

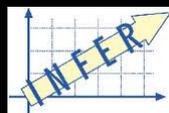
# 14th INFER Annual Conference

10-13 May, 2012

Faculty of Economics, University of Coimbra, Portugal

Young People Understanding about Economics<sup>1</sup>

Abigail Ferreira and Celeste Amorim Varum



<sup>1</sup>This presentation is included in the research project "Economicando" (PTDC/EGE-ECO/100923/2008), financed by FEDER funds through the Programa Operacional Fatores de Competitividade - COMPETE and by national funds through the FCT - Fundação para a Ciência e Tecnologia.

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**Economic Literacy**

- The present crisis has highlighted the importance for citizens to possess more knowledge about the functioning of the economy and about the effects of their decisions for themselves and for society.
- One of the most effective ways to help consumers is to empower them with information and ensure that people are able to understand how to put this information into practice – the case for economic education

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### Economic Education

- Private benefits – It gives our students the building blocks for a successful financial future. It empowers consumers by giving them the knowledge and tools to improve their economic well being, helping people develop the skills to meet their financial and personal objectives, including savings, financial stability, home ownership, higher education, or retirement'. (Santomero, 2003)
- Public benefits – 'invisible hand works better when the agents of the economy are economically and financially literate. The economy performs better when its participants are well-informed because well-informed participants make decisions that enhance resource allocation, and thus contribute to rising efficiency, productivity, and living standards' (NCEE, 2003; Stern, 2002)

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### Economic Literacy – What it means?

- Kind of knowledge that is required to accomplish a set of tasks related to economic matters, for example, to decide which job to take, to manage income, to pay a bill, to send a check, to understand a bank statement or a balance sheet.
- '...a capacity to apply reasoning processes when making decisions about using scarce resources. Economic reasoning implies having the capacity to: define the choice-related problems which confront us, identify and rank criteria or goals which shape our choices, use knowledge (facts and concepts) to analyse the probable consequences of choosing each alternate, and take action based upon the evaluation of costs and benefits of various alternate choices'. (Miller, 1988)

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### Economic Literacy: a continuous and sequential learning process

- As a long-term solution to the gap in economic and financial knowledge, economic education programs should be aimed at school children
- Broad-based economic education initiatives for school-age children will translate into a society of financially literate adults.
- Economic education can help children to develop a useful way of thinking about basic issues and personal and social decisions, as well as, how to play a more active role in the economic world.
- 'If young children are exposed early to the fundamentals of economics, they will be better able to comprehend and apply these principles when they are taught in later years'. Kourilsky (1993)

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### Economic Literacy – How to acquire?

- Formal learning - through specific programs and teaching activities directed for school children
- Non-formal learning – Via the interaction with the environment in which children operate. It is from these interactions that they will establish their perceptions of economic reality. Throughout this process, all kinds of sources of information play a crucial role, since they are readily assimilated, whether through their school teachers, parents or adults in general, the media or their own observations.

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Economic Literacy: a continuous and sequential learning process

- There is in the literature a debate regarding the interest and capacity of children to understand economic concepts, about which topics are more appropriate to teach to children, and even about if it is appropriate to teach economics to children.

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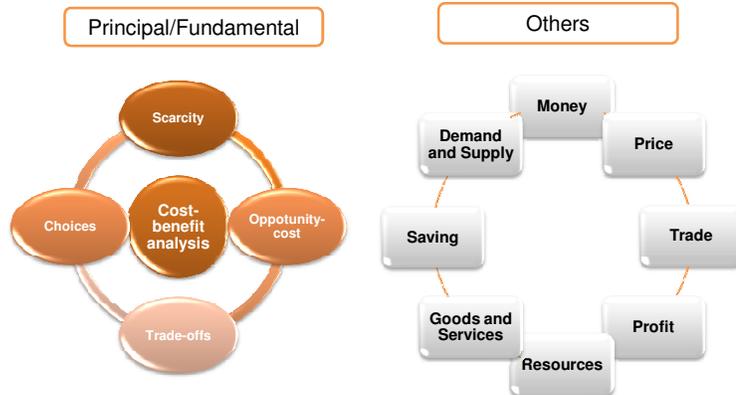
Economic Literacy: a continuous and sequential learning process

- A vast line of research provides evidence on the effect of economic programs among children at the elementary level.
- Most of these studies have been conducted in the U.S. and the majority concludes that young students are able to learn and understand a variety of economic concepts.
- These studies focus on the efficiency of certain teaching programs. There is however a demand for concrete evidence demonstrating the general level of economic knowledge of elementary students.

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Economic Literacy: What themes they can and should  
understand



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Our study

1. Provides evidence of economic literacy among elementary students which had not gone under any formal teaching program in economics.
2. Examines why some third and fourth grade students are more knowledgeable in economics than others.
3. Examines student's perceptions, interest and attitudes about Economics

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### Data

- Data collected via Questionnaire
- 587 students of 3<sup>rd</sup> and 4<sup>th</sup> grades (8-12 years old)
- 7 elementary schools in the region of Aveiro
- Questionnaire:
  - Developed with basis on the analysis of surveys and tests internationally used for access the level of economic knowledge:
    - The Standards in Economics Survey – Economic Literacy Test
    - Economic Literacy Survey
    - Test of Economic Literacy

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### Data

- Questionnaire:
  - Developed with basis on the analysis and study of surveys and tests internationally used for access the level of economic knowledge:
    - The Standards in Economics Survey – Economic Literacy Test
    - Economic Literacy Survey
    - Test of Economic Literacy
  - Includes questions on fundamental economics concepts, microeconomic concepts, macroeconomic concepts and concepts of international economics distributed in 6 major areas
  - Total of 31 questions: 26 multiple-choice questions of their knowledge of economics and 5 questions of their opinions, interest and attitudes
  - Also some questions on demographic data (age, class and school attended, year of schooling and parents' professional activity)

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### Data

School	Nº Respondents	Gender		Grade		Average size class
		Female	Male	3º	4º	
A	168	83	85	74	94	25
B	163	79	84	95	68	24
C	52	26	26	23	29	18
D	85	45	40	40	45	22
E	19	10	9	12	7	11
F	62	28	34	23	39	21
G	38	17	21	13	25	22
<b>Total</b>	<b>587</b>	<b>288</b>	<b>299</b>	<b>280</b>	<b>307</b>	<b>---</b>

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### Empirical Results

- Level of Economic Understanding

	Statistics			
	Mean	Standard deviation	Maximum value	Minimum value
<b>General</b>	<b>58,1</b>	20,3	96,2	0,0

- Percentage of respondents by number of correct answers

Question number	0-6	7-13	14-20	21-26
<b>Respondents (%)</b>	6,3%	29,5%	<b>49,1%</b>	15,2%

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### Descriptive Analysis

- **Factors that explained the economic knowledge differences between children – OLS Estimation**
- Personal characteristics
  - Age in years
  - Age squared
  - Gender (M=1; F=0)
- School context
  - Grade (1 = 3th grade; 2 = 4th grade)
  - Class (dummy by school and class –28 dummies)
  - Class size
- Socioeconomic context
  - Par\_Emp (=1 if parents employed; 0 = if at least one parent is unemployed)
  - Father\_Emp (1 = if low qualification; 2 = if medium qualification; 3 = if high qualification)
  - Mother\_Emp (1 = if low qualification; 2 = if medium qualification; 3 = if high qualification)
- Familiarization with Economics (1 = yes; 0 = no)
  - Banc\_Acc (Have bank account)
  - Talk\_Econ\_Sav (Parents talk about economy or the importance of savings)

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### Major findings

- Non linear relationship between age and economic knowledge
- Some variability between classes in the same school
  - Three factors that seem to stand out:
    - Signal for classes of GRADE 3 are mostly negative – relationship with age
    - More or less active role of the teacher in the dissemination and discussion of issues related to economics with their students
    - Class management policy of certain schools
- Class size is also a factor explaining the strong performance
- Individuals whose parents have a professional activity implying higher level of qualifications tend to have a better result in ELQ.
- Positive and significant impact of the practice of talking with parents about economics issues and the importance of savings

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#### Interest and attitudes towards economics

- 85% shows interest in know more about Economics
- 83% of the respondents stated that parents often talk to them about the importance of saving
- 59%of the respondents stated that parents often talk to them about economic matters
- 70% of respondents state that have a bank account where they put their savings
- When questioned: 'Do you have an idea of how the current crisis will affect your family?'
  - only 50% of the children reported how the crisis is expected to affect his family
  - 12% answer that 'I think it does not affect my family'
- **Respondents ideas of how the crisis affect their family:**
  - Lack of money to buy essential goods(51,7%)
  - The need to save more (16,7%)
  - Unemployment (9,2%)
  - Rising prices (9,2%)
  - Lower wages (7,8%)
  - Higher taxes (3,4%)
  - Other (1,3%; ex. migration; the needf or parents to work more hours)

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#### Conclusions

- Knowledge about economics will help citizens to understand better the complex reality surrounding them and, eventually, to take more efficient decisions.
- Economic literacy results from a continuous and sequential learning process, which starts developing in childhood.
- The literature in general supports that young people need to become familiar with economic matters.
- What is the level of economic knowledge of our elementary school children?
  - Elementary school children have a relatively low level of economic literacy
  - Variables that explain the differences in economic knowledge: age, class size, qualification level of parents jobs, the practice of talking with parents about savings and economic matters

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#### Conclusions

- The current crisis has drawn attention of young people about economic issues and our results show that they are really concerned about its effects.
- Despite the children still scarce understanding about the impact of the present crisis upon their families, the results reveals that a significant part of these shows a great interest and desire to learn more about the economy.
- Inclusion of economic themes since elementary school has high importance. How to do this?
  - Not the inclusion of an isolate discipline at the school curriculum
  - Via the introduction of this subject in other disciplines (economic examples in mathematic exercises, introduction of texts dealing with the economy in the reading disciplines, discussion of issues related to economic environment and context in social studies)
- Teachers and even parents need to develop a solid understanding of the economy through courses / training programs because we can not expect that our students or children learn what teachers and parents do not know (Allgood and Walstad, 1999).

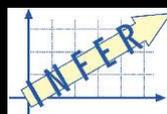
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