

# WHERE ARE THE POOR IN INTERNATIONAL ECONOMICS?

LUIS CARVALHO<sup>1</sup>  
AURORA A.C. TEIXEIRA<sup>1 2</sup>

<sup>1</sup> FACULDADE DE ECONOMIA DO PORTO, UNIVERSIDADE DO PORTO

<sup>2</sup> INESC PORTO, OBEGEF

**U.** PORTO

**FEP** FACULDADE DE ECONOMIA  
UNIVERSIDADE DO PORTO

## Where are the poor in International Economics?\*

Luís Carvalho

Aurora A. C. Teixeira<sup>♦</sup>

Faculdade de Economia, Universidade do  
Porto

CEF.UP, Faculdade de Economia, Universidade do  
Porto; INESC Porto; OBEGEF

### Abstract

Despite the fact that a very significant proportion of the human population is living with financial difficulties and other constraints typical of poverty, scientific studies in the areas of Economics and especially in International Economics that address the issue of poverty and of poor countries are very few. Using bibliometric techniques, we measured the attention paid by authors from the field of International Economics to poverty and poor countries. To this end, we sorted and analyzed all articles published in the most important journal in the field, the *Journal of International Economics* (JIE) over the last forty years.

Evidence shows that the authors who have published articles in the JIE have mostly developed studies focused on ‘Meso (industry, region) and microeconomic policies and issues of ‘International Trade’ and ‘International Finances’, and are usually of the ‘Formal’ and ‘Formal and Empirical’ types, where the topic ‘Poverty’ is very marginal (only 13 articles published in the JIE, less than 1% of the total, address this matter in any of its dimensions). Furthermore, in the more empirical articles, no country among those included in the group ‘Less Developed Countries’ deserved particular attention.

The neglect of poverty and of the poor contrasts (and is related to) with the significant weight of articles that make use of formalization (more than 80%). Despite the trend for a decrease in exclusively ‘Formal’ articles, without any applied/empirical component, the (still) excessive focus on ‘mathematical’ accuracy (i.e., formalization), and the concomitant limited capacity to deal with the (social) problems of the real world, is an effective challenge to authors in the field of international economics and, in particular, to those who publish in the JIE, which must be overcome if we do not want international economics to become a “cyborg” science.

*Keyword:* International Economics; Poor Countries; Poverty; Bibliometrics

*JEL-Codes:* I39; F00; C89

---

\* We are very grateful to Sandra Silva for rich, constructive feedback on an earlier version of this study. All remaining errors are, of course, our own.

<sup>♦</sup> Correspondence: [ateixeira@fep.up.pt](mailto:ateixeira@fep.up.pt); Faculdade de Economia do Porto, Rua Dr Roberto Frias, 4200-464 Porto, Portugal; Tel. 00351225571100; Fax 00351225505050.

## 1. Introduction

Most of the people in the world are poor, so if we knew the economics of being poor we would know much of the economics that really matters. (Schultz, T., 1979, Nobel Prize Lecture)<sup>1</sup>

The human population is about 7 billion people,<sup>2</sup> of which about 4 billion live on annual incomes below US\$2.000 per year (Prahalad and Hammond, 2002), and one billion live in 49 countries with *per capita* incomes below US\$938 (Lorentzen and Mohamed, 2010). Although in the last century average life expectancy and living standards have increased, convergence of productivity between rich countries and poor countries has been absent (Boltho and Toniolo, 1999).

Despite the numerous and important contributions that have been made by international organizations (e.g., UNCTAD, UN, World Bank, EU) in the field of poverty, there are very few scientific studies in certain areas of Economics (Ehrlich, 2008), and especially International Economics (Feenstra and Rose, 2000), that have addressed this issue and/or countries with low *per capita* incomes.

Given the intimate relationship between globalization, development and poverty (Boltho and Toniolo, 1999), it becomes important to measure the attention paid by economic science, and in particular by International Economics, to topics that focus on the poorest countries and poverty-related matters, in both the latter countries and in other more developed ones.

Thus, in methodological terms, and to answer the research question – Where are the poor in International Economics? – we rely on bibliometric techniques to classify and analyze all (1.800) articles published in the most important journal in International Economics, the *Journal of International Economics* (Feenstra and Rose, 2000). According to the *ISI Web of Knowledge*, the *Journal of International Economics* had, in 2010, an impact factor<sup>3</sup> of 1.788, reflecting its quality and influence (Vieira and Teixeira, 2010), emphasizing its growing value in recent years, as its impact factor increased from 1.167 in 2005 to 1.788 in 2010. Having searched the *ISI Web of Knowledge* bibliographic database for the citations made (*Journal Citations Reports*), ordered according to the impact factor for 2010, and in the *Economics* category only, we see that the *Journal of International Economics* ranked 43<sup>rd</sup> among the 304 publications in the area, proving its importance.

---

<sup>1</sup> In “Theodore W. Schultz – Prize Lecture”. Nobelprize.org. 31 Dec 2010 [http://nobelprize.org/nobel\\_prizes/economics/laureates/1979/schultz-lecture.html](http://nobelprize.org/nobel_prizes/economics/laureates/1979/schultz-lecture.html), accessed on 30 December 2010.

<sup>2</sup> In “U.S. Census Bureau”, <http://www.census.gov/main/www/popclock.html>, accessed on 28 June 2011.

<sup>3</sup> The impact factor is the average number of times that the articles of a journal, published in the last two years, are mentioned in the *Journal Citations Report*. Source: in “*ISI Web of Knowledge*”, [http://admin-apps.isiknowledge.com/JCR/help/h\\_impfact.htm](http://admin-apps.isiknowledge.com/JCR/help/h_impfact.htm), accessed on 31 May 2011.

In this study, we intend to assess which type of analyses International Economics have dedicated to the issue of poverty in the last few decades, classifying, in certain periods of time, the articles published in the *Journal of International Economics* according to topics (including poverty) and types (empirical versus conceptual), and ascertaining which countries have been examined. This pioneering study in the field of international economics by its focus (poverty and poor countries) and techniques used (bibliometrics), intends to be a discussion paper that will promote the need for future lines of research in the area.

The following section consists of a review of the literature on poverty and the poor in international economics. The methodological considerations on the work are presented in Section 3, and Section 4 describes the empirical results of the analysis, focusing particularly on the issue of poverty. Finally, in the Conclusions, we outline the main contributions of the study and its limitations.

## **2. Poverty, the poor and topics related to the literature of International Economics. A literature review**

### **2.1. Concept of poverty and sub-topics in the context of economics**

In recent decades, the concept of poverty has seen a very significant evolution (Silva, 2010). This evolution involves not only the acquisition of knowledge about the complexity of the phenomenon of poverty amid an abundance of resources, but also the need to equip ourselves with the appropriate instruments to measure this phenomenon and to support and assess the strategies leading to its eradication (Rodrigues and Andrade, 2010).

Despite this noteworthy evolution, the most common concept of poverty in academic studies (e.g., Ferreira, 2000) or in institutional reports (Eurostat, 2010) is still monetary poverty: the ‘poor’ are the individuals or households whose income or expenses are below a certain threshold.<sup>4</sup> Accordingly, for Brandolini et al. (2010), poverty is usually defined as insufficient income or expenses. The concept of monetary poverty has an unquestionable advantage: the clarity of definition, coupled with the ease of quantifying the phenomenon and the possibility of making comparisons in time and space (Silva, 2010). Nevertheless, Brandolini et al. (2010) stress that the economic situation of families also depends on their real and physical assets. Thus, the analysis of income is not enough because it does not show all the resources available, given that the individuals can also count on financial and real assets to meet daily needs and unexpected events.

---

<sup>4</sup> In the case of less developed countries, this value is arbitrarily set at one dollar per person and per day, for the definition of severe poverty or, with a more generous criterion, two dollars per person and per day (Silva, 2010). In the EU countries, the poverty threshold is a specific percentage (60%, according to the Eurostat criterion) of the average income of a given territory (Eurostat, 2010).

According to Eurostat (2010), poverty and social exclusion are interrelated, with social exclusion tending to be perpetuated from generation to generation, causing difficulties in accessing income, employment, education, information, child care services, health services, living conditions and social participation. Disparities in living standards are also evident when we analyze the lack of some items, such as telephone, colour television, washing machine, personal car or a week of annual vacations, but can also be measured by access to certain services such as banking services, postal services, public transport, basic health services and primary school.

It is important to note here the definition of poverty presented by Sen (1983), which employs the concept of “empowerment”. According to Sen (1983), it is not the characteristics of the assets themselves and their deprivation that define poverty, but rather the lack of the inherent capacity to lead a life according to current standards in society. In addition to better accommodating the complexity of the phenomenon of poverty in its various dimensions, this concept also has the advantage of conveying the idea that poverty is not fought only with compensation measures to counteract monetary income (in other words, resorting to subsidies), but rather by enhancing the allocation of resources available to individuals and families in poverty, so that they can gain the capacities to ensure a dignified life. Hence, the current emphasis on fighting poverty through educational policies and professional training (Alves, 2009), the promotion of health (Schultz, 1979), participation in the productive system and in the labour market (Machado et al., 2007), payment for services to families and the community (Cardoso, 2010).

In this context, and combining both settings (that of Sen and of monetary poverty), we can define poverty as the lack of income, insufficient access to the basic necessities of life (such as food, clean water, shelter and health), limited future opportunities (due to illiteracy or no education), limitations in social terms (lack of rights, of freedom or active voice) and access to information, with a poverty rate set at US\$1.25 (PPC) per day, i.e., all people considered poor are all those that live on less than this daily amount (UNCTAD, 2010).

The aspects related to poverty have also been analyzed according to certain fundamental dimensions, including: family composition, the application of income, education and the labour market (Banerjee and Duflo, 2007). In a study of 13 poor countries conducted by Banerjee and Duflo (2007), the authors concluded that the typical extremely poor family tends to be large, with the number of family members varying between six and twelve, and the number of adults varying between two and five; food represents 56 to 78 percent of household consumption. The non-food items include a significant amount of alcoholic beverages,

tobacco and parties (weddings, funerals and religious festivals), the latter accounting for up to 10 percent of the annual budget; regarding education, the amount spent is negligible, representing about 2 percent of family budgets; finally, in terms of labour market, many poor families have multiple occupations, albeit not very specialized, and there is a need to live outside their usual place of residence during part of the year in order to find work.

In order to help people out of poverty, the programmes developed by the World Bank (2010) place their main emphasis on improving areas such as health (e.g., reducing child mortality), education, social protection, infrastructures (e.g., roads and schools), rural development, environment, public financial management, and the development of the private sector (e.g., access to credit and the increase of productivity).

Several authors emphasize the need for government intervention in the fight against poverty. Specifically, Skidmore (2009) notes that there are many aspects responsible for the existence of poverty, which are difficult to control, such as cultural factors (e.g., women cannot go to school in some cultures), corruption, discrimination (sexual, racial, linguistic, ethnic and caste), economic problems (e.g., hyperinflation), environmental, geographical (e.g., some regions are prone to falls in agricultural production), historical, political, ideological, biological, meteorological (e.g., storms, floods, fires), psychological and wars, and believes that government intervention through comprehensive programmes of income maintenance, health care and education is essential to reduce poverty.

More recently, and analyzing the developed countries (the United Kingdom and the United States of America), Couch et al. (2010) highlight the role of government policies on poverty reduction, through its influence on wage growth, increasing employment rates of parents with low income, social support to families, incentives for young people to remain in school and improvement in labour market conditions. Adopting a different yet complementary approach, Krishna (2010) believes that government policies should not only take people out of poverty, but also prevent poverty in the future. Hence, he analyzes the movements of families that influence the process of leaving or falling into poverty, concluding that the different reasons for falling into poverty are illness, medication expenses, job loss, reduction of working hours, increased interest rates, social expenditure (weddings and funerals), land-related factors (land exhaustion, irrigation failures or poor crops). Among the main reasons for leaving poverty are those related to land (new cultures, new techniques, new methods of livestock farming, investing in non-traditional crops), investment in small businesses, public and private sector jobs, aid from governmental and non-governmental agencies.

Regarding countries, their classification as ‘poor’ is established for those with gross national incomes *per capita* below US\$938 (Lorentzen and Mohamed, 2010). Samuelson and Nordhaus (2005) presented as characteristics for these countries rapid population increases, low levels of literacy and poor health, with the most part of the population dedicated to agricultural activities. The same authors mentioned as key to development: human resources (appropriate population growth, improvement of nutrition, health, education and training of workers); natural resources (arable land and raw materials), capital formation (savings and investment); and technology (imitation and innovation), but also highlighted as factors that could affect economic development, geography, climate, customs, religion, negotiation habits, class conflicts and political systems.

Other authors point out some measures of international action with implications for poverty reduction and its consequences, such as social clauses relating to labour issues (Nkowani, 2009), environmental objectives (Sachs and Reid, 2006), coordination between entities (multinational companies, international organizations, global communities, governments) in developing and investing in impoverished regions (Bardhan 2006; Sachs, 2005), and redistributive policies to be implemented by most developed countries (Labonte and Schrecker, 2004).

The multidisciplinary of the poverty issue is clear. As noted by Skidmore (2009: 5), “[m]any factors are involved: cultural, economic, environmental, geographic, historical, political, ideological, biological, meteorological, psychological, and probably more.” The author stresses the need for additional scientific research in all areas, including economics. In fact, this latter area, particularly in ‘mainstream’ economics, the debate on poverty remains excessively focused on the issue of measurement and causes ‘close’ to poverty (Ehrlich, 2008). Taking the words of Alfred Marshall (1890: Livro IV, Cap.I, IV.I.2) seriously, “[k]nowledge is our most powerful engine of production; it enables us to subdue Nature and force her to satisfy our wants”,<sup>5</sup> it seems relevant to assess the topics that are more commonly examined in the area of international economics, and the relevance that the issues of poverty and the poor have taken in this scientific field.

## **2.2. The scientific area of international economics: what has been investigated in recent decades?**

International economics combines world events with economic analysis, and is an area of great relevance since we are going through the second wave of globalization, which began in

---

<sup>5</sup> In <http://www.econlib.org/library/Marshall/marP15.html>, accessed on 30 December 2010.

the 1950s, and in which products, capital and labour are intertwined with the countries (Pugel, 2007).

The definition of the main research topics in the area of international economics is a complex task because they have developed differently and received differing levels of attention over the past few decades. Therefore, the list of topics from the most influential works (*Handbooks*) published in the area of international economics, covering a period of time since the 1950s to the present is an appropriate approach towards achieving this task.

Thus, we built Table 1 after analyzing the various chapters that make up each of the eight selected works (one per decade). In this table, each column corresponds to a work and the topics illustrated represent chapters or sections in each work. The topics were organized and arranged to obtain an aggregate similarity. According to this aggregation, we have reclassified each group of topics into a main theme (see column 'Our proposal'). For example, in the new theme 'Business and direct foreign investment and multinational companies', we found that works by Walter (1975), Lindert (1986), Ethier (1995) and Pugel (2007) contained chapters that addressed the issue of multinational companies and/or direct foreign investment, having defined a main theme with this designation in the column 'Our proposal'.

**Historical and conceptual approaches.** Studies on this issue (Enke and Salera, 1950; Mundell, 1968; Walter, 1975; Lindert, 1986; Ethier, 1995; Pugel, 2007; Appleyard et al., 2008; Krugman and Obstfeld, 2009) seek to explain why the existence of trade between countries is beneficial. They focus mostly on the theories of international economics, particularly the classical theory, which analyzes the comparative advantage as well as the competitive advantage and competitiveness of a country (Lee and Wilhelm, 2010).

**Business and international investment and multinational companies.** This theme shows the contribution of multinational companies to economic development, particularly in recipient nations, as well as the role of public policies in improving the economic contribution of direct foreign investment, as well as changes in political attitudes over time and between countries regarding issues such as liberalization versus regulation, attraction versus control, and foreign government-investor relations (Young, 2004).<sup>6</sup>

---

<sup>6</sup> According to Young (2004), the topics that have been analyzed in this area are mainly: 1) Theory and context (the role of governments in terms of economy, reasons and constraints in their intervention; the role of multinational companies in economic growth in developing countries; the role of governments in the development process, in particular the change of policies that attract investments); 2) Policies per periods (regulation vs. liberalization); 3) Attraction and competition policy; 4) Trade, connections and formation of clusters; 5) Dimensions of politics; 6) Illustrations of regions and of countries (the importance of countries or specific areas, such as the origin and destination of many multinational companies).

**Table 1: Main themes addressed in international economics**

Enke e Salera (1950)	Mundell (1968)	Walter (1975)	Lindert (1986)	Ethier (1995)	Pugel (2007)	Appleyard et al. (2008)	Krugman and Obstfeld (2009)	Our proposal
Mercantilism and classical theories of international trade	The theory of exchange	The theory of international trade	The theory of international trade	Why and how nations trade	The theory of international trade	The classical and neoclassical theory of trade	International trade theory	<b>Historical and conceptual approaches</b>
		Trade, growth and multinational enterprise	Direct foreign investment and the multinationals	The multinational firm	Multinationals and migration: international factor movements			<b>Business and international investment and multinational companies</b>
Balance-of-payments analysis	The balance of payments	Balance of payments	The balance-of-payments accounts	Balance of payments	Payments among nations	The balance-of-payments accounts	National income accounting and the balance of payments	
The rate of exchange		Foreign exchange	Foreign exchange market and what determines exchange rates?	The exchange rate	What determines exchange rates?	The foreign exchange market	Exchange rates and the foreign exchange market: an asset approach	
	Flexible exchange rates and employment policy	Equilibrium adjustment systems: flexible exchange rates	Floating exchange rates and international balance		Floating exchange rates and internal balance	Economic policy in the open economy under flexible exchange rates	Macroeconomic policy and coordination under floating exchange rates	
	The monetary dynamics of international adjustment under fixed and flexible exchange rates	Equilibrium adjustment systems: fixed exchange rates	International and external balance with fixed exchange rates		Internal and external balance with fixed exchange rates	Economic policy in the open economy under fixed exchange rates	Fixed exchange rates and foreign exchange intervention	<b>Macroeconomic, Meso (industry and region) and microeconomic policies and issues in international trade</b>
Making international payments	A theory of optimum currency areas	International transmission of economic conditions	Income and foreign exchange	Incomes and adjustment	The foreign exchange market	National income and the current account	Money, interest rates, and exchange rates	
		International liquidity	The changing nature of world money	Prices and capital and adjustment	Forward exchange and international financial investment	International financial markets and instruments: an introduction	Optimum currency areas and the European experience	
	The cost of exchange crises and the problem of sterling		Factor movements: labor and international lending and the world debt crisis		International lending and financial crises	The international monetary system: past, present and future	The global capital market: performance and policy problems	
Trade control: the tariff		The theory of tariffs	The basic analysis of a tariff and arguments for and against a tariff	Tariffs and trade theory	Analysis of a tariff	The instruments of trade policy	The instruments of trade policy	
Trade control: import quotas and exchange control		Nontariff distortions	Other national policies affecting trade	Why and how nations restrict trade	Nontariff barriers to imports			
An evaluation of trade control		The political economy of trade policy	The political economy of trade barriers		Trade blocs and trade blocks	The impact of trade policies	The political economy of trade policy	
Freer trade through commercial treaties		Trade liberalization			Arguments for and against protection	Arguments for interventionist trade policies		<b>International trade, economic integration and labour market; International finances; International relations</b>
Commercial policy of the United States and the United Kingdom			Trade policies and developing countries	The south and the east in transition	Trade policies for developing countries	Political economy and U.S. trade policy	International trade and the developing countries	
							Trade policy in developing countries	
							Developing countries: growth, crisis and reform	
						Poor workers in poor countries	Controversies in trade policy	<b>Poverty</b>
International cartels			OPEC and other international cartels					<b>Others</b>
The trade policy of the Union of Soviet Socialist Republics								

Source: Authors' compilation.

**International macroeconomic policies: balance of payments and exchange policies.** In this section, we study the links between instruments and macroeconomic indicators – including, according to Agénor (2004), exchange rates, trade openness, inflation rates, growth rates and *per capita* income, but also, and according to Hoover (1992), unemployment rates, pricing, monetary policy, fiscal policy and public debt.

**International trade policies.** The theory of international trade is essentially a branch of microeconomics, concerned with the study of economies in which their markets go beyond national borders (Neary, 1995a, 1995b).<sup>7</sup>

**Poverty.** Although it is not in itself a ‘core’ topic of international economics,<sup>8</sup> we argue that by its nature this scientific area has significant impacts on the dimension and dynamic of poverty. Still, the few papers that have arisen within international economics have explored matters such as globalization (Harrison, 2006), informal barriers to exports (Porto, 2005), child labour (Edmonds and Pavcnik, 2006a), and unemployment (Keuschnigg and Ribi, 2009).

**Others.** Remaining topics that include, among others, scientometrics (Kim et al., 2006), the cartels (Enke and Salera, 1950; Lindert, 1986), and the centrally planned economies (Samuelson and Nordhaus, 2005).

### **2.3. The problems of poverty and the poor in international economics: an unexplored issue?**

Existing studies in international economics focus mainly on developing countries, often also called low-income countries, addressing in particular the methods recommended for the development of these countries (Krugman and Obstfeld, 2009), the causes of underdevelopment (Choi et al., 2009), the consequences of the strategies used (Krugman and

---

<sup>7</sup> According to Neary (1995a, 1995b), the topics that have been analyzed in this area are mainly: 1) International trade (how world prices are affected by exogenous shocks such as tariffs, international transfers or economic growth); 2) Trade policy and the gains from trade; 3) Quantitative restrictions to trade (quotas, voluntary restrictions to exports); 4) Political economics of trade policy; 5) Domestic distortions and optimum policies (subsidies to production); 6) The structure of production and comparative statics; 7) Theories of international trade; 8) Tests on trade theories (econometric tests); 9) International movements of factors and multinational companies; 10) Uncertainty (implications of uncertainty on international trade); 11) Real foundations of international macroeconomics; 12) Trade, technology and growth (transfer of technology, influence on the convergence of growth rates of different countries and implications in economies).

<sup>8</sup> Conducting a literature search in the Scopus database (date of reference: 31 December 2010), using as keywords “*International Economics*” and “*Poverty*”, we obtained 83 articles, most of which are reviewed outside the area of economics, in particular those associated to the studies on Health, Population and Food. There is only 1 article in a scientific journal on International Economics, the *Journal of International Trade Law and Policy*. If we conduct a similar search in the *Journal of International Economics*, there are only 3 articles: “Outsourcing, unemployment and welfare policy”, Keuschnigg and Ribi (2009); “International trade and child labor: Cross-country evidence”, Edmonds and Pavcnik (2006a); “Informal export barriers and poverty”, Porto (2005).

Elizondo, 1996), and the market flaws that affect their competitiveness and development (Young, 2004).

Krugman and Obstfeld (2009) conclude that in all cases of successful development, the countries have been involved in outward-oriented industrialization, based on exports of manufactured goods. In a complementary perspective, Choi et al. (2009) analyze the perception that developing countries may have limited access to the markets of developed countries, given that the goods they produce do not have the quality required by consumer demand or high performance. Krugman and Elizondo (1996) point out that many of the world's largest cities are located in developing countries mainly due to policies of import substitution for industrialization, which means that the population is concentrated around the major centres to serve as manpower to the industries supplying the domestic market. Young (2004) argues that in most developing countries there are major market failures that act as constraints on the improvement of competitiveness and sustained development of the market economy, in particular policies related to the development of technological capabilities, human resources, and industrial and rural development.

The measures with major implications in reducing poverty are also addressed by several studies in international economics, focusing, in particular, on the liberalization of barriers against direct foreign investment (Rutherford and Tarr, 2008), the implications of international trade (Balat et al., 2009), and the impacts of informal export barriers (Porto, 2005).

The liberalization of barriers against direct foreign investment in the business sector and services seems to prove beneficial to the situation of the poorest families, according to a study by Rutherford and Tarr (2008), which dealt with Russia's accession to the World Trade Organisation. International trade also has major implications for poverty reduction, being formed by the complementarity between export opportunities and domestic factors (Balat et al., 2009), emphasizing, among the latter, the improvement of infrastructures, appropriate competition policies, greater access to credit, better education and health, and lower brokerage costs. The impacts of informal barriers to exports on the poor have also been noted (Porto, 2005), including transport costs, complex customs practices and bribery, which in low income countries act as export taxes that distort the efficient application of resources, cause low salaries and productive income and, consequently, increase poverty.

Notwithstanding the important contribution of the aforementioned studies, there seems to be scant evidence on the issue of poverty in international economics. Nevertheless, this assumption lacks a more objective analysis that unambiguously and quantitatively elucidates

on the real importance of the poor and poverty in the scientific field of International Economics. To this end, bibliometrics seems to be an indispensable instrument, as shown in the following section.

#### **2.4. The pertinence of bibliometrics in the study of poverty and the poor in the scientific area of International Economics**

That which is considered as the first definition of bibliometrics was presented in the *Journal of Documentation* and defined by Pritchard (1969: 348) as “the application of mathematical and statistical methods to books and other media”. A more recent author, Broadus (1987: 376), prepared a study on the concept of bibliometrics and presented his own definition as “the quantitative study of physical published units, or of bibliographical units, or substitutes for each”.

Thus, bibliometrics enables the application of any quantitative measurement or analysis to physical items (e.g., a number of volumes in a collection), to the number of titles (of bibliographical units), to the number of articles published (e.g., in a given area within a certain period of time or published by a person in one journal), to citations (included in the works of other authors), to study by authors, to editors, to subjects, date, language, format, among others (Broadus, 1987). In this way, bibliometric methods have been used by several authors to analyze the evolution of scientific knowledge, particularly through the analysis of scientific areas (e.g., Silva and Teixeira, 2008), through the analysis of publications (e.g., Wouters and Leydesdorff, 1994; Kim et al., 2006), and the study of the intellectual development of a scientific field (e.g., Lorentz and Mohamed, 2010).

Scientometrics is defined as the quantitative study of science, a term introduced by Vassily V. Nalimov in 1960 and recognized with the foundation of the journal entitled *Scientometrics* in 1978 (Wouters and Leydesdorff, 1994). It has been used to study all aspects of the literature on science and technology, including all quantitative aspects of the science of science, communication in science and political science (Hood and Wilson, 2001). Despite the similarity between the concepts, bibliometrics deals with the various measures of literature and documents and other media, whereas scientometrics has to do with scientific production and utility (Broadus, 1987).

Bibliometric studies in the context of poverty and economics, to the best of our knowledge, has only recently been examined by Lorentz and Mohamed (2010), with the study “*Where are the poor in innovation studies?*”. Nevertheless, this study only focuses on the area of innovation.

Thus, since bibliometrics is an objective way to assess a relatively unexplored subject from a scientific point of view, and there are no bibliometric works that address the issue of poverty and poor countries in International Economics, we propose to address the matter through bibliometric techniques, developing work as a basis for future lines of research in the area.

### **3. Where are the poor in International Economics? Methodological considerations**

In order to properly frame/classify the articles to be analyzed, we have combined the elements collected from the *Handbooks* (cf. Section 1.3) with the Classification System of the *Journal of Economic Literature* (JEL),<sup>9</sup> codified for International Economics (category F). Eight major topics have therefore been defined. In addition to ‘Poverty’ (Topic 8), which is the focus of this study, seven other topics have been added (plus the miscellaneous ‘Others’): 1) Historical and conceptual approaches; 2) Business and international investment and multinational companies; 3) Macroeconomic policies and issues in international trade; 4) Meso (industry and region) and microeconomic policies and issues of international trade; 5) International trade, economic integration and labour market; 6) International finances; 7) International relations; 8) Poverty; 9) Others.

Having defined the various topics in detail in Section 1, more specifically in Section 1.3, their operationalization has been further specified by identifying the corresponding JEL codes. Because the systematic classification in Section 1 is based on *Handbooks*, this operation is not limited to include *ipsis verbis* the topics mentioned in Section 1.3. As the analysis made here is based on journal articles, it was necessary to adapt the proposed categorization, including in some cases new categories in addition to those listed above

**1) Historical and conceptual approaches.** Combines the topic with the same previously defined name (Section 1.3), with the JEL codes, F01 – *Global Outlook* and F02 – *International Economic Order*.

**2) Business and international investment and multinational companies.** As in previous topics, we combined the topics systematized in Section 1.3. with their operationalization via the JEL codes F21 – *International Investment; Long-Term Capital Movements*, F23 – *Multinational Firms; International Business* and F24 – *Remittances*.

**3) Macroeconomic policies and issues in international trade.** This topic combines the previously defined one as ‘International macroeconomic policies: balance of payments and exchange policies’ (Section 1.3), with the JEL codes F41 – *Open Economy Macroeconomics*,

---

<sup>9</sup> In “American Economic Association”, [http://www.aeaweb.org/jel/jel\\_class\\_system.php#F](http://www.aeaweb.org/jel/jel_class_system.php#F), accessed on 13 March 2011.

F42 – *International Policy Coordination and Transmission*, F43 – *Economic Growth of Open Economies* and F44 – *International Business Cycles*.

**4) Meso (industry and region) and macroeconomic policies and issues of international trade.** Consists of the topic presented in Section 1.3 called ‘International trade policies’, with the JEL codes F13 – *Trade Policy; International Trade Organizations*, F14 – *Country and Industry Studies of Trade*.

**5) International trade, economic integration and labour market.** This is a new topic, compared to the one proposed in Section 1.3, that aims to include contents in international trade that are not defined for topic 5. We consider therefore JEL codes F15 – *Economic Integration*, F16 – *Trade and Labour Market Interactions, Trade and Environment*, and F22 – *International Migration*.

**6) International finances.** This is also a new topic covering the JEL codes F31 – *Foreign Exchange*, F32 – *Current Account Adjustment; Short-Term Capital Movements*, F33 – *International Monetary Arrangements and Institutions*, F34 – *International Lending and Debt Problems*, F35 – *Foreign Aid*, and F36 – *Financial Aspects of Economic Integration*, and will focus mainly on issues of international finances.

**7) International relations.** This topic was not considered previously, and corresponds to JEL codes F51 – *International Conflicts; Negotiations; Sanctions*, F52 – *National Security; Economic Nationalism*, F53 – *International Agreements and Observance; International Organizations*, F54 – *Colonialism; Imperialism; Postcolonialism*, and F55 – *International Institutional Arrangements*, and will focus on the subject of international relations, a content not covered in previous topics.

**8) Poverty.** Covers the contents described in Section 1.3, and is normally identified in articles by the JEL code I3 – *Welfare and Poverty*.

**9) Others.** Covers all remaining issues that are not included in the topics indicated above.

In line with Silva and Teixeira (2008) and Silva and Teixeira (2009), the articles selected were classified into one of six types of research methodology: 1) Formal; 2) Formal and Empirical; 3) Empirical; 4) Appreciative; 5) Appreciative and Empirical; 6) Surveys.

Articles classified as ‘Formal’ develop analytical models, and the theoretical explanations are expressed in mathematical terms (through modelling) or simulation. When articles classified as ‘Formal’ include data tests, they are classified as ‘Formal and Empirical’. The classifications referred to as ‘Empirical’ involve econometric or statistical tests. Those considered ‘Appreciative’ refer to theoretical articles, of nature of discussion. Whenever

articles defined as ‘Appreciative’ include appreciations or comments based on empirical data, they will be classified as ‘Appreciative and Empirical’. Finally, when the articles involve an overview of the literature, they are called ‘Surveys’.

In a different way to Silva and Teixeira (2008) and Silva and Teixeira (2009), whose bibliometric technique involved reading the abstracts of each article, in this study we have read each of the 1.800 articles for two reasons: 1) in most articles, a reading of the abstract alone did not allow the classification of articles into topics and types; 2) to carry out the analysis of the countries, we need to identify which countries (if such were the case) were under study in the article.

Based on the classification of the nine topics and the six types established previously, a simple exploratory statistical analysis is made, divided into five-year periods.

Specifically, the analysis of the distribution in terms of topics and types in each five-year period and for the overall period (1971-2010) of the articles published in the *Journal of International Economics* enables the analysis of how the topics have evolved, and in particular to assess the importance/weight that the issue of poverty has caused within International Economics.

Additionally, the ranking in terms of unit of analysis of the empirical articles provides us with knowledge about the countries under analysis, highlighting the weight of the articles that focus on the “low-income countries”, in line with Lorentz and Mohamed (2010), thus obtaining the magnitude of the empirical studies that focus on “poor” countries.

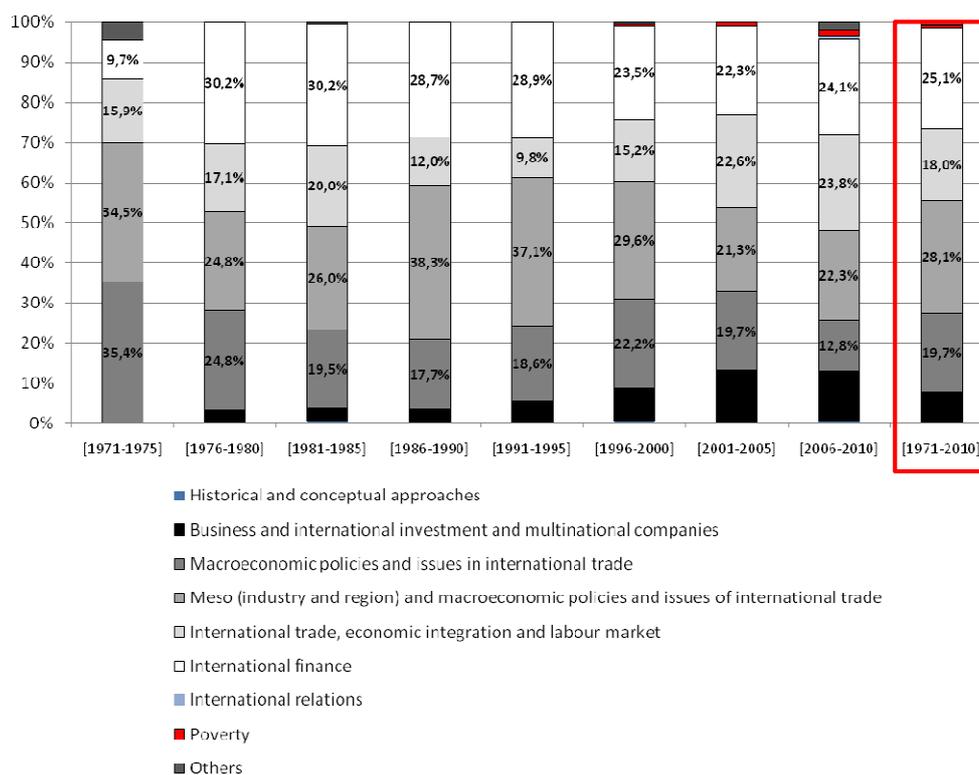
## **4. Empirical results<sup>10</sup>**

### **4.1. Exploratory analysis of the JIE articles by ‘topic’ and ‘type’**

The analysis of the articles revealed that the topic ‘Meso (industry, region) and microeconomic policies and issues of International Trade’ was the most analyzed, representing 28.1% of the total articles published (cf. Figure 1). This topic has had a regular weight over the years, with a peak in the 1986-1990 period, accounting for 38.3% of the articles published, but falling to 22.3% of the total articles in the most recent period (2006-2010).

---

<sup>10</sup> Of the 1.800 initial articles, those corresponding to “symposium”, “comments”, “note” and “reply” were excluded.



**Figure 1: Distribution (%) of articles by Topic**

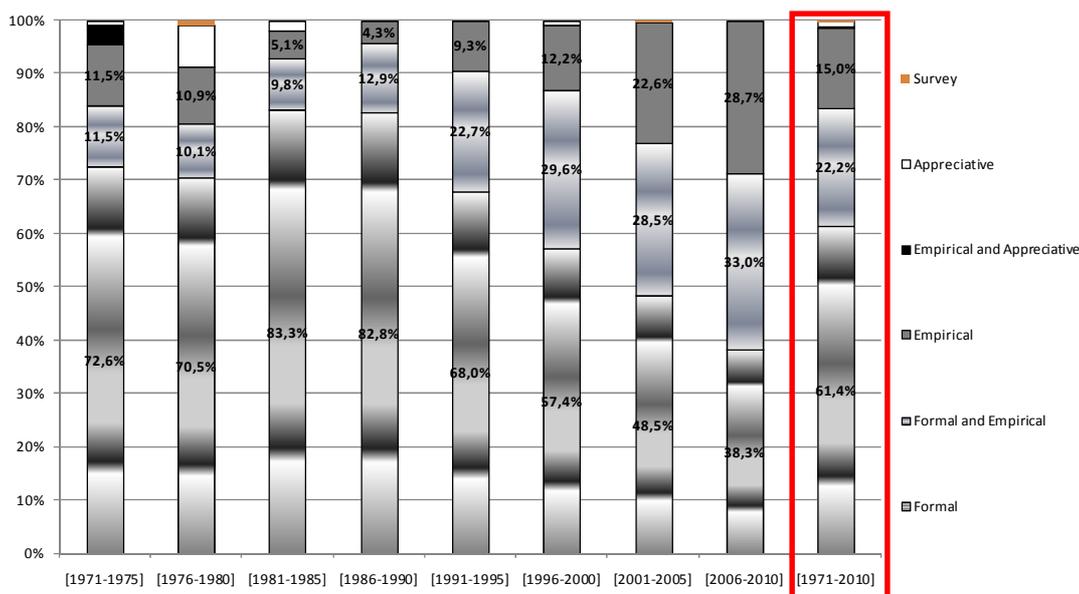
Source: Authors' compilation, based on the articles published in the JIE, 1971-2010 (n=1740)

Featuring significantly, we should highlight the topics 'International Finances', 'International trade, economic integration and labour market', and 'Macroeconomic policies and issues in international trade'. In the first case, the weight more than tripled from the period 1971-1975 to 1976-1980, with 9.7% and 30.2% of the articles published, respectively, ultimately representing 25.1% of the total number of articles published.

The topic 'Macroeconomic policies and issues in international trade' has lost the interest of researchers, dropping from 35.4% of articles published in 1971-1975 to 12.8% in the most recent period (2006-2010). With regard to 'International trade, economic integration and labour market', registering 18.0% of the total articles surveyed, it had however periods of less interest, particularly in the period 1991-1995, with only 9.8%.

'Poverty' has virtually no expression in the scientific area of International Economics, representing only 0.6% of the total articles published in the JIE, corresponding to one article published in the period 1996-2000, three in the period 2001-2005, and six in the most recent period (2006-2010), which despite its reduced expression, shows a growing interest.

Regarding the type of methodology used in the articles published in the JIE, the enormous weight of formalism in these articles is naturally very obvious (cf. Figure 2) – more than 80% of the articles published are 'Formal', 61.4% are exclusively 'Formal', and 22.2% are 'Formal and Empirical'.



**Figure 2: Distribution (%) of Articles by Type**

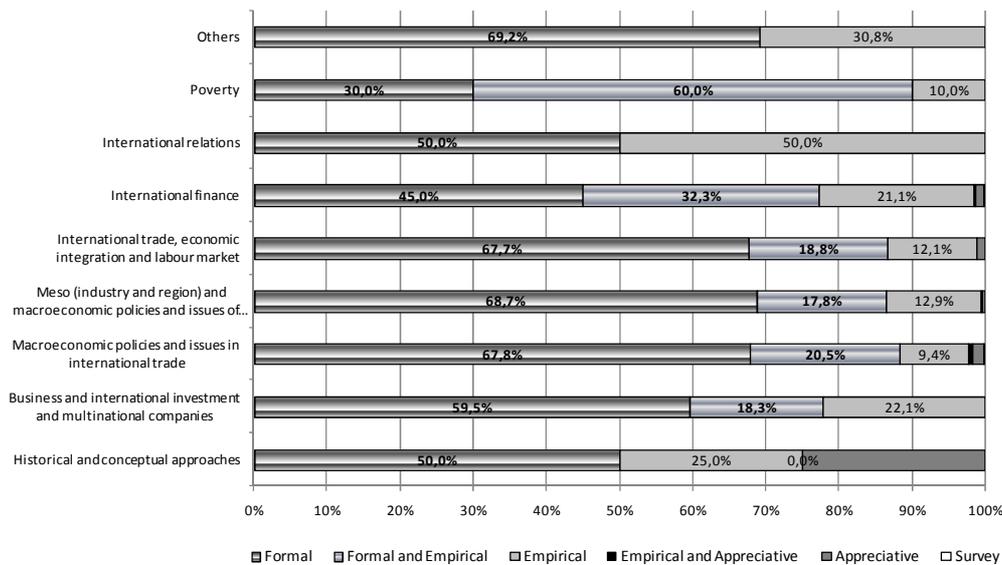
Source: Authors' compilation, based on the articles published in the JIE, 1971-2010 (n=1740)

It should be noted, however, that the 'Formal' type has lost relevance since the 1981-1985 period, during which it represented 83.3%, to the most recent years in which it 'only' accounted for 38.3% (2006-2010). In contrast, the 'Formal and Empirical' articles and the exclusively 'Empirical' have significantly increased in their weight, from a modest 9.8% ('Formal and Empirical') and 5.1% ('Empirical') in the 1981-1985 period to 33.0% and 28.7% in the most recent period (2006-2010), respectively.

In the early years, there was some interest in 'Appreciative' works, with 3.5% in the period 1971-1975, and 'Appreciative and Empirical', with 7.8% in 1976-1980. However, after these periods these categories lost significance with the 'Appreciative' type being used in only two articles in the 1996-2000 period.

By analyzing the intersection of topics by type (Figure 3), we see that the 'Formal' and 'Formal and Empirical' types have great relevance in all topics, and in the most analyzed one, 'Meso (industry, region) and microeconomic policies and issues in International Trade' represent 68.7% and 17.8%, respectively.

Regarding 'Poverty', the articles analyzed are: one article of the 'Empirical' type, three articles of the 'Formal' type, and six articles of the 'Formal and Empirical' type.



**Figure 3: Distribution (%) of Articles by Topic and Type**  
 Source: Authors' compilation, based on the articles published in the JIE, 1971-2010 (n=1740)

#### 4.2. Exploratory analysis of the articles by country

The classification of countries by degree of development was done based on the classification of ‘*Rankings by income*’ of *The World Bank – Doing Business*,<sup>11</sup> in which each country is identified individually. Hence, countries that appear in the ranking as “*High income*” were named here as ‘Developed Countries’, those that appear in the ranking as ‘*Upper middle income*’, were called ‘Middle Developing Countries’, and those that appear in the ranking as “*Low income*” and “*Lower middle income*” were called ‘Less Developed Countries’.<sup>12</sup>

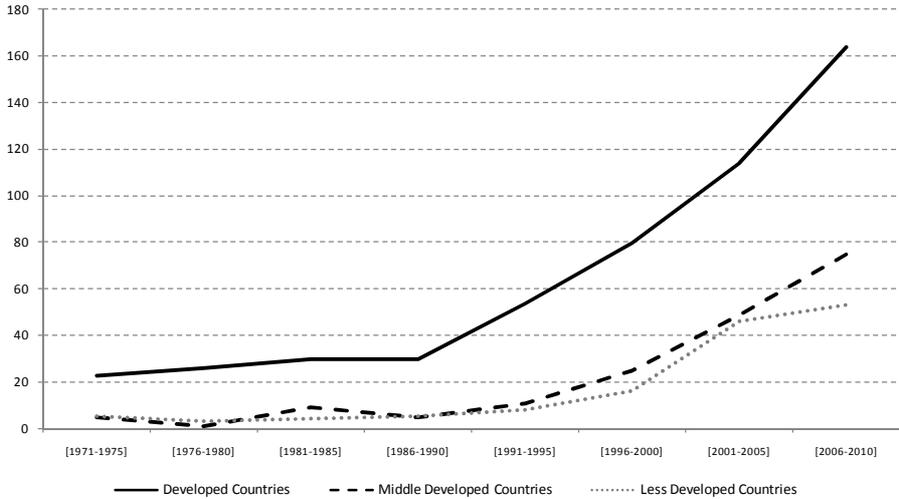
As our preliminary analysis showed, there were only twenty-six articles dedicated to the low-income countries, which would invalidate obtaining significant conclusions about the evolution of their study over time. We therefore chose to include in the category ‘Less Developed Countries’ the countries classified by the *World Bank* as “*Lower middle income*”, because with a national gross income *per capita* from \$996 to \$3.945, their inclusion is justified, providing us with more robust conclusions on the study of lower income countries.

Until the early 1990s (1991-1995 period), the analysis of articles published in the JIE focused mainly on ‘Developed Countries’, being thereafter a growing interest in ‘Middle Developed Countries’ and ‘Less Developed Countries’ (cf. Figure 4). The interest in ‘Less Developed Countries’ is emphasized from the 1996-2000 period on, despite the growth of published

<sup>11</sup> In “*The World Bank*”, <http://www.doingbusiness.org/rankings>, accessed on 15 April 2011.

<sup>12</sup> Economies are split according to the national gross income *per capita* of 2009, in which the groups are: “*Low income*”, \$995 or less; “*Lower middle income*”, \$996 - \$3.945, “*Upper middle income*”, \$3.946 - \$12.195; and “*High income*”, \$12.196 or more, in *The World Bank*, <http://data.worldbank.org/about/country-classifications>, accessed on 15 April 2011.

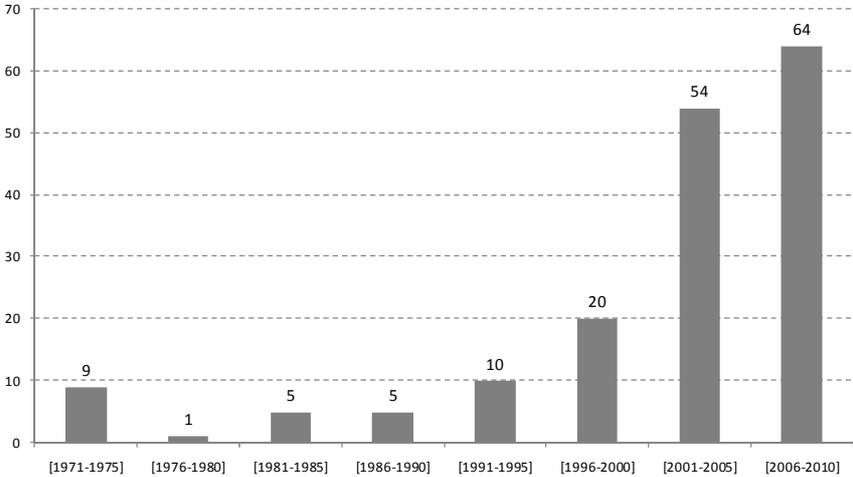
articles dealing with these countries being lower than that recorded for ‘Developed Countries’ and ‘Middle Developed Countries’, especially for the 2006-2010 period.



**Figure 4: Growth in number of references to countries, by level of development, in the articles published in the JIE**

Source: Authors’ compilation, based on the articles published in the JIE, 1971-2010 (n=1740)

The articles researching countries do so both on an individual basis and per groups of countries.<sup>13</sup> Increasingly, over the period under analysis, a significant number of articles analyzed ten or more countries (Figure 5). The growth is sharper after 2000, reaching 64 articles published in the period 2006-2010.



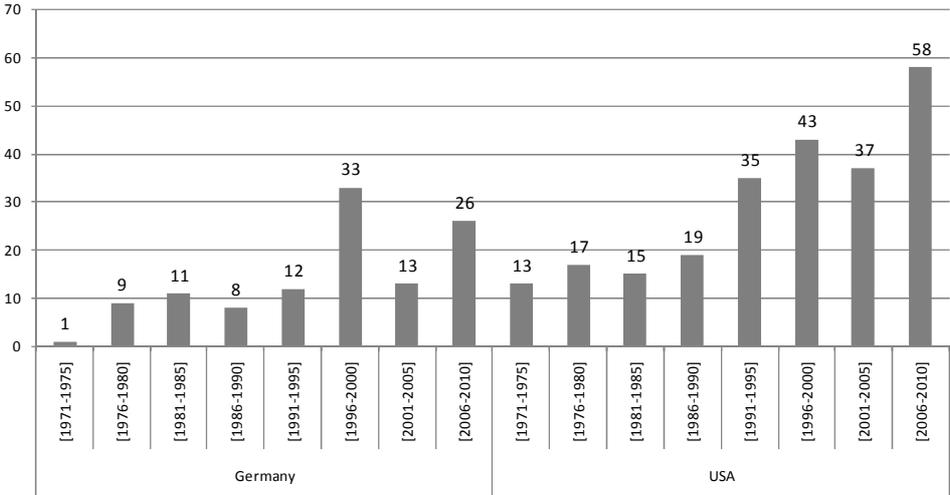
**Figure 5: Number of references per group of more than ten countries, 1971-2010**

Source: Authors, based on the articles published in the JIE, 1971-2010 (n=1740)

Among the countries analyzed individually, or in groups of less than ten countries, the most analyzed were the United States of America (USA) and Germany, with two hundred and thirty-seven and one hundred and thirteen studies, respectively. As can be seen in Figure 6, Germany had peaks of interest especially in the years 1996 and 2000, always remaining

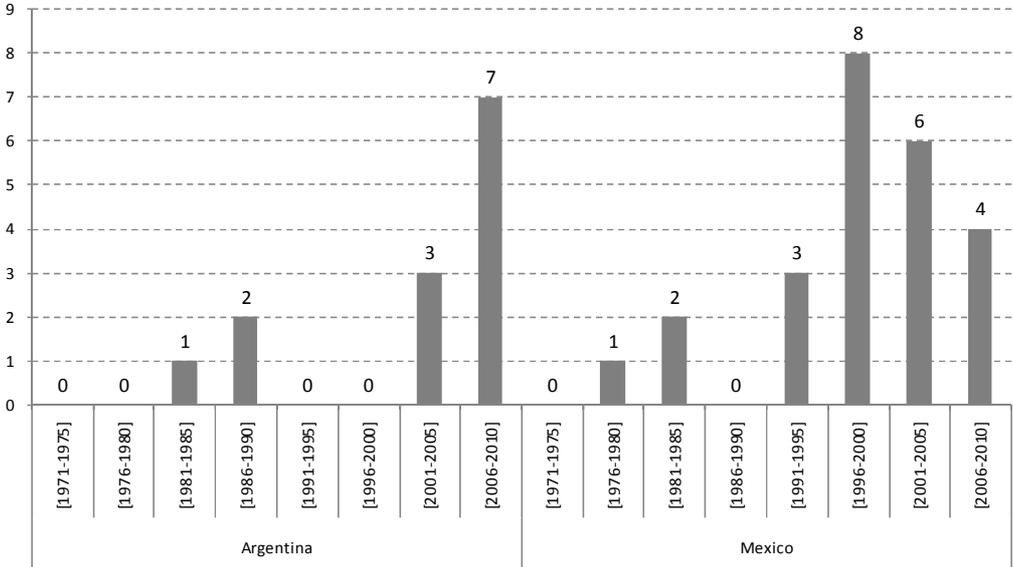
<sup>13</sup> For the purpose of our analysis, we used the criterion according to which in the case of up to nine countries we proceeded to identify the country, but for more than ten countries we identified them in a single group entitled ‘Extended group of countries’.

among the most-researched countries. The USA is the most widely mentioned country in the JIE, with references increasing significantly since 1991.



**Figure 6: Number of references to the USA and Germany, 1971-2010**  
*Source:* Authors' compilation, based on the articles published in the JIE, 1971-2010 (n=1740)

It was found that among the countries with more references, excluding those classified as 'Developed Countries', Argentina had three references and Mexico had twenty-four, these countries being classified as 'Middle Developed Countries'. Argentina was mentioned for the first time in 1982, appearing regularly in articles since then. With regard to Mexico, its references began in 1977, remaining equally among the countries mentioned, attracting greater interest in the 1996-2000 period, with eight references.



**Figure 7: Number of references to Argentina and Mexico, 1971-2010**  
*Source:* Authors' compilation, based on the articles published in the JIE, 1971-2010 (n=1740)

Note that no country considered individually and classified as 'Less Developed Country' has shown more than ten references over the period under analysis (1971-2010).

### **4.3. Where are the poor in International Economics? An attempt at a qualitative overview of studies that focused on poverty**

In a population of 1.740 articles, only 13 articles were found that addressed poverty or poor countries in some of its dimensions. These articles were published mainly from a more recent period (1996-2000).

Regarding the issue of “poverty”, only one article was published in the 1996-2000 period, three in the 2001-2005 period, and nine in the 2006-2010 period. Before 1996, the authors in the field of International Economics did not show any particular interest in the subject.

Note that among these articles only one was classified under the main topic of ‘Poverty’ (Balat et al., 2009), nine were classified under the secondary topic ‘Poverty’ (Kim and Kim, 2000; Harrison and McMillan, 2003; Feeney and Hillman, 2004; Porto, 2005; Porto, 2006; Rutherford and Tarr, 2008; Chamon and Kremer, 2009; Asiedu et al., 2009; Foellmi and Oechslin, 2010), and the remaining three, although indeed considering poverty to some degree, did not have this issue as the focus of the work (Edmonds and Pavcnik, 2006a; Edmonds and Pavcnik, 2006b; Papageorgiou et al., 2007).

Within this latter group of studies, poverty is mentioned ‘*en passant*’ via, for example, the positive effects that globalization and technological innovation in medicine have had not only on the developed nations that created them, but also on the less developed countries (Papageorgiou et al., 2007). Focusing on labour market issues, Edmonds and Pavcnik (2006b) report that a major feature of the labour market in poorer economies is that a large share of individuals work outside the formal labour market, pointing out that market liberalization leads to a decline in family work and an increase in formal work. The same authors found elsewhere (Edmonds and Pavcnik, 2006a) that countries that trade more have a lower incidence of child labour. Thus, the increase in trade openness will correspond to a decline in child labour and, consequently, to a lower risk of poverty.

Imminently formal studies focus primarily on ‘Modelling, methodologies and analysis tools’, and secondly on poverty, particularly on issues related to the impact of trade liberalization (Kim and Kim, 2000; Feeney and Hillman, 2004; Rutherford and Tarr, 2008, Foellmi and Oechslin, 2010), income inequality (Porto, 2006), and informal barriers (Porto, 2005) in poverty; direct foreign investment (Asiedu et al., 2009) and integration (Chamon and Kremer, 2009) as tools to fight poverty; or the imperfections of the capital market (Harrison and McMillan, 2003).

According to Kim and Kim (2000), trade liberalization allows a poor economy to transform into an economy that promotes education and higher productivity growth. In this argument, the joint effort of international trade and education in economic growth will improve education and, consequently, the ability of workers to adapt to new jobs that, combined with international trade, will allow workers to specialize in sectors with high rates of technological progress. The technological aspect is also highlighted by Feeney and Hillman (2004), who analyze why governments of poor countries without sufficiently developed financial markets have failed to liberalize trade. The latter could be enhanced by technological and institutional changes that facilitate transactions of assets, such as reductions in transaction costs in financial markets, a decrease of information asymmetry, and the improvement of the protection of private property rights. Capital market imperfections play, according to Harrison and McMillan (2003), an important role in determining investment decisions in local firms, and the difficulties in financing are a major obstacle to business expansion in poor countries. These authors also alert to the fact that the entry of foreign firms in the market will reduce the credit available to local companies, because they are a better investment (risk) for local banks, with local companies facing greater restrictions in accessing credit. On this basis, companies owned by local entrepreneurs in poor countries face greater difficulties in accessing credit than multinational companies.

The positive aspect of trade liberalization in the distribution of income is also highlighted by Rutherford and Tarr (2008), and Foellmi and Oechslin (2010). The latter argue that the liberalization of trade generally benefits the poorest, whereas the former confirm a positive impact on the distribution of income and on the poor resulting from the accession of a country to the WTO. In this last line of argument, Porto (2006) shows that low-income households gain more from the reforms of international trade than middle- and high-income families, thus the liberalization of trade has a pro-poor effect in the distribution of income. In a previous work (Porto, 2005), the same author notes that in low-income countries, informal barriers such as transport costs, heavy customs practices, bureaucracy, costly regulations and bribes act as export taxes that distort the efficient allocation of resources, generate low salaries and low farming incomes, and increase poverty.

According to Chamon and Kremer (2009), economic integration was the driver that transformed poverty into wealth for some East Asian countries, with learning and the economic effects of trade policies contributing to this growth and learning pathway. Direct Foreign Investment is, for Asiedu et al. (2009), an essential tool to fight poverty, and its absence deprives poor countries of some of its advantages, namely sources of capital, creation

of jobs, increase in wages, increase in productivity of companies and domestic workers, and promotion of economic growth.

The only study that focuses explicitly on poverty, written by Balat et al. (2009), states that certain costs associated with exports, and consequently with trade impacting on income and poverty, depend on the complementarity of domestic factors such as improvement of infrastructures, adequate competition policies, access to credit, better education and health, and lower marketing or brokerage costs. In this context, since transaction costs, particularly marketing costs or brokerage costs, are still strong powerful barriers to imports and exports, they cause greater poverty.

## **5. Conclusions**

This study aimed to assess the attention paid by International Economics to the issue of poverty and of poor countries in recent decades. In the absence of bibliometric works that address poverty and poor countries in International Economics, and since bibliometrics is an objective way to measure a relatively unexplored subject from the standpoint of science, bibliometric techniques were used to answer the question “Where are the poor in International Economics?”. All the articles published in the *Journal of International Economics* (JIE), between 1971 and 2010, were read thoroughly and classified according to topics and types.

We found that authors who published in the JIE dealt mainly with the topics ‘Meso (industry, region) and microeconomic policies and issues in International Trade’ and ‘International Finances’, representing 28.1% and 25.1% of all published articles, respectively. With regard to ‘Poverty’, it is (disturbingly) clear that authors in the field of International Economics, especially those who publish in the JIE, pay little attention to this matter, representing only 0.6% of all articles, which corresponds to the absolute value of 13 in a total of 1.740 articles.

The lack of analyses regarding the issue of poverty is not immune to the type of methodologies followed by the authors who publish in the JIE. Specifically, the vast majority (more than 80%) of articles are based on ‘Formal’ and ‘Formal and Empirical’ methodologies. Despite the downward trend in the weight of articles with exclusively ‘Formal’ methodologies, the articles that used this methodology still represented about 40% of published articles in the more recent five-year period (2006-2010).

The debate on formalization in economics is long-standing and far from being consensual. According to some authors, for example, McCann (2007: 1215), “simple rhetorical [appreciative] devices” should be avoided and, instead, deep and comprehensive analyses should attempt to use analytical approaches (i.e., formal), making the microeconomic

foundations explicit and clearly defined. Failure to achieve a more consistent internal methodology would result, according to McCann, in poorly defined policy and assessment designs. McCann emphasizes the need for different areas of economics to provide increasing support to formalization. In contrast, Barnes (2003: 14) stresses the need for the removal of “rationalist, formal and universal explanations, to ones that are relativistic, eclectic, and local ...”. Along this line, Partridge (2006: 2) acknowledges that the ‘economics profession continues ... more enamoured by mathematical technique rather than social and policy relevance ...’, and the (excessive) focus on mathematical ‘rigour’ can, according to this author, prevent the impact of science on politics due to the inability to deal with the (social) problems of the real world.

The rise in the weight of ‘Formal and Empirical’ articles within the field of International Economics – a substantial increase from a modest 10% (1981-1985) to more than a third in the most recent period (2006-2010) -, seems to indicate that this scientific area is trying to make its methodology apparatus more overarching, in order to allow scientific progress in this area, and at the same time not lose sight of the reality it wishes to analyze. Therefore, this trend seems to show that International Economics has found an adept way of improving its ‘good theory’ status (Cook and Brown, 1999), with a pragmatic focus on triggering action, developing reliable skills for decision-making. Nevertheless, the infinitesimal weight of the subject of poverty and of empirical analyses on the less developed countries indicates that International Economics, at least through the lens of JIE, is still far from a science progressing towards action, “a tool at the service of knowing” (Cook and Brown, 1999: 388), requiring a real investment here in the themes of poverty and the poor, if the aim is to prevent research in economics from becoming “... a profession on a rapid plunge to insignificance.” (Ehrlich (2008: 16).

## References

- Agénor, P-R. (2004). "Macroeconomic adjustment and the poor: analytical issues and cross-country evidence", *Journal of Economic Surveys*, 18 (3): 351-408.
- Alves, N. (2009). “Novos factos sobre a pobreza em Portugal”, *Boletim Económico do Banco de Portugal*, 15: 125-154.
- Appleyard, D.R.; Field, A.J.; Cobb, S.L. (2008). *International Economics*. 6<sup>a</sup> Edition. New York. McGraw-Hill International Edition.
- Asiedu, E.; Jin, Y.; Nandwa, B. (2009). "Does foreign aid mitigate the adverse effect of expropriation risk on foreign direct investment?", *Journal of International Economics*, 78 (1): 268-275.

- Balat, J.; Brambilla, I.; Porto, G. (2009). "Realizing the gains from trade: export crops, marketing costs, and poverty", *Journal of International Economics*, 78 (1): 21-31.
- Banerjee, A.V.; Duflo, E. (2007). "The economic lives of the poor", *Journal of Economic Perspectives*, 21 (1): 141-167.
- Bardhan, P. (2006). "Does globalization help or the world's poor?", *Scientific American*, 294 (4): 84-91.
- Boltho, A.; Toniolo, G. (1999). "The assessment: the twentieth century - achievements, failures, lessons", *Oxford Review of Economic Policy*, 15 (4): 1-17.
- Brandolini, A.; Magri, S.; Smeeding, T.M. (2010). "Asset-based measurement of poverty", *Journal of Policy Analysis and Management*, 29 (2): 267-284.
- Broadus, R.N. (1987). "Toward a definition of bibliometrics", *Scientometrics*, 12 (5-6): 373-379.
- Cardoso, A.R. (2010). "Os desafios da pobreza", in Teixeira, A.A.C.; Silva S. e Teixeira, P., *O que Sabemos sobre a Pobreza em Portugal?*, Porto: Grupo Editorial Vida Económica. pp.81-91.
- Chamon, M.; Kremer, M. (2009). "Economic transformation, population growth and the long-run world income distribution", *Journal of International Economics*, 79 (1): 20-30.
- Choi, Y.C.; Hummels, D.; Xiang, C. (2009). "Explaining import quality: the role of the income distribution", *Journal of International Economics*, 78 (2): 292-303.
- Cook, S.D.N.; Brown, J.S. (1999). "Bridging epistemologies: the generative dance between organizational knowledge and organizational knowing", *Organization Science* 10 (4): 381-400.
- Couch, K.; Smeeding, T.M.; Waldfogel, J. (2010). "Insights", *Journal of Policy Analysis and Management*, 29 (2): 401-407.
- Edmonds, E.V.; Pavcnik, N. (2006a). "International trade and child labor: cross-country evidence", *Journal of International Economics*, 68 (1): 115-140.
- Edmonds, E.V.; Pavcnik, N. (2006b). "Trade liberalization and the allocation of labor between households and markets in a poor country", *Journal of International Economics*, 69 (1): 272-295.
- Ehrlich, P.R. (2008). "Key issues for attention from ecological economists", *Environment and Development Economics*, 13 (1): 1-20.
- Enke, S.; Salera, V. (1950). *International Economics*. London, Dennis Dobson Ltd.

- Ethier, W.J. (1995). *Modern International Economics*. 3<sup>a</sup> Edition. New York. Norton International Student Edition.
- Eurostat (2010). *Combating poverty and social exclusion – A statistical portrait of the European Union 2010*, in [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-EP-09-001/EN/KS-EP-09-001-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-EP-09-001/EN/KS-EP-09-001-EN.PDF), acedido em 23.12.2010.
- Feeney, J.; Hillman, A.L. (2004). “Trade liberalization through asset markets”, *Journal of International Economics*, 64 (1): 151-167.
- Feenstra, R.C.; Rose, A.K. (2000). “The Journal of International Economics at fifty: a retrospective”, *Journal of International Economics*, 50 (1): 3-15.
- Ferreira, M.L. (2000). *A Pobreza em Portugal na Década de Oitenta*. Lisboa. Conselho Económico e Social.
- Foellmi, R.; Oechslin, M. (2010). “Market imperfections, wealth inequality, and the distribution of trade gains”, *Journal of International Economics*, 81 (1): 15-25.
- Harrison, A. (2006). “Globalization and poverty”, National Bureau of Economic Research, Working Paper nr. 12347, Cambridge Massachusetts, *National Bureau of Economic Research*.
- Harrison, A.E.; McMillan, M.S. (2003). “Does direct foreign investment affect domestic credit constraints?”, *Journal of International Economics*, 61 (1): 73-100.
- Hood, W.W.; Wilson, C.S. (2001). “The literature of bibliometrics, scientometrics, and informetrics”, *Scientometrics*, 52 (2): 291-314.
- Hoover, K.D. (1992). *The New Classical Macroeconomics. Volume I*. The International Library of Critical Writings in Economics. Aldershot. Edward Elgar Publishing Limited.
- Keuschnigg, C.; Ribi, E. (2009). “Outsourcing, unemployment and welfare policy”, *Journal of International Economics*, 78 (1): 168-176.
- Kim, E.H.; Morse, A.; Zingales, L. (2006). “What has mattered to economics since 1970”, *Journal of Economic Perspectives*, 20 (4): 189-202.
- Kim, S-J.; Kim, J.K. (2000). “Growth gains from trade and education”, *Journal of International Economics*, 50 (1): 519-545.
- Krishna, A. (2010). “Who became poor, who escaped poverty, and why? Developing and using a retrospective methodology in five countries”, *Journal of Policy Analysis and Management*, 29 (2): 351-372.
- Krugman, P.; Elizondo, R.L. (1996). “Trade policy and the third world metropolis”, *Journal of Development Economics*, 49 (1): 137-150.

- Krugman, P.R.; Obsfeld, M. (2009). *International Economics: Theory and Policy*. 8<sup>a</sup> Edition. Boston. Pearson International Edition.
- Labonte, R.; Schrecker, T. (2004). "Committed to health for all?", *Social Science and Medicine*, 59 (8): 1661-1676.
- Lee, C.; Wilhelm, W. (2010). "On integrating theories of international economics in the strategic planning of global supply chains and facility location". *International Journal of Production Economics*, 124 (1): 225-240.
- Lindert, P.H. (1986). *International Economics*. 8<sup>a</sup> Edition. Illinois. Irwin Publications in Economics.
- Lorentzen, J.; Mohamed, R. (2010). "Where are the poor in innovation studies?", Paper presented at the Conference in Honour of Nick von Tunzelmann, Brighton: SPRU, University of Sussex, April 2010.
- Machado, A.F.; Ribas, R.P.; Penido, M. (2007). "Mobilidade entre estados de pobreza e inserção no mercado de trabalho: uma análise para o Brasil metropolitano em 2004", *Economia Aplicada*, 11 (2): 253-279.
- Marshall, A. (1890). *The Agents of Production. Land, Labour, Capital and Organization*, Book 4, Pub. Date 1920, 8th edition, London: Macmillan and Co., Ltd., in <http://www.econlib.org/library/Marshall/marP15.html>, acessido em 30.12.2010.
- McCann, P. (2007). "Observational equivalence? Regional studies and regional science", *Regional Studies* 41: 1209–1221
- Mundell, R.A. (1968). *International Economics*. New York. The Macmillen Company.
- Neary, J.P. (1995a). *International Trade. Volume I*. The International Library of Critical Writings in Economics. Aldershot. Edward Elgar Publishing Limited.
- Neary, J.P. (1995b). *International Trade. Volume II*. The International Library of Critical Writings in Economics. Aldershot. Edward Elgar Publishing Limited.
- Nkowan, Z. (2009). "International trade and labour: a quest for moral legitimacy", *Journal of International Trade Law and Policy*, 8 (1): 4-24.
- Papageorgiou, C.; Savvides, A.; Zachariadis, M. (2007). "International medical technology diffusion", *Journal of International Economics*, 72 (1): 409-427.
- Partridge, M. (2006). "We're right, they're wrong, regional science is where it's at", *Review of Regional Studies* 36: 1–14.
- Porto, G.G. (2005). "Informal export barriers and poverty", *Journal of International Economics*, 66 (2): 447-470.

- Porto, G.G. (2006). "Using survey data to assess the distributional effects of trade policy", *Journal of International Economics*, 70 (1): 140-160.
- Prahalad, C.K.; Hammond, A. (2002). "Serving the world's poor, profitably", *Harvard Business Review*, 80 (9): 48.
- Prichard, A. (1969), "Statistical bibliography or bibliometrics?", *Journal of Documentation*, 25(4): 346-349.
- Pugel, T.A. (2007). *International Economics*. New York, McGraw-Hill/Irwin.
- Rodrigues, C.F.; Andrade, I. (2010). "Monetary poverty, material deprivation and consistent poverty in Portugal", artigo apresentado na II Conferência em Memória de Leonor Vasconcelos Ferreira, *Recent debates on poverty and inequality*, FEP, Porto, 11 Setembro 2010.
- Rutherford, T.F.; Tarr, D.G. (2008). "Poverty effects of Russia's WTO accession: modeling real households with endogenous productivity effects", *Journal of International Economics*, 75 (1): 131-150.
- Sachs, J.D. (2005). "Can extreme poverty be eliminated?", *Scientific American*, 293 (3): 56-65.
- Sachs, J.D.; Reid, W.V. (2006). "Investments toward sustainable development", *Science*, 312 (5776): 1002.
- Samuelson, P.A.; Nordhaus, W.D. (2005). *Economics*. 18ª Edition. New York. McGraw-Hill/Irwin International Edition.
- Schultz, T. (1979). "The economics of being poor", Prize Lecture. Lecture to the memory of Alfred Nobel, December 8, 1979, in [http://nobelprize.org/nobel\\_prizes/economics/laureates/1979/schultz-lecture.html](http://nobelprize.org/nobel_prizes/economics/laureates/1979/schultz-lecture.html), acedido em 30.12.2010.
- Sen, A. (1983). *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford/GB. Oxford University Press.
- Silva, E.G.; Teixeira, A.A.C. (2008). "Surveying structural change: seminal contributions and a bibliometric account", *Structural Change and Economic Dynamics*, 19 (4): 273-300.
- Silva, M. (2010). "Pobreza, direitos humanos e democratização da economia", in Teixeira, A.A.C.; Silva, S. e Teixeira, P., *O que Sabemos sobre a Pobreza em Portugal?*, Porto: Grupo Editorial Vida Económica. pp. 61-74.

- Silva, S.T.; Teixeira, A.A.C. (2009). "On the divergence of evolutionary research paths in the past 50 years: a comprehensive bibliometric account", *Journal of Evolutionary Economics*, 19 (5): 605-642.
- Skidmore, M.J. (2009). "Poverty in the twenty-first century: explaining the need for the new journal and describing its goals", *Poverty & Public Policy*, 1 (1): 1-7.
- United Nations Conference on Trade and Development (UNCTAD) (2010). *Information Economy Report 2010 – ICTs, Enterprises and Poverty Alleviation*, in [http://www.unctad.org/en/docs/ier2010\\_embargo2010\\_en.pdf](http://www.unctad.org/en/docs/ier2010_embargo2010_en.pdf), acessado em 10.11.2010.
- Vieira, P.C.; Teixeira, A.A.C. (2010). "Are finance, management, and marketing autonomous fields of scientific research? An analysis based on journal citations", *Scientometrics*, 85 (3): 627-646.
- Walter, I. (1975). *International Economics*. 2ª Edition. New York. The Ronald Press Company.
- World Bank (2010). *Measuring Results to Improve Lives – January 2010*, in <http://siteresources.worldbank.org/PROJECTS/Resources/40940-1244163232994/ResultsBookletSM2010.pdf>, [accedido em 19.12.2010]
- Wouters, P.; Leydesdorff, L. (1994). "Has price's dream come true: is scientometrics a hard science?", *Scientometrics*, 31 (2): 193-222.
- Young, S. (2004). *Multinationals and Public Policy. Volume I*. The International Library of Critical Writings in Economics. Cheltenham. Edward Elgar Publishing Limited.

## Recent FEP Working Papers

Nº 424	Maria Inês Veloso Ferreira and Aurora A.C. Teixeira, " <a href="#"><i>Organizational Characteristics and Performance of Export Promotion Agencies: Portugal and Ireland compared</i></a> ", September 2011
Nº 423	Pedro Cosme Costa Vieira, " <a href="#"><i>Está na hora de Portugal sair da Zona Euro</i></a> ", September 2011
Nº 422	Márcia Daniela Barbosa Oliveira and João Gama, " <a href="#"><i>How we got Here? A Methodology to Study the Evolution of Economies</i></a> ", July 2011
Nº 421	Vitor M. Carvalho and Manuel M. F. Martins, " <a href="#"><i>Macroeconomic effects of fiscal consolidations in a DSGE model for the Euro Area: does composition matter?</i></a> ", July 2011
Nº 420	Duarte Leite, Pedro Campos and Isabel Mota, " <a href="#"><i>Computational Results on Membership in R&amp;D Cooperation Networks: To Be or Not To Be in a Research Joint Venture</i></a> ", July 2011
Nº 419	Sandra T. Silva, Isabel Mota and Filipe Grilo, " <a href="#"><i>The Use of Game Theory in Regional Economics: a quantitative retrospective</i></a> ", June 2011
Nº 418	Marisa R. Ferreira, Teresa Proença and João F. Proença, " <a href="#"><i>An Empirical Analysis about Motivations among Hospital Volunteers</i></a> ", June 2011
Nº 417	Marlene Grande and Aurora A.C. Teixeira, " <a href="#"><i>Corruption and Multinational Companies' Entry Modes. Do Linguistic and Historical Ties Matter?</i></a> ", June 2011
Nº 416	Aurora A.C. Teixeira, " <a href="#"><i>Mapping the (In)visible College(s) in the Field of Entrepreneurship</i></a> ", June 2011
Nº 415	Liliana Fernandes, Américo Mendes and Aurora A.C. Teixeira, " <a href="#"><i>A weighted multidimensional index of child well-being which incorporates children's individual perceptions</i></a> ", June 2011
Nº 414	Gonçalo Faria and João Correia-da-Silva, " <a href="#"><i>A Closed-Form Solution for Options with Ambiguity about Stochastic Volatility</i></a> ", May 2011
Nº 413	Abel L. Costa Fernandes and Paulo R. Mota, " <a href="#"><i>The Roots of the Eurozone Sovereign Debt Crisis: PIGS vs Non-PIGS</i></a> ", May 2011
Nº 412	Goretti Nunes, Isabel Mota and Pedro Campos, " <a href="#"><i>Policentrismo Funcional em Portugal: Uma avaliação</i></a> ", May 2011
Nº 411	Ricardo Biscaia and Isabel Mota, " <a href="#"><i>Models of Spatial Competition: a Critical Review</i></a> ", May 2011
Nº 410	Paula Sarmento, " <a href="#"><i>The Effects of Vertical Separation and Access Price Regulation on Investment Incentives</i></a> ", April 2011
Nº 409	Ester Gomes da Silva, " <a href="#"><i>Portugal and Spain: catching up and falling behind. A comparative analysis of productivity trends and their causes, 1980-2007</i></a> ", April 2011
Nº 408	José Pedro Figue, " <a href="#"><i>Endogenous Response to the 'Network Tax'</i></a> ", March 2011
Nº 407	Susana Silva, Isabel Soares and Carlos Pinho, " <a href="#"><i>The impact of renewable energy sources on economic growth and CO2 emissions - a SVAR approach</i></a> ", March 2011
Nº 406	Elena Sochirca and Sandra Tavares Silva, " <a href="#"><i>Efficient redistribution policy: an analysis focused on the quality of institutions and public education</i></a> ", March 2011
Nº 405	Pedro Campos, Pavel Brazdil and Isabel Mota, " <a href="#"><i>Comparing Strategies of Collaborative Networks for R&amp;D: an agent-based study</i></a> ", March 2011
Nº 404	Adelaide Figueiredo, Fernanda Figueiredo, Natália P. Monteiro and Odd Rune Straume, " <a href="#"><i>Restructuring in privatised firms: a Statis approach</i></a> ", February 2011
Nº 403	Cláudia M. F. Pereira Lopes, António Cerqueira and Elísio Brandão, " <a href="#"><i>The financial reporting quality effect on European firm performance</i></a> ", February 2011
Nº 402	Armando Silva, " <a href="#"><i>Financial constraints and exports: evidence from Portuguese manufacturing firms</i></a> ", February 2011
Nº 401	Elena Sochirca, Óscar Afonso and Pedro Mazedo Gil, " <a href="#"><i>Directed technological change with costly investment and complementarities, and the skill premium</i></a> ", January 2011
Nº 400	Joana Afonso, Isabel Mota and Sandra Tavares Silva, " <a href="#"><i>Micro credit and Territory - Portugal as a case study</i></a> ", January 2011
Nº 399	Gonçalo Faria and João Correia-da-Silva, " <a href="#"><i>The Price of Risk and Ambiguity in an Intertemporal General Equilibrium Model of Asset Prices</i></a> ", January 2011

Nº 398	Mário Alexandre Patrício Martins da Silva, " <a href="#">A Model of Innovation and Learning with Involuntary Spillovers and absorptive capacity</a> ", January 2011
Nº 397	Fernando Governo and Aurora A.C. Teixeira, " <a href="#">Marketing and technology sophistication as hidden weapons for fostering the demand for 'art house' cinema films: a cross country analysis</a> ", January 2011
Nº 396	Liliana Fernandes, Américo Mendes and Aurora A.C. Teixeira, " <a href="#">A review essay on child well-being measurement: uncovering the paths for future research</a> ", December 2010
Nº 395	David Nascimento and Aurora A.C. Teixeira, " <a href="#">Recent trends in the economics of innovation literature through the lens of Industrial and Corporate Change</a> ", December 2010
Nº 394	António Brandão, João Correia-da-Silva and Joana Pinho, " <a href="#">Spatial competition between shopping centers</a> ", December 2010
Nº 393	Susana Silva, Isabel Soares and Óscar Afonso, " <a href="#">E3 Models Revisited</a> ", December 2010
Nº 392	Catarina Roseira, Carlos Brito and Stephan C. Henneberg, " <a href="#">Innovation-based Nets as Collective Actors: A Heterarchization Case Study from the Automotive Industry</a> ", November 2010
Nº 391	Li Shu and Aurora A.C. Teixeira, " <a href="#">The level of human capital in innovative firms located in China. Is foreign capital relevant?</a> ", November 2010
Nº 390	Rui Moura and Rosa Forte, " <a href="#">The Effects of Foreign Direct Investment on the Host Country Economic Growth - Theory and Empirical Evidence</a> ", November 2010
Nº 389	Pedro Mazeda Gil and Fernanda Figueiredo, " <a href="#">Firm Size Distribution under Horizontal and Vertical R&amp;D</a> ", October 2010
Nº 388	Wei Heyuan and Aurora A.C. Teixeira, " <a href="#">Is human capital relevant in attracting innovative FDI to China?</a> ", October 2010
Nº 387	Carlos F. Alves and Cristina Barbot, " <a href="#">Does market concentration of downstream buyers squeeze upstream suppliers' market power?</a> ", September 2010
Nº 386	Argentino Pessoa " <a href="#">Competitiveness, Clusters and Policy at the Regional Level: Rhetoric vs. Practice in Designing Policy for Depressed Regions</a> ", September 2010
Nº 385	Aurora A.C. Teixeira and Margarida Catarino, " <a href="#">The importance of Intermediaries organizations in international R&amp;D cooperation: an empirical multivariate study across Europe</a> ", July 2010
Nº 384	Mafalda Soeiro and Aurora A.C. Teixeira, " <a href="#">Determinants of higher education students' willingness to pay for violent crime reduction: a contingent valuation study</a> ", July 2010
Nº 383	Armando Silva, " <a href="#">The role of subsidies for exports: Evidence for Portuguese manufacturing firms</a> ", July 2010
Nº 382	Óscar Afonso, Pedro Neves and Maria Thompsom, " <a href="#">Costly Investment, Complementarities, International Technological-Knowledge Diffusion and the Skill Premium</a> ", July 2010
Nº 381	Pedro Cunha Neves and Sandra Tavares Silva, " <a href="#">Inequality and Growth: Uncovering the main conclusions from the empirics</a> ", July 2010
Nº 380	Isabel Soares and Paula Sarmiento, " <a href="#">Does Unbundling Really Matter? The Telecommunications and Electricity Cases</a> ", July 2010
Nº 379	António Brandão and Joana Pinho, " <a href="#">Asymmetric information and exchange of information about product differentiation</a> ", June 2010
Nº 378	Mónica Meireles, Isabel Soares and Óscar Afonso, " <a href="#">Economic Growth, Ecological Technology and Public Intervention</a> ", June 2010
Nº 377	Nuno Torres, Óscar Afonso and Isabel Soares, " <a href="#">The connection between oil and economic growth revisited</a> ", May 2010

Editor: Sandra Silva ([sandras@fep.up.pt](mailto:sandras@fep.up.pt))

Download available at:

<http://www.fep.up.pt/investigacao/workingpapers/>

also in <http://ideas.repec.org/PaperSeries.html>

---

[www.fep.up.pt](http://www.fep.up.pt)

**FACULDADE DE ECONOMIA DA UNIVERSIDADE DO PORTO**

Rua Dr. Roberto Frias, 4200-464 Porto | Tel. 225 571 100

Tel. 225571100 | [www.fep.up.pt](http://www.fep.up.pt)