

TEACHING INTRODUCTORY MACROECONOMICS DURING THE GREEK FINANCIAL CRISIS¹

Structured Abstract

- Purpose (mandatory): The purpose of the paper is to determine how including the Greek financial crisis in teaching introductory macroeconomics benefits students.
- Design/methodology/approach (mandatory): The methodology is based on responses of a recent survey administered to students at a university in Greece.
- Findings (mandatory): An eclectic approach that distinguishes various economic theories and methodologies, mainly neoclassical and Keynesian, can provide a pedagogical way of teaching introductory macroeconomics, allowing students to use their everyday personal experience in determining the most “suitable” theory in explaining the crisis.
- Originality/value (mandatory): To my knowledge, such an exercise of discovering students’ perceptions of teaching an introductory macroeconomics class during the GFC has not yet been attempted.

¹ [I am grateful to two anonymous referees for their useful comments.](#)

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I. INTRODUCTION

The subprime crisis broke out in late 2007, initiating the Global Financial Crisis (GFC), which was “a human disaster” (Figart, 2010, p. 236) and the greatest slump of the global economy since the Great Depression. Economists were not able to comprehend that a crisis might be approaching, nor the depth of the crisis (Lux & Westerhoff, 2009, p. 2). Economists have not dealt effectively with the longtime crisis, and actually may even have contributed to its development and unfolding (Colander et al., 2009, p. 249). In the meantime, economics students struggle with the conceptual difficulties of the GFC that are inherent in the way economics is taught. Blinder (2010, p. 389), referring to the GFC, stated that “this is truly a teaching moment”.

While economics enrolments are growing (Shiller, 2010, p. 403), there are reports from the UK about the dissatisfaction of employers with young economists regarding their training. Young economists lack knowledge regarding economic institutions, the operation of the financial system and economic history. Thus, they are unable to provide a context for current policy debates (Carlin & Soskice, 2012, p. 1). A Steering Group formed after a conference sponsored by the Bank of England and the UK’s Government Economic Service recommended that: (1) mainstream economics is an important tool-kit but provisional and incomplete; (2) greater pluralism in economics should be taught; (3) a mixed market for Masters’ degrees should be established; (4) provision should be made for “professional practitioner” economists; (5) incentives should be established for better teaching; (6) incentives should be strengthened for economic research (Coyle, 2013).

In the USA, employers state their discontent with the skills of college graduates as they lack effective written communication, team collaboration, critical thinking and applying knowledge to real-world issues. While economic majors at undergraduate institutions in the USA when asked reveal that 63% of the respondents prefer “more discussion of real world issues”, “preparing for work” and “the ability to communicate” (Strasser & Wolfe, 2014, pp. 191–192).

Effectively, the GFC should drive a major restructuring and reorientation of economics teaching, in particular introductory macroeconomics, as the current curriculum fails to provide students with reasonable answers. “Thus, it is not surprising that the crisis is renewing a longstanding concern about the practical relevance of economics as it is taught” (Shiller, 2010, p. 406).

The purpose of the paper is to determine how including the Greek financial crisis in teaching introductory macroeconomics benefits students, based on responses of a recent survey administered to introductory macroeconomics students at a university in Greece, one of the hardest hit countries by the GFC. To my knowledge, such an exercise of discovering students’ perceptions of teaching an introductory macroeconomics class during the GFC has not yet been attempted. Teachers of economics would benefit from these findings, as they will provide the substance for the creation of an updated introductory macroeconomic syllabus based on students’ experience during the GFC.

The structure of the paper is as follows: Section II reviews the literature regarding the impact of the GFC on the teaching of economics, especially introductory macroeconomics.

Section III provides the methodology and the demographic data of the survey study. Section IV contains the presentation and analysis of the survey results. Section V concludes.

II. LITERATURE REVIEW

Macroeconomics as a social science strives for simple ways of reasoning about highly interrelated complex phenomena that cannot be disaggregated and studied in a simplistic way. Macroeconomic models will always be modified, restructured and even abandoned, when economic reality contradicts the policy conclusions of the dominant paradigm. As instructors of macroeconomics, we have to live, research and teach within economic reality; we have to live, research and teach during the GFC.

It appears bizarre that instructors persist in teaching to a great extent the same curriculum as though the GFC never happened. “Post-crisis undergraduate macroeconomics instruction features very much the same line-up of models and concepts as before the crisis erupted” (Gärtner, Griesbach, & Jung, 2014, p. 297). Why is this so? Instructors may believe that there is no alternative paradigm that could be used in undergraduate teaching or that the GFC can be explained or will be explained within dominant teachings of the neoclassical paradigm (Gärtner, Griesbach, & Jung, 2013, p. 415). Then again, why should the dominant neoclassical curriculum of teaching change regarding policy formation when “policy makers were largely slaves of Keynes, [so] you cannot blame modern neoclassical economics for the problems. Modern neoclassical economics and its abstract models have not really been followed in government since they were invented” (Rajan, 2010, p. 400). Thus, explicitly or implicitly, the opinion is that dominant neoclassical teaching paradigm does not need to change because, at the level of policy-making, Keynesian economics is the dominant paradigm and is to be blamed for the GFC. To put this in context, incorporating a brief discussion of the main arguments of each school would be helpful in a more inclusive contextualization of the debate and in particular of the need to enrich introductory macro courses with the other view as well.

The neoclassical marginalist economic analysis is based on individuals that are characterized by rational maximizing behavior based on self-interested and exogenous preferences, and prices are determined in a perfectly competitive market in equilibrium without market power. The behavioral assumptions used do not imply that everybody’s behavior is consistent with rational choice. However, competitive forces will see that those who behave in a rational manner will survive, and those who do not will fail. Neoclassical economics is based on microeconomic foundations, inquiring into conditions of static equilibrium. The economy can be viewed as being in equilibrium. The macroeconomic variables are the result of aggregating microeconomic relationships. Savings determine investment, and equilibrium is achieved at full employment by an adjustment in wages. Consequently, if there are no impediments to the operation of the market process, allocative and productive efficiency is always achieved. The neoclassical dichotomy maintains that nominal variables cannot affect the long-run equilibrium real variables such as employment. The state should only provide for public goods.

On the other side of the fence, “... comments from Chicago economists are the product of a Dark Age of macroeconomics in which hard-won knowledge has been forgotten” (Krugman, 2009). Neoclassical economics aims to persuade our students that people are perfectly rational and markets are perfectly efficient. Consequently, it would be straightforward to conclude that unemployment is voluntary and recessions are natural and necessary. At the same time, the theory leads us to conclude that the monetary and financial markets of the economy do not influence output or employment or individual incomes, and free trade makes everyone better off. “Keynesian economics has been largely abandoned and

replaced by a highly abstract dynamic stochastic equilibrium model that is much closer to the classical laissez faire model economists held in the 1930s” (Shiller, 2010, p. 405). However, this perception of the economy is wrong and unable to explain the economic reality of the GFC that we are experiencing (Friedman, 2010, pp. 391–392).

Keynesianism is based on the writings of John Mayard Keynes, particularly *The General Theory of Employment, Interest and Money*, which has imperishable relevance to current economic and social problems. Keynes argued that the most prominent failure of the market system was its inability to provide full employment. The neoclassical concept that the economy moves to a unique and exogenously established equilibrium has no relevance for the real world. The capitalist economic system lacks any internal self-correcting mechanism for maintaining appropriate levels of aggregate demand, low levels of unemployment and stable prices. Thus, government economic policy is essential in avoiding such market failures. Keynesians elevate the role of effective demand in a monetary economy as the engine for economic growth. The goal of economic policies and institutional arrangements is to encourage high levels of aggregate demand, with the aim of achieving and maintaining full employment.

While the Keynesian revolution was a denunciation of classical macroeconomics, it was completely rejected once the rational expectations became the dominant paradigm in teaching and policy formulation. “If this view [rational expectations] is correct, we will forever remain ignorant of the fundamental causes of economic fluctuations” (Cochrane, 1994). Minsky (1970) called attention to the idea that markets, particularly financial markets, do not embody perfect rationality. In the meantime, fiscal stimulus is the Keynesian answer to recession of the GFC, and such stimulus underlies the Obama administration’s economic policies. “Admitting that Keynes was largely right, after all, would be too humiliating a comedown” (Krugman, 2009). Overall, as Nicholas Kaldor said, “Macroeconomics is the part of the subject in which everything you learned in school is wrong” (Solow, 1983). Consequently, explicitly or implicitly, the dominant neoclassical teaching paradigm has to change. At the level of policy making, neoclassical economics is clearly the dominant paradigm, not Keynesian economics as some would suggest, and this dominant paradigm is to be blamed for the GFC.

As a result, instructors and students of economics “will have to learn to live with messiness,” recognizing the significance of irrational and often unpredictable behavior, distinctive imperfections of markets and enduring the fact that an economic “theory of everything” is unworkable (Krugman, 2009). Teaching during the GFC provides an gateway for theoretical pluralism and presenting contending worldviews that would increase student’s interest and critical skills (Figart, 2010, p. 236). In this context, Shiller (2010, pp. 403, 407) emphasizes the need for professors to incorporate a long historical perspective to link the theoretical constructs of the past with current theories, explicitly emphasizing history of economic thought. This should be done together with the analysis of financial markets, economic history, case studies (Gärtner et al., 2013, p. 406), as well as institutions and how those institutions actually become effective (Rajan, 2010, p. 401). Also, professors should incorporate the realities of finance into the teaching of macroeconomics as “financial markets fall far short of perfection ... they are subject to extraordinary delusions and the madness of crowds” (Krugman, 2009). Finally, professors should recognize the impact of “animal spirits”, the term fathered by Keynes, signifying that there is always an unpredictable element in the economy that should be part of our real world teaching of economics (Shiller, 2010, pp. 405–406). Overall, the other side of the fence argues that “Keynesian economics remains the best framework we have for making sense of recessions and depressions” (Krugman, 2009). Considering the aforesaid, we should not be surprised that economic instructors across the transatlantic responded differently to the GFC in their curricula. US economics instructors

placed notably more importance on financial topics (financial intermediaries, liquidity traps, multiple interest rates, bubbles and quantitative easing) that their European counterparts (Gärtner et al., 2014, p. 297).

Overall, the literature review confirms that an eclectic approach to including the GFC in teaching introductory macroeconomics is worthwhile, and provides learning benefits to students. Distinguishing between the neoclassical and Keynesian approaches, explanations and policy implications of the GFC, can provide an insightful pedagogical method of teaching introductory macroeconomics during the Greek financial crisis. In this teaching style, students are allowed to integrate their everyday personal experiences into their learning process, which can in turn provide invaluable insights in the development of a syllabus that incorporates the GFC. Nevertheless, the eclectic teaching approach is a reflection of the diverse policy responses to the hazards produced by the GFC. For example, the European Central Bank took its time to initiate net asset purchases, alike to the Fed's quicker response; in addition, Europeans were still are fixated with austerity, whereas the US was quite indifferent (Gärtner et al., 2014, pp. 297–298)

III. METHODOLOGY AND DEMOGRAPHIC DATA

A recent survey was administered to introductory macroeconomics students in Spring 2014 at a-the University of Macedonia in Greece, one of the countries hardest hit by the GFC, to determine how including the Greek financial crisis influences the teaching of introductory macroeconomics and benefits students. The goal of the survey was to identify the models, concepts, and approaches that impact introductory macroeconomics teaching during the financial crises. Surveys focused on the unique individual experience of a given phenomenon. While the results of a survey study may not be generalized to the greater population, they can still offer insight on a complex phenomenon (Sun, 2009, p. 3). In this case, the survey set out to obtain opinions, observations, characteristics and attitudes of Greek introductory macroeconomics students, regarding how the class contributed to their knowledge of the GFC. Utilizing a 5-point Likert scale, the independent variables created a matrix for comparative evaluation. Nevertheless, due to careful attention on individual experiences, the findings in survey studies cautions generalizations across space and time.

The course was assigned to the professor John Marangos with a predetermined textbook and, as such, there was little flexibility regarding the choice of the textbook. Nevertheless, the syllabus and teaching incorporated discussion of the GFC and the impact of current economic events on Greek citizens using macroeconomic tools taught in class. The syllabus adopted an eclectic approach in incorporating the GFC into the teaching of introductory macroeconomics. Distinguishing between economic theories and methodologies, mainly neoclassical and Keynesian, concerning the reasons and policy implications of the GFC, can provide a pedagogical method of teaching introductory macroeconomics during the Greek financial crisis. In this teaching fashion, students are allowed to use their everyday personal experience in determining the most “suitable” theory in rationalizing the crisis. Linking the everyday personal experience of students to the GFC can provide invaluable insights in the development of a syllabus that incorporates the GFC.

The questionnaire was distributed in a hard copy form in the last class of the semester. While keeping the survey anonymous, a set of questions aimed at extracting information about respondents (gender, age, year of study, employment, city of original residence, attendance) was included in the survey. The demographic data is presented in Table 1.

As in Table 1, a total of 121 students (102, 84.3% females and 19, 15.7% males) from the introductory macroeconomics class from a Greek university completed the survey. Since the percentage of male students is small relative to the total, no gender-based comparison of

results is meaningful. Nevertheless, the data distinguishing between female and male responses is provided in the tables for review. The substantial majority of students were between 18-20 years old (107 students, 88.4%) and the same number (107 students, 88.4%) were in the first year of their studies. The substantial majority were also full-time students without any employment (112 students, 92.6%). Sixty-two percent (75 students) of the students reported that Thessaloniki, the city where the survey took place, was their original residence, 18.2% (22 students) stated that they grew up in a small city, while 14.9% (18 students) selected a village as their original residence. Students reported that 64.5% (78 students) attended the introductory macroeconomics classes between 80 to 100% of the time, while 21.5% (26 students) reported attending 60 to 80% of the time; overall, this reflects a very satisfactory attendance rate which provides valuable information.

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IV. PRESENTATION OF SURVEY RESULTS

Prior to the attendance of the introductory macroeconomics course, most students had no or very little knowledge of economics: 35.5% (43 students) had no knowledge, while 47.9% (58 students) had some basic knowledge. Only 16.5% (20 students) had a high level of knowledge and knew economics well enough. The self-reported benefits of studying macroeconomics are, in order of importance: to explain facts to family or friends 64.5 % (78 students), to understand news and newspapers 63.3% (79 students), to pass the exam 62% (75 students), and to use the knowledge in professional life 47.1% (57 students). The introductory macroeconomics class was able to assist students in understanding the GFC, as the “very much” and “a lot” responses received jointly 61.2% (74 students), while the “somewhat” response was answered by 33.1% (40 students). As to whether the introductory macroeconomics course is very useful and mostly useful in understanding the GFC, 95.8% (116 students) of the students responded positively. Students’ satisfaction from the course in explaining the GFC was very positive by 16.5% (20 students), mostly positive 65.3% (79 students) and neither positive of negative 16.5% (20 students). Regarding how students will apply the knowledge gained from introductory macroeconomics, the responses were: in studying 59.5% (72 students), in everyday personal life 58.7% (71 students), in financial decisions 33.1% (40 students), and in professional life 16.5% (20 students).

After completing the introductory macroeconomics course, 25.6% (31 students) know well enough the current situation of the economic crisis in Greece, 54.5% (66 students) have a good level of understanding, while 19% (23 students) know some basics. Regarding the economic policies imposed to Greece from the troika, 24.8% (30 students) stated that the austerity measures were necessary for national survival (they strongly agreed or agreed), 23.1% (28 students) neither agreed nor disagreed, and 52.1% (63 students) disagreed or strongly disagreed. That the burden of the policies was not distributed fairly was argued by an astonishing 81.8% (99 students). Many students believe no matter which political party was in power, it would not have had any impact on the severity of the austerity package (41.3% (50 students), while 44.6% (54 students) were neutral (neither agreed nor disagreed). On the question of whether the government had no option other than to introduce the austerity measures, 64.4% (78 students) both strongly disagreed and disagreed, 23.1% (28 students) neither agreed nor disagreed, and only 12.4% agreed or strongly agreed with there being no other option. Sixty-two percent of the students believe that people should fight against the measures. The crisis is not viewed as an opportunity for Greece to move forward by 38.8% (47 students), while 30.6% (37 students) see the crisis as an opportunity for Greece. Students

appear very pessimistic as 79.4% (106 students) believe that nothing can be done to solve the crisis in Greece, while 86.5% (105 students) insist (as does the majority of the Greek population) that Greece should remain in the Eurozone.

Regarding the austerity measures, 86.7% (105 students) strongly disagreed or disagreed with the reductions in wages and the increase in taxes, 85.1% (103 students) strongly disagreed or disagreed with the reduction in pensions, 66.1% (80 students) strongly disagreed or disagreed with the elimination of the 13th and 14th salary (Christmas, Easter and holiday salary supplements), 74.3% (90 students) strongly disagreed or disagreed with the reduction in public investment, 47.1% (57 students) strongly disagreed or disagreed with the reduction in government expenditure, 79.3% (96 students) strongly disagreed or disagreed with the growth in inequalities, 81.8% (99 students) strongly disagreed or disagreed with the social riots and increase in suicides.

Students strongly disagreed or disagreed with the reduction in military expenditure, as 53% (56 students) responded in this way, 80.2% (56 students) were against loan default, 52.9% (64 students) were in favor of debt forgiveness, and 61.2% (74 students) were against the reduction in public investments, while 45.5% (55 students) neither agreed nor disagreed with the nationalization of the bank. The remaining responses were equally distributed more or less in either side of the fence in this question. Surprisingly, only 55.4% (67 students) were in favor of taxing the wealthy church, and an astonishing 86% (104 students) were in favor in the reduction of corruption. In the last question, 93.4% (113 students) believe that it is important to learn macroeconomics to understand the economic crisis in Greece.

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Students believe that it is not probable that Greece will be forced to exit the Eurozone (54.5% or 66 students). A large percentage of students (48.8% or 59 students) believed that the crisis will last 10 years, while 18.2% (22 students) argued for 5 years, 24% (29 students) stated 50 years and 8.3% (10 students) responded 100 years.

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Students believe that the economic situation of the country compared to last year is: about the same 41.3% (50 students), worse 38.9% (47 students), or a bit better 18.2% (22 students). For the next year, 39.7% (48 students) forecasted that the economic situation for the country will be better, 38.8% (47 students) the same, and 21.4% (26 students) worse. Last year, the personal economic situation of students was the same 52.1% (63 students), better 30.6% (37 students) or worse 17.4% (21 students). Students believe that next year their personal economic situation will be the same 40.5% (49 students), better 33% (39 students) or worse 26.5% (32 students).

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V. ANALYSIS OF SURVEY RESULTS

A large majority of the students surveyed had either no prior knowledge or very little knowledge of economics before studying the introductory macroeconomic class. So, the teaching benefits of incorporating the GFC can be easily realized. How students have applied their knowledge from the subject to “real life”? Interestingly, students wanted mainly to use

their knowledge gained in class to advise family and friends and to understand the news and newspapers. Studying introductory macroeconomics to pass the exam had a high percentage of responses, although lower than the aforementioned responses. The impact of introductory macroeconomics to professional life had only a positive response from less than half of the students. The majority of this group of students saw the benefits of studying macroeconomics as mainly personal and within the inner circle of family and friends, rather than to be used for professional reasons. This may be explained by the fact that the first-year students in the department surveyed consists of students who, in the entrance exams in the university, were examined in classical subjects (ancient Greek, Latin, history etc.) rather than hard sciences. So, it is likely they are not planning to become economists. Nevertheless, an astonishing 93.4% of students argued that it is important to learn macroeconomics to understand the economic crisis in Greece, because 95.8% found the class very useful in understanding the GFC. Students realized that the introductory macroeconomics course was able to assist them in understanding the GFC and were satisfied in the course's explanation of the GFC. After completing the course, students felt they had a good level of understanding of the economic crisis in Greece.

Students believe that the austerity policy measures imposed by the troika were not necessary and the burden was distributed unequally. Students were against every one of the austerity measures. Interesting, there was no strong support for the nationalization of banks, while only just over half were in favor of taxing the church. Nevertheless, students disagreed with the no option to the necessity of austerity, consequently people should fight against these austerity measures. Students were split more or less in their perception that the crisis provides an opportunity to Greece and, generally, they were pessimistic about overcoming the crisis. However, most of these students favored the pursuit of policies without exiting the Eurozone. A large percentage of the students believed that the political party in power would not have had any impact in altering the policy measures imposed, demonstrating a pessimistic view regarding the representation of people's will through the political process.

Overall, most students believe that the economic situation of the country is the same as the previous year. For the following year in comparison with current year, students believe that their personal economic situation will remain the same. Nevertheless, there is some hope that the country and their personal economic situations will be better.

VI. CONCLUSION AND TEACHING RECOMMENDATIONS

The paper deals with a very interesting issue that of teaching introductory macroeconomics in an era of crisis in a country with the GFC hit quite severely. The issues are of importance also because the paper deals with an open debate between the two schools of thought in economic thinking. That extent it is my view that exploratory evidence regarding students' perceptions about the benefits that they gain from introductory macro as taught in their class and their ability to understand real world economic phenomena is of importance. By and large, the literature review endorses that the study of the GFC in introductory macroeconomics using an eclectic approach advances student learning by encouraging students to question and use different theories to support their arguments, by focusing the subject material to current events evolving in real time, and by enriching analytical skills.

What is the impact of the aforementioned Greek students' responses to the introductory macroeconomics curriculum? Clearly, the economic crisis in Greece and the GFC in general, is a teaching moment. For the economics student group surveyed, students are looking forward to gaining understanding of the crisis for personal and inner-circle of family and friends reasons. An eclectic approach in teaching introductory macroeconomics

that incorporates the GFC in a pedagogical way builds up the perception that introductory macroeconomics is necessary and interesting in explaining the GFC. Students appreciate the knowledge gained, and although we do not know the views of the students before enrolling into the subject, we know their level of knowledge of macroeconomics.

Interestingly, students assessed the austerity measures imposed upon the people of Greece by the troika in a substantial negative way. Were the students' negative views on the austerity measures a reflection of how the subject was taught or unaffected by how the subject was taught? Their-Students' everyday personal experience with the crisis and viewing the impact of the crisis on their inner circles of family and friends ~~demonstrates-creates a the~~ conflict ~~of-between expected~~ policy outcomes ~~between-of~~ the austerity measures and personal experience. Students are able to assess and make predictions for the country and their own personal economic situations. Anyone would be hard-pressed, while teaching introductory macroeconomics to make a strong case for the benefits of the austerity measures, as this directly contradicts the "lived experiences" of the students.

In this context, it may be argued that an eclectic approach of different economic theories, mainly neoclassical and Keynesian, at the introductory level is appealing in providing considerable educational value, showing how complex social problems can be. The paper provides evidence of the need to view the available approaches as complements (and not substitutes or even rivals), if we are to provide students with tools to guide them towards a more holistic contextualization of real economic phenomena. An eclectic approach can provide an effective pedagogical way of teaching introductory macroeconomics by allowing students to use their everyday personal experience in determining the most "suitable" theory in explaining the crisis. In this way, instead of teaching introductory economics in an abstract, theoretical and hypothetical way, students carry their "life stories into the classroom" (Figart, 2010, p. 239) to be used as a teaching tool. Students, using their personal experience, are able to assess and contrast theories and policy outcomes in an objective and significant way based on their "lived experiences". We should give our students the voice to express their perspective on the GFC in assessing and evaluating economic theories by conveying theory, policy outcomes and personal experience in concert.

Regarding the limitations of the study as stated in the methodology section, survey practitioners advise us to avoid generalizations across time and space due to the sensitive information from individual experiences. Further research may include surveying the same students at their last year of study. A comparison with what fourth-year students think will be thought-provoking. A different methodology can be adopted by establishing a control group and a treatment group and testing a specific hypothesis.

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TABLE NO.2: RESPONSES ABOUT THE MACROECONOMICS COURSE

Questions	Gender	Did not know anything	Knew some basics	Had good level	Knew it well enough	Knew it perfectly well
2.1 How could you describe your level of knowledge in Macroeconomics before starting the course of Macroeconomics at the University?	Total	43 (35,5%)	58 (47,9%)	15 (12,4%)	5 (4,1%)	0 (0,0%)
	Female	38 (37,3%)	50 (49,0%)	11 (10,8%)	3 (2,9%)	0 (0,0%)
	Male	5 (26,3%)	8 (42,1%)	4 (21,1%)	2 (10,5%)	0 (0,0%)
2.2 The benefits of studying Macroeconomics at the University for you personally?		Yes	No			
1. I can pass exam	Total	75 (62,0%)	46 (38,0%)			
	Female	62 (60,8%)	40 (39,2%)			
	Male	13 (68,4%)	6 (31,6%)			
2. I can understand news & newspapers	Total	79 (65,3%)	42 (34,7%)			
	Female	68 (66,7%)	34 (33,3%)			
	Male	11 (57,9%)	8 (42,1%)			
3. I can explain facts to my family or friends	Total	78 (64,5%)	43 (35,5%)			
	Female	68 (66,7%)	34 (33,3%)			
	Male	10 (52,6%)	9 (47,4%)			
4. I can use my knowledge in professional life	Total	57 (47,1%)	64 (52,9%)			
	Female	48 (47,1%)	54 (52,9%)			
	Male	9 (47,4%)	10 (52,6%)			
5. Other	Total	2 (1,7%)	119 (98,3%)			
	Female	2 (2,0%)	100 (98,0%)			
	Male	0 (0,0%)	19 (100,0%)			
Questions	Gender	Nothing	A little bit	Somewhat	A lot	Very much
2.3 How much have you learnt about the economic crisis in Greece since you started the course of Macroeconomics?	Total	1 (0,8%)	6 (5,0%)	40 (33,1%)	60 (49,6%)	14 (11,6%)
	Female	1 (1,0%)	5 (4,9%)	28 (27,5%)	56 (54,9%)	12 (11,8%)
	Male	0 (0,0%)	1 (5,3%)	12 (63,2%)	4 (21,1%)	2 (10,5%)
		Not useful at all	Not useful so much	Neither useless nor useful	Mostly useful	Very useful
2.4 Do you think that Macroeconomics is useful	Total	0 (0,0%)	0 (0,0%)	5 (4,1%)	62 (51,2%)	54 (44,6%)

course for understanding the economic crisis in Greece?	Female	0 (0,0%)	0 (0,0%)	4 (3,9%)	52 (51,0%)	46 (45,1%)
	Male	0 (0,0%)	0 (0,0%)	1 (5,3%)	10 (52,6%)	8 (42,1%)
		Very Negative	Mostly Negative	Neither positive nor negative	Mostly Positive	Very Positive
2.5 Please rate your level of satisfaction from the course of Macroeconomics in studying the economic crisis in Greece	Total	0 (0,0%)	2 (1,7%)	20 (16,5%)	79 (65,3%)	20 (16,5%)
	Female	0 (0,0%)	2 (2,0%)	17 (16,7%)	67 (65,7%)	16 (15,7%)
	Male	0 (0,0%)	0 (0,0%)	3 (15,8%)	12 (63,2%)	4 (21,1%)
2.6 In what way have you applied your knowledge of Macroeconomics in real life already?	Gender	Yes	No			
1. In my studying	Total	72 (59,5%)	49 (40,5%)			
	Female	63 (61,8%)	39 (38,2%)			
	Male	9 (47,4%)	10 (52,6%)			
2. In my everyday personal life	Total	71 (58,7%)	50 (41,3%)			
	Female	61 (59,8%)	41 (40,2%)			
	Male	10 (52,6%)	9 (47,4%)			
3. In making financial decisions	Total	40 (33,1%)	81 (66,9%)			
	Female	33 (32,4%)	69 (67,6%)			
	Male	7 (36,8%)	12 (63,2%)			
4. In my professional life	Total	20 (16,5%)	101 (83,5%)			
	Female	17 (16,7%)	85 (83,3%)			
	Male	3 (15,8%)	16 (84,2%)			
5. Other	Total	6 (5,0%)	115 (95,0%)			
	Female	5 (4,9%)	97 (95,1%)			
	Male	1 (5,3%)	18 (94,7%)			
Questions	Gender	Do not know anything	Know some basics	Have good level	Know it well enough	Know it perfectly
2.7 After the course of Macroeconomics at the University how would you rate your understanding of current situation of the economic crisis in Greece?	Total	0 (0,0%)	23 (19,0%)	66 (54,5%)	31 (25,6%)	1 (0,8%)
	Female	0 (0,0%)	20 (19,6%)	55 (53,9%)	27 (26,5%)	0 (0,0%)
	Male	0 (0,0%)	3 (15,8%)	11 (57,9%)	4 (21,1%)	1 (5,3%)
2.8 I will read out some comments people have said about the economic policies. To what extent do you agree or disagree with each of them after the Macroeconomics course at the University?	Gender	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

a. The austerity measures are necessary for our national survival	Total	26 (21,5%)	37 (30,6%)	28 (23,1%)	28 (23,1%)	2 (1,7%)
	Female	20 (19,6%)	31 (30,4%)	26 (25,5%)	23 (22,5%)	2 (2,0%)
	Male	6 (31,6%)	6 (31,6%)	2 (10,5%)	5 (26,3%)	0 (0,0%)
b. The burden of the policies is not distributed fairly to all citizens	Total	8 (6,6%)	3 (2,5%)	11 (9,1%)	48 (39,7%)	51 (42,1%)
	Female	7 (6,9%)	1 (1,0%)	9 (8,8%)	38 (37,3%)	47 (46,1%)
	Male	1 (5,3%)	2 (10,5%)	2 (10,5%)	10 (52,6%)	4 (21,1%)
c. If another party was in power, the austerity package would be less severe	Total	13 (10,7%)	37 (30,6%)	54 (44,6%)	14 (11,6%)	3 (2,5%)
	Female	12 (11,8%)	31 (30,4%)	47 (46,1%)	10 (9,8%)	2 (2,0%)
	Male	1 (5,3%)	6 (31,6%)	7 (36,8%)	4 (21,1%)	1 (5,3%)
d. The government had no option but to introduce these policies	Total	27 (22,3%)	51 (42,1%)	28 (23,1%)	13 (10,7%)	2 (1,7%)
	Female	20 (19,6%)	46 (45,1%)	26 (25,5%)	8 (7,8%)	2 (2,0%)
	Male	7 (36,8%)	5 (26,3%)	2 (10,5%)	5 (26,3%)	0 (0,0%)
e. People should fight against the measures	Total	7 (5,8%)	11 (9,1%)	28 (23,1%)	50 (41,3%)	25 (20,7%)
	Female	6 (5,9%)	11 (10,8%)	22 (21,6%)	43 (42,2%)	20 (19,6%)
	Male	1 (5,3%)	0 (0,0%)	6 (31,6%)	7 (36,8%)	5 (26,3%)
f. The crisis can be seen as an opportunity for Greece to move forward	Total	15 (12,4%)	32 (26,4%)	37 (30,6%)	29 (24,0%)	8 (6,6%)
	Female	14 (13,7%)	29 (28,4%)	32 (31,4%)	20 (19,6%)	7 (6,9%)
	Male	1 (5,3%)	3 (15,8%)	5 (26,3%)	9 (47,4%)	1 (5,3%)
g. There is nothing anybody can do to solve Greece's economic crisis	Total	56 (46,3%)	40 (33,1%)	17 (14,0%)	5 (4,1%)	3 (2,5%)
	Female	47 (46,1%)	37 (36,3%)	11 (10,8%)	5 (4,9%)	2 (2,0%)
	Male	9 (47,4%)	3 (15,8%)	6 (31,6%)	0 (0,0%)	1 (5,3%)
			Yes	No		
2.9 After studying the Course of Macroeconomics do you believe that Greece	Total	16 (13,2%)	105 (86,8%)			

should withdraw voluntarily from the Eurozone?	Female	12 (11,8%)	90 (88,2%)			
	Male	4 (21,1%)	15 (78,9%)			
2.10 After the Macroeconomics course at the University I would like you to tell me whether you agree or disagree with each of the following measures that were announced recently and regarding the the outcomes of the austerity measures:		Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. Reduction in wages and increase in taxes	Total	47 (38,8%)	58 (47,9%)	13 (10,7%)	3 (2,5%)	0 (0,0%)
	Female	40 (39,2%)	51 (50,0%)	9 (8,8%)	2 (2,0%)	0 (0,0%)
	Male	7 (36,8%)	7 (36,8%)	4 (21,1%)	1 (5,3%)	0 (0,0%)
b. Reduction in pensions	Total	35 (28,9%)	68 (56,2%)	13 (10,7%)	3 (2,5%)	2 (1,7%)
	Female	30 (29,4%)	59 (57,8%)	10 (9,8%)	3 (2,9%)	0 (0,0%)
	Male	5 (26,3%)	9 (47,4%)	3 (15,8%)	0 (0,0%)	2 (10,5%)
c. Elimination of 13-14 salary	Total	31 (25,6%)	49 (40,5%)	28 (23,1%)	10 (8,3%)	3 (2,5%)
	Female	27 (26,5%)	40 (39,2%)	23 (22,5%)	9 (8,8%)	3 (2,9%)
	Male	4 (21,1%)	9 (47,4%)	5 (26,3%)	1 (5,3%)	0 (0,0%)
d. Reduction in public investments	Total	43 (35,5%)	47 (38,8%)	16 (13,2%)	14 (11,6%)	1 (0,8%)
	Female	35 (34,3%)	42 (41,2%)	15 (14,7%)	10 (9,8%)	0 (0,0%)
	Male	8 (42,1%)	5 (26,3%)	1 (5,3%)	4 (21,1%)	1 (5,3%)
e. Reduction in government expenditure	Total	23 (19,0%)	34 (28,1%)	29 (24,0%)	30 (24,8%)	5 (4,1%)
	Female	17 (16,7%)	29 (28,4%)	26 (25,5%)	26 (25,5%)	4 (3,9%)
	Male	6 (31,6%)	5 (26,3%)	3 (15,8%)	4 (21,1%)	1 (5,3%)
f. Growth in inequalities	Total	57 (47,1%)	39 (32,2%)	21 (17,4%)	3 (2,5%)	1 (0,8%)
	Female	52 (51,0%)	31 (30,4%)	18 (17,6%)	1 (1,0%)	0 (0,0%)
	Male	5 (26,3%)	8 (42,1%)	3 (15,8%)	2 (10,5%)	1 (5,3%)
g. Social riots and increase in suicides	Total	71 (58,7%)	28 (23,1%)	14 (11,6%)	3 (2,5%)	5 (4,1%)
	Female	65 (63,7%)	22 (21,6%)	10 (9,8%)	3 (2,9%)	2 (2,0%)

	Male	6 (31,6%)	6 (31,6%)	4 (21,1%)	0 (0,0%)	3 (15,8%)
2.11 After attending the course of Macroeconomics at the University I would like you to tell me whether you agree or disagree with each of the following proposals:	Gender	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. Reduction in military expenditure	Total	17 (14,0%)	39 (32,2%)	35 (28,9%)	22 (18,2%)	8 (6,6%)
	Female	12 (11,8%)	33 (32,4%)	32 (31,4%)	19 (18,6%)	6 (5,9%)
	Male	5 (26,3%)	6 (31,6%)	3 (15,8%)	3 (15,8%)	2 (10,5%)
b. Default	Total	40 (33,1%)	57 (47,1%)	15 (12,4%)	7 (5,8%)	2 (1,7%)
	Female	34 (33,3%)	50 (49,0%)	12 (11,8%)	5 (4,9%)	1 (1,0%)
	Male	6 (31,6%)	7 (36,8%)	3 (15,8%)	2 (10,5%)	1 (5,3%)
c. Debt forgiveness	Total	2 (1,7%)	18 (14,9%)	37 (30,6%)	39 (32,2%)	25 (20,7%)
	Female	1 (1,0%)	16 (15,7%)	33 (32,4%)	33 (32,4%)	19 (18,6%)
	Male	1 (5,3%)	2 (10,5%)	4 (21,1%)	6 (31,6%)	6 (31,6%)
d. Reduction in public investments	Total	33 (27,3%)	41 (33,9%)	26 (21,5%)	19 (15,7%)	2 (1,7%)
	Female	27 (26,5%)	37 (36,3%)	22 (21,6%)	16 (15,7%)	0 (0,0%)
	Male	6 (31,6%)	4 (21,1%)	4 (21,1%)	3 (15,8%)	2 (10,5%)
e. Nationalization of banks	Total	8 (6,6%)	18 (14,9%)	55 (45,5%)	29 (24,0%)	11 (9,1%)
	Female	5 (4,9%)	15 (14,7%)	50 (49,0%)	24 (23,5%)	8 (7,8%)
	Male	3 (15,8%)	3 (15,8%)	5 (26,3%)	5 (26,3%)	3 (15,8%)
f. Taxing the church	Total	10 (8,3%)	11 (9,1%)	33 (27,3%)	26 (21,5%)	41 (33,9%)
	Female	9 (8,8%)	7 (6,9%)	30 (29,4%)	23 (22,5%)	33 (32,4%)
	Male	1 (5,3%)	4 (21,1%)	3 (15,8%)	3 (15,8%)	8 (42,1%)
g. Reduction in corruption	Total	3 (2,5%)	4 (3,3%)	10 (8,3%)	26 (21,5%)	78 (64,5%)
	Female	3 (2,9%)	1 (1,0%)	8 (7,8%)	25 (24,5%)	65 (63,7%)
	Male	0 (0,0%)	3 (15,8%)	2 (10,5%)	1 (5,3%)	13 (68,4%)

		Not important at all	Not important so much	Neither important nor important	Mostly important	Very important
2.12 How important do you think is to learn Macroeconomics for understanding the economic crisis in Greece?	Total	0 (0,0%)	2 (1,7%)	6 (5,0%)	65 (53,7%)	48 (39,7%)
	Female	0 (0,0%)	1 (1,0%)	5 (4,9%)	54 (52,9%)	42 (41,2%)
	Male	0 (0,0%)	1 (5,3%)	1 (5,3%)	11 (57,9%)	6 (31,6%)

TABLE NO.3: RESPONSES REGARDING GREECE EXITING THE EUROZONE.

Questions	Gender	Not probable	Mostly not probable	Neither not probable or mostly Not probable	Mostly probable	Probable
How probable do you consider the scenario of Greece being forced out of the Eurozone?	Total	19 (15,7%)	47 (38,8%)	39 (32,2%)	13 (10,7%)	3 (2,5%)
	Female	17 (16,7%)	43 (42,2%)	32 (31,4%)	9 (8,8%)	1 (1,0%)
	Male	2 (10,5%)	4 (21,1%)	7 (36,8%)	4 (21,1%)	2 (10,5%)

TABLE NO.4: RESPONSES REGARDING HOW LONG THE CRISIS WOULD LAST.

Questions	Gender	1 year	5 years	10 years	50 years	100 years
How much time do you think will Greece require in order to exit from the current economic crisis?	Total	1 (0,8%)	22 (18,2%)	59 (48,8%)	29 (24,0%)	10 (8,3%)
	Female	1 (1,0%)	17 (16,7%)	54 (52,9%)	23 (22,5%)	7 (6,9%)
	Male	0 (0,0%)	5 (26,3%)	5 (26,3%)	6 (31,6%)	3 (15,8%)

TABLE NO.5: RESPONSES REGARDING THE IMPACT OF THE CRISIS.

Questions	Gender	Much worse	A bit worse	About the same	A bit better	Much better (5)
Compared to last year, you believe that the economic situation of the country is:	Total	18 (14,9%)	29 (24,0%)	50 (41,3%)	22 (18,2%)	2 (1,7%)
	Female	15 (14,7%)	22 (21,6%)	45 (44,1%)	18 (17,6%)	2 (2,0%)
	Male	3 (15,8%)	7 (36,8%)	5 (26,3%)	4 (21,1%)	0 (0,0%)
What are your expectations for the economic situation of the country next year? Do you believe that the situation will be:	Total	13 (10,7%)	13 (10,7%)	47 (38,8%)	44 (36,4%)	4 (3,3%)
	Female	9 (8,8%)	11 (10,8%)	38 (37,3%)	41 (40,2%)	3 (2,9%)
	Male	4 (21,1%)	2 (10,5%)	9 (47,4%)	3 (15,8%)	1 (5,3%)
In the last year, your personal economic situation was:	Total	6 (5,0%)	15 (12,4%)	63 (52,1%)	33 (27,3%)	4 (3,3%)
	Female	4 (3,9%)	14 (13,7%)	54 (52,9%)	28 (27,5%)	2 (2,0%)
	Male	2 (10,5%)	1 (5,3%)	9 (47,4%)	5 (26,3%)	2 (10,5%)
Do you believe that your personal economic situation next year will be:	Total	10 (8,3%)	22 (18,2%)	49 (40,5%)	35 (28,9%)	5 (4,1%)
	Female	9 (8,8%)	17 (16,7%)	41 (40,2%)	31 (30,4%)	4 (3,9%)
	Male	1 (5,3%)	5 (26,3%)	8 (42,1%)	4 (21,1%)	1 (5,3%)