Modes of International Dissemination of Ideas and the Standardization of Postgraduate Teaching in Economics in Portugal

Ana Costa (ISCTE and Dinâmia, Lisbon, Portugal) ana.costa@iscte-iul.pt

Gonçalo Marçal (Dinâmia, Lisbon, Portugal) Goncalo.Marcal@iscte-iul.pt

Manuel Couret Branco University of Évora and CICP, Portugal) mbranco@uevora.pt

Abstract:

Since the first postgraduate course in Economics was created in Portugal in the beginning of the 1980s, a noticeable standardization in the provision of this sort of training in Portugal has occurred. In other words postgraduate courses in Economics have become very similar across Portuguese higher education institutions. There has been a narrowing of the curricula around an increasingly restricted number of modules that may be called "core", eliminating or expelling a large variety of modules to peripheral areas of economics or to other domains of knowledge. This standardization process has also been noticeable within the syllabi and the suggested readings for the main "core" modules. A thorough survey of the curricula and syllabi in the major public universities in Portugal allowed us to reach these conclusions. This standardization not only reduces the chances of a plural teaching of economics, but also pushes many students into other postgraduate studies where they go in search of the scientific framework to study the social realities that interest them. Inevitably the number of graduates in economics with a plural vision of the economy has systematically been shrinking. This process seems to have happened throughout the world and the second part of the paper looks for understanding how this process took place in Portugal through interviews with those responsible for several editions of said courses. Classifying the modes of international dissemination into imitation/emulation and coercion we have reached the conclusion that imitation of what are considered the best practices in the world, and most especially in the Anglo Saxon world, can best explain the standardization process in a first stage. More recently the search for national and international recognition of postgraduate courses in several institutions has introduced some form of coercion in the shape of assessment and certification processes and scholarship awarding, for instance. It seems that in their quest for providing the best education possible, universities got somehow trapped in monism, either voluntarily or involuntarily.

1. Introduction

Studying the nature of the articles published by Portuguese economists in the Portuguese journals *Estudos de Economia* and *Economia* in the 1980s and 1990s, José Reis argued that there was a tendency for a loss of diversity in the issues addressed and a growing preponderance of formal economics to the detriment of historical discussion, analysis of ideas and of substantive issues, such as the development of the Portuguese economy

(Reis 2012). The subjects of the doctoral theses in Economics carried out in Portugal between 1980 and 2016 seem to show the same tendency. Thus, not only did the weight of applied theses fall in the total amount of theses carried out, from about 57% to about 37%, but also within these same applied theses the weight of those concerning Portugal decreased from 92% to about 74% in the same period (Branco et al., 2019).

Roger Backhouse and Béatrice Cherrier (2017), analysing articles published in three of the most important mainstream international journals, the American Economic Review, the Journal of Political Economy and the Quarterly Journal of Economics, reach a different conclusion. According to them, since the 1970s until today there would have been a noticeable increase in applied economics, often regarding issues of economic policy, along with a drastic reduction of elaborate pieces of economic theory. Angus Deaton, in turn, wrote in 2007 that if the typical economics thesis of the 1980s consisted of an elaborate price theory estimated by the maximum likelihood method in nonlinear regression models based on a very small number of observations, the typical thesis of the middle of the first decade of the new millennium already used little or no theory, much simpler econometrics, and hundreds of thousands of observations (Deaton 2007). Backhouse and Cherrier emphasize, however, that the boundaries between theoretical and applied work would have been blurred in the meantime, and today theory itself would have become more applied (Backhouse and Cherrier 2017).

Is Portuguese economics in counter cycle with the rest of the world, then? The methodologies and the concerns of the studies cited above are not the same and therefore they do not allow us to truly answer this question. The remarks they contain are, nevertheless, sufficient to arouse our curiosity and to push us into deepening the subject, namely by studying the evolution of post graduate teaching in economics in Portugal, through analysing curricula, syllabi and suggested readings in both master and doctoral courses.

Scientific studies focusing on aspects such as the structure, objectives, syllabi and suggested readings of postgraduate courses are not abundant in the international literature on economics teaching. Among these, although they only partially concern the subjects referred to above, mention should be made to Barone (1991), Bowen (1953), Coats (1992), Hansen (1991), Krueger (1991), McCoy and Milkman McCoy et al. (2014) Thornton and Innes (1988), who focused on the US reality, T. Thornton (2012, 2013a, 2013b) and G. Argyrous and T. Thornton (2013) on economics teaching in Australian universities, Engwall (1992) with a broad study of the evolution of research and postgraduate education in economics in Sweden from the late nineteenth century until 1990, and Baccini and Marcuzzo (2009) on the Italian reality.

These scientific works focus on very different realities and have equally different motivations, objectives and methodologies. However, they all convey a sense of dissatisfaction with the state and evolution of post-graduate education in economics. First there would be an excessive focus on the learning of formal models and techniques to the detriment of the understanding of real economic problems; second, what may be called the core of the basic training modules of postgraduate education would leave out several theoretical approaches that belong to the common heritage of economics as a social and plural science; third this core would have become more prevalent in the curricular structure of the courses to the detriment of a greater breadth of substantive topics, of analytical methodologies and of ideas being discussed; finally, the homogenization of curriculum structures and syllabi would prevail over the existence of different training objectives.

In contrast to this enduring dissatisfaction, the evolution of the demand for postgraduate education in economics gives signs of change. Coats (1992) notes this when he compares Bowen's pioneering work of 1953 with the 1988 report of the Commission on Post-Graduate Education in Economics (Hansen 1991, Krueger, 1991). While the number of Ph.D. students in Economics in the USA has remained stable, there is a decrease in the number of North Americans Ph.D. and a corresponding increase of non-American Ph.D. students (Coats, 1992). Besides, graduates in economics tend to look for master degrees in different areas, like business and other more applied areas (Coats, 1992). Regarding Australia, Tim Thornton (2013a) and George Argyrous and Tim Thornton (2013) also highlight the decrease of supply in economics, schools of economics having disappeared or having been incorporated in business schools.

Research focusing on the Portuguese reality is even scarcer as one would expect. Jochen Oppenheimer and António Romão (1985) refer to post-graduate teaching in a study on the teaching of economics in general. In this study they suggest that master degrees in the 1980s seemed to be more concerned with stretching general undergraduate training than with researching more specialized domains (Oppenheimer and Romão 1985). These authors also show how, from a paradigmatic point of view, postgraduate teaching was still relatively plural, not only because the various schools proposed training programs that could be considered somehow alternative, but also because the approach itself was plural. More recently, Nuno Valério et al. (2011) also focused not exclusively on postgraduate teaching in a paper that narrates the history of economics teaching at what is today the Lisbon School of Economics and Management. This study has the particularity of evoking the various legal and institutional changes and their impact on the formulation of the postgraduate courses in Economics taught at that school.

2. Methodological note

The present study is divided into three major parts. The first part analyses the curricula of master and doctoral courses in five Portuguese public universities. The second part examines the syllabi of Macroeconomics and Microeconomics modules as well as their suggested readings in these same five universities. Finally, based on interviews made with those responsible for several editions of said courses, the third part tries to look at the evolution of these postgraduate courses from the point of view of the process of international dissemination of economic ideas. This analysis focuses on the courses proposed by the Nova School of Business and Economics (FEUNL), the Lisbon School of Economics and Management (ISEG), the Faculty of Economics of the University of Coimbra (FEUC), the Faculty of Economics of the University of Oporto (FEP), and the Higher Institute of Labour and Business Sciences (ISCTE - IUL). These are the five most important economics public schools in Portugal and represent about 70% of the doctoral theses produced in the country. This study is aware of the risk of losing relevant information in doing so but believes that narrowing the study to these five universities allows greater analytical depth and therefore better understanding of the process.

Curricula, syllabi and suggested readings were examined for the academic years of 1983-84, 1990-91, 1998-99, 2010-11 and 2016-17. The academic year 1983-84 was taken because it was very close to the official creation of the first master's degree in 1980 and to include the institutions that proposed a master's course in Economics at the beginning of that decade: the ISE (later ISEG) and FEUNL created their master courses in 1981 and the FEP in 1983. The academic year 1990-91 is particularly interesting to analyse because it is set just before most universities reduced the duration of graduation courses from five to four years. This reduction would come to have an expansionist effect on master courses and therefore this year is an important moment to take stock of the master courses created in the 1980s. The year 1998-99, in turn, allows us to account for the evolution of masters and doctorates in economics after the first reduction in the duration of graduate courses, as well as to take into account the creation of a PhD course at the FEP in 1998, similar to the one previously created by FEUNL. The academic year 2010-11 marks a period in which the Bologna¹ guidelines had already been applied in all study cycles in Portuguese universities, and also after the creation of A3ES, the national body for the evaluation and accreditation of higher education institutions. It should be stressed in this regard that that year most universities had already provided PhD courses as required by the A3ES. Finally, the academic year 2016-17 obviously aims to reflect the current state of post-graduate training in economics.

The aim of the present study was not to analyse all the courses taught in the wide domain of economics, but only those that specifically provided the title of Master or PhD in Economics. In each institution, only one course was thus examined. This choice was not evident, however. On the one hand, many courses of economics were presented over time under various titles and if the criterion of economics was strictly used in some moment in time, no true postgraduate course in economics could be found in many of the universities studied. On the other hand what determines in reality the designation of economics? Should courses that entitle themselves, for example, agricultural economics, European economics, or monetary and financial economics, be considered courses in economics? From a disciplinary point of view they are without doubt courses in economics. However, in many of the five institutions that propose several of these sort of courses there is also a course in economics alone, which took us to narrow this study to the single "economics" courses only.

This option may appear to be reductive since it would leave out many courses, in particular doctoral courses, which often resulted in theses classified by the Directorate General of Statistics in Education and Science (DGEEC) as being in economics. This admittedly problematic choice has, however, a clear purpose. As the American Economic Association has shown, the willingness to work in many fields of economics such as those described above led doctoral students to enrol precisely in courses other than economics (Hansen 1991). This phenomenon was also observed in Portugal, where the relative narrowing of the courses in economics was accompanied by the creation of a large number of courses with other titles corresponding to more specialized fields of economics or related areas such as European Economics or Development Studies.

As a matter of fact, one of the hypotheses that this study raises is that the creation of these courses responds precisely to the need for some students to get that training that they could not find in the courses in economics. It was also with the purpose of identifying the possible narrowing of the courses in economics that this study was limited to examining only the courses that the institutions recognized as being their Master or

¹ The Declaration of Bologna was signed in June 1999 by 29 European Countries that sought to establish a European Higher Education Space based on the adoption of structural reforms that would allow the mutual recognition of European higher education diplomas

PhD courses in economics. Thus were considered only the courses in economics when it existed with this title and other courses when in the institution in question there was no other course in economics. Therefore, in FEUC, in 1990-91 the master course in European economics was taken as the university's master course in economics.

3. Curricula of master and doctoral courses

This analysis of the curricula of master and doctoral courses in economics intends to find out if they propose a specialization in the follow-up of a more generalist training supposedly obtained with the bachelor degree or if they propose deepening the core concepts presented there. For this, modules within the curricula were classified in two major groups. The first group, that shall be called core, includes modules that have been considered central in any postgraduate course in economics in most universities, and which are often compulsory. The perception that in postgraduate courses in economics there could or should exist modules called core is already present in the pioneering work of Bowen (1953). In the survey he conducted with North American economics teachers the existence of core modules is accepted by most respondents, although there is no consensus among them when it comes to defining which modules should be given this status. Only Economic Theory met such a consensus at the time (Bowen 1953: 105).

Economic Theory has since split up into various modules that may claim this heritage although a module entitled Economic Theory has existed as such for some time in various curricula of postgraduate courses in economics in Portugal. More recently, in a survey of master courses in the USA, Thorton and Innes (1988) showed that 97% and 96% of them respectively required Microeconomics and Macroeconomics, Statistics or Econometrics being present in 82% of them (Thornton and Innes 1988: 174). Hansen shows the same phenomenon for North American doctoral courses (Hansen 1991: 1062).

Indeed, postgraduate education in economics since the 1950s has taken an increasingly quantitative twist in the vast majority of universities (see McCoy et al., 2014: 385). Likewise, in Portugal, most master and doctoral courses in economics, besides, Macroeconomics and Microeconomics, require quantitative methods. For this reason the group of core modules includes Microeconomics, Macroeconomics and quantitative methods, such as Econometrics. In Table 1 other modules have been incorporated in Macroeconomics, such as Introduction to Macroeconomics, Macroeconomic Theory, Complements or Topics of Macroeconomics, Advanced Macroeconomics or Macroeconomics in an Open Economy. More specific modules that can somehow be considered extensions of Macroeconomics were also incorporated in the core group, such as Growth (for more detail see table 1 below).

Core Modules	Specialization Modules
Microeconomics	Agricultural Economics and Policy
Macroeconomics	International Trade
Econometrics	Development Economics
Optimization	Environment Economics
Game Theory	Industrial Economics
Micro-econometrics	International Finance
Macro-econometrics	Natural Resource Economics
Mathematical Analysis	Economic History
Economic Growth	Regulation Economics
Time Series	Financial Management
Statistics	Policy Analysis
Operational Research	Investments
Cost-Benefit Analysis	Monetary Economics
Macroeconomics in a Open Economy	Public Economics
Mathematical Economics	International Economics
Computing Methods	Labour Economics
Economic Theory	Social Economics
Economic Modelling	Health Economics
Dynamic Economics	History of Economic Thought
	European Economics
	Education Economics
	Political Economy
	Economic Policy
	Economic Integration
	Common Agricultural Policy
	Regional Economics
	Regional Development
	Monetary Policy
	Financial Economics
	Portuguese Economics
	Energy Economics
	Tourism Economics
	Public Finance

Table 1 - Core and Specialization Modules in Master and Doctoral Courses (non exhaustive list)

The second group of modules called specialization modules puts together all the modules that are intended not only to apply core concepts but also those that focus of specific sectors of the economy, such as Labour Economics, Development Economics, European Economics, Monetary Economics, Economic History, etc. This group also incorporate History of Economic Thought although in reality this module does not really respond to the classification criteria for this group. However, when it exists, this module is not understood as core in most curricula. Indeed already in Bowen's work (1953) History of Economic Thought is shown as an "autonomous" module out of Economic Theory. Thornton and Innes, in turn, point out that only 11% of the master courses examined required History of Economic Thought (Thorton and Innes 1988: 174).

Following this method of classifying modules, the evolution of master courses in economics in the five universities analysed in the last thirty years is presented in table 2 below.

Table 2 - Structure of master courses. Weight of module groups as a percentage of the total amount of credits required for receiving the degree

	1983-1984		1990-1991		1998-1999		2010-2011		2016-2017	
	Core	Spec.								
FEUNL	55	45	75	25	60	40	78,5	21,5	50	50
FEUC*	-	-	12,5	87,5	28,5	71,5	30	70	30	70
FEP**	54	46	-	-	69	31	38	62	37,5	62,5
ISEG-UL	13	87	60	40	67	33	54	46	54	46
ISCTE-IUL	-	-	-	-	-	-	55	45	50	50

 \ast In 1990-91 the Master in European Economics was considered; in 2016-17 the course of 2015-16 was considered

** In 1998-1999 the course of 2000-01 was considered

The table above does not disclose a clear common tendency. Indeed, if in some universities the group of core modules has been strengthened (ISEG-UL, FEUC) in others, the opposite happened, specialization modules having been strengthened. One trend, however, stands out, which is that in the last thirty years there has been a standardization of the courses across universities. In other words, master's curricula have become increasingly similar. This process is neither uniform nor completely linear, however. In each decade examined curricula contents vary significantly.

If, for example, in FEUNL curriculum composition is very similar in 1983-84 and in 2016-17, over time it has fluctuated considerably. This fluctuation should be understood partly due to the creation and extinction of other courses in the same area, the different objectives assigned to what was considered at each moment of time the master course in economics, and the different reforms undergone. At FEUC, in turn, the reduction of specialization modules should not be overrated since the course considered in 1990-91 as an economics course was in European Economics, which had clearly a nature and purpose different from the master courses in economics displays a very stable structure. Such a phenomenon can also be understood in the same way for ISEG-UL, albeit with some variations. The major variations curricula composition happened in the first phase of course development. In most universities this composition is relatively stable from the turn of the millennium on, reinforcing the idea of a broad consensus on what should be the curriculum of a master course in economics.

The evolution of doctoral courses in Economics, in turn, is mirrored in Table 3 below.

	1983-84		1990-91		1998-99		2010-11		2016-17	
	Core	Spec.								
FEUNL*	50	50	55	45	61,5	38,5	78,5	21,5	64	36
FEUC**	-	-	-	-	-	-	100	0	100	0
FEP***	-	-	-	-	70	30	91,6	8,4	91,6	8,4
ISEG- UL****	-	-	-	-	-	-	75	25	87,5	12,5
ISCTE	-	-	-	-	-	-	-	-	72,7	27,3

Quadro 3 - Structure of doctoral courses. Weight of module groups as a percentage of the total amount of credits required for receiving the degree

* In 1983-84 only compulsory modules were taken into account.

** For 2016-17 the course of 2015-16 was considered

*** For 1998-99 the course of 2000-01 was considered

**** For 2016-17 the course of 2017-18 was considered

As seen in Table 3, most doctoral courses are relatively recent. All the universities considered here have long delivered PhD degrees in Economics but not all through a course or through a structured course as in the last decade, prompted by the need for institutional accreditation. Before that only FEUNL and FEP proposed a doctoral course as described. In these two universities, a tendency towards a concentration of the doctoral course around core modules stands out clearly, this being more evident in FEP. Courses in the other universities were created only in the last decade. Despite their short history, they confirm the trend displayed by the oldest doctoral courses and the master courses, namely an increasing homogeneity of the supply and an increasing concentration of the courses around core modules.

In the most recent cases, doctoral courses were created at the beginning with a very significant weight of the core modules, in this particular case the FEUC doctoral course being an extreme case since all the modules of the course can be considered as core. At ISEG-UL the doctoral course was created with a high degree of core modules and the recent reform of the course strengthened this feature. The fact that in our classification the doctoral courses at the FEUNL and at ISCTE seem less centred in the core modules is mainly the result of the association of economics and finance, two domains that are often coupled with the purpose of increasing the employability of PhD holders.

4. Syllabi and suggested readings

In an article published in 1991 Hansen referred to doctoral courses in Economics in the USA as being strikingly similar². This homogeneity was particularly flagrant for the syllabi of the modules of macroeconomics, microeconomics and econometrics, which were

 $^{^2}$ Hansen's article follows the work developed by the Commission on Post-Graduate Education in Economics created by the American Economics Association in 1988.

previously labelled as core. This homogeneity, as Hansen (1991: 1062) notes, "seems to reflect a widespread agreement among economists on what the economy is, or at least on what constitutes its core." Tim Thornton (2013a, 2013b) in his analysis of undergraduate and postgraduate syllabi in economics at various Australian universities in the 1980s and 2011 shows that the syllabi of macroeconomics and microeconomics modules basically consist in neoclassical economics. Moreover, the very teaching of neoclassical economics seems to have become more simplistic, more focused on the presentation of the 'general case' to the detriment of 'exceptional cases' which would in themselves justify discussing the model's assumptions, their validity and the limits of their application, as the analysis of different editions of textbooks suggests (Thornton, T., 2013a: 157).

Are macroeconomics and microeconomics in post-graduate courses in economics in Portuguese universities also strikingly homogenous? This question guided the analysis of the syllabi and of the recommended readings for compulsory and elective modules in macroeconomics³ and microeconomics⁴ at the universities considered. The analysis carried out falls short of the limitations arising from considering module's syllabi from their contents only, each being described with different levels of detail. In some cases syllabi are only very briefly described.

Furthermore it was not possible to take into consideration the contact time spent in class, or at least planned, to assess the depth at which each item of the syllabus is dealt with. We are aware that there is a qualitative dimension associated with the teaching practice, which is certainly an element of differentiation even when syllabi are very similar. Notwithstanding the recognition of all these limitations, we consider as Hansen (1991) that the homogeneity in the syllabi of macroeconomics and microeconomics modules shows that there is also a generalized consensus within Portuguese faculty on what should be the basic training of students in these modules, on what economists do or should do, on what economics is, basically, or, at least, given the semi-peripheral nature of Portugal and of the Portuguese University, on what is thought to be the best practices in the international context.

The main conclusion drawn from the analysis of the macroeconomics and microeconomics syllabi is its great homogeneity in the universities considered in the present study. This homogeneity is even greater in the case of microeconomics modules. Indeed, every microeconomics syllabus in the master courses that have been considered

³ In the domain of macroeconomics the following modules were considered:

Macroeconomics I, Macroeconomics II, Macroeconomic Theory I, Macroeconomic Theory II, Macroeconomic Theory III, Growth and Fluctuations, Macroeconomic Analysis, Macroeconomics in Open Economy, Intermediate Macroeconomics, Advanced Macroeconomics I, Advanced Macroeconomics II, Cycles and Economic Growth, Macroeconomic Policies, Economic Growth, Cycles and Economic Growth, Elements of Macroeconomics, Macroeconomics and Monetary Theory, Growth Economics, Dynamic Economics, Topics in Macroeconomics, Macroeconomics and Conjuncture Analysis, Growth and Economic Cycles, Advanced Topics in Macroeconomics I, Advanced Topics in Macroeconomics II, Topics in Economic Growth.

⁴ In the domain of microeconomics the following modules were considered: Microeconomics I, Microeconomics II, Topics of Microeconomics, Game Theory, Microeconomic Theory I, Microeconomic Theory II, Microeconomic Theory III, Decisions and Interactions, Games and Markets, Game Theory I, Game Theory II, Microeconomic Analysis, Intermediate Microeconomics, Advanced Microeconomics I, Advanced Microeconomics II, Game Theory and Uncertainty, Game Theory and Information, Elements of Microeconomics, Advanced Topics in Microeconomics Contracts and Corporations, Complements of Microeconomics, Microeconomics, Game and Contracts Theory, Advanced Topics in Microeconomics I, Advanced Topics in Microeconomics II.

here, addresses an extremely similar set of topics. The canon of the microeconomics module is identified in Table 4.

Table 4 - Topics covered in the syllabi of all microeconomics modules of master courses in Economics (FEUNL, FEUC, FEP, ISEG-UL, ISCTE-IUL)

Consumer Theory Producer Theory Choice Under Uncertainty Information Economics (moral hazard and adverse selection) Game Theory

General equilibrium analysis and structures of market competition (in four of the five universities considered), and welfare economics (in three of the same five universities), are also important subjects addressed in master course syllabi. This canon remains almost unchanged when one considers microeconomics syllabi in doctoral courses (Table 5):

Table 5 - Topics covered in the syllabi of all microeconomics modules of doctoral courses in Economics (FEUNL, FEUC, FEP, ISEG-UL, ISCTE-IUL)

Consumer Theory
Producer Theory
Choice Under Uncertainty
Information Economics (moral hazard and adverse selection)
Agency and Contract Theory
Structures of Market Competition
Game Theory

As for master courses, general equilibrium analysis and welfare economics are also present in the microeconomics syllabi of doctoral courses, in this case three of the five universities considered.

As in Tim Thornton's works on teaching economics in Australia (Thornton 2013a, 2013b), the most recent research in behavioural and experimental economics has little presence in master and doctoral courses' curricula in Portugal. Reference to behavioural and experimental economics in syllabi of microeconomics modules thus becomes an element of distinction. In the case of master courses, only at ISEG-UL the microeconomics syllabus makes reference to it. In the case of doctoral courses, reference is made to those topics in the 'Advanced Microeconomics' program at ISEG-UL and in the 'Advanced Topics in Microeconomics II' at ISCTE-IUL, referring to Kahneman and Tversky's prospect theory and to behavioural game theory. Complementing the analysis with suggested readings, only the module of 'Advanced Topics in Microeconomics II' at ISCTE-IUL, of the PhD in Economics, explicitly refers to textbooks in this specific domain, namely Edward Cartwright's book of 2014, "Behavioural Economics", and

Colin Camerer's, George Loewenstein and Matthew Rabin book of 2003, "Advances in Behavioural Economics".

Despite the noticeable homogeneity also observed in the macroeconomics syllabi in the universities concerned, there is a greater diversity of topics than with microeconomics. This is mainly due to the stronger links to economic policy issues and to 'real world' events. Macroeconomics topics included in most master degree programs are identified in the table below (Table 6):

Table 6 - Macroeconomics topics included in most master degree programs in Economics (FEUNL, FEUC, FEP, ISEG-UL, ISCT'E-IUL)

Real business cycles theory Economic growth models (neoclassical and endogenous growth) Unemployment and labour market Consumption functions, investment and supply New classicism and rational expectations New Keynesian economics and dynamic general equilibrium models Stabilization and macroeconomic stabilization policies Exchange rates and foreign exchange markets Budgetary and monetary policies

As mentioned previously with the microeconomics syllabi, in macroeconomics too there is a great coincidence between the topics addressed in both master and doctoral courses, as can be seen in the following table (Table 7)

Table 6 - Macroeconomics topics included in most doctoral programs in Economics (FEUNL, FEUC, FEP, ISEG-UL, ISCTE-IUL)

Real business cycles theory Economic growth models (neoclassical and endogenous growth) Overlapping generations models Consumption functions, investment and supply. Inflation New classicism and rational expectations New Keynesian economics and dynamic general equilibrium models Stabilization and macroeconomic stabilization policies Search and matching models and labour market Budgetary and monetary policies

The connection of macroeconomics to economic policy and 'real world' phenomena proves to be stronger at master level than at doctoral level. This is the case of such topics as international monetary system, balance of payments crises and the problems of financing, adjustment and indebtedness that are included in the syllabus of the Macroeconomics in a Open Economy module at the FEUC in the 1990/91 master in European Economics. When in this same FEUC a master course in Economics, makes

its appearance in 2010/11 and 2015/16, the module taken as reference in our study becomes 'Intermediate Macroeconomics', whose syllabus mentions the most relevant macroeconomic phenomena, the identification of problems and the implications of economic policy.

The syllabus of the module macroeconomic policies of the FEP master degree in Economics in 2010/11 refers to macroeconomic policies in exceptional situations, in particular, the post-2007 crisis. In 2016/17, the module 'Macroeconomic Policies' is still part of the core modules in the course, and refers to global macroeconomic imbalances and the great recession and introduces topics on reforms and institutions of macroeconomic policy in the euro area.

In the case of the Master and Doctoral Program in Economics of FEUNL, in 1998/99, the syllabus of the module 'Macroeconomic Theory I' deals with regime changes in the context of development and transition to market economy and addresses the vast subject of European and world economy. In 2016/17, in FEUNL's master course in Economics, the module 'Macroeconomic Analysis' aims at discussing current macroeconomic problems and economic policy responses, referring in particular to the sovereign debt crisis.

The Macroeconomics and Monetary Theory's syllabus of the ISEG-UL master course in Economics has undergone a surprising transformation when comparing the 2010/11 and 2017/18 curricula, becoming much more applied and historical. In fact, the approach to the module is quite different, being based on case studies with the purpose of clarifying how macroeconomics and monetary theory can contribute to the understanding of how real economies work. The syllabus addresses in particular the cases of Japanese stagnation in the 1990s and the first decade of the present century and the great depression of the 1930s, and also deals with the Southeast Asian monetary crises in the late 1990s and the Argentine crisis.

In the case of ISCTE-IUL, there is topic on central banks, credibility and the current financial crisis in the Macroeconomics syllabus in 2016/17. This applied dimension of macroeconomics is lost in doctoral courses, though. In the case of FEUC's 'Advanced Macroeconomics II' syllabus, students' learning objective is to be able to analyse the properties of open economy models and to relate them with empirical information on balances of payments, exchange rates and foreign exchange crises. In ISCTE-IUL, syllabus of the module 'Advanced Topics in Macroeconomics I', in 2016/17, introduces the topic on the financial and macroeconomic crisis of 2008 and its implications.

Alongside this thematic narrowing, the great similarity of the syllabi of macroeconomics and microeconomics modules between the master and the doctoral programs in economics suggest that what distinguishes master and doctoral courses in economics is not the diversity of theoretical perspectives, or the openness to methods other than quantitative methods, and especially econometrics, but a the theoretical purification within a single approach and a greater sophistication of the formal models and associated instruments. More empirical evidence is needed to confirm this hypothesis though.

In short, macroeconomics at the master level seems to be concerned with the real world, following some of the international literature on economics teaching such as Hansen (1991) and Krueger (1991), which reflects COGEE's concern for the excessive emphasis put on techniques along with poor knowledge of real economic problems. However, the

question of theoretical pluralism and the space given to controversy in economics teaching seems to be absent from the consensus among Portuguese economists on what should constitute the fundamental training of students in Economics⁵, as it also seems to be the case with the literature mentioned above on the North American reality. The present analysis identified an example only of some theoretical opening in the case of the 'Advanced Topics in Macroeconomics II' syllabus of the PhD in Economics of ISCTE-IUL in which a reference is made to the theory of endogenous money and in which Giuseppe Fontana's 2003 article, "Post Keynesian Approaches to Endogenous Money: a time framework explanation" published in the Review of Political Economy, appears as suggested reading, although as complementary only.

Compulsory readings for the microeconomics modules at master level are H. R. Varian (2003) textbook, Microeconomic Analysis, and at PhD level, A. Mas-Collel, J. Green and M. Whinston's (1995) textbook, Microeconomic Theory, consensual in the universities studied. Regarding macroeconomics modules, compulsory readings are more diversified at master as much as at doctoral level. In addition, more reference is made to journal articles. At master level the most mentioned textbooks are W. Carlin and D. Soskice's (2006) Macroeconomics: Imperfections, Institutions and Policies and D. Romer's 2012), Advanced Macroeconomics. At doctoral level the most recommended readings are Romer's, Advanced Macroeconomics, suggested in all of the universities examined, B. Heijdra's (2009), Foundations of Modern Macroeconomics; L. Ljungqvist and T. Sargent's (2012), Recursive Macroeconomics Theory; M. Obstfeld and K. Rogoff's (1998), Foundations of International Macroeconomics; and N. Stokey, R. Lucas and E. C. Prescott's (2004), Recursive Methods in Economic Dynamics.

5. Modes of standardization

In the very beginning of the introduction of postgraduate courses in economics, the institutions studied in this article seemed to propose alternative programs based on their specificities. By choosing to study in a particular institution, students were also choosing a particular type of course. This is clearly no longer the case today, as we have seen. Courses are more or less the same regardless of the institution concerned. A series of interviews conducted with actual and former directors of postgraduate courses can shed some light on this process of standardization (Marçal et al., 2019). From these interviews the modes of standardization can be classified in two major groups and analysed in three main periods.

The standardization process results roughly from either imitation or emulation, and coercion. In the first case institutions adopt what they take as the best practices through a process of benchmarking. In the second case institutions are forced to varying degrees to adopt a standard. This obligation may result from competition between universities, for instance. Standardization then occurs, because institutions are afraid of losing students if they do not adopt the standard. The coercion process can also be more direct and forceful. The A3ES, the national body for the evaluation and accreditation of higher

⁵ This does not mean that there is no concern about theoretical pluralism and criticism among some Portuguese economists. As an example, see St. Aubyn, Miguel (2013), " Consequências da Crise Atual para o Ensino da Macroeconomia - Algumas Notas e Propostas ", in João Carlos Lopes, Jorge Santos, Miguel St. Aubyn and Susana Santos (eds.), *Estudos de Homenagem a João Ferreira do Amaral*, Coimbra: Edições Almedina.

education institutions, has conditioned some course approval to the adoption of a minimum standard.

Three major periods can be identified in this process of standardization. The first goes from the introduction of the fist postgraduate course until 1990. The second period covers the 1990s and is characterized by the reduction of the duration of undergraduate courses and the beginning of the Bologna process. Finally, the third period begins with the implementation of the Bologna process that institutionalized a higher education system with three study cycles and a total duration of seven to eight years of schooling, three years for a graduate course, two years for a master degree and three to four years for a doctorate.

In the first period the standardization that occurred clearly resulted from imitation or emulation. At FEUNL, for instance, PhD holders freshly returned from the United States created in 1981 a master and doctoral program based on those in which they had been enrolled, say Luís Campos e Cunha and Ana Balcão Reis (Marçal et al. 2019). In FEP something slightly different occurred. If in FEUNL PhD holders from North American universities came back to Portugal and created a course similar to those they had seen there, in FEP, on the contrary, teachers went to the United States after the master and doctoral courses were created in order to acquire the skills needed because at the time there were not enough PhD holders at FEP, said António Brandão and Elvira Silva (Marçal et. al. 2019).

In ISEG, in João Ferreira do Amaral's opinion, the process of standardization is much slower as a result of the institution's historical specificities, namely a strong tradition in Economic Planning and Social and Economic Development, and was mainly motivated by a reaction to FEUNL's project (Marçal et. al. 2019). In short standardization during this period was essentially the result of imitation, and only slightly pushed by a moderate form of coercion as a response to competition in ISEG.

During the 1990s and until the full implementation of the Bologna directives, standardized postgraduate courses in economics were created in other universities while those that were more diverse gradually became more standardized. In FEUC the first doctoral course in economics was modelled from the doctoral program in England where two FEUC faculty members had just got their PhDs. In ISCTE the English model was also the source of inspiration for the postgraduate courses they created in this period. It is interesting to note that if in the beginning of the postgraduate experience in Portugal the inspiration came from the United States, for more recent courses the inspiration came from the United Kingdom. This is not unexpected because most scholarships were now directed to European countries as a result of the European integration and the Bologna process. However, the differences between the American and the English programs were not very significant regarding the issues under consideration here. In each of these cases some benchmarking with FEUNL's program was also carried out. Thus, the standardized character of these new master and PhD courses resulted from a mix of imitation and of coercion in the form of competition and recognition. As Pedro Bação from FEUC points out, the major concern was that student skills could be internationally recognized (Marçal et al. 2019), this recognition depending on the adoption of a standard.

This standardization did not happen without some form of resistance though. Not only in ISEG as we have already seen but also in ISCTE and somehow in FEUC. Alternatives existed but in the face of the need to attract students and to get international recognition, these alternatives were gradually neglected. The first version of the PhD program in ISCTE, that had no compulsory modules, was intended to be plural according to Helena Lopes, who directed the first course. Since then this program went through three reforms. One in 2007 that introduced modules, one in 2011 and another in 2016 each bringing the programs closer to the standard. Extensive benchmarking involving what were considered leading European universities and directives from the national accreditation agency clearly supported these reforms with the avowed purpose of matching the standard core, as Sofia Vale says (Marçal et al. 2019). Once again imitation and coercion cohabitate, but it seems that as we move forward in time coercion gains weight, especially when the national accreditation agency, the A3ES, takes on a greater role in the process.

6. Conclusion

Post-graduate education in Economics in Portugal has rapidly grown since the 1980s. The few scientific studies that deal with the Portuguese reality in the 1980s show that economics teaching at master level is still relatively plural as far as curricula, syllabi, and theoretical approach are concerned. During the 1980s and the 1990s there is a tendency to a diminishing diversity of the issues addressed and to a growing emphasis on formal and abstract models to the detriment of the discussion of substantive issues. In this the evolution of Portuguese post-graduate courses in economics displayed some of the features that have been referred to in international literature on this subject.

The following aspects characterize the evolution of post-graduate education in Economics in Portugal: a) standardization of curricula; b) strengthening of the consensus on what should be the contents of a master course in economics, especially since the new millennium; c) growing preponderance within curricula of what have been called core modules, namely macroeconomics, microeconomics and quantitative methods; d) this preponderance is even more patent for doctoral courses; e) standardization of macroeconomics and microeconomics syllabi, even more so in the case of microeconomics; f) strong similarity of the macroeconomics and microeconomics syllabi between master and doctoral courses; g) absence of theoretical pluralism and diversity of research methodologies, a finding reinforced by the analysis of the suggested readings.

The evolution of post-graduate education in Economics in Portugal is partly adaptive and responds to circumstances external to the university, such as the dynamics of the demand for this type of training, changes in the skills most demanded by employers, or the process of European integration itself. This evolution, however, has also a performative character associated with the idea shared by teachers and researchers in Economics in Portugal on what should constitute the fundamentals in student training in Economics, on what economists do or should do, on what economics is, and an emulative character, which materializes in what are thought to be the best practices of the leading universities in the international context. Moreover, the standardization of postgraduate training in Economics, the preponderance of core modules, the homogeneity of macroeconomics and microeconomics syllabi and the absence of thematic, theoretical and methodological diversity, has been accompanied by an increasing supply of more interdisciplinary training on the economy, mainly at master level that is assumed as an alternative to economics, not as an alternative within economics.

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