

**Project title****Prices, Wages and Rents in Portugal 1500-1900****Project reference****PTDC/HAH/70938/2006****Abstract**

The project consists of three parts. The first is instrumental and involves constructing a new data base of wages, prices and rents in Portugal between 1500 and 1900 with coverage of the entire country. This will focus on major and lesser cities, some of them ports, others in the interior, and located in 6 different regions. The various time series will be homogeneous, consistent and comparable with similar work in other countries. This will entail reducing them to appropriate metric units, and values in silver and grain equivalents. In part, the project will draw on the fruits of the numerous but disparate and sometimes patchy efforts by historians since the 1940s. It will carry out a thorough revision of these data, and will fill in their considerable gaps, in particular regarding wages, rents and the prices of luxuries. It will mine a wide range of institutional archives at all levels. Special attention will be paid to the nature of these sources and to the methodological adjustments they require. Differences between wholesale and retail prices and between market and non-market situations will receive special attention. A parallel endeavour will be to compile as many consumption budgets as possible, in order to establish the "weights" used in formulating the price and wage indices, which are the main outcome of the entire exercise. Another one will be to gather information on the metric equivalence of the plethora of weights and measures at the local level which is characteristic of Ancien Regime. The resultant data base will be made available electronically to the national and international scientific community, as it is constructed. It will constitute a major step in Early Modern Portuguese historiography, because of its broad geographical scope, comprehensiveness, reliability and superior quality of its information.

The second and third parts of the project involve the analysis, by the project team, of these results. The perspective will be that of some of the current principal issues in the study of Portuguese and international economic history during the period. The second part will concern the essentially "domestic" aspects of the agenda. Firstly, it will cover the very long term evolution of the Portuguese economy using, for the 1st time, objective indicators of welfare, such as silver and consumption wages. This will permit a revision of several major historiographical problems. The most controversial is probably the impact of the 16th century Overseas expansion on macroeconomic performance and the distribution of its gains. Other revisited themes are the impact of wars, natural disasters, the waxing and waning of

the colonial economy after 1600, crop innovation, epidemiology, infrastructural and technological modernization (19th century), and degrees of economic openness. Altogether, a new and more solidly based picture of Portugal's economic past will become possible. Secondly, a new historical regional analysis over four centuries will be carried out, employing our new regional information on prices, rents and wages. Using statistical techniques, it will trace the evolution of regional economic asymmetries and the integration of markets, allowing the identification of where the country's economic leadership lay at different stages of its development. This is important in ascertaining the role of the urban sector in the country's development. Thirdly, changes in the inequality of income distribution, which were probably considerable over time and space, due to demographics, the land property system and the Law of Engel. This can be seen using the long term fluctuations in price-relatives, between "luxuries", rents and basic items, as well as unskilled wages. These data can be put together for different social and income strata using socially related consumption baskets. This "real income distribution" has yielded quite surprising results for other countries in the period. It is new for Portugal.

The third part of the project concerns its integration into the newly expanding international network of comparative research in wages and prices history. This means joining the Global Prices and Income History Group, at UC Davis. It also requires adding the Portuguese dimension to this worldwide effort of comparative analysis from which it has been absent. Portugal's contribution is important because it reached great power status early and then declined early also, in contrast with the more studied Britain and the Netherlands, which pulled away from Europe economically in the 17-18th centuries. International comparisons have used Spain and Italy, with their patchy and old evidence, for their "Southern Europe" paradigm. Now, Turkey has come into the picture but the Portuguese counterbalance is still very necessary. This case study will enrich debates on the decline of the real wage Europe after 1500; the onset of the "Great Divergence" between the dynamic North-West and the lagging South and Central European nations; the trends in income inequality between nations and within nations.

### **Objectives**

One of the project's objectives is to construct a new data base of wages, prices and rents in Portugal. This will draw on earlier results by historians, which will be revised. The considerable remaining gaps will be filled from archival research in six of the countries' regions. The resultant data base will be a major step for Early Modern Portuguese historiography, owing to its geographical scope, comprehensiveness, reliability and superior quality of information. The second aim involves an innovative analysis of the results along

three axes. A revision of Portugal's economic past using objective indicators of welfare will draw a different picture of its long run performance. The evolution of regional asymmetries and the integration of markets over four centuries will arise from the novel regional information on prices, rents and wages. Long run changes in the inequality of income distribution will be studied historically for the first time in Portugal. The third goal is to bring Portugal into the international network of research in wages and prices history.

This project flows from and extends significantly several research preoccupations I have had for years. One is my interest in the long term economic growth of Portugal in the 19th and 20th centuries. Another is the concern, in such a study, to cast it in a comparative approach, which is particularly important in the case of a small follower economy like this. A third is my interest in issues of welfare and their relationship with macroeconomic performance, which has taken me into anthropometric history and standard of living analysis. Finally, there is the quantitative orientation, which has shaped most of my research and has caused me to devote much effort to data gathering as a starting point for solid research on the economic past. What is new in this project for me is reaching far back into the Early Modern Period, the very broad scope of the research and its necessarily collaborative nature, and the construction of a major public source open to use for all economic historians.

#### **State of the Art**

This project builds on 2 quite distinct historiographical currents, which it seeks to bring together with a case study on Portugal between 1500 and 1900.

The first arises from the study of economic growth during the last 2 centuries, a period of unparalleled expansion of population, output and productivity, starting in the West and reaching now a global scale. Subject to successive revisions during the last 50 years, the prevailing view today is that the Industrial Revolution was a decisive break, but not as sudden and dramatic as claimed earlier. It occurred in a region – Northwest Europe – which had experienced growth already for more than a century, along with urbanization, agricultural improvement and a rise in living standards. In the rest of Europe, from 1500 to 1750 income per capita declined or stagnated, and conditions for economic acceleration were therefore absent. This was the Great Divergence in Wages and Prices (R. Allen, "The Great Divergence in European Wages and Prices from the Middle Ages to the First World War", *Explorations in Economic History*, 38, 2001, 411-447), which is at the heart of one of the main debates in long term comparative economic history (J. van Zanden, "Wages and the Standard of Living in Europe, 1500-1800", *European Review of Economic History*, 3, 1999, 643-64; A. Maddison, *The World*

Economy: a Millennial Perspective, Paris, 2001). Following a suggestion by J. G. Williamson ("The Evolution of Global Labor Markets since 1830", *Explorations in Economic History*, 32, 1995, 141-97), it involves estimating income per capita from the real wages of urban labour across Europe over long intervals, using a purchasing power parity methodology based on extensive price information and a common basket of consumption goods. The goal is to map the intensity and timing of the divergence in order to understand which factors – demography, technology, urbanization, trade, institutions, colonial history and the like – were its main determinants. At present, the literature is still concentrating on this "map", and Portugal, a missing country until now, is an important addition and useful "counterweight" to recent findings on the Eastern Mediterranean (S. Pamuk, "Urban Real Wages around the Eastern Mediterranean in Comparative Perspective, 1100-2000", *Research in Economic History*, 25, 2005, 213-232).

A second strand in this historiography has to do with income distribution, a topic often connected to development and urbanization (P. Hoffman et al, "Sketching the Rise of Real Inequality in Early Modern Europe", in R. Allen et al. (eds.) *Living Standards in the Past*, Oxford, 2005). The Great Divergence of Wages and Prices implied an increase in the inequality of this distribution among nations, but it was also accompanied by a similar movement within nations. The main reasons were the rise of population, a concentrated system of landownership, the Law of Engel and technical progress. The prices of "luxuries" fell relative to that of staples and rents. This favoured the rich and the owners of the means of production relative to the poor. All land-intensive production became relatively more costly, while labour-intensive services became relatively cheaper. The result was the downward pressure on real wages noted above. Apart from a valuable explanation for the secular fall in real wages, this approach raises a crucial point: can we really infer income per capita directly from real wages? The bias comes from missing the more urban, service and manufacturing-oriented economic activities, which were expanding rapidly and pushing up the level of income per capita, especially in the more advanced countries of the Northwest. Price and wage research dates back to the 1930s or before. In this new version, it is still young and faces several difficulties. Data is scarce, particularly on Asia. There is a need to "regionalize" the analysis and cover countries better. The use of real wages as a proxy for national product per capita must be reconciled with the distributional issue. A consistent economic interpretation of the long run data in terms of the "big questions" – convergence, divergence, stagnation, development – is needed. The debate is still too focused on collecting and refining the data.

A third strand of this historiography broadens the discussion to ask whether there was a Great Divergence also between Europe and India

and China. According to Pomerantz (*The Great Divergence: China, Europe and the Making of the Modern World*, Princeton, N.J., 2000) and others, between the 16th and the 18th centuries, both regions' real wages were on a par with Western Europe. Intercontinental per capita income divergence only happened upon industrialization. Before the 18th century, real wages in Europe could not have risen much therefore and this casts doubts on the idea of a Great Divergence there. This "pessimistic" view has been strongly criticised by Maddison (2001), who contrasts a stagnant Asia, from the 16th century on, with a slowly growing Europe right up to the onset of industrialization. Portugal, with its long tradition of presence in Asia, is a valuable addition to this second debate because it can help answer the question, asked by S. Broadberry and B. Gupta ("The Early Modern Great Divergence: Wages, Prices and Economic Developments in Europe and Asia, 1500-1800", *Economic History Review*, LIX, 2006, 2-31): was early modern Asia more like the backward parts of Europe (including Portugal?) but far different from the Northwest's, and therefore never likely to harbour any sort of "industrial revolution"?

Our 2nd historiographical current arises from Portuguese price history and the interpretations of economic performance it has stimulated. The former has a solid tradition, inaugurated by V. M. Godinho (*Prix et Monnaies, 1750-1850*, Lisboa, 1955) and with many followers down to the present (J. Romero de Magalhães, *O Algarve Económico, 1600-1773*, Lisboa, 1993; Rui Santos, *Sociogénese do Latifundismo Moderno : Mercados, Crises e Mudança na Região de Évora, Séculos XVII A XIX*, Lisboa, 2003). Altogether, it covers the country well, but is patchy over time – no town or region is observed for more than two centuries - and it is much weaker when it comes to wages or rents. Not much effort has been made, however, to gather this data into a single homogenous and consistent data base, or to produce weighted indices, except for the 19th century (D. Justino, *Preços e Salários em Portugal (1850-1912)*, Lisboa, 1990). This is in harmony with the lack of preoccupation shown by Portuguese historians in producing a coherent interpretation of national macroeconomic history over 4 centuries. Instead, prices have been used to study a succession of cycles seen as occurring around a horizontal trend line, in other words, in a static and Malthusian perspective inspired by the *Annales* school (J. Nunes de Oliveira, *A Beira Alta de 1700 a 1840: Gentes e Subsistência*, Viseu, 2002). These cycles are not treated, however, as part of a longer run process and therefore have not been linked up to each other in order to obtain a fuller picture. The possibility of changes in the global productivity of the economy or market and technology-induced structural shifts influencing living standards, on the whole has also not been considered. Given the strong emphasis on the prices of agricultural staples, the part of the urban sector in accounting for the movements of the national

economy has not been given much importance either. Curiously, despite the prevalence of the idea of “decadence”, the notion of systematic decline over centuries in the very long term is unexplainably absent from the discipline’s worries (in contrast with the international historiography – see above). For most authors, the colonies, the excessive weight of the state and the submission of Portugal to foreign interests have had the central role in accounting for the behaviour of the Portuguese economy (V.M. Godinho, *Estrutura da Antiga Sociedade Portuguesa*, Lisboa, 1971). Indeed, they seem to have mattered more than anything else, not only in the 16th century, but also in the crisis of the 17th century, during the reversals of the 18th century (J. Lúcio de Azevedo, *Épocas de Portugal Económico*, Lisboa, 1929). Their impact in the 19th century has equally served to underscore this importance (J. Pedreira, *Estrutura Industrial e Mercado Colonial: Portugal e Brasil (1780-1830)*, Linda-a Velha, 1994). Yet price indicators have hardly been used as empirical proof for any of these relationships. The only macroeconomic model to have sprung from the efforts of Portuguese price historians is that which V. M. Godinho himself (*Prix et Monnaies, 1750-1850*, Paris, 1955) devised to explain the ebb and flow of efforts at industrialization over the centuries and their ultimate failure. Its underlying hypothesis is that manufacturing would only develop with official support and this was forthcoming only when falling or stagnant prices announced a recession in trade and agriculture or the colonies. Whenever this cycle changed, support ended and manufacturing fell back, again a static model. Although this model would have difficulty today in meeting the exacting standards of the Cliometric school, it has provoked considerable and useful debate, and revealed that such approaches, based on solid evidence, may stir anew interest in the long term evolution of the Portuguese economy, which is the object of this project.

### **Results and Repercussions**

The first result is a data base of original material, on prices, wages and rents for Portugal between 1500 and 1900 and available electronically on two sites: of the ICS and of the Global Prices and Income History Group, at UC Davis. The sources are local, regional and national archives in 6 cities. The data will be internationally comparable, being reduced to metric units, in the case of prices, and expressed in monetary units and grams of silver. It will be widely disseminated globally among scholars working in the field. This will ensure the visibility of the Portuguese case in all future significant comparative work. The analytical results will include a collection of essays by team members on long-run Portuguese economic history, using the empirical results obtained. It will also consist of articles in national (x) and foreign (y) refereed journals, besides preliminary results in working papers and at international and national conferences. There will be one Ph.D. and two master’s theses.

This project will have two important repercussions. Portuguese economic history, although potentially of great interest for international comparisons, has up till now remained absent from most comparative economic history. One reason is the difficulty with the language; the other is that not much quantitative data has been available easily in published form to non-Portuguese researchers. An example is the recent debate involving RC Allen, van Zanden and others on the History of Real Wages, 1500-1800, which discusses Southern Europe in terms only of rather poor data from Spain and Italy. The integration of this project in the Global Price and Income History Group and the availability on its site of its data base will change this situation dramatically. This will have several significant advantages. One is that future comparative research will be able to reflect the specificity of the Portuguese case, thereby enriching itself. Another is that this will attract attention to Portuguese economic history and encourage foreign scholars to do research on it and thus bring to bear on it new perspectives. In the third place, the greater interest in Portugal abroad will lead to an increased involvement by Portuguese scholars in international research networks, which will be positive for their work and raise standards.