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Micro, Macro, Maths: Is that all? An International Study on Economics Bachelor Curricula

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International Student Initiative for Pluralism in Economics
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Abstract

This text presents the results of a global study on the course structure in economics bachelor degrees. The study was implemented by the critical student initiative ISIPE (International Student Initiative for Pluralism in Economics) in 2015. The survey represents the most comprehensive assessment of course structure in the economics bachelor so far, as to the knowledge of the authors.

Program syllabi were reviewed for 13 countries worldwide including Argentina, Brazil, Chile, Denmark, France, Germany, Italy, Israel, Mexico City, Portugal, Spain, Turkey and Uruguay. Courses were classified to reach more meaningful, i. e. more aggregated, results. To find out more about the prioritization of certain subjects, courses were weighed based on the credits given for each course during the Bachelor. The method follows the approach by PEPS (2014).

The international survey attests a dominance of the MMM core, i. e. the relative importance of the courses microeconomics, macroeconomics and maths, as represented by calculus and statistical methods. According to the sample, the MMM core accounts for 40,4% of the study time on average. This characteristic is similar across different countries as represented by a low standard variance. On the other side, only a minimum amount of time is devoted to reflexive courses such as economic history or history of economic thought (4,2%).

The study thus confirms a high degree of similarity of the course structure of the economics bachelor degrees on a global scale and a lack of pluralism. Economics needs a more diversified body of knowledge if it is going to respond successfully to the multidimensional challenges of contemporary society.

Introduction

In 2014, the International Student Initiative for Pluralism in Economics (ISIPE) was founded as a coalition of 65 economics student groups from 30 countries. Students worldwide shared the experience of a lack of pluralism in their study programs and a lacking link to "real" economic problems. Among the national groups common critique was shared, e. g. overrepresentation of neoclassical economics in the curricula, too few courses on history of economics thought and scarce links to other social sciences disciplines. The similarity between the criticism of the different groups, despite the fact that they come from very different countries, encouraged ISIPE to formulate a joint statement. On 5 May 2014 an open letter for pluralism was published in 14 languages, calling for a change of course in the way economics is taught and research is done. The initiative claims that theoretical and methodological diversity as well as interdisciplinarity is needed in order to bring "economics back into the service of society." ISIPE has fulfilled a vital role as a joint mouthpiece for student initiatives worldwide and as global facilitator of local progress. Today the open letter is officially supported by almost 3000 individuals in 110 countries, confirming that ISIPE is indeed a global movement.

The criticism of ISIPE may seem rightful, but is it evidence-based? Is it possible to proof the felt lack of pluralism or is the open letter just a point of view? The idea behind the present study is precisely to go beyond *feelings* about the state of economics: How is economics really taught around the world? How are study programs structured? Do similarities between countries exist? What are the differences? Little data are available on these questions. To answer them it appeared necessary to produce the data required ourselves.

The idea to do a global study is related to the work of the French group PEPS (Pour un Enseignement Pluraliste dans le Supérieur en Economie) that was founded in 2009. In 2013 PEPS examined study programs for 54 french Universities demonstrating the importance of formal courses as well as the lack of reflexive thought. The study attracted media attention and gave substance to the call for pluralism in France. The normative aim of the present study is in a similar vein to underpin the call for pluralism with empiric evidence on its necessity.

Literature Review

Whilst numerous studies have been conducted on economics programs in the USA, 5 years ago, there seemed to exist little to no comprehensive research on the structure of economics programs elsewhere. However, encouraged by the financial crisis, critical economists have felt the need to proof the perceived lack of pluralism empirically. The present study by ISIPE is exemplary in this regard. As noted above, the ISIPE study follows the initiative by PEPS that quantified course content for economics curricula in France in 2013.

The PEPS study demonstrates that microeconomics, macroeconomics, statistics and maths make up 43% of the study time in France. history of economic thought (HET), on the contrary, accounts for 1.7% of the curricula, with 15 universities offering no HET course at all (PEPS 2016).

For Great Britain, Westerlind Wigstrom (2008) analyzes economics programs for 12 top universities, as listed by the Research Assessment Exercise 2008. The author observes an "almost equal" structure. Similar to PEPS he finds that programs are dominated by the combination microeconomics, macroeconomics, maths and statistics. Westerlind Wigstrom cites the University of Nottingham calling the named courses the "core of the economics degree". He further points out that only two of the 12 universities examined require reflexive courses like history of economic thought, economic history or philosophy of science.

Similar to the observations by Westerlind and Wigstrom, Earle et al. (2017) find the same core structure when analysing the curricula of 7 top universities in the UK. They further note that the courses are taught in a similar fashion at all universities.

The data for Germany used in the present ISIPE study is analysed in detail by Fauser and Kaskel (2016). They use a bigger data set of 54 Universities. Information was extracted from programs' outlines, examination regulations and module catalogues. Fauser and Kaskel extend the ISIPE scheme by looking into the availability of a course in qualitative methods. They find that "Qualitative methods" is nowhere a compulsory course. For 27.8% of the study programs examined, the course is listed as an elective. The authors contemplate that some of the students may be able to take the course as an elective in another faculty. There however remain at least 44,4% of the programs for which students are not able to take a course in qualitative methods.

Another country-specific analysis for the data used in this study is available for Chile. Correa and Mautz (2015) present results and methods used in detail in the spanish article "Mejorar es cambiar: La evolución reciente de los currículos de economía en Chile". In their analysis, data are presented considering weighted averages of participation of each category, based on data from university enrollment in order to portray the reality of the whole country. Nonetheless, for the purpose of comparability, new figures are presented in *this* article in line with the general approach that does not take into account enrolment numbers (Table 3).

For the USA, more comprehensive data sets are available including longer time series. For the most part, courses are grouped and counted based on the course name and classified in compulsory or elective modules. Comprehensive quantification of the course structure dates back to 1950. In the study by Newcomer et al. neither maths nor econometrics is listed as a compulsory course. Further, no micro-macro divide can be observed. In general, there is more variety regarding course content and structure. More than half of the universities offer the following courses, listed by frequency: money and banking, public finance, labor problems, economic history, statistics, international economics, corporations, theory, accounting, history of economic theory, comparative economics, and business cycles (Newcomer et al., in Taylor 1950).

The higher degree of variety and a more universal approach that was present in the 50s may be contrasted by the more recent studies by Siegfried and Walstad (2014) and Petkus et al. (2014). They observe the now typical dominance of the courses microeconomics, macroeconomics as well as quantitative studies. Petkus et al. state that, "Principles of economics" is mandatory in 99,9% of the programs reviewed, followed by courses in intermediate microeconomics and macroeconomics that are compulsory in more than 94% of all programs, and 99% among National Universities.

Siegfried and Walstad compare their findings to the 80s and note that reflexive courses have been exchanged for more lectures on quantitative methods. They note: "[T]raditional courses in moral philosophy or public utility economics have gone the way of buggy whips" (Siegfried and Walstad 2014, p. 156). Interestingly, also "Money and Banking" has lost importance. When in 1980 it was a compulsory module in 37% of the programs, it remains compulsory in only 10% in 2013. "Economic History" with a recent mandatory share of 5% to 2% of the courses has been almost "wiped out". The general tendency is summarized by the authors as follows: "The trend over the past three decades is simple and clear: Add econometrics and drop other specific requirements, leaving room for four field course electives." (Siegfried and Walstad 2014, p. 154).

Monteiro and Lopes compare the American and the European system based on a data set of highly ranked universities from 2004-2005. Their cluster analysis demonstrates the dominance of the common core courses: principles of economics, microeconomics, macroeconomics, econometrics, maths and statistics. These courses are characterized by a much higher frequency than any other courses in the heterogenous group. Principle of economics seems to be less important in Europe, compared to the USA though. In the observed sample the course is mandatory for all programs in the USA, compared to 60% in Europe. (Monteiro and Lopes 2007)

Whilst the larger part of the studies seems to simply count courses, some deeper investigations have been made regarding *content* as well. E. g. Earle et al. (2017) argue that all courses reviewed teach the neoclassical view, which they describe, following Colander (2000), as being characterized by the trinity of: individualism, optimization and equilibrium. Further, neoclassical economics is described as a "mechanical view of the world" which is "characterised by *knowable, predictable* forces" (Earle et al. 2017, p. 39). In addition, Earle et al. look at how economic expertise is tested in exams. They note that exams are typically dominated by mathematical problems and replication. In particular, in macroeconomics and microeconomics courses, mathematical problems, which Earle et al. describe as "operate a model" questions amount to 55%. In total "operate a model"questions, multiple choice questions and questions, for which descriptions must be replicated amount to 92% of the questions in the exams under review for microeconomics and macroeconomics courses (ibid, p. 52).

According to Earle et al. not only course structure, but also course *content* is very similar among the universities examined. According to the authors the typical microeconomics course is structured as follows: Consumer and producer theory are characterized by rational fully informed and optimizing agents. A smoothly functioning market directs both sides into a socially optimal result. This ideal economy is then complemented by imperfections, such as limited information, that may lead to market failure. Regarding macroeconomics, Earle et al. describe the typical short and long run divide. In the long run, growth models, that ultimately all rest on some kind of Solow model are standard, which are then complemented by endogenous growth models, that focus on promoting technology and human capital. On the other hand, there is the short run, where the IS-LM models and representative agent models dominate and recessions are typically modeled as exogenous shocks (ibid, p. 41-45).

Gärtner's studies (2001, 2013) confirm the importance of the IS-LM model, which, adding

AS-AD, and the Keynesian Cross, he refers to as "bread and butter models". They are taught in more than 90% of the macroeconomics courses under review in Gärtner 2013. Gärtner's study is based on questionnaire among teaching staff at universities in Europe and the US. The sample amounts to 259 respondents.

A comprehensive analysis of the typical microeconomic content is found in Lee's review of textbooks (2010). In all 43 texts reviewed, Lee finds a. o. the following concepts and tools, that he refers to as typically neoclassical: diminishing marginal utility, utility maximization, profit maximization, indifference curves, marginal rate of substitution, income/substitution effects, individual and market demand curves, prices elasticity of demand, perfect competition, profit maximisation, marginal cost = price. Whilst the study demonstrates that the focus has become more standardized during the years, Lee notes "neoclassical economics, as defined in terms of the tools, models, and discourse of its microeconomic theory, has always been with us throughout the 20th century" (Lee 2010, p. 205).

Several authors make the point that teaching content is more standardized for microeconomics compared to macroeconomics (e. g. Westerlind Wigstrom 2008, Gärtner 2001).

Method and Procedure

General Approach

Economics is taught in a lot of different places. At universities' economics department, of course, but not only. Economics is also taught in high schools in some countries, in business schools, in other departments, etc. To review all of them would be very informative, but goes beyond the available resources. At this step at least, we decided to focus on economics department, and more precisely, on bachelor in economics (i.e. the first three years). We chose to limit our study to them because universities are viewed, in a lot of countries, as "the place" where economics is taught. Many other places where we can find some economics courses are inspired by universities' curricula.

Focusing on universities, we could also have taken master courses into account. However, master programs are almost always specialized (and, in any case, more specialized than bachelor degrees). After all, if a student would like to do his masters degree in neoclassical economics or in history of economic taught, it is an individual choice. A specialized master does not represent the *standard* set of courses everybody studying economics must attend.
On the other hand, a student who would like to study economics (in his bachelor) needs an honest and broad presentation about different theories available, and this has to happen in the first years. The question of pluralism is absolutely fundamental in the beginning of the studies, when awareness about the diversity (or the lack of it) of a discipline is shaped. That is why focusing on bachelor programs seemed appropriate.

When analysing the way economics is taught the most satisfying thing to do would be to understand what is really taught during class, i.e. be present in every course to precisely hear the lecture. Unfortunately, the massive workload renders such a project impossible. Further, even if resources would be available, it would be very difficult to follow a standardized guideline to ensure a consistent and objective analysis.

A questionnaire would have been another option, i. e. we could have asked students around the world about their feelings regarding the state of economics, such as Colander did several times. A questionnaire might however suffer e. g. from a selection bias. Further, the objective of this study was precisely to observe more than feelings, i. e. supply quantitative evidence to the observed feelings of a lack of pluralism.

A quantitative survey on the economics curricula was chosen as it appeared to be more objective than a qualitative analysis. This is of major concern as the study itself is published by the critical students network.

Data Collection

Data on what is actually taught were collected based on official curricula published by the universities themselves. The survey period stretches over two academic years (2014-2015 and 2015-2016), except for France for data collecting took place during 2012-2013.

Data were collected on a global scale. The sample is random but not randomized. All student groups that were willing to participate in the study were able to participate. The sample is biased for European countries. It includes 6 countries from the EU, 3 countries from Latin America, Turkey and Israel. No data could be collected for North America, Australia, Africa and Asia (except for Israel). The sample is thus not representative for the whole world, it however allows for an international perspective.

In total 421 bachelor programs in 13 countries were examined. Each country represented in the study relies on an individual national student group. This means, that data were collected by students based in the country for which respective curricula were analysed and hence by people familiar with the country-specific particularities of the respective curricula under scrutiny. Finally, all national results were averaged to make comparisons.

Weighing of Courses

To find out more about prioritisation of certain subjects, courses were weighted based on the credits[1] given for each course during undergraduate studies. The method applied follows the approach of the study implemented by the french student movement for pluralism in economics teaching (PEPS) in 2013: The idea is simply to count the credits given to each course during the first 3 years at the university, focusing on the bachelor degree in economics. For example, if “Microeconomics” is taught in the first semester of the first year for 3 credits, and also in the first semester of the second year for 2 credits, than the “score” of “Microeconomics” is 5. Credit points are a standardized means for comparing the volume of learning based on the associated workload (See e. g. European Commission 2015 for the European ECTS System). Although different credit systems may be used on an international level, they all give an understanding about the *relative* study volume.

[1] if available.

Categorisation

To have more meaningful, i. e. more aggregated data, categories were built. Otherwise the multiplicity of course titles would have rendered conclusive results impossible. Categorisation was further necessary to allow for comparisons between countries, in which courses with different names cover similar topics. Finally, the study allows for the conclusion that e. g. "Quantitative methods" represent 20 % of the study time of all the bachelor programs under examination.

14 categories were chosen based on the study done by PEPS: mathematics and statistics, microeconomics, macroeconomics, introduction to economics, reflexive, economic history / economic problems, international, money and banking, methods (excl. statistics), topics in economics (inequalities, work, etc.), management, professional, opening and others.

Table 1: Categories

Mathematics and Statistics	Mathematics	Statistics, probability	Econometrics	Data analysis	Optimization		
Microeconomics	Microeconomics	Game Theory	Industrial organization	Contract theory			
Macroeconomics	Macroeconomics (incl. growth)	National accounts	Public policies, public policy	Public finance	Public economics,	Economics of the public sector	Economic policy
Introduction to Economics	Economic analysis, Introduction to economic analysis	Introduction to economics					
Reflexive	History of Economic Thought	Epistemology, Theory of knowledge	Economic theories				
Economic History/ Economic Problems	Economic problems	History of economic facts	Economic history				
International	International economics	Geographic economics	Development economics	European economics			
Money / Banking	Money	Banking	Financial economics				
Methods	Methods / / Methodology	Foreign languages	Computer				
Topics in economics	Economics of inequality	Economics of Internet, of communication, etc.	Environmental economics	Labor economics	Health economics	Tax	Other topics in (i.e. "economics of …)
Management	Management	Law	Accounting	Human relations, human resources			
Opening	Social sciences courses (including demography)	General knowledge					
Others	Political Economy	Choice of any course in management or economics					

The advantage of the method pursued is that the procedure allows for standardization. To make sure, that all groups follow the same method, a precise guideline was written and shared

between national groups involved in the project. Of course, the main drawback of the methodology is that it's not based on the actual contents of the course but on the course *name* as elaborated below.

Critical Reflection on Data Collection and Categorisation

Drawing conclusions from the mere title regarding course content may be a bold undertaking in general. Of course, there exist courses that share the same title but are taught in different, and sometimes maybe opposite, ways. In particular, lecturers may differ in the degree of implicit or explicit critical reflection they offer alongside the presentation of the theory itself. Courses probably will not be taught in the same way according to an "orthodox" or to an "heterodox" economist. E. g., a microeconomics class taught by heterodox economist Bernard Guerrien (University Paris 1 – Sorbonne) might not have a lot in common with a microeconomics class given by Jean Tirole at the Toulouse School of Economics.

Adding the variable "heterodox/mainstream professor" would be an interesting additional undertaking, but may also result in a more subjective assessment than simply "counting" the weight of each course, besides being time-consuming. Further, some studies tell us that the number of heterodox economists is marginalized. This is for example true for Germany (Heise et al. 2017, Grimm et al. 20017). As for the marginalization of heterodox economist it seems likely that most courses are taught by mainstream professors and the probability of hearing in depth critique in standard lectures seems low, which may also be related to time constraints.

Further, although a course may be taught in different ways, this does not contradict that the name is of informative value. For example, even if the way a "Microeconomics" course is taught is very critical (which seems unlikely), the fact that the course exists and the relative time spent on it can still serve to reach several conclusions. The title gives an idea about the relative balance of power within the curricula regarding certain fields or topics, e. g. "Microeconomics". Further, the existence of the course "Microeconomics" and "Macroeconomics" proofs that the dichotomy between the two perspectives is standard (which was not the case 60 years ago).

Another noteworthy point in this regard is provided by the study of Earle et al. (2017). In their survey of economics exams in the UK they demonstrate that very little reflexivity is required in the courses "Microeconomics" and "Macroeconomics". Only 8% of the exercises require students to "evaluate".

The high concentration of the market for textbooks for the principle course as well as intermediate microeconomics and intermediate macroeconomics gives further substance to the the notion of a pretty unified body of course content. E. g. in Germany, 90% of economics bachelor (Volkswirtschaftslehre) students are told to read[2] the highly formalized textbook by Varian in their first microeconomics course (Peukert et al. 2018). Several studies confirm that the way, in particular microeconomics, is taught is very much the same. Core topics, that are covered in the standard textbooks include household/consumer theory, theory of the firm/producer theory, which are combined almost everywhere in a equilibrium model (See Westerlind Wigstrom 2008; Beckenbach et al. 2016; Earle et al. 2017). Further, a look at

[2] i. e. the textbook is included in the bibliography of the course.

common textbooks demonstrates a high degree of formalization and a strong focus on neoclassical content. On the other hand, content that nurtures reflections and critical thinking is marginalized (See e. g. Brue 1996, Peukert et al. 2018, Treeck and Urban 2017, Stapleford 2000, Earle et al. 2017, Beckenbach et al. 2016, Giedeman and Lowen 2008).

Macroeconomics may be a bit less standardized (Westerlind Wigstrom 2008, Gärtner 2001), however, common topics seem to be almost everywhere: The IS-LM model, the Solow model, (the) Phillips curve and the AS-AD model (Gärtner 2001, Earle et al. 2017, Beckenbach et al. 2016). Further the divide between the long and the short run (and the missing connection between the two) seems to be common. Market disequilibria tend to be analysed from a short run perspective only (based on rigidities) (Parkin 2000; Knoedler and Underwood 2003, Earle et al. 2017, Beckenbach et al. 2016).

As mentioned above, the problem of finding meaningful and commonly applicable categorisations remains an issue of debate. In this survey, the French categorisation scheme of PEPS was followed, which may not be suitable for all countries.

The comprehension of the educative system in each country with national particularities requires the first step to be taken on the national level. This means that each group participating in the study gathered its own data by itself. One major issue was to guarantee that a unified method is consistently applied. As mentioned before, a guideline was written to ensure the way of data collection was the same. However, it should also be noted, that data were collected by students and not by paid professional researchers. This meant that timing devoted to the study could be volatile.

As courses were recorded based on the respective language, a final “quality” management could not be implemented. Almost all of the curricula under review were not translated in English. To be able to compare the data, every national group had to translate their results. This translation was not always straightforward, as some titles of courses are very specific to each country. It cannot be ensured that the translation of all the courses was made consistently, but we took time to coordinate the efforts in that sense.

However, the issue of translation and categorisation mainly applies to courses not belonging to the core. E. g. courses on quantitative methods, microeconomics and macroeconomics could relatively easy be assigned to the respective categories.

For the calculation of averages, countries were weighed equally in spite of varying population size. The number of universities under examination further varies for different countries. In particular, the sample from Uruguay only includes a single university. Further, data from different universities were not weighted according to student numbers, due to the lack of data availability. This results in a higher relative weight given to small universities. A course taught in front of 400 students is given the same weight compared to one in front of 30.

As mentioned above, the sample is biased for European countries.

Table 2: Sample Size

Sample Size (Number of programs)	
France	50
Chile	6
Israel	18
Portugal	19
Spain	45
Denmark	4
Mexico City	8
Turkey	69
Argentina	31
Italy	60
Germany	36
Brazil	74
Uruguay	1
Total	421

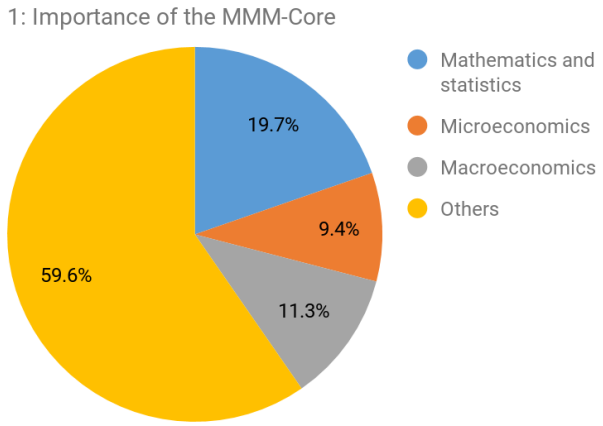
One important issue we had to deal with is the existence of optional courses. How could we take them into account? Several options were available: we could possibly exclude them, by focusing on the core of the curricula. But in some bachelors we surveyed, all courses are optional. Excluding optional courses would mean to exclude the entire program. We therefore decided to weight elective courses by the number of options available. For example, if students had to choose between "history of economic thoughts" and "econometrics" for 3 ECTS, we counted 1.5 ECTS for each course. This issue is also of minor importance regarding the MMM courses, as they tend to be mandatory courses.

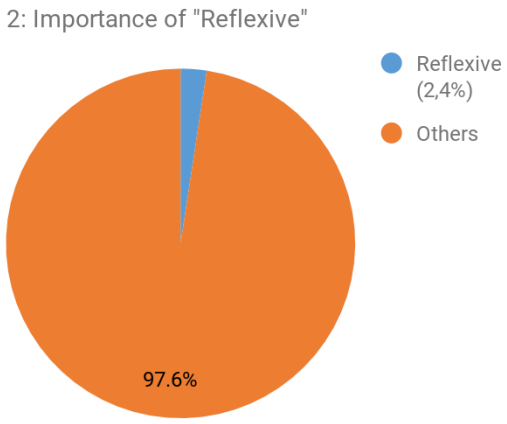
Results

Due to methodological issues mentioned above, in the following, the focus is on interpreting the data for which categorisation and translation issues were less troublesome[3].

The main result of the survey is the dominance of the MMM core, i. e. the most important course over all countries belong to the categorisation mathematics and statistics, macroeconomics and microeconomics (except for the courses belonging to the category management, which accounts for 15.9 %). The technical MMM core accounts for 40.4 % of the study time on average.

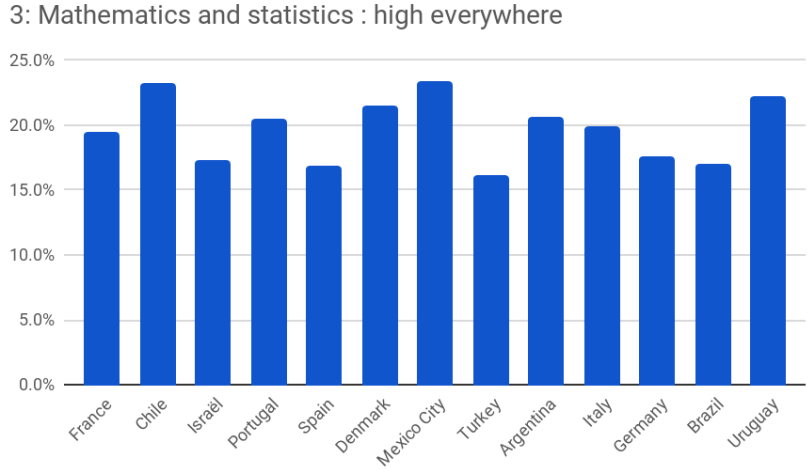
[3] The inclusion of "Public Economics" in the "Macroeconomics" category may be problematic (as pointed out by Fauser und Kaskel 2016).





Little time is devoted to explicitly reflexive courses. This category includes courses on history of economic thought, epistemology, philosophy of science and economic theories. The category is very weak in terms of credits (only 2.4 %). The same holds for economic history and economic problems (4.2 %). More generally, it appears that courses related to history do not amount for a large share of the economics curricula.

Quantitative methods make up a big piece of the study programs on average. The dominance of formal methods is robust over all countries with a high share everywhere. Calculus, statistics and econometrics amount for ⅙ to ¼ of the study time. The share seems to be particularly high for the Latin American countries in the sample.

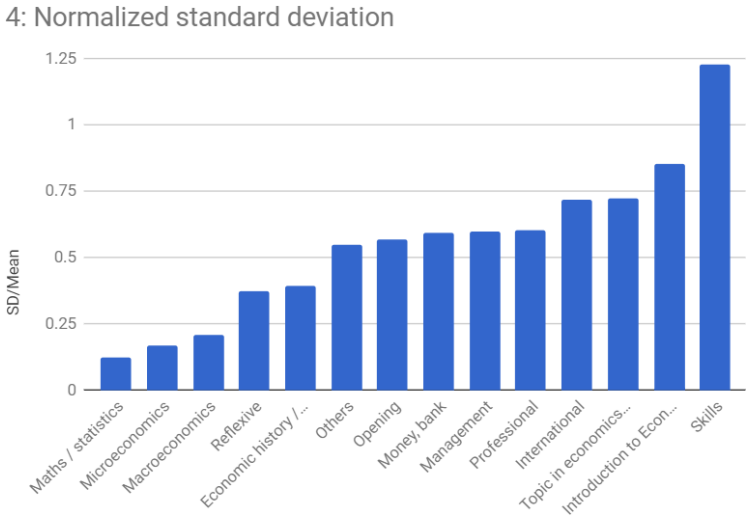


Microeconomics and macroeconomics make up for a large share of the curricula as well. Interestingly, macroeconomics (11.3 %) seems to be more important than microeconomics (9.4 %). This may however be due to the inclusion of "public economics" in the category.

What is especially striking is the very low variance of the MMM core over different countries. Over all courses, the normalized standard deviation is lowest for the courses of the MMM core. Maths, micro and macro is central *everywhere*. We conclude, that the MMM core may

be regarded as the foundation of the way economics is taught in universities today.

Also reflexive courses and economic history show a low normalized standard deviation. They seem to be of equally little importance in the countries examined.



Conclusion

When examining curricula of economics on a global scale, the objective of the study was to find empirical proof for a perceived lack of pluralism. The title emphasizes the critical question of the study: “Micro, Macro, Maths: Is that all?” Can a one-sided, formalist standard of teaching be proven?

The study confirms the importance of quantitative approaches. In spite of methodological weaknesses of the approach, the thesis, that microeconomics, macroeconomics, calculus and statistics form the core of today’s economics curriculum can be verified without doubt. Although we cannot say, that other approaches are not part of the economic curriculum, the study confirms the relative weight of the MMM core. What is striking, is that this is standard over *all* countries analysed. The MMM Core seems to define the heart of economics curricula on a global scale.

Further, the importance of reflexive approaches was examined. In this regard, the study confirms that students are mostly not required to think critically. There is also little variance here. We agree with Earle et al. in that “It is hardly an exaggeration to say that it is now possible to go through an economics degree without having to venture an opinion.” (Earle et al. p. 51). We believe that this is a problem and pluralism is needed in order to tackle today’s multifaceted crises.

Appendix

Table 3: Detailed Results

Categories	France	Chile	Israël	Portugal	Spain	Denmark	Mexico City	Turkey	Argentina	Italy	Germany	Brazil	Uruguay	**Average**	Min	Max
Mathematics and statistics	19,5%	23,2%	17,3%	20,5%	16,8%	21,5%	23,4%	16,1%	20,7%	19,9%	17,7%	17,1%	22,2%	**19,8%**	16,1%	24,4%
Micro economics	10,7%	11,3%	14,3%	9,0%	8,6%	9,5%	10,0%	9,5%	6,0%	7,2%	9,0%	8,5%	8,3%	**9,5%**	6,0%	14,3%
Macroeconomics	12,8%	7,9%	9,5%	11,8%	10,3%	13,0%	10,0%	15,3%	9,4%	10,7%	11,6%	13,6%	11,1%	**11,5%**	9,4%	15,3%
Introduction to Economics	2,3%	1,8%	0,2%			2,1%	2,7%		3,6%		2,6%	3,8%	2,8%	**1,6%**	0,2%	3,8%
Reflexive	2,2%	1,1%	0,3%	1,6%	2,8%	2,4%	7,3%	4,5%	3,0%	1,1%	1,3%	1,3%	2,8%	**2,5%**	0,3%	7,3%
Economic history / Economic problems	3,3%	3,4%	3,9%	6,2%	4,0%	1,0%	9,6%	2,6%	4,9%	3,3%	0,5%	6,6%	5,6%	**4,1%**	0,5%	9,6%
International	4,5%	2,2%	1,3%	4,0%		2,1%	5,3%	5,0%	4,4%	3,0%	2,6%	3,8%	5,6%	**3,2%**	1,3%	5,6%
Money, banking	5,1%	4,6%	0,2%	9,7%		3,5%	2,2%		3,0%	4,9%	4,0%	6,3%		**3,0%**	0,2%	9,7%
Methods (excl. Statistics)	13,9%	7,1%	2,7%	0,6%		0,0%	1,6%	1,7%	6,7%	6,1%	5,2%	4,4%	5,6%	**4,3%**	0,0%	13,9%
Topics in economics (inequalities, work, etc.)	2,5%	7,0%	6,3%	9,7%	14,9%	2,8%	6,4%	16,0%	5,6%	3,3%	3,5%	11,6%	8,3%	**7,0%**	2,5%	16,0%
Management	13,7%	17,1%	24,1%	16,2%	20,8%	11,1%	7,2%	18,3%	14,1%	25,9%	21,3%	12,0%	5,6%	**16,6%**	5,6%	25,9%
Professional	3,0%	0%	4,9%			14,6%	3,8%		3,9%	1,0%	2,5%	3,5%	2,8%	**3,1%**	1,0%	14,6%
Opening	4,1%	10,5%	0,2%	2,9%	5,1%	4,2%	6,4%	11,0%	5,2%	0,8%	7,4%	6,0%	11,1%	**5,0%**	0,2%	11,1%
Others	2,5%	2,9%	14,9%	7,8%	16,7%	12,2%	4,0%		9,7%	12,8%	10,9%	1,7%	8,3%	**8,7%**	1,7%	16,7%

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