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Modes of Standardization for Postgraduate Teaching in Economics in a semi-peripheral country: the case of Portugal¹

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Abstract: Since the first postgraduate program in economics was created in Portugal in 1978, there has been a marked standardization in the provision of this training. A narrowing of the curricula took place around an increasingly restricted number of courses that may be called "core", excluding or relegating a wide variety of courses to peripheral areas of economics or to other fields, reducing the chances of pluralist teaching in economics. As this process happened throughout the world, we examine how it took place in Portugal through interviews with those responsible for the said programs. Classifying the modes of dissemination into emulation, coercion, and normative we conclude that imitation of what are considered the best practices in the Anglo-Saxon world can best explain the initial stage of standardization. Recently, as institutions sought national and international recognition for postgraduate programs, coercion and normative followed in the form of assessment and certification processes.

Keywords: Economics education; postgraduate programs; standardization; Portugal.

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and of alternatives with an emphasis on the theoretical and epistemological foundations of the 2007-2008 economic crisis and responses to the crisis, values conflicts, value incommensurability and valuation in public decision-making. Her research has been published in the *Cambridge Journal of Economics*, *Journal of Economic Issues*, *Ecological Economics*, *Environmental Values*, and *Transfer: European Review of Labour and Research*.

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1 Introduction

In the international literature on economics teaching few scientific studies focus on aspects such as the structure, objectives, syllabi, and recommended texts for postgraduate programs. However, even though they only partially concern the subjects referred to above, mention should be made of Barone (1991), Bowen (1953), Coats (1992), Hansen (1991), Krueger (1991), McCoy et al. (2014), and Thornton and Innes (1988), who focused on the USA; Thornton (2012, 2013a, 2013b) and Argyrous and Thornton (2013) on economics teaching in Australian universities; Engwall (1992), who produced a broad study of the evolution of research and postgraduate education in economics in Sweden from the late nineteenth century to 1990; and Baccini and Marcuzzo (2009), on the situation in Italy. These scientific studies focus on very different realities and have equally different motivations, objectives, and methodologies. Nevertheless, the “knowledge gap” on the motives and the institutional processes behind the evolution of postgraduate education in economics persists.

The above issue is all the more relevant as these studies convey a sense of dissatisfaction with the state and evolution of postgraduate education in economics. Firstly, they note the excessive focus on the learning of formal models and techniques to the detriment of understanding real economic problems; secondly, they argue that what may be called the core of the basic training courses in postgraduate education leaves out several theoretical approaches that belong to the common heritage of economics as a social and plural science; thirdly, they claim that this core has become more prevalent in the curricular structure of programs to the detriment of a greater

range of substantive topics, analytical methodologies and discussion of ideas; finally, they state that the homogenization of curriculum structures and syllabi prevails over the existence of different training objectives.

In contrast to this enduring dissatisfaction, the evolution of the demand for postgraduate education in economics has been showing signs of change. Coats (1992) already noted this when he compared Bowen's pioneering 1953 study with the 1988 report by the Commission on Postgraduate Education in Economics (Hansen 1991, Krueger, 1991). While the number of Ph.D. economics students in the USA remained stable, there was a decrease in the number of PhDs produced by North Americans and a corresponding increase in non-American Ph.D. students (Coats, 1992). In addition, economics graduates were tending to look for master's degrees in different areas, such as business and other more applied areas (Coats, 1992). Regarding Australia, Thornton (2013a), and Argyrous and Thornton (2013) also highlight the falling supply in economics programs, as economics faculties have either disappeared or have been incorporated into business schools.

The aim of our paper is to contribute to the study of the evolution of postgraduate teaching in economics in a semi-peripheral country such as Portugal through an analysis of curricula, syllabi, and recommended texts for both master's and doctoral programs, and to shed light on the debate about the standardization process that has been taking place in postgraduate education in economics. Research focusing on the Portuguese context is even scarcer, as would be expected. Oppenheimer and Romão (1985) examine postgraduate teaching in a study on the teaching of economics in general, in which they suggest that master's degrees in the 1980s seemed to be more concerned with extending general undergraduate training than with research in more specialized areas (Oppenheimer and Romão, 1985). The authors also show how, from a paradigmatic point of view, postgraduate teaching was still relatively plural, not only because the various universities proposed training programs that could, to some extent, be considered alternative, but also because the approach itself was plural. Later, Valério et al. (2011) also focused, albeit not exclusively, on postgraduate teaching in a book exploring the history of economics and management teaching in what is today the Lisbon School of Economics and Management. Their study specifically refers to the various legal and institutional changes and their impact on the formulation of the postgraduate economics programs taught at the school.

2 Methodological note

This study is divided into three subheadings. Subheading 3 analyses the curricula of master's and doctoral programs in five Portuguese public universities: the Nova School of Business and Economics (FEUNL); the Lisbon School of Economics and Management at the University of Lisbon (ISEG-UL); the Faculty of Economics at the University of Coimbra (FEUC); the Faculty of Economics at the University of Oporto (FEP); and the Higher Institute of Labour and Business Sciences (ISCTE-IUL). These are the five most important public economics faculties in Portugal and represent about 70% of Portugal's doctoral theses. Subheading 4 examines the syllabi and recommended texts for macroeconomics and microeconomics courses in the same five universities. Finally, based on interviews held with those responsible for the said

programs over several academic years, subheading 5 investigates the reasons for their evolution.

Twelve directors of said master and doctoral programs were interviewed: João Ferreira do Amaral and Miguel St. Aubyn from ISEG-UL; Ana Balcão Reis and Luís Campos Cunha from FEUNL; António Brandão and Elvira Silva from FEP; Adelino Fortunato and Pedro Bação from FEUC; and Catarina Roseta Palma, Helena Lopes, Joaquim Ramalho and Sofia Vale from ISCTE-IUL².

Favoring a historical perspective, the interviewees were chosen due to their position either as directors of the programs or because they held a relevant position during different periods under analysis. The interviews focused on certain essential topics, on analyzing mainly the evolution of the institution's postgraduate training (the main drives behind its creation and the changes made since then), and its relationship with the postgraduate training of other institutions (both national and international), highlighting the retrospective and prospective perspectives on the evolution of the institution's postgraduate teaching of economics. Furthermore, the interviews aimed to capture each director's position on the evolution of the curricula, syllabi, and recommended texts of master and doctoral programs coordinated by them, to explore the main reasons behind that evolution and, finally, to gather additional information about those elements.

Curricula, syllabi, and recommended texts were examined for the academic years 1983-84, 1990-91, 1998-99, 2010-11 and 2016-17³. These years were selected for the following reasons: a) given that the FEUNL created a master and PhD program in 1978, and the ISE (later ISEG-UL) and FEP created their master's programs in 1981 and 1983, respectively, 1983-84 is the academic year which allows for the inclusion of all five institutions; b) 1990-91 was pivotal in terms of taking stock of master's programs created in the 1980s; c) 1998-99, in turn, allows us to examine the development of economics master and doctoral programs after the first reduction in their length, in 1990-91 and subsequent years, as well as to consider the creation of a PhD program at the FEP in 1998, similar to one previously created by the FEUNL; d) 2010-11 marks the period in which the Bologna⁴ guidelines had already been applied in Portuguese universities, the A3ES, the national body for the evaluation and accreditation of higher education institutions, was created and most Portuguese PhD

² The personal interviews were conducted in 2018: João Ferreira do Amaral (February 6) and Miguel St. Aubyn (February 27) at ISEG-UL; Ana Balcão Reis (March 15) and Luís Campos Cunha (January 22) at FEUNL; António Brandão (February 2) and Elvira Silva (March 21) at FEP; Adelino Fortunato and Pedro Bação (March 7) at FEUC; and Catarina Roseta Palma, Helena Lopes, Joaquim Ramalho and Sofia Vale (June 7) at ISCTE-IUL.

³ Up until the implementation of the Bologna Process, there was a set of postgraduate courses shared both by master and PhD programs. The difference was in the number of courses that the PhD student had to complete, namely a few more advanced courses. Only after the Bologna Process, did master and PhD programs grow separately. Indeed, the External Commissions of Assessment designated to evaluate master's and/or PhD programs in Economics, in the context of the mission of the national body for the evaluation and accreditation of higher education institutions (A3ES), favored the idea of separated curricula, making sure that courses within PhD programs curricula are effectively taught at a doctoral level.

⁴ The Bologna Declaration was signed June 1999 by 29 European countries that sought to establish a European Higher Education Area based on the adoption of structural reforms that would allow for mutual recognition of European higher education diplomas.

programs started to follow the A3ES guidelines; e) 2016-17 reflects the current state of postgraduate training in economics.

We restricted our study to programs that specifically award the degree of master's or PhD in Economics. Programs such as Agricultural Economics, European Economics, Monetary and Financial Economics, or Development Studies, for example, were not under the scope of the present analysis. This was not a straightforward decision. This option meant that doctoral programs that often produced theses classified by the Directorate General of Statistics in Education and Science (DGEEC) as belonging to the general field of economics were not considered. However, this admittedly problematic choice has the purpose of more clearly identifying the standardization that specifically occurs within programs that entitle strictly as Economics.

In fact, in four of the five institutions these types of programs coexisted with master's or PhD programs in Economics, which led us to narrow the scope of the study to include the latter programs only. Further, the main reasons behind the creation of these alternative programs are multiple. Many programs were created in the nineties in reaction to the first reduction in the length of degree programs, as mentioned above. In this context, the institutions need to position themselves strategically and to differentiate. Adaptation to the economic structure of the region and to characteristics of labor markets may also have played a role.

In addition, as the American Economic Association has shown, an interest in working in many fields of economics not covered by the Economics programs, such as those described above, is precisely what has led doctoral students to enroll in programs other than just Economics (Hansen, 1991). This phenomenon has also been observed in Portugal, where the relative narrowing of economics programs was accompanied by the creation of programs committed to a more substantive perspective on the study of the economy, such as Development Studies, in contrast with master's or PhD programs in Economics which favor a formalistic and instrumental approach.

A proper consideration of the variety of reasons behind the creation of these alternative programs and of the relationship between these programs and the master's and/or PhD programs in Economics was out of the reach of the present analysis. Moreover, for the purpose of identifying the possible narrowing of economics programs, this study was limited to examining only the master and PhD programs in Economics. The exception was the FEUC master in European Economics in 1990-91, which was taken as the university's master program in economics because there was no other in the institution at the time.

3 Curricula for master's and doctoral programs

Our analysis of the curricula for master and doctoral programs in economics intends to determine whether they propose specialization as a follow-up to the more general training supposedly obtained with the bachelor's degree or instead propose a more in-depth study of the core concepts presented in the latter. Hence, the courses within the curricula were classified into two major groups. The first, i.e., the core group, includes courses that have been considered central to any postgraduate program in economics in most universities, and which are often compulsory. The perception that

so-called core courses could or should exist in postgraduate programs in economics was already present in the pioneering work of Bowen (1953). In his survey of North American economics teachers, the existence of core courses was accepted by most of the respondents, although there was no consensus at the time on a definition of which courses should be given this status, with the exception of economic theory (Bowen 1953, p. 105).

Economic theory has since been split into various courses that may claim this heritage, although a course specifically entitled Economic Theory has existed for some time in various curricula for postgraduate programs in economics in Portugal. More recently, in a survey of master's programs in the USA, Thornton and Innes (1988) showed that 97% and 96% required Microeconomics and Macroeconomics, respectively; and 82% required Statistics or Econometrics (Thornton and Innes 1988, p. 174). Hansen found the same phenomenon in North American doctoral programs (Hansen 1991, p. 1062).

In fact, postgraduate education in economics has adopted an increasingly quantitative approach in most universities since the 1950s (see McCoy et al., 2014: 385). Likewise, in Portugal, most master's and doctoral programs in economics require quantitative methods, in addition to Macroeconomics and Microeconomics. For this reason, the group of core courses includes Microeconomics, Macroeconomics, and quantitative methods, such as Econometrics (see Table 1). In this Table, other courses have been incorporated within Macroeconomics, such as Introduction to Macroeconomics, Macroeconomic Theory, Complements or Topics of Macroeconomics, Advanced Macroeconomics, or Macroeconomics in an Open Economy. More specific courses that can be considered extensions of Macroeconomics were also included in the core group, such as Economic Growth (see Table 1). The same applies to Microeconomics, e.g., Game Theory.

[Insert Table 1 here]

The second group of courses in Table 1, known as specialization courses, not only includes the courses intended to apply core concepts but also those that focus on specific sectors of the economy, such as Labor Economics, Development Economics, European Economics, Monetary Economics, and Economic History. This group also incorporates History of Economic Thought, although in reality this course does not respond to the classification criteria for this group. However, when it exists, the course is not understood as core in most curricula. In fact, in Bowen's work (1953), History of Economic Thought is already shown as an "autonomous" course emerging from Economic Theory. Thornton and Innes, in turn, point out that only 11% of the master's programs required History of Economic Thought (Thornton and Innes 1988, p. 174).

Following this method of classifying courses, the evolution of master's programs in economics over the last thirty years in the five universities is presented in Table 2 .

[Insert Table 2 here]

Table 2 does not reveal any clear common trend. Whereas in some universities the group of core courses has been strengthened (ISEG-UL, FEUC), in others the

opposite has occurred, with specialization courses having been reinforced. One trend, however, stands out: the standardization of programs across universities in the last thirty years. Nevertheless, this process is neither uniform nor completely linear, since the contents of the curricula vary significantly in each decade examined.

Although the composition of the FEUNL curriculum, for example, is very similar in 1983-84 and 2016-17, it has fluctuated considerably. This fluctuation should be understood as partly due to the creation and abolition of other programs in the same area, the different objectives assigned to what was considered the master program in economics at each given time, and the different reforms that were implemented. In the FEUC, in turn, the reduction in specialization courses should not be overrated: the 1990-91 Master's in European Economics clearly had a different nature and purpose to the master's program in economics that followed. In fact, since the end of the last century the structure of the master's program in economics has been very stable in this university. The major variations in curricula content took place during the first phase of the program development. In most universities these contents have remained relatively stable from the turn of the 21st century onwards, thus reinforcing the idea of a broad consensus on the curriculum for master's programs in economics.

The evolution of doctoral programs in economics is shown in Table 3.

[Insert Table 3 here]

As Table 3 indicates, with the exception of FEUNL, doctoral programs are relatively recent. The five universities considered here have been delivering PhD degrees in economics for a long time, but not all of them have involved programs with a curricular structure, as it would happen in this last decade prompted by the need for institutional accreditation. Prior to this, only the FEUNL and FEP had proposed a doctoral program as described. In these two universities, the tendency to concentrate the doctoral program around core courses stands out clearly, particularly in the FEP. Despite their short history, the doctoral programs in the other universities confirm the trend displayed by the oldest doctoral and master's programs: an increasing homogeneity and concentration of programs around core courses.

The most recent doctoral programs were created from the outset with a significant weighting of core courses: the FEUC doctoral program represents an extreme case, since all the courses in the program can be considered core. In the ISEG-UL, the doctoral program was created with a strong emphasis on core courses and the recent reform of the program has reinforced this. The fact that the doctoral programs at the FEUNL and ISCTE-IUL seem less centered on the core courses in our classification is mainly the result of the links between economics and finance, two domains that are often coupled in order to resolve the falling numbers of PhD students and increase the employability of PhD graduates.

4 Syllabi and recommended texts

In an article published in 1991, Hansen referred to doctoral programs in economics in the USA as being strikingly similar.⁵ This was particularly conspicuous in the syllabi for the macroeconomics, microeconomics, and econometrics courses, which were previously classified as core. This homogeneity, Hansen (1991, p. 1062) writes, "appears to reflect the substantial agreement among economists about what economics is or at least what constitutes its core." In his analysis of undergraduate and postgraduate economics syllabi in various Australian universities, Thornton (2013a, 2013b) shows that the syllabi for macroeconomics and microeconomics courses basically consist of neoclassical economics. Moreover, the very teaching of neoclassical economics seems to have become more simplistic, focusing more on the presentation of the 'general case' to the detriment of 'exceptional cases', which would, in itself, justify discussing the assumptions of models, their validity and the limits of their application, as the analysis of different editions of textbooks suggests (Thornton, 2013a, p. 157).

Are macroeconomics and microeconomics in postgraduate economics programs in Portuguese universities also strikingly homogenous? This question framed the analysis of the syllabi and recommended texts for compulsory and elective macroeconomics and microeconomics courses at the five universities. The analysis revealed some limitations arising from considering the syllabi for the courses from their contents only, since they were described in varying levels of detail. In some cases, the syllabi are only very briefly described.

Furthermore, it was not possible to assess the depth in which each item on the syllabus was covered. We are aware that there is a qualitative dimension associated with teaching practice, which is certainly an element of differentiation, even when the syllabi are very similar. Notwithstanding all these limitations, like Hansen (1991), we consider that the uniformity of the syllabi for the macroeconomics and microeconomics courses shows that there is a general consensus within Portuguese faculties on the basic training these courses should provide for students, on what economists do or should do, and on what economics is. Given the semi-peripheral status of Portugal and Portuguese universities, this consensus is permeated by what are thought to be the best practices in an international context.

Homogeneity is even greater in the case of the microeconomics courses. In fact, every microeconomics syllabus in the master's programs considered here addresses a very similar set of topics. General Equilibrium Analysis and Imperfect 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's syllabi. This canon of the microeconomics course is identified in Table 4, indicating that the core remains almost unchanged in the microeconomics syllabi for doctoral programs.

[Insert Table 4 here]

As in Thornton's studies on economics teaching in Australia (Thornton 2013a, 2013b), the most recent research in behavioral and experimental economics features

⁵ Hansen's article follows the work developed by the Commission on Postgraduate Education in Economics created by the American Economic Association in 1988.

very little in master's and doctoral curricula in Portugal. Pertaining to master's programs, it is only referenced in the ISEG-UL microeconomics syllabus. Pertaining to doctoral programs, reference is made to these topics in the ISEG-UL 'Advanced Microeconomics' syllabi and the 'Advanced Topics in Microeconomics II' at ISCTE-IUL, referring to Kahneman and Tversky's prospect theory and to behavioral game theory. Extending the analysis to include recommended texts, only the 'Advanced Topics in Microeconomics II' course for the ISCTE-IUL PhD in Economics explicitly refers to textbooks in this specific area, namely Edward Cartwright's 2014 book *Behavioural Economics*, and Colin Camerer, George Loewenstein, and Matthew Rabin's 2003 book *Advances in Behavioural Economics*.

Despite the marked uniformity also observed in the macroeconomics syllabi in the five universities, there is a greater range of topics than the microeconomics syllabi. This is mainly due to the stronger links with economic policy issues and 'real world' events. The macroeconomics topics included in most master and doctoral programs are identified in Table 5.

[Insert Table 5 here]

There are great similarities between the topics addressed in the macroeconomics syllabi for both master and doctoral programs. The link between macroeconomics and economic policy and 'real world' phenomena was found to be stronger at the master level. This is so with topics such as the international monetary system and financing, balance of payments crises and the related problems of structural adjustment and indebtedness included in the FEUC 'Macroeconomics in an Open Economy' syllabus for the 1990/91 Master's in European Economics. Later, in the context of the FEUC master's program in Economics, 'Macroeconomics in an Open Economy' was replaced by 'Intermediate Macroeconomics', whose syllabus refers to the most relevant macroeconomic phenomena and the implications of economic policy.

The syllabus for the 'Macroeconomic Policies' course for the 2010/11 FEP Master in Economics refers to macroeconomic policies in exceptional situations, in particular the post-2007 crisis. In 2016/17, the same course was still one of the core courses for the program, referring to global macroeconomic imbalances and the Great Recession, and introducing topics on reforms and the institutional structure of macroeconomic policy in the euro area.

In the case of the FEUNL master's and doctoral programs in economics, in 1998/99 the syllabus for the course 'Macroeconomic Theory I' deals with regime changes in the context of development and transition to a market economy and addresses the vast subject of the European and world economy. In the 2016/17 FEUNL master's program in Economics, the course 'Macroeconomic Analysis' discussed current macroeconomic problems and economic policy responses, especially the sovereign debt crisis.

When comparing the 2010/11 and 2017/18 curricula for the ISEG-UL Master's in Economics, it can be seen that the 'Macroeconomics and Monetary Theory' syllabus has undergone an important transformation, having become much more applied and historical. In fact, the approach to this course is quite different, given that it is based on case studies in order to clarify how macroeconomics and monetary theory can

contribute towards an understanding of how real economies work. The syllabus addresses, in particular, the Great Depression of the 1930s, the Japanese stagnation in the 1990s and the first decade of the present century, the Southeast Asian monetary crises in the late 1990s, and the Argentine crisis.

In the ISCTE-IUL, there is a topic on central banks, rating agencies, and the financial crisis of 2007/08 in the 2016/17 macroeconomics syllabus. However, this applied dimension of macroeconomics is usually missing in doctoral programs. In the case of the FEUC 'Advanced Macroeconomics II' syllabus, the student learning objectives involves being able to analyze the properties of open economy models and relate them to empirical information on balance of payments, exchange rates, and foreign exchange crises. The ISCTE-IUL syllabus for the 2016/17 'Advanced Topics in Macroeconomics I' course introduces the topic of the financial and macroeconomic crisis of 2007-2008 and its implications.

Alongside a thematic narrowing, the close similarity between the syllabi for the macroeconomics and microeconomics courses for master and doctoral programs in economics suggests that what distinguishes these programs is not the range of theoretical perspectives or the openness to methods other than quantitative methods, in particular econometrics, but a theoretical closeness within a single approach, the greater sophistication of the formal models and an emphasis on techniques. However, more empirical evidence may be needed to confirm this hypothesis.

The question of pluralism in economics teaching – both as offering an enlarged, more comprehensive and reflexive perspective of economic analysis, and as making sense of competitive concepts and theories (Beckenbach, 2019) – is absent from the consensus among Portuguese economists on the fundamental training of students in Economics⁶. Our paper identified an example of only some conceptual and theoretical openness in the case of the 'Advanced Topics in Macroeconomics II' syllabus for the ISCTE-IUL PhD in Economics, in which reference is made to the theory of endogenous money and Giuseppe Fontana's 2003 article, "Post Keynesian Approaches to Endogenous Money: a time framework explanation", is recommended, but only supplementary, reading.

The texts for the microeconomics courses at the master's level are H. R. Varian's (2003) *Microeconomic Analysis* and, at the PhD level, A. Mas-Colell, J. Green and M. Whinston's (1995) *Microeconomic Theory*.⁷ Regarding macroeconomics courses, the texts are more diverse both at the master's and doctoral level. In addition, there are more references to articles in journals. At the master's level, the most frequently cited 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 widely used texts are Romer's *Advanced Macroeconomics*, adopted by all five universities, B. Heijdra's (2009) *Foundations of Modern Macroeconomics*, L. Ljungqvist and T. Sargent's (2012) *Recursive Macroeconomic Theory*, M. Obstfeld and K. Rogoff's (1998) *Foundations of International*

⁶ This does not mean that there is no concern for pluralism and criticism among some Portuguese economists. As an example, see St. Aubyn (2013).

⁷ The courses are mainly taught in Portuguese, although the textbooks are in English.

Macroeconomics, and N. Stokey, R. Lucas and E. C. Prescott's (2004) *Recursive Methods in Economic Dynamics*.

5 Modes of standardization

When postgraduate programs in economics were first introduced in Portugal, the five institutions proposed alternative programs based on their specific interests and expertise. Hence, in choosing to study at a particular institution, students were also choosing a particular type of curriculum. This is clearly no longer the case today. Programs are more or less the same, regardless of the institution. A series of interviews conducted with present and former directors of postgraduate programs sheds some light on this process of standardization (Marçal et al., 2019).

In the 1970s, the leading institution (among our five universities) in the creation of a new consensus on fundamentals in student training in economics was the FEUNL, which was founded in 1978 (Rodrigues, 2019). Reflecting the semi-peripheral status of the Portuguese economy and academia, this new consensus was clearly determined by the adoption of the 'American model'. This raises the following questions: What was the basis of the legitimation of this new consensus and its spread across Portuguese academia? What were the main mechanisms through which standardization was achieved?

From institutionalism, mimetic, coercive and normative processes have been put forward to explain this isomorphism, corresponding, to cognitive, regulative, and normative forms of legitimacy (Fourcade, 2006; Haveman and David, 2008; Hirschman and Berman, 2014; Scott, 1995 [2001]). In fact, as legitimacy facilitates access to resources, it may become a key factor in competition between universities. Moreover, this idea of competition was often mobilized in the interviews conducted with current and former directors of the postgraduate programs.

Mimetic processes are linked to forms of cognitive legitimacy, implying the existence and reproduction of shared understandings on the fundamentals of student training in economics, what economists do or should do, and what economics is. As already argued, this was, at least initially, determined by the adoption of the 'American model'. The FEUNL was the leading institution involved in such adoption. Later, imitation also spread by means of institutions adopting what they considered to be best practices through a process of benchmarking, ultimately reproducing the existing consensus on the fundamentals of economics teaching at the postgraduate level. Coercion, in turn, implies that institutions are forced to varying degrees to adopt a standard. Coercive pressures arise mainly from the adoption of new regulations and administrative guidelines, which enforces the adoption of minimum standards in a direct and forceful manner, thus giving rise to new levels of homogeneity. In the context of postgraduate teaching in economics in Portugal, this operated mainly in conjunction with the reduction in the length of undergraduate programs, the implementation of the Bologna process and the creation of the A3ES. Finally, normative pressures operate mainly through the influence of international accreditation and rankings designed to evaluate the research and teaching quality of universities. In this respect, the FEUNL once again played a pioneering role in the creation of a normative environment favorable to the publication of research results in

academic journals in English, even in the absence, initially, of formal assessment mechanisms (Rodrigues, 2019). Competition between universities tended to enforce the adoption of these standards: in our interviews we found a perception that institutions may lose students or be penalized by employers if they do not comply with the standards.

Three major periods can be identified in this process of standardization. The first extends from the introduction of the first postgraduate program to the year 1990. The second period covers the 1990s and is characterized by the reduction in the length of undergraduate programs and the beginning of the Bologna process. Finally, the third period begins with the implementation of the Bologna process, which instituted a higher education system with three study cycles and a total duration of eight to nine years, comprising three years for a first degree program, two years for a master's degree and three to four years for a doctorate.

In the first period, imitation or emulation was the main driving force behind standardization. In 1978, PhD holders who had recently returned from the United States created a master's and doctoral program at the FEUNL based on the programs they had followed, according to Luís Campos e Cunha and Ana Balcão Reis⁸ (Marçal et al., 2019). The program brochure explicitly acknowledged the legacy of the American model: the program was intended to provide training “at least equivalent to a master's degree obtained in a reputable foreign university”⁹. This effort to emulate the ‘American model’ led to the creation of a doctoral program with a markedly neoclassical and neoliberal character (Rodrigues, 2019)¹⁰. In addition to the core courses in Microeconomics, Macroeconomics, and Econometrics, the PhD thesis was to be submitted in essay format, in the expectation that this would lead to publishable papers.

The consolidation of the leading role of FEUNL and the legitimization of this new consensus on the teaching of economics benefited from an important academic and institutional collaboration between the FEUNL and the Portuguese Catholic University, in Lisbon, with linkages to the Central Bank of Portugal and international organizations such as the International Monetary Fund and the European Central Bank (Costa, 2019)¹¹. Some prominent professors of FEUNL ended up having a very

⁸ Luís Campos e Cunha: “In the US, a PhD program with courses was already completely established”. Ana Balcão Reis says that the PhD program “was launched [...] in a totally different format when compared to other schools, because it tried to follow American universities.”

⁹ Guide to FEUNL, 1978/1979, p. 14.

¹⁰ The prominent figure in the creation and consolidation of FEUNL was Alfredo de Sousa. The other members of the commission in charge of FEUNL's institutionalization were the future Minister Aníbal Cavaco Silva (PhD at the University of York, UK, 1975); Abel Mateus (PhD at the University of Pennsylvania, USA, 1977); Manuel Pinto Barbosa (PhD at Yale University, USA, 1977); and José António Girão (PhD at Cornell University, USA, 1972). Other important professors included António Soares Pinto Barbosa (PhD at Virginia Polytechnic Institute and State University, USA, 1978, supervised by James Buchanan); Diogo Lucena (PhD at Stanford University, 1980); Jorge Braga de Macedo (PhD at Yale University, USA, 1979); and Miguel Beleza (MIT, 1979) (Rodrigues, 2019).

¹¹ Abel Mateus, economist in the Department of Economic Studies of Bank of Portugal during 1978-1981, was a member of the Board of Directors of the Portuguese central bank from 1992 to 1998, and consultant to this body from 1998 to 2003. Senior economist at the World Bank between 1981 and 1992, he held consultancy positions at the World Bank and the IMF between 1998 and 2003. José António Girão, deputy director of the Department of Economic Studies of the Portuguese central bank

active role in the Department of Economic Studies during the seventies when the central bank gained influence, related, in particular, to the collaboration with the MIT group¹² and the IMF's intervention in 1978 (Costa, 2019).

In the FEP, the situation was slightly different where teachers went to the United States after the master's and doctoral programs had been created in order to acquire the skills they needed because there were not enough PhD holders in the FEP at the time, according to Brandão and Silva¹³ (Marçal et. al. 2019).

In the ISEG-UL, as explained by João Ferreira do Amaral, given the institution's particular history, namely a strong tradition in economic planning and social and economic development, the standardization process turned out to be much slower. In fact, the transformation was, at least in the early stages, mainly inspired by the need to respond to the FEUNL project (Marçal et. al. 2019). Competition between universities may therefore have played a part in accelerating the process of standardization. The pressure to adopt the model of the newcomer institutions, even if not in a direct and forceful way, triggered the ISEG-UL's developmental path.¹⁴

In the following period, during the 1990s and up to the full implementation of the Bologna directives, a growing number of postgraduate programs in economics were created in other universities in line with the above-mentioned new consensus on economics teaching. Simultaneously, the postgraduate programs already running, which were more diverse and plural, gradually became more standardized. In the ISEG-IUL, the first doctoral program did not have an autonomous curriculum. Students without previous training were obliged to attend core master courses, while others could choose courses that were closer to their dissertation topic. A full doctoral program was only established after Bologna. In the FEUC, the first doctoral program in economics was inspired by the doctoral program in England, where two FEUC faculty members had recently completed their PhDs. In the ISCTE-IUL, the English

from 1980 to 1985, was an economist in the same department from 1978 to 1980. Miguel Belezza was governor of the Bank of Portugal from 1992 to 1994 and Minister of Finance in the XI Constitutional Government from 1990 to 1991. António Borges (PhD at Stanford University, 1980) was vice governor of the Bank of Portugal from 1990 to 1993 and professor at FEUNL. He was also a visiting professor at Portuguese Catholic University, in Lisbon. In 1993, when he left the Portuguese central bank, he returned to INSEAD.

¹² Between 1975 and 1977, a group of economists from the Massachusetts Institute of Technology (MIT) developed a series of studies on the Portuguese economy in collaboration with the Bank of Portugal: Rudiger Dornbusch, Richard Eckaus, Lance Taylor, Andrew Abel; along with PhD students, Kenneth Rogoff, Paul Krugman, and Miguel Belezza.

¹³ António Brandão: "The requirement for PhDs [began] to compel professors – who were often lacking orientation – to go to the USA". Elvira Silva explained the reasons behind the choice of USA: "We had a professor here, Professor António Vasconcelos, who had done his PhD at Berkeley. [He] had been teaching in the USA for about 30 years and had personal connections with some institutions. He was the main driver."

¹⁴ João Ferreira do Amaral: "Competition among universities was very important, particularly from FEUNL. That was what made the development from the 1980s onwards such a great political transformation of the school [...]. Of course, the law established the master's degree, the law on university autonomy, etc., but it was surpassed by competition from a university with people who had recently been awarded PhDs, mainly in the USA, who, undeniably, had a great capacity for communication and marketing and engaged with the media, bringing with them the perception that the ISEG was languishing because it was becoming the second or third school. And that was much more important than any institutional issue."

model was also the source of inspiration for the postgraduate programs created during this period.

It is interesting to note that at the beginning of the postgraduate experience in Portugal the inspiration came from the United States, whereas for more recent programs it came from the United Kingdom. This is not unexpected, since by then most scholarships were directed to European countries, due to the European integration and the Bologna process. However, the differences between the American and the English programs were not very significant in terms of the issues under consideration here. In each of the other four universities, some benchmarking with the FEUNL program was also implemented. Imitation, coercion, and normative processes were thus intertwined, and all played a part in increasing the homogeneity of these new master's and PhD programs in economics. As Pedro Bação from FEUC pointed out, the major concern was that student skills could be internationally recognized¹⁵ (Marçal et al. 2019) and that this recognition was perceived to depend on the adoption of a standard.

Nevertheless, this standardization did not happen without some form of resistance, not only in the ISEG-UL, as already seen, but also in the ISCTE-IUL, and to a certain extent in the FEUC. Alternatives existed but faced with the need to attract students and gain international recognition, they were gradually abandoned. The first version of the ISCTE-IUL PhD program, which had no compulsory courses, was intended to be plural, according to Helena Lopes, who directed the first program¹⁶. Since then, this program has undergone three reforms: one in 2007 to introduce courses, another in 2011, and a final one in 2016, each bringing the PhD program closer to the standard model. Extensive benchmarking from leading European universities and directives from the national accreditation agency clearly supported these reforms, with the express purpose of matching the standard core, as Sofia Vale has stated (Marçal et al. 2019)¹⁷.

Once again, the three processes coexist, although it appears that over time coercion has become more significant, particularly since the national accreditation agency, the A3ES, has begun to play a greater role in the process. Coercion has ended up reinforcing a model that had already achieved cognitive and normative legitimacy. Additional to the informal network of academic and institutional collaborations, to which the FEUNL was connected, the legitimacy of this model was also favored by the role played by the FEUNL academic economists in policy advice and public

¹⁵ Pedro Bação: “We just want our students to be able to recognize the concepts each time they read an economics text.” For this to be accomplished, when the program was created, the main goal was to make it similar to other schools following the standard, within and outside Portugal: ‘At that time, if I remember correctly, we hardly ever did anything that was different from the standard practice in these programs.’

¹⁶ Helena Lopes: “The main idea was to provide the opportunity to do a PhD in Economics that did not fit into the already existing standard. It was an alternative. I always had the idea of a truly plural pluralism. So, it was not intended to exclude anyone.”

¹⁷ As Sofia Vale puts it, the benchmarking outside Portugal “had already been done several times, and I believe that at that time we looked within because of A3ES. But, of course, the London School of Economics, or the Paris School of Economics, MIT. [...] I would say that it is more European because it is a third cycle as in Bologna, is under pressure from the A3ES and the main inspiration was internal.”

intervention during the process leading to Portugal's membership of the European Union or in the context of IMF's interventions (Rodrigues, 2019).

6 Conclusions

Postgraduate education in economics in Portugal has grown rapidly since the 1980s. The few scientific studies that deal with the Portuguese situation in the 1980s show that economics teaching at the master's level was still relatively plural pertaining to the curricula, syllabi, and theoretical approaches. During the 1980s and 1990s there was a move towards reducing the range of issues addressed and a growing emphasis on formal and abstract models, to the detriment of discussion of substantive issues. In this regard, the evolution of Portuguese postgraduate programs in economics displayed some of the features that have been referred to in the international literature on this subject, namely:

- standardization of curricula.
- strengthening of the consensus on the contents of master's and PhD programs in economics, particularly since the new millennium.
- the growing prevalence within curricula of core courses: macroeconomics, microeconomics, and quantitative methods.
- even clearer evidence of the previous point in relation to doctoral programs.
- standardization of macroeconomics and microeconomics syllabi, particularly the latter
- Close similarities between the macroeconomics and microeconomics syllabi for master's and doctoral programs, differing only in terms of their increasing formalism and technical content.
- the absence of diversity in theories, concepts, and research methodologies; a finding reinforced by an analysis of adopted textbooks.

The evolution of postgraduate education in economics in Portugal is partly adaptive, responding to circumstances both internal and external to universities: the universities from which Portuguese academics hold their PhD in Economics; dynamics of the demand for this type of training; changes in the skills that employers demand most; and the process of European integration itself. Imitation and normative forces therefore seem to be the motivational triggers in the process of standardizing postgraduate teaching in economics in Portugal. Moreover, mimetic, coercive, and normative processes coexisted and were intertwined.

Besides, this evolution also has a performative aspect, associated with a consensus among economics teachers and researchers in Portugal on what the fundamentals of student training in economics should be, together with an emulative aspect, which materializes in what are thought to be the best practices of the leading universities in an international context. The lack of pluralism and the concentration on core subjects within the Economics programs, and most especially the doctoral programs, is of particular concern as they are preparing most of the next generation of teachers, who in turn, will consequently lack a broader view on the economy. Nevertheless, the standardization of postgraduate training in economics has been accompanied by an increasing supply of more interdisciplinary and pluralist training which focuses on the economy, mainly at the master's level, and which is assumed to be an alternative to

Economics programs, rather than an alternative within Economics programs. It remains to be seen whether teachers will be recruited within these programs, though.

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Tables

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

Core Courses	Specialization Courses
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 an Open Economy	Public Economics
Mathematical Economics	International Economics
Computing Methods	Labor Economics
Economic Theory	Social Economics
Economic Modeling	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 2 - Structure of master programs: weighting of course groups as a percentage of the total amount of credits required for the award of the degree

	1983-1984		1990-1991		1998-1999		2010-2011		2016-2017	
	Core	Spec.	Core	Spec.	Core	Spec.	Core	Spec.	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

* In 1990-91 the Master in European Economics was taken into account; in 2016-17 the 2015-16 program was taken into account.

** In 1998-1999, the 2000-01 program was considered.

Table 3 - Structure of doctoral programs: weighting of courses groups as a percentage of the total amount of credits required for the award of the degree

	1983-84		1990-91		1998-99		2010-11		2016-17	
	Core	Spec.	Core	Spec.	Core	Spec.	Core	Spec.	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-IUL	-	-	-	-	-	-	-	-	72.7	27.3

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

** For 2016-17, the 2015-16 program was taken into account.

*** For 1998-99, the 2000-01 program was taken into account.

**** For 2016-17, the 2017-18 program was taken into account.

Table 4 - Topics covered in the syllabi of all microeconomics courses for master and doctoral programs in economics (FEUNL, FEUC, FEP, ISEG-UL, ISCTE-IUL)

Master programs in economics	Doctoral programs in economics
Consumer Theory	Consumer Theory
Producer Theory	Producer Theory
Choice Under Uncertainty	Choice Under Uncertainty
Information Economics (moral hazard and adverse selection)	Information Economics (moral hazard and adverse selection)
Game Theory	Agency and Contract Theory
	Imperfect Competition
	Game Theory

Table 5 - Topics covered in the syllabi of all macroeconomics courses for master and doctoral programs in economics (FEUNL, FEUC, FEP, ISEG-UL, ISCTE-IUL)

Master programs in economics	Doctoral programs in economics
Real business cycle	Real business cycle
Economic growth (neoclassical and endogenous growth)	Economic growth (neoclassical and endogenous growth)
Unemployment and the labor market	Overlapping generation models
Consumption functions, investment and supply	Consumption functions, investment and supply. Inflation
New classicism and rational expectations	New classicism and rational expectations
New Keynesian economics and dynamic general equilibrium models	New Keynesian economics and dynamic general equilibrium models
Stabilization and macroeconomic stabilization policies	Stabilization and macroeconomic stabilization policies
Exchange rates and foreign exchange markets	Search and matching models and labor market
Fiscal and monetary policies	Fiscal and monetary policies