomey 2000). Qualitative explanations on these indicators were avoided because the main purpose of this chapter is provides statistical evidence to establish the alternative proposal of the J-curve.

The chapter then continued by presenting available historical empirical evidence on the same two indicators that the above authors found the U-curve. The historical scope was expanded up to 2000 (for foreign investment) and up to 2005 (for FDI), and the results contrasted with the U-shaped pattern. Instead of a "U", I found a J-shaped pattern. Despite the statistical limitations, the information already existing represents years of research of prominent scholars and institutions. Accordingly, based on it, the J-shaped trend line could be traced by the stocks of foreign assets and liabilities from 1870 to 2000, and for outward stocks of FDI from 1913 to 2005. This evidence is sufficient to establish the J-curve as a research hypothesis. Thus, the evidence provided reveals a huge and unprecedented surge in financial activities after the 1990s. That is to say, regarding the markets surveyed the level of global financial integration in the late 20th century/early 21st century differs radically from the past. The U-shaped trend suggests that the contemporary level of integration replays earlier historical scenarios, whereas the J-curve invites us to rethink the underpinnings of recent developments in financial globalisation.

Furthermore, some additional indications of the contemporary financial upsurge were presented through the performance of a variety of novel and conventional markets from the 1970s onwards, such as portfolio investment, international banking loans, notional amount of OTC market and foreign assets and liabilities. The growth of these markets was found to be exponential over the past two decades.

As for the U-curve, the J-curve does not purport to be a general standard that includes all financial markets and establish a unique historical pattern for all of them. However, the J-curve launches a different proposal from the U-curve. The J-curve proposes that the degree of financial market integration by the end of the 1990s did not repeat the same level achieved during the Gold Standard at least in the two indicators researched. This is an indication that a different that highlight further investigation about the financial framework of contemporary markets. Accordingly, the J-curve certainly leads to an additional inquiry about the factors that have triggered the changes in its performance. This qualitative analysis will be made in the next chapter. For now, it is important to emphasise the key message extracted from the empirical finding, which is that the magnitude of foreign assets and FDI stocks did not match the "back to the future" scenario proposed by the U-shaped pattern.

Additional evidence regarding the historical context complements the message underlying the J-shape and provides further support to its view. Therefore, the next chapter will provide a historical assessment between the first and the second eras of financial globalisation in order to raise the necessary qualitative indications to corroborate the J-shape proposal.

IV. INSTITUTIONAL CHANGE BETWEEN THE TWO ERAS OF FINANCIAL GLOBALISATION

1. Introduction

The previous chapter established empirically that a J-shaped pattern is more appropriate than a U-curve to describe the process of financial globalisation in certain key financial markets. The left arm of the J identifies the Gold Standard as the first era of financial globalisation and the longer upward stroke on the right corresponds to the second age which occurred in the 1990s to the present day. The evidence presented reveals that this latter period was unprecedented in terms of stocks of foreign assets and outward FDI. Nevertheless, the J-curve proposal is not only supported by empirical evidence but also by historical analysis which takes into account the role played by institutions and other factors outside economics in the process of international financial development.

Behind this J-curve lie key institutional changes that require more detailed examination. This chapter aims to scrutinise how these different institutional frameworks contribute to the explanation of the J-curve by examining the characteristics of the institutional arrangements underlying these two eras. The institutional interpretation underlying this analysis was discussed in chapter one. In the next section, some clarifications are made related to the use of the term "rules of the game" and the institutional interpretation adopted in this thesis. After that, section 2.2 is dedicated to surveying the distinctive institutional characteristics of the Gold Standard. For comparative purposes, the narrative then takes a huge leap to the 1980s, then, section 2.3 aims to evaluate the financial institutional structure set up from the 1980s onwards.[32] Section 3 concludes the chapter.

---

[32] There is an extensive literature concerning the interwar era. Just to mention some influential studies, one can consult: Block (1977), Clarke (1973), Eichengreen (1992, 19996), Friedman (1953), Keynes (1930, 1931a, 1931b), Lewis (1949), Nurske (1944), Pollard (1970), Soule (1947), Triffin (1947, 1967), and Wolfe (1950).

2. Building a dense network of historically specific global financial institutions: from the era of British dominance to Pax Americana[33]

2.1. Institutional prerequisites to investigate the J-curve

Financial activities are formal and/or informal contracts that are undertaken in the present but most of the time end in the future, thus they are subject to some degree of payoff uncertainty. As a result, contracts and instruments involved should be carefully organised, ruled and managed in order to guarantee that the system continues operating in normal conditions. That is why financial activities depend on a framework of institutional arrangements, such as: markets, money (including international monetary standards and monetary instruments), habits, traditions, rules and regulations (both *de jure* and *de facto* regulations), legal proceedings and policy schemes. Financial flows have flourished and evolved throughout history encouraged by the development, adaptation and interaction of those institutional aspects.

Besides the economic characteristics discussed in this thesis, institutional and political factors deeply marked the two ages of financial globalisation. In the first phase, the exuberance of the British economy determined the pace of international capital flows, as well as the increased degree of financial integration. In the recent period, the hegemonic power of the US has been exerting an essential role on the shape of the contemporary global financial structure. The economic and political power of these nations strongly influenced both the international financial performance and the

[33] In academic circles, the word Pax has been used to describe a period in history marked by the absence of major wars, usually imposed by a predominant nation. Accordingly, this term has frequently been associated with the concept of "hegemony" derived from Sociology. The term Pax Britannica was coined to describe a peace imposed by Great Britain upon hostile nations, especially in the 19th century. Patrick K. O'Brein (2003) argued against the adequacy of this customary use. The starting point of his argument is the Gramsci concept of hegemony described as a combination of both coercion (read: domination by force) and consent (read: leadership by consent). Examining the history of the two main superpowers (the UK and the US) since the eighteenth century, he concluded that the role played by Britain in 1793-1914 and the US after WWII in the global economic order have been similar, however only the US developed both aspects of hegemony defined by Gramsci. Then, he considered that since Rome, only the US exercised a global hegemonic role, and it happened between 1941 and 2001. In this sense, throughout the period researched by O'Brien, history has registered only two periods of relative peace imposed by hegemonic nations, the Pax Romana and the Pax Americana. According to him, the common representation of the Pax Britannica as a hegemonic global power in the Gramscian sense is both a "theory without history" and a myth.

development of institutions to tackle the repercussions of the ebbs and flows of market volatility, euphoria and crises.

Institutions progressed and regressed throughout time. Their historical changes provide an important insight into understanding why the recent financial globalisation framework has been capable of dealing with an unprecedented volume of capital inasmuch as it leads to a deeper study of the underlying historical specificities of each period. In fact, this is the key proposition underlying the J-curve, i.e. the process of capital mobility and market integration has evolved during the second wave of financial globalisation. A way to investigate this development is through the study of the historical institutional framework of the two eras.

Institutional characteristics are specific in different moments of history and confer idiosyncrasy to each international financial system. The first and the second wave of financial globalisation have their specific institutional characteristics related to the historical period in which they took place. Examining the two historical experiences, it is clear that there have been a "dense network of financial institutions" (Baldwin & Martin 1999:8) underlying the development of both periods. As discussed in chapter one, Hodgson (1998, 2002a:53) brings to attention for the importance of placing the economic analysis on the grounds of historically specific economic institutions. His purpose is to encourage the analyst to take into account the historical specificity of institutions in order to establish their conclusions about the subject in debate. Considering these two suggestions, the analysis proposed in this chapter is focused on an examination of the "dense network of historically specific financial institutions" to characterise each financial globalisation era and to provide a description of their salient aspects.

The J-shaped proposition represents a sharp contrast of international capital mobility between the Gold Standard period and the post-Bretton Woods era. The J-curve acknowledges that the pre-WWI financial market integration was huge and unprecedented in the context of the turn of the 20th century, but as demonstrated in the previous chapter, that level of financial integration was overcome from the 1990s to 2005. Then an unparalleled age of financial globalisation arrived. Both the old and the new episodes were benchmarks of financial globalisation and demand further investigation of its institutional underpinnings.

Despite there being contrasts, these experiences have in common the fact that one nation played a decisive role in the drawing of the international financial architecture. Britain was the dominant nation during the Gold Standard while the US has been the economic and political hegemonic superpower since the 1970s, especially after the collapse of the Soviet block in 1989. However, the institutional nature of these financial regimes is quite different. Examining past and current institutional frameworks should be a step towards understanding these differences, and then to reveal key points in favour of the J-pattern proposition. By doing so, the message proposed by the J-curve is not only reinforced but also more precisely understood.

In this chapter, the expression "rules of the game" will be frequently used in discussing the institutional characteristics of the two financial globalisation eras. In order to avoid any inconsistency between the institutionalist approach adopted in this thesis and the subsequent analysis, a previous clarification is necessary. There is an academic issue between the "old" and the "new" institutionalism on the definition of institution as "rules of the game". Several authors have been discussing this subject but for the purpose of this section, it suffices to mention Hodgson (1997, 1998, 2001) and North (1990, 1991, 1994).[34] Both recognise the importance of institutions for the development of the economic activity, and believe that history matters in economics, but both also diverge in terms of the definition of institution.

Hodgson's definition of institution was already presented in chapter one, and it is related to an "old" North American institutionalism. In contrast, North's definition is closer to the game theory since his description links institutions to rules of the game (see also Nelson 1995). Both definitions are opposed and support quite different theoretical underpinnings. As stated in chapter one, not only the definition of institutions but the methodological approach invoked in this thesis is related to the "old" institutionalist tradition, hence the use of the "rules of the game" term does not mean an agreement with the mainstream game theory. There are a couple of reasons why this is so.

[34] Just to refresh mind, one of the key North's (1994:360) definition of institutions is this one: "Institutions are the humanly devised constraints that structure human interaction. They are made up of formal constraints (e.g., rules, laws, constitutions), informal constraints (e.g., norms of behaviour, conventions, self-imposed codes of conduct), and their enforcement characteristics. Together they define the incentive structure of societies and specially economies. (...) Institutions form the incentive structure of a society, and the political and economic institutions, in consequence, are the underlying, determinants of economic performance. Time as it relates to economic and societal change is the dimension in which the learning process of human beings shapes the way institutions evolve."

The expression "rules of the game" was presumably coined by Keynes (1932:220) immediately after the return to gold by Britain in 1925. In that context, Keynes was referring to the rules that forced the Bank of England to reduce its supply of credit. However, authors have been using the expression the "rules of the game" not to describe such a specific situation, but to describe the general relationship between central banks (or national banks) during the Gold Standard. Scholars such as McKinnon (1993) consider the "rules of the game" as the general set of arrangements that characterised the Gold Standard including the absence of capital controls, price and wage flexibility, and pegged exchange rates. Other scholars have extended the term to other historical eras and have used the term the "new rules of the game" to describe the arrangements designed to rule the world economy, such as the process of liberalisation which occurred during the late 20th century (Drache 1999:10).

Taking the case of the classical Gold Standard (1871-1913), it is worth to remembering that humankind has carried financial transactions through precious metals standards from ancient times. Since then, several standards of metallic coins (i.e. commodity-money) have emerged[35]. Examining this evolutionary process starting in the capitalist era, scholars have described the historical details underlying the context under which such standards emerged. This section intends to focus on the institutional nature of the financial regime structured during the classical Gold Standard.

The classical Gold Standard was not the first monetary standard regime based on commodity-money that had been set up. A Gold Standard system began to be built in Britain from the beginning of the 18th century when the overvaluation of gold in 1717 by Sir Isaac Newton drove out silver coins from circulation. There is little consensus on when exactly it was effectively structured, but scholars believe that Britain managed her monetary practices through gold fetters in this century, circa 1774.[36] Apart from academic controversies, the key point to be highlighted is the principle that led the nation to choose such a regime. On this account, according to Keynes (1930:258) "the

[35] According to Keynes (1930:258) gold, silver and other "precious" metals had been chosen as store of value or command of purchasing power since time immemorial. "Some four or five thousand years ago the civilised world settled down to the use of gold, silver and copper for pounds, shillings and pence."

[36] This date is not consensual amongst scholars. Eichengreen (1996:12) asserted that "England had effectively gone onto the gold standard … in 1774 when silver's legal-tender status for transactions in excess of £25 was abolished, and in 1821, when its legal-tender status for small transactions was revoked". On the other hand, Redish (1990:789) disagreed affirming that the Gold Standard was incomplete before 1816 since "in 1816 England ended its official policy of bimetallism and adopted a single gold standard with a gold coinage complemented by a token silver coinage".

choice of gold as a standard of value is chiefly based on tradition". Therefore, it was clearly an institutional choice, in accordance with Hodgson's definition of institution.

What tradition was Keynes referring to? Basically, he was drawing attention to the long-established human convention of building a monetary standard which is embodied in a precious metal whose value varies little throughout time. The essential purpose of this "incarnation" of value was to maintain the stability of the purchasing power of money and then the stability of a huge number of contracts assigned in this money, present and future, productive or speculative. It was evidence of the importance played by institutional aspects over policy decisions. Therefore, one can conclude that currency stability was the most important institutional aspect of that monetary regime. It was too important to fail. Accordingly, the "rules of the game" of the Gold Standard reflected this priority and that is why the policy instruments were strongly concentrated to sustain the monetary stability, leaving social demands of another nature unassisted. All things considered, the driving force of the Gold Standard system must be understood in the context of 19th century capitalism. This is the purpose of the next section.

2.2. The rules of the Gold Standard game: the institutional framework of the first financial globalisation period

a) Building global money and market integration: the rules of the game

The major economic and geopolitical feature of the emergence of the classical Gold Standard was that Britain, as the seat of the industrial revolution, emerged as an economic and financial superpower. Therefore, many countries quickly took advantage of the opportunity of being able to link their own currencies to the British monetary system. In fact Portugal had already adhered to the British Gold Standard from 1854, due to its long commercial relationship with the country. In 1871, Germany won the Franco-Prussian War and used the indemnity received by France to accumulate gold and establish the mark as its new gold-based unit. In practice, it represented an adherence to the regime. The German adherence played an important role in the transition of the system from being only a localised arrangement of payment between some countries to an international monetary regime. Germany was the most industrialised European nation after Britain, and consequently the role played by its economy in the continent was quite influential. Geographically located at the heart of Europe, the performance of the German economy directly affected the economy of its neighbours such as Denmark, the Netherlands, and Norway. As a result, the Deutsch adherence stimulated them to peg their own currencies into gold, encouraging the Gold Standard to spread around continental Europe.

Voluntarily and motivated by commercial and financial interests, almost all Western European countries committed themselves to practise the monetary gold parities defined by Britain. Austria-Hungary and Italy joined the standard by the end of 19th century, and the US joined in 1879. The adherence of these core countries in Western Europe and America immediately ignited and set off a chain reaction in other nations in Asia and Latin America. They realised the importance of adhering to the system not only because of the commercial interests involved but also because of the possibility to have access to loans and to the capital market from these countries. Some of them were not successful over the years but the fact is they made a great effort in terms of domestic policy arrangements to attach to gold standard convertibility, establishing the exchange rate of their currencies into a fixed weight of gold. As argued in Bordo & Rogoff (1996), the adherence of the Gold Standard was "a good housekeeping seal of approval" to have access to this more advanced financial market. Respectively, Russia, Japan, India, Ceylon, Siam, Argentina, Mexico, Peru and Uruguay also adopted gold standards at that time. As a consequence, by 1900 the Gold Standard had evolved into an international regime, which is why most authors have labelled it as the classical Gold Standard experience.

The classical Gold Standard was a monetary system in which the value of national currencies was fixed at a definite weight of gold. Therefore, one of the chief characteristics of the regime was the commitment assumed by governments to maintain fixed exchange rates with gold. Consequently, Central Banks (or National Banks) were supposed to freely convert the currency of each participating country into gold at any time through a fixed exchange rate. The monetary stability was the priority of the economic policy of the country participants. By creating a stable monetary parity to gold, this system stabilised the exchange rate of many countries within narrow limits of variation. As a consequence, all international debts were settled in gold.

As early as 1752, David Hume wrote an influential explanation of the Gold Standard mechanism. He proposed his famous price-specie-flow model based on two hypotheses: first, only gold coins circulated internally, and second, the role played by banks (both central and commercial) was unimportant. In his model, international transactions were paid in gold. When receiving their payment, exporters coined the gold received into their national mint, and similarly, importers paid for their merchandises by exporting gold. As a result, commercial banks did not play an important role in the development of cross-border activities.

This could be explained by means of a hypothetical example depicting the commerce between two countries **α** and **ω**. Suppose **α** has a trade deficit. As imports are paid for in gold, country **α** has an outflow of gold. This outflow reduces the money supply in **α** and raises it in **ω,** as **ω** increases its stock of gold. Consequently, prices are reduced in **α** and increased in **ω**. Because prices in **α** are lower than in **ω**, **ω** increases their imports from **α**, sending gold to **α**. Then, as **α** receives gold, its trade deficit is re-established, its gold coin stock increases and so their prices return to stability. Similarly, the stock of gold coins decreases in **ω,** its trade surplus returns to a balance and their prices become stable again. Therefore, the balance-of-payment equilibrium is restored.

As Hume's model was developed in the middle of the 18th century, it did not comprise the (nature of) capital flows that characterised the international Gold Standard at the end of the 19th century. More than a hundred years after Hume's model, the exports of capital from Europe developed significantly. Therefore, the role played by central and commercial banks, as well as the fluctuation of interest rates, should be taken into account in the economic analysis. That analysis was made in 1919 by a committee organised to debate the return to gold by Britain after the wartime. This committee prepared the Cunliffe Report.

According to the Cunliffe Report, commercial transactions amongst countries were identified as being paid off in its banknotes, not in gold. According to the Report, central banks have compromised themselves to converting currency into gold at any time of demand. When **α** runs a trade deficit against **ω**, **α** should pay the difference with banknotes. Entrepreneurs in **ω** presented this amount to **α**'s central bank for conversion into its currency provoking an outflow of gold, leading to a consequent decrease in its money supply, while at the same time raising the money supply in **ω**. As the payments were in money, central banks had a relevant role since they converted gold into banknotes and vice-versa. Apart from this difference, the process of adjustment was very similar to Hume's model described above, so much so that at the end the exports in **α** rise and its imports fall until the trade imbalance between these countries is eradicated.

In fact, "the rules of the game" were much more complex (and not always obeyed) than described by Hume or by the Cunliffe report.[37] Central banks usually tried to avoid an outflow of gold in order to preserve the stability of their currency. The central banks' decisions were focused mainly on maintaining gold reserves compatible with the golden points and internal price stability. Then, they applied their discount rate to avoid the erosion of their gold reserves up to the point in which international markets decided to increase their exports. To be clear, they put interest rates up at least during the time needed while other countries increased their imports from the country where prices went down due to the central bank's restrictive policy.

The results attained by the operation of the discount rate were usually successful. This policy procedure involved the management of loans and interest rates which in turn aimed to control the country's gold reserves and consequently the supply of money. For instance, if there was the expectation of a gold outflow, the central bank increased the discount rate withdrawing money from the market in order to make exports more competitive. In doing so, the trade deficit would be eliminated avoiding the loss of gold reserves. Similarly, interest rates could be increased also to reduce credit (and then increasing the cost of investment), keeping the entrepreneurs under strict market discipline.

Alternatively, there were another two ways to reduce the money supply in order to avoid an outflow of gold. However, open market operations were sometimes employed in Britain and (by the end of the 19th century) in Germany but not regularly because it required a developed financial market to be able to negotiate a number of bonds efficiently. Foreign exchange market operations with the same purpose occurred between London and New York but were also not so significant. They occurred

[37] Some scholars question the adequacy of this term to express the Gold Standard mechanism. For example, Ragnar Nurske (1944), Arthur Bloomfield (1959), McCloskey & Zecher (1976) and Eichengreen (1996) maintain that central banks developed many ways of violating the "rules of the game", putting at risk the stability of the system. Therefore, many writers on the subject use the expression between quotation marks.

because these two alternative ways did not reflect the reality of the European and American financial system during the Gold Standard.

Up to this point, one can imagine that the international transactions under the Gold Standard were a consequence of the operation of a set of rules, formally written and strictly obeyed, but this is not true. A couple of reasons for this could be pointed out. First, apart from the commitment of the central banks in maintaining the convertibility of their currencies into gold, there was not a statute to prescribe laws or codes to be followed. Then over time there were many deviations from the mechanisms of adjustment described above. The two quotations below could enlighten this point. McCloskey & Zecher (1976:362) reasoned that:

> Central banks often did not play the rules: the Bank of France and the National Bank of Belgium, for example, kept their discount rates low regardless of gold flows. An alternative indicator of the extent to which central bankers played the rules is the extent to which the relationship between inflows of gold and increases in domestic credit was positive. Once again, the indicators are that in the late nineteenth century the monetary authorities, in the case American and British, cheated: the correlation between gold flows and annual changes in domestic credit was -0.07 in the United States and -0.74 in the United Kingdom.

In agreement, Eichengreen (1996:29; 32) presents some more evidence collected from the research of other eminent scholars:

> Ragnar Nurkse tabulated by country and year the number of times between 1922 and 1938 that the domestic and foreign assets of central banks moved together, as if the authorities had adhered to the 'rules of the game', and the number of times did not. Finding that domestic and foreign assets moved in opposite directions in the majority of years, Nurkse attributed the instability of the interwar gold standard to widespread violations of the rules and, by implication, the stability of the classical gold standard to their preservation. But when in 1959 Arthur Bloomfield replicated Nurske's exercise using pre-war data, he found to his surprise that violations of the rules were equally prevalent before 1913. … Central banks possessed the capacity to violate the rules in the short run because there was no question about obeying them in the long run.

The so-called "rules of the game" of the Gold Standard were the mechanisms of balance-of-payment adjustment managed by central banks and (to a minor extent) by commercial banks to guarantee the defence of gold convertibility. However, as quoted above, these rules were not fully respected at all. So the "rules of the game" cannot be considered a central pillar for the maintenance of the Gold Standard, at least in the short run, but also they cannot be discarded as if they were unimportant. It is worth emphasising that the violation of these rules in the short term was tolerated as long as agents believed that inconsistent policies relating to the monetary stability would not happen indefinitely. That is to say, in the long run they should be maintained, otherwise the system would not survive. Considering this, its institutional maintenance in the short run should be found in other more robust and credible foundations.

Interestingly, despite the fact that the rules were defied many times, the system continued in operation up to the occurrence of a world war.[38] Then, how did the Gold Standard regime operate for so long without a written code and without having its informal commitments strictly obeyed? Most authors have answered this puzzle, affirming that it was sited in two crucial pillars: the long term commitment to gold convertibility and international solidarity. This is another piece of evidence to show the importance played by institutional aspects in the development of the regime. Inspired by Keynes's (1930:258) assertiveness regarding the choice of gold as a standard of value to establish a monetary standard, I consider that among other reasons, the long term commitment to gold convertibility was motivated by tradition, an institutional aspect as discussed beforehand. Furthermore, this tradition was kept for governments of member countries, that is, the nation-states played an important role as institutions of global economic governance.

Governments (especially in the core countries) were committed to maintaining the long term convertibility into gold, overcoming the problems caused by short term deviations. This commitment was measured as a priority policy objective of each country member. Economic policy instruments were fully dedicated to maintaining the gold parities to get the "good housekeeping seal of approval", and then investments in social security were virtually non-existent. As seen above, there was great concern with price stability and little concern with output level and its distribution. Political complaints in opposition to the side effects of high interest rates were still embryonic at that time: the right to vote was not universal, labour parties and labour unions were not yet structured, and wages and prices were relatively flexible. Besides, private agents noticed that

[38] McCloskey & Zecher (1976:363) affirm: "Yet, the gold standard, it is said, worked quickly and well. The exchange rate between sterling and dollars, among many other rates, remained virtually unchanged from January 1879, when the United States put itself back on gold, to August 1914, when the war put the United Kingdom effectively off it".

governments would not hesitate to take unpopular measures to maintain domestic monetary stability.

This commitment was not enough to maintain the stability of the Gold Standard system without international solidarity amongst the central banks. An increase (reduction) in one country's discount rate attracted (repelled) financial capital and gold reserves, damaging the balance-of-payments of the other countries. These disturbances might ignite cumulative imbalances in international accounts for many economies. Despite the influence of the Bank of England as the coordinator of the system, there were turbulent periods in which its reactions were not enough to prevent financial crises. For instance, if a country lost a great part of its gold reserves, it would have to increase its discount rate to attract overseas gold and capital. As usual, all economies wanted to increase their reserves, and without international cooperation the system would be ruined. Then, if the other economies wanted to preserve their proper financial stability, they would have that to act cooperatively helping the one in distress to increase its gold reserves in order to guarantee the continuity of the system. This meant that, in order to preserve its own interests the system had to be preserved and could not allow countries in crisis to influence the policy decisions of all others because it would eventually lead to the failure of the system.

Although the steadfast long term government commitment to monetary stability, the Gold Standard could not prevail for more than forty years without international solidarity between central banks since as discussed above the discount rate was raised whenever there was risk of gold outflows. This decision attracted international capital and gold to certain countries, promoting an opposite reaction in others. Similarly, central banks decreased the discount rate when the gold stock was in excess. Unilateral decisions similar to that provoked unexpected outflows or inflows of gold to some other countries, then problems to their balance-of-payments and domestic prices. The opposite reaction was instantaneous and the final result had a harmful effect to all. Policy responses rebound over and over again creating an inconsistent policy scenario, ruining the credibility of the system. Central banks noticed that this non-cooperative game should be avoided in order to maintain the core rules. Thus, international cooperation was a very important aspect of the game helping countries to overcome the financial crises that eventually emerged.

Eichengreen (1996:34) exemplify the importance and extension of these occurrences:

> The Bank of England borrowed £3 million of gold from the Bank of France and obtained a pledge of £1.5 million of gold coin from Russia. This action was not unprecedented. The Bank of England had borrowed gold from the Bank of France before, in 1839. It had turned the favour in 1847. The Swedish Riksbank had borrowed several million kroner from the Danish National Bank in 1882. But 1890 was the first time such action was needed to buttress the stability of the international gold standard and its key currency, sterling. 'The assistance thus given by foreign central banks [in 1890] marks an epoch' was the way [the English economist Ralph] Hawtrey put it.

International liquidity varied for many reasons, therefore central banks' decisions were too harmful (or not) for the maintenance of monetary stability, damaging the credibility of the system as a whole. For example, when the international liquidity was reduced, there was a need to increase the interest rate or vice-versa, and without an institution to coordinate this adjustment, central banks might have made inconsistent decisions. For this reason, an effective leadership was important to coordinate these decisions. As the most powerful monetary authority, the Bank of England assumed this position in the 1870s, leading the global market since its discount rate was the target for all other central banks. The role played by the Bank of England and the other central banks likewise represents another key institutional aspect of the Gold Standard.

Besides the aforementioned episodes of international cooperation, the Baring crisis in 1890 became well-known due to the unprecedented amount of money negotiated between central banks. It is an outstanding example showing the importance of international cooperation during the Gold Standard. The British bank Baring Brothers, lent money to the government of Argentina but it did not receive any payment in due time. It provoked an expectation that the Bank of England would not have enough gold to maintain the parity of the pound sterling. The Bank of England bailed out the Baring Brothers to prevent a larger depression, and Lombard Street ended up receiving a loan of £3 million in gold from the Bank of France, and £1.5 million in gold coins from the Russian State Bank. The Bank of England managed to recompose their reserves and the currency crisis was eventually resolved, but this experience almost ruined the Gold Standard.

Since then, a new "rule" was introduced in the system. Countries noticed that the commitment of sustaining the gold parity could not be accomplished without international cooperation amongst central banks. Consequently, by the end of the 19th century and the beginning of the 20th century, several similar crises were thwarted through the coordinated action of the monetary authorities from distinct countries. One more procedure was established which incorporated the rules of the game and then international solidarity became an institution to the gold regime.

What does it mean in terms of global capital integration?

Being played like this, the rules of the game created a favourable policy environment able to trade goods and capital, connecting all country-members through the common language of an international monetary standard. As mentioned above, the adherence to the Gold Standard implied some basic commitments which were mutually related: governments should be prepared to take any policy measures to defend convertibility; they would be coordinated by a leader; and they would expect cooperation from the central banks. This does not mean a perfectly coordinated world[39] but one that encouraged the adherence of a variety of countries distant from the north Atlantic economy.

All of these commitments and rules imply that foreign securities issued in countries off gold were considered riskier. On the other hand, countries on gold were integrated into an extensive market and then had much more opportunities to buy or sell their assets. The "good housekeeping seal of approval" allowed the inclusion of peripheral countries to the European markets and favoured global economic integration since the adherence to the rules allowed access to a wide market free from capital controls. Accordingly, the establishment of the classical Gold Standard played a crucial role in global capital integration. Protectionism to agricultural and industrial products was a common trend in developed countries (especially from the end of the 19th century to 1913) as noted by Bairoch & Kozul-Right (1996) and Chang (2002) but capital controls were scarce at that time.

Before 1870, cross-border trade and financial flows were less connected, less structured and financial markets were roughly institutionalised. An international network of asset trade was not put into operation due to unsolved problems in managing and expanding the bimetallist standard (Redish 1990; Eichengreen 1996). It was confined to few areas

[39] Despite playing a central role to the global market institutionalisation, this regime could not be considered perfectly integrated. In fact, there were many crises and backlashes in various countries, especially in peripheral economies, due to inconsistencies in their economic policy (Bordo & Eichengreen & Irwin 1999; see also Eichengreen & Bordo 2002, p. 40).

of Europe, the US and a few Asian countries. As time passed, it did not have enough credibility to integrate countries from all continents in "the dense network of historically specific financial institutions."

During the period prior to the Gold Standard, international transactions were atomised due to the monetary chaos that prevailed within the richest countries. Therefore, there was not a global market, since the institutional instruments discussed above were absent in the international scenario. British 18th century gold practices spread all around the world and re-emerged as the international (classical) Gold Standard. Over time, the classical Gold Standard regime was institutionally established. A truly universal market was "built" based on these commitments, institutionalised by a historical convergence of economic, political and specific social circumstances. The gold parity, the rules that oriented the relationship amongst central banks and the international coordination through cooperation represent the basic aspects of "the dense network of historically specific financial institutions" which made the operation of the system possible.

Eichengreen (1996:30) noted that "it [the Gold Standard] was a socially constructed institution whose viability hinged on the context in which it operated". On this account, the key message to be emphasised in this section is the role played by the institutional arrangements in order to make possible the operation of a global capital market for almost half a century. Despite the crises and retreats that occurred throughout the 1870-1914 period, the expressive volume of capital traded and its wide geopolitical width marked the trade and financial international economic history. The specialised literature has labelled this era as a benchmark in terms of global capital mobility and integration, thus this period is considered as the first wave of financial globalisation.

In summary, the rules of the Gold Standard game shaped the institutional arrangements that were developed to sustain money stability. The Bank of England was the coordinator of the system and the message it preached was the Gospel of currency stability to allow the redemption of capital flows, and the Gospel of international cooperation amongst central banks to avoid severe problems in the balance-of-payments of member countries. This means institutional arrangements were made to adapt the system to achieve these policy objectives, so that financial flow disturbances would be discouraged. Helped by central banks worldwide, Lombard Street managed discount rates in order to prevent outflows of gold, which would have caused more and more disruptive banking crises. In so doing, capital flows emerged and cross-border transactions were encouraged worldwide.

b) Building global markets through reduced transaction costs

The expansion of cross-border financial flows from 1870 to 1914 was heavily influenced by the development of technological breakthroughs which sharply reduced the transaction costs of monetary and financial transactions. On this account, there were major innovations in two distinct areas, namely mechanical minting coinage and communication technology. In the former, the most important breakthrough created was the steam-powered engines which were able to mint coins. The introduction of stream-driven stamping presses by the government of Britain in the early 19th century brought lower money transactional costs, contributing to the organisation of a national monetary system in that country and in others, contributing then indirectly to the advent of the classical Gold Standard. In the latter, there were three key innovations: the domestic telegraph, the trans-Atlantic cable and the telephone. These breakthroughs were very important since they provided direct and instant interconnection amongst a diversity of geographically distant financial centres. They dramatically reduced the cost of long distance communication and allowed a lower cost of financial transactions which increased the efficiency of those markets. Accordingly, financial centres became more integrated than they were during the first half of the 19th century.

These technological developments played an important role, encouraging increasing levels of capital integration and promoting round-the-world financial affairs. This does not mean that it was rapid or truly universal but by the beginning of the 20th century, key countries in all continents were connected through technological devices. Problems remained in terms of global coordination of financial operations since corporations and governments did not have the appropriate management skills, legal procedures and multilateral institutions to deal with the issues that were raised. But those major technical instruments invented at that time were an important piece in the Gold Standard puzzle since they equipped central banks, private banks, investors and governments with the tools to play the game across national borders. This section aims to explore how dispersed and geographically distant financial markets became part of a global marketplace through reduced transaction costs.[40]

At first, it is worth balancing the importance of the mechanical coinage to the Gold Standard because its importance was in fact indirect. It helped the establishment of national monetary coherence and identity in local economies, therefore the monetary identity facilitated the adherence of countries to a regime whose central aspect was the conversion of national currencies into a fixed exchange rate in gold. Nevertheless, in terms of the process of global financial integration *per se*, it should be recognised that the advent and spread of the intercontinental communication breakthroughs were much more important.

Technological improvements regarding the manufacture of token coinage in the early 19th century were important in organising domestic monetary systems in major European countries. Yet, the Bank of England was the pioneer of minting coins mechanically through these machines, soon after Britain abandoned the bimetallism in 1816 (Redish 1990). It was one key historical event which contributed to the emergence of the Gold Standard in England and, by contagion to the other countries worldwide. Before that, coins were minted employing manual labour. This had several disadvantages: coins were easily counterfeited, it was more difficult to mint small denomination coins, their weight and size could hardly be constant and homogeneous, and on top of that regional transactions were more costly.

Helleiner (2003:63) put in historical context the problems caused by the inconvenience of conducting business and building a stable and coherent monetary regime without a uniform currency. According to him the expansion of commerce in major countries during the second half of the 19th century was severely hindered by this problem. He quoted part of a speech delivered by Canada's Minister of Finance in 1869 which describe quite well the shortcomings of counterfeited money, and the increase in transaction costs provoked by the absence of a uniform national monetary standard:

> Those who were engaged in business – from the largest merchant to the keeper of a corner grocery – had to keep on his desk a Bank Note Detector almost as large as a Family Bible, and had to be constantly getting new editions of it, in order to know what notes were counterfeit, what genuine, and as regarded even the

[40] Scholarly literature regarding the contribution of reduced transaction costs in communications to financial market integration during the Gold Standard has been relatively modest in comparison with other topics discussed about the globalisation of markets in this period. For this reason, this section draws heavily on data collected by Garbade & Silber (1977) and Michie (1987).

genuine, to know what were worth par, and what rates of discount the others might be taken.

The problems generated by the absence of mechanical coinage and a national common national currency in many major countries hindered national development and obstructed the cross-national transactions. Even simple transactions became very risky as seen in the quotation above. Before unification in the early 19th century, important European countries such as Germany and Italy used several different coins. This significantly increased transaction costs for investors and merchants because whenever they wished to buy or sell their commodities or assets through countries they had to exchange money, even when moved to a certain province within the same country.[41] The "technological obstacle" to minting coins was overcome by the use of the steam-powered mint machine.

Instead of production being done by hand, steam-powered engines were used to mint coinage mechanically. They produced coinage with economy (of time and labour) and high precision. This resulted in many advantages: coins were produced in large scale and at low cost; nation-states had earnings of seigniorage and brassage; coins could not be easily imitated since it became simpler to detect false money; the counterfeiting became more costly; coins became perfectly uniform; and it allowed the minting of both lower and higher-denomination coins. Taking into account the institutional endorsement of nation-states, the new technology permitted coins to maintain their value throughout time.[42] As a result, the use of money became more practical and acceptable, thus allowing and encouraging a much wider range of daily transactions.

In this sense, commercial transaction costs were reduced significantly. Transactions in general became safer and more reliable. Their credibility avoided the additional cost of

[41] Italy was a typical example of the inconveniences created by provincial coins. Helleiner (2003:65) extracted a quotation from a Report ordered by the government of Italy in 1868 about the unification of its monetary system. The author stated: "On the line from Milan to Ancona, you pass across four monetary zones; those, namely, of Lombardy, Parma, Modena, and Romagna; each of which has its coinage, its numerations, unknown on the other side of the frontier, which for any other purpose is already forgotten."

[42] It is worth emphasising that technological development was not a panacea for domestic monetary stability. Mint machines made possible homogeneous coinage but it was not enough to guarantee the stability of its value throughout time. It was not enough in terms of money stability and general acceptance without the institutional guarantee given by nation-states. Redish (1990:799) correctly asserted that "the success of the tokens was due both to changes in minting technology that made counterfeiting more costly and the Mint's willingness to guarantee the convertibility of the tokens".

paying twice for the same transaction if forged money was used for the first time. On the whole, transactions did not incur additional costs in comparison with the time before. It did not mean that before mechanical coinage, coins were not broadly used in commercial transactions, but it promoted a revolution in the volume of money transactions due to the reasons presented above.

In summary, mechanical coinage allowed the creation of uniform coins and the unification of the national markets, discouraging the counterfeiting and favouring the development of unified national monetary markets. Without a uniform currency, agents faced high transaction costs and equally importantly, without monetary unification, markets were reduced to their provinces. In a country with different regional coins, daily transactions would certainly be more expensive because agents are forced to continuously exchange money, therefore variations in the exchange rates meant that purchases and sales would become more expensive. Monetary unification was an important institutional aspect for the international affairs at that time, equivalent to a territorial or linguistic unification because agents could make transactions with each other without additional costs nationwide. Money eventually became the common language amongst agents at least in its domestic frontiers. That strengthened the nation-state's key position as the institution that enforced the domestic currency and officially maintained the control of emission within national territory.

As mentioned previously, the mechanical development of coinage was one of the factors that contributed to the advent of the Gold Standard regime. On this account, Redish (1990:805) asserted: "The Gold Standard succeeded because the new technology employed by the Mint was able to make coins that counterfeiters could not copy cheaply and because the Mint accepted the responsibility of guaranteeing the convertibility of the tokens". Helleiner (2003:71) reached the same conclusion when he asserted that "concerns for the transaction costs faced by the poor and those who transacted with them were important not just in prompting reforms of copper coinage and private tokens. They were also central in encouraging countries to introduce the gold standard with the fiduciary silver coinage system."

The benefits brought by the minting of coinage played a key role in the development of national and international monetary markets. However, it was not enough to integrate financial markets which were geographically distant. Intercontinental financial transactions were made with a large time delay due to the existent state-of-the-art communication system. Improvements in steamship travel did not eliminate significantly the time of transoceanic transport as well as developments in regional means of transportation such as railways or ferryboats, which were also not enough to communicate the daily change of prices among distant markets, mainly because those prices could change many times a day.

By the mid-19th century, even between Britain and France, transport time was not sufficiently short to allow an exchange of security priced information within the same day, and consequently a wider and more active international financial market slowly evolved (Michie 1987:39). Transport of information through physical means was a bottleneck for the progression of global finance. Assuming that geographical distance could not be overcome through the existent means of transportation, it had to happen through technological development of new means of long distance communication. The foundations for large-scale electronic communications were laid during the 19th century through the invention of the telegraph, the trans-Atlantic cable and the telephone.

Taking London as the world's core financial centre at the time, one can realise that before the telegraph and the telephone, investors outside London had to keep in touch with the "City" by establishing contracts through correspondence enforced by attorneys (country clients), or through appointed specialised agents to act on their behalf (e.g. large investors, normally banks). It meant that investors from within and outside The City had to keep in contact through the dispatch of letters. Communication within the London market, which was carried out directly through individual contact and regular correspondence, was sufficient to keep it operating normally. However in the provincial markets, decisions had to be taken with a lack of knowledge, despite improvements in the railway system and in other modes of transport used by the Royal Mail (Michie 1987).

Developments in scientific knowledge that gave birth to the telegraph, the trans-Atlantic cable and the telephone during the second half of the 19th century significantly improved the speed of long distance information transfer. The growing integration amongst national security markets can be followed by examining the role played by these key breakthroughs in intercontinental market connection. Their operation and development had dramatic impacts on the process of financial globalisation (read: global market integration) since they significantly reduced the transaction costs of operations. This large fall in the cost of communications enhanced the efficiency of financial dealings for both national and foreign transactions. As a result, spatial and temporal barriers were reduced (or "virtually removed")[43], connecting many markets that were formerly separated. This transformation can be evaluated through the volume of telegraphic messages (and real time communication) between distant financial centres.

The introduction of the telegraph and the telephone transformed the security market worldwide. By the late 1840s public telegraph lines linked London and the major British cities, reducing the number of letters dispatched by the Royal Mail and shortening the communication time between distant markets from days to minutes. These instruments were not confined to Britain, but they spread firstly to Europe and North America, then to the countries in Australasia and Latin America.

In 1851, a submarine cable was laid between Dover and Calais, establishing fast and direct communication between The London Stock Exchange (LSE) and The Paris Bourse. In addition, this allowed London to be linked not just to Paris but to the main European Bourses that were already interlinked by telegraph. From 1851 to the early 20th century, more submarine cables were laid connecting other parts of Britain to continental Europe, particularly to France, the Netherlands, Belgium and Germany. The figures illustrating this flow of information are quite impressive. According to Michie (1987:42):

> Altogether, of the 17,372 telegrams sent to and received from continental centres by the members of the London Stock Exchange between 12 and 17 July 1909, 43.1 per cent were German, 19.7 per cent French, 17.8 per cent Dutch and 8.2 per cent Belgian, leaving only 11.1 per cent for the rest of Europe. This volume of business represented an equivalent of one telegram being received or dispatched every second for an eight-hour working day during a six-day week.

The data shows how well integrated in terms of communications the major European stock exchanges were in the early 20th century. Investors were now able to conduct business much more quickly than they had been able to before. The good results encouraged the development of data transmission technologies promoting a dramatic fall in the transaction costs and allowed financial transactions to be accomplished much more efficiently. As Michie (1987:44) observed "in 1851 it cost £1.4 (£1 8s) to send

[43] According to Michie (1987:47): "The spatial and temporal barriers that had divided London from other securities markets had been virtually removed through the introduction of the telegraph and telephone and their progressive refinement."

the minimum message between London and Paris, while by 1906 the charge had fallen to only £0.04 (10d) or a decline of 97 per cent." In fifty five years, the cost of sending messages became negligible, and consequently financial transaction costs reduced and asymmetric information was sharply deflated, and the virtuous cycle went on spurring denser integration between the key financial centres in Western Europe.

On 27th July 1866, the trans-Atlantic telegraph cable was put into operation connecting London and New York (Garbade & Silber 1977:826), and then to Melbourne in 1872, Buenos Aires in 1874 (Michie 1987:45), and Tokyo in 1900 (Bordo & Eichengreen & Irwin 1999:32). Thereby, at the turn of the 20th century, the world's major financial centres were integrated with each other through telegraphic communications. Britain was linked to North America, to key countries in continental Europe, to South America, Asia, and Oceania. Despite the limitations of the technology available, these five continents were interlinked as never before, and then the world's major national financial markets became globalised for the first time in history.

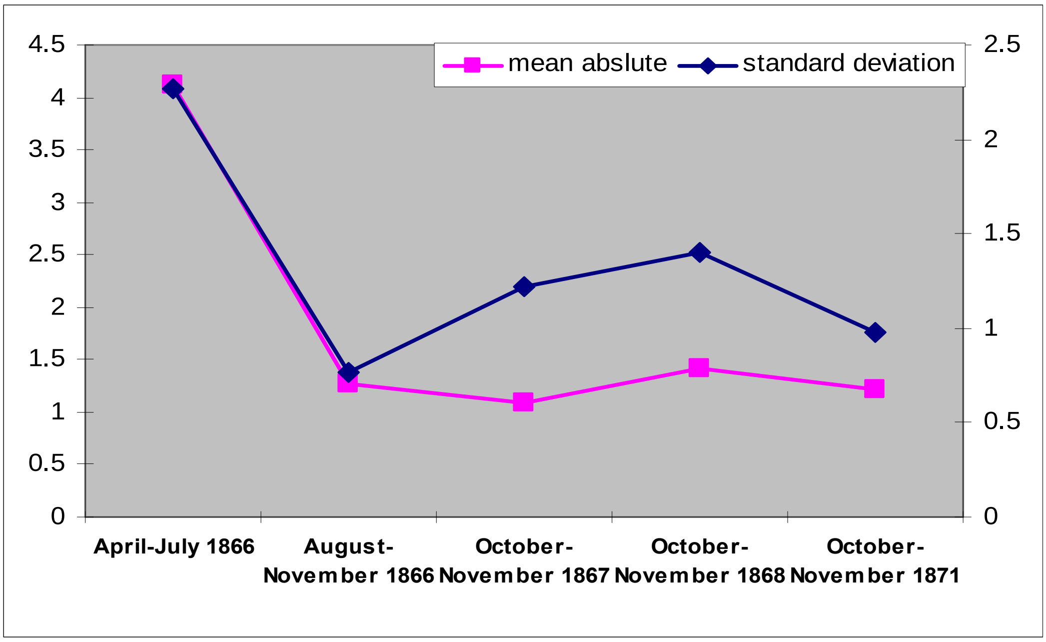
Contemporary scholars have emphasised the key role played by the trans-Atlantic cable as a historical step towards global financial integration, but it is worth noting that the press at the time also highlighted the importance of this fact. The American local press underlined the importance of this historical event for the US economy and to solve the problems related to the low level of integration and high uncertainty in financial and commercial activities that were frequent before the cable. After that, because of the elimination of time delays and a decrease in uncertainty, agents from distant markets could take decisions with much more knowledge and confidence. Garbade & Silber (1977:827) extracted this historical record from a New Yorker newspaper:

> The contemporary press immediately recognized the importance for enhancing the integration of American and European markets. On July 30, 1866 the *New York Evening Post* wrote 'The Atlantic Cable will tend to equalize prices and will eliminate from the transactions in bonds, in merchandise and in commodities, an element of uncertainty which has had the effect of … seriously damaging the commercial relations between this country and Europe.' As if to foster these ends, the *Post* began to publish price quotations from the London market the next day.

Before the transatlantic cable, financial integration was advancing amongst Western European countries, encouraged by telegraphic technological devices, geographical proximity and cultural affinity. However, the US economy was too strong to remain disconnected and the long distance between America and Europe hindered the development of a larger volume of financial transactions. Prior to the cable, investors in London or New York received price information with three weeks delay on average (Garbade & Silber 1977:820). They continuously faced a dilemma: they had to decide if they would invest based on knowledge or based on their estimations and expectations. After the cable the delay dropped to a day, thus their estimations became much more precise and price differentials reduced significantly. Market participants were more sensitive to price changes on identical assets, so they were able to execute business faster than in the past, and arbitrage operations became more attractive.

Garbade & Silber (1977) tested the impact of the submarine cable between London and New York focusing on the differentials in the prices of the same asset traded in these two centres. They calculated the inter-market price differentials through the mean price - there was an absolute difference of prices in these two markets - and the standard deviation of these differences during the period of pre-cable and post-cable. Their results are presented in these figures below.

Figure 8. Effects of domestic telegraph and trans-Atlantic cable: Mean absolute and Standard deviation of the absolute difference of the United States 5-20 Bonds in New York and London[44]



Source: Garbade & Silber (1977:825)

[44] This figure is based on data in Appendix 9.

During the four months before the launch of the cable, the mean absolute difference of security prices between London and New York was $4.118 but this difference fell by half four months later. As can be seen in figure 8, this fall was fast and consistent during the time interval analysed. On average, prices became closer and continued in this way in the following years analysed. Similarly, the standard deviation of the absolute difference series had the same sharp fall after four months, which meant that the dispersion of prices reduced by more than fifty per cent. These results indicate that these markets became more integrated. The price convergence between them is a piece of evidence of the positive impacts on the trans-Atlantic financial integration provided by the telegraph.

These figures become more significant if they are compared to the results obtained between New York and New Orleans and Philadelphia. Garbade & Silber made similar calculations to these regional markets using different asset prices before the telegraph and after the telegraph. Their results were not much less significant. In fact, this was an expected result but it presented important evidence related to the relevant impact of trans-oceanic communication over these key centres. This evidence indicates that similar results happened in other intercontinental connections.

Table 14 displays the results of these communications between major countries a few years before WWI.

Table 14. European and Anglo-American Stock Exchange telegraph traffic: 1908-09

	Anglo-Continental Telegraph Service, 5-7 July 1909						Anglo-American Telegraph Co. 22-24 September 1908		
	France			Germany					
Time	**London out**	**London in**	**Total**	**London out**	**London in**	**Total**	**London out**	**London in**	**Total**
Entire day	1,317	787	2,104	2,821	1,573	4,394	2,005	4,111	6,116

Source: Post Office Memorandum, Anglo-Continental Telegraph Service, 11 August 1909; M. Carson, Manager, Anglo-American Telegraph Co., to F. J. Brown, General Post Office, London, 22 October 1908, quoted in Michie (1987:44).

The table shows a picture of the telegraph communications between the most important world financial centres, i.e. the LSE, key European countries and the US. As can be seen, there was a marked difference of communication between London and the main European countries and London and the US. London sent more messages to France and

Germany than were received by them, conversely, the opposite happened between US and London due to the continental size of the American economy. Overall, the table shows an intense exchange of information circulating amongst the stock exchange markets of these core countries.

Based on the table above nothing can be concluded regarding the evolution of the volume of messages exchanged between Britain and America before 1908. Michie (1987:45, 46) compared to the number of messages sent per minute between London and the US in the initial period of the transatlantic cable and 1908. Thus, it became possible to evaluate both the increased intensity of this communication and the large fall in its cost. He pointed out that:

> In 1908 an average of thirty-two telegrams a minute were being send and received over the Anglo-American Company's wires, during the busy period between 3 p.m. and 4 p.m., compared to a maximum of seven when the cable opened in 1866. At the same time, the cost of a one-word telegram fell from £20 in 1866 to £1 in 1902, or by 95 per cent; the cost continued to fall as competition grew, to £0.1 (2s) by 1906, or by a further 90 per cent. … The volume of telegrams between London and New York using the Anglo-American cables can be estimated to have risen from about 42,000 a year in 1871 to 570,000 in 1908, or by 1,257 per cent.

These dramatic reductions in transaction costs between the countries also happened within European economies. This means that, communications were as fast as possible and costs were dramatically falling which meant investors could operate as fast as possible in different countries. Their security markets no longer played a local role but they influenced and were influenced by quotations obtained in different centres. This increased communication developed until the verge of the WWI.

In 1891, the telephone allowed two-way instantaneous communication turning the telegraph into an outdated device. It provided the technological conditions for the simultaneous operation of a wide range of markets. This was important not just in allowing a very quick exchange of information, but it also changed the way financial cross-border transactions were conducted. From the end of the 19th century onwards, the telephone hastened the process of financial integration even more. Initially this invention was confined to subscribers in London, but by the turn of the century it had spread throughout Britain, the major countries in continental Europe and to the US.

In 1891 London was linked to Paris by telephone. In 1897 these interconnections increased considerably since two more cables were laid between these two cities. Phone communication was more expensive than telegraphic messages at that time but its vastly increased speed outweighed this concern and telephonic communication was therefore preferable. This and the benefit of instantaneous communication overcame its high costs, and for this reason in the early 20th century the use of the telephone spread quickly amongst stock markets in developed countries. According to Michie (1987:45):

> A three-minute call from London to Paris cost £0.4 (8s) or ten times more than a telegram, but it did provide voice-to-voice contact. As a result, there was a general switch away from the telegraph for those centres possessing direct London telephone connections, namely, Paris and Brussels, while the telegraph continued to be central for business with other continental centres, such as Berlin, Frankfurt and Amsterdam. Thus, in European communications the arrival of the telephone represented the final stage on the removal of all communications barriers, which had been begun by the telegraph.

All these devices considered so far played a key role in global integration during the Gold Standard era since investors could readily respond to deals in centres connected to each other, and additionally, countries and companies could issue securities internationally and so they became more marketable than before. As mentioned in chapter two, Goodhart maintained that the transatlantic cable in 1866 marked the beginning of the first financial globalisation era (Eichengreen & Bordo 2002:3) instead of the emergence of the Gold Standard. Without mentioning the expression "financial globalisation" Michie (1987) also took into account the importance of the telephone and arrived at the same conclusion.[45]

A perfect and complete integration was not achieved but at least the main countries in each continent were able to establish instant contact with each other. This included not only developed countries but key developing ones. Table 15 gives an example of this global integration.

---

[45] Focusing on London as the core financial centre of that time, Michie (1987:47) pointed out: "The spatial and temporal barriers that had divided London from other securities markets had been virtually removed through the introduction of the telegraph and telephone and their progressive refinement. 'Communications between London, Paris, Shanghai, Johannesburg and other great cities is undertaken to-day with greater ease and rapidity than formerly attended the transmission of a message from London to Bath'" was one observer's conclusion in 1908, echoed by many others. **The conditions for an international market in securities now existed**" (emphasis added).

Table 15. London Stock Exchange: Government Securities Quoted, 31 December 1910 (In pounds)

Category	*Paid-up value*	*Average size of individual issue*	*% Total paid-up value*
UK total	1,050,929,844	4,342,685	**19**
Central government	765,787,050	76,578,705	14
Local government	285,142,794	1,229,064	5
Colonial total	824,695,955	2,561,168	**15**
Canada	89,479,440	1,078,066	2
Australia	194,506,177	2,778,660	3
New Zealand	65,552,348	1,311,047	1
South Africa	103,720,294	2,033,731	2
Egypt	95,474,200	19,094,840	2
India an Ceylon	250,477,442	8,637,153	4
Others	25,486,054	749,590	0
Foreign total	3,702,452,964	15,236,431	**66**
France	1,022,274,418	611,137,209	18
Germany	465,674,817	93,134,963	8.
Italy	322,670,073	107,556,690	6
Russia	305,067,293	19,066,705	5
Spain and Portugal	192,357,839	38,471,567	3
Scandinavia	37,745,378	1,509,815	1
Netherlands, Belgium, Switzerland	229,987,948	22,908,795	4
Austro-Hungary	482,018,906	40,168,242	9
South-eastern Europe	26,456,650	3,307,081	0
Greece and Turkey	101,904,500	5,661,361	2
U.S.	40,697,997	2,713,200	1
Mexico	39,288,263	9,822,066	1
Brazil	93,118,240	3,448,824	2
Argentina	111,496,856	3,596,673	2
Chile	25,142,352	1,795,882	0
Uruguay and Paraguay	27,148,197	4,524,700	0
Other Latin American	17,657,495	1,765,750	0
China	49,098,950	3,776,842	1
Japan	135,849,772	10,449,982	2
Others	4,153,670	1,038,418	0
World total	5,578,078,763	6,912,117	100.00

Sources: London Stock Exchange Official List, 31 December 1910; Stock Exchange Official Intelligence (London, 1910 and 1911); extracted from Michie (1987:51)

Table 15 displays the paid-up capital from the UK government securities traded at the LSE in 1910. At first sight, this provides evidence of the high degree of LSE internationalisation because there were investments made and paid for by Britain to countries located in all continents.[46] In fact, during the 19th century the LSE overcame

[46] In 1903 Pratt, quoted in Michie (1987:34), asserted: "The bonds of every Government, the stocks of every country, are traded in London [while] Wall Street confines itself to the securities of the United

the Amsterdam Bourse, its stronger competitor at the time, and until WWI it became the world's largest and most international stock market. Mainly due to the historical context of British imperialism, LSE activities were internationally oriented, thus a high proportion of British securities were held abroad. This did not mean that only Britain was able to trade securities overseas because the system allowed a two way flow of communication, but yet there were open channels of communication, and consequently more visible opportunities for savers and borrowers to negotiate abroad in a wide diversity of countries. Essential information about financial assets such as their risk, maturity, and rate of return could be changed much more quickly in comparison to the period without intercontinental communiqués.

The underwater communication interconnected central banks, commercial banks, public and private financial institutions in general and therefore a great variety of financial transactions that were too risky and of little potential profit in the past became negotiable. This also promoted the development of financial instruments and made possible short and long-term transactions. This had the ability (institutionally and technologically managed) to conduct financial transactions between wide numbers of countries spread worldwide, and is understood in this thesis as the core characteristic of financial globalisation.

This does not mean that the process of integration and/or financial development was free from irregularity or unevenness. The development of national financial markets depends on numerous historical circumstances that are far beyond being solved only through the establishment of advanced technological communication devices. This topic is beyond the scope of this chapter but taking into account the world trends of economic growth, one can identify that they were quite different during the period considered (table 16) and so, the degree of financial development and investment in international security differed from country to country.

States". Comparing the biggest Stock Exchange market in Europe with the biggest of the Americas, Michie (1986:184) confirmed the point established by Pratt: "there was a growing divergence between the London and New York exchanges in the matter of the securities quoted. Increasingly London provided a market for securities from the whole world, while New York traded almost exclusively in American stocks and bonds."

Table 16. Trends in economic growth, 1830-1913 (Annual growth rates of the volume of GNP per capita, based on three-year averages)

Period	*Developed countries*	*Developing countries*	*World*
1830-1870	0.6	-0.2	0.1
1870-1890	1.0	0.1	0.7
1890-1913	1.7	0.6	1.4

Source: Bairoch (1993) quoted by Bairoch & Kozul-Wright (1996:20).

Domestic institutional arrangements in finance are subjected to the historical peculiarities of each country, i.e. some economies are more or less vulnerable than others. As with any other market, financial markets evolve idiosyncratically, and the total paid-up value in percentage showed in table 15 presents these differences. In Europe, only three countries (France, Germany and Italy), received a third of the value paid for by LSE in 1910. All Latin American countries, China, Greece and Turkey received altogether little more than 8 percent.

As stated in section 3.2.b, financial globalisation did not imply financial homogenisation. Instead it involved a system which was able to connect (even unevenly) different financial markets that spread worldwide, and that were able to play the financial game. The huge amount of money invested to reduce asymmetric information did not result in perfect symmetry of economic and financial development. Those breakthroughs drastically reduced delays in exchange of information, allowing then national markets to attain a global scope.

Despite the enormous progress obtained in transoceanic communication, Bordo & Eichengreen & Irwin (1999) pointed out that geographical ignorance created serious problems for investors to oversee their investment. According to them, the disproportionate share of railway bonds in foreign investment portfolios is evidence of this difficulty because it was relatively easier to monitor the actions of a railway company (such as how much track had been laid, where it had been laid, and how much traffic it carried) than other economic activities.

In addition, according to those authors, the limitations of communication technology in acquiring reliable information from distant markets can explain the limited importance of FDI prior to 1914 and consequently the importance of the free standing company as the vehicle for foreign direct investment. A great majority of foreign investment prior to 1914 took the form of portfolio investment. FDI was undertaken mainly by free-standing companies that had limited scope to operate abroad and that were poorly assessed quantitatively[47]. Free standing companies became increasingly important as British investors gradually diversified its investments in railroads and government bonds into farming, ranching, mining and brewing because they were trying to avoid agency problems associated with the attempt to control distant American management.

In summary, several obstacles that were blocking a worldwide flow of information were removed by the key 19th century technological breakthroughs in communications. As a result, the falling transaction costs were an important element in explaining global financial integration and the high level of cross-border capital mobility during the 1870-1914 era. This process began in Britain, spread to continental Europe and, after the transatlantic cable, moved to the rest of the world, allowing capital markets to be more efficient, visible, and global.

c) Building global markets through colonial ties

During the Gold Standard, the core of the world economy in trade, investment and finance was centred in Europe. At the turn of the 19th century the US economy became an important player in the industrial and financial scenario surpassing key European economies except Britain and France. Table 17 presents the picture of global capital flows and its most important players worldwide. The leadership of Britain was far ahead of all other leading countries, but in 1920 the US reached the same ratio of capital flow to output as Britain and surpassed all other Western European nations.

[47] According to Wilkins (1998:13) free-standing companies "were structured to solve the problem posed earlier; business abroad was risky; it was hard to obtain adequate and reliable information about firms in distant lands; returns were unpredictable; but there were clearly opportunities abroad; a company organized within the source-of-capital country, with a responsible board of directors, under source-of-capital country law, to mobilize capital (and other assets) and to conduct the business in foreign countries could take advantage of the opportunities, while reducing the transaction costs by providing a familiar conduit."

Table 17. International capital flows as a percent of Gross National Product, selected countries by decade: 1870-1920 (+ = outflow; - = inflow)

	Sending countries					*Receiving countries*		
Year	***UK***[a]	***France***	***Germany***[b]	***Italy***	***Sweden***[c]	***USA***[d]	***Canada***	***Australia***
1870	5.62	-	0.56	0.4	-1.61	-2.68	-7.6	0.02
1880	3.23	-0.41	1.92	0.68	-3.68	0.09	-	-0.07
1890	5.75	1.97	1.97	-0.35	-2.48	-0.05	-7	-0.09
1900	1.76	3.81	1.26	2.23	-2.71	1.43	-4	-0.04
1910	7.38	3.61	1.31	-0.07	0.39	-0.03	-12	0
1920	2.58	-	-	-4.77	0.48	2.42	-4.9	-0.01

[a] United Kingdom: Figures are three-year averages centered on dates shown.
[b] Germany: Net flow is divided by net national product. Figures are three-year averages centered on 1870, 1880, 1890, 1900, 1910.
[c] Sweden: Net flow is divided by gross domestic product. Figures are averages value over the following periods: 1866-75 (1870); 1876-85 (1880); 1886-95 (1890); 1896-1905 (1900); 1906-15 (1910); and 1916-25 (1920).
[d] US: Figures are five-year moving averages centered on the years 1871, 1881, etc.
Source: Green & Urquhart (1976:244).

Most of the capital invested was basically long-term, which took the form of direct investment and bank loans. The majority of long-term foreign investments were spent between developed countries in Western Europe and, mainly by the turn of the 19th century, between Europe and the US. Yet, it was also employed in overseas regions of recent settlements chiefly to construct port facilities, railroad networks and infrastructure in general. The profitable opportunities abroad were too high to miss since those areas suffered from a huge lack of infrastructure, and investors from the core countries (especially Britain) were eager to attract new promising markets.

An important factor to encourage financial integration was the cultural proximity amongst countries of Western Europe and their (ex)-colonies. Colonial ties played an important role in the process of global financial integration because natural barriers such as language, legal and accounting systems facilitated the development of investments from the core countries to the colonies. For instance, despite Britain having a long and strong commercial presence (and considerable political influence) in Argentina and Uruguay, her amount of investment was relatively much higher in her (ex)-colonies. Profitable opportunities were high since the majority of those (ex)-colonies did not have their own financial conditions to finance infrastructure investments, which required long-term investment.

Table 18 shows that British investment was concentrated in Europe and North America. In addition, despite Latin America being geographically closer to Britain than Oceania, Latin America received a third of the amount invested in Oceania. Cultural barriers hindered a riskier volume of investment in that area. France also directed its lending to countries where it had a strong political influence and close cultural ties, e.g. Italy, Spain, and Russia.

Table 18. The distribution of British foreign investment by areas (in million dollars)

Foreign Long-term Investments in	*Amount*
Africa	4,700
Asia	6,000*
Europe	12,000
North America (north of Mexico)	10,500**
Latin America	850
Oceania	2,300

Source: North (1962:24)
* Of which China, $1,600 million.
** Of which the United States, $6,800 million.

An important aspect of this debate highlighted by most economic historians is the close connection between migration and capital movements. The reverse cycles of migratory movements represented an important source of information for European investors in the overseas areas of recent settlement but the phenomenon was stronger amongst Anglo-Saxon countries in general, especially between Britain and the US. Throughout the Gold Standard era, a large number of workers and investors left Britain go to America mainly. Many of them became American residents, but some were investors who moved to that country to identify potential sources of investment and send valuable information about local conditions to their companies in Britain. Then the British company set up agreements to finance those investments. Given the limitations of communication at the time, this was an alternative way of avoiding major investment loss.

After those people left Britain, there was a tendency to raise the salaries in the US. Its domestic profit rate fell in some specific areas, and then investors sought new investment alternatives in areas where the labour price was cheaper due to the great contingent of workers available. Soon afterwards, there was the reverse cycle in

America but this migratory flow stopped when the US became a capital exporter by the early 20th century.

Both emigration and foreign investment were cyclical phenomena, increasing during the boom and falling away in times of depression. These movements of labour had a considerable influence on investment in countries that were gaining in population, as well as in Britain. This process happened until WWI, and subsequently that sort of migration flow was never repeated again, being as it was an exclusive characteristic of the Gold Standard. The inflow of capital into those countries had great repercussions on the domestic and export sector, for instance the US, Canada, Australia and other British borrowers expanded considerably their commodity, industrial and capital export sectors.

To sum up, colonial ties played an important role in global financial integration during the Victorian era, especially regarding the "Atlantic economy". They established similar rules for juridical, financial, and property right systems, which favoured the investor's decision on behalf of economies with the same system. Massive migration between English-speaking countries in response to profitable opportunities resulted, on the one hand, in a movement of long-run capital where they were relatively abundant to countries where they were relatively scarce. On the other hand, it triggered a process of cyclical development concentrated in those world areas.[48]

2.2 Post-Bretton Woods era: new institutions and the outbreak of the second wave of financial globalisation

Having mentioned key institutional aspects surrounding the global financial integration of the 1870-1914 period, the thesis now jumps forward to the modern era to compare

---

[48] This phenomenon of mass migration during the pre-1914 years was not exclusive to Anglo-Saxon countries. Bordo & Eichengreen & Irwin (1999:16) show that a similar movement also happened in Italy. However, this movement was not motivated by colonial ties at all. "The high level of migration, including reverse and seasonal migration, that characterized the late 19th century was an important channel for the flow of such information. Italian workers who travelled to the New World for a few years, or even just for the planting and harvest seasons, before returning to their home town in Italy formed an obvious network for information about supplies and demands in the Americas. Multinational corporations similarly established (in their case, proprietary) networks for conveying such information across borders." Each one of the main European countries had a specific way to undertake their external long-term investments. So, it is not possible to generalise a common pattern for all of them. The emphasis on the English-speaking countries above is justified by their relative importance in the economic and financial scenario of the time.

the institutional and technological underpinnings of contemporary globalisation. The rules of the game of this period are closely connected to the economic and political configuration that marked the historical context of this period. In the same extent that Britain played a crucial role in the development of the first wave of financial globalisation, the US has been the key actor in the second wave. Therefore, the historical characteristics of the American economy during the second advent of financial globalisation should now be examined in order to reveal the new dynamic rules of the game.

In sharp contrast with the British experience, after the end of WWII, none of the US financial markets were as internationally oriented as financial markets in London. On the contrary, American financial markets were more domestically oriented, highly restrictive, and strictly regulated by the legal and institutional apparatus built after the Great Depression. Despite these differences, the US became the core country in current global financial affairs. In order to understand essential aspects underlying the second wave it is worth presenting a brief historical background to describe how the financial system that evolved in this country from the 1950s to the 1970s has enabled it to create the basis for current financial globalisation from the mid-1980s.

As is widely known, the interwar era was the bottom line in terms of financial globalisation. Hence, it is beyond the scope of this section to discuss the wide range of agreements set up in Bretton Woods, but only to mention the institutional framework structured in the conference. What is important here is to focus on the institutions that appeared after the end of the Bretton Woods system, which were the cornerstones for the second financial globalisation occurrence.

Bretton Woods agreements were in force until the beginning of the 1970s. In May 1971, President Nixon unilaterally decreed the inconvertibility of the dollar into gold. In December 1971, the Smithsonian Agreement tried to reorganise the exchange rates of the main currencies by depreciating the dollar by 10 percent. However at the onset of 1973 this agreement failed, the dollar was depreciated by more than 10 per cent and the exchange rates began to float freely.

Since then, a new historical period in global finance has been set in motion. The post-Bretton Woods period (1971 till now) has been marked by a variety of policy, institutional and technological changes. The key policy shift was the management of international exchange rates since there was a clear tendency towards more freely fluctuating exchange rates worldwide. A variety of private institutions such as the International Organization of Securities Commissions (IOSCO), International Swaps and Derivatives Association (ISDA), etc. was created to deal with the international trade of assets. Parliamentary statutes, constitutional amendments, and regimes of coordinated intervention have been implemented to deal with an extraordinarily large rise in international capital mobility in industrialised and emerging markets. Meanwhile, massive advances in telecommunications and information processing technologies have played a very important role in terms of diminishing transaction costs and allowing for a huge volume of transactions.

The second era of financial globalisation evolved more quickly during the 1980s[49] and its development is ongoing. Once again, a "dense network of historically specific financial institutions" was developed to accommodate the huge weight of capital that has been transacted internationally. This "new network" flourished on account of a set of changes that occurred in economic, political, and intellectual thinking. More precisely, it was marked by political disputes between developed countries, by the operation of new policy regimes, by the creation of innovative institutional arrangements, and by striking technological changes.

This new network also established new "rules of the game". Some players such as the nation-states, central banks, commercial banks and investors continue to be important actors in this game, albeit having assimilated new characteristics and lost others. In general, the role carried out by each one changed radically. For instance, the consequences of the financial liberalisation changed radically the role played by the nation-states. They lost autonomy and became entrapped by the resurgence and unprecedented growth of financial markets. The changes the nation-states underwent were paradoxical in certain cases. The US government has been using its political, economic and military power, and diplomatic influence to consolidate liberal policies

[49] There is no consensus about the exact chronology of the second wave of financial globalisation. For instance, Chesnais (1994) affirms that in contemporary financial globalisation, three stages can be distinguished. The first stage lasted between 1960 and 1979 and was characterised by the advent and development of the Euromarket and off-shore banks. According to him, financial globalisation was limited and incomplete at that time since it was strongly linked to the internationalisation of American banks. The second stage lasted from 1980 to 1985 and was marked by American hegemony, and by deregulation and liberalisation policies introduced by the United States and Britain. In this period, a global financial system emerged and was consolidated. The third phase began in 1986 and was characterised by Stock Exchange liberalisation, by the development of a variety of off-balance sheet financial innovations, and by the integration of the "emerging markets" at the beginning of the 1990s. So, according to this author, financial globalisation began in the 1960s. This is not the proposition supported by this dissertation.

worldwide. In the meantime, this country has been using public expenditure (civil and military) to confirm and sustain its hegemony.

Central banks, commercial banks and non-banking institutions also had an important involvement in this new institutional scenario. The former have been key agents in implementing banking deregulation rules, and the other two agents have been dealing with an unprecedented volume of capital and trading a huge variety of financial instruments that have been created especially since the 1980s.

The geopolitical aspects of contemporary financial globalisation heavily reflect the political power rivalry that was taking place amongst developed countries. Headed by the American economy and their policy decisions, a wide range of new arrangements radically changed the scope, extent and mobility of international finance. Besides geopolitical considerations, macro and microeconomic changes have also been responsible for the emergence of this new era. From a macroeconomic viewpoint, financial deregulation and liberalisation has eliminated tariff barriers and enhanced greater capital integration worldwide. Along with this, a set of rules, legal procedures, and an open regulatory framework have all played an important role in the process of global financial integration.

From the microeconomic viewpoint, technological developments in computer science, information technology and telecommunications have allowed 24 hour trading in real time amongst agents. Simultaneous communication is hindered only by time zone differences between countries. Also, technological and scientific developments have played an important role in dramatically reducing transaction costs, and have allowed an increasing volume of transactions to take place in a growing number of markets. At the same time, a wide range of financial innovations have had a key role in facilitating market integration and capital mobility.

A significant distinction between the onset of this new era and the previous one was the lack of any international monetary agreement. The first era began soon after the early years of the Gold Standard, and ended when this system collapsed. In contrast, the second wave began when the Bretton Woods regime broke down. Since then, no metallic monetary agreements have been designed to stabilise international exchange rates or to manage global trade and financial transactions.

A monetary regime based on gold aimed to maintain monetary stability by establishing a limit to liquidity growth. Any currency would have international acceptance when the national central bank guaranteed full conversion of that currency into gold. This meant that countries agreed to manage their monetary policy according to the growth of the world's gold reserves.[50] Thus, growth in international liquidity was limited to the international supply of gold during the classical Gold Standard and Bretton Woods periods.

The elimination of this "material anchor" (or of this "material obstacle") after the Bretton Woods breakdown has allowed an exceptional growth of international liquidity, impelling the appearance of new markets and products, meaning that the monetary standard around which the global financial system has developed now became fiat, unlike the previous historical experience. That is to say, the post-Bretton Woods era of financial globalisation has been evolving free from gold convertibility. As will be discussed below, this fiat monetary regime and the absence of any international financial regulation has encouraged an outburst of financial transactions outside the control of national central banks.

In brief, historical events involving economics, politics, institutions, law, technology, etc have all combined to deepen financial linkages across national boundaries, consequently shaping the second financial globalisation era. The next section will focus on the combined effects of these developments, which provided a basis for institutional changes allowing a phenomenal expansion in financial flows after the 1980s, as predicted by the J-curve.

a) Tight springs: Rebuilding global money

Financial globalisation is a historical process that developed gradually over time. The second episode was not an exception. It resulted from the combination of the decisions of various agents acting through an extensive historically specific network of institutions. During the decades before the 1980s, key economic and political shifts took place. After WWII, Europe was no longer the main exporter of capital as it had

[50] It should be mentioned that in doing so they were also able to trade globally, and have access to the international market for credit.

been for many years, and the US emerged as the hegemonic superpower. The American hegemony was heavily exercised in the monetary field. At that time, the US was in possession of two thirds of the world's gold reserves (Block 1977) and therefore the Federal Reserve (FED) was the only central bank in the world able to guarantee free convertibility into gold. This fact established the dollar as the international currency used in trade and financial transactions. After the establishment of the dollar as the global currency, international economic affairs once more had a monetary standard of reference. As a result, other central banks (especially in Europe) began to accumulate dollars instead of gold as a strategic monetary policy measure aiming to challenge the American hegemony. Meanwhile, international transactions gradually grew once more throughout the 1960s and the 1970s under the coordination of the IMF.

The US played a crucial role in the economic recovery of the post-war period. Military expenses, the Marshall Plan and the US balance-of-payments deficits (1960s and 1970s) all encouraged the emergence of a money market in dollars based outside its borders. Two main reasons explain this phenomenon: first, the dollar was in demand in many countries because of its full convertibility; and second, the American financial legislation built soon after the Great Depression established a wide range of regulations for banking concentration and international expansion. The FED also established a maximum limit for the interest rate on long term deposits and loans offered by banks.

Impelled by the external demand for dollars and overcoming internal restrictions through a variety of financial innovations, American banks deposited a great part of their monetary surpluses in overseas markets, especially in European banks. International banks that operated in these financial markets (centred in London) were stimulated by the opportunities for profit in recycling these dollars, so they traded other currencies into dollars, relending and redepositing them into banks and non-banking institutions worldwide. These developments were responsible for the creation of the Euromarket. The Euromarket and the other offshore activities of American banks grew dramatically because their financial transactions were accomplished without any regulation or supervision by central banks. Chesnais (1994) called it the period of *financial internationalisation*, which means that the process of financial globalisation was not complete because the monetary and financial systems of most national markets worldwide were still closed by a myriad of domestic regulations.

In the early 1970s, the Bretton Woods agreements collapsed and the dollar-gold standard no longer ruled the international monetary regime. After the first oil shock in 1973, leading oil exporters invested their large surpluses in money markets around the world, significantly increasing the global liquidity. International banks invested this amount in OECD countries and by the end of the 1970s, in Latin American and East Asian economies. At the time, world inflation and interest rates were high and volatile, and exchange rates were floating. This macroeconomic scenario of instability accelerated the development of financial innovations[51] such as derivative contracts, created in the US in the early 1970s aiming to protect agents against the risk of uneven changes in asset prices.[52]

By the end of the 1970s, the US and the UK had adopted financial deregulation and capital account liberalisation policies. These policies encouraged aggressive bank competition between American/British banks and the banks of other developed countries, later influencing the other developed countries to adopt similar measures. In October 1979, an important event was to change the global financial scenario, which helped to propel national financial markets towards a deep stage of globalisation. At that time, the strength of the American economy was damaged due to the occurrence of a repeated public deficit and current account deficit. As a result, the dollar was depreciating. This provoked a distrust of dollar stability and its capacity to continue being the international currency. Consequently, the FED pushed for a dramatic interest rate increase to stem the dollar's fall. This policy was known as "dollar diplomacy". This policy had an effective result - strengthening the dollar and establishing it again as the international currency. In addition, the high interest rate attracted investors worldwide. American public debt grew substantially, triggering a sequence of institutional changes (domestically and internationally) and financial innovations that

[51] On this account, Kregel (1996:55) pointed out: "It is the increased volatility in international costs and prices due to flexible exchange and interest rates that has been the driving force behind the financial innovations that currently dominate the globalization process."

[52] According to Cintra (2000) the first transaction of those hedge instruments occurred in 1972, through the creation of future contracts of foreign currencies by the International Monetary Market (IMM), affiliated to the Chicago Mercantile Exchange. In 1973, the so-called contracts of options appeared in Chicago Board Options Exchange subordinated to the Securities and Exchange Commission (SEC). In 1975, the same Commission created future contracts of interest rates. In 1979, the IMM negotiated for the first time future contracts with securities of the American Treasury. In 1982 appeared future contracts of Stocks Exchange indexes based on the Standard and Poor's 500 index, created through the Index and Options Market, a special division of the Chicago Mercantile Exchange (FDIC Banking Review, 1998).

were a crucial step in setting in motion mass changes leading to the second wave of financial integration.

In November 1989, another historical event took place and marked the beginning of an era in terms of an upsurge of global neo-liberal economic policies. The Institute for International Economics organised in Washington a conference called "Latin American Adjustment: How Much Has Happened?" Officials of American government, multilateral institutions established and headquartered in that city such as International Monetary Fund (IMF), World Bank, Inter-American Development Bank (IBD), and several Latin American economists attended the conference to discuss key Latin-American issues after experiencing a significant economic depression during the "lost decade" of the 1980s.

The main purpose of that conference was to evaluate the economic reforms undertaken in Latin American countries throughout the 1980s. The results of this meeting were called afterwards the "Washington Consensus", and it decisively influenced the rules of the game of the world economy after the 1990s.

Neo-liberal policy proposals emerged from the conference, strongly influenced by the American government and the multilateral agencies involved. As a matter of fact, three years earlier, the Institute for International Economics published a book written by eminent mainstream scholars from the US, Mexico and Brazil (Bela Balassa, Gerardo M. Bueno, Peter-Pablo Kuczynski, and Mário Henrique Simonsen) entitled *Towards Economic Growth in Latin America*, in which they sketched neo-liberal policy propositions to Latin American countries.

The Washington Consensus became the policy package for the stabilisation of Latin American nations supporting Washington political and technocratic circles. Its policy propositions strongly influenced policymakers and financial markets worldwide, creating the intellectual basis for financial liberalisation policies. Financial openness should not be seen as a threat to domestic markets but rather it should be taken as a stimulus to competition and efficiency. José Miguel Albala-Bertrand (1991:471) summarised the core policy proposals in this way:

> This package amounts to macroeconomic prudence, outward-orientation and 'free market' capitalism. The policies are: fiscal discipline (i.e. zero or small deficits), public expenditure reduction (i.e. eliminating subsidies and reducing the public sector wage bill), tax reform (i.e. broad base, simple application rules and

> moderate or absent marginal rates), financial liberalisation (i.e. interest rates should be both market-determined and positive in real terms, and foreign exchange should not be controlled), the exchange rate (i.e. it should be market-determined and positive in real terms for outward-oriented recovery), trade liberalisation (i.e. import liberalisation by setting a small homogeneous tariff across the board and eliminating all other restrictions), foreign direct investment (i.e. unrestricted capital inflows, especially in debt-equity swaps), privatisation, deregulation and property rights (i.e. rules needed to secure the satisfactory operation of the capitalist system).

Market friendly policymakers appear to have found a consensus about the content and the type of far-reaching liberal reforms. Washington institutions (US government, IMF and World Bank) required from developing countries privatisations, tax reforms, public spending retrenchments, tight monetary policy, the dismantling of governmental gear of intervention, trade and financial liberalisation in order to plough the soil to restore the price mechanism in a free market system. According to them, these measures were essential in order to allow an efficient world economy to flourish.

The liberalisation of capital markets in Europe is part of this historical context. The European Union (EU) is a political and economic community established in 1993 by the Maastricht Treaty that has developed a single market through a standardised system of laws applied in all member states, guaranteeing the freedom of movement of people, goods, services and capital. The first stages of economic integration in Europe started in the 1960s and 1970s and dealt with barriers to trade in goods. From 1988 onwards the European Community's Single Market Programme turned its attention to decrease barriers to competition and increase factor mobility in financial and other services. The removal of barriers in financial markets has allowed capital to become more mobile and move easily tradable throughout the region.

To conclude this introductory part, the international financial scenario which led to the onset of financial globalisation after the 1980s was marked by another "dense network of historically specific financial institutions" formed by these events: the absence of a global system of financial regulation; a flexible exchange rate regime; high interest and exchange rates volatility; limited international cooperation to coordinate monetary parities; inadequate capacity to raise funds to rescue countries in trouble in their balance-of-payments; massive international liquidity and high capital mobility; development of institutional innovations; liberalisation policies in the US and UK; new and deregulated financial markets (Euromarket and offshore banks); the emergence of the US as the industrial, financial, diplomatic and military hegemony; and a very high interest rate in the US.

The dynamic interaction of all these factors created a "tight springs" effect. Step by step, the springs were compressed through a series of new policy and institutional arrangements. Once released by a collective convergence of political power led by developed nations, it spurred a unique historical combination of events, and liberated a sequence of procedures that over time changed the world of finance and brought about another historical episode of financial globalisation. Political pressure groups in society and coalitions between governments emerged and were crucial factors in setting off the process of global expansion of financial markets.

b) The new "rules of the game": Rebuilding global markets after the 1980s

The second wave of financial globalisation is often associated with the internationalisation of financial markets that occurred between America, Europe and Japan during the 1960s and 1970s. However, in order to grasp the root of the "dense network of historically specific financial institutions" underlying the phenomenon, this section starts with an examination of the American banking legislation since the 1930s. This approach is taken for two reasons: firstly, because the US is the hegemonic nation that has been leading the process of contemporary financial globalisation; and secondly because as has been affirmed since the beginning, this thesis proposes to understand the process of financial globalisation focusing on its institutional aspects. This way, the legal perspective of modern financial globalisation reveals the depth of the institutional change undertaken by the American economy, the core countries and eventually the whole transformations that recently occurred in the worldwide financial scenario. After this analysis, the main economic and political aspects of the process will be considered.

Financial globalisation involves a process of extensive market integration between countries, which evolves gradually over time and requests legal procedures to allow deeper enmeshment between domestic and overseas markets. Therefore, an important aspect for a successful globalisation is a legal adaptation between local financial systems to international regulation. The legal adjustment between different judicial regimes has allowed institutional investors, commercial and investment banks and a variety of new agents in the market to negotiate worldwide.

Judicial differences should be taken into account to examine institutional aspects of modern financial globalisation. The financial systems of the two Western superpowers are governed by Common Law. This judicial system allows larger institutional freedom to financial institutions. Therefore, in Anglo-Saxon countries, financial institutions have a wide degree of freedom and flexibility to alter restrictions imposed by the regulation in force. In practice, those restrictions stimulate the competition for the establishment of new markets and new practices, allowing the enlargement of their activities. For this reason, banking and non-banking institutions constantly altered the limits imposed by the regulation (chiefly in the US) through the development of innovative financial instruments and the creation of new institutions.

On the contrary, the judicial system adopted in continental Europe and Japan is based on Statutory Law that establishes significant government intervention and stricter limits to financial activities. Accordingly, the innovative capacity of financial institutions in these countries is more limited. On the one hand, it limits the development of financial innovations, but on the other it allows more control by the monetary authority over monetary and fiscal policies. In this case, public institutions have more responsibility for the creation and development of new instruments and financial procedures.

On this account, institutional changes in the American financial system starting from the 1980s have been the cornerstone for modern financial globalisation. Along with these changes arose a set of rules, legal procedures and an open regulatory framework that played an important role in the process of global financial integration.[53] Examination of the main developments of this process reveals how this hegemonic country has not only changed the institutional framework in its finance sector, but also heavily influenced shifts in the world financial affairs in line with its political and economic perspective. American domestic policies have been creating new "rules of the game" and then delineating the current international financial regime.

In the early 1930s, the US financial system was set up by the Glass-Steagall Act of 1933 and by the Securities Exchange Act of 1934. Besides establishing many regulations, it also instituted several forms of restrictions to the banking competition.

[53] For more details on this open regulatory framework see FDIC Banking Review (1998), v. II, n.1, and OECD (2000).

For instance, Regulation Q instituted by the FED established a maximum limit for interest rates on long term deposits and loans granted by banks, and also prohibited the payment of interest on cash deposits. The McFadden Act had already instituted in 1927 rigorous restrictions to the enlargement of the existent interstate banking systems, and to the constitution of new interstate networks. In other words, bank institutions could only constitute branches in several states simultaneously through official authorisation.

This institutional framework organised in the 1930s worked very well until the post-war period, however a couple of decades later those limitations became an obstacle to the banking expansion and they were progressively removed after the 1980s. In 1980, the Depository Institutions Deregulation and Monetary Control Act extinguished Regulation Q, thus banks were authorised to offer money market deposit accounts, which were financial instruments similar to mutual funds, being guaranteed by the Federal Deposit Insurance Corporation (FDIC).

The elimination of Regulation Q stimulated the banks to intensify the process of banking concentration and international expansion. As a result, extensive mergers and bank acquisitions occurred in the 1990s. This demonstrates that the gradual removal of state and federal restrictions to geographical expansion was responsible for the consolidation of nationwide interstate banking.

American states gradually changed the restrictions for the expansion of agencies and interstate banks by reciprocity agreements. The Riegle-Neal Interstate Banking and Branching Efficiency Act (1994) eliminated the geographical restrictions to the interstate branches established by the McFadden Act of 1927. This allowed banks to form coast-to-coast branch banking, as well as to accept interstate deposits. The abolition of geographical restrictions to banking activity promoted huge concentration in this sector since it created a market for corporate control in banking.

Furthermore, the Financial Gramm-Leach-Bliley Modernization Act (1999) allowed the expansion of the great commercial banks for activities related to investment banks (securities negotiation), asset management and operation in the insurance market by the formation of financial holding companies. Once more, this allowed the concentration and the centralisation of the bank capital through multibank holding companies. Consequently, big commercial banks became also investment banks and insurance companies.

Finally, due to the elimination of geographical barriers, big American banks expanded their activities beyond the traditional bank loans. They became managers of mutual funds, providing services of asset management, and also overcame prudential rules through credit securitisation. Additionally, to face the increased domestic and international competition, banks demanded the separation between commercial banks and investment banks, imposed by the Glass-Steagall Act (1933).

The emergence of several highly specialised markets aiming to provide products and services tailored to attend specific demands is a new historical institutional fact, in clear contrast with the institutional framework that characterised the first phase. In other words, the emergence of these markets (many of them derivative markets specialised in short term assets) had a decisive impact on the process of global financial enmeshment and on the formation of the J-curve, as will be presented below.

The pressures, tensions and policy decisions resulting from the scenario summarised above encouraged changes in the institutional framework of the international financial system, being one of the causes of the second financial globalisation era. Certainly, the repercussions of these transformations for the process of financial integration cannot be interpreted in isolation from the historical context where they occurred. They are part of the contemporary "dense network of historically specific financial institutions" and so they influenced and have been influenced by a sea of transformations that happened simultaneously in economic and political terrains. Given the space limitations of this chapter, the section will present only key aspects of these occurrences.

During the 1960s and 1970s, international economic policy had changed sharply in comparison to the period after WWII. Politically speaking, the second financial globalisation was marked by the change from British dominance to the American hegemony. As a result, the intellectual climate in which this outbreak of capital flourished was very different, also reflecting the broad changes listed above. The end of the Bretton Woods agreements marked the end of the "Keynesian era" and the beginning of a neoliberal era in global finance. Anglo-American neoliberal policies put into operation since the 1970s greatly influenced the worldwide financial scenario during the contemporary period. As Helleiner (1994:12) affirmed:

> When these two states [the US and the UK] supported growth of the Euromarket in the 1960s and then liberalized and deregulated their financial markets in the 1970s and 1980s foreign financial centers increasingly witnessed their business

> and capital migrating to these more attractive markets. To compete effectively for this mobile financial business and capital, they forced to follow the lead of Britain and United States, by liberalizing and deregulating their own financial systems. This 'competitive deregulation' in finance was a central reason for the flurry of liberalization activity throughout the advanced industrial world in the 1980s.

The post-Bretton Woods period has been marked not by a revamped Gold Standard or Bretton Woods system but by deregulation and liberalisation policies, i.e. by the decrease/removal of government controls on monetary and financial markets. Led by the US and Britain and followed by continental Europe and Japan, these policies have eliminated government controls on monetary and financial markets. This occurred mainly in the following ways: privatisation; mergers and acquisitions; opening of capital in balance-of-payment; and openness of stock exchange markets, securities markets, and operations among banks' commercial and depository institutions (Singh 1997, 2003; Griffith-Jones 2003). The deregulation and liberalisation policies had eliminated barriers and allowed financial transactions to be accomplished globally. Nevertheless, there are pros and cons in this debate.

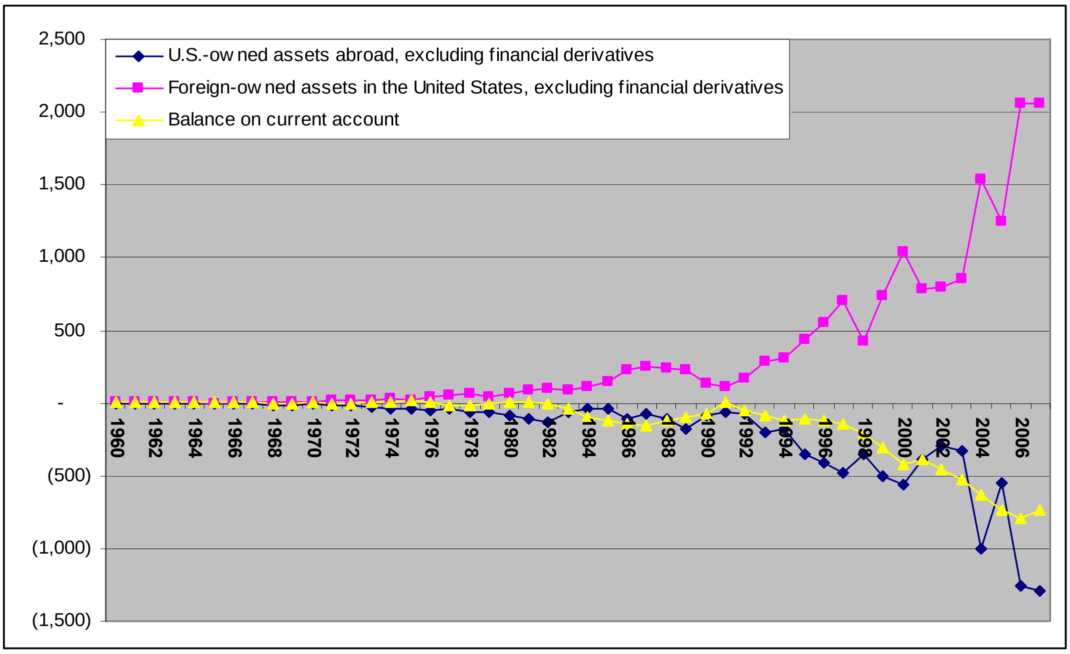
The conventional theoretical argument behind the reduction of the government's role by removing or reducing restrictions in controlling markets is an attempt to make them freer and presumably more efficient. Accordingly, economic liberalisation promotes growth and eventually reduces or alleviates poverty, improving the standard of living and helping to narrow the gap between the rich and the poor through convergence between developed and developing economies so that in the long run, liberalisation of capital accounts, trade and investment, and regimes of privatisation of national economies will attract more foreign direct and portfolio investment and thus create more employment opportunities for developing countries. These represent the mainstream statement regarding the role played by liberal policy measures. They will be tested, but there is no room in the chapter to discuss their effectiveness, and as such, they will be discussed in the next chapter.

In 1981, Ronald Reagan became President of the US. From the beginning of his mandate he implemented measures to hasten the process of industrial and financial deregulation. For example, he reduced the growth of government spending, tax rates on income from labour and capital; he also diminished financial regulation, and implemented tight control over the money supply aiming to reduce the rate of inflation.

The process of liberalisation that he promoted also reached stock exchange markets in the late 1980s and early 1990s. Then institutional investors (pension funds, investment funds, insurance companies and hedge funds) diversified their investment portfolios buying bonds and securities issued in most countries, including "emerging markets". After this, the rules of the global financial game changed radically because these policies provoked deep institutional changes for the world economy.

Reagan executed a restrictive monetary policy associated with an expansionist budget policy (supply side economics, also called Reaganomics) aiming to overcome the stagflation that characterised the late 1970s and early 1980s in the US. Then, the FED sold American treasury bonds offering positive real interest rates. The warranties given by the government increased international capital mobility, raised American public debt and absorbed a huge amount of money from foreign investors. Figure 9 depicts how foreign investors were attracted by financial assets issued in the US after the second half of the 1980s.

Figure 9. US international transactions: 1960-2007 (Billions of dollars)[54]



Source: Bureau of Economic Analysis - US International Transactions Accounts Data – available at http://www.bea.gov/international/

[54] This figure is based on data in Appendix 10.

The figure above shows that the American public debt assets became a safe refuge for international investors. The US could finance its economy and its public deficit through an increase in its domestic interest rate since its securities issued were easily negotiated worldwide. The profitability of its bonds attracted resources worldwide like a magnet, meaning that the high attractiveness of American treasure bonds autonomised its monetary policy. This fact gave great power to the US economy and transformed international affairs at the end of the 20th century. Due to its credibility, any changes in the American interest rate had a decisive influence on international capital flow. Besides being free from any balance-of-payment restriction, it strengthened its hegemony since the country had no need to foment the development of core and peripheral countries, as it had had to in the 1960s. Accordingly, the current account deficits that the US has had after 1982 have been financed by foreign capital.
The Latin America debt crisis in August 1982 created great instability in the international financial scenario, especially in the US because their commercial banks had invested heavily in Latin America since the 1970s. Throughout the 1980s, the liberalisation of financial markets was underway in most developed countries under the influence of American and British economies. This unstable policy scenario provoked important changes in the strategy of banks and great companies worldwide.

The great impulse to financial markets provided by liberalisation policies has encouraged the appearance of higher liquidity assets. American banks intensified their operations in short-term activities developing varied financial instruments of hedge and derivatives contracts. These financial innovations have been used to reduce prospective financial risks underlying securities prices, interest rates, market indexes, or commodity prices, but have also allowed larger capital mobility and speculative movements. The financial diversification set up allowed lenders to transfer their operations from the conventional credit market to direct emission in securities markets. By transferring risks among agents, the derivative apparatus represents hedge instruments that allow the decline of assets' risks. They reduce the risk of illiquidity, allowing faster adjustment of most asset prices before a potential crisis in the markets' expectations. From this point of view, the use of derivatives, especially off-balance sheet operations, resulted in a process of intense financial integration among domestic markets. This was a remarkable institutional aspect of contemporary financial globalisation that differed from the past episode and that has spurred higher interconnectedness and enmeshment of global financial markets.

Multinational companies also became important agents in international capital markets. These companies retained a significant stock of convertible currencies, derivatives and overseas securities. The liquidity they managed in financial markets became strategic to their prospective investment plans, for example hedge operations were used to avoid conjunctural instability, and also for capital appreciation. Likewise, households became small investors as well. Increasingly, they have been acquiring financial assets in primary and secondary securities markets mediated by institutional investors and investing part of their resources in bonds, securities, currencies, commodities, etc in order to obtain liquidity and protection against eventual risks.

Eatwell & Taylor (1998:3) commented on this change with the following:

> Households transformed themselves from being depositors in banks to investors in pension and mutual funds. According to flow of funds data, over the 15 years between 1978 and 1993, the share of US financial sector assets held by institutional investors rose from 32% to 52%; the share of banks fell from 57% to 34% over the same period. Similar increases in assets managed by institutional investors occurred in Britain, France and Germany. Pooled money funds moved aggressively toward investments abroad (including emerging markets) and toward short-term placements. [According to] Edwards, in 1993 it was reported that 'the typical stock is now held for an average of a little over two years, compared to over four years 10 years ago and seven years in 1960.

Table 19 provides an updated and wider picture on this subject considering the American case. It shows that since the 1980s, the assets of institutional investors had a quick growth, and trebled his participation in American GDP.

Table 19. U.S. institutional investors: 1980-2005 (US$ billions stock end of period)

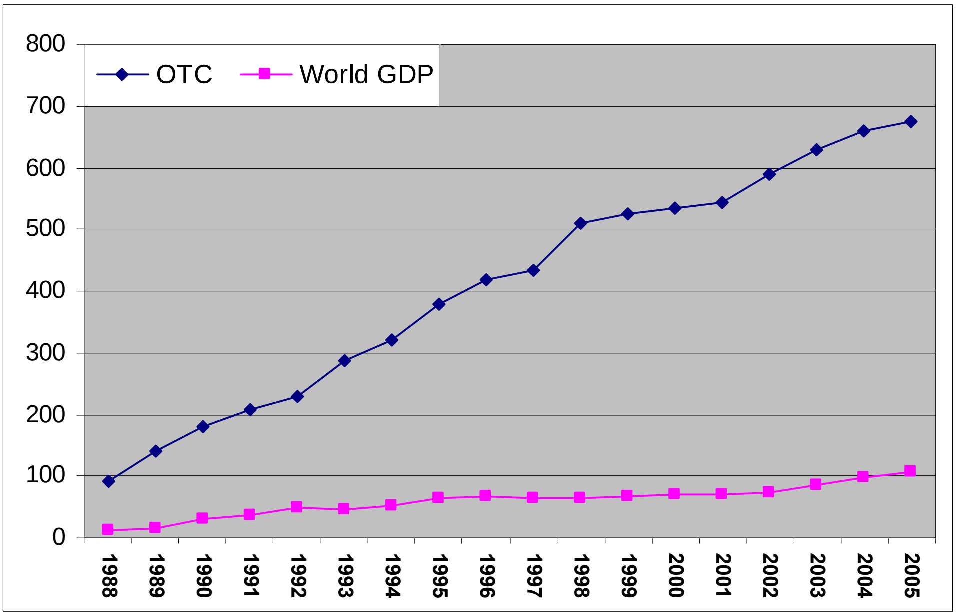
Assets	1980	1985	1990	1995	1999	2000	2002	2005
Insurance Companies	646.3	1,094.7	1,884.9	2,803.9	3,940.6	3,997.7	4,274.8	5,646.1
Life	464.2	796.1	1,351.4	2,063.6	3,067.9	3,135.7	3,335.0	4,380.7
Others	182.1	298.6	533.5	740.3	872.7	862.0	939.8	1,265.4
Investment Companies	146.1	496.6	1,154.6	2,730.5	6,270.2	6,389.3	6,013.1	8,322.8
Open	138.2	488.3	1,101.7	2,594.1	6,118.1	6,247.4	5,862.3	8,052.0
Closed	7.9	8.3	52.9	136.4	152.1	141.9	150.8	270.8
Pension Funds	786.0	1,800.2	2,697.0	4,757.0	7,671.0	7,444.8	6,134.0	8,410.0
Private	513.0	1,226.3	1,626.7	2,888.8	4,571.2	4,355.0	3,309.5	4,613.3
Public	273.0	573.9	1,070.3	1,868.2	3,099.8	3,089.8	2,824.5	3,796.7
Other	444.9	707.1	1,097.6	1,480.5	2,175.5	2,267.8	2,056.4	2,219.9
Financial Companies	196.9	338.4	547.0	672.3	1,003.5	1,140.1	1,192.6	1,334.6
REITs	3.2	10.4	28.5	33.3	69.0	66.4	102.3	354.6
Total	2,023.3	4,098.6	6,834.1	11,771.9	20,057.3	20,099.6	18,478.3	24,598.8
Memorandum								
Total Assets	4,675.1	8,927.70	13,779.8	21,791.0	35,127.1	36,926.7	38,564.6	44,160.8
Total Assets/Institutional Investors	43.3	45.9	49.6	54.0	54.3	52.1	47.9	55.7
GDP nominal	2,795.6	4,213.0	5,803.2	7,400.5	9,268.5	9,817.0	10,480.9	11,459.6
Total Assets Institutional Investors/GDP	72.4	97.3	117.8	159.1	216.4	204.7	176.3	214.7

Source: Federal Reserve, Flows of Fund Account of the United States, various issues.

In a globalised capital market, private decisions are affected by numerous influences coming from a variety of markets and because of this the performance, sensibility and nature of national markets and domestic dealers has changed markedly. The rapid development of risk management techniques and derivative contracts have proliferated in response to the interest and exchange rate volatility, changed the portfolio habits of agents, and brought a marked and unprecedented institutional change in finance. Portfolio decisions of companies and families had become tied closely to the behaviour of the financial system since changes in the prices of these assets had been influencing their incomes and affecting their decisions on investment and consumption. This is another remarkable institutional difference between the present and the former era of financial globalisation. This institutional change is one of the aspects that characterises the J-curve.

The development to the most common unlisted (OTC) derivatives, such as interest rate swaps, currency swaps and interest rate options is displayed in figure 10. Data regarding these markets are available only from 1988 onwards and were presented in table 12 in the previous chapter. Nonetheless, in this chapter the figure below is plotted to represent the extraordinary progress of these institutional innovations from 1987 until 2005. As can be seen, they rise almost eightfold in nineteen years, while the world GDP increased only 106 per cent during the same period.

Figure 10. Percentage accumulated growth of notional amounts of OTC derivative contracts and world GDP[55]



Source: International Swaps and Derivatives Association (ISDA), online database. GDP: UNCTAD, online database.

Gradually, national exchange and securities markets have become increasingly more integrated worldwide. As can be noticed, the process of financial deregulation and integration has been asymmetrical but global, and has reached quite important markets (exchange, credit, bonds, securities, etc.). Impelled by American monetary policy, financial agents gained the ability to operate worldwide. The role carried out by Credit Rating Agencies has also been crucial in stimulating global financial development. These Agencies supply comparative indicators of risk relative to a group of securities. They do not offer warranties against losses but a comparative spectrum of risk evaluation, which investors can use to monitor potential losses of their investment portfolios. In addition, the risk classifications help investors to define the amount to be

[55] This figure is based on data in Appendix 11.

invested since they establish the expected income and risk prize monitoring large corporations that have thousands of shareholders. This is another key institutional innovation that differs greatly from the first financial globalisation.

Furthermore, the process of securitisation has been stimulating the development of modern financial globalisation. Securitisation is the technique used in the exchange of illiquid assets (such as long-term bank loans, mortgages) to marketable assets. As a reaction to growing instability surrounding medium and long-term assets that marked the international scenario after the 1970s, investors have been demanding safer positions that avoid bank liabilities. As a result, banks have transformed non-negotiated assets into negotiable marketable securities, which have been an important incentive to the off-balance sheet operations, as for instance, many financial derivative instruments.

Another characteristic of this era was the occurrence of financial crises. Starting with the breakdown of the Bretton Woods system, a marked characteristic of the following years, especially during the 1990s, was a sequence of critical episodes. The table below summarises the main events.

Table 20. International monetary, securities and banking crises after the 1970s

	International monetary and securities crises
1971	Breakdown of Bretton Woods
1970s	OPEC inflation shock
1980s	International debt crises (Polish crisis, Mexican crisis, Brazilian crisis, etc.)
1985-86	Fall of the overvalued dollar
1987	World-wide stock market crash (followed by the aftershock of 1989)
1994-95	Mexican crisis
1997-98	East Asian crisis
1998	Russian crisis
1998-99	Brazilian Real crisis
2000	Turkish crisis
2001-02	Argentinean crisis
2002	Attack on the Brazilian Real
2002	Uruguayan collapse
2007	American subprime mortgage crisis
	Banking crises
1973-75	UK secondary banking crisis
1989	US savings and loans crisis
1987-92	Banking crises in Finland, Norway and Sweden
1990 on	Japenese banking crisis over real estate loans
1997 on	Asian banking crisis
	Significant individual failures
1974	Herstaat Bank, Franklin National Bank
1983	Continental Illinois Bank, Banco Ambrosiano SpA
1991	BCCI
1995	Barings
1996	Sumimoto
1998	Long-term Capital Management

Source: Elaborated from Braithwaite & Drahos (2000):135, and Dymski (2003:90).

A current outstanding characteristic of the contemporary era is the relationship between FDI and PI, pointed out by Kregel (1994). According to him, conventional wisdom has considered the flows of FDI “less dangerous” than PI since it is, by nature, a long-term investment responsible for the creation of job opportunities, and arguably it has been spreading technological progress to the host countries. In addition, it is considered less unstable than PI because it rarely provokes balance-of-payments (BOP) problems (sic). However, according to the argument developed by Kregel, the recent development of financial markets had changed this scenario. When investors make an FDI they set up a hedge contract in foreign currency (the dollar in general) in the same amount as the investment. FDI is counted in the BOP but the hedge operation is not since it is done between the company and a commercial bank or other financial institution.

Consequently, it also creates a problem for the BOP. That is to say, investors can review their positions at any time and flee from the countries leaving behind economies to face up to serious difficulties in financing their BOP.

Due to the current global financial liberalisation, investors can easily transport their assets at any time and from any place, and quickly invest them in another market elsewhere in the world. Therefore, from the point of view of the domestic exchange rate stability, FDI flows have been as volatile as PI flows. In other words, Kregel is claiming that when speculative bubbles change the assets profile radically, the amount invested in FDI has sufficient liquidity to quickly flee the country, provoking depressive pressures on the BOP and on the money market.

What do these arguments mean in terms of the J-curve debate?

They mean that global financial integration goes further and runs deeper than ever before backed by the "dense network of historically specific financial institutions" described above. The advent of highly integrated capital markets has been accompanied by tensions and increased financial instability. The development of future markets in which investors can hedge their exposure has allowed a higher volume of capital transactions but has also made it more volatile, as will be presented in the next chapter. The point to be emphasised here is that financial liberalisation and diversification have made financial activities much more complex and pervasive than in the past era.

Despite being closely integrated for the time, financial markets in the Victorian era were relatively narrow in comparison to the present day. Colonial ties are no longer important in current globalisation but the strong hegemonic power played by the US since the 1970s has enforced policy changes in the direction of a more liberal financial system.

Technology has been a common influential element allowing huge development of the level of integration for the two eras. The communication revolution that occurred in the past was prominent but the information problems on a global scale were far from being eliminated. In comparison, recent developments in telecommunications and computer science have helped reduce the informational problems significantly, allowing a much larger volume of assets to be negotiated in a larger number of countries. In his historical analysis of the globalisation of international financial markets from the beginning of the 20th century, Bordo (2000:48) deduced that: "Financial market integration is broader and deeper today than pre-1914. This largely reflects financial innovations to overcome barriers to asymmetric information." This does not mean that the markets became perfect. On the contrary, the last two decades witnessed frequent and severe crises. However, it indicates that the space for financial capital development has significantly enlarged throughout the world and over present time. This is in a nutshell the message proposed by the J-curve.

In summary, the key characteristics of the current financial globalisation have been: the reduction in (and sometimes the elimination of) government regulations for international capital flows; privatisation, mergers and acquisitions; the emergence of new institutions to manage a huge amount of short-term capital such as pension funds, mutual funds, institutional investors, etc.; the creation of a number of new financial services especially in off-balance-sheet operations; an increase in FDI flows; and the proliferation of stock exchanges in many emerging markets. On account of these developments, market participants have been developing institutions designed to attenuate information problems in financial transactions. As a consequence, a much broader range of securities has been traded internationally. The institutional framework developed in the second era of financial globalisation is more multifaceted, dense and extensive than in the first phase. New markets, new products and services, and innovative forms of intermediation have been established. This institutional structure has been decisive in supporting a historically unprecedented volume of capital trade in more pervasive financial markets.

3. Conclusions

This chapter examined the two historical eras of financial globalisation aiming to identify their main institutions and to evaluate the role of the institutional changes in the development of each experience. It was verified that pre-existent and new institutions both adapted themselves according to economic and political changes in the historical context. The chapter discussed the key transformations for the development of capital mobility during both experiences in a variety of institutions such as markets, central banks, banking and non-banking institutions, and legal regulations.

The main institutions that led to the first upsurge of financial globalisation emerged in the UK and in the core Western European countries. These countries were motivated to carry out great capital transactions due to their advanced industrial and technological development, and due to colonialist expansion. In other words, economic conditions, political organisation, technical progress and reliable institutions made possible the emergence and maintenance of markets, rules and international solidarity for close to forty years.

New radical global institutional change was witnessed after the 1970s. The centre of the financial system moved from the UK and Western Europe to the US. The main characteristics of this phase were the neoliberal policies and the development of a wide range of financial innovations. A new institutional framework was established to handle a giant volume of short term and long term capital. The institutional adjustments handled mainly by the US gave birth to an international monetary system based on fiduciary money, and also inaugurated a highly speculative period. A large variety of markets and financial innovations aimed to guide the agents' expectations due to the high degree of policy instability. As a result, the growth of the global financial system was intense and continuous. The institutional and technological differences identified in this chapter are qualitative pieces of evidence to support the J-curve proposition.

V. Effects of the second wave of financial globalisation

1. Introduction

This thesis has presented statistical evidence and provided a historical analysis of the two episodes of financial globalisation. An alternative interpretation to the mainstream U-shaped pattern has been established. Accordingly, the J-shaped proposal has asserted that global financial activity in the current era is unprecedented in stocks of foreign assets and outward stocks of FDI markets. Broadly speaking, the development of financial interconnectedness in these markets has risen significantly in recent decades in comparison to the previous globalisation era. Mainly from the 1990s onwards, their development has surpassed the first episode in terms of scale, magnitude and speed. The J-curve implies that comparatively financial globalisation has been gaining momentum in recent years, but the new global financial anatomy has produced consequences for the world economy. This chapter aims to investigate the key arguments about the macroeconomic costs and benefits of financial globalisation throughout this second era.

An impressive amount of literature on the subject has been produced in recent years, and it would therefore be impossible to provide a fully detailed review. The chapter seeks to present the scale of this issue and to highlight key array of views on the implications of contemporary financial globalisation, focuses on the following research questions: Are increased financial flows beneficial, problematic, or both? Are they stabilising or destabilising? Which areas have benefited from financial globalisation, and which areas have suffered? The answers depend on what kind of economic theory the authors use. For this reason, after this introduction, section 2 aims to answer an additional question, which is: What does economic theory have to say about the relationship of financial development and the economic performance? On this account, the section is going to present two key theoretical approaches. Then section 3 presents the basic results found in the literature, and section 4 draws the conclusions.

2. Assessing the literature

Scholars have discussed the effects of financial globalisation theoretically, empirically and (more usually) through a mixture of these approaches. The key issues running across much of this literature have been the impact of financial globalisation on both economic growth and capital volatility. Researchers have reached a variety of results because they have used different theories, indicators, time series, country samples, econometric models and diverse ways to estimate volatility (Kose *et al* 2006). A major reason for this divergence in opinions is because scholars have been grasping the meanings of their results based on different schools of economic thought. They might use the same indicators, time series and sample of countries, but if their theoretical approach is different, their interpretations of the results may be subject to considerable variation. The next section briefly reviews the arguments of two contrasting and influential bodies of theory on the relationship between financial markets and the performance of advanced capitalist economies.

2.1 Identifying theoretical viewpoints: from efficient market to financial instability hypothesis

Due to this close relationship between finance, economic growth and crises, economists (Akyus 1998; Arestis 2002b, Kregel 2007; Nissanke & Stein 2003; Singh 1997, 2003; Solimano 1999; Stiglitz 2000) have been debating a wide range of questions surrounding the consequences of financial market integration. The development of the literature on finance cannot be exaggerated since it is correlated with key topics heavily debated in economics such as investment, income, economic growth, economic crises and the like. There is a colossal amount of literature on the subject, and it is beyond the scope of this thesis to revise it all.

Running across the literature on financial globalisation, two contrasting theoretical interpretations have inspired economists to interpret the effects of the phenomenon. One has been developed by mainstream economics, and the other by critical scholars. Consequently, they support opposite viewpoints on the functioning of financial markets. The former was developed by Eugene Fama in the 1960s and is called the

Efficient Markets Hypothesis (EMH),[56] while the latter is based on Hyman Minsky's theory developed in the 1970s under the label of the Financial Instability Hypothesis (FIH).

The EMH relied on the rational behaviour of agents and on market discipline as a mechanism to efficiently allocate financial assets (Fama 1970:383). The standard theory that he used emphasises the positive effects of free markets in terms of promoting better global allocation of capital, then helping to improve international risk-sharing, and decreaseing consumption volatility. This leads, in turn, to increased GDP growth and price and consumption stability. Conversely, the FIH proposed that financial fragility and crises are endogenous in capitalist economies (Minsky 1985: 26), hence some degree of governmental market intervention is crucial in order to deal with the the inherent instability. In fact, governments are supposed to create adequate constraining institutions as agents that help to stabilise the economy. Minsky and critical economists have questioned the validity of these effects, and have highlighted their negative macroeconomic implications and high social costs.

Mainstream economists are proponents of the free market thesis as a robust explanation for the development of financial markets. Soon after the end of WWII, Jacob Viner was one of the first authoritative academic voices to support the importance of free international capital flows as a policy agenda for the post-war world order. Viner (1947:98) ably addressed the mainstream stance on the role of global financial markets:

> The basic argument for international investment of capital is that under normal conditions it results in the movement of capital from countries in which its marginal value productivity is low to countries in which its marginal value productivity is high and that it thus tends toward an equalization of marginal value productivity of capital throughout the world and consequently toward a maximum contribution of the world's capital resources to world production and income.

Viner's view was backed up by a substantial body of subsequent research. The EMH is one of the theoretical developments that was developed in the same mainstream tradition to describe the behaviour of financial markets in domestic economies. This

[56] The dominant features of EMH are quite close to the mainstream approach developed by the hyper-globalists discussed in chapter III, section 3. However, the EMH is focused on describing the performance of financial markets in particular, moreover Fama's principles have been used by contemporary authors to depict the effects of financial globalisation, whereas in the context of the literature review displayed in chapter III, the theoretical debate on globalisation was more general, and not focused on financial markets.

hypothesis is formed by three basic theoretical principles: free market, utility maximisation and rational expectations. EMH also predicts perfect information, i.e. all information needed by investors is available provided there is no market intervention by governments. In the context of free market, agents use all information rationally, and then asset prices will reflect the corrected market opinion. The equilibrium price on securities is achieved in the free markets as a consequence of individual decisions from a large number of utility maximising agents (Fama 1970).

Fama's (1970:383) concept of efficient can clarify the backbone of his approach:

> The primary role of the capital market is allocation of ownership of the economy's capital stock. In general terms, the ideal is a market in which prices provide accurate signals for resource allocation: that is, a market in which firms can make product-investment decisions, and investors can choose among the securities that represents ownership of firm's activities under the assumption that securities prices at any time 'fully reflect' all available information. A market in which prices always 'fully reflect' available information is called 'efficient'.

Based on this standard definition, it can be seen that rational agents can react promptly when new relevant information emerges. As a result, prices fully reflect all available (old and new) information. Individually, investors cannot make excess profits ("beat the market") because, other things being equal, the assets are always traded at their market (fair) value. There is no investor that outperforms the competition, except by a non-rational manner, for example, by luck. In this way, markets are efficient in determining equilibrium asset prices and consequently in guiding the investors towards allocating their assets effectively.[57] From country to country, differences in interest rates, in the value of assets and in the value of currencies would be eliminated by arbitrage.

Contemporary authors have been extending the principles underlying the EMH and assessing the consequences of the recent phenomenon of global financial integration. One of the most frequent allegations is that, when the rate of return to capital differs in international capital markets, investors transfer their assets from the host country to the country that offers a higher return, and they are then able to evaluate the competitive

57 This general description corresponds in fact to the strong version of the EMH. In his 1970 article, Fama describe three forms in which the EMH is commonly stated: weak form, semi-strong form and strong form efficiency. Briefly, the weak form asserts that no excess returns can be earned by using investment strategies based on historical share prices or other financial data. According to the semi-strong form of efficiency, share prices adjust within an arbitrarily small but finite amount of time; and finally, the strong form affirms that share prices reflect all information and that no one can earn excess returns (Fama 1970).

advantages of each country. As a result, capital flows where its productivity is highest, i.e., agents determine an advantageous allocation and efficient capital distribution for all nations. Capital is allocated to its most productive use as long as financial markets are deregulated and free of state intervention. Hence, assets are traded with smaller costs and greater productivity, encouraging an increased output and employment opportunities on a global scale.

Following the inspiration provided by Viner and the EMH (among others), scholars have been advocating that greater financial openness increases efficiency and narrows the gap between developing and developed countries because the market knows how best to apply scarce resources to produce maximum economic growth. On this account, financial liberalisation is the central pillar which helps to spread economic development worldwide.

The existence of barriers to the trading of financial assets across countries causes friction and should be removed in order to maintain "normal" free market operation. Systematic economic interdependence of countries and markets, and the absence of domestic governance policies are encouraged since national political objectives are subordinated to global governance, i.e. financial activities are subject to international free market purposes. In doing so, financial globalisation has brought convergence of product and income, resulting in economic benefits for countries that are integrated in the system.

On the other hand, authors from the critical school develop a conflicting theory of financial markets. The term "critical school" is used by Singh (2003:197) to express the non-mainstream Keynesian theoretical approach to price formation in asset markets (see also Davidson 2001b:18). This expression will be used here with the same meaning.

The key point of the argumentation developed by the critical school is the claim that markets fails and reach multiple equilibria, frequently sub-optimal. Consequently, markets need extra-market coordination from national or international authorities in order to deliberately attempt to smooth the market deficiencies. The ability of the free market to achieve a Pareto optimal equilibrium is a special case of the general unstable condition of international financial markets. It is claimed to be an intrinsic characteristic of capitalist economies, and that is why markets are considered fragile and destabilising (Davidson 2001b; Minsky 1985, 1986, 1992) rather than efficient. Unlike the theoretical position supported by the mainstream economists, critical scholars are oversceptical about the efficiency of international financial markets as an institution capable of creating a stable financial environment.

In the non-mainstream tradition, Hyman P. Minsky developed the most influential Keynesian argumentation in direct contrast to the EMH. [58] The FIH is an interpretation of Keynes' general theory of money and finance, which is focused on the importance of money, uncertainty, and on the role of monetary institutions in the development of investment and economic cycles (Minsky 1992). The basic argument proposed by FIH is that the financial instability is a result of internal mechanisms developed by the financial system, as an inherent part of its own nature (Minsky, 1986: 100).

One of the fundamental attributes of contemporary capitalist economies is the use of debts to finance investments, and the purchase of assets to pay financial commitments. In addition, industries have been financed through debts, external capital funding and have developed capital-intensive techniques, hence their period of investment maturation lengthened. This encouraged an increase in the firms' need for external finance, until it exceeded the income generated by their activities. The tendency of investments to surpass the companies' internal funds gradually increased their level of indebtedness (Minsky, 1992: 6-7).

Financial intermediaries (banks and non-banking institutions) have played an important part in Minsky's approach. Banks do not need money in cash to finance the productive activity because when they authorise a demand for investment, they create money. In addition, banks developed new practices and innovative financial instruments to allow higher levels of financing. According to Minsky, financial innovation is an essential attribute of modern capitalist economies that has created different types of money. Financial innovation is one of the key aspects of economic change because bank portfolios hold different monetary instruments, aiming to respond to different purposes according to the financing need demanded by agents.

[58] According to Wray (2001:3): "Hyman Minsky, arguably the foremost twentieth century theorist on the topic of financial instability, extended Keynes's analysis with two primary contributions. (Minsky 1975, 1986) First, Minsky developed what he labelled 'a financial theory of investment and an investment theory of the cycle', attempting to join the approaches of those who emphasized financial factors and those who emphasized real factors as causes of the cycle by noting that the two are joined in a firm's balance sheet."

The complex net of financial arrangements developed by the banking system from the 1970s provided better leverage to firms and investors and created financially instable positions. The maximising behaviour of economic agents induces investors to assume more aggressive and risky positions, mainly during periods of prosperity, generating fragile and unstable financial structures (Minsky, 1986, p. 173). Accordingly, agents gradually engaged in more fragile financing structures, from hedge and speculative to the insolvent Ponzi financing. When firms reach the stage called Ponzi, they could not increase their finance structure or even manage their debts. Therefore the cycle of prosperity is reverted and the economy falls into a crisis. As a consequence, economic and financial instability produce uncertainty and hamper the progress of economic activity, especially long-term investments. As soon as profits went down and financial commitments went up, it became more difficult to accomplish current and prospective liabilities. Their investments dropped off and that took the economy to a financially fragile position.

Due to the increased uncertainty originating in financial markets but which spread quickly to the entire system, entrepreneurs and investors in general prefer financial gains than to risk their capital in productive investments. Speculation starts to prevail over entrepreneurial activity, worsening the economy's instability and financial fragility. Capitalist economy endogenously evolves from being robust to being fragile as soon as the diffusion of riskier and more vulnerable ways of financing appear as an outcome of the market behaviour.

> The inherent instability of capitalism is due to the way profits depend upon investment, the validation of business debts depends upon profits, and investment depend upon the availability of external financing. But the availability of financing presupposes that prior debits and the prices that were paid for capital assets are being validated by profits. Capitalism is unstable because it is a financial and accumulating system with yesterdays, todays, and tomorrows. (Minsky 1986: 294)

A relatively tranquil growth period is transformed into a speculative boom as part of the nature of a capitalist economy heavily dependent on "yesterdays, todays and tomorrows" financial decisions. This means that a capitalist regime is inherently unstable, endogenously financially fragile, and thus always subjected to periods of booms and crises. Stability is only achieved through government intervention. Minsky & Ferri (1991:4) proposed that "institutions and interventions thwart the instability breeding dynamics that are natural to market economies by interrupting the endogenous process and 'starting' the economy again with non-market determined values as 'initial conditions'". As can be seen, the rules of the game described by both theoretical interpretations are in sharp contrast to each other.

Up to this moment, the following question can be raised: How can this theoretical interpretation be applied to scrutinise the effects of the current financial globalisation?

Mainstream economists have been the arguments provided by the EMH to stress the importance of financial liberalisation policies to improve the resource allocation and reduce the cost of capital. The international financial system should be flexible so that a large amount of capital can be allocated more efficiently worldwide. This will encourage greater global market efficiency and then lead to a virtuous cycle of increased savings, investment, and economic growth. Accordingly, more jobs and higher incomes may be created and this would result in increased productivity and lower consumption volatility. In summary, competitive markets, free international capital mobility and flexible exchange rates (helped by the efficiency of the technological means of communication) should improve the information required by the investor leading to better international capital allocation and relative economic development in diverse global areas.

On the other hand, critical authors have been examining the current financial globalisation episode through the lenses provided by the FIH. For instance, applying Minsky's theory, Kregel (2004) developed an argumentation that permitted the consequences of the increasingly frequent international financial crises of the 1990s to be investigated. He used Minsky's analysis of financial fragility (originally elaborated to describe the financial performance of firms in their domestic markets) in an international context to describe the deleterious consequences in terms of financial instability for countries receiving large capital inflows. According to Kregel, conventional wisdom would suggest that governance of financial institutions and markets through the introduction of best practice norms is enough to solve financial market instability. But through the Minsky approach, these prudential measures are not enough to cope with current financial instability because they become "endemic and endogenous" (see also Davidson 2001b:19 and 31).

Focusing on the current international scenario of financial integration, Kregel asserted that in addition to firms and private agents, governments also take loans to make investments, especially in developing countries.[59] Their ability to issue money to finance their investments is limited by a required and desirable sound monetary policy. Then, when a government requires financing above and beyond its internal capacity, the more frequent alternative is to take loans from international banks or institutions. As a result, the process of indebtedness of a country and its consequences is similar to that which happens with firms and investors in Minsky's model. If a country takes international loans to make investments, it can develop the same financial positions described by Minsky. If the loans they contracted are invested in tradable activity, or in any other profitable activity that helps maintain a high level of foreign currency stock, it will be possible to pay back the amount owed, and the interest rates required. Should the global financial scenario be stable, the process of international financial fragility can be postponed. However, if there is a change in the psychology of markets, countries begin to lose their stock of foreign exchange reserves. Consequently, they begin to delay payments of their contracted loans, and they will be exposed to a risky financial situation, and be left with the same problems of financial fragility. When these problems reach the Ponzi position, they lose all access to the international capital market, decree moratorium and the crisis can spread worldwide through contagion. Waves of rumours and panic extend worldwide, and the financial crisis then spreads to other countries which are also financially fragile.

3. Effects of financial globalisation in the 1990s

One of the key characteristics of contemporary financial globalisation is the process of capital account liberalisation, and the liberalisation of the financial sector[60] which has

[59] Kregel (2004:575, 577) asserted that: "Minsky's work was initially concerned with the relationship between business firms and the banks that lend to them. However, the different types of repayment profiles that Minsky sets out to classify the potential fragility of the system have general application. In particular, they can be applied to countries that borrow in international financial markets to supplement the resources necessary for their development. … Thus developing countries will be in the same position as a firm attempting to raise additional financing … This general framework has a ready application to sovereign borrowing by countries".

[60] According to Bergstein quoted in Rogoff et al (2003:17), there is a clear conceptual and empirical distinction between liberalisation of financial sectors and liberalisation of the capital account. In his opinion, this distinction is important to discern the implications of financial liberalisation for growth and

been put into operation in advanced, emerging and developing economies. According to Eatwell & Taylor (1998) the process of financial liberalisation began in the 1950s during the development of the Euro currency market. It spread throughout the developed economies during the 1960s and the 1970s (led by the US and the UK), and then it reached its peak by spreading worldwide in the 1980s and 1990s (Bekaert & Harvey & Lundblad 2001; Kose *et al* 2006).

Financial liberalisation has increased the integration of a wide range of national markets, and this has consequently led to a gradual development in the global marketplace. This augmented integration has encouraged an upsurge in cross-border capital flows, largely since the 1980s. The resulting huge increase in global capital flows has brought macro and microeconomic benefits to some economies, but has not been helpful for others. Generally speaking, increased capital flows have contributed to improving investment, growth, financial development, volume of trade, budget surplus, employment, etc for some countries, but on the other hand, the world economy has also been subject to a number of unexpected and unforeseeable influences. Current financial globalisation has often been associated with increased volatility in some macroeconomic aggregates[61], and by an increased vulnerability to crises (Prasad *et al* 2003:21, Eichengreen 2004). These have damaged the effectiveness of domestic economic policies (especially in emerging economies), and has also impeded economic growth and increased the contagion of financial crises (Prasad *et al* 2003:3). As Eichengreen (2004:20) affirms, financial liberalisation is a two-edged sword.

One of the policy prescriptions proposed by the mainstream macroeconomics thought became a reality in the world economy from the 1970s. Most countries have been noticeably affected by this process of global liberalisation and deregulation. On the whole, the effects of the second wave of financial globalisation have not been uniform or straightforward. In fact, the impact of financial globalisation has been unique for each country, contrary to what was predicted by the mainstream school. A particular description for each country would require specific models for each one which are able

---

development. In his words: "when I refer to liberalization of the financial sector, what of course I have in mind is the opening up of that sector to competitive forces internally and internationally; opening up the sector to foreign participation, especially banks, but insurance companies, money managers and others, without necessarily opening up the economy to movements of capital flow, including by those same foreign participants in the domestic financial sector liberalization process".

[61] Kose et al (2006:21) conclude that "there is no evidence that financial globalization has delivered on the promised benefit of improved international risk sharing and reduced volatility of consumption."

to take into account those specificities, however this is neither feasible nor the purpose of this chapter. Instead, it aims to draw a broad picture through an assessment of the macroeconomic consequences presented on the recent specialised literature.

One might identify as a methodological problem the fact that most articles on the subject are written by conventional authors. I tried to find non-mainstream papers, some of them are included in the next sections, but in fact there are not many of them.

3.1 Effects of financial liberalisation on economic growth

A burgeoning body of literature about the effects of global financial integration encouraged by liberalisation policies has recently been developed. The removal of restraints on international financial transactions has affected financially developed and underdeveloped countries in a variety of ways. For this reason, scholars have reached a number of different conclusions. Some of them have asserted that financial liberalisation has increased the growth rates in most countries. Others, however, have reached a different conclusion, i.e. that liberalisation has increased the gap between rich and poor nations. These authors have been indicating that, in theory, financial integration can increase the growth rates in developing countries through both direct and indirect channels. The direct channels include increases in domestic savings, reductions in the cost of capital due to better risk allocation, transfers in technology, and financial sector developments. The indirect channels include a promotion of specialisation, inducements towards better macroeconomic and other policies, and an enhancement in capital flows. These channels can potentially increase the economic rates of growth within these countries.

This is what the standard theory affirms, but the evidence presented below indicates that empirically it is difficult to identify a strong and robust causal relationship between greater financial integration and higher growth rates within these countries.

In order to capture a general picture, this section is going to present a broader range of evidence from authors with different theoretical backgrounds. Scholars have been reviewing the literature about the effects of capital account liberalisation and stock market liberalisation on growth (Edison *et al* 2002, Prasad *et al* 2003, Eichengreen 2004, Kose *et al* 2006). Amongst them, Kose et al (2006) have, so far, presented a more complete research which focuses on the growing body of evidence in this subject. They surveyed three different strands of this literature: empirical studies relating GDP growth to capital account liberalisation; equity markets and FDI. Most of the authors examined by Kose *et al* (2006) supported the mainstream approach.

a) Capital account liberalisation

Kose *et al* (2006) examined the main results of twenty-five econometric studies on financial integration and growth published throughout the period 1994-2006. This literature surveyed by them is composed of articles that aimed to establish a causal relationship between financial openness[62] and growth. Kose *et al* presented a table summarising the key aspects and the main conclusions of these studies. This table was reorganised in table 21 below.

[62] In their article, Kose *et al* use financial openness and financial integration interchangeably.

Table 21. Summary of recent research on financial integration and economic growth

Study	*Number of countries*	*Time period*	*Financial Openness Measure*	*Main findings*
Alesina, Grilli, and Milesi-Ferretti (1994)	20	1950-89	Binary	NO EFFECT: No clear impact of capital controls on growth in the OECD countries.
Quinn (1997)	64	1960-89	ΔQuinn	POSITIVE: There is a robust positive association between capital account liberalization and growth.
McKenzie (2001)	112	1960-89	Binary	MIXED: No robust evidence of significant impact of capital controls on economic growth.
Grilli, and Milesi-Ferretti (1995)	61	1966-89	Share	NO EFFECT: No evidence of a robust correlation of capital account restrictions with growth.
Rodrik (1998)	95	1975-89	Share	NO EFFECT: No evidence of a significant effect on financial openness and growth.
Edwards (2001)	62	1980-89	Share, Quinn, ΔQuinn	MIXED: Capital account openness positively affects growth only after a country has achieved a certain degree of economic development and financial development.
Vlachos and Waldenström (2005)	42	1980-90	Volume, Binary	MIXED: Value added growth in sectors more dependent on external finance no higher post- liberalization but positive effects on growth in output and number of firms
Arteta, Eichengreen and Wyplosz (2001)	61	1973-92	Quinn, ΔQuinn	MIXED: Evidence on positive association between capital account liberalization and growth fragile but stronger correlation with growth when openness measures are interacted with trade openness and rule of law.
O'Donnell (2001)	94	1971-94	Share, Volume	MIXED: No evidence of capital controls on growth, but volume is sometimes significant.
Bosworth and Collins (1999)	58	1978-95	Volume	MIXED: FDI is highly beneficial for domestic investment while portfolio flows have no discernible effect and loans lie in between. Insignificant impact of international flows on saving.
Bailliu (2000)	40	1975-95	Volume	MIXED: Capital inflows foster higher economic growth but only for economies where the banking sector has reached a certain level of development.
Eichengreen and Leblang (2003)	47	1975-95	Binary	MIXED: An open capital accounts boosts growth in periods of financial stability in international markets with controls playing insulating role during instability. Similar results for 27 economies, 1880-1997.
Edison, Klein, Ricci, and Sløk (2004)	73	1976-95	Share, Quinn	MIXED: Capital account liberalization has positive growth effect in middle income countries
Chanda (2005)	82	1976-95	Share	MIXED: Capital account liberalization significantly raises growth in more ethnically homogeneous countries.
Klein (2005)	71	1976-95	Share	MIXED: Capital account openness has a statistically significant impact on growth in countries with better (not the best) institutions.
Klein and Olivei (2006)	70	1976-95	Share	MIXED: Developed countries with open capital accounts enjoyed greater growth and financial deepening (with latter effect not present for development economics).
Kraay (1998)	117	1985-97	Share, Quinn, ΔQuinn	MIXED: Change in financial openness is not significantly related to growth (coefficient on Volume significantly positive but result not robust).
Reisen and Soto (2001)	44	1986-97	Volume	MIXED: Both FDI and portfolio equity flows have a significant positive impact on growth, but bank lending contributes to growth only if banking system is well capitalized.
Vanassche (2004)	45	1980-97	Share, Quinn	POSITIVE: Financial openness has a positive effect on sectoral value added growth but with greater relative impact on those sectors more reliant on external financing.
Quinn, Inclan and Toyoda (2001)	76	1960-98	Quinn, ΔQuinn	POSITIVE/MIXED: Capital account liberalization has a robust positive impact on growth in most countries.
Durham (2004)	80	1979-98	Volume	MIXED: Growth effects of FDI and portfolio flows depend on the absorptive capacity of host countries, especially financial or institutional development.
Bonfiglioli and Mendicino (2004)	90	1975-99	Binary	MIXED: Capital liberalization has positive effect on growth but mainly via indirect channels, e.g. mitigating effects of banking crises (whereas equity market liberalization has direct effect but no interaction with banking crises).
Mody and Murshid (2005)	60	1979-99	Volume, A Sum	MIXED: FDI had strongest positive impact on domestic investment. Positive relationship between capital flows investment growth is more emphasized with stronger policies.
Edison, Levine, Ricci, and Sløk (2002)	57	1980-2000	Share, Volume	NO EFFECT/MIXED: With isolated exceptions, unable to reject the null hypothesis that international financial integration does not accelerate growth even when controlling for particular economic, financial, institutional, and policy characteristics.
Fratzscher and Bussiere (2004)	45	1980-02	KS, Volume	MIXED: Positive short-run growth impact of capital account liberalization but longer term effect depends on institutional quality, FDI flows, and liberalization sequencing.

Source: Kose el al (2006:57-9)

Notes:
Dependent variable:
EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortization; ΔGNPc: Growth rate of real per-capita GNP; I: Investment; I/Y: Investment over GDP; ΔIc: Growth rate in investment per capita; ΔIND: Growth rate of industry-level measures, e.g., real value added, output or number of firms; ΔlnI: Growth rate of real private investment; S/Y: Saving over GDP; ΔTFP: Growth rate of total factor productivity; ΔYc: Growth rate of real per-capita GDP; ΔY: Growth rate of real GDP.
Regression methodology:
Cross-section: Single observation for each country over entire period; FE: Country and/or industry fixed effects; GMM: Generalized Method of Moments; IV: Instrumental Variables; NLLS: Non-Linear Least Squares; OLS: Ordinary Least Squares; Panel: Repeated observations on countries (or country industries) observed over multiple periods (which may be, for example, annual, five years or a decade); Pooled: Assumes no country-specific fixed effects; RE: Country random effects; SUR: Seemingly Unrelated Regressions; WLS: Weighted Least Squares.
Financial openness measure:
A Sum: Sum of four binary AREAER liberalization indicators across the following categories – capital account; current account; export proceeds and multiple exchange rates; Binary: 0/1 dummy variable from AREAER taking the value of one when capital controls in place; KS: Measure based on Kaminsky and Schmukler (2003); Quinn: Measure based on Quinn (1997); ΔQuinn: Change in Quinn measure; Share: The proportion of years in which countries had liberalized capital accounts based on the binary variable from AREAER; SMLD: Official Date of Stock Market Liberalization; Volume: Variable based on actual flows/stocks of financial flows.
Main findings:
NO EFFECT: No evidence of a significant effect of greater financial integration on growth; MIXED: Evidence of positive effect of financial integration on growth is conditional upon other economic characteristics (for example, financial development or human capital) or otherwise non-robust (for example, conditional on different country samples); POSITIVE: Significant positive effect of greater financial integration on growth.

As one can see, it provides ample country coverage since most of them have a large sample of countries encompassing developed and emerging economies. Another important fact is the time period covered by these different empirical analyses. And finally, the table above encompasses different econometric methodologies since some authors use dynamic regression models, others use nonlinear interactions between financial integration and economic growth and so on. In order to grasp a broader picture of financial integration and economic growth, the results will be considered together.

The top panel brings together research that covered the 1980s starting in previous decades. Six in seven concluded that there is no or, at best, a mixed effect between financial liberalisation and economic growth. Only one indicated a positive effect. The lower panel shows the results covering the 1990s. Again, the overwhelming majority of these eighteen studies indicate no effect, or a mixed effect, except for one that found a positive impact on "sectoral value added growth" between 1980 and 1997. It is worth noting that the research led by Dennis Quinn, Carla Inclan, and A. Maria Toyoda (2001) concluded that these results could be mixed for the period 1960-98, whilst the results of the 1997 Quinn's article produced a *positive* outcome to the period 1960-89.

To sum up, only two of these studies concluded that there are growth benefits associated with international financial integration.

On the whole, the results of this compilation present a clear-cut picture about the relationship between financial liberalisation and economic growth. That is, it is hard to identify a strong and robust causal relationship between increased financial integration and higher growth rates for developing countries for the period analysed for those scholars above, most of them conventional economists. There are positive effects on growth mainly for advanced countries but as the samples in general include much more countries than the industrial economies, the impact of financial integration does not systematically increase the growth rate.

The econometric or statistical estimations made by non-mainstream scholars about the same topic discussed in this section are available in less quantity and not always covering the entire period of the second financial globalisation, which is mid-1980s onwards.

Singh (2003) has carried out an econometric analysis of the effects of capital account liberalisation on economic growth for developing countries. Table 22 presents regression results of the effects of capital flows and their volatility on growth per capita for a large sample of developing covering the period 1970-1998.

Table 22. Effects of capital flows and their volatility on growth per capita per decade

	Dependent variable: rate of GDP growth per capita			
Independent variable	***1970-98***	***1970-80***	***1980-89***	***1990-98***
Capital flows	0.287[b]	-0.149	0.133	0.275[b]
Capital flows volatility	-0.344[b]	-0.322[b]	-0.188	-0.124
Initial GDP per capital	-0.508[b]	-0.345	-0.940[b]	0.159
Initial schooling	1.429	-1.749	3.640[a]	-0.446
Population growth rate	-0.513[b]	-0.438	-0.573[b]	0.869[b]
Investment	0.182[b]	0.309[b]	0.164[b]	0.094[b]
Policy	0.008[b]	0.007[b]	0.011[b]	0.013[b]
Inflation rate	-0.002[b]	-0.008	-0.001[b]	-0.004[b]
Openness of the economy	0.001	0.006	0.001	-0.024[b]
Adjusted R^2	0.75	0.59	0.57	0.38
No. of Countries	72	56	74	100

[a] denotes significance at the 10 per cent level, and [b] at the 5 per cent level.
Source: World Bank (2001), extracted from Singh (2003).

Volatility of capital flow is measured by the standard deviation of the flow. The dependant variable is the rate of growth of GDP per capita. The table suggests an economically important and statistically significant negative relationship between capital flow volatility and GDP growth per capita for the period as a whole 1970-1998. It is however interesting that the negative relationship becomes weaker over time, with the value of the relevant co-efficient rising from a statistically significant minus 0.322 during 1970-79 to minus 0.124 in 1990-98 when the co-efficient was also statistically insignificant.

Other non-mainstream economists have been using econometric and statistical techniques to assess the impacts of financial liberalisation on development. On this account, Arestis & Demetriades (1996) examined the question of causality between financial development and economic growth. They conduct co-integration and causality tests between finance and growth using time series data for twelve representative countries. According to them, country specific factors are likely to influence the causal nature of the relationship between financial development and economic growth. Their main findings were that growth rates vary across countries most probably because of institutional and policy differences adopted from country to country.

Arestis, Demetriades & Luintel (2001) utilised time series methods and data from developed economies to examine the relationship between stock market development and economic growth. Their results support the view that although banks and stock markets may be able to promote economic growth, the effects of the former are more powerful.

Arestis, Demetriades, Fattouh & Mouratidis (2002) have found that the effects of liberalisation policies vary considerably from country to country. Their econometric tests applied to six developing countries (Greece, Thailand, Philippines, Korea, India and Egypt) demonstrated that the effects of financial liberalisation on financial development of these countries are ambiguous.

b) Equity market liberalisation

Kose *et al* (2006) also surveyed 7 studies relating the effects of financial liberalisation on the equity markets. The evidence summarised by them reveals an opposite scenario than demonstrated by table 22. The table below reproduced the results from the papers connecting equity market liberalisation and growth.

Table 23. Summary of key empirical studies on equity market liberalisation and growth

Study	Number of countries	Time period	Financial Openness Measure	Main findings
Henry (2000)	11	1977-94	SMLD	POSITIVE: Positive growth of real private investment following stock market liberalisation.
Bekaert, Harvey and Lundblad (2001)	30	1980-97	SMLD	POSITIVE: Positive effect on growth following equity market liberalization which is greater for countries with above median education levels.
Li (2003)	95	1975-2000	SMLD	POSITIVE: Positive growth impact of opening equity markets due mainly to productivity channel in middle- and high-income countries and to capital accumulation (I/Y) in low-income.
Bekaert, Harvey and Lundblad (2005)	95	1980-97	SMLD	POSITIVE: Equity liberalizations increased growth (controlling for policy endogeneity) with stronger effects in better legal and investment environment and financial development.
Gupta and Yan (2005)	31	1981-98	SMLD	POSITIVE/MIXED: Stock market liberalization leads to higher real value added growth in sectors more dependent on external finance (but, controlling for liberalization endogeneity, not in those with higher growth opportunities).
Milton (2006)	28	1980-2000	SMLD	POSITIVE: Significant improvement in sales performance associated with liberalization of a firm's equity to foreign investors (controlling for growth opportunities).
Hammel (2006)	13	1982-95	SMLD	MIXED: Real value added in sectors more dependent on external finance grows faster following equity liberalization in countries with larger stock market capitalization to GDP.

Source: Kose el al (2006:62)
Notes: See notes table 21

The rising importance of portfolio equity flows to emerging markets has motivated a number of researchers to examine the growth effects of equity market liberalisation. Most of the papers listed below suggest that portfolio equity flows have a significant positive impact on output growth. Some of these papers also document the empirical relevance of various theoretical channels, linking equity market liberalisation to economic growth, including increases in investment growth and firm-level positive growth impacts. However, one can observe that the number of researches and the sample of countries here are much smaller than the researches on financial liberalisation presented in table 21. This may indicate that more research is needed in this field in order to provide a more robust indication for the impact of financial liberalisation on the equity markets. Also that the positive effects of equity market liberalisation are limited to a smaller number of countries in comparison to the large samples showed in table 21.

c) FDI

The relative importance of FDI flows has risen significantly in recent years, making it an important form of private international financing for emerging market economies. Standard theories have been agreed that FDI should yield more benefits than other types of financial flows for two reasons: it increases the domestic capital stock, and it has a positive impact on productivity through transfers of technology and managerial expertise. It has also been argued that FDI tends to be the least volatile of the various types of capital flows, making countries less vulnerable to sudden stops or reversals of flows.

Nevertheless, studies using aggregate data have been unable to provide evidence about the positive impact of FDI on economic growth. In the list of 11 papers presented by Kose *et al*, while only one show that FDI enhances GDP growth, the others report that there is no direct evidence of such a relationship.

Table 24. Summary of Key Empirical Studies on FDI and Growth

Study	*Number of countries*	*Time period*	*Financial Openness Measure*	*Main findings*
Balasubramanyam, Salisu, and Sapsford (1996)	46	1970-85	FDI/Y	MIXED: FDI has a positive impact on economic growth in countries which have export-oriented rather than import substituting trade policies.
Borensztein, De Gregorio and Lee	69	1970-89	FDI/Y	MIXED: FDI contributes to growth in countries with a higher level of human capital.
De Mello (1999)	31	1970-90	FDI	MIXED: Growth effects of FDI depend on the FDI degree of complementarity and substitution between FDI and domestic investment.
Haveman, Lei, and Netz (2001)	74	1970-89	FDI/Y	POSITIVE: FDI leads to increased growth.
Lensink and Morrisey (2002)	88	1970-98	FDI/Y	MIXED: FDI has a positive impact on growth, but evidence is weak in developing countries. FDI volatility has a negative growth effect.
Hermes and Lensink (2003)	67	1970-95	FDI/Y	MIXED: FDI has a positive growth impact if financial system sufficiently developed.
Choe (2003)	80	1971-95	FDI/Y	MIXED: FDI Granger-causes economic growth, vice versa, but effects are more emphasized from growth to FDI than from FDI to growth.
Alfaro, Chanda, Kalemli-Ozcan and Sayek (2004)	71	1975-95	FDI/Y	MIXED: FDI has a significantly positive effect on growth in countries with well-developed financial markets.
Carkovic and Levine (2005)	72	1960-95	FDI/Y	MIXED: FDI inflows do not exert an independent influence on economic growth
Blonigen and Wang (2005)	69	1970-89	FDI/Y	MIXED: FDI has a positive impact on growth in less developed countries provided education levels are high enough, but not in developed countries.
Aykut and Sayek (2005)	37	1990-2002	FDI/Y	MIXED: While manufacturing sector FDI has a FDI/Y positive impact on growth, primary or service sector FDI has no significant impact.

Source: Kose el al (2006:62)

Despite the theoretical presumption that FDI has the strongest benefits of the different types of inflow, it has not proven easy to document these benefits. Again, the sample of countries is smaller than the evidence provided by financial liberalisation indicating that more research is needed in order to achieve more conclusive evidence.

Up to this point, the mainstream propositions relating financial globalisation (read: liberalisation) to higher rate of economic growth and income convergence worldwide cannot be confirmed. As seen above, most of the studies carried out for conventional scholars have shown that liberalisation has divergent impacts on economic growth. Moreover, there is another issue on this account that should mentioned, namely, liberalised financial markets can be volatile, promoting capital misallocations and financial crises. Hence, the consequences of financial globalisation on volatility shall be discussed in the next section.

3.2 Effects of financial globalisation on macroeconomic volatility

According to Kose *et al* (2006:20) there is little empirical evidence to support the view that capital account liberalisation by itself increases vulnerability to crises. In their opinion, financial crises are just particularly sharp manifestations of the more general phenomenon of macroeconomic volatility. Therefore volatility is another important aspect regarding the effects of financial globalisation, which should be analysed more carefully.

According to mainstream theory, international financial integration should reduce macroeconomic volatility because as discussed in the previous section, a globalised free capital market should provide better opportunities for capital allocation managed by rational agents. As a consequence, it should reduce volatility by diversifying risk of capital allocation. These benefits are presumably even greater for developing countries that are intrinsically subject to higher volatility due to their production structures being less diversified than those of industrial economies.

Irrespective of the effects on output volatility, mainstream theory suggests that financial integration should reduce consumption volatility. The ability to reduce fluctuations in consumption is regarded as an important determinant of economic welfare. Access to international financial markets provides better opportunities for countries to share macroeconomic risk and, thereby, smooth consumption. The empirical evidence presented below does not confirm those theoretical propositions.

Prasad et al (2003) calculated the volatility for what they called more financially integrated economies (MFI) and less financially integrated (LFI) countries, for a period between the 1960s and the 1990s. It is worth noting that their data sample comprises of 76 countries including 21 developed and 55 developing. They were grouped in that way, the 21 richest world economies formed the industrial countries, the MFI is constituted by 22 key developing countries and the LFI is formed by other 33 developing economies. They calculated volatility for different macroeconomic aggregates through the standard deviation.

Their results reveal roughly a similar pattern for volatility of output, income and consumption. On average, industrial countries have had lower volatility than MFI and LFI economies. Similarly, MFI had lower volatility than LFI countries. However, there are some intriguing results which deserve more detailed analysis. Their evidence shows the evolution of the average volatility in growth, income and consumption for these three different groups of countries. In what follows, the evidence will be presented with distinction for the last two decades of the 20th century.

In terms of volatility in output growth, the table below reveals that MFI and LFI economies had almost the same level of output volatility in the 1960s, but in the next two decades, the LFI were more volatile than MFI. In the 1970s, the LFI reached their largest volatility level but they had a significant reduction during the two following decades. Conversely, the MFI had their lowest level of volatility in the 1970s but they arrived in the 1990s with a higher percentage to LFI. As expected, during these three decades, the output volatility of industrial countries was not only more stable but it presented a much lower level than the MFI and LFI economies (it was smaller by about fifty percent on average). Looking at the whole picture, volatility slightly declined for all these three groups, except for MFI.

Table 25. Average volatility of output growth (percentage standard deviations for each group of countries)

	1960-99	***1960s***	***1970s***	***1980s***	***1990s***
Industrial countries	2.18	1.91	2.46	2.03	1.61
MFI economies	3.84	3.31	3.22	4.05	3.59
LFI economies	4.67	3.36	4.88	4.53	2.70

Source: Prasad et al (2003:23)

Regarding volatility in income growth, the results showed below indicate that throughout the last four decades industrial countries have typically had the lowest volatility. During this period, volatility declined continuously for these countries, although only by a small margin. Income volatility in MFI remained stable during 1970s and 1980s. Their level of volatility reached the highest point over these two decades but declined significantly during the 1990s. LFI countries presented the largest volatility of all the three groups, although by the 1990s their income volatility was less than MFI. Again, during the 1990s, the MFI presented the highest figure for volatility amongst the three groups.

Table 26. Average volatility of income growth (percentage standard deviations for each group of countries)

	1960-99	*1960s*	*1970s*	*1980s*	*1990s*
Industrial countries	2.73	2.18	2.99	2.54	1.91
MFI economies	5.44	3.60	5.43	5.45	4.78
LFI economies	7.25	4.42	9.64	7.56	4.59

Source: Prasad et al (2003:23)

Total consumption volatility declined for all three groups of countries from the 1960s to the 1990s. The same pattern of lowest and continuously declining percentages repeated here regarding the industrial countries. For MFI economies, it slightly declines from the 1980s to the 1990s. LFI economies had the highest figures for the entire period but during the last two decades the consumption volatility fell substantially.

Table 27. Average volatility of total consumption growth (percentage standard deviations for each group of countries)

	1960-99	*1960s*	*1970s*	*1980s*	*1990s*
Industrial countries	1.86	1.38	1.84	1.58	1.38
MFI economies	4.34	3.95	4.19	3.43	4.10
LFI economies	6.40	4.85	6.50	6.34	4.79

Source: Prasad et al (2003:23)

Finally, the table below presents the ratio of consumption to income volatility. In this, industrial countries have the lowest ratio throughout the entire period, and the volatility of consumption growth to income volatility is quite similar for MFI and LFI economies, increasing continuously between the 1970s and 1990s for both. The ratio of consumption to income volatility for MFI not only increased after the 1970s but, during the 1980s and throughout the 1990s, it rose substantially. It can be explained by the crises experienced in some of these economies.

According to Prasad *et al* (2003) this is a striking result not just because the volatility of consumption rose but also because it increased more than income volatility. It is surprising since the conventional theory predicts that financial integration allows countries to share income risk and smooth consumption.

Table 28. Ratio of total consumption volatility to income volatility (percentage standard deviations for each group of countries)

	1960-99	*1960s*	*1970s*	*1980s*	*1990s*
Industrial countries	0.67	0.75	0.56	0.61	0.58
MFI economies	0.81	0.92	0.74	0.76	0.92
LFI economies	0.80	0.95	0.68	0.82	0.84

Source: Prasad et al (2003:23)

Thus far, some key conclusions can be drawn, and as shown, the evidence suggests that output and income volatility have, on average, declined in the 1990s compared to the 1980s for all groups of countries. However, consumption volatility and the ratio of consumption to income volatility for MFI economies have increased. So, how did Prasad et al (2003) explain these paradoxical results?

According to them, it reveals some evidence of a threshold effect, i.e. financial integration reduces volatility only beyond a certain level. In other words, countries are able to receive benefits from lower consumption volatility only beyond a certain level of financial integration attained by industrial economies. Apparently, MFI economies are in the process of acquiring these threshold effects. Most emerging market economies are below this threshold level of financial integration while most industrial economies are above it.

To sum up, the empirical evidence presented regarding the effects of financial globalisation on growth and volatility reveals two outstanding results for the period 1960s-90s: 1. There is no strong and robust evidence that financial integration has raised growth rates; and 2. Financial integration might have increased consumption volatility indistinctly for MFI and LFI countries but for industrial countries volatility remained flat for the aggregates in discussion.

The picture about the volatility under the second financial globalisation scenario is much better drawn by the research done by Kose et al (2006). They calculate volatility using a different taxonomy and time horizon providing some further evidence to the debate on volatility discussed so far. Instead of defining more or less financially integrated countries, they proposed a general classification, dividing the groups of countries in advanced, emerging and other developing economies. Instead of being calculated in decades, volatility is calculated for the period which is at the centre of the second surge of financial globalisation, i.e. 1985 to 2004. And finally, they calculated volatility using cross-country averages of the standard deviations and coefficient of variation for the main current types of international capital inflows, i.e. FDI, equity and debt. Their results look at the debate from a different perspective providing some new evidence; hence it plays an important role for accomplishing the purpose of this chapter.

Table 29 presents their key results. The top panel shows that, in all country groups, gross inflows of debt financing are substantially more volatile than FDI or equity inflows, or the sum of FDI and equity inflows. The lower panel shows the coefficient of variation, which is the standard deviation divided by the mean. The results using this measure are less clear-cut. For emerging markets, FDI and the sum of FDI and equity are slightly less volatile than debt flows. Some of these results fail to be sensitive to the choice of sample as a few countries have very small shares of certain types of flows, which distorts some of the results (by blowing up the coefficients of variation).

Table 29. Volatility of different types of inflows: 1985-2004

	FDI/GDP	Equity/GDP	Debt/GDP	FDI+Equity/GDP
Standard deviation*				
All countries	1.90	1.42	4.42	2.78
Advanced economies	2.43	2.36	6.18	4.38
Emerging markets	1.45	0.84	3.38	1.87
Other developing economies	1.76	0.11	3.36	1.76
Coefficients of variation**				
All countries	0.85	0.98	0.76	0.80
Advanced economies	0.92	0.99	0.64	0.84
Emerging markets	0.75	1.07	0.85	0.71
Other developing economies	0.89	0.65	0.80	0.87

Source: Kose et al (2006:56)
Notes: Data shown in this table are the cross-country means and medians for each group of countries of the standard deviation and coefficient of variation of the different categories of gross capital inflows over the period 1985–2004. The coefficient of variation is the standard deviation divided by the mean.
* Mean of standard deviation.
** Mean of coefficient of variation.

Table 29 shows two different ways of representing volatility. Statistically speaking, the coefficient of variation is a finer indicator than the standard deviation because the latter is affected by the magnitude of the different types of investment. For the purpose of this chapter, the key results revealed by the table are the figures for advanced and emerging economies. Having "all countries" as a parameter, one can realise that the FDI/GDP volatility is significantly larger in an advanced economy in comparison to the emerging markets. It is another unexpected result for the conventional wisdom. As expected, emerging countries had the highest volatility in equity and debt markets amongst all groups most probably due to the spurt of crises during this period.

Another important conclusion drawn from the table above is the short distance between FDI and equity volatilities, especially for advanced economies. It means that during 1985-2004, FDI was as volatile as equity flows for both groups of countries, confirming the Kregel's (1994) approach summarised above. Again, this result does not fit with the proposition advocated by the conventional wisdom which tends to emphasise the stability of FDI since it encompass long term commitment with the recipient countries.

4. Conclusions

The first part of the chapter examined two contrasting theoretical approaches which accounted for the dynamics of the international capital market, one belongs to the mainstream economics (EMH) and the other is related to critical Keynesian economists (FIH). According to the former, prices on traded assets reflect all known information since rational agents take decisions in freee markets. Contemporary authors have been using the theoretical principles of this approach to emphasise the importance of liberalisation and deregulation policies to improve the world economy. Conversely, critical authors claim that the instability is an endogenous feature of the system, hence capitalist economies always need a governmental or institutional intervention to tackle the vicissitudes of the system.

The second section considered the empirical evidence of some key macroeconomic indicators related to global capital flows. The central message of this chapter is that according to the scholars surveyed the correlation between financial liberalisation and growth is not yet evidence, as proposed by the mainstream approach. As a whole, financial globalisation creates winners (in the north) and losers (in the south) in terms of volume of capital traded and volatility. This is not only a conclusion of this chapter. Likewise, in the last two chapters of their 2004 book, Obstfeld & Taylor presented a wide empirical study on the evolution in the international capital mobility since the Gold Standard. Chapter 7 has a suggestive name “Uneven integration” and chapter 8 is called “Uneven rewards and risks”. The evidence presented led them to conclude that contemporary financial integration is biased towards rich nations, and that the alleged benefits in terms of convergence and equality are far from being a reality. Through a different theoretical and historical perspective, Chang (2002) achieved the same conclusion.

It urges the implementation of strategies for political and economic development especially in those areas where the capital have not yet arrived in amount able to improve the living standard of the society. The majority of world capital has not flowed to poorer countries - instead it has concentrated on developed economies. Overall, the instability of the international financial system seems to contradict the efficient market theory, and so the predictions of this approach might not be realised, especially in low-income countries.

VI. Conclusions

The major purpose of this thesis is to provide quantitative and qualitative evidence to demonstrate the J-curve as an alternative depiction of financial globalisation since the classical Gold Standard period. In contrast to the widely-known U-shaped pattern, the J-shaped proposition elaborated here claims that the level of financial enmeshment since the mid-1990s has been higher and more pervasive than the highest level of financial integration achieved during the previous experience. Opposing to the "nothing new" scenario in global finances, this thesis provides a contrasting original perspective showing those markets in which scholars found the U-curve, today's financial integration has surpassed the pre-1914 era. Thus the current financial globalisation is unprecedented. In order to reach this conclusion, certain steps were followed that gradually aimed at delineating the necessary arguments for the construction of the J-curve proposition.

The first step was to understand the globalisation phenomenon in a theoretical and historical perspective. The main features of this endeavour were developed in chapter two. This chapter departed from an economic standpoint to present a review of key aspects running across the globalisation literature, such as its definition, chronology, the debate about myth or reality, and measurements. At the end, it presented three theoretical interpretations of the phenomenon. The chapter established core aspects surrounding globalisation, pointing to some focused issues on financial globalisation proposed by the subsequent chapters.

The main features of the J-shaped proposition are developed in detail in chapters three and four. After a literature review on financial globalisation, chapter three demonstrates the empirical aspects of the J-curve. The starting point of the empirical study was to piece together historical estimates and data from prominent scholars and reliable institutions in order to assess the statistical performance of financial globalisation. This empirical research showed that a J-curve is traced for stock of foreign assets and liabilities during 1870 to 2000 and for the outward stock of FDI from 1913 to 2005. In those markets, the U-shaped pattern could not be confirmed, conversely a J-shaped pattern better represents the performance of those markets within the time frame in study. Those findings together create the necessary conditions for the elaboration of the research hypothesis, which was referred to as the J-shaped curve. Additional illustration of the huge surge of financial activities was presented subsequently from the various financial markets from the 1970s onwards. This study demonstrated that the level of activity in novel markets from this period has been remarkable. The evidence displayed led to another stage of the thesis.

Up to this point, the major result of the thesis is the achievement of a J-curve in those two markets. This thesis does not aim to make empirical tests for a variety of financial markets since 1870. In fact, the authors who had studied the U-curve had not made this due to the scarcity of historical data for that period, which have hindered this type of research. I am not saying that the financial globalisation phenomenon is limited to just two indicators. On the contrary, my interpretation presented displayed in chapter three, section 2.1.b recognises it as a wide-reaching process. Moreover, in section 3.4 of chapter two, I presented a range of indicators that have been using by scholars to assess financial globalisation. The central argument of this research is clear: authors have found the U-curve in certain markets from the past until 1995. I updated their figures and found another shape pointing to an unprecedented volume of cross-border transactions throughout the current era. It led me to further investigation on the historical and institutional characteristics of this period. The essential purpose and the key message of the J-curve is to promote a debate on the nature of the financial markets, highlight the uniqueness of the contemporary era, and invite a re-examination of the second episode of financial globalisation.

Having established empirically the research hypothesis, the next step was to investigate the qualitative underpinnings underlying the J-curve. One of most frequent criticisms levelled at the historical literature on financial globalisation is that the debate covers a very long historical period in which economic, social and political circumstances are very different. For this reason, it is difficult to compare qualitatively the level of financial integration in those eras. Scholars who study the U-shaped pattern present various ways to tackle this difficulty. They normally opt for historical analysis combined with rigorous econometric treatment, but they do not always choose to scrutinise the phenomenon through the role played by institutions in both eras. To deal with this issue, chapter four is devoted to investigating the institutional aspects of the two financial globalisation waves. The chapter underlines the centrality of the changes that occurred in the institutions (rules, traditions, regulations) for the development of cross-border financial activity in each era. Based on the work of Baldwin & Martin (1999) and Hodgson (2002a), the chapter focused on the examination of the "dense network of historically specific financial institutions" developed in each era.

The chapter examines the "rules of the game" and the role played by the technological innovations to increase financial integration. Although recognising that technological breakthroughs put into operation in both eras were important factors in encouraging global integration, the focal point to explain the meaning of the J-curve is based on the analysis of the institutional arrangements that shaped the two experiences. On this account, especially after the 1980s, more robust and sustainable manifestations of financial globalisation have multiplied and were responsible for accommodating an unprecedentedly huge volume of cross-border financial flows. In other words, the institutional framework developed in the second era was much more complex, extensive and pervasive than in the first. This explains the longer upward stroke of the J-shape.

Finally, chapter five analysed the consequences of financial globalisation during the current era. The chapter first identified and presented the foundations of two contrasting theoretical interpretations that have currently been taken into account to assess the implications of financial globalisation. The conventional wisdom represented by the EMH supports the fact that neo-liberal measures should be the basis for the process of convergence and global prosperity. Conversely, the FIH sustains the importance of additional measures taken for governments and multilateral institutions to support the achievement of higher levels of economic activity. Following this analysis, the chapter presents a variety of macroeconomic aggregates that have been scrutinised to assess the impacts of the phenomenon. Resorting to several distinct assessments, the main traits of that evaluation are that most of the benefits of financial globalisation have been concentrated in Triad countries. In contrast to what is foreseen by the conventional theory, liberal policy regimes encouraged by North Atlantic countries have created neither worldwide prosperity nor sustainable development. Therefore, one contribution of the J-shape analysis is to draw attention to the uneven pattern of current financial globalisation and hence to the urgency for an elaboration of new global financial architecture.

The market by itself has not eliminated inequalities nor has it provided a better level of economic development to all nations. Developing countries in general, but Latin American in particular, have been characterised by very large inequalities in income and wealth distribution. Hence, additional programmes and public policies are necessary in order to overcome those issues and push those economies in the direction of economic development.

One way to cope with this problem is to formulate institutionally development strategies for each developing country, including it as a central objective of domestic national policy. This development agenda should aim to create greater equity and/or alleviate inequality among nations. These policies should be applied while paying careful attention to specific objectives of each developing economies, rather than to apply similar programmes to all indistinctly. To do so, it is necessary to scrutinise the historical aspects of their process of industrialisation and developing policies, trying to understand which are the conditions and possibilities to produce or improve domestic development strategies.

Development policies in those countries have been extremely volatile and have been failing frequently. As a consequence, they have had a very negative impact both on the economic performance and on the countries' ability to alleviate inequality. Therefore, one important aspect to emphasise is to encourage the stability in terms of their policy agenda, i.e. to establish long-term policies which remain without being changed frequently. Short-term programmes are also important but they are not able to overcome the structural problems that only long-term investment commitment could.

In addition, developing countries can only influence the course of events and try to invert this tendency if they act united through pressures on leading global economies, such as the G7 group. These actions together with sustainable long-term policies provided by local governments and multilateral institutions are a key way to attain the changes necessary to reverse the uneven economic development and the unfortunate effects of (financial) globalisation. Not having a policy is also a policy and its outcomes are unlikely to be the best approach for those societies.

Currently, the UN has been developing specific programmes with this purpose. For example, the Millennium Development Goals is an attempt to reduce inequality, poverty and provide financing to improve the life of citizens of developing countries. It was created as part of the Monterrey Consensus, an International Conference held in Monterrey, Mexico in 2002, in order to formulate developing policies to be applied in those countries.

Yet, in these countries the difference between the rich and the poor is very high, and this is why they have a tremendous catching-up movement in front of them. Echoing

Karl Marx, the distinctive characteristic of capitalism is the concentration of wealth in just a few hands. Chapter five illustrates this statement.

Nevertheless the J-curve does not call attention only for the unequal and biased pattern of current financial globalisation. Moreover, there are also a couple of policy propositions can be extracted from the lessons underlying the J-curve since it was demonstrated that the higher degree of financial integration since the 1990s represented also an era of high instability and new risks to the world economy.

As the global economy shows growing signs of vulnerability, the early years of the 21st century have been characterised by generally worrying macroeconomic conditions. The occurrence of a series of financial crises since the 1980s created suspicion of truthful corporate accounting, and provoked deleterious consequences for a sound global financial regulation. These problems, associated with a large range of macroeconomic imbalances examined throughout the last two chapters of the thesis, have indicated that on the financial side, the system is becoming out of control. Most countries (especially the US) created a lot of defences against financial crises in the 1930s, but the system has developed alternative ways of surpassing the mechanisms of regulation and has developed around those defences. To put it another way, under the pressure of prudential regulation, financial institutions have moved offshore and go around the system to play the game more harshly and aggressively than ever. Indeed, the safeguards are no longer effective, so that private agents and families around the world have loosing their savings, especially in reckless lending provided by unregulated bank-type institutions. Needless to say that there is an issue nowadays on global financial control.

The Basel Committee on Banking Supervision, created in 1974 by the Group of Ten (G10) has formulated broad supervisory standards, guidelines and recommends statements of best practice in banking supervision. However, those international banking regulation agreements are not applied to investment banking and to hedge funds. In my opinion, it is not clear so far that the world economy needs a new regulatory institution, but it is clear to me that it needs a revamped international regime to regulate those short-term transactions. Then, one alternative in order to avoid other financial global crises is to build a new Basel agreement to tackle this issue.

Financial markets cannot discipline themselves since they cannot move quickly and decisively enough to rescue institutions under hazardous conditions. Historically, they have not been able to avoid the recurrent occurrence of financial crises, or even of moderating satisfactorily its harmful consequences. Past and present experiences teach us that financial crises have spread all over the world, and have been managed with help of some forms of government intervention. Historically, when it did not happen (as during the in the 1929 crisis), the consequences were extremely harmful. At that time, the worldwide economic downturn plunged the global economy into a period called The Great Depression. That does not mean that financial globalisation is coming to the end but it does mean that to avoid the occurrence of financial crises is always preferable (and more economically viable) than to manage governments bailout of corporations. Especially because there are a couple of major players concentrated in few countries that strongly influenced the performance of all global financial markets. Accordingly, the future of the contemporary financial regime might be a stage of more state regulatory agencies intervention.

In summary, institutions are part of the “rules of the game” and also part of the solution. There is no definitive final answer to the problem of inequality among nations under the capitalist system but there are ways to reduce the unfortunate consequences resulting from the capital will.

Difficulties are ubiquitous in a research of a theme with such a large historical and geographical scope. The increasing popularity of financial globalisation has brought to light a variety of studies, methods and approaches. The wide variety of approaches and the proliferation of many different econometric tests have shown more clearly how hard it is to enter and sustain a different interpretation. Moreover, many difficult arrangements had to be made to gather the historical data, especially with regard to the late 19th century.

The thesis established the J-shaped pattern, highlighting the importance of institutions to the development of global financial activity, and presents the problematic consequences underlying the current experience. The results of this research invite enquiry on the sustainability of the current financial architecture and encourage new development strategies. It is hoped therefore, that this study may expand research in that area. In fact, studies about a new financial architecture are an ongoing research programme and should be more inclusive in order to avoid a situation whereby “it” can happen again. Possibly, this is the appropriate moment to rethink the unfolding of the current financial globalisation. Without a new world financial design defined democratically in political terrain by representatives of global society, a new depression period can last for a long time, bringing disastrous consequences to most people. But, is anyone listening?

VII. APPENDICES

1. A diachronic study of the word **globalisation**[63]

Globalisation had reached a wide audience after the 1990s within economics and in other social sciences (see appendix 2). The usage of the word is recent in economics, despite of the phenomenon and then the idea behind the word is old.[64] As presented in figure 16 in appendix 2, between the 1970s and the 1980s scholars used different nouns (*internationalisation, transnationalism, interdependence*, etc) to address the issues related to the phenomenon of global market integration. Nevertheless, after the 1990s they seem to have agreed to use the word *globalisation* as an umbrella term to study the increased interconnectedness of markets worldwide. Many reasons could explain this fact. There are elements to consider beyond the borders of economics since it involves some sociological aspects, which are outside the scope of this thesis. Nevertheless, a diachronic analysis can demonstrate how the meanings and forms of this word have come into being. But first, it is important to consider John Searle's (1995) arguments about language, institutions and facts.

Searle's approach is quite influential to explain one possible reason for the prevalence of the term *globalisation* in the current era. According to him, "institutional facts in general require language because the language is partly constitutive of the facts" (p. 70). As an institution, language is the collective public and conventional representation of facts, and a way of representing something new that has been happening, and has shaped the world in the collective mind. Searle's assertion may be applied to the adherence of the word *globalisation* since the 1980s. According to him (1995:69):

> The status exists only if people believe it exists, and the reasons function only if people accept them as reasons. Therefore, the agent must have some way to represent the new status, he cannot do it in terms of prelinguistic brute features. … Because the new status exists only by convention, there must be some conventional way to represent the status or the system will not work. … We have to have words or other symbolic means to perform the shift from the X to the Y status."

[63] In a previous version of the thesis, this appendix was written as a part of a chapter. However, despite the importance of this material for a quantitative evaluation of globalisation and financial globalisation literature in social sciences over the last decades, the data presented here is not central to underpinning the subsequent work in the thesis.
[64] It can be traced back to the period of the Age of Discovery centuries ago or even before that (Held e t 1999). This periodisation of globalisation was discussed in chapter 2, section 3.2.

Words themselves are nothing else but conventions and human language changes throughout time. Humans are capable of abstract thinking, i.e. they are capable of using concepts, and their language ability allows them to employ words to express abstract notions. The usage of the word *globalisation* is connected with the gradual but pregressive and thick development of the process of trade and financial market interconnectivity. In the following two decades after the 1960s, the word appears not to have been in common usage in English. Historical factors explain this gap. Due to the lack of more substantial and ongoing manifestations of globalisation, most English-speakers, scholars and ordinary people, had little or no acquaintance with the meaning of *globalisation* as it is understood today. However, especially after the 1980s, the world was transformed by extensive changes in trade, production and finance, which created favourable circumstances for the labelling of the notion, then the word gained currency as it began to enter the mainstream in the 1990s. This conclusion seems to be in accordance with what was discussed about the development of the globalisation literature in the first section of this chapter (figures 11 to 16 appendix 2).

The prevalence of the word *globalisation* after the 1990s is strongly connected with its etymology. Referring to the global spread of the term recently, Anthony Giddens (2002:7) correctly asserted that during the late 1980s the term was hardly used in academia or in everyday language. Then he stated that it "has come from nowhere to be almost everywhere." The second part of his sentence is what this chapter (and the following one) is about, but the first part is not an accurate statement. The study on the origin of the term plays an important role in this chapter since it adds to the debate the importance of the language as an institution that evolves while general transformations in diverse areas and institutions have occurred.

In its current meaning, globalisation evokes a myriad of changes and events that were allegedly involving the entire world. At first, the noun *globalisation* appeared in English dictionaries as a derivative of *global*, which in turn has its origin in the Latin *globus*, initially "sphere" and later "earth", "globe", "world". According to the sources researched, it is difficult to tell precisely when the word *globalisation* was coined in English. However, it is possible to identify when the word was recorded in English dictionaries.

The online edition of the Oxford English Dictionary (OED) states that *globalization* was defined for the first time in the 1961 edition of the Webster's dictionary (spelled with “z”).[65] The OED online also asserts that it was the first published mention of the word too. The 1961 edition of Webster’s also suggests that the noun *globalization* can be used interchangeably with the noun *globalism*, despite defining globalism slightly different: *globalisation* is means the act of globalising while *globalism* is defined as a policy or system promoting globalisation.

Despite of the fact that it appeared in The Oxford Dictionary in 1971, the OED online suggests that the first printed appearance on British soil was on 5th October 1962 in the *Spectator* magazine, which uses the word (spelled with *s*) as part of an intriguing prophetic statement: “globalisation is, indeed a staggering concept”. At that time the journalist could not imagine that not only the concept but also the causes and consequences of the phenomenon would be intensively studied in the coming years by a variety of scientists belonging to different disciplines. Furthermore, according to the OED online, some related forms of the word were used for related meanings in the US and the UK before *globalisation* was attested in printing. For instance, on 4th April 1959 *The Economist* used the expression “globalised quota”, while the word *globalism*[66] was mentioned in the 23rd January 1965 issue of the same periodical. On 28th January 1962, the British newspaper *The Sunday Times* used the word *globalising*. In 1953 the term *globalist* was printed in *The Book of Year* of the Encyclopaedia Britannica. Furthermore, in the early 1960s, the term *global village* was coined and popularised by the Canadian educator and philosopher Marshall McLuhan,[67] and the expression *global warming* was used in *The Economist* on 4th June 1979.

These are only few representative samples collected by the OED online that reveal how the word *globalisation* and correlated terms were used in the English language in their earliest printed mentions. Nevertheless, the concept may have appeared earlier and the word may have initially been restricted to particular types of verbal communication such as political speeches, parliamentary discourses, etc (Scholte 2001:613).

---

[65] Here is the definition provided by the Webster’s 1961 edition: “Globalization n, -s: the act of globalizing or condition of being globalized.”

[66] Scholte (2002:4) found this word mentioned in: Reiser, O.L. & Davies, B. (1944) *Planetary Democracy: An Introduction to Scientific Humanism*, New York: Creative Age Press, pp. 212, 219.

[67] McLuhan emphasised the role played by high technology and international communications encouraging a planetary connection, and then forming one global community. He developed this concept in various books. The key ones are: McLuhan, Marshall (1962). *The Gutemberg Galaxy: the making of typographic man*. Toronto: University of Toronto Press; McLuhan; and McLuhan, M. & Fiore, Q. (1968) *War and peace in the Global Village*, New York: McGraw-Hill.

In other languages, such as most European languages, and also some others outside Europe, the term apparently penetrated from English when the modern concept of globalisation was developed. It is out of the scope of this section to scrutinise the origin of this word in many languages but judging by countries that have been less globalised than the US and the UK basically, one can conclude that the word may have penetrated into different languages under the influence of English. The following examples can illustrate it: French *globalisation*[68] or *mondialisation*, Italian *globalizzazione*, Spanish *globalización*, Portuguese *globalização*, German *globalisierung*, Dutch *globalisering*, Danish *globalisering*, Swedish *globalisering*, Russian *globalizatsia*, Czech *globalizace*, Slovak *globalizácia*, Polish *globalizacja*, Latvian *globalizácija*, Malay *globalisasi*, and Indonesia *globalisesion*.

Besides, many languages spoken in African and Asian countries (most of the Commonwealth Nations, and other Asian autonomous regions such as Tibet, etc), this word does not exist in their mother tongues or dialects, and then they simply adopted the English word. It may be due to their colonial heritage or not since it also occurs in languages spoken in countries that have never been colonies but are currently influenced by English. Moreover, in some languages, people also use derivates of other words to express global (world) integration.

I have been searching for other scientific evidence on the origin of the term in other European languages. Then, I found an article from the German linguist Rosemarie Schnerrer. According to Schnerrer (1998), while the word *global* has a long tradition in German (at least since 1882), the terms *globalisation* and *globalise* are fairly modern. They can only be traced in the index of the German Dictionary of Foreign Words, and in the Dictionary of German Contemporary Language[69] since the 1950s. According to her, the earliest evidence found in the German Dictionary of Foreign Words of 1959 relates to the subject area of economics. She quotes the FAZ newspaper, 24.12.1959 as follows: "The bilateral announcement following Spain's entry into the OEEC and the concomitant partial liberalisation and globalisation of Spanish imports have been stopped almost completely despite the previous agreement". After that time, the term spread fast in international trade and stock market.

[68] According to the research done in this chapter, *globalisation* has been derived in French before English, which means that only the current meaning has been attached to it under English influence.
[69] Deutsches Fremdworterbuch, Worterbuch der Deutschen Gegenwartssprache.

The most distinguished controversy about the usage of the word *globalisation* within academia is this term in French. As discussed in section 2, the term *globalisation* was used in 1927 to denote a method of teaching developed by a psychologist. However, French scholars have recently been using two terms to designate the phenomenon: *globalisation* (Aglietta 1995), and *mondialisation* (Chesnais 1994, 1997, 2001, Gerbier 1997, Rogalski 1997).

Mondialisation comes from the French word *monde* (world). One of the first economists to acknowledge the concept of *mondialisation* was the French economist François Chesnais. His books and articles (Chesnais 1994 and elsewhere) contrast the English term *globalisation* with the French *mondialisation.* As stated above, according to Chesnais (1994 and elsewhere), the term in English was popularised by the American Schools of Business and Management, and bear neoliberal principles. Scholars and consultants belonging to those schools have developed corporative and marketing strategies in order to encourage the great corporations to penetrate the global markets, taking advantage of the technological apparatus of telecommunications and the liberal reforms that were in course during the early 1980s.

In opposition to that notion, Chesnais develops a Marxian interpretation of the term based on the Marxist concept of capital valuation. Accordingly, he defines *mondialisation* as a historical process of capital valuation encompassing the productive and financial spheres worldwide and subjected to political and ideological interferences. Centring the definition on the cyclical and contradictory dynamics of the capital, he advances gloomy prognostications about the future of the world economy. He considers the concept of *mondialisation* in a more general way and accurately describes what has been happening in the world economy recently. For this reason, did not use the words *globalisation* and *mondialisation* interchangeably.

On the other hand, French economic scholars (even Chesnais) use the expression *globalisation financière* (financial globalisation) (Aglietta 1995; Chesnais 1997, 2001; Gerbier 1997; Rogalski 1997) to designate the globalisation of financial markets.

In order to evaluate the first records of *globalisation* in British English, a small a questionnaire has been sent to the most authoritative dictionary publishers to collect information regarding the usage of the term globalisation. Two questions have been addressed: 1) When was the word *globalisation* (also spelt *globalization*) recorded in that particular dictionary for the first time? And 2) When was it first used as a headword?

In British English, the term appeared for the first time as a derivative in the Oxford English Dictionary Supplement in the early 1970s but only in the mid-1990s did the same dictionary separately defined it. Table 30 summarises the results, including the first appearance ever and the first appearance as an entry in its own right.

Table 30. English dictionaries entries for the word globalisation

	First appearance ever	First explanation under *global* as a derivate	First appearance as an entry in its own right
Webster's	1961	-	1961
Oxford	1972[1]	1972	1995
Chambers	1983[2]	1983	-
Collins	1991	-	1991
Cambridge	1995	1995	1995
Penguin	2000	-	-

Source: Questionaire.

[1] OED *Supplement*.

[2] According to Vicky Aldus, Assistant Editor of Chambers Harrap Publishers Ltd, the term *globalisation (z)* remained recorded as a derivative of the word *global* from 1983 until the 2006 edition of the Chambers Dictionary and does not appear as a headword. The noun *globalization* and the verb *globalize (s)* belong to the same entry, the meaning of the latter being "to make global".

Globalisation was recorded as a derivative under *global* or *globalize* from 1961 to the early 1990s. Dictionaries do not normally provide extensive definitions for every derivative but rather relate them to some or all the meanings of the headword under which they appear. For example, the verb *globalise* may be explained as "to make global", which refers the dictionary user to the definition of *global*. Moreover, a word such as *globalisation* may appear with no explanation whatsoever, it's meaning being conveyed by the suffix –tion. In such a case, the user is expected to know the meaning of the suffix and based on that to understand the meaning of the word as "the action of making something global or worldwide". The user is again referred to global for a detailed definition.

Dictionaries do provide a separate definition for some derivatives, and may even list them as separate headwords, but usually only when their meaning differs considerably from the meaning that may expected to relate to the headword or when they have acquired a particular significance. If the word has acquired a specialised meaning, then it may be considered necessary to provide a separate entry. However, since language change is a gradual phenomenon that happens over long periods of time (and that applies to the change in the meanings of words too), it is very difficult to say exactly when a derivative word "deserves" a dictionary entry of its own. Most of the time, that is the editor's choice, which differs from the publisher, as confirmed by the table above. Currently, some dictionaries list *globalisation* as a headword. This is obviously due to the increasing significance in economics, politics and other areas of the notion it denotes. For that reason, the next section will discuss the term according to the interpretations of some scholars of economics and correlated disciplines.

2. Groundwork of globalisation and financial globalisation debate

Globalisation is widely assumed as a major feature of contemporary society, however most studies on the subject have not investigated the groundwork literature on globalisation and financial globalisation. Despite a deluge of publications on the subject over the past decade or so, scholars have not argued when the subject was first studied, and how much has been written about it within academia.

This appendix is structured in three parts.[70] The next section presents the groundbreaking scholars who wrote the first books, articles, and PhD theses on globalisation. Section 2.2 deals with the progression of the literature on globalisation during the 1970-2005 period, offering a concise survey of absolute and relative figures of the width and diversity of the academic literature. Again, this section makes use of journal articles, books and doctorate theses, mostly written in English. At the end, section 2.3 presents a brief assessment of financial globalisation.

2.1. Groundbreaking scholars

Scientific knowledge is essentially disseminated through various publications, such as books, journal articles, an assortment of papers (for instance, working, discussion, policy, or staff papers), conference proceedings, unpublished doctoral theses, reports, bulletins, memos, and other materials, not to mention a variety of virtual resources available on the internet. It is virtually impossible to assess all these resources in order to present the groundbreaking scholars who have approached globalisation (displayed in this section), or to evaluate adherence to the subject in academic circles (presented in the next one). However, both tasks can be dealt with if assessments are made through diverse databases specialised in providing key scientific information, such as bibliographic data about some of the publications mentioned above. Accordingly, seven different but mutually complementary authoritative databases have been researched to

[70] In a previous version of the thesis, this appendix was written as a part of a chapter. However, despite the importance of this material for a quantitative evaluation of globalisation and financial globalisation literature in social sciences over the last decades, the data presented here is not central to underpinning the subsequent work in the thesis.

collect the information required for this section and the next one, as follows: EconLit, Social Sciences Citation Index (SSCI), JSTOR, PsycINFO, Bowker's Global Books in Print, Index to Theses, and Dissertation Abstracts (DISS).

Econ-lit, SSCI, JSTOR and PsycINFO are well-known journal articles databases widely used by researchers in their respective fields. The relevance of this search to present a broad picture of the globalisation literature can be inferred from Huáscar Pessali (2004:30) when he reasons that "since the inter-war period, academics have been conversing gradually more through shorter pieces of work – papers and articles – published in specialised journals. These journals have been growing in number and specialising further ever since. The subject of economics is no exception."

Furthermore, the investigation of the groundwork of the globalisation debate proposed here does not only cover journal articles, but also books and PhD theses. On this account, Bowker's Global Books in Print, The Index to Theses, and the DISS will be researched. Bowker's Global Books in Print is an English and (in some extent) Spanish-language database of books from the US, UK, Canada, Australia and New Zealand. The Index to Theses and the DISS are databanks of doctorate thesis from the UK and Ireland, and American, Canadian and European Universities respectively. Altogether, they cover a great amount of journal articles, books and theses produced worldwide.[71] Accordingly, albeit incomplete, the results reveal the groundwork of the globalisation debate within academia and provide a broad picture about the literature developed over last quarter of the 20th century.

A search was made in all the databases mentioned above using the two alternate spellings *globalisation* and *globalization* in order to discover the first article, book or PhD thesis on the topic under discussion. PsycINFO presented the first publication that used the word *globalisation* amongst all the databases consulted. Searching through the period from 1806 to 2007, 2,115 hits appeared.[72] As this word is written by the same spelling in both English and French, the database found two articles written in French in 1927 containing the word *globalisation* in the title. One was published in a Journal of Psychology and the other in a Journal of Pedagogy.[73] However, the term was used

[71] Appendix 2A provides further methodological information about the databases.
[72] Accessed at The British Library on 19th April 2007.
[73] Decroly, O. (1927). "Le principle de la globalisation applique a l'education parle et ecrit." [The principles of instruction by wholes applied to written and spoken language (suggested title translation)]. *Archives de Psychologie*, 20, pp. 324-346; and Herlin, A. (1927). "La methode Belge de demutisation;

with a completely different denotation from the one used in economics. One of the papers was the seminal article written by the Belgian Psychologist Ovide Decroly in which he developed his method for teaching reading and writing to deaf and mute children. The other one was an application of Decroly's method.

From 1927 to the early 1940s no records outside psychology or pedagogy were found of articles, PhD thesis or books searching the word *globalisation* (or *globalization*) in the title, abstract or as a keyword. For that period, the databases listed only articles using the French word globalisation, published in psychological and pedagogical journals at random. From 1927 to 1970, only 12 hits were found. If the period is expanded up to 1994, only 61 papers appear, which means that 2,054 (97 percent) came out from the second half of the 1990s to 19th April 2007. On the whole, the word is used with different meanings in different publications in these two areas, the latest ones including analyses of the numerous psychological effects of economic globalisation on human behaviour.

Analysing the results of a search made using both PsycINFO and the multidisciplinary database JSTOR, one can see that Decroly's method was very influential. Many other articles published in journals of psychology, pedagogy and education quoted his seminal 1927 paper. After all, from 1927 to the early 1940s, the term *globalisation* (-*zation*) was used by these disciplines, in French, and concerned a method of teaching deaf mute children. There were no records of books and PhD theses during that period.

However, in 1951, the American Sociologist Paul Meadows mentioned the word *globalization* (p. 11) within inverted commas, with the same meaning with which it is used currently. In my opinion, his article could be considered a seminal paper which, on sociological grounds, reveals key insightful thoughts relating globalisation to the culture of the modern industrial society. For obvious reasons, he does not provide a scientific analysis of globalisation, nor does he develop the concept *per se*, but puts forward a basis of a debate about the tendency towards cultural universalisation in the context of the advent of modern industrial technological societies. According to him, the tendency had been stronger than a cultural localisation. In Meadows's (1951:11) words: "with industrialism, a new culture system has evolved in one national society

application de la function de globalisation du Dr. A. Decroly a l'enseignement des sourds-muets." [Belgian method of demutization; application of Dr. A. Decroly's total method to the teaching of deaf mutes]. *Bulletin de la Societé Francais de Pedagogie*, 26, pp. 36-41.

after another; its global spread is incipient and cuts across every local ethos." As this tendency is supposed to evolve over time, he concludes that this new culture pattern is in the process of "globalization," which is "replacing the central mythos of the medieval Church." As will be shown in section 2.3, Meadows grasped the globalisation concept ten years before the first dictionary definition in English.

Likewise, in 1960, Pierre Leonard wrote an article in French, not directly related to globalisation but using the word in a way closely connected with today's meaning. The theme of his article is the cyclic fluctuations in maritime transport after WWII. He establishes a causal relationship between the Treaty of Rome (signed on 25th March, 1957 by France, West Germany, Italy, Belgium, the Netherlands and Luxemburg), globalisation and liberalism. According to him, the terms of the Treaty (which established the European Economic Community - EEC) encouraged progressive *globalisation* (meaning a global integration of most countries in terms of trade flows), and introduced a ferment of liberalism that should eventually spread to all Organisations for European Economic Cooperation (OEEC) countries.[74]

In order to present the evolution of globalisation literature during this early stage, Box 1 displayed in appendix 2B represents the first 50 scholarly articles found in JSTOR searching in full-text. The results clearly show that *globalisation* was randomly and gradually used in publications concerning education, administration, law, politics, mathematics and later, by the late 1960s, economics. All things considered, it is evident that from the 1950s onwards, the word, initially restricted to psychology, pedagogy and education, came to be used by some other disciplines bearing different meanings. In the late 1960s, this term timidly migrated from these areas to a wider variety of social and natural disciplines, including economics.

The random walk tendency identified in Box 1 can be confirmed by the results found in doctoral dissertations, despite this figure being inferior to the number of articles published within the same period, for obvious reasons. The first PhD thesis containing

[74] Leonard (1960:25) asserted that "*Les dispositions du traité de Rome, par la globalisation et l'accroissement progressifs des contingents qu'elles stipulent, ont introduit sans nul doute un ferment de libéralisme qui devrait normalement s'étendre aussi - avec autres pays de l'O.E.C.E group d'Etats a, il faut le noter, depuis plusieurs annés admis pour la réparation des navires une totale libération contingentaire*."

the word was submitted at the University of Chicago in 1967.[75] The subject code displayed by DISS presents this research as related to various subjects of social sciences, but not economics *per se*, such as: "business, administration, management, anthropology-cultural, education, bilingual and multicultural, education adult and continuing". The term took at least one more decade to appear in books. According to Bowker's Global Books in Print, the first book that used the term as a keyword was published in 1978,[76] and is related to economics.

Another way of more precisely identifying a topic in any printing resource using databases is narrowing the search to publications that include the word *globalisation* (spelled with *s* or *z*) in the title. Having searched in all the mentioned databanks, the first article appears to have been published in 1968. It was found through the JSTOR and its core argumentation is closer to politics than to economics.[77] In SSCI the first article to include the word in its title was published in 1976 in a Journal of Sociology.[78] On the EconLit platform, the first two were published in 1984, both related to economics.[79]

Similarly, the first PhD thesis containing the word, with the spelling *globalization* in its title, was submitted at the University of California (Los Angeles) in 1971.[80] The subject code of this thesis presents it as a study in mathematics. In this list of "the firsts", the first book with *globalization* in the title was published in 1983,[81] and it is related to economics.

---

[75] Edwin, D. L. E. (1967) *Global training and education: an examination of context, cultural toughness, and minimum necessary change in international diverse organizational settings*. PhD Dissertation, Loyola, University of Chicago, 506 p.
[76] Mankekar, D. R. (1978) *One way free flow*. Asia Book Corporation of America.
[77] Modelski, G. (1968) "Communism and the globalization of politics." *International Studies Quarterly*, 12 (4), December, pp. 380-93. This search in the JSTOR database (http://www.jstor.org , accessed on 11th May, 2007) for the term *globalisation* or *globalization* from 1665 to 11th May 2007 produced 868 hits in the title and 16,736 hits in the full text.
[78] Lamy, P. (1976). Globalization of American Sociology: excellence or imperialism. *American Sociologist*, 11 (2) pp. 104-14.
[79] Lipietz, A. (1984) "The globalization of the general crisis of fordism." *CEPREMAP Working Papers*, 50 p., and Helmsing, A. H. J. (1984) "Economic structure, trade and regions." *Institute of social Studies Working Papers*, 38 p. On this account, it is worth mentioning the suggestion of the external examiner of this thesis that the first article in a core economics journal explicitly addressing globalisation is: Harris, R. G. (1993) "Globalization, trade and income." *Canadian Journal of Economics*, 26 (4) pp. 755-76.
[80] Chan, S. J. B. Y. (1971) *Generalized convexity and globalization*. PhD Dissertation, University of California, Los Angeles, 118 p.
[81] Levitt, T. (1983) *Globalization of markets*. Harvard Business School, reprint. This reference is classified as a book according to the Bowker's Global Books. Theodore Levitt published an article with the same name in the *Harvard Business Review*, for this reason it appears in the SSCI database as a journal article. Apparently, the reprint edition of the *Harvard Business Review* was in the form of a booklet.

Up to this point, four important conclusions can be drawn based on this bird's eye view of the earliest academic research on globalisation. First, the word *globalisation* was used in academia for the first time in 1927, in French, by scholars of psychology and pedagogy, and its meaning was completely different from its connotation today.[82]

Second, during the decades after the 1920s, the word was used by a variety of scholars of different disciplines such as sociology, anthropology, politics, economics, business, administration, geography, history, and law, bearing different meanings. Present-day students may suppose that this subject appeared for the first time in academic literature on economics due to two basic reasons: firstly, the striking amount of literature relating globalisation to its economic aspects in recent years; and secondly due to the increasing interest in economic globalisation shown by the media worldwide. In fact, economic globalisation has been a hotly debated aspect most recently due to its problematic and controversial repercussions in every corner of the world, nevertheless the evidence presented here has shown that the earliest thoughts on globalisation had been developed by other disciplines of social sciences, particularly sociology and political science. Economists started to investigate the subject systematically in the 1980s.

The third conclusion is that the subject globalisation had an interdisciplinary character from the very beginning of the scientific investigation, i.e., it has been approached in several aspects and dimensions, and examined by many disciplines.

Fourth, some sources have asserted that the term *globalisation* was coined by Theodore Levitt in his 1983 paper/book[83] but the evidence presented here dismisses this conclusion. Levitt was a German-American economist at Harvard Business School and the editor of the *Harvard Business Review* (HBR) from 1985-89. He wrote various books and articles on marketing, becoming a well-known expert in this area. With his

[82] Researching through the aforementioned databases, I found no academic record or any other mention of this term in English or in other language before 1927. However, as noticed beforehand, these databases are heavily concentrated in articles written in English, so one should take into account that the word may have been previously used in other languages, with or without the current meaning. It may be much older than we can imagine since the databanks did not search papers in languages that use a type of writing other than the Latin alphabet, e.g. Cyrillic alphabet or Chinese script.

[83] Sergey Kozmenko & Helen Chuyko (2003). See also The New York Times on 6th June, 2006 (available at: http://www.nytimes.com/2006/07/06/business/06levitt.html?ei=5088&en=959815b0e89ed1c2&ex=1309838400&adxnnl=1&partner=rssnyt&emc=rss&adxnnlx=1190329880-U2jnFL3dyq0huV8pD7m9Qw), Businessweek online on 29th June 2006 (available at: http://www.businessweek.com/bschools/content/jun2006/bs20060629_5211_bs001.htm), and NDTV.com online on 7th July 2006 (available at: http://www.ndtv.com/convergence/ndtv/story.aspx?id=NEWEN20060006618).

1960 HBR article “Marketing Myopia” he became an author of international renown. Over the next decades, he published papers with various purposes applied to marketing, management, and business. Eventually, in 1983, he published “The globalization of markets,” examining the new international markets for standardised consumer products. “The globalization of markets” got complimentary remarks regarding the cutting-edge analysis of the burgeoned phenomenon.

Levitt’s main achievement was to help popularised the term arguing that the new technologies in communication and transportation boosted the worldwide economic, commercial and productive connectivity. As a result, global markets for standardised consumer products emerged, dominated by what he called the “global corporation”. He also distinguished the term *internationalisation* from the term *globalisation*. According to him, *internationalisation* reflects the dominance of traditional actors such as multinational companies and national governments, while *globalisation* reflects a new relationship between global corporations and globalised markets. In his opinion, these are the main driving forces spurring the global market’s integration, which encouraged him to assert that “the globalization of markets is at hand” (p. 92). Some of his arguments and predictions failed (see Abdelal & Tedlow 2003) but, in fact, he was one of the first scholars in economics to address core aspects related to economic globalisation.

As will be discussed in section 4, the word *globalization* was first printed and defined in the American English dictionary Webster’s in 1961. The 1961 definition (presented in section 2.3) already explains globalisation as a phenomenon that is worldwide in scope. Therefore, Levitt did not coin the word and he was not the first to realise this possible level of planetary integration. He may have popularised the term and brought it into the mainstream business audience but, the evidence presented here dismisses the fact that he coined it, and also demonstrates that globalisation had been addressed in social sciences as early as 1951.

Besides the aforementioned constellation of groundbreaking scholars such as Meadows (1951), Leonard (1960), Edwin (1967), Modelsk (1968), Chan (1971), Lamy (1976), Mankekar (1978), many others used the word before him or in the same year (according to the data collected, see Appendix 2), including Michael Porter, who was a professor at

Harvard Graduate School of Business Administration.[84] Moreover, two books and three PhD theses appeared in that year (Appendix 2D) using the term. Therefore, it is less likely that *globalisation* started to be used in economics in 1983 through the groundbreaking work of Levitt. His article provided useful insights, enabling a better understanding of the emergence of global markets for standardised consumer products, and helped globalisation to gain widespread recognition in economics. Nevertheless, it is more appropriate to recognise that the topic was of interest for economics as a collective, academic endeavour and was accomplished by more than one scholar during the 1980s.

2.2. Assessing the relevance of globalisation as a subject in social sciences through key authoritative databases

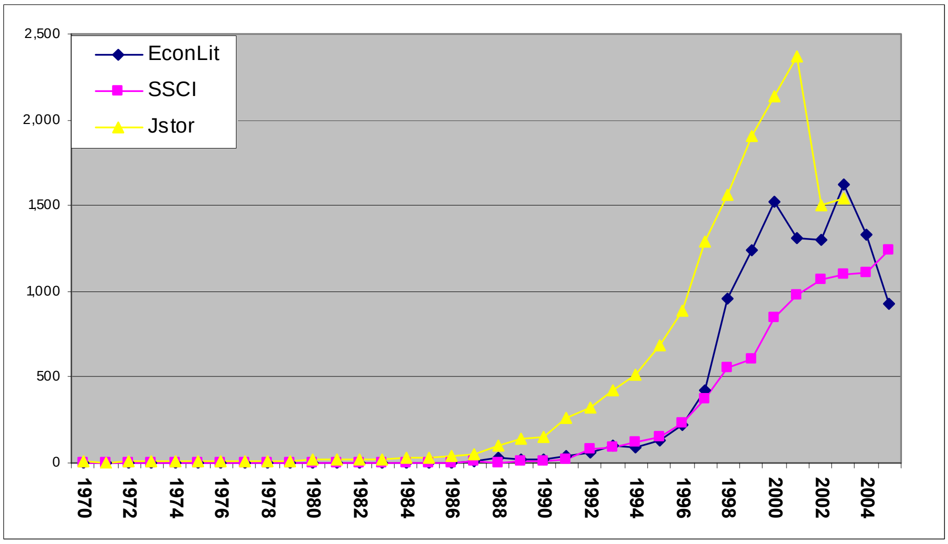
Globalisation has been a subject of extensive study in social sciences recently. Unlike traditional key topics already well-established in both the domains of macro- and microeconomics, globalisation was barely studied two decades ago. However, as one can conclude from this section, it became the prominent "youngest member of the family" in economics in recent years. In fact, since the mid-1990s, it has received a remarkable amount of attention, not only from economists but from social scientists in general, and even from scholars of other disciplines. The proliferation of the literature on globalisation to many areas of scientific knowledge, as well as many of its correlated topics, is an indication of the relevance of this theme as an interdisciplinary research programme. This section aims to present a brief survey of the adherence of the audience within academia from 1970 to 2005.

The initial objective is to assess the scope and volume of academic articles including the word *globalisation* spelt either with an *s* or a *z* in the title, abstract, or as a keyword, or, in the case of the JSTOR, also in the text. The results of this search presented in Figure 11 are an indication of how much economists and other social scientists studied the theme during the above period.

[84] Porter is one of the main scholars to develop concepts of competitive strategic planning applied to industrial corporations in the context of market globalisation. See for example Porter, M. (ed) (1986) *Competition in global industries*. Boston: Harvard Business School Press; Porter, M. (1992) Capital disadvantage: America's failing capital investment system, *Harvard Business School Review*, 70 (5) pp. 65-82.

Figure 11 shows two marked tendencies: from 1970 until the early 1990s, and between the mid-1990s and 2005. During the first period, the number of articles increased only gradually. The growth rate was very slow (even negligible) until 1987. Only in 1988 did the total of the three databases reach over one hundred articles. This rate of increase was more or less the same until 1991 (see Appendix 2C). From this unpretentious start, it grew little during the first half of the 1990s and reached a sustainable and upward pattern from the mid-1990s to 2005, although two of the three indicators (EconLit and Jstor) presented a falling off tendency after 2001. Since the researched database contained papers from many disciplines, the figure reveals a wider and growing interest in globalisation in various areas of study, and also professional recognition of this topic in more recent years.

Figure 11. Number of articles that contain the term *globalisation*[a] in the article title, abstract or as a keyword: 1970-2005[85]



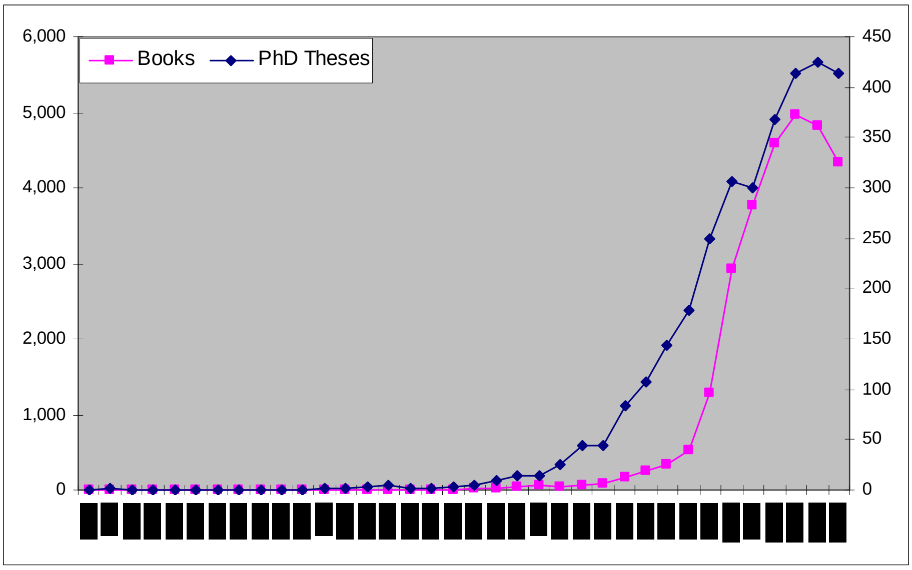
Source: EconLit; Institute for Scientific Information – Social Science Citation Index; JSTOR
[a] Includes the spelling of the word with either *s* or *z*

This increased interest can also be assessed in a different way through books and doctoral theses. These figures are shown in Figure 12, which shows the same two phases displayed in Figure 11: from the 1970s to the first half of the 1990s, the subject was scarcely discussed in academia in books and theses. In 1992, only 59 books and

[85] This figure is based on data in Appendix 2C.

theses were published, in contrast with an impressive 5,374 in 2003, the highest score of the period.

Figure 12. Number of books and theses that contain the term *globalisation*[a] as a keyword: 1970-2005[86]



Source: Dissertation Abstracts (DISS), Index to Theses; Bowker's Global Books in Print.
[a] Includes the spelling of the word with either *s* or *z*.

Summing up the number of all these publications presented in Figures 1 and 2, one can see that scientific endeavour grew significantly during the second period: the number of these publications was just 5 in 1970, 9 in 1980, 182 in 1990, jumping from 860 in 1995 to reach a staggering 9,018 in 2005.

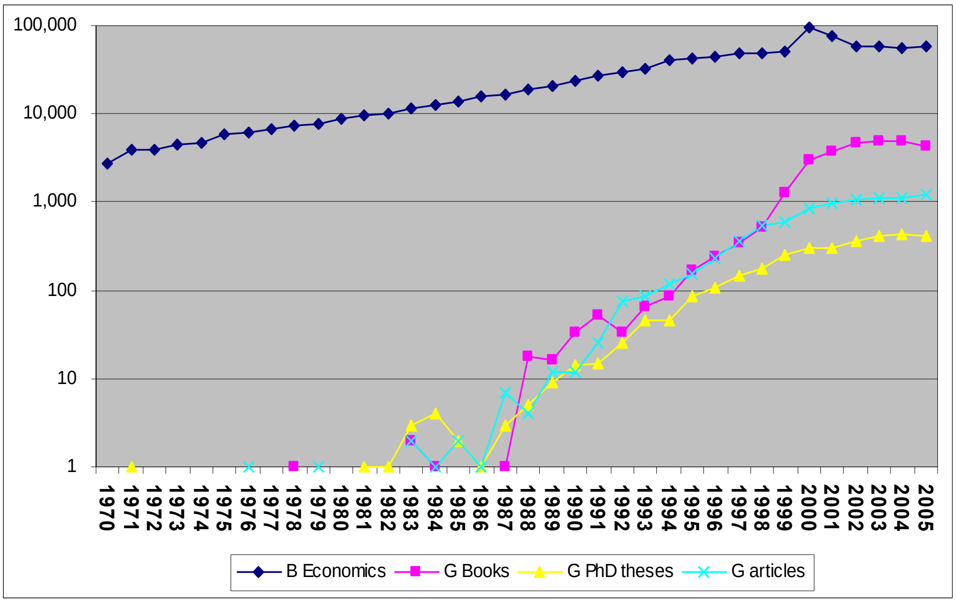
In fact, Figures 9 and 10 are complementary and together represent further supportive evidence concerning the academic adherence of this topic in recent years. They were not plotted together because their dimensions are rather different from each other but, overall, the volume of journal articles, books, and doctoral theses soared very quickly in the mid-1990s and beyond. Accordingly, this means that in the second phase globalisation acquired wide recognition by the social sciences, including economics, and has become a fashionable topic (Hirst & Thompson 1996:195; Grazia Ietto-Gilles 1997:73; Keohane & Nye Jr. 2000:104; James 2001:1; Scholte 2001:613; Bordo 2002:20; Stiglitz 2002:4; Perraton 2003:37).

[86] This figure is based on data in Appendix 2D.

Nevertheless, if analysed separately, the above figures do not provide any conclusion concerning the relative evolution of the literature on globalisation over time. For this reason, Figure 13 compares the results concerning books, theses and articles on globalisation (G), with those for books that contain the term *economics* (B Economics) as a keyword. The data is quite different (especially the value of B Economics, which is very high), and thus they are incomparable in nominal terms. For this reason, the figure has been plotted on a logarithmic scale.

The B Economics line shows a slight tendency of growth from 1970 to the mid-1980s when G literature (books, theses and articles) was practically nonexistent. After the mid-1980s, G literature figures increased sharply and continued to increase steadily in the 1990s. They finally evened out by the end of the period. Even on a logarithmic scale, the pattern is very similar to those displayed above. The overall picture shows that G literature made substantial progress from 1990 onwards. There was a great distance between *economics* and *globalisation* from the 1970s to the early 1990s, but this changed considerably in more recent years. This is additional evidence of the outstanding and consistent progress of academic research in this discipline.

Figure 13. Number of books that use *economics* as a keyword, compared to books, theses, and articles that contain the word *globalisation*[a] amongst the listed keywords: 1970-2005[87]



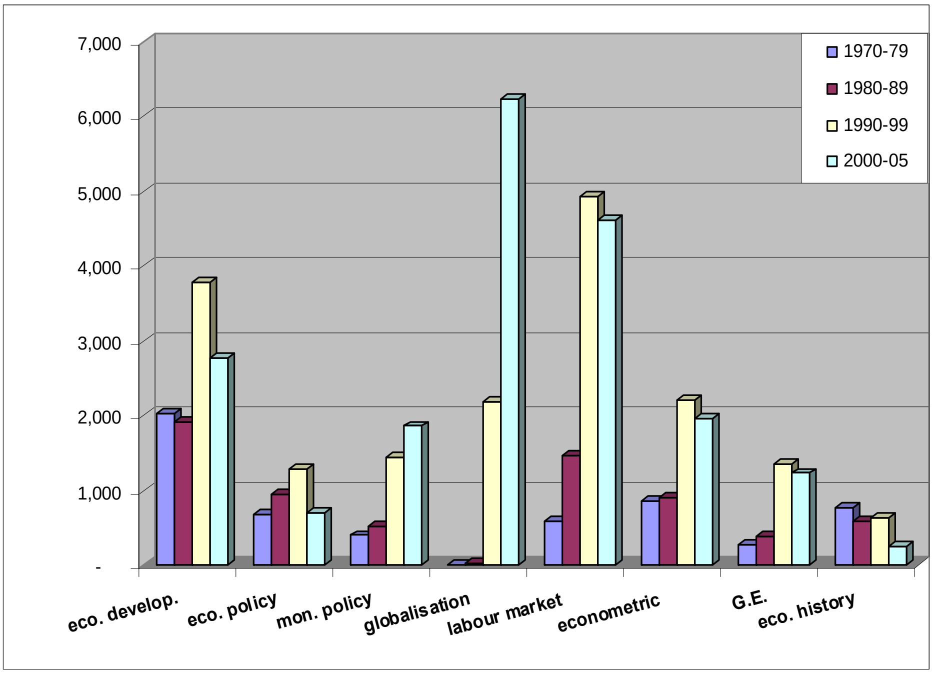
Sources: B Booksand and Globalisation Books comes from the Bowker's Global Books in Print, G PhD theses comes from the British Library Index to Theses and Dissertation Abstracts (DISS), G articles comes from the SSCI.

Furthermore, another piece of evidence can be added to present the development of the literature on globalisation in relative terms after the 1970s. Comparing globalisation with other topics that have been the subject of long-term discussions in economics, the evidence of its growth may be even more impressive. Therefore, in order to provide a better picture of the progress of the globalisation debate, one should also consider how this subject stands in comparison to other well-studied topics during the same period. Data collected from the SSCI was used for such an assessment.

As shown in Figure 14 below, the number of articles on globalisation increased rapidly to outperform other selected subjects during the 2000-05 period. This period thus represents an outburst in academic interest in globalisation.

[87] This figure is based on data in Appendix 2E.

Figure 14. Number of articles that contain the terms *economic development*, *economic policy*, *monetary policy*, *globalisation*[a], *labour market*[b], *econometric general equilibrium*, and *economic history* in their title, abstract, or as keywords: 1970-2005[88]



Source: Institute for Scientific Information – Social Science Citation Index
a Includes the spelling of the word with either *s* or *z*.
b Includes the spelling of the word either with or without *u*.

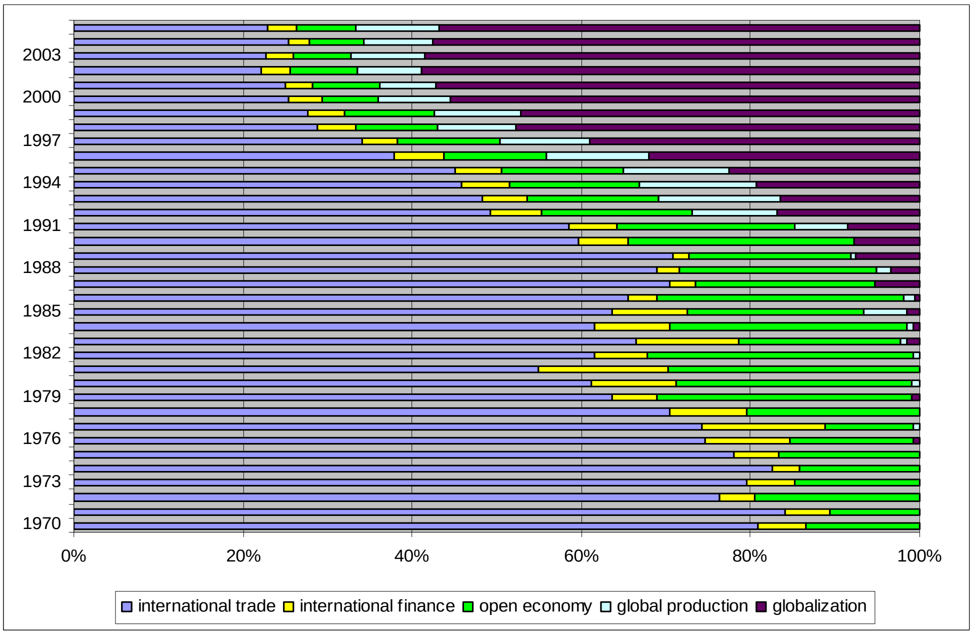
It is worth noting that globalisation started from ground zero in the 1970s while the other subjects are traditionally hot topics in economics. Nevertheless, globalisation achieved comparable levels in the 1990s, reaching its highest level in the early years of the 21st century.

In short, the key message provided by these figures so far also asserts that globalisation has reached a prominent position in social sciences in only a few years. It does not mean that the debate related to international affairs is new or had been ignored in economic literature. On the contrary, Berthil Ohlin and James E. Meade shared the 1977 Nobel Prize for their contribution to the theory of international trade and international capital movements. In addition, Robert Mundell was awarded the prize in 1999 for his analysis of monetary and fiscal policy under different exchange rate regimes, and for his analysis of optimum currency areas.[89] Accordingly, subjects such

[88] This figure is based on data in Appendix 2F.
[89] It is worth noting that the scholars received their Nobel Prizes for work on international economics carried out decades before being made laureates.

as international trade and finance, and global institutions, among others, have been studied for a long time, as shown in Figure 15 below.

Figure 15. Number of articles that contains the terms *international trade*, *global institutions*, *open economy*, and *international finance* and *globalisation*[a] *in the title*, abstract, or as keywords: 1970-2005[90]



Source: Institute for Scientific Information – Social Science Citation Index
[a] Includes the spelling of the word with either *s* or *z*.

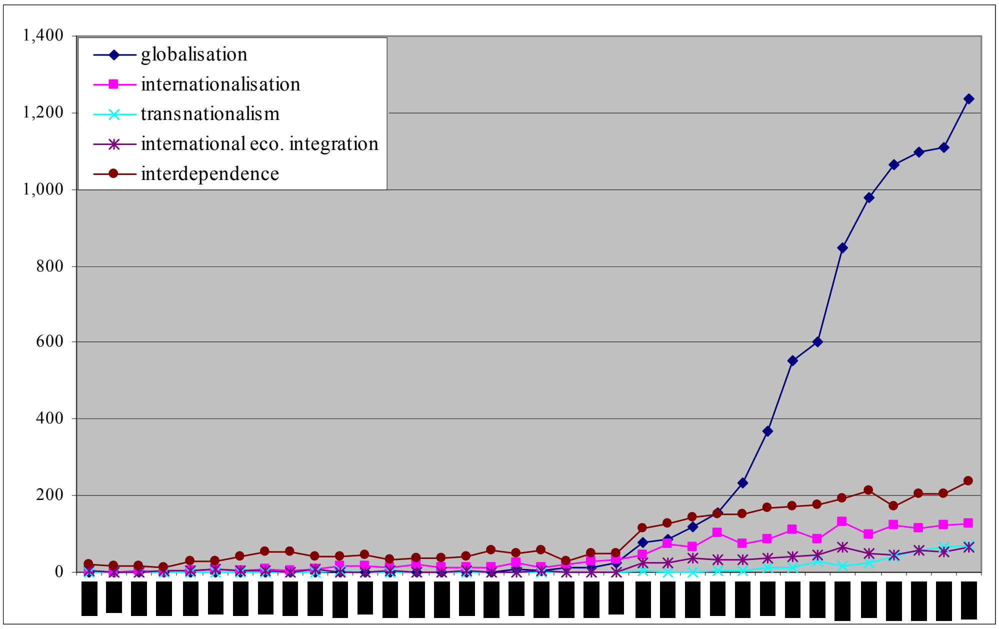
Papers on international trade, international finance and using the alternative term open economy were in vogue in the 1970s and 1980s. Apparently, after the mid-1990s many of these themes were discussed under the umbrella of globalisation, since the figure shows a marked increase in globalisation articles and a proportional decrease in these themes. From 2000 to 2005, the number of articles written under the label *globalisation* surpassed the sum of all the other selected topics plotted in figure 15. The ebb and flow of this literature in fact reinforces the importance of the subject because, in the end, all the words and terms researched are related to globalisation. Arguably, insofar as the term became popular within the academic circles from the 1990s onwards, researchers have agreed to use *globalisation* to describe the variety of issues that were addressed in international economics. In this case, the flood of articles on

[90] This figure is based on data in Appendix 2G.

globalisation after the 1990s could be related also to the previous period if this word was disseminated within academia before.

Up to this point, one can conclude that at least since the 1970s there has been general interest on the part of the academic community in studying subjects related to economic activity beyond national frontiers. As will be discussed in the next section, the usage of the term *globalisation* was not widespread at all at this time. Apart from the terms given in the above figure, scholars were using others with the same meaning at that time. Figure 16 seems to ratify the point that the term *globalisation* itself apparently came into use as a substitute for correlated terms such as *internationalisation*, *transnationalism* and *international economic integration* and *interdependence* (Keohane & Nye 2000) in the academic literature of the 1990s. The upward pattern that emerged contrasted sharply with the steadiness of the other themes. Again, from the mid-1990s to 2005, more articles were published under the label *globalisation* than those on the other three topics together. At face value, the result of this data shows further recognition of globalisation as an academic topic which is the focus of so much scientific effort.

Figure 16. Number of articles that contain the terms *globalisation*[a], *internationalisation*[a], *transnationalism*, *international economic integration* and *interdependence* in the article title, abstract, or as keywords: 1970-2005[91]



Source: Institute for Scientific Information – Social Science Citation Index
[a] Includes the spelling of the word with either *s* or *z*.

---

[91] This figure is based on data in Appendix 2H.

Other terms such as *Americanisation*, *multilateralism*, *transnationalism*, *denationalisation* were consulted, but the results were less significant than those plotted in the above figure. As a matter of fact, Figure 16 complements Figure 15 by adding some more possible topics related to the globalisation debate. All the subjects quoted in these two figures together give an idea of how relevant globalisation as a research topic became. They also show that it has been studied under several different labels, including in disciplines outside economics. It does not indicate that the increased use of the term globalisation actually corresponded to a new phenomenon but that globalisation became an omnibus subject and an umbrella term which comprises (but is not confined to) the subjects displayed in the last two figures.

In addition to the terms mentioned above, one should take into account that there are many other ways of approaching this topic without using precisely the term *globalisation* or the others. For example, American sociologist Immanuel Wallerstein wrote an article in 1974 expressing his concerns about the development of what he called "the capitalist world-economy". He also used the term *world capitalist system* to express the same meaning for which scholars currently use *globalisation*. Taking into account that some other writers may also have used this same nomenclature (or others) to express the current meaning of globalisation, the flood of academic studies should be larger than those demonstrated above.

To sum up, several conclusions can be drawn from the results achieved in this section. Firstly, by the end of the 20^{th} century, *globalisation* had become a widely recognized buzzword in the social sciences since its surge in the mid-1990s.

Secondly, although the usage of this word in economics is relatively new, globalisation has already established an impressive research programme in economics, particularly in the international political economy (IPE).

Thirdly, globalisation has become a wide-ranging debate, consequently an interdisciplinary topic.[92] The overall picture presented here of implied and actual

[92] Other authors have come to a similar conclusion based on different evidence. For instance, Robert Reich (1998:1) suggests that "the substance of the subjects studied under the rubric of globalization varies dramatically. This list includes, but was not confined to, the study of democratization, development, market deregulation, privatization, welfare reform, new security agendas (such as immigration and drugs), and the general retreat of all aspects of the state from policy intervention". David Held (Hirst & Held, 2002:2) emphasizes the same point: "I think of globalisation as the increasing

audiences points to an increased interdisciplinary audience. As can be concluded, it has drawn the attention of many different academic disciplines, most notably economics, business management, sociology, history, political science, and law, among others. After years of intensive research, multiple facets of globalisation have emerged emphasising a wide range of issues worthy of being addressed.

Another noteworthy piece of evidence of this interdisciplinarity is the recent sprouting of encyclopaedias on globalisation. Encyclopaedias are by definition a set of books containing articles on various topics, covering all or most branches of knowledge. It is less common when an encyclopaedia is edited covering all or most aspects of one subject. By the early the 21st century, globalisation had reached this exceptional status because it has evoked not one but a myriad of themes. In 2006, David O'Connor published the *Encyclopaedia of the global economy: a guide for students and researchers*, in two volumes. In the same year, *Globalization: encyclopaedia of trade, labor, and politics*, also in two volumes, was published by Ashish K. Vaidya. More recently, Roland Robertson and Jan Aart Scholte published the 2007 *Encyclopaedia of Globalisation*, a massive brand-new, four-volume work consisting of over 400 entries covering key economic, historical, political, psychological, cultural, ecological, geographical, and social aspects of globalisation.

Governments all over the world have been consulting scholars and experts on globalisation to obtain advice in key areas such as economic policy, international competitiveness, finance and development, research and development, regulations, national innovation systems, intellectual property rights, patents, etc. Globalisation has been included as a discipline in the undergraduate curriculum in several areas of science, and has been influential in the creation of several postgraduate and research programmes all over the world. This not only includes universities, but also multilateral institutions which have been establishing a variety of programmes dedicated to the study of globalisation.

---

extent, intensity, velocity and impact of world-wide interconnectedness. Such interconnectedness has existed for some hundreds of years. But if you trace its increase, I think you can argue that there is now an ongoing transformation, from economics, politics and migration to culture and law, which is creating a new kind of world order." Anthony Giddens (2002:10) asserts: "Both groups [the sceptics and the radicals] see the phenomenon almost solely in economic terms. This is a mistake. Globalisation is political, technological and cultural, as well as economic. It has been influenced above all by developments in systems of communication, dating back only to the late 1960s."

Table 31 below presents a list of the programmes that have been developed worldwide with globalisation as their main subject. Only programmes in English and those that were developed in universities or research institutions have been selected. Appendix 8 provides details about the main characteristics of each of them. Checking the Appendix, one realises that the overwhelming majority of the programmes are interdisciplinary. Certainly there are many others with the same characteristics in other languages or even in English but it would be impracticable to search for all of them. Therefore, the list given below is not exhaustive. However, it can provide a broad figure of the interdisciplinarity of globalisation as an academic topic, and the great intellectual effort that has been made by several institutions to tackle numerous issues and to prepare high standard professionals to deal with the complex configuration of this new world. The table also reveals that these programmes are heavily concentrated in North America and Europe, and most of them have been developed after 2000.

Table 31. Sample collection of postgraduate programmes and research projects on globalisation worldwide[93]

Country/Region	*No. of Programmes/Projects*
North America	
Canada	11
United States	26
Total	37
Europe	
Austria	2
Denmark	3
Finland	3
Germany	2
Ireland	3
Sweden	3
United Kingdom	17
Total	33
Asia and the Pacific	
Australia	4
Japan	4
Pakistan	2
Taiwan	1
Turkey	1
Total	12
Middle East	
United Arab Emirates	1
Overall total	83

Source: Internet

Indeed, the debate on globalisation became a kaleidoscope of images that has invited minds worldwide to comprehend its many complex faces. It does not mean that the theme can only be understood by someone with a wide scientific background, but only that the topic is not confined to one particular field of research. Conversely, it does mean that an extensive range of academic approaches has attempted to bridge the gaps that appear continuously as the process evolves. Moreover, as globalisation encompasses a broad variety of themes, in certain studies the contributions of other disciplines are necessary. In the wake of this academic endeavour, new approaches and data with varied purposes have emerged, opening new possibilities for study across scientific fields.

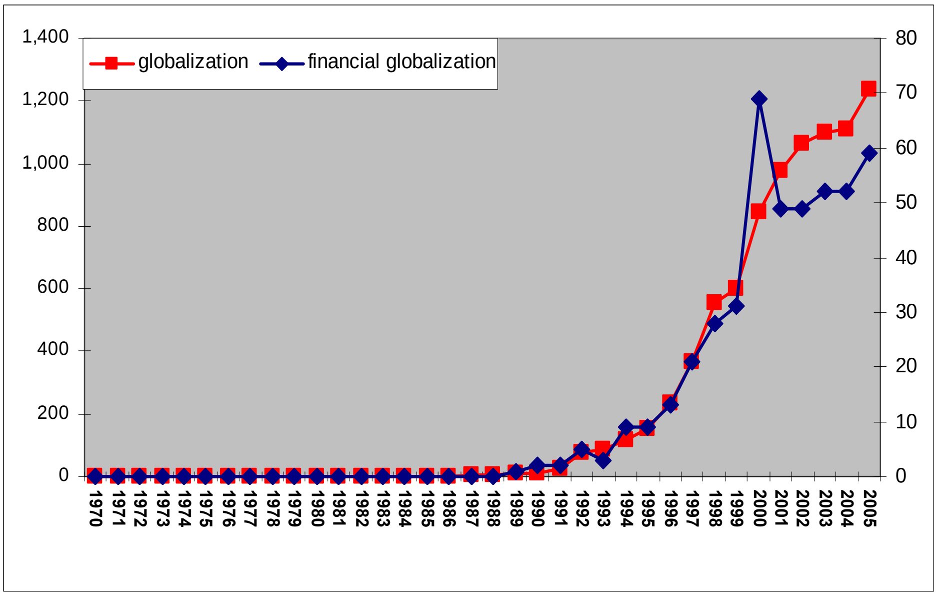
93 This table is based on data in Appendix 2I. The table includes the name of the institution, a basic description of the programme and the country in which it is located.

Practice makes perfect, and exercise creates a virtuous circle. Once scholars started a broad research programme years ago to investigate the ongoing transformations in the world economy, several multilateral institutions such as the IMF, UNCTAD, OECD, BIS, and ISDA began providing accurate data and developed various measures concerning globalisation and its consequences. A worldwide audience has been feeling the benefits of the results achieved, i.e. institutions have been purposefully developing their own methodological ways of defining key aspects related to the matter, and academics have been using this information to produce a huge surge of scholarly interpretations of globalisation's main issues. As a result, the interdisciplinary contributions that the topic has received enable researchers to explore and understand the abundance of new subjects that have been raised recently.

2.3. A brief evaluation of financial globalisation literature

Thus far, the aforementioned databases have helped to assess various key aspects of the progress of the globalisation literature, in particular the level of resonance that it has achieved amongst social sciences. Nevertheless, a brief evaluation on the development of the financial globalisation literature is missing and is the central aspect of this research. Having the SSCI as the source of data, Figure 17 draws a comparison between the number of articles written on globalisation and financial globalisation.

Figure 17. Number of articles that contain the terms *globalisation*[a] and *financial globalisation*[a], in the article title, abstract, or as keywords: 1970-2005[94]



Source: Institute for Scientific Information – Social Science Citation Index (SSCI)
a Includes the spelling of the word with either *s* or *z*.

Although the volume of financial globalisation articles is relatively lower, the evolution of the literature of both topics is statistically very similar, i.e., the same growth pattern can be seen for the 1970-2005 period. The relatively low number of articles may paint a deceptive and incomplete picture. In order to show a more appropriate evaluation, it is important to assess the growth rate of the decade, which makes it clear that there was significant growth throughout the period. The table below shows that the growth was concentrated in the 1990s and was rapid and significant. Note that in the biennium 2005-06, the number of articles was almost the same as what had been written in the five previous years. From the first article published in 1989 that included the term financial globalisation in the article title, abstract or keyword till 2006, there was a staggering accumulated growth of 2,549 per cent.

[94] This figure is based on data in Appendix 2J.
[94] Other authors have come to a similar conclusion

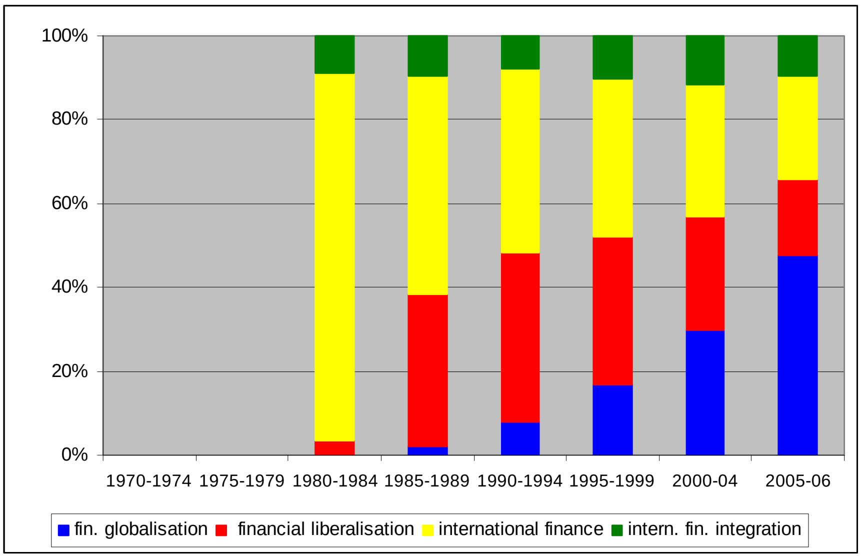
Table 32. Quinquennium and accumulated rate of growth of articles on financial globalisation: 1970-2005

	1970-1974	1975-1979	1980-1984	1985-1989	1990-1994	1995-1999	2000-04	2005-06
Fin. globalisation [a]	0	0	0	1	21	102	271	261
Quinq. Growth					2,000	386	166	- 4
Accumulated (%)				1	2,001	2,387	2,552	2,549

Source: Institute for Scientific Information – Social Science Citation Index (SSCI)
[a] Includes the spelling of the word with either *s* or *z*.

Nevertheless, it is worth remembering that financial globalisation has also been discussed in different strands, such as financial liberalisation, international finance, and international financial integration, among others. Hence, figure 18 shows how the term *financial globalisation* stands as a novel term before these other traditional ones.

Figure 18. Number of articles that contain the terms *financial globalisation*[a], *financial liberalisation*[a], *international finance*, and *international financial integration* in the article title, abstract, or as keywords: 1970-2005[95]



Source: Institute for Scientific Information – Social Science Citation Index (SSCI)
[a] Includes the spelling of the word with either *s* or *z*.

The most salient feature of the above figure is the dominance of the term "international finance" in the 1980s. As expected, soon after the second half of the 1980s, financial liberalisation very quickly became as an expressive topic, encompassing part of the literature on international finance. Meanwhile, slowly but progressively, "financial

[95] This figure is based on data in Appendix 2K.

globalisation” advanced and shaped a completely different picture by the end of the 1990sj and early 2000s. Both the terms “international finance” and “financial liberalisation” reached the end of the period with a lower number of articles in relation to the volume of financial globalisation papers. In brief, the figure shows two different but inter-related tendencies. First, the asymmetrical and rapid growth of articles on financial globalisation; and second an apparent substitution of the other terms by the label “financial globalisation”. To put it another way, present-day scholars have done a great deal and are providing a challenge for a new generation of researchers to deal with this complex subject.

2A. Coverage description of the bibliographical databases.

PsycINFO:

"The American Psychological Association's PsycINFO database is the comprehensive international bibliographic database of psychology. It contains citations and summaries of peer-reviewed journal articles, book chapters, books, dissertations, and technical reports, all in the field of psychology and the psychological aspects of related disciplines, such as medicine, psychiatry, nursing, sociology, education, pharmacology, physiology, linguistics, anthropology, business, and law. Journal coverage, spanning 1806 to present, includes international material selected from more than 1,900 periodicals written in over 35 languages. Current chapter and book coverage includes worldwide English-language material published from 1987 to present. Over 80,000 records are added annually through weekly updates. Approximately 7.7 million cited references are found in citations to 156,000 journal articles, books, and book chapters."

(available at: http://www.ovid.com/site/catalog/DataBase/139.jsp?top=2&mid=3&bottom=7&subsection...)

Social Sciences Citation Index (SSCI):

The Social Sciences Citation Index (SSCI) is a multidisciplinary index to the journal literature of the social sciences. It fully indexes more than 1,725 journals across 50 social sciences disciplines, and it indexes individually selected, relevant items from over 3,300 of the world's leading scientific and technical journals.

In addition, the Social Sciences Citation Index also provides access to current information and retrospective data from 1956 forward. Note that you may not have access to all data years. Averages 2,900 new records per week. Includes approximately 60,000 new cited references per week. As of January 1992, contains searchable, full-length, English-language author abstracts for approximately 60% of the articles in the index.

Some of the disciplines covered include: Anthropology Political Science, History, Public Health, Industrial Relations Social Issues, Information Science & Library Science, Social Work, Law Sociology, Linguistics, Substance Abuse, Philosophy Urban Studies, Psychology Women's Studies Psychiatry.

(available at: http://www.thomson.com/content/scientific/brand_overviews/ssci)

JSTOR:

JSTOR is a database that provides access of leading academic journals and scholarly literature from around the world. Currently, JSTOR archives 718 journals. A list of the disciplines of study that JSTOR covers includes: Anthropology, Aquatic Sciences, Archaeology, Architecture & Architectural History, Art & Art History, Asian Studies, Biological Sciences, Botany & Plant Sciences, Business, Classical Studies, Developmental & Cell Biology, Ecology & Evolutionary Biology, Economics, Education, Feminist & Women's Studies, Film Studies, Finance, Folklore, General Science, Geography, Health Policy, Health Sciences, History, History of Science & Technology, Jewish Studies, Language & Literature, Latin American Studies, Law, Linguistics, Mathematics, Middle East Studies, Music, Paleontology, Performing Arts, Philosophy, Political Science, Population Studies, Psychology, Public Policy & Administration, Religion, Slavic Studies, Sociology, Statistics, Zoology.

(available at: http://www.jstor.org/page/info/about/archives/newFeatures.jsp)

EconLit:

"EconLit, the fundamental research tool in economics, provides bibliographic citations, with selected abstracts, to the international literature on economics since 1969.

EconLit covers a broad range of document types published world-wide, including journal articles, books, and dissertations, as well as articles in collective works, such as conference proceedings and collected essay volumes. The database also includes Abstracts of Working Papers in Economics from the Cambridge University Press database, Index of Economic Articles in Journals & Collective Volumes and the full text of the Journal of Economic Literature book reviews.

EconLit topics include economic development, forecasting, and history; fiscal theory; monetary theory and financial institutions; business finance; public finance; and international, labour, health care, managerial, demographic, regional, agricultural, and urban economics; country studies, and government regulations."

(available at http://www.ovid.com/site/catalog/DataBase/52.jsp?top=2&mid=3&bottom=7&subsection...)

Index to Theses:

"The Index to Theses new and enhanced service provides users with coverage dating from today right back to 1716, providing total bibliographic control of all theses ever produced by British and Irish Universities. In addition, the expanded Index to Theses service benefits from the addition of a further 44,000 abstracts to the original collection covering the period 1970-1985"

(available at http://www.bl.uk/britishthesis).

Dissertation Abstracts (DISS):

Dissertation Abstracts (DISS) is an index which "contains references and abstracts for doctoral dissertations from accredited American and Canadian, selected British and European universities, covering all academic subjects. Masters theses are also included from accredited North American universities" (Dissertation Abstracts Field Guide, available at http://ovid.gwdg.de/ovidweb/fldguide/dissdb.htm). "Dissertation Abstracts provides information from over 1,000 participating institutions. This database contains the following ProQuest Information and Learning Company Publications: Comprehensive Dissertation Index; Diseertation Abstracts International; Masters Abstracts International; American Doctoral Dissertations. The Dissertation Abstracts database includes coverage of the following topics: Literature, Education, Chemistry, Engineering, Psychology, Business, Economics, Philosophy, Sociology, and Information Science" (Database Guide Content, available at http://web5s.silverplatter.com/webspirs/changeGuideTopic.ws?topic=1).

Bowker's Global Books in Print:

Bowker's Global Books in Print is "is the comprehensive online portal into the book industry, with articles on the latest industry news, access to literary journals and reviews, and an expansive directory of book sites around the world" (available at: http://globalbooksinprint.com/bip).

2B. Box 1.Fifty first journal articles containing the word globalisation according to the JSTOR

Year	***Journal***	***Article title***
1948	The Elementary School Journal	Interrelationships among the Language Arts
1951	Annals of the American Academy of Political and	Culture Theory and Industrial Analysis
1952	The University of Chicago Law Review	The Corporation as a Technique of International
1957	International Review of Education	Problems and Trends in Dutch Education
1957	The Elementary School Journal	New Methods for Old in Teaching Phonics
1960	Revue économique	Les fluctuations cycliques dans les transports maritimes
1961	Revue économique	Le marche international et la situation de l'industrie
1962	Revue économique	Sur quelques problemes poses par l'aide aux pays sous-developpes
1963	World Politics	International Relations and Asian Studies: The Subordinate State System of Southern Asia
1964	The Journal of Risk and Insurance	A General Risk Theory
1965	International Organization	Implications and Questions for the Future
1965	Proceedings of the National Academy of Sciences of the United States of America	Alexander-Spanier Cohomology and Rings of Continuous Functions
1966	American Journal of Mathematics	Categories of Functors and Adjoint Functors
1967	Transactions of the American Mathematical Society	The Cotangent Complex of a Morphism
1967	The Annals of Mathematics	A Lefschetz Fixed Point Formula for Elliptic Complexes: I
1968	Transactions of the American Mathematical Society	Families of Finite Character and Essential Valuations
1968	Revue économique	Qu'est-ce qu'un investissement?
1968	International Studies Quarterly	Communism and the Globalization of Politics
1969	Transactions of the American Mathematical Society	Pre-Self-Injective Rings
1969	International Organization	Further Notes on Operationalizing Some Variables Related
1969	International Organization	Soviet Foreign Policy at the Crossroads: Conflict and/or
1970	International Review of Education	Actualité des principes de Ovide Decroly dans les pays développés ou en développement
1970	Revue Française de Sociologie	La théorie générale des systèmes et ses perspectives de développement dans les sciences sociales
1970	The Journal of Conflict Resolution	The World's Foreign Ministers: A Political Elite
1970	Revue économique	Les instruments d'execution du plan utilises par l'etat a l'egard des entreprises A la recherche des instruments d'une nouvelle politique industrielle
1970	Midwest Journal of Political Science	Distance in Foreign Policy Behavior: A Comparative Study
1970	Revue économique	Accumulation, Capital Financier, Monopolisme
1970	Transactions of the American Mathematical Society	Flat Modules Over Commutative Noetherian Rings
1970	Proceedings of the American Mathematical Society	Complete Ideals and Monoidal Transforms
1971	Canadian Journal of African Studies	L'Anthropologie et l'histoire africaine
1971	The Journal of Politics	Revolt and Revisionism in the Gaullist Global Vision: An Analysis of French Strategic Policy
1971	International Organization	Security and a Transnational System: The Case of Nuclear
1971	Educational Studies in Mathematics	Mathematics in the Decroly School
1972	Econometrica	The Factor-Price Equalization Theorem
1972	Le Mouvement social	Les grèves de la Régie Renault en 1947
1972	Transactions of the American Mathematical Society	Localizations of HNP Rings
1972	International Studies Quarterly	Corporate Giants: Some Global Social Costs
1972	International Studies Quarterly	Marx, Universalism, and Contemporary World Business
1972	International Studies Quarterly	Multinational Business: A Global Perspective
1973	Journal of Peace Research	Conflict Formations in Contemporary International Society
1973	Journal of Peace Research	Industrial Cooperation, Consumption Patterns, and Division of Labor in the East-West Setting
1973	The Journal of American History	Open Door Expansionism Reconsidered: The World War II
1973	American Journal of Political Science	Comparative Research on Eastern Europe: A Critique of Hughes and Volgv's "Distance in Foreign Policy Behavior"

1973	Proceedings of the American Mathematical Society	Descent of Projectivity for Locally Free Modules
1974	Journal of Peace Research	International Law, Dominance, and the Use of Force
1974	History and Theory	Histoire Économique ou Économie Rétrospective?
1974	Political Theory	Philosophy, Theory and Science of Politics
1974	Transactions of the American Mathematical Society	Pairs of Domains Where all Intermediate Domains are
1974	SubStance	Linguistics and Grammatology
1974	Transactions of the American Mathematical Society	The Unitary Representations of the Generalized Lorentz Groups

Source: JSTOR (accessed in 19th April 2007). Note: Only articles have been counted, while reviews have been excluded.

2C. Number of articles that contains the word "globalisation" in the article title, keywords or abstract

	EconLit	SSCI	Jstor
1970	0	0	9
1971	0	0	4
1972	0	0	8
1973	0	0	8
1974	0	0	8
1975	0	0	10
1976	0	1	9
1977	0	0	13
1978	0	0	9
1979	0	1	11
1980	0	0	18
1981	0	0	17
1982	0	0	21
1983	0	2	18
1984	2	1	31
1985	2	2	34
1986	0	1	37
1987	7	7	53
1988	35	4	96
1989	18	12	140
1990	21	12	153
1991	39	25	259
1992	60	76	321
1993	101	86	423
1994	93	117	512
1995	136	155	689
1996	224	234	888
1997	427	369	1,294
1998	958	553	1,560
1999	1,244	601	1,909
2000	1,525	846	2,139
2001	1,307	980	2,368
2002	1,297	1,065	1,502
2003	1,621	1,098	1,541
2004	1,331	1,109	405[a]
2005	927	1,236	106[a]

[a] The JSTOR did not update the articles.

2D. Number of books and PhD theses that contains the word "globalisation" in the keywords

	Books	PhD Theses
1970	0	0
1971	0	1
1972	0	0
1973	0	0
1974	0	0
1975	0	0
1976	0	0
1977	0	0
1978	1	0
1979	0	0
1980	0	0
1981	0	1
1982	0	1
1983	2	3
1984	1	4
1985	0	2
1986	0	1
1987	1	3
1988	18	5
1989	16	9
1990	33	14
1991	53	15
1992	33	26
1993	67	45
1994	85	45
1995	166	84
1996	244	107
1997	343	144
1998	526	179
1999	1,284	250
2000	2,934	307
2001	3,777	300
2002	4,600	368
2003	4,961	413
2004	4,830	424
2005	4,345	413

2E. Number of books that use Economics as keyword, compared to books, PhD and articles that contains the word "globalisation" in the keywords

Year	Economics	books	PhD theses	G articles
1970	2,688	-	-	0
1971	4,004	-	1	0
1972	3,957	-	-	0
1973	4,449	-	-	0
1974	4,667	-	-	0
1975	5,910	-	-	0
1976	6,045	-	-	1
1977	6,877	-	-	0
1978	7,260	1	-	0
1979	7,825	-	-	1
1980	8,729	-	-	0
1981	9,442	-	1	0
1982	10,175	-	1	0
1983	11,462	2	3	2
1984	12,499	1	4	1
1985	13,995	-	2	2
1986	15,734	-	1	1
1987	16,867	1	3	7
1988	18,563	18	5	4
1989	21,151	16	9	12
1990	23,297	33	14	12
1991	26,750	53	15	25
1992	29,959	33	26	76
1993	32,306	67	45	86
1994	40,656	85	45	117
1995	42,961	166	84	155
1996	45,251	244	107	234
1997	47,855	343	144	369
1998	47,661	526	179	553
1999	51,446	1,284	250	601
2000	96,149	2,934	307	846
2001	76,957	3,777	300	980
2002	58,785	4,600	368	1,065
2003	58,305	4,961	413	1,098
2004	56,682	4,830	424	1,109
2005	59,179	4,345	413	1,236

2F. Number of articles that contains the word "economic development" "economic policy", "monetary policy", "globalisation", "labour market", "econometric" "general equilibrium", "economic history" and in the title, keywords, or abstract

	eco. develop.	**eco. policy**	**mon. policy**	**globalisation**	**labour market**	**econometric**	**G.E.**
1970-79	2,030	688	402	2	591	856	275
1980-89	1,917	943	534	29	1,477	902	386
1990-99	3,784	1,290	1,443	2,193	4,917	2,210	1,349
2000-05	2,766	697	1,860	6,236	4,617	1,967	1,233

2G. Number of articles that contains the word "international trade", "global institutions", "open economy", and "international finance" and "globalisation"[a] in the title, keywords, or abstract

	international trade	international finance	open economy	global production	globalization
1970	72	5	12	0	0
1971	63	4	8	0	0
1972	55	3	14	0	0
1973	43	3	8	0	0
1974	52	2	9	0	0
1975	75	5	16	0	0
1976	97	13	19	0	1
1977	107	21	15	1	0
1978	76	10	22	0	0
1979	72	6	34	0	1
1980	68	11	31	1	0
1981	50	14	27	0	0
1982	88	9	45	1	0
1983	87	16	25	1	2
1984	77	11	35	1	1
1985	86	12	28	7	2
1986	99	5	44	2	1
1987	93	4	28	0	7
1988	80	3	27	2	4
1989	112	3	30	1	12
1990	92	9	41	0	12
1991	173	17	62	19	25
1992	221	27	80	45	76
1993	252	28	81	75	86
1994	277	35	92	84	117
1995	309	38	98	85	155
1996	277	43	88	88	234
1997	322	40	114	101	369
1998	333	53	112	108	553
1999	353	54	136	129	601
2000	386	62	101	128	846
2001	429	53	138	112	980
2002	401	63	142	139	1,065
2003	425	63	126	165	1,098
2004	490	48	124	156	1,109
2005	496	77	151	212	1,236

2H. Number of articles that contains the word "globalisation", "internationalisation", "transnationalism", "international economic integration" in the article title, keywords, or abstract

	globalisation	internationalisation	transnationalism	internat. eco. integration
1970	0	3	0	4
1971	0	1	2	0
1972	0	6	0	1
1973	0	2	0	4
1974	0	5	1	6
1975	0	8	0	8
1976	1	5	0	5
1977	0	10	0	4
1978	0	5	0	2
1979	1	7	0	9
1980	0	17	3	2
1981	0	18	1	2
1982	0	11	0	4
1983	2	21	0	2
1984	1	11	0	2
1985	2	14	0	4
1986	1	13	0	1
1987	7	24	1	2
1988	4	14	0	4
1989	12	20	0	0
1990	12	27	0	0
1991	25	33	2	2
1992	76	43	5	23
1993	86	75	2	26
1994	117	64	1	37
1995	155	101	4	31
1996	234	74	6	32
1997	369	85	11	37
1998	553	112	12	40
1999	601	88	29	45
2000	846	132	17	64
2001	978	97	26	50
2002	1,065	124	39	45
2003	1,098	115	57	58
2004	1,109	122	64	54
2005	1,236	125	71	66

2I. Sample collection of programmes and projects on globalisation worldwide

Research Institution	Basic description/Mission	Country
	North America	
McMaster University – Institute on Globalization and the Human Condition	. Globalization and Autonomy .” To investigate the relationship between globalization and the processes of securing and building autonomy. To this end, we will seek to: [a] refine understanding of these concepts and of the historical evolution of the processes inherent in both of them, given the contested character of their content, meaning and symbolic status. Given that globalization is the term currently employed to describe the contemporary moment, we will: [b] determine the opportunities globalization might create and the constraints globalization might place on individuals and communities seeking to secure and build autonomy; [c] evaluate the extent to which individuals and communities might be able to exploit these opportunities and to overcome these constraints; and [d] assess the opportunities for empowerment that globalization might create for individuals and communities seeking to secure and to build autonomy. [e] determine how the autonomy available to individuals and communities might permit them to contest, reshape, or engage globalization. Focus Areas: production and exchange (including cultural production), environment, living in cultural plurality.” http://globalization.mcmaster.ca/ga/ga81.htm	Canada
International Development Research Centre	. Globalization, Growth and Poverty (GGP) .“ The goal of the GGP program is to support policy reforms in developing countries aimed at promoting inclusive growth and poverty reduction, and appropriate international integration strategies, by generating necessary evidence and analysis, and by strengthening the capacities for their production and use in democratic policy making.” http://www.idrc.ca/en/ev-90935-201-1-DO_TOPIC.html	Canada
McGill University University of Montreal Concordia University	. Globalization and the National Security State . “The Globalization and the National Security State project unites researchers from three Montreal Universities examining the effects of globalization on the traditional security functions of the nation-state in different regions of the world.” http://gnss.mcgill.ca/index.htm	Canada
University of British Columbia – Departament of English	. Nationalism and Globalization . “This focus group encourages inter-disciplinary research projects that engage contemporary theoretical debates about nationalism, globalization, and postcoloniality.” http://www.english.ubc.ca/grad/research/ntl_global.htm	Canada
University of Saskatchewan - Centre for the Study of Co-operatives	. Co-operative Membership and Globalization: Creating Social Cohesion through Market Relations . “The interdisciplinary research team included fifteen academic co-investigators from universities across the country and more than twenty community partners from Nunavut to Halifax to Victoria. The project explored the extent to which co-operatives reflect or contribute to social cohesion, or a common sense of identity, in the communities where they are located. The project was arranged into four broad and overlapping clusters of research—urban consumers, rural regionalization and other changing definitions of community, Aboriginal cultures, and information technologies. The purpose of	Canada

	our project, through each of these four clusters, was to produce publications and practical ideas to meet the needs of academics, students, co-operatives, and governments. The research process relied on active collaboration between co-investigators and partner organizations. The research findings will enable co-operatives to be more responsive to members, more efficient in anticipating and meeting their needs, and in the process more effective at supporting change in Canadian communities in an era of globalization." http://www.socialcohesion.coop/research/index.htm	
University of Victoria	. Globalization, Rural Restructuring, and Local Welfare: A Comparative Analysis of Shrimp Aquaculture and the Transformation of Environment and Society in Thailand and India Project Completed (2000 – 2003) ."This project is examining how growing international demand and trade in cultured shrimp are affecting rural environments and impinging upon local livelihoods. This study follows from our previous research on shrimp farming in Thailand, expanding on it in three key ways. First, it situates shrimp culture within a broader context of globalization, so as to facilitate the development of conceptual linkages between local and macro factors that are shaping the production of export-oriented agricultural commodities generally, and shrimp in particular. Second, we are conducting intensive studies within four socially and ecologically distinct settings so as to achieve a deeper understanding of how the dynamics and structure of shrimp farming are shaped by local ecologies, politics, and social processes. Finally, the proposed research is cross-national, allowing a comparative analysis of how responses to globalization pressures vary between nation-states." http://www.geog.uvic.ca/shrimp/Pages/Researchers/Flaherty/Flaherty.htm	Canada
Université de Montréal - in collaboration with Université Laval Universidad de Buenos Aires Universidad Nacional de La Plata	. Globalisation, bioethics and biotechnology in Canada and Argentina . "Our aim is to we will create an interdisciplinary collaborative research team of scholars and policy makers interested in the socio-ethical and policy implications of biotechnology. This team will conduct research to understand the particular socio-cultural, historical and economic factors that influence public debate and policy while also reflecting on the challenges posed by the blurring of traditional biotechnology boundaries (i.e., health and agriculture). We will contribute to the mutual understanding of common and divergent views to enable ethically and socially nuanced policy recommendations for addressing biotechnology innovation in Canada and Argentina." http://www.genethics.ca/Argentina/	Canada
York University	. Globalization of Protracted Refugee Situations (GPRS) Project . "The main objective of the GPRS project is to explore and define the extent of long-term refugee situations internationally with the purpose of determining the relationship between the persistence of the camps and other long-term refugee situations and the provision of specific forms of development aid." http://www.atkinson.yorku.ca/~gprs/index.html	Canada
The University of British Columbia Centre for International Healthy	. Developing a Research Program on Globalization, Social Organization and Health. . Project Period: 2003 - 2006 . "This Canadian-Cuban-Mexican collaboration is investigating the effects on health that are attributable to the impact of globalization on the social organization within our communities. Specifically, the program of research seeks to develop greater clarity around conceptual frameworks and then build on this to develop methodologies and research protocols for conducting cross-country	Canada

	studies that in turn can provide insights into the forces at play, the health implications and policy options for mitigating the negative effects of globalization." http://www.cih.ubc.ca/EN/associated_projects/developing_a_research_program_on_globalization,_social_organization_and_health/	
University of Manitoba	. Centre for Globalization and Cultural Studies . "Through a number of its humanities and social sciences departments, the University has a long-standing interest and research strength in globalization and cultural studies. Newly developed educational program and research initiatives in this area, combined with the recent hiring of a number of promising young faculty, have led the University to identify globalization and cultural studies as a priority area for further development." http://umanitoba.ca/centres/gcs/	Canada
University of Toronto - Centre for International Studies	. Program on Globalization and Regional Innovation Systems (PROGRIS) . "…to study a key aspect of the emerging global economy - namely, how firms and institutions interact to foster the innovation process in a regional context … The goal of PROGRIS is to investigate how the interaction of firms and regional institutions in Canada and other countries facilitates, or impedes, the process of innovation and social learning that is critical for success in the new global economy." http://www.utoronto.ca/progris/web_files/aboutus.htm	Canada
University of Colorado at Boulder	. Globalization and Democracy (GAD): A National Science Foundation (NSF) Graduate Training Program. . It … "is an interdisciplinary training program … that provides an ideal context for studying the forces of change in the modern world." "GAD training and research are organized around six themes: - Globalization of economic processes. - The possibilities for democracy in a globalizing economy. - Transformations of the meaning and practice of citizenship. - The legitimacy of political and governmental structures. - Accountability in the face of transnational economic forces. - Ethno-national conflict and accommodation. http://www.colorado.edu/IBS/GAD/gad.html	United States
Yale University	. The Yale Center for the Study of Globalization (YCSG) . "The YCSG is devoted to examining the impact of our increasingly integrated world on individuals, communities, and nations. The Center's purpose is to support the creation and dissemination of ideas for seizing the opportunities and overcoming the challenges presented by globalization. It is focused on producing practical policies to enable the world's poorest and weakest citizens to share in the benefits brought by globalization. YCSG also explores solutions to problems that, even if they do not result directly from integration, are global in nature and can therefore be effectively addressed only through international cooperation. The Center draws on the rich intellectual resources of the Yale community, scholars from other universities, and experts from around the world." http://www.yale.edu/bulletin/html2004/grad/research.html#ISPS	United States
Columbia University	. Center on Globalization and Sustainable Development (CGSD) of the Earth Institute at Columbia University. . "Our mission is to augment the intellectual community using social sciences approaches to address the most pressing international development problems of our time. This mission overlaps with those of social science departments across the university, with whose faculty we collaborate. The hallmark of CGSD is interdisciplinary research and policy application. We operate on the underlying principle that because development problems cross disciplines - from the environment to disaster preparedness to public health to economic planning - so must the solutions."	United States

	http://www.earth.columbia.edu/cgsd/	
Columbia University	.The Program in International Development and Globalization. . "The program examines issues in international economic development and analyzes global institutions, multilateral treaties, non-governmental organizations, and mobilizations of public protest. It looks at the interplay among state, politics, and civil society." http://globaldevphd.columbia.edu/Home.asp	United States
Indiana University	. International and Comparative Law, and Globalization . "Globalization is changing the world politically, economically, culturally, and legally. Our Global Legal Studies Program has been created to prepare students for lawyering in the global era." http://law.indiana.edu/curriculum/programs/specialties/global.shtml	United States
Princeton University - Niehaus Center for Globalization and Governance	. Center for Globalization & Governance (CGG) . "Our mission is three-fold. First, we seek to create a large and dynamic community of scholars and students interested in both the academic and policy dimensions of globalization and international governance. To do this, the Center will run a visiting fellows program in which the most promising young scholars working on globalization and governance issues will spend a year at Princeton. The Center will strive to create an intellectual community that serves the main goals of the Woodrow Wilson School: to tackle the most serious issues of the present day and prepare the leaders who will shape the public policies of the future." http://www.princeton.edu/~pcglobal/about.html	United States
International Food Policy Research Institute (IFPRI)	. Globalization and Markets . "This globalization and markets research program is designed to help national policy makers, researchers, international organizations and agriculture-sector stakeholders in developing and developed countries to better evaluate the implications of different scenarios of trade liberalization and globalization. It is also designed to help decision makers develop adequate related policies and societal responses for rural development, poverty alleviation, and food security, including alleviation of the economic barriers that prevent smallholder farmers in developing countries from benefiting from greater market-based opportunities. Policy changes supported by this research are expected to accelerate income growth through increased access to both domestic markets and international trade." http://www.ifpri.org/themes/grp02/grp02research.asp	United States
Emory University	. Program in Globalization, Global Migration, and Health . "The Emory Global Health Institute has provided seed funding to establish a research program that will address the impact globalization and global migration have on the health of specific populations. The program will focus on globalization's and global migration's effect on the cardio-metabolic risk factors of the targeted populations. Seed funding is being used to develop and implement a scientific workshop, publish the proceedings of this workshop, and publish a literature review on the current state of research regarding the cardio-metabolic risk factors of the United States' culturally and ethnically diverse population. Additionally, Emory researchers are using these seed funds to establish a network of global collaborators as well as develop a plan to secure external funding that will sustain the research program." http://www.globalhealth.emory.edu/programs/facultyPrograms/globalMigration.php	United States
University of California, Los Angeles – The Globalization Research Centre - Africa	. The UCLA Globalization Research Center . "The overall aim of the UCLA Globalization Research Center-Africa (GRC-A) is to research the ways global forces impact upon African societies, investigate the ways in which African societies impact upon the globalization process, and conduct cross-national	United States

Member Institution of Globalization Research Network (GRN)	and cross-cultural comparisons of global processes as they relate to Africa. GRC-A currently supports projects focused on: conflict, conflict management and democracy; HIV/AIDS in Africa; and curriculum development." http://www.globalgrn.org/directors.htm#UCLA	
The George Washington University – Centre for the Study of Globalization Member Institution of Globalization Research Network (GRN)	. The GW Center for the Study of Globalization . "The GW Center for the Study of Globalization (GWCSG) was established to promote research into and public education about the various forces driving globalization, the implications of globalization for business strategy and government policy, and the effects of globalization on people's day-to-day lives. In doing so, GWCSG conducts research in three broad areas; Globalization and Convergence, Global Financing and Investment, and Globalization and Information Technology. The GWCSG supports a number of initiatives, including studies with emphases on globalization's effects in Europe and the Middle East." http://www.globalgrn.org/directors.htm#GW	United States
The George Washington University – Center for Economic Research	. Research Program in Poverty, Development, and Globalization . "Current research of Development Program members include the following fields of study: - Poverty Alleviation. - Health and economic development - Trade policy and development strategy - Development Public Economics - Underdevelopment traps - Development issues in Transition - Institutions and Organizations." http://www.gwu.edu/~cer1/Development%20Program.htm	United States
University of Hawaii-Manoa – Globalization Research Center Member Institution of Globalization Research Network (GRN)	. The Globalization Research Center at the University of Hawaii at Manoa . "The goal of the Globalization Research Center (GRC) at Hawaii is to identify and analyze the social, political, economic, and cultural transformations that characterize globalization, paying particular attention to their impact on Asia and the Pacific. GRC has developed projects focusing on human rights and trafficking of persons, global public health, urbanization and water, livable cities and global governance." http://www.globalgrn.org/directors.htm#UH	United States
University of South Florida – Dr. Kiran C. Patel Center for Global Solutions Member Institution of Globalization Research Network (GRN)	. Dr. Kiran C. Patel Center for Global Solutions at the University of South Florida . "The Dr. Kiran C. Patel Center for Global Solutions at the University of South Florida was established in May 2005, incorporating the USF Globalization Research Center as its research arm. The Patel Center studies the dynamics and effects of globalization worldwide, building on the Center's experience in Latin America and the Caribbean. The Center's research focuses on: economics, trade, and development; health; safety and human security; sustainable environments; and culture and the arts. Given that the phenomenon of globalization manifests itself in local contexts, the Center also sponsors several projects that deal directly with the Tampa Bay region." http://www.globalgrn.org/directors.htm#USF	United States
Harvard University – Belfer Center for Science and International Affairs	. Science, Technology and Globalization Project (STG) . "The aim of the Science, Technology and Globalization Project (STG) is to undertake research, conduct training, provide policy advice and disseminate information on interactions between technological innovation and globalization, with particular emphasis on implications for developing countries." http://bcsia.ksg.harvard.edu/research.cfm?program=STPP&project=STG&ln=About&pb_id=255&gma=27&gmi=45	United States

Harvard University – Center for International Development	. Globalization and Development . "Globalization is the defining event of the last three decades. This research program focuses on the causes and consequences of globalization and its impact on the prospects for development. What do governments, international organizations, and non-governmental actors need to do to ensure that poor countries can take advantage of world markets while avoiding the whiplash that often accompanies insertion in the world economy? What are the implications of globalization for strategies of institutional reform in developing nations? How can the rules of international trade and finance be made more supportive of the goals of sustainable development and poverty alleviation? What is the appropriate balance between national autonomy and international discipline for countries at different levels of development?" http://www.cid.harvard.edu/archive/res/cidglobal.html	United States
University of Massachusetts Amherst - Political Economy Research Institute (PERI)	. Globalization and Macroeconomics ." PERI's Globalization and Macroeconomics program provides research to promote sustained full employment and widespread prosperity for advanced and developing countries." http://www.peri.umass.edu/Globalization.198.0.html	United States
Tufts University – Global Development and Environment Institute	. Globalization and Sustainable Development ." Since 1999, GDAE's Globalization and Sustainable Development Program has been developing an empirically-based understanding of the economic integration process in order to draw out lessons for the Free Trade Area of the Americas (FTAA) and other pending trade agreements, most notably the new round of World Trade Organization negotiations." http://ase.tufts.edu/gdae/policy_research/globalization.html#relatedprojects	United States
Massachusetts Institute of Technology (MIT) - Industrial Performance Center	. Industrial Performance Center Globalization Project . The MIT Industrial Performance Center is engaged in a major new research program on the process of globalization and its implications for productivity growth, innovation and the creation of good jobs… The IPC Globalization Project focuses on one aspect of these developments: the fragmentation of the production systems of firms in the advanced economies, and the relocation of parts of these enterprises to other societies. Using the opportunities provided by new communication and transportation technologies, as well as the internationalization of capital markets, many firms are breaking off parts of their productive activities and relocating them in foreign countries…While the basic process of globalization has been much studied, its effects on individual firms and on their home societies have not. To investigate these questions, the IPC research team is tracking the course and consequences of globalization in several industries, including: • electronics, including semiconductors • software • financial services, including venture capital • motor vehicles • textiles and apparel. " http://ipc-lis.mit.edu/globalization/main.html	United States
Woodrow Wilson International Center for Scholars	. Science, Technology, America, and the Global Economy ." The Woodrow Wilson Center has created a new program to explore paths for long-term growth in the United States and around the world. STAGE targets policies that foster sustained, sustainable, and equitable growth." http://www.wilsoncenter.org/index.cfm?fuseaction=topics.home&topic_id=1408	United States
Stanford University –	. Center for Global Business and the Economy	United

Stanford Graduate School of Business	. "We encourage partnerships between the School and global managers and support rigorous and relevant research, teaching, and course development resources. The Global Center provides a focus for investigating the inherent complexity of international business: running operations across dispersed geographies, in a variety of cultures simultaneously, and under different legal, economic and political institutions." http://www.gsb.stanford.edu/cgbe/	States
University of California, Berkeley	. The Religion, Politics and Globalization Program . "The Religion, Politics and Globalization Program (RPGP) promotes multidisciplinary research and provides programming on the themes of religion, politics and globalization." http://ias.berkeley.edu/rpgp/rpg-about.htm	United States
University of California, Berkeley Institute of Governmental Studies	. Berkeley Center For Globalization and Information Technology . "Established in 2000, the Berkeley Center For Globalization and Information Technology comprises an interdisciplinary group of faculty and students that seeks to promote the study of the social ramifications of the globalization process and information technology. The Center is involved in issues related to global governance; telecommunication systems; and "internet studies", including cyberspace, virtual communities, e-commerce, and e-politics with a special focus on Silicon Valley and the wired world." http://igs.berkeley.edu/research_programs/	United States
East-West Center	. Islands of Globalization . The project seeks to enhance understanding of globalization from the perspective of small island societies, and changing notions of "islandness." http://www.eastwestcenter.org/research/research-projects/?class_call=view&resproj_ID=193&mode=view	United States
University of Chicago	.The Globalization Project . Project Period: 1996 - 2002 . "At its most general, globalization involves increasingly rapid movements of commodities, images and persons across national and regional systems. The Project aimed to stimulate inquiry into the logic of these movements by drawing together scholars trained in these social and cultural sciences." http://globalizationproject.uchicago.edu/aims.html	United States
Yale University – Yale School of Forest and Environmental Studies	. Globalization, Transnational Networks and Legitimate Authority . "This research path seeks to understand better the emergence of international and transnational networks in terms of their legitimacy, authority, and accountability in shaping environmental policy." http://environment.yale.edu/cashore/research-program/globalization-transnational-networks-and-legitimate-authority/	United States
University of California, Irvine - the Center for Research on Information Technology and Organizations (CRITO)	. Globalization of E-commerce - Impacts of Electronic Commerce in the Global Networked Economy: A Multi-Country Study ."The Internet and electronic commerce are bringing countries together to create a global networked economy. Internet technology is said to have no regard for national borders, but the people and companies that use the technology function within very different national environments. This research program examines the global diffusion of Internet-based e-commerce, how national environments and policies influence e-commerce use within countries, and the economic and social impacts of e-commerce." http://www.crito.uci.edu/GIT/project3.asp	United States
	Europe	
Internet Union of Forest Research Organization (IUFRO)	. Forest Research Management in an Era of Globalization . "The ultimate goal of research is to improve the wellbeing of society. However, globalization has changed the framework conditions and nature of forest research. Societal questions around	Austria (IUFRO Headquarters)

	forests and forestry are increasingly complex. At the same time budgets are declining. This condition is requiring research organizations to use their financial and human capital resources more efficiently. Consequently, the role of managers in forest research has become even more important as they will have to make sound policy choices for the future of forest research." http://www.iufro.org/download/file/1913/77/news07-6.doc	
International Research Center for Cultural Studies	. The Cultural Paradoxes of Globalization . "This research program focuses on the cultural dimensions of globalization and seeks to analyze its dynamism and paradoxes, its symbolic articulations and transformations, and its public and academic expressions and negotiation. Possible fields of research for fellowship applications could be: Case studies in the cultural history of globalization Cultural preconditions of transnational economic practices and processes European cultures and the challenge of globalization Global cities and the transformation of urban culture The impact of migrating knowledge and material culture on collective self-definition Contemporary art and art production between global aspirations and local self-assertion Civic laboratory or site of a global market of tastes? The changing social and cultural role of art museums Media, music, and film between local audiences and international modes of consumption Literary production and literary genres beyond national and cultural boundaries Political discourses confronting the cultural dilemmas of globalization The culture of global organizations and anti-global movements Religion at the crossroads of secularization, rationalization, and radicalization. " http://www.ifk.ac.at/about__research_foci--4-en.html	Austria
Aalborg University – Research Centre for Development and International Relations (DIR)	. Globalization and Social Change - Interdisciplinary Critical Perspectives (PhD Program) . "The PhD Researcher Program is characterized by basic research, which tries to connect different levels in analyzing the combined process of globalization and social change. This is done by focusing on definitions and frameworks to enable an understanding of the causes and effects of geopolitical and geoeconomic processes and the socio-political forces at global, regional and local levels. Through the use of critical development theories and international political economy as well as the evolution of these concepts it is sought to understand the challenge which globalization exposes local communities to and their possible responses. Through different projects, an understanding of the conditions for peace and security, crisis and change in the international political economy and at the societal levels is formed, which includes the gender problematic, ethnicity and civil society." http://www2.ihis.aau.dk/development/phd_program.html	Denmark
Aalborg University – Research Centre for Development and International Relations (DIR)	. Beyond Globalization and Development: In Search of Alternative Futures (Research Program) . Research Period: 2005-2008 . "This research programme will dig deeper, excavate and unearth the reasons why world poverty increases rather than decreasing, why nature continues to scream rather than settling. It will relate issues, problems and puzzles beyond globalization and development in search of alternative futures." (p.8) PDF http://www2.ihis.aau.dk/development/pdf/research_program_2005-	Denmark

	2008_til_nettet.pdf	
Aalborg University – Research Centre for Development and International Relations (DIR)	. Globalization, Inequality and Human Security Research period: 2001-2003 . "The features and objectives of the research program are related to the following thematics: - Generating new knowledge on the basis of interdisciplinary theoretical and empirical scrutiny of the changing relationships and processes of globalization and development.; - Explicitly introducing questions of power and agency to structures and processes of globalization and development; - Mounting critical and reflexive analyses of issues, problems, cases, areas and challenges from the meta to the micro-levels related to the specific context and dynamics of globalization and development; - Identifying asymmetric relations, additions and subtractions to human security, inclusions and exclusions of various categories of social strata as related to processes of unilateral liberalization by the nation-state, multilateral liberalization by the IFIs and the WTO, voluntary and involuntary regionalizations and different forms of interactions by global and local actors; - Identifying various forms of resistance to globalization and searching for alternatives to conventional approaches to globalization and development at the levels of conceptual, empirical and social practices." http://www2.ihis.aau.dk/development/pdf/Research_program.pdf	Denmark
United Nations University	. Various ongoing projects related to globalisation and its economics, social and policy impacts . "To undertake multidisciplinary research and policy analysis on structural changes affecting the living conditions of the world's poorest people." . "To provide a forum for professional interaction and the advocacy of policies leading to robust, equitable and environmentally sustainable growth." . "To promote capacity strengthening and training for scholars and government officials in the field of economic and social policy making." http://www.unu.edu/globalization/	Finland
Helsinki School of Economics	. Globalization and Competitiveness ."The 'globalization and competitiveness' programme examines how the increasing mobility of labour and capital affects Finnish companies and their competitiveness. The following questions are significant for the programme: For what and how companies compete under globalization, and what kind of rules are applied? How changes in consumer cultures and multiculturalism affect Finnish society, companies and their competitiveness?" http://www.hse.fi/EN/research/programs/globalization/	Finland
University of Tampere	. LIIKE - Research Programme on Finnish Companies and the Challenges of Globalization . "LIIKE is the first national research programme funded in collaboration with the Academy of Finland and the National Technology Agency Tekes in the field of business studies. The programme focuses on the changes of Finnish companies and their management under the pressure of knowledge-based competition and finance-driven economy." http://www.uta.fi/tutkimus/liike/index.html	Finland
DIW Berlin (German Institute for Economic Research) and Dresden University of Technology / Chair of Energy Economics	. The Globalization of Natural Gas Markets - A Joint Research Program on Supply Issues and Regulation in European and International Gas Markets (2004-2008) . "The Globalization of Natural Gas Markets" ("Global Gas") is a research program by DIW Berlin and the DREWAG Chair for Energy Economics at Dresden University of Technology. Its	Germany

	objective is to carry out research on the evolving governance structures in the European and the international gas markets." http://globalgas.ee2.biz/	
University of Mannheim	. Graduate Program "Globalization and Cultural Studies" . "The graduate program "Globalization and Cultural Studies" offers doctoral students the opportunity to study globalization processes within a uniquely transdisciplinary context." http://amerikanistik.uni-mannheim.de/promoengl.htm	Germany
Research Institute of Industrial Economics	. Globalization and Corporate Restructuring . "Due to these very important changes for the Swedish economy, the Research Institute of Industrial Economics has initiated a research program where research with this aim can be accumulated. The main aim of the research program is to increase our understanding of what economic prerequisites, forms of ownership of corporations and general institutions can ensure an efficient structural change in an international perspective and thus make use of the possibilities for growth entailed by the globalization process." http://www.industrialeconomics.se/Templates/ResearchProgramme1.aspx?PageID=3e394d02-c963-45ab-aa11-e1c9ddf38361	Sweden
Research Institute of Industrial Economics	. Labor Market Consequences of the Globalization of Firms (On-going research project part of the "Globalization and Corporate Restructuring") . "The effects of globalization on labor market are regarded as one of the largest structural problems in Swedish economy. The objective of this project is to analyze the consequences of firms' location decisions for outcomes in the labor market." http://www.naringslivsforskning.se/Templates/ResearchProject1.aspx?PageID=cda4d64d-9a5b-463b-a674-836320de5300	Sweden
Research Institute of Industrial Economics	. Globalization and ownership policy in post-war Sweden (Research project part of the "Research Program Economics of Entrepreneurship") . "This project studies the dramatic turn in Swedish ownership policy on ownership structure in the Swedish economy in the post-war period." http://www.naringslivsforskning.se/Templates/ResearchProject1.aspx?PageID=cf4ff603-970d-48b6-b52d-9f7c337cc499	Sweden
University of Sussex	. Economic Geographies of Globalisation and Development . "The research of this cluster focuses on global value chains, developing country industrialisation, industrial change and regional economic performance, the nature and impact of the emergence of China and spatial price formation. Current research on regional inequality and regional economic performance (Mick Dunford) has been mainly confined to Europe (including an ESRC funded project with the universities of Durham and Hertfordshire) on Regional economic performance, governance and cohesion in an enlarged Europe that was graded as outstanding by the ESRC and generated a number of valuable datasets). Most recent research activity has concentrated on the Three Italies and on the comparative performance of continental, Nordic, Mediterranean, east European and 'neo-American' economies. This research is underpinned by an interest in the relationships between globalization, integration, transition, convergence, inequality and social cohesion (including analyses of the structural and cohesion policies of the EU). Theoretically it draws upon theories of regulation in which the group has a strong interest. Current plans centre on an extension of this research to a comparative study of the EU and China…" http://www.sussex.ac.uk/geography/1-4-1.html	UK
University of Sussex	. The Development Research Centre on Migration, Globalisation and Poverty . 'The Development Research Centre on Migration, Globalisation	UK

	and Poverty aims "to promote new policy approaches that will help to maximize the potential benefits of migration for poor people, whilst minimizing its risks and costs". It undertakes a programme of research, capacity-building, training and promotion of dialogue to provide the strong evidential and conceptual base needed for such new policy approaches. This knowledge base is also being shared directly with poor migrants, contributing both directly and indirectly to the elimination of poverty.' http://www.migrationdrc.org/about/index.html	
University of Warwick	. Centre for the Study of Globalisation and Regionalisation . "CSGR is a multidisciplinary project. Its staff and associates are drawn from the fields of Anthropology, Business, Economics, Law, Politics and Sociology. Likewise, the Centre's seminars, conferences and other projects generally draw participants from several disciplines. The research agenda of CSGR highlights issues of the definition, measurement, impacts, and policy implications of globalisation and regionalisation. More specifically, much of the Centre's research concentrates on questions such as comparative regionalisms, the political economy of global and regional finance and trade, civil society in globalisation and regionalisation, and security issues in globalisation and regionalisation. CSGR research spans all regions of the world, as well as relations between them." http://www2.warwick.ac.uk/fac/soc/csgr/about/	UK
London School of Economics (LSE), University of London	. The Centre for the Study of Global Governance . "The Centre for the Study of Global Governance is a leading international institution dedicated to research, analysis and dissemination about global governance. Based at the London School of Economics, the Centre aims to increase understanding and knowledge of global issues, to encourage interaction between academics, policy makers, journalists and activists, and to propose solutions." http://www.lse.ac.uk/Depts/global/aboutus.htm	UK
King's College, University of London	. MA/MSc Environment, Politics and Globalization, Department of Geography . "The MA/MSc Environment, Politics and Globalisation programme is aimed at providing students with an in-depth and critical awareness of the politics and geographies shaping environments at a range of interrelated and ever shifting scales. In this context the programme involves a broad and reflexive interpretation of the terms 'environment', 'politics', and 'globalization'. It aims to enable students to develop the skills required to engage with both cutting edge academic literatures and grounded policy scenarios so that they can participate in the dynamic and contested environmental arena. These aims are achieved by the unique combination of theoretical and practical modules that draw on the environmental expertise of the staff and internships with participating environmental organisations." . http://postgraduatestudentships.co.uk/node/1909	UK
Queen Mary, University of London	. MSc Globalisation and Development – Departament of Geography . "MSc Globalisation and Development examines the economic, political, social and institutional bases and consequences of uneven power relations within contemporary processes of global development. Not restricted merely to economic dimensions of globalisation, the programme also examines the moral, ideological, gender and race relations that shape processes of, and institutional responses to, globalisation and development. It does so at a range of scales and in different spaces within an increasingly transnational world. MSc Globalisation and Development is an innovative programme	UK

	that combines the theoretical and empirical study of globalisation with a detailed examination of the activities of a range of organisations concerned with the practice of development. Whilst the programme aims to develop an advanced and critical understanding of the geographies of globalisation and development and to engage with questions of power and resistance, it also offers the skills necessary to engage directly with practitioners working in the field of development. Taught through an innovative range of seminars, workshops, presentations and site visits, and delivered by members of the Department's internationally renowned Spaces of Politics, Inequality and Development Research Group, the programme engages with the latest thinking and practice around globalisation and development." .http://www.geog.qmul.ac.uk/postgraduate/programmes/globalisation/index.html	
School of Oriental and African Studies (SOAS), University of London	. MSc Globalisation and Development . "The programme offers a critical examination of the contemporary process of globalisation and how it has influenced the developing world, both before and after 9/11.The MSc Globalisation and Development blends critical analysis of mainstream thinking, alternative theories and practices, and cases studies of political, social and cultural aspects of globalisation and development. The degree draws its strength from the unrivalled expertise in development problems and processes at SOAS." http:// www.soas.ac.uk/programmes/prog13999.php	UK
University College London (UCL)	. MSc in Globalisation . "The MSc in Globalisation is an interdisciplinary programme that examines the economic, political, institutional and social processes shaped by increasing interdependence, integration and interaction between people in distant places. The thematic scope is broad-ranging, and seeks to balance a critical interrogation of conceptual debates around the nature of globalisation with an examination of the diverse geopolitical, economic, and social manifestations of the globalisation process itself. The MSc is strongly interdisciplinary in scope, and thus is appropriate for students from a diverse set of backgrounds. This would include students with undergraduate degrees in the social sciences—such as human geography, politics and international relations, economics, sociology, and anthropology—as well as a range of other disciplinary and professional backgrounds. By offering students considerable flexibility in their choice of modules and, especially, in the framing and design of their dissertation projects, the course seeks to accommodate individual research interests and needs. Students completing the MSc in Globalisation will be able to develop expertise in key theoretical discourses and debates around globalisation, develop expertise in advanced social science research skills, gain experience in the design and execution of a major research project and prepare for careers in fields where an advanced understanding of the subjects covered in the programme are valuable. These include development agencies, international business, consultancy, government, social services and academia." http://www.geog.ucl.ac.uk/prospstudents/pg/msc/geoglobal/	UK
Institute for the Study of the Americas – School of Avanced Study – University of London	. MSc in Globalisation and Latin American Development . "The MSc in Globalisation and Latin American Development examines both the theoretical issues raised by globalisation and the variant ways in which different Latin American societies have reacted to it. The programme also examines the degree to which contemporary indices of globalisation are continuous with earlier forms of Latin America's global incorporation, and it takes as its	UK

	central concern the ways in which Latin American development is bound up with global processes The flexibility of either part-time or full-time study is offered. A number of fieldwork grants are offered to enable students to carry out fieldwork for the dissertation. Alongside the development of techniques, skills and knowledge relevant to the interests and research needs of individual students, the programme aims to equip students for both independent research and analysis in primary and secondary material, and writing at an advanced level, thus fostering students' intellectual development and the independent learning ability required for continuing professional and personal development. Outcomes can be broadly defined as either knowledge-based or skill-based and are usually realised in combination. Thus the categories of outcomes below are not mutually exclusive; knowledge and understanding, skills of various kinds and other attributes are complementary attainments gained in reciprocal relationship with one another. The programme draws substantially on the active research of teaching staff in the specialist areas of study." http://www.americas.sas.ac.uk/postgraduate_study/MSc_GlobalisationLatinAmDev.htm	
Loughborough University	. Globalization and World Cities Research Network . "Centred in the Geography Department at Loughborough University, this research network focuses upon the external relations of world cities. Although the world/global city literature is premised upon the existence of world-wide transactions, most of the research effort has gone into studying the internal structures of individual cities and comparative analyses of the same. Relations between cities have been neglected by world cities researchers; the Globalization and World Cities (GaWC) Research Network has been formed to aid in rectifying this situation (see Multiple GaWCs - a brief introduction to the multi-facetted nature of GaWC - and Formative Missions for GaWC)." http://www.lboro.ac.uk/gawc	UK
University of Bath	. MSc Globalisation and International Policy Analysis (MGIPA) . "Provides a multidisciplinary social science based understanding of globalisation and international policy analysis and examines the vertical links between national, supra-national and global levels, as well as the horizontal links between policy making by governments, business and other actors." http://www.bath.ac.uk/prospectus/postgrad/soc-pol/progs/mgipa.shtml	UK
University of Glasgow	. MSc Global Movements, Social Justice & Sustainability . "This programme offers you the chance to examine the social, political and cultural aspects of the global movements that are shaping the contemporary world, and to assess ongoing debates about social justice and sustainability, through the analysis of a wide range of ethnographic studies. When do processes and practices of globalisation, participation and sustainability strengthen injustice? When are they emancipatory? This programme draws on detailed ethnographic studies from both the 'north' and the 'south' to analyse global movements, examining for example how and when 'participatory governance' and 'sustainable development' are used to support or to exploit social and ecological systems. Through developing the hands-on critical skills of participatory, investigative and action research - grounded in the emerging field of global ethnography - you will be encouraged to examine and assess strategies used to resist and redirect those processes of globalisation, sustainable development and participatory governance which have	UK

	the potential to produce and reproduce inequalities." http://www.findamasters.com/search/showcourse.asp?cour_id=9960	
University of Nottingham	. The Leverhulme Centre for Research on Globalisation and Economic Policy . "GEP - the Globalisation and Economic Policy Centre - is the major centre in Europe studying the impacts of globalisation and economic policy and one of the biggest of its kind in the world. The Centre has an impressive international reputation; its academics have advised the Treasury, the World Bank and WTO." http://www.gep.org.uk	UK
University of Aberdeen	. Masters (MLitt) program in Muslims, Globalisation, and the West, Al-Maktoum Institute, Dundee, Scotland . "This is a new one year taught masters programme which provides an introduction and exploration of the complex issues and relationships between Muslims and what is referred to as the 'West'. The programme mainly focuses on the analysis of issues related to the contexts in which globalisation, dialogue and clash of civilisations emerged. Key issues for students taking the programme include the emergence of globalisation and its overriding impact on politics and international relations issues relating to Islam and Muslims across the world. Within the programme, we also look into the debate of dialogue or non-dialogue and ongoing concepts and discussions on the perceived threats of Islam to 'Western' values, reinforcing the claim made by proponents of clash of civilisations. The programme also highlights the Quranic discourse on peace, dialogue, understanding, the concept of humanity (insaniyyah) and universalism. Thus, globalisation in its political but also sociological underpinnings is examined by identifying areas of similarity and difference between the two. In addition, the programme discusses issues about the concept of political Islam, understandings and misunderstanding about it and whether or not Muslim political thought is incompatible with principles of governance in the 'West'. This innovative and unique programme is aimed to enable students to contribute in an informed and intelligent way to current debates on how Muslims (and more broadly Islam) can be seen to be engaging with the contemporary issues of globalisation and international relations. One important element of this programme is its uniqueness within the field of Islamic Studies, with the focus on the combination of approaches including both studies of Islamic sources and concepts (in particular the Qur'an and other core sources) and contemporary social/political studies of issues relating to international relations. This makes the programme distinct from any other programmes in either Islamic Studies and politics or sociology." . http://www.h-net.org/announce/show.cgi?ID=157034	UK
Manchester Metropolitan University	. MA in Globalisation, Societies & Cultures – Departament of Sociology . "This new MA programme will run alongside our existing MA in Sociology and provides the same range of methodological insights and skills. However, the MA in Globalisation focuses specifically on the many ways in which global forces - often working alongside parallel transformations - are changing the ways in which we are experiencing everyday life. Among the key themes tackled are : - the development of transnational communities and cultures including emergent new forms of worldwide political protest, - the possibilities for a future global society or culture, the inter-meshing of local-global interests and identities - the inequalities and social exclusion generated by economic	UK

	globalisation. A wide range of further topics can be explored through the option courses available including the impact and the repercussions of globalisation for the following: - women's lives and work, - gender issues and international movements, - cities and urban cultures, - the media and technology, - consumption practices, - crime connections, - issues surrounding race and racism and contemporary world crises. A central theme running through all the courses concerns whether and to what extent sociology - like other disciplines - needs to re-think many of its central concepts, debates and theoretical approaches in the light of globalisation processes." http://www.sociology.mmu.ac.uk/courses_maglob.php	
University of Brighton	. MA Cultural and Critical Theory (Globalisation: Politics and Culture) . "Commencing with current debates concerning the appropriate conceptualisation and historical location of the process of globalisation, the first unit, The Political Economy of Globalisation, addresses the central approaches to understanding the development of the world system from within the disciplines of international relations. It will consider the key contemporary arguments concerning some of the institutional, economic and political transformations of the last two decades: the role of the World Trade Organisation, the General Agreement on Tariffs and Services, the development of regional blocs, and the changing status and role of the United Nations. It will also address the issues of the relationships between globalisation, bio-technology, militarism and the nation state." http://www.brighton.ac.uk/art/programmes/humanities/pdf/ma-global-poli-cult.pdf	UK
Swansea University – School of Law - Wales	. MA in Global Orders and Law . "In its first part, the module will explore the interconnections between law, trade, politics, and economics in a global context. The second part of the module will allow students to apply the theoretical insights thus gained to various topics of globalization such as the global economy, environment, human rights, and international criminal law." http://www.swansea.ac.uk/law/postgraduate/MADegree/MAinGlogalOrdersandLaw/	UK
The School of Law and Government Dublin City University	. MA in Globalisation . "The MA in Globalisation provides students with the skills and abilities to understand the pressures giving rise to and created by globalisation. For students with some years' work experience in the field, the programme also provides a basis for further professional development within their chosen career. . The principal objectives of the programme are: · to develop in students a detailed understanding of the key concepts underpinning contemporary globalisation. · to provide an in-depth knowledge of the manner in which contemporary world politics and the international regulatory environment shapes the role and character of the principal actors on the world stage, including international institutions, non-governmental organisations and the growing anti-global capitalism movement. · to develop in students a critical perspective concerning the range of issues arising on the contemporary international world stage, including international political economy, global governance,	Ireland

	international law, regional conflict, national and international security policies, Third World solidarity and international human rights. · To provide students with strong research skills in the area of globalisation and international relations more generally." http://www.internationaleducationmedia.com/ireland/law_and_government_dublin_city_university.htm	
University College Cork - College of Arts, Celtic Studies and Social Sciences	. MA Sociology of Develoment & Globalisation . "The Department offers an innovative MA in the Sociology of Development and Globalisation (CKE56). This programme was launched in 1990 and grew out of a long standing interest in development issues within the Department. The importance and continuing relevance of an analysis of the global nature of our current world, at both the structural and cultural levels, is illustrated by the street confrontations over the World Trade Organisation's meetings and by the less volatile, but pervasive 'McDonaldisation' of culture and consumerism. However, at the same time, examples of resistance and conflict exemplified by events in Chechnya, East Timor, Kosovo, Rwanda, and Palestine remind us of the importance of the local and the specific in understanding regional developments as they articulate with the wider global trends. In our teaching and research, we draw on both sociological and anthropological perspectives. The programme attempts to analyse critically the processes of the globalisation of poverty and inequality and explores alternative strategies of development by which people can liberate themselves from the structures and ideologies of domination. In the programme we recognise that poverty and inequality are not only about access to resources, but are based on ways of knowing, thinking, and feeling The Department is offering a range of courses in the field of sociology, focusing on sociological theory (including Weber, Foucault, Habermas and critical sociology, Elias and process sociology), the sociology of contemporary Ireland (including the conflict in Northern Ireland, crime and deviance, women and gender in Ireland, environment and environmental movements), and the sociology of culture and media." . http://www.ucc.ie/en/CKE56/	Ireland
University of Limerick	. MA in Language, Culture & Globalisation http://www.postgradireland.com/Courses/CourseView.asp?intPGCourseID=3530&strKeyword=globalisation#courseDetails	Ireland
	Asia and the Pacific	
RMIT University	. The Globalism Institute – An RMIT Research Center . "The Globalism Institute specialises in engaged and principled research that develops socially sustainable and culturally sensitive responses to the demands of globalization." http://globalism.rmit.edu.au/research/research.html	Australia
Centre for Asia Pacific Social Transformation Studies (CAPSTRANS) – University of Wollongong and the University of Newcastle	. Globalisation and development: impact on Indian women workers (Research Program: Mobility and Exclusion) . "This project will examine sectors that have opened up to the global economy directly and indirectly: call centres and women working as out-workers and in the informal sector in the garment industry in Tirupur in the Coimbatore district of Tamil Nadu. Some of the main areas, which will be discussed in the interviews and subsequently analyzed, include: occupational mobility, wages, empowerment of women in the workplace, attitudes of women towards work and the attitude of the employers towards the women employees, education, caste and social constraints and family life." http://www.capstrans.edu.au/about/projects/global-dev.html	Australia
Centre for Asia Pacific	. Globalisation and Education	Australia

Social Transformation Studies (CAPSTRANS) - University of Wollongong and the University of Newcastle	. "A new and emerging program that examines the intersection between globalisation and education, including work on transnational education, international markets in education, the internationalisation of vocational education, and language and literacy policy in South East Asia." http://www.capstrans.edu.au/about/education.html	
Centre for Asia Pacific Social Transformation Studies (CAPSTRANS) - University of Wollongong and the University of Newcastle	. Globalisation and International Development . "This research program examines the impact of globalisation on development at the local, national, and regional levels. Research projects are currently organised into two major themes. International Agencies and Development NGOs Social Impact Analysis http://www.capstrans.edu.au/about/int-dev.html	Australia
Hokkaido University - Slavic Research Center	. Making a Discipline of Slavic Eurasian Studies: Meso-areas and Globalization . This research program was created "…in order to make contributions to rejuvenating and advancing international Slavic Eurasian area studies in accordance with the new historical environments of regional integrations and globalization." http://src-h.slav.hokudai.ac.jp/coe21/coe-e.html	Japan
Institute of Developing Economies Japan External Trade Organization (IDE – JETRO)	. Globalization in South Asia: Its Impact on Employment and Labor Issues Research Period: April 2005 - March 2007 . "In South Asia, as in other regions, globalization has given rise to new industries and created new employment opportunities in sectors such as the IT industry in India and readymade garment industries in Bangladesh and Sri Lanka. At the same time, globalization has brought changes in employment practices both in the public and private sectors, resulting in a shrinking of formal employment and an expansion of non-standard work arrangements. In this two-year research project, we have been investigating the issue first through an analysis of employment-related policies and institutions and the structure of labor markets and employment, and secondly by conducting several empirical surveys jointly with South Asian organizations. In the second and final year, following the field studies conducted in India, Sri Lanka and Bangladesh in the first year, the impact of the withdrawal of the Multi-Fiber Agreement (MFA) on the employment situation will be analyzed intensively through sample surveys in India and Pakistan." http://ideaix03.ide.go.jp/English/Research/Project/2006/402.html	Japan
Institute of Developing Economies Japan External Trade Organization (IDE – JETRO)	. Climbing up the Global Value Chain: Possibilities and Limitations for East Asian Manufacturers . Research Period: April 2007 - March 2009 . "This research project studies the growth mechanisms of East Asian latecomer firms that participate in the global division of labor, cutting across both the different stages of value-adding activities and country borders. With special reference to empirical studies based on the "global value chain" (GVC) perspective, this study attempts to elucidate the possibilities and limitations associated with the growth of latecomer firms for powerful brand-carrying companies from the developed economies." http://ideaix03.ide.go.jp/English/Research/Project/2007/109.html	Japan
Institute of Developing Economies Japan External Trade Organization (IDE – JETRO)	. Reconstruction and Development of Rural Cambodia: From Krom Samakki to Globalization . Research Period: April 2007 - March 2008 . How have Cambodian peasants rebuilt their social relations, which were totally destroyed by the Khmer Rouge regime? The objective of this study is to elucidate the process of reconstruction and	Japan

	development in rural households after 1979, when the Khmer Rouge regime collapsed, and to publish it in English. http://ideaix03.ide.go.jp/English/Research/Project/2007/406.html	
Sustainable Development Policy Institute	. Globalization and Rural Livelihoods . This research program aims to promote sustainable development by collaborating with existing organisations on current agricultural practices and their consequences for the environment, and the efficient utilisation of scarce natural resources, especially water. .. The program focuses on issues affecting the indigenous farming community. This program is actively involved in a campaign on food security and biodiversity. Agreement on agriculture, Trade Related Intellectual Property Rights (TRIPs), bio-patenting and increased influence of multinational companies in agricultural input supply has threatened the region's food security." http://www.sdpi.org/research_Programme/environment/globalization_and_rural_livelihood.htm#1	Pakistan
Sustainable Development Policy Institute	. Gender and Globalization . "Program Objectives … - to find out how processes of economic globalisation influence gender(in-) equality in Pakistan; - to raise awareness about this interaction amongst stakeholders, and - to develop strategies how to make sure globalisation does not widen gender inequality but rather supports women's empowerment." http://www.sdpi.org/research_Programme/human_development/gender_and_globalization.htm	Pakistan
National Taiwan University – Institute for Advanced Studies in Humanities and Social Science	. Program for Globalization Studies . "Goals of the globalization program 1. Integrating the research resource of the National Taiwan Universities, promoting cross-disciplinary cooperation, combining the top-grade scholar in our school to constitute a research team with international competition ability. 2. Stirring more cross-disciplinary cooperation, handling new research issues, and arousing academic communities in East Asia and scholars in related research field to develop neo-theory. 3. Having the research ability that can show an important topic of Taiwan or East Asia, and the globalization developments. Regarding the researches of the realms, such as economics, psychology and geography...etc. as the principle that first to do. Integrating the social science such as sociology, management, politics, mass communications, jurisprudence. 4. Bringing the advantage of National Taiwan University in the social science domain to a full play and combining the outstanding issue related research team, and through the practice to train a new research talented person. 5. Communicating with international communities and exercising international influence." http://www.psy.ntu.edu.tw/glob/en01.asp	Taiwan
Koç University	. Center for Research on Globalization and Democratic Governance (GLODEM) . "Undertake high-quality research, foster public discussion, and enhance local and international linkages within and beyond Turkey;" . "Advance and apply knowledge about globalization and democratic governance;" . "Build Koç's reputation for expertise and advice pertaining to globalization and democratic governance based on its academic strength, independence and impartiality;" . "Serve broader audience by dealing with questions of long term strategy and policy about the various dimensions of globalization and democratic governance through research publications,	Turkey

	conferences, seminars, and workshops." http://portal.ku.edu.tr/~glodem/	
	Middle East	
Zayed University	. Globalization and Transnational Flows ."Research in this area is interdisciplinary and may address any aspect of the character and processes of contemporary globalization and the transnational flows which lie at its heart. The aim is to make a contribution to the understanding of the processes, dynamics, and consequences of globalization and the ways that it is reshaping the nature of contemporary social, cultural and political life, relationships, boundaries and networks at the interpersonal, collective, national and international levels." http://www.zu.ac.ae/research/aspx/culturesociety.aspx	United Arab Emirates

2J. Number of articles that contain the terms* globalisation *and* financial globalisation*, in the article title, abstract, or as keywords: 1970-2005

Years	Globalization	Fin. globalization
1970	0	0
1971	0	0
1972	0	0
1973	0	0
1974	0	0
1975	0	0
1976	1	0
1977	0	0
1978	0	0
1979	1	0
1980	0	0
1981	0	0
1982	0	0
1983	2	0
1984	1	0
1985	2	0
1986	1	0
1987	7	0
1988	4	0
1989	12	1
1990	12	2
1991	25	2
1992	76	5
1993	86	3
1994	117	9
1995	155	9
1996	234	13
1997	369	21
1998	553	28
1999	601	31
2000	846	69
2001	980	49
2002	1065	49
2003	1098	52
2004	1109	52
2005	1236	59

2K. Number of articles that contain the terms* financial globalisation, financial liberalisation, international finance, *and* international financial integration *in the article title, abstract, or as keywords: 1970-2005

Years/terms	**1970-1974**	**1975-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-04**	**2005-06**
financial globalisation	0	0	0	1	21	102	271	261
financial liberalisation	0	0	2	19	107	215	247	100
international finance	0	0	50	27	116	228	289	137
intern. fin. integration	0	0	5	5	21	62	106	52
total	0	0	57	52	265	607	913	550

3. OECD key ICT indicators

	Total communication access paths*	Standard analogue access lines
1991	437.4	422.1
1992	459.0	437.3
1993	485.2	455.3
1994	518.9	471.2
1995	562.5	485.5
1996	590.8	465.3
1997	655.3	508.5
1998	737.0	477.4
1999	858.8	475.9
2000	1016.9	469.7
2001	1129.2	461.2
2002	1214.4	446.8
2003	1291.5	436.7
2004	1408.5	428.3
2005	1529.9	417.3

4. Standard rate for 3-minute call from New York City to London

Year	US Dollar
1927	75
1928	45
1930	30
1936	21
1944	21
1945	12
1949	12
1970	9.6
1974	5.4
1980	4.8
1986	4.83
1991	3.32
1995	2.4
1999	0.3

5. Foreign capital stocks 1825-2000

	1825	1855	1870	1900	1914	1930	1938	1945	1960	1971	1980	1985	1990	1995	2000
Assets															
United Kingdom	0.5a	0.7a	4.9a	12.1a	19.5a	18.2a	22.9c	14.2a	26.4a	-	551d	857d	1,760d	2,490d	4,450.00
France	0.1a	-	2.5a	5.2a	8.6a	3.5a	3.9c	-	-	-	168d	428d	736d	1,100d	2,430.00
Germany	-	-	-	4.8a	6.7a	1.1a	0.7c	-	1.2a	-	257d	342d	1,100d	1,670d	2,600.00
Netherlands	0.3a	0.2a	0.3a	1.1a	1.2a	2.3a	4.8c	3.7a	27.6a	-	99d	178d	418d	712d	1,140.00
United States	0.0a	0.0a	0.0a	0.5a	2.5a	14.7a	11.5c	15.3a	63.6a	-	775d	1,300d	2,180d	3,350d	7,350.00
Canada	-	-	-	0.1a	0.2a	1.3a	1.9a	-	-	-	92d	129d	227d	302d	546.00
Japan	-	-	-	-	-	-	1.2c	-	-	-	160d	437d	1,860d	2,720d	2,970.00
Other Europe	-	-	-	-	-	-	4.6c	-	-	-	503d	715d	1,777d	2,855d	4,999.00
Other	-	-	-	-	-	-	6.0c	2.0a	5.9a	-	94d	123d	214d	337d	2,499.00
All	0.9a	0.9a	7.7a	23.8a	38.7a	41.1a	52.8a	35.2a	124.7a	-	2,800d	4,508d	10,272d	15,536d	28,984.00
World GDP	-	-	111b	128b	221b	491b	491b	722b	1,942b	5,733b	11,118e	12,455e	21,141e	25,110e	31,499.00
Sample GDP	-	-	16f	43f	76f	149f	182f	273f	671f	-	7,806d	9,705d	17,250d	21,956d	25,785.00
Sample size	-	-	4f	7f	7f	7f	7f	7f	7f	-	25d	25d	25d	25d	63.00
Assets/Sample GDP	-	-	0.47	0.55	0.51	0.28	0.26	0.12	0.18		0.36	0.46	0.60	0.71	1.12
Assets/World GDP	-	-	0.07	0.19	0.18	0.08	0.11	0.05	0.06		0.25	0.36	0.49	0.62	0.92
UK/All	0.56	0.78	0.64	0.51	0.5	0.44	0.43	0.4	0.21	-	0.2	0.19	0.17	0.16	0.15
US/All	0	0	0	0.02	0.06	0.36	0.22	0.43	0.51	-	0.28	0.29	0.21	0.22	0.25
Liabilities															
Europe	-	-	-	5.4a	12.0a	-	10.3a	-	7.6a	-	1,457d	2,248d	5,406d	8,592d	14,509.00
North America	-	-	-	2.6a	11.1a	-	13.7a	-	12.5a	-	684d	1,412d	2,830d	4,681d	9,611.00
Australia & N.Z.	-	-	-	1.6a	2.0a	-	4.5a	-	2.2a	-	71d	118d	216d	318d	494.00
Japan	-	-	-	0.1a	1.0a	-	0.6a	-	0.3a	-	147d	307d	1,530d	1,970d	1,810.00
Latin America	-	-	-	2.9g	8.9g	-	11.3g	-	9.2a		250g	-	505g	768g	490.00
Asia (excl. Japan)	-	-	-	2.4g	6.8g	-	10.6g	-	2.7a		129g	-	524g	960g	132.00
Africa	-	-	-	3.0g	4.1g	-	4.0g	-	2.2a		124g	-	306g	353g	155.00
Developing Countries	-	-	-	6.0g	13.0g	-	25.9g	-	14.1a		506g	-	1,338g	2,086g	3,595.00
All	-	-	-	18.0a	45.5a	-	55.0a	-	39.9a	-	3.368dg	-	12,655dg	19,728dg	30,020.00
World GDP	-	-	111b	128b	221b	491b	491b	722b	1,942b	4,733b	11,118e	12,455e	21,141e	25,110e	31,499.00
Sample GDP	-	-	-	-	-	-	-	-	-	-	9,508d	-	19,294d	25,043d	25,785.00
Sample size	-	-	-	-	-	-	-	-	-	-	65dg	-	65dg	65dg	63.00
Liabilities/Sample GDP	-	-	-								0.35		0.66	0.79	1.16
Liabilities/World GDP	-	-	-	0.14	0.21		0.11		0.02		0.30		0.60	0.79	0.95
Developing Countries/All	-	-	-	0.33	0.29	-	0.47	-	0.35	-	0.15	-	0.11	0.11	0.12

Notes:
Units for foreign investment and GDP are billions of current U.S. dollars.
a= from Woodruff (1967, 150-159).
b= from Maddison (1995); sample of 199 countries; 1990 US dollars converted to current dollars using US GDP deflator; some interpolation.
c= from Lewis (1945, 292-97).
d= from IFS (9/97). Up to 26 countries, fixed sample, trend interpolation on missing data.
e= from World Bank (1994).
f= excludes “Other Europe” and “Other”; GDP data from appendix.
g= from Twomey (1998; unpublished worksheets).
Source: Obstfeld & Taylor (2004:22, 23)

6. FDI in world economic activity: 1913-2005

Item	1913	1960	1975	1980	1985	1990	1995	2000	2005
World FDI stock as a share of world output	9	4.4	4.5	4.8	6.4	8.12	9.98	20.43	23.99
World FDI inflows as a share of world output	-	0.3	0.3	0.5	0.5	1.04	1.22	3.92	1.75
World FDI inflows as a share of gfcf	-	1.1	1.4	2	1.8	4.5	5.4	19.8	7.5
World sales of foreign affiliates as a share of world exports	-	84 [b]	97 [c]	99 [d]	99 [d]	122			

Source: UNCTAD, Division on Transnational Corporation and Investment, based on UNCTAD-DTCI, FDI data base, UN-DESIPA data base; Dunning 1993a and Bairoch, 1994.
a Estimate.
b 1967 based on United States figures.
c Based on United States and Japanese figures.
d 1982 based on German, Japanese and United States data.

7. FDI + PI Selected developed economies 1980-2003

Year	FDI outward	FDI inward	PI outward	PI inward	GDP	FDI+PI/GDP (outflow)	FDI+PI/GDP (inflow)
1980	50,676.02	47,574.75	32,306.15	50,350.67	6,073,075.81	1.37	1.61
1981	51,349.88	45,322.01	42,780.64	56,412.47	6,447,075.82	1.46	1.58
1982	25,048.63	32,927.33	51,801.64	50,357.60	6,446,604.46	1.19	1.29
1983	34,833.89	33,011.75	48,456.35	46,830.52	6,823,727.46	1.22	1.17
1984	48,037.11	41,225.86	67,878.95	62,344.80	7,288,486.55	1.59	1.42
1985	58,692.57	43,745.54	105,326.04	136,195.72	7,691,432.58	2.13	2.34
1986	92,349.78	72,936.04	176,870.99	177,768.14	9,120,797.80	2.95	2.75
1987	134,684.45	119,279.11	120,241.29	157,449.19	10,435,644.03	2.44	2.65
1988	168,233.53	134,628.89	184,575.63	225,827.73	11,837,962.85	2.98	3.04
1989	210,705.33	162,264.29	248,021.76	299,002.16	12,388,674.06	3.70	3.72
1990	217,668.78	165,637.32	153,754.02	159,329.80	13,486,225.99	2.75	2.41
1991	182,028.27	114,572.94	266,465.07	308,926.00	14,296,041.35	3.14	2.96
1992	167,423.13	115,545.69	295,150.86	181,777.78	15,146,440.06	3.05	1.96
1993	197,228.53	143,280.96	317,327.78	337,885.26	15,563,513.56	3.31	3.09
1994	227,317.40	148,224.27	272,184.16	331,185.18	16,748,480.86	2.98	2.86
1995	304,893.56	219,672.25	365,239.91	460,166.68	18,255,678.96	3.67	3.72
1996	333,284.08	239,383.64	450,272.64	652,452.53	18,442,066.96	4.25	4.84
1997	404,690.08	287,185.58	439,693.60	627,224.17	18,482,235.96	4.57	4.95
1998	642,572.48	511,903.18	596,852.56	536,095.24	18,467,041.96	6.71	5.67
1999	1,036,768.91	861,732.96	774,574.32	960,156.96	19,739,283.96	9.18	9.23
2000	1,107,815.37	1,145,913.12	670,920.17	1,046,385.22	20,485,860.96	8.68	10.70
2001	681,682.90	610,181.24	603,680.28	867,478.35	20,142,152.96	6.38	7.34
2002	489,440.51	442,765.86	474,249.52	723,979.24	20,862,409.96	4.62	5.59
2003	510,630.59	360,830.79	632,160.24	1,170,104.90	22,918,975.96	4.99	6.68

8. Foreign Assets and Liabilities: advanced and emerging countries, 1970-2004

Year	Total Advanced country Group (24 countries)				Total Emerging Market Group (36 countries)			
	Total assets	*Total liabilities*	*GDP (US$)*	*Total assets + Total liabilities/ GDP (%)*	*Total assets*	*Total liabilities*	*GDP (US$)*	*Total assets + Total liabilities/ GDP (%)*
1970	522532	446847	2162754	45	24790	90211	330226	35
1971	639555	541521	2400152	49	28203	99417	366102	35
1972	773674	648429	2798798	51	37280	113657	409205	37
1973	883796	782270	3395832	49	49196	132883	510389	36
1974	943120	891676	3764693	49	57896	163337	648106	34
1975	1088766	1009261	4223902	50	62557	203380	682550	39
1976	1280157	1204067	4585249	54	80699	244987	744181	44
1977	1497483	1428476	5175455	57	106812	309163	846995	49
1978	1906226	1788850	6234806	59	131019	365035	1001362	50
1979	2300763	2199108	7167245	63	160778	432737	1211422	49
1980	2690128	2598285	7961389	66	184027	527286	1467683	48
1981	2934421	2894687	8067745	72	215206	616603	1862570	45
1982	3139101	3101716	8001824	78	214720	700247	1743706	52
1983	3440625	3362670	8300092	82	253708	756799	1750478	58
1984	3612200	3558738	8689603	83	288573	783270	1795995	60
1985	4425518	4368402	9159844	96	315082	840825	1855641	62
1986	5808757	5689225	11177952	103	341614	913969	1931406	65
1987	7321485	7159455	12946730	112	410100	1017566	2148467	66
1988	8316341	8138661	14559422	113	444324	1032367	2491001	59
1989	9820746	9732515	15133628	129	507921	1083582	2786777	57
1990	11067497	11160069	16982441	131	628084	1181248	3037753	60
1991	11815734	12060966	18068321	132	735793	1305339	3173436	64
1992	11982638	12284920	19432266	125	804389	1440249	3492511	64
1993	13628800	13729952	19568497	140	1024983	1858874	4090101	71
1994	15053370	14928270	20981778	143	1180239	2115984	4509302	73
1995	17426275	17454113	23060868	151	1383751	2429284	5183822	74
1996	19249204	19295406	23151863	166	1574730	2741930	5702590	76
1997	21476352	21496661	22735427	189	1748710	2991426	5970699	79
1998	24744281	25047507	22991203	217	1961265	3233118	5520122	94
1999	27870904	28292516	24112496	233	2213451	3633162	5442381	107
2000	30813057	31378249	24357144	255	2387803	3608065	5943946	101
2001	30787395	31594132	24079308	259	2534642	3730518	5927873	106
2002	33858935	35024296	25093948	275	2858136	3868451	6020957	112
2003	42780849	43859771	28150601	308	3474519	4610664	6778628	119
2004	50968545	52302880	31152952	331	4191729	5323003	7877397	121

9. Effects of domestic telegraph and trans-Atlantic cable: Mean absolute and Standard deviation of the absolute difference of the United States 5-20 Bonds in New York and London

	Mean absolute	**Standard deviation**
April-July 1866	4.118	2.265
August-November 1866	1.272	0.762
October-November 1867	1.097	1.221
October-November 1868	1.419	1.399
October-November 1871	1.208	0.973

10. US international transactions: 1960-2003 (Millions of dollars)

Year	US-owned assets abroad, net increase/financial outflow (-)	Foreign-owned assets in the US, net (increase/financial inflow (+)	Balance on current account (lines 1, 18, and 35 or lines 73, 74, and 75)/13
1960	(4,099)	2,294	2,824
1961	(5,538)	2,705	3,822
1962	(4,174)	1,911	3,387
1963	(7,270)	3,217	4,414
1964	(9,560)	3,643	6,823
1965	(5,716)	742	5,431
1966	(7,321)	3,661	3,031
1967	(9,757)	7,379	2,583
1968	(10,977)	9,928	611
1969	(11,585)	12,702	399
1970	(8,470)	6,359	2,331
1971	(11,758)	22,970	(1,433)
1972	(13,787)	21,461	(5,795)
1973	(22,874)	18,388	7,140
1974	(34,745)	35,341	1,962
1975	(39,703)	17,170	18,116
1976	(51,269)	38,018	4,295
1977	(34,785)	53,219	(14,335)
1978	(61,130)	67,036	(15,143)
1979	(64,915)	40,852	(285)
1980	(85,815)	62,612	2,317
1981	(113,054)	86,232	5,030
1982	(127,882)	96,589	(5,536)
1983	(66,373)	88,694	(38,691)
1984	(40,376)	117,752	(94,344)
1985	(44,752)	146,115	(118,155)
1986	(111,723)	230,009	(147,177)
1987	(79,296)	248,634	(160,655)
1988	(106,573)	246,522	(121,153)
1989	(175,383)	224,928	(99,486)
1990	(81,234)	141,571	(78,968)
1991	(64,388)	110,808	3,747
1992	(74,410)	170,663	(47,991)
1993	(200,552)	282,040	(81,987)
1994	(178,937)	305,989	(118,032)
1995	(352,264)	438,562	(109,478)
1996	(413,409)	551,096	(120,207)
1997	(485,475)	706,809	(135,979)
1998	(347,829)	423,569	(209,557)
1999	(503,640)	740,210	(296,822)
2000	(569,798)	1,046,896	(413,443)
2001	(366,768)	782,859	(385,701)
2002	(198,014)	768,246	(473,944)
2003	(283,414)	829,173	(530,668)

11. Accumulated growth of notional amounts of OTC derivative contracts and world GDP (In percentage)

Year	OTC Notional value (billion dollars)	OTC Accumulated (%)	World GDP Notional value (billion dollars)	World GDP Accumulated (%)
1988	1,654.30	91.12	17,952.27	11.69
1989	2,474.80	140.71	18,827.27	16.57
1990	3,450.37	180.13	21,663.61	31.63
1991	4,449.97	209.10	22,663.88	36.25
1992	5,345.70	229.23	25,263.85	47.72
1993	8,474.57	287.76	24,483.20	44.63
1994	11,303.21	321.14	26,322.46	52.14
1995	17,712.63	377.85	29,229.46	63.19
1996	24,953.15	418.72	29,963.60	65.70
1997	29,035.06	435.08	29,824.98	65.24
1998	50,997.00	510.72	29,596.03	64.47
1999	58,265.00	524.97	30,693.76	68.18
2000	63,009.00	533.12	31,508.59	70.83
2001	69,207.30	542.95	31,207.84	69.88
2002	101,318.49	589.35	32,356.89	73.56
2003	142,306.92	629.81	36,252.63	85.60
2004	183,583.27	658.81	40,960.43	98.59
2005	213,195.58	674.94	44,000.00	106.01

IX. BIBLIOGRAPHY

Abdelal & Tedlow (2003) “Theodore Levitt’s ‘The globalization of markets’: An evaluation after two decades”. *Harvard Business School,* Working Paper 03-082, February.

Adelman, I. (1995) “The long term impact of economic development in developed countries on developing countries since 1820.” *Journal of Evolutionary Economics*. 5, pp. 189-209.

Aglietta, M. (1999) “La globalisation financière [Financial globalisation].” In Collection Repères, *L’économie mondiale*. Paris: Editions La Découverte. [In French]

Akyüz, Y. (1998) “A crise financeira do Leste asiático [The East Asian financial crisis].” *Revista Política Externa.* 7 (2) pp. 41-53. [In Portuguese]

Albala-Bertrand, J. M. (1991) “Latin American adjustment: How much has happened? Literature review.” *Journal of Latin American Studies*, 23 (2) pp. 470-472.

Alvarez, P. A. (2002) “Understanding globalization.” *The History Teacher*. 35 (2) pp. 261-66.

Anguiano, G. M. de (2000) “Hyman P. Minsky en el pensamiento económico del siglo XX [Hyman P. Minsky and the economic thought of the 20th century].” *Comércio Exterior*. 50 (12) pp. 1-17. [In Spanish]

Annual Abstract Statistics (UK). London: HMSO.

Arestis, P. & Demetriades, P. (1996) “Finance and growth: Institutional Considerations and Causality.” *UEL Department of Economics*, Working Paper 5, May.

Arestis, P. & Demetriades, P. (1997) “Financial development and economic growth: assessing the evidence.” *The Economic Journal*. 107 (442) pp. 783-99.

Arestis, P., Demetriades, P. O. & Luintel, K.B. (2001) “Financial Development and Economic Growth: The Role of Stock Markets”. *Journal of Money, Credit and Banking.* 33 (1), pp. 16-41.

Arestis, P. & Basu, S. (2002a) “Financial globalization: some conceptual problems.” *Levy Institute of Bard College*, Working Paper 360.

Arestis, P. *et al* (2002b) “The impact of financial liberalization policies on financial development: evidence from developing economies.” *International Journal of Finance and Economics*. 7, pp. 109-21.

Arestis, P. & Basu, S. (2003a) “Is financial globalization truly global? New institutions for an inclusive capital market.” *Levy Institute of Bard College*, Public Policy Brief 75.

Arestis, P. & Basu, S. (2003b) “Financial globalization and regulation.” *Levy Institute of Bard College*, Working Paper 397, December.

Arestis, P. & Basu, S. (2004) “Financial liberalization and poverty: Channels of influence.” *Levy Institute of Bard College,* Working Paper 411, July.

Arestis, P., Basu, S. & Sushanta, M. (2005) “Financial globalization: the need for a single currency and a global central bank.” *Journal of Post Keynesian Economics*. 27 (3) pp. 507-31.

Arthmar, R. (1999) “A Inglaterra e o padrão-ouro nos anos 20 [England and the Gold Standart in the 1920s].” *Interface*. (5) pp. 107-23. [In Portuguese]

Aurélio, M. M. & Silva, M. E. da (1998) “Crise cambial e intervenções em mercados de derivativos de câmbio [Currency crisis and interventions in the exchange derivative markets].” *Proceedings of the XXVI Brazilian National Association of Postgraduate Programmes in Economics (ANPEC),* Vitória, Espírito Santo (Brazil) pp. 589-604. [In Portuguese]

Bairoch, P. (1996) “Globalization myths and realities: one century of external trade and foreign investment.” In Boyer, R. & Drache, D. (eds.). *States Against Markets: the limits of globalization.* Routledge: London & New York.

Bairoch, P. & Kozul-Wright, R. (1996) “Globalization myths: some historical reflections on integration, industrialization and growth in the world economy.” *UNCTAD,* Discussion Papers 113, March.

Baldwin, R. E. & Martin, P. (1999) “Two waves of globalization: superficial similarities, fundamental differences”. *National Bureau of Economic Research,* NBER Working Paper 6904, January.

Batista Jr, P. N. (1998) “Mitos da ‘globalização’ [‘Globalization’ myths].” *Estudos Avançados*. 12 (32) pp. 125-86.

Bayoumi, T. (1990) “Saving Investment Correlations: Immobile Capital, Government Policy or Endogenous Behaviour.” *IMF Staff Papers.* 37, pp. 360-87.

Bekaert, G., Harvey, C. R. & Lundblad, C. (2001) "Does financial liberalization spur growth?" *National Bureau of Economic Research,* NBER Working Paper 8245, April.

Belluzzo, L. G. de M. (1995) "O declínio de Bretton Woods e a emergência dos mercados 'globalizados' [The collapse of the Bretton Woods system and the emergence of 'globalised' markets]." *Economia e Sociedade*. (14) pp. 11-20. [In Portuguese]

Belluzzo, L. G. (2005) "O dólar e os desequilíbrios globais [The influence of American currency and global imbalances]." *Revista de Economia Política*. 25 (3) pp. 224-32. [In Portuguese]

Bernstein, P. L. (1998) "Stock market risk in a Post-Keynesian world." *Journal of Post Keynesian Economics*. 21 (1) pp. 15-25.

Bank for International Settlements (1999) 69th Annual Report. Basle, Switzerland.

BIS (2005) *Triennial Central Bank survey: Foreign exchange and derivatives market activity in 2004. Preliminary global results*. Basle: Bank for International Settlements, March.

BIS (2007) *Triennial Central Bank survey of foreign exchange and derivatives market activity in 2007*. Basle: Bank for International Settlements, September.

Block, F. (1977) *The origins of international economic disorder: a study of United States international monetary policy from World War II to the present.* London: University of Calofornia Press.

Bordo, M. (1995) "Is there a good case for a new Bretton Woods international monetary system?" *The American Economic Review*. 85, pp. 317-22.

Bordo, M. (2000) "The globalization of international financial markets: What can history teach us?" *Paper prepared for the Conference 'International Financial Markets: The Challenge of Globalization'*, Texas A&M University, 31st March 2000, College Station (TX), United States.

Bordo, M. (2002) "Globalization in historical perspective." *Business Economics*. January, pp. 20-9.

Bordo, M. & Rogoff, H. (1996) "The Gold Standard as a 'good housekeeping seal of approval'." *The Journal of Economic History*, 56 (2) pp. 389-428.

Bordo, M., Eichengreen, B. & KIM, J. (1998) "Was there really an earlier period of international financial integration today?" *National Bureau of Economic Research*, NBER Working Paper 6738, September.

Bordo, M. & Eichengreen, B. & IRWIN, D. (1999) "Is globalization today really different than a hundred years ago?" *National Bureau of Economic Research*, NBER Working Paper 7195, September.

Braga, J. C. de S. & Cintra, M. A. M. (2004) "Finanças dolarizadas e capital financeiro: exasperação sob comando americano [Financial capital and the power of dollar: exasperation under American dominance]." In Fiori, J. L. (org). *O poder americano*. Petrópolis: Vozes. [In Portuguese]

Braithwaite, J. & Drahos, P. (2000) "Financial Regulation." In: *Global Business Regulation.* Cambridge: Cambridge University Press.

Briston, R. J. (1970) *The stock exchange and investment analysis*. London: George Allen and Unwin Ltd.

Brown, M. M. (2003) "Democratic governance: Toward a framework for sustainable peace." *Global Governance*. 9, pp. 141-46.

Caffé, R. (1997) "Capital fictício, inovações financeiras e derivativos: algumas observações sobre a natureza da finança globalizada [Fictitious capital, financial innovations and derivatives: some comments on the nature of financial globalisation]." *Proceedings of the II National Conference of Political Economy (Sociedade Brasileira de Economia Política)*, São Paulo (Brazil) pp. 301-10. [In Portuguese]

Calvo, G. A. & Mendoza, E. G. (1997) "Rational herding behavior and the globalization of securities markets." *Institute of Empirical Macroeconomics,* Discussion Paper 120, August.

Canuto, O. & Lima, G. T. (1999a) "Desdobramentos da globalização financeira: regulação substantiva e procedimental [Financial globalisation unfoldings: substantive and procedural regulation]." *Instituto de Economia/UNICAMP*, Texto para Discussão 76, julho. [In Portuguese]

Canuto, O. & Lima, G. T. (1999b) "Transformações financeiras, regulação substantiva e regulação procedimental [Financial changes, substantive regulation and procedural regulation].” *Proceedings of the II National Conference of Political Economy,* São Paulo (SP), Brazil. [In Portuguese]

Canuto, O. & Lima, G. T. (2002) “Basle 2: from substantive regulation to procedural regulation.” In Fendt, R. & Tedesco, L. (eds.). *Uneven architecture: the space of emerging countries in the international financial system.* São Paulo: Fundação Konrad Adenauer.

Canuto, O. & Lima, G. T. (2005) “Redes de segurança financeira e crises bancárias em economias emergentes [Financial security nets and banking crisis in emerging economies].” In: Sobreira, R. (ed.). *Regulação financeira e bancária.* São Paulo: Atlas.

Carciente, S. L. (2003) “De Bretton Woods a la globalización financiera: nuevas reglas de juego [From Bretton Woods to financial globalisation: new rules of the game].” *Análise Economica*. (39) pp. 1-20. [In Spanish]

Carvalho, F. J. C. de (1992) *Mr. Keynes and the post Keynesians: principles of macroeconomics in monetary production economy*. Aldershot: Edward Elgar.

Carvalho, F. C. (2004) “Bretton Woods aos 60 anos [Bretton Woods in its 60s].” *Novos Estudos CEBRAP*. (70) pp. 51-63. [In Portuguese]

Carvalho, F. C. de; Souza, F. E. P. de; Sicsú, J.; Paula, L. F. R. de & Studart, R. (2001) *Economia monetária e financeira: Teoria e política* [*Monetary and financial economics: Theory and politics*]. Rio de Janeiro: Campus. [In Portuguese]

Chang, H-J (2002) *Kicking away the ladder: Development strategy in historical perspective*. London: Anthem Press.

Chase-Dunn, C., Kawano, Y. & Brewer, B. D. (2000) “Trade globalization since 1795: waves of integration in the world-system.” *American Sociological Review*. 65 (1) pp. 77-95.

Chesnais, F. (1994) *La mondialisation du capital* [*The globalisation of capital*]. Paris: Syros. [In French]

Chesnais, F. (1997) “L’émergence d’un régime d’accumulation mondial à dominance financière [The emergence of a global accumulation regime under financial dominance].” *La Pensée*. 309, pp. 61-85. [In French]

Chesnais, F. (2002) "A teoria do regime de acumulação financeirizado: conteúdo, alcance e interrogações [The theory of financial accumulation regime: content and interrogations]." *Economia e Sociedade*. 11 (1) pp. 1-44. [In Portuguese]

Chesnais, F. (2005) "Douze thèses sur la mondialisation du capital [Twelve theses on the globalisation of capital]." *Laberinto*. March, pp. 1-10. [In French]

Choi, W. G., Sharma, S. & Strömqvist, M. (2007) "Capital Flows, Financial Integration, and International Reserve Holdings: The Recent Experience of Emerging Markets and Advanced Economies." *International Monetary Fund*, IMF Working Paper 151, July.

Cintra, M. A. M. (1999) "A crise do padrão ouro-dólar e a gestação da globalização financeira a partir dos Estados Unidos [The dollar-gold standard crisis and the development of financial globalisation under the United States dominance]." *Economia em Revista*. 7 (1) pp. 5-44. [In Portuguese]

Cintra, M. A. M. (2000) "A dinâmica do novo regime monetário-financeiro americano: uma hipótese de interpretação [The dynamics of the contemporary American financial-monetary regime: an interpretation]". *Revista Estudos Avançados*. (39) pp. 103-141. [In Portuguese]

Clarke, Stephen V. O. (1973) "The reconstruction of the international monetary system: the attempts of 1922 and 1933." *Princeton Studies in International Finance*. International Finance Section, n. 33.

Commons, J. R. (1931). "Institutional economics." *American Economic Review,* 21 (4) pp. 648-57.

Cohen, B. J. (1996) "Phoenix risen: The resurrection of global finance." *World Politics*, 48 pp. 268-96.

Conceição, O. A. C. (2001) "Os antigos, os novos e os neo-institucionalistas: há convergência teórica no pensamento institucionalista? [The old, the new and the neo-institutionalists: is there any theoretical convergence in the institutionalist thought?]" *Análise Econômica*. 19 (36) pp. 25-45. [In Portuguese]

Conceição, O. A. C. (2002a) "A contribuição das abordagens institucionalistas para a constituição de uma teoria econômica das instituições [The contribution of the institutionalists' approaches for the constitution of an economic theory of institutions]." *Revista Ensaios FEE*. 23 (1) pp. 77-106. [In Portuguese]

Conceição, O. A. C. (2002b) "A relação entre processo de crescimento econômico, mudança e instituições na abordagem institucionalista [The process of economic growth and change in the institutionalist approach]." *Proceedings of the First Rio Grande do Sul Meeting on Economics*, Porto Alegre (RS), Brazil, maio. [In Portuguese]

Conceição, O. A. C. (2002c) "O conceito de instituição nas modernas abordagens institucionalistas [The concept of institution in modern institutionalist approach]." *Revista Economia Contemporânea*. 6 (2) pp. 119-46. [In Portuguese]

Conceição, O. A. C. (2004) "Além da transação: uma comparação do pensamento dos institucionalistas com os evolucionários e pós-keynesianos [Beyond the transaction: a compararison between institutionalists, evolutionaries and post-Keynesians]." *Proceedings of the XXXII Brazilian National Association of Postgraduate Programmes in Economics (ANPEC)*, João Pessoa (PB), Brazil. [In Portuguese]

Crafts, N. & Venables, A. (2001) "Globalization in history: a geographical perspective." *Paper prepared for the NBER conference on 'Globalization in Historical Perspective'*, 4th and 5th May 2001, Santa Barbara (CA), United States.

Crotty, J. R. (1983) "On Keynes and capital flight." *Journal of Economic Literature*, 21 (1) pp. 59-65.

Crystal, D. (2003) *English as a global language*. 2nd edn. Cambridge: Cambridge University Press, second edition.

Dathein, R. (2002) "De Bretton Woods à globalização financeira: evolução, crise e perspectivas do Sistema Monetário Internacional [From Bretton Woods to financial globalisation: evolution, crisis and perspectives of the International Monetary system]." *Proceedings of the VII National Conference of Political Economy (Sociedade Brasileira de Economia Política)*, Curitiba (PR), Brazil. [In Portuguese]

Davidson, P. (1997) "Are grains of sand in the wheels of international finance sufficient to do the job when boulders are often required?" *Economic Journal*. 107, pp. 671-86.

Davidson, P. (2000) "Is a plumber or a new financial architect needed to end global international liquidity problems?" *World Development*. 28 (6) pp. 1117-131.

Davidson, P. (2001a) “John Maynard Keynes y la economía del siglo XXI [John Maynard Keynes and the economy of the 21st century].” *Comércio Exterior*. 51 (1) pp. 1-14. [In Spanish]

Davidson, P. (2001b) “If markets are efficient, why have there been so many international financial market crises since the 1970s?” In Arestis, P. & Baddeley, M. & McCombie, J. (eds). *What global economic crisis?* New York: Palgrave McMillan.

Davidson, P. (2002) “Globalization.” *Journal of Post Keynesian Economics*. 24 (3) pp. 475-92.

Davidson, P. (2003a) “What is wrong with the Washington Consensus and what should we do about it?” *Paper presented at Conference on “Reforming The Reforms: What Next For Latin America?”* 25th July 2003, Rio de Janeiro (RJ), Brazil.

Davidson, P. (2003b) “The future of the international financial system.” *Paper presented at Conference on the Future of Economics*, 18th September 2003, University of Cambridge, Cambridge, UK.

Davis, L. E. & Huttenback, R. A. (1977) “Public expenditure and private profit: budgetary decision in the British Empire, 1860-1912.” *The American Economic Review*. 67 (1) pp. 282-87.

Davis, L. & Neal, L. (1998) “Micro rules and macro outcomes: the impact of micro structure on the efficiency of security exchanges, London, New York, and Paris, 1800-1914.” *The American Economic Review*. 88 (2) pp. 40-5.

Dequech, D. (1998) *Rationality and institutions under uncertainty*. Thesis (PhD). University of Cambridge.

DiMaggio, P. *et al.* (2004) “Digital inequality: From unequal access to differentiated use”. In Neckerman, K. (ed.) *Social Inequality*. New York: Russell Sage Foundation, pp. 355-400

Dombrowski, P. (1998) “Haute finance and high theory: recent scholarship on global financial relations.” *Mershon International Studies Review*. 42, pp. 1-28.

Dooley, M. P., Folkerts-Landau, D. & Garber, P. (2003) “An essay on the revived Bretton Woods System.” *National Bureau of Economic Research*, NBER Working Paper 9971, September.

Drache, D. (1999) “Globalization: is there anything to fear?” *Centre for the Study of Globalisation and Regionalisation*, CSGR Working Paper 23/99, February.

Dunning, J. (1988) *Explaining international production*. London: Unwin Hyman.

Dugger, W. (1990) “The new institutionalism: New but not institutionalist.” *Journal of Economic Issues*, XXIV (2) pp. 423-31.

Dymski, G. A. (2003) “The international debt crisis.” In: Michie, J. (ed). *The handbook of Globalisation.* Cheltenham. Edward Elgar.

Eatwell, J. & Taylor, L. (1998) “The performance of liberalized capital markets.” *Center for Economic Policy Analysis*, CEPA Working Paper III/9, August.

Eatwell, J., Milgate, M. & Newman, P. (eds) (1998). *The New Palgrave: A Dictionary of Economics*. London: Macmillan Press.

Edelstein, M. (1982) *Overseas investment in the age of high imperialism*. New York: Columbia University Press.

Edison, H. J., Levine, R., Ricci, L. & Sløk, T. (2002) “International financial integration and economic growth.” *Journal of International Money and Finance*. 21, pp. 749–776.

Eichengreen (1992) *Golden fetters: the gold standard and the Great Depression, 1919-1939.* New York: Oxford University Press.

Eichengreen, B. (1994) “History and Reform of the International Monetary System.” *Center for International and Development Economics Research,* CIDER Working Papers C94-041, October

Eichengreen (1996) *Globalizing capital: A history of the international monetary system.* Princeton: Princeton University Press.

Eichengreen, B. (2000) “Taming Capital Flows.” *World Development*. 28 (6) pp. 1105-16.

Eichengreen, B. (2004) “Global Imbalances and the Lessons of Bretton Woods.” *National Bureau of Economic Research*, NBER Working Paper 10497, June.

Eichengreen, B., Rose, A. K. & Wyplosz, C. (1995) “Exchange market mayhem: the antecedents and the aftermath of speculative attacks.” *Economic Policy*. 21, pp. 249-96.

Eichengreen, B. & Bordo, M. D. & Irwin, D. A. (1999) "Is globalization today really different than the century years ago?" *National Bureau of Economic Research*, NBER Working Paper 7195, June.

Eichengreen, B. & James, H. (2001) "Monetary and financial reform in two eras of globalization." *Revised version of a Paper prepared for the NBER conference on 'Globalization in Historical Perspective'*, 4th and 5th May 2001, Santa Barbara (CA), United States.

Eichengreen, B. J. & Bordo, M. D. (2002) "Crises now and then: what lessons from the last of financial globalization was?" *National Bureau of Economic Research*, NBER Working Paper 8716, January.

Fama, E. (1970) "Efficient capital markets: A review of theory and empirical work." *Journal of Finance*, 25 (2) pp. 383-417.

Farhi, M. & Cintra, M. A. M. (2003) "O crash de 2002: da 'exuberância irracional' à 'ganância infecciosa'[The 2002 crash: from 'irrational exuberance' to 'infectious greed']." *Revista de Economia Política.* 23 (1) pp. 39-61. [In Portuguese]

Feenstra, R. C. (1998) "Integration of trade and disintegration of production in the global economy." *Journal of Economic Perspectives.* 12 (4) pp.31-50.

Feibleman, J. (1945) "Book review: Reiser O. L. & Davies B. (1944) Planetary democracy: An introduction to scientific humanism and applied semantics, New York:Creative Age Press", *The Philosophical Review*, 54 (1) pp. 89-90.

Feinstein, C. H. (1972) *National income expenditure and output of the United Kingdom 1855-1965*. Cambridge: Cambridge University Press.

Ferrari Filho, F. (2006) "Keynesian proposals for reform of the international monetary system: in search of the neutrality of internationally convertible money?" *Revista de Economia*, 32 (2) pp. 7-20.

Field, A. J. (1992) "The magnetic telegraph, price and quantity data, and the new management of capital." *The Journal of Economic History*. 52 (2) pp. 401-13.

Findlay, R. & O'Rourke, K. (2001) "Commodity market integration, 1500-2000." *Paper presented at the NBER Conference on Globalization in Historical Perspective*, 3rd – 06th May 2001, Santa Barbara (CA), United States.

Frankel, J. A. (2000) “Globalization of the economy.” *National Bureau of Economic Research*, NBER Working Paper 7858, August.

Freeman, R. B. & Oostendorp, R. H. (2001) “The occupational wages around the world data file.” *International Labour Review*, 140 (4) pp. 379-401.

Freitas, M. C. P. & Prates, D. M. (2002) “Reestruturação do sistema financeiro internacional e países periféricos [Restructuring of the international financial system and peripheral countries].” *Revista de Economia Política.* 22 (2) pp. 15-31. [In Portuguese]

Friedman, M. (1953) *Essays in positive economics*. Chicago: University of Chicago Press.

Fry, M. (1997) “In favour of financial liberalisation.” *The Economic Journal*, 107 (442) pp. 754-70.

Furtado, J. (1999) “Mundialização, reestruturação e competitividade [Globalisation, restructuring and competitiveness].” *Novos Estudos.* (53) pp. 97-118. [In Portuguese]

Furtado, J. (2000) “Globalização das empresas e desnacionalização [Globalization of firms and denationalisation].” In: Lacerda, A. C. de (ed.) *Desnacionalização: mitos, riscos e desafios*. São Paulo: Contexto. [In Portuguese]

Galbraith, J. K. (1955) *The great crash, 1929*. London: Hamish Hamilton.

Gall, N. & Ricupero, R. (1997) “Globalism and Localism: What are the Limits of Competition and Security?” *Fernando Braudel Institute of World Economy*, Braudel Papers 16.

Garbade, K. D. & Silber, W. L. (1977) “Technology, communication and the performance of financial markets: 1840-1975.” *The Journal of Finance*. 33 (3) pp. 819-32.

Gerbier, M. (1997) “La continentalisation, véritable object de la mondialisation [The continentalisation, true object of globalisation].” *La Pensée*. 309, pp. 27-40. [In French]

Giddens, A. (1996) “Keynote on globalization”. *United Nations Research Institute for Social Development*. Keynote Address at the UNRISD Conference on Globalization and Citizenship. December. Available at:

http://www.unrisd.org/unrisd/website/newsview.nsf/0/3F2A5BF8EF7300D480256B750053C7EC?OpenDocument

Giddens, A. (2002) *Runaway world: How globalization is reshaping our lives*. London: Profile Books.

Giddens, A. (2006) *Sociology*. 5th edn. Cambridge: Polity Press.

Gonçalves, R. (1997) "A volatilidade do sistema financeiro internacional e a vulnerabilidade das economias nacionais [The volatility of international financial system and the vulnerability of national economies]." *Proceedings of the II Brazilian National Association of Postgraduate Programmes in Economics (ANPEC)*, São Paulo (Brazil) Maio. [In Portuguese]

Gonçalves, R. (2000) "As locomotivas enferrujadas do capitalismo [Capitalism's rusted locomotives]." *Análise Econômica*, 18 (33) pp. 7-28. [In Portuguese]

Grabel, I. (1995) "Speculation-led economic development: a post-Keynesian interpretation of financial liberalization programmes in the Third World." *International Review of Applied Economics*. 9 (2) pp. 130-49.

Green, A. & Urquhart, M. C. (1976). Factor and commodity flows in the international economy of 1840-1914: a multi-country view. *Journal of Economic History*, 36 (1) pp. 217-52.

Greenspan, A. (2003) "Global finance: is it slowing?" *The Federal Reserve Board*, Speeches 2003, March.

Griffith-Jones, S., Cailloux, J. & Pfaffenzeller, S. (1998) "The East Asian Financial Crisis: a Reflection on its Causes, Consequences and Policy Implications." *Institute of Development Studies,* IDS Discussion Papers 367.

Gurley, J. & Shaw, E. S (1955) "Financial aspects of economic development." *The American Economic Review*, 45 (4) pp. 515-38.

Guttman, R. (1996) "A transformação do capital financeiro [Financial capital transformation]." *Economia e Sociedade.* (7) pp. 51-83. [In Portuguese]

Harley, C. K. (2000) "A Review of O'Rourke and Williamson's globalization and history: The evolution of a nineteenth century Atlantic economy." *Journal of Economic Literature*. XXXVIII, pp. 926-35.

Harris, R. C. (1993) "Globalization, trade and income." *Canadian Journal of Economics*, 26 (4) pp. 755-76.

Held, D. (2001) "Globalization, cosmopolitanism, and democracy: an interview with David Held", *Constellations*, 8 (4) pp. 427-41

Held, D., McGrew, A., Goldblatt, D. & Perraton, J. (1999) *Global transformations: politics, economics and culture*. California: Stanford University Press.

Helleiner, E. (1994) *States and the re-emergence of global finance: from Bretton Woods to the 1990s.* Ithaca, NY; London: Cornell University Press.

Helleiner, E. (2003) *The making of national money: territorial currencies in historical perspective*. Ithaca and London: Cornell University Press.

Henderson, J. (1999) "Uneven crises: institutional foundations of East Asian economic turmoil." *Economy and Society*. 28 (3) pp. 327-68

Hicks, J. (1985) "Keynes and the world economy." In: Vicarelli. F. (ed). *Keynes's Relevance today*. London: Macmillan Press.

Hirst, P. (1997) "Globalisation: Myth or Reality?" *International Affairs*. 73 (3) pp. 409-25.

Hirst, P. & Thompson, G. (1996a) *Globalization in Question*. Cambridge: Polity Press.

Hirst, P. & Thompson, G. (1996b) "Globalisation: ten frequently asked questions and some surprising answers." *Soundings*. (4) pp. 52-66.

Hirst, P. & Thompson, G. (2003) "The Future of Globalisation." In: Michie, Jonathan (ed), *The Handbook of Globalisation*. Cheltenham. Edward Elgar.

Historical Statistics of the United States - Colonial Times to 1970 (1975) U.S. Department of Commerce. U.S. Bureau of the Census. Washington (DC). Part 1 and part 2.

Hodgson, G. M. (1988) *Economics and institutions: A manifesto for a modern institutional economics.* Cambridge and Philadelphia: Polity Press and University of Pensylvania Press.

Hodgson, G. M. (1993) "Institutional economics: Surveying the 'old' and the 'new'" *Metroeconomica.* 44 (1) pp. 1-28.

Hodgson, G. M. (1997) "The ubiquity of habits and rules". *Cambridge Journal of Economics,* 21 pp. 663-84.

Hodgson, G. M. (1998) "The approach of institutional economics." *Journal of Economic Literature*, 36 (1) pp. 166-92.

Hodgson, G. M. (2000) "What is the essence of institutional economics?" *Journal of Economic Issues.* XXXIV (2) pp. 317-29.

Hodgson, G. M. (2001) *How economics forgot history: the problem of historical specificity in social science.* London: Routledge.

Hodgson, G. M. (2002a) "General theorising versus historical perspective: a problem for post Keynesians. In: Arestis, P., Desai, M & Dow, S. (eds.) *Methodology, microeconomics and Keynes: Essays in honour of Victoria Chick*. Vol. 2. London: Routledge.

Hodgson, G. M. (2002b) "The evolution of institutions: an agenda for future theoretical research". *Constitutional Political Economy*. 13 (2) pp. 111-27.

Hodgson, G. M. (2003) The hidden persuaders: institutions and individuals in economic theory. *Cambridge Journal of Economics*, 27 pp. 159-75.

Hodgson, G. M. (2007) "The problem of historical specificity". In: Stavros, I. & Nielsen, K. (eds). *Economics and the social sciences: Boundaries, interaction and integration*. Cheltenham UK and Northampton MA: Edward Elgar.

Hollingsworth, J. R. (1998) "New perspectives on the spatial dimensions of economic coordination: tensions between globalization and social systems of production." *Review of International Political Economy.* 5 (3) pp. 482-507.

Ietto-Gillies, G. (1997) "Globalisation: Myth and Reality." *Economic Issues.* 2 (2) pp. 73-84.

IMF (1997) *World Economic Outlook*. Washington, DC: IMF.

International Monetary Fund (2006) *International Financial Statistics Yearbook 2006.* Washington, D.C.: IMF.

Irwin, D. (1996) "The United States in a new global economy? A century perspective." *American Economic Review Papers and Proceedings*. 86 (2) pp. 41-46.

Kaminsky, G. & Reinhart, C. (1998) “Financial crises in Asia and Latin America: then and now.” *American Economic Review: Papers and Proceedings*. 88 (2) pp. 444-48.

Kapur, D. (1998-99) “FMI: cura ou doença [IMF: cure or disease].” *Revista Política Externa.* 7 (3) pp 65-75. [In Portuguese]

Kearney, A. T. (2003) “Measuring Globalization: Who’s Up, Who’s Down?” *Foreign Policy*. January-February, pp. 60-71.

Keohane, R. & Nye Jr., J. S. (2000) “Globalization: what’s new? What’s not? (and so what?).” *Foreign Policy*. Spring, pp. 104-20.

Kerstenetzky, J. (2001) “Coordenação como um tema histórico-institucional: discussão de duas experiências históricas [Coordenation as a historical-institutional subject: a debate of two historical experiences].”*Revista Brasileira de Economia*. 55 (3) pp. 379-405.

Keynes, J. M. [1919] (1973) *The economic consequences of the peace.* London: Macmillan (The Collected Writings of John Maynard Keynes, v. II).

Keynes, J. M. (1921a) (1973) “The meaning of probability.” In: *A Treatise on Probability.* London: Macmillan (The Collected Writings of John Maynard Keynes., v. VIII, chapter I) pp. 3-9.

Keynes, J. M. [1921b] (1973) “Probability in relation to the theory of knowledge.” In: *A Treatise on Probability.* London: Macmillan (The Collected Writings of John Maynard Keynes, v. VIII, chapter II), pp. 10-20.

Keynes, J. M. [1930] (1971) “Problems of international management - II. The gold standard”. In: *A Treatise on Money: II. The applied theory of money*. London: Macmillan (The Collected Writings of John Maynard Keynes, v. VI, book VII, chapter 35), pp. 258-69.

Keynes, J. M. [1931a] (1972) “The economic consequences of Mr. Churchill”. In: Keynes, J. M. *Essays in persuasion*. London: Macmillan (The Collected Writings of John Maynard Keynes, v. IX).

Keynes, J. M. [1931b] (1972) “How to pay for the war.” In: *Essays in Persuasion*. London: Macmillan (The Collected Writings of John Maynard Keynes, v. IX, chapter VI-2), pp. 372-81.

Keynes, J. M. [1936] (1973) *The general theory of employment, interest and money*. London: Macmillan (The Collected Writings of John Maynard Keynes, v. VII).

Keynes, J. M. [1943] (1980) "The International Clearing Union." In: *Activities 1940-44: Shaping the post-war world. The Clearing Union.*" London: Macmillan (The Collected Writings of John Maynard Keynes, v. XXV).

Keynes, J. M. [1944] (1980) "The International Monetary Fund." In: *Activities 1941-46: Shaping the post-war world: Bretton Woods and reparations*." London: Macmillan (The Collected Writings of John Maynard Keynes, v. XXVI).

Kindleberger, C. P. (1973) *The world in depression, 1929-1939*. London: Allen Lane the Penguin Press.

Kindleberger, C. P. (1989) *Manias, Panics and Crashes: A History of Financial Crises*. Basic Books.

Kingston, W. (2000) "A spectre is haunting the world – the spectre of global capitalism." *Journal of Evolutionary Economics*. 10, pp. 83-108.

Kleinknecht, A. & Wengel, J. t. (1998) "The myth of economic globalisation." *Cambridge Journal of Economics*. 22, pp. 637-47.

Koenig-Archibugi, M. (2003) "Global governance." In: MICHIE, J. (ed). *The Handbook of Globalisation.* Cheltenham: Edward Elgar.

Kose, M. A., Prasad, E., Rogoff, K. & Wei, S.-J (2006) "Financial globalization: a reappraisal." *International Monetary Fund*, IMF Working Paper 06/189, August.

Kozmenko, S. & Chuyko, H. (2003) "Paradox of financial globalization." *Problems and Perspectives of Management*, (1) pp. 13-16.

Kregel, J. (1977) "On the existence of expectations in English Neoclassical Economics." *Journal of Economic Literature*. 15 (2) pp. 33-43.

Kregel, J. (1994) "Capital flows: globalization of production and financing development." *UNCTAD Review*. pp. 23-38.

Kregel, J. (1995) "Neoclassical price theory, institutions, and the evolution of securities market organization." *The Economic Journal*. 105 (429) pp. 459-70.

Kregel, J. (1996) "Some risks and implications of financial globalization for national policy autonomy." *UNCTAD Review*. pp. 55-62.

Kregel, J. (2004) “Can we create a stable international financial environment that ensures net resource transfers to developing countries?” *Journal of Post Keynesian Economics*. 26 (4) pp. 573-90.

Kregel, J. (2007) “*Financial Liberalisation and Domestic Policy Space: Theory and Practice with Reference to Latin America”*. Forthcoming.

Kregel, J. (jankregel@yahoo.com), 10th September 2007. *“Truly” globalised transnational firms*. Email to A. Salles (a.o.t.salles@herts.ac.uk).

Krugman, P. (1979) “A model of balance of payments crises.” *Journal of Money, Credit and Banking*. 11 (3) pp. 311-25.

Lane, P. R. (2004) “Global financial trade: how far have we come?” *Institute for International Integration Studies*, IIIS Discussion Paper 35, August.

Lane, P. R. & Milesi-Ferretti, G. M. (2003) “International financial integration.” *Institute for International Integration Studies*, IIIS Discussion Paper 3, July.

Lane, P. R. & Milesi-Ferretti, G. M. (2006) “The external wealth of nations mark II: Revised and extended estimative of foreign assets and liabilities, 1970-2004.” *International Monetary Fund*, IMF Working Paper 69, March.

Leonard, P. (1960) “Les fluctuations cycliques dans les transports maritimes [Cyclical fluctuations in maritime transport].” *Revue économique*. 11 (1) pp. 17-45. [In French]

Levitt, T. (1983) The globalization of markets.” *Harvard Business Review*, May-June, pp. 92-102.

Lewis, W. A. (1949) *Economic survey 1919-1939*. London: Allen & Unwin.

Lima, L. A. de O. (1984) “Keynes e o fim do *laissez-faire* [Keynes and the end of *laissez-faire*].” *Revista de Economia Política.* 4 (1) pp. 123-131. [In Portuguese]

Lima, G. T. & Canuto, O. (2003) “Regulação bancária e redes de segurança financeira [Banking regulation and financial security’s net].” In: Sobreira, R. (ed.). *Regulação financeira e bancária.* São Paulo: Atlas. [In Portuguese]

Lothian, J. R. (2000) “Capital market integration and exchange-rate regime in historical perspective.” *Research in Banking and Finance*. 1, pp. 139-73.

Lothian, J. R. (2002) "The internationalization of money and finance and the globalization of financial markets." *Journal of International Money and Finance*. 21, pp. 699-724.

Lyons, F. S. L. (1963). *Internationalism in Europe, 1815-1914*. Leyden: A. W. Sythoff-Leyden.

Machlup, F. (1941) "Eight questions on gold: a review." *The American Economic Review*. 30 (5) pp. 30-7.

Meadows, P. (1951) "Culture theory and industrial analysis." *Annals of the American Academy of Political and Social Science*. 274, pp. 9-16.

McCloskey, D. N. & Zecher, R. (1976) How the Gold Standard worked, 1880-1913. In Harry, G. J. & Frenkel, J. (eds). *The monetary approach of the balance of payments*. Toronto: University of Toronto Press.

McKinnon, R. I. (1993) "Rules of the game: international money in historical perspective", *Journal of Economic Literature*, 31 (1) pp. 1-44.

Michie, R. C. (1985) The London Stock Exchange and the international securities market, 1850-1914. *Institute of Commonwealth Studies (University of London)*, Collected Seminar Papers n. 35.

Michie, R. C. (1986) "The London and New York Stock Exchanges: 1850-1914." *The Journal of Economic History*. 46 (1) pp. 171-87.

Michie. R. C. (1987) *The London and New York stock exchanges, 1850-1914*. London: Allen and Unwin.

Michie, R. C. (1988) "Different in name only? The London stock exchange and foreign bourses, c. 1850-1914." *Business History*. 30 (1) pp. 46-68.

Michie, R. C. (1999) *The London Stock Exchange: a history*. Oxford: Oxford University Press.

Minsky, H. P. (1985) "The Financial Instability Hypothesis: A restatement." In Arestis, P. and Skouras, (eds.), Post Keynesian Economic Theory.

Minsky, H. P. (1986) *Stabilizing an unstable economy*. New Haven:Yale University Press.

Minsky, H. P. (1992) "The financial instability hypothesis." *Levy Economics Institute of Bard College,* Working Paper 74, May.

Minsky, H. P. & Ferri, P. (1991) "Market processes and thwarting systems." *Levy Economics Institute of Bard College,* Working Paper 64, November.

Mishkin, F. S. (1999) "Global Financial Instability: framework, events, issues." *Journal of Economic Perspectives*. 13 (4) pp.3-20.

Mishkin, F. (2005) "Is financial globalization beneficial?" *National Bureau of Economic Research*, NBER Working Paper 11891, December.

Morris, C. (1945) "Book review: Reiser O. L. & Davies B. (1944) Planetary democracy: An introduction to scientific humanism and applied semantics, New York: Creative Age Press". *The Journal of Religion*. 25 (2) pp. 155-56.

Moshirian, F. (2003) "Globalization and financial market integration." *Journal of Multinational Financial Management.* 13, pp. 289-302.

Nayyar, D. (2006) "Globalisation, history and development: a tale of two centuries". *Cambridge Journal of Economics*. 30, pp. 137-59.

Nissanke, M. & Stein, H. (2003) "Financial globalization and economic development: toward an institutional foundation." *Eastern Economic Journal*. 29 (2) pp. 287-308.

North, D. C. (1962) "International capital movements in historical perspective." In: Mikesell, R. F. (ed) *U.S. private and government investment abroad*. Eugene: University of Oregon Books, pp. 10-43.

North, D. C. (1990) *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.

North, D. C. (1991) "Institutions." *Journal of Economic Perspectives*, 5 (1) pp. 97-112.

North, D. C. (1994) "Economic performance through time." *American Economic Review*, 84 (3) pp. 359-68.

Nurske, R. (1944) *International currency experience*. Geneva: League of Nations.

O'Brien, P. K. (2003) "The governance of globalization: the political economy of Anglo-American hegemony, 1793-2003." *CESifo,* Working Paper 1023, September.

Obstfeld, M. (1994) “The logic of currency crises.” Cahiers Economiques et Monétaires n. 43, Paris: Banque de France.

Obstfeld, M. (1998) “The Global Capital Market: Benefactor or Menace?” *Journal of Economic Perspectives.* 12 (4) pp.9-30.

Obstfeld, M. & Taylor, A. (2002) “Globalization and capital markets.” *National Bureau of Economic Research,* NBER Working Paper 8846, March.

Obstfeld, M. & Taylor, A. (2004) *Global capital markets: integration, crisis, and growth*. Cambridge: Cambridge University Press.

Odlyzko, A. (2001) “Internet pricing and the history of communications.” *Computer Networks*, 36 pp. 493-517.

Ohmae, K. (1991) *The borderless world: Power and strategy in the interlinked economy.* New York: HaperCollins Publishers, Rev. Ed.

Ohmae, K. (1995a) “Putting global logic first.” *Harvard Business Review*. 73 (1) pp. 119-25.

Ohmae, K. (1995b) *The end of the nation state: The rise of regional economies.* London: HaperCollins Publishers.

O’Rourke, K. H. & Williamson, J. G. (2002) “When did globalisation begin?” *European Review of Economic History*, 6 (1) pp. 23-50.

Perraton, J. (2001) “The global economy: Myths and realities.” *Cambridge Journal of Economics*. 25, pp. 669-84.

Perraton, J. (2003) *The Scope and Implications of Globalisation*. In: Michie, Jonathan (ed) The Handbook of Globalisation. Cheltenham. Edward Elgar.

Perraton, J. & Goldblatt, D. (1997) “The globalization of economic activity.” *New Political Economy*. 2 (2) pp. 257-77.

Persaud, A. (2001) “The puzzling decline in financial market liquidity.” *Bank for International Settlements*, BIS Papers 2, April.

Pessali, H. F. (2004) *A rhetorical analysis of Oliver Williamson’s Transaction Cost Economics*. Thesis (PhD). University of Hertfordshire.

Pessali, H. F. (2006) “Nano-fundamentos da macroeconomia: Keynes e os elementos institucionais na Teoria Geral. [Nano-foundations of macroeconomics: Keynes and the institutional aspects of the General Theory].” *Revista de Economia*. 32 (2) pp. 63-79. [In Portuguese]

Plihon, D. (1995) “A ascenção das finanças especulativas [World and financial instability].” *Economia e Sociedade.* n. 5, pp. 61-78. [In Portuguese]

Plihon, D. (1996) “Desequilíbrios mundiais e instabilidade financiera: A responsabilidade das políticas liberais: um ponto de vista keynesiano [World and financial instability].” *Economia e Sociedade.* n. 7, pp. 85-127. [In Portuguese]

Pollard, S. (ed) (1970) *The gold standard and employment policies between the Wars*. London: Methuen, 1970.

Porter, M. (1983) “Industrial organization and the evolution of concepts for strategic planning: the new learning.” *Managerial and Decision Economics.* 4 (3) pp. 172-80.

Prasad, E. S. *et al* (2003) “Effects of financial globalisation on developing countries: some empirical evidence”. *International Monetary Fund,* Occasional Paper 220.

Prates, D. M. (2002) *Crises Financeiras dos Países Emergentes: Uma Interpretação Heterodoxa [Financial crises in emerging countries: A heterodox interpretation]*. Thesis (PhD). Universidade Estadual de Campinas. [In Portuguese]

Pritchett, L. (1996) Forget Convergence: Divergence Past, Present, and Future. *Finance and Development*. June.

Pritchett, L. (1997) Divergence, Big Time. *Journal of Economic Perspectives*. 11 (3) pp. 3-17.

Quinn, D. P. (2003) “Capital account liberalization and financial globalization, 1890-1999: a synoptic view.” *International Journal of Finance and Economics*. 8, pp. 189-204.

Rallet, A. & Rochelandet, F. (2007) “ICTs and inequalities: the digital divide.” In: Brousseau, E. & Curien, N. (eds) *Economics of Internet*, Cambridge: Cambridge University Press.

Rajan, R. & Zingales, L. (2003) “The great reversals: the politics of financial development in the twentieth century.” *Journal of Financial Economics*. 69. pp. 5-50.

Redish, A. (1990) “The evolution of the Gold Standard in England.” *The Journal of Economic History*. 50 (4) pp. 789-805.

Reich, S. (1998) What is globalization? Four Possible Answers. *Kellogg Institute*, Working Paper 261, December.

Rodrik, D. (1998) “Symposium on globalization in perspective: An introduction.” *Journal of Economic Perspectives*. 12 (4) pp. 3-8.

Rodrik, D. (2000) “How Far Will International Economic Integration Go?” *Journal of Economic Perspectives*. 14 (1) pp. 177-86.

Rodrik, D. (2002) “Feasible globalizations.” *National Bureau of Economic Research,* NBER Working Paper 9129, September.

Roet, R. & Crandall, R. (1999) “The global economic crisis, contagion, and institutions: new realities in Latin America and Asia.” *International Political Science Review*. 20 (3) pp. 271-83.

Rogalski, M. (1997) “Mondialisation: présentation et remarques complémentaires [Globalisation: presentation and supplementary comments].” *La Pensée*. 309, pp. 5-15. [In French]

Rogoff, K. (1999) International institutions for reducing global financial instability. *The Journal of Economic Perspectives*. 13 (4) pp. 21-42.

Rogoff, K. (2003) “Is financial globalization harmful for developing countries?” *International Monetary Fund*, Transcript of an IMF Economic Forum, May.

Romo, H. G. (1997) “Globalización financiera y riesgo sistémico [Financial globalisation and systematic risk].” *Comércio Exterior*. 47 (11) pp. 870-880. [In Spanish]

Rowthorn, R. & Kozul-Wright, R. (1998) “Globalization and economic convergence: An assessment.” *UNCTAD,* Discussion Papers 131, March.

Samuels, W. J. (1989) “Some fundamentals of the economic role of government.” *Journal of Economic Issues.* 23 (2) pp. 291-303.

Samuels, W. J. (1995) “The present state of institutional economics.” *Cambridge Journal of Economics*. 19 pp. 569-90.

Santos, S. (1997) A globalização do mercado financeiro [Globalisation of financial markets]. *Bolsa de Mercadorias & Futuros*, Resenha BM&F 111, julho. [In Portuguese]

Schnerrer, Rosemarie (1998) "Globalisierung" [Globalisation]. *Institut für deutsche Sprache*, Sprachreport 3/98 [In German].

Scholte, A. J. (2000) *Globalization: a critical introduction*. New York: Palgrave.

Scholte, A. J. (2001) "Globalization". In JONES, R. J. Barry (ed). *Routledge Encyclopedia of International Political Economy*. Routledge: London and New York.

Scholte, J. A. (2002) "What is globalization? The definitional issue – again." *Centre for the Study of Globalisation and Regionalisation*, CSGR Working Paper 109/02, December.

Scholte, J. A. (scholte@warwick.ac.uk), 11th June 2007. *Financial globalisation*. Email to A. Salles (a.o.t.salles@herts.ac.uk).

Schumkler, S. L. & Zoido-Lobatón, P. (2001) "Financial globalization: Opportunities and challenges for developing countries."

Schumpeter, J. A. (1954) *History of economic analysis*. London: Allen & Unwin.

Searle, J. (1995) *The construction of social reality*. London: Penguin Books.

Simon, M. (1968) "The pattern of new British portfolio foreign investment, 1865-1914." In: Hall, A. R. (ed). *The export of capital from Britain 1870-1914*. London: Methuen & Co. Ltd.

Sinclair, S. (2003) "The WYO and its GATS." In MICHIE, Jonathan (ed). *The Handbook of Globalisation*. Cheltenham: Edward Elgar.

Singh, A. (1997) "Financial liberalisation, stockmarkets and economic development". *The Economic Journal*. 107 (442) pp. 771-82.

Singh, A. (2003) "Capital account liberalisation, free long-term capital flows, financial crises and economic development". *Easter Economic Journal*. 29 (2) pp. 191-216.

Solimano, A. (1999) Globalization and national development at the end of the 20th Century. *World Bank Policy Research,* Working Paper 2137, June.

Soule, G. [1947] (1989) “Prosperity decade: from War to Depression 1917-1929.” The Economic History of the United States, v. III. New York, M. E. Sharpe.

Stiglitz, J. E. (2000) “Capital market liberalization, economic growth, and instability”. *World Development*. 28 (6) pp. 1075-86.

Stiglitz, J. E. (2002) *Globalization and its discontents*. NewYork: W. W. Norton & Company.

Strange, S. (1998) “‘Globaloney?’ (Review essay).” *Review of International Political Economy*. 5 (4) pp. 704-11.

Streeten, P. (2001) “Integration, interdependence, and globalization”. *IMF Finance and Development*. 38 (2) pp. 1-11.

Stulz, R. M. (2005) “The limits of financial globalization.” *National Bureau of Economic Research,* NBER Working Paper 11070, January.

Sutcliffe, B. & Glyn, A. (1999) “Still Underwhelmed: Indicators of Globalisation and their Misinterpretation.” *Review of Radical Political Economics*. 31(1) pp. 111-32.

Sutcliffe, B. & Glyn, A. (2003) "Measures of Globalisation and their Misinterpretation." In Michie, J. (ed.) The Handbook of Globalisation. Cheltenham: Edward Elgar.

Sylla, R. (2002) “Financial systems and economic modernization.” *The Journal of Economic History*. 62 (2) pp. 277-92.

Talk’07 (2007) Internet telephony: an introduction. London: Lyonsdown.

Taylor, A. M. (1994) “Domestic saving and international capital flows reconsidered.” *National Bureau of Economic Research,* NBER Working Paper 4892, October.

Taylor, A. M. (1996) “International capital mobility in history: the saving-investment relationship.” *National Bureau of Economic Research,* NBER Working Paper 5743, September.

Taylor, A. M. (1997) “The Great Depression as a watershed: international capital mobility over the long run.” *National Bureau of Economic Research,* NBER Working Paper 5960, March.

Taylor, A. (2004) “Global finance: past and present.” *Finance and Development*. pp. 28-31.

Tobin, J. (1999) "Financial globalization: can national currencies survive?" *Cowles Foundation for Research in Economics at Yale University*, Cowles Foundation Paper 985.

Tobin, J. (2000) "Financial globalization." *World Development*. 28 (6) pp. 1101-04.

Toye, J. (2003) "The International Monetary Fund (IMF) and the World Bank (WB)." In Michie, J. (ed). *The Handbook of Globalisation*. Cheltenham: Edward Elgar.

Triffin, R. (1947) "National central banking and the international economy." Postwar Economic Studies 7, pp. 46-81.

Triffin, R. (1964) "The evolution of the international monetary system: historical reappraisal and future perspectives." *Princeton Studies in International Finance*, no. 12, International Finance Section, Department of Economics Princeton University, NJ, pp. 1-29.

Triffin, R. (1972) "International monetary collapse and reconstruction". *Journal of International Economics*. 2 (4) pp. 375-400.

Twomey, M. J. (2000) *A century of foreign investment in the Third World.* London : Routledge.

UNCTAD (1994) *World Investment Report 1994: Transnational corporations, employment and the workplace*, New York: United Nations.

UNCTAD (2006) *Information Economy Report: The development perspective*. New York and Geneva: United Nations.

UNDP (1999) *Human Development Report*. New York: United Nations Development Programme.

U. S. Census Bureau. *Statistical Abstract of the United States.* Washington, D.C.: U.S. Census Bureau.

Viner, J. (1947) "International Finance in the postwar World." *Journal of Political Economy*. 55 (2) pp. 97-107.

Wachtel, H. M. (1998-1999) Três taxas globais para controlar a especulação [Three global taxes to control speculation]. *Revista Política Externa.* 7 (3) pp. 76-84.

Wachtel, P. (2000) "Globalization of banking: why does it matter?" *Paper presented at Presente y Futuro del Sistema Financiero en Paises Emergentes,* 25th-26th October 2000, Caracas, Venezuela.

Wallerstein, I. (1974). "The rise and future demise of the world capitalist system: concepts for comparative analysis." Comparative Studies in Society and History, 16 (4), pp. 387-415.

Walters, B. & Young, D. (1999) Post-Keynesianism and coherence: A Reply to Arestis, Dunn and Sawyer. *Scottish Journal of Political Economy*. 46 (3) pp. 346-48.

Went, R. (2002) "Globalization in the perspective of imperialism." *Science & Society.* 66 (4) pp. 473-97.

Wilkins, M. (1988) "The free standing company, 1870-1914: an important type of British foreign direct investment." *Economic History Review*. XLI (2) pp. 259-82.

Wilkins, M. (1989) *The history of foreign investment in the U.S. to 1914*. Cambridge: Harvard University Press.

Wilkins, M. (1998) "Multinational enterprises and economic change." *Australian Economic History Review*. 38 (2) pp. 103-34.

Williamson, Jeffrey (1996) Globalization, Convergence, and History. *The Journal of Economic History*. 56 (2) pp. 277-306

Williamson, John. (1985) "On the system in Bretton Woods". *The American Economic Review*. 75 (2) pp. 74-9.

Williamson, O. E. (1994) Visible and invisible governance. *The American Economic Review.* 84 (2) pp. 323-26.

Williamson, O. E. (1998) The institutions of governance. *The American Economic Review.* 88 (2) pp. 75-9.

Woodward, R. (2003) "An 'action' not a 'nation': The globalisation of World Politics" In: Michie, J. (ed). *The Handbook of Globalisation*. Cheltenham: Edward Elgar.

Wolfe, M. (1950) *The French franc between the Wars 1919-1939*. New York: AMS.

Wray, L. R. (2001) "Financial Instability." *Center for Full Employment and Price Stability,* Working Paper No. 19, July.

Wyplosz, C. (1998) "Globalized financial markets and financial crises." *Paper presented at the Conference on 'Coping with financial crises in Developing and Transitional Countries: Regulatory and Supervisory Challenges in a New Era of Global Finance' (Forum on Debt and Development),* 16th-17th March, Amsterdam, Netherlands.

Zevin, R. (1992) "Are world financial markets more open? If so, why and with what effects?" In: Banurie, T & Schor, J. B. (eds.) *Financial openness and national autonomy*. Oxford: Oxford University Press.

1. Websites consulted

Aalborg University. "Research Program 2001-2003: Globalization, Inequality and Human Security." [Online] URL: http://www2.ihis.aau.dk/development/pdf/Research_program.pdf [Accessed 25th August 2007].

Aalborg University. "Research Programme 2005-2008: Beyond Globalization and Development: In Search of Alternative Futures." [Online] URL: http://www2.ihis.aau.dk/development/pdf/research_program_2005-2008_til_nettet.pdf [Accessed 21st August 2007].

Aalborg University. "The PhD Researcher Study Program: Globalization and Social Change - Interdisciplinary Critical Perspectives." [Online] URL: http://www2.ihis.aau.dk/development/phd_program.html [Accessed 21st August 2007].

Businessweek. Theodore Levitt dead at 81. [online] URL: http://www.businessweek.com/bschools/content/jun2006/bs20060629_5211_bs001.htm [Acessed 14th August 2007]

Cashore, B. "Globalization, Transnational Networks and Legitimate Authority" [Online] URL: http://environment.yale.edu/cashore/research-program/globalization-transnational-networks-and-legitimate-authority/ [Accessed 21st August 2007].

Centre for Asia Pacific Social Transformation Studies (CAPSTRANS). "Globalisation and development: impact on Indian women workers" [Online] URL: http://www.capstrans.edu.au/about/projects/global-dev.html [Accessed 21st August 2007].

Centre for Asia Pacific Social Transformation Studies (CAPSTRANS). "Globalisation and International Development" [Online] URL: http://www.capstrans.edu.au/about/int-dev.html [Accessed 21st August 2007].

Centre for Asia Pacific Social Transformation Studies (CAPSTRANS). "Globalisation and Education" [Online] URL: http://www.capstrans.edu.au/about/education.html [Accessed 21st August 2007].

Centre for the Study of Co-operatives, University of Saskatchewan. “Co-operative Membership and Globalization: Creating Social Cohesion through Market Relations” [Online] URL: http://www.socialcohesion.coop/research/index.htm [Accessed 21st August 2007].

Columbia University. “GERT International Development and Globalization Program” [Online] URL: http://globaldevphd.columbia.edu/Home.asp [Accessed 21st August 2007].

Columbia University. “Welcome to the Center on Globalization and Sustainable Development” [Online] URL: http://www.earth.columbia.edu/cgsd/ [Accessed 21st August 2007].

Developing Economies Japan External Trade Organization (IDE – JETRO). “Research Activities - Research Projects: Globalization in South Asia: Its Impact on Employment and Labor Issues” [Online] URL: http://ideaix03.ide.go.jp/English/Research/Project/2006/402.html [Accessed 21st August 2007].

Developing Economies Japan External Trade Organization (IDE – JETRO). “Research Activities - Research Projects: Climbing up the Global Value Chain: Possibilities and Limitations for East Asian Manufacturers” [Online] URL: http://ideaix03.ide.go.jp/English/Research/Project/2007/109.html [Accessed 21st August 2007].

Developing Economies Japan External Trade Organization (IDE – JETRO). “Research Activities - Research Projects: Reconstruction and Development of Rural Cambodia: From Krom Samakki to Globalization” [Online] URL: http://ideaix03.ide.go.jp/English/Research/Project/2007/406.html [Accessed 21st August 2007].

Dresden University of Technology. “The Globalization of Natural Gas Markets” [Online] URL: http://globalgas.ee2.biz/ [Accessed 21st August 2007].

East-West Center. “Research: Islands of Globalization” [Online] URL: http://www.eastwestcenter.org/research/research-projects/?class_call=view&resproj_ID=193&mode=view [Accessed 21st August 2007].

Economic History Services (EH.Net). “Exchange Rate Query Result - UK.” [Online] URL: http://eh.net/hmit/exchangerates/answer?yBegin=1897&yEnd=2005&nation%5B%5D=United+Kingdom [Accessed 31st August 2007].

Economic History Services (EH.Net). “Exchange Rate Query Result - Switzerland.” [Online] URL: http://eh.net/hmit/exchangerates/answer?yBegin=1913&yEnd=2005&nation%5B%5D=Switzerland [Accessed 31st August 2007].

Emory University. “Funded Programs: Program in Globalization, Global Migration, and Health” [Online] URL: http://www.globalhealth.emory.edu/programs/facultyPrograms/globalMigration.php [Accessed 21st August 2007].

Flaherty, M. “UVic Researchers” [Online] URL: http://www.geog.uvic.ca/shrimp/Pages/Researchers/Flaherty/Flaherty.htm [Accessed 26th August 2007].

Genethics.ca. “Globalisation, bioethics and biotechnology in Canada and Argentina” [Online] URL: http://www.genethics.ca/Argentina/ [Accessed 21st August 2007].

George Washington University. “Research Program in Poverty, Development, and Globalization” [Online] URL: http://www.gwu.edu/~cer1/Development%20Program.htm [Accessed 21st August 2007].

Global Development and Environment Institute at Tufts University. “Globalization and Sustainable Development” [Online] URL: http://ase.tufts.edu/gdae/policy_research/globalization.html#relatedprojects [Accessed 21st August 2007].

Global Financial Data. “Japan Yean (Sample Data).” [Online] URL: http://www.globalfinancialdata.com/index.php3?action=detailedinfo&sampledata=true&id=4014 [Accessed 31st August 2007].

Globalization and the National Security State. “Home” [Online] URL: http://gnss.mcgill.ca/index.htm [Accessed 21st August 2007].

Globalization Research Network. “The Centers” [Online] URL: http://www.globalgrn.org/directors.htm#UCLA [Accessed 21st August 2007].

Globalization Research Network. “The Centers” [Online] URL: http://www.globalgrn.org/directors.htm#GW [Accessed 21st August 2007].

Globalization Research Network. “The Centers” [Online] URL: http://www.globalgrn.org/directors.htm#UH [Accessed 21st August 2007].

Globalization Research Network. “The Centers” [Online] URL: http://www.globalgrn.org/directors.htm#USF [Accessed 21st August 2007].

Harvard University. “Science, Technology and Globalization Project” [Online] URL: http://bcsia.ksg.harvard.edu/research.cfm?program=STPP&project=STG&ln=About&pb_id=255&gma=27&gmi=45 [Accessed 21st August 2007].

Harvard University. “Globalization and Development” [Online] URL: http://www.cid.harvard.edu/archive/res/cidglobal.html [Accessed 21st August 2007].

Helsinki School of Economics. “Globalization and Competitiveness” [Online] URL: http://www.hse.fi/EN/research/programs/globalization/ [Accessed 21st August 2007].

Ieda, O. “About 21st COE ‘Making a discipline of Slavic Eurasian Studies’” [Online] URL: http://src-h.slav.hokudai.ac.jp/coe21/coe-e.html [Accessed 21st August 2007].

Indiana University. “International and Comparative Law, and Globalization” [Online] URL: http://law.indiana.edu/curriculum/programs/specialties/global.shtml [Accessed 21st August 2007].

Institute on Globalization and the Human Condition / McMaster University. “Globalization and Autonomy.” [Online] URL: http://globalization.mcmaster.ca/ga/ga81.htm [Accessed 21st August 2007].

International Food Policy Research Institute. “Globalization and Markets: Research Program.” [Online] URL: http://www.ifpri.org/themes/grp02/grp02research.asp [Accessed 21st August 2007].

International Research Center for Cultural Studies. “The Cultural Paradoxes of Globalization” [Online] URL: http://www.ifk.ac.at/about__research_foci--4-en.html [Accessed 21st August 2007].

Koç University. "GLODEM: The Center for Research on Globalization and Democratic Governance" [Online] URL: http://portal.ku.edu.tr/~glodem/ [Accessed 21st August 2007].

London School of Economics. "The Centre for the Study of Global Governance" [Online] URL: http://www.lse.ac.uk/Depts/global/aboutus.htm [Accessed 21st August 2007].

Massachusetts Institute of Technology. "Globalization Study" [Online] URL: http://ipc-lis.mit.edu/globalization/main.html [Accessed 21st August 2007].

National Taiwan University. "Program for Globalization Studies" [Online] URL: http://www.psy.ntu.edu.tw/glob/en01.asp [Accessed 21st August 2007].

NDTV.com. "'Globalisation' inventor dies at 81." [online] URL: http://www.ndtv.com/convergence/ndtv/story.aspx?id=NEWEN20060006618 [Acessed 14th August 2007].

Oxford English Dictionary (2007) [Online]. "Globalisation." URL: http://dictionary.oed.com/cgi/entry/50095613se3?query_type=word&qu [Accessed 4th April 2007]

Political Economy Research Institute. "Programs: Globalization and Macroeconomics" [Online] URL: http://www.peri.umass.edu/Globalization.198.0.html [Accessed 21st August 2007].

Princeton University. "About the center." [Online] URL: http://www.princeton.edu/~pcglobal/about.html [Accessed 21st August 2007].

Research Institute of Industrial Economics. "Globalization and Corporate Restructuring" [Online] URL: http://www.industrialeconomics.se/Templates/ResearchProgramme1.aspx?PageID=3e394d02-c963-45ab-aa11-e1c9ddf38361 [Accessed 21st August 2007].

Research Institute of Industrial Economics. "Globalization and ownership policy in post-war Sweden" [Online] URL: http://www.naringslivsforskning.se/Templates/ResearchProject1.aspx?PageID=cf4ff603-970d-48b6-b52d-9f7c337cc499 [Accessed 21st August 2007].

Research Institute of Industrial Economics. "Labor Market Consequences of the Globalization of Firms" [Online] URL:

http://www.naringslivsforskning.se/Templates/ResearchProject1.aspx?PageID=cda4d64d-9a5b-463b-a674-836320de5300 [Accessed 26th August 2007].

RMIT University. "The Globalism Institute – An RMIT Research Center: Research" [Online] URL: http://globalism.rmit.edu.au/research/research.html [Accessed 21st August 2007].

Stanford Graduate School of Business. "Center for Global Business and the Economy: Who we are" [Online] URL: http://www.gsb.stanford.edu/cgbe/ [Accessed 20th September 2007].

Sustainable Development Policy Institute. "Research Program: Gender and Globalization" [Online] URL: http://www.sdpi.org/research_Programme/human_development/gender_and_globalization.htm [Accessed 21st August 2007].

Sustainable Development Policy Institute. "Research Program: Globalization and Rural livelihood" [Online] URL: http://www.sdpi.org/research_Programme/environment/globalization_and_rural_livelihood.htm#1 [Accessed 21st August 2007].

Teuffel. K. v., Bartuska, A. & Mayer, P. "Forest Research Management in an Era of Globalization" [Online] URL: http://www.iufro.org/download/file/1913/77/news07-6.doc [Accessed 26th August 2007].

The New York Times. "Theodore Levitt, 81, who coined the term 'Globalization', is dead." [online] URL: http://www.nytimes.com/2006/07/06/business/06levitt.html?ei=5088&en=959815b0e89ed1c2&ex=1309838400&adxnnl=1&partner=rssnyt&emc=rss&adxnnlx=1190329880-U2jnFL3dyq0huV8pD7m9Qw [Acessed 14th August 2007].

The Program in International Development and Globalization. "IGERT International Development and Globalization Program" [Online] URL: http://globaldevphd.columbia.edu/Home.asp [Accessed 25th August 2007].

The University of British Columbia. "Developing a Research Program on Globalization, Social Organization and Health". [Online] URL: http://www.cih.ubc.ca/EN/associated_projects/developing_a_research_program_on_globalization,_social_organization_and_health/ [Accessed 25th August 2007].

UNCTAD, World Investment Report. [Online] URL: http://stats.unctad.org/fdi/ReportFolders/ReportFolders.aspx?CS_referer=&CS_ChosenLang=en.

United Nations University. “Globalization 2007” [Online] URL: http://www.unu.edu/globalization/[Accessed 21st August 2007].

University of British Columbia – Departament of English. “Nationalism and Globalization” [Online] URL: http://www.english.ubc.ca/grad/research/ntl_global.htm [Accessed 21st August 2007].

University of California, Berkeley. “Institute of Governmental Studies: Research & Training Programs at IGS” [Online] URL: http://igs.berkeley.edu/research_programs/ [Accessed 21st August 2007].

University of California, Berkeley. “The Religion, Politics and Globalization Program: Mission” [Online] URL: http://ias.berkeley.edu/rpgp/rpg-about.htm [Accessed 21st August 2007].

University of California, Irvine - the Center for Research on Information Technology and Organizations (CRITO). “Globalization of E-commerce” [Online] URL: http://www.crito.uci.edu/GIT/project3.asp [Accessed 21st August 2007].

University of Chicago. “The Globalization Project” [Online] URL: http://globalizationproject.uchicago.edu/aims.html [Accessed 21st August 2007].

University of Colorado at Boulder. “University of Colorado at Boulder Globalization and Democracy: An NSF Graduate Training Program” [Online] URL: http://www.colorado.edu/IBS/GAD/gad.html [Accessed 26th August 2007].

University of Manitoba. “The Centers” [Online] URL: http://umanitoba.ca/centres/gcs/ [Accessed 21st August 2007].

University of Mannheim. “Graduate Program ‘Globalization and Cultural Studies’” [Online] URL: http://amerikanistik.uni-mannheim.de/promoengl.htm [Accessed 21st August 2007].

University of Sussex. “About the DRC” [Online] URL: http://www.migrationdrc.org/about/index.html [Accessed 21st August 2007].

University of Sussex. "Economic Geographies of Globalisation and Development" [Online] URL: http://www.sussex.ac.uk/geography/1-4-1.html [Accessed 21st August 2007].

University of Tampere. "LIIKE - Research Programme on Finnish Companies and the Challenges of Globalization." [Online] URL: http://www.uta.fi/tutkimus/liike/index.html [Accessed 21st August 2007].

University of Toronto. "About us" [Online] URL: http://www.utoronto.ca/progris/web_files/aboutus.htm [Accessed 21st August 2007].

University of Warwick. "Centre for the Study of Globalisation and Regionalisation: About CSGR" [Online] URL: http://www2.warwick.ac.uk/fac/soc/csgr/about/ [Accessed 21st August 2007].

Woodrow Wilson International Center for Scholars. "Program on Science, Technology, America, and the Global Economy" [Online] URL: http://www.wilsoncenter.org/index.cfm?fuseaction=topics.home&topic_id=1408 [Accessed 21st August 2007].

Yale University. "Bulletin of Yale University" [Online] URL: http://www.yale.edu/bulletin/html2004/grad/research.html#ISPS [Accessed 21st August 2007]. International Development Research Centre. "About GGP" [Online] URL: http://www.idrc.ca/en/ev-90935-201-1-DO_TOPIC.html [Accessed 21st August 2007].

York University. "Welcome to the Globalization of Protracted Refugee Situations (GPRS) Project Website" [Online] URL: http://www.atkinson.yorku.ca/~gprs/index.html [Accessed 21st August 2007].

Zayed University. "Culture and Society Research Program" [Online] URL: http://www.zu.ac.ae/research/aspx/culturesociety.aspx [Accessed 21st August 2007].