OECD-BANK OF ITALY SYMPOSIUM ON FINANCIAL LITERACY: IMPROVING FINANCIAL EDUCATION EFFICIENCY
BEHAVIORAL ECONOMICS AND FINANCIAL EDUCATION

FINANCIAL EDUCATION
CAN ECONOMIC PSYCHOLOGY AND BEHAVIOURAL ECONOMICS HELP TO IMPROVE IT?

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FERREIRA, LIMA, COUTINHO & PADILHA ROMA-OECD-2010
EDUCATION, MIND AND BEHAVIOUR – WHERE WE STAND

1. trouble processing information
2. mental operations anchored on emotional factors
3. **different mental systems** [**System 1** and **System 2**]
4. **hot and cold selves**
5. excessive optimism
6. cognitive dissonance
7. group behaviour
8. different perceptions of reality
9. **reason x emotion** – “*reason is a slave to emotion...*”
10. cognitive and emotional limitations [perception, memory and judgment of data], mental shortcuts [*heuristics*], biases and systematic errors
ECONOMIC PSYCHOLOGY OR BEHAVIOURAL ECONOMICS
– IS THERE A DIFFERENCE?
- economic behaviour and decision-making
- economic science expanded
  - Gabriel Tarde - 1881
  - Thorstein Veblen - 1899
- George Katona – World War II / 1975
- Herbert Simon – Nobel – 1978 → bounded rationality
- Daniel Kahneman [& Amos Tversky] – Nobel – 2002 → heuristics and biases, Prospect Theory
- Richard Thaler – 1980
- XXI century – EMOTIONS – neuroscience
  - G. Loewenstein, P. Slovic, C. Camerer, M. Rabin, D. Laibson...
SOME HEURISTICS [PETER EARL]

- Heuristics and biases in acquiring information
  - availability bias
  - selective perception
  - concrete vs. abstract, statistical information
  - framing effects

- Heuristics and biases in processing information
  - small probabilities = zero; large probabilities = certainties
  - poor understanding of compound probabilities
  - excessive optimism over future capacities
  - impulse prevailing over reflection
  - vulnerability to social pressure
  - failure to use consistent judgmental strategy over repeated cases
SOME HEURISTICS [PETER EARL]

- Heuristics and biases in choice
  - sunk cost bias
  - endowment effect
  - illusion of control
  - wishful thinking
  - expensive self control strategies

- Post-choice heuristics and biases
  - gambler’s fallacy
  - attribution bias
  - memory distortions
  - hindsight bias
FINANCIAL EDUCATION AND ECONOMIC PSYCHOLOGY
– A PROMISING DIALOG

- similar goal → help citizens to improve their economic and financial decisions

- behaviour is necessarily at stake when one considers education, learning, changing habits, communication etc.

So:

- programmes must address the automatic mental system – and impulses/emotions – if they mean to actually change behaviour

- conveying technical information alone rarely gets to the point

- necessary attention to how people process information too
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FINANCIAL EDUCATION AND ECONOMIC PSYCHOLOGY – A PROMISING DIALOG

1. IN ACTION - THE BRAZILIAN PILOT PROGRAMME

ENEF-Estratégia Nacional de Educação Financeira – a proposal for a financial education programme

- federal government and ngo’s
- **pilot version** → high school students
- book → can be used by teachers of any subject
- 72 *learning opportunities*

INNOVATION:

- economic psychology / behavioural economics *blinkers*
1. IN ACTION - THE BRAZILIAN PILOT PROGRAMME

ENEF - Estratégia Nacional de Educação Financeira – a proposal for a financial education programme
- content of the book [BRASIL COREMEC, 2010]
  - financial aspects of daily life situations (short, medium and long term)
  - family and social life
  - personal belongings
  - work
  - entrepreneurship
  - projects
  - public goods
  - national and international economics
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**ENEF**-Estratégia Nacional de Educação Financeira – a proposal for a financial education programme
- content of the book [BRASIL COREMEC, 2010]
  - economic psychology / behavioural economics *blinkers* on:
  - mental accounting
  - intertemporal choice
  - anchoring and framing
  - impulsive buying
  - the role of illusions
  - affective forecasting related to consumption
  - group pressure
  - marketing traps

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- **assumption**: technical information on finance is not enough to actually change behaviour
- **because**:
  - bounded rationality, with anomalies and inconsistencies in economic behaviour, biases in perception, memory and judgement of data
  - influence of emotions on decision-making
- **goal**:
  - raise awareness, offer favourable conditions to the appearance of insights both over systematic errors and antidotes to them, trigger discussions on the issue, puzzle...
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- **BLINKER:**
- example on budget, writing down expenses, and saving:

Another common mistake is not to have control over the money saved. To avoid spending on other things the money you have saved when you did not have that snack, what about putting it away in an envelope where you can write down the name of your goal – “new sneakers”? This is a good technique because when we name the money, we respect more what we intend to do with it. It is important to have discipline and patience, sticking to our goal. Otherwise, we may forget why we have been saving money, and decide to spend it on impulse, thus jeopardizing our planning. We can decide to change our project at any time and spend the money we had been saving, but should beware of what we are doing. (p.19)
1. IN ACTION - THE BRAZILIAN PILOT PROGRAMME

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- BLINKER:
- example on credit:

Remember that everything in life is finite... Not only money, but time, efforts, energy, health, and even life itself! This is why making these choices is unavoidable – there is no way you can have it all, all the time. At such moments, lowering your expectations might be the smart thing to do! It is not about being mediocre, but rather stopping tormenting yourself over impossible unfeasible goals, while you concentrate your energy on what you can actually achieve. (p.29)
1. IN ACTION - THE BRAZILIAN PILOT PROGRAMME

**ENEF**-Estratégia Nacional de Educação Financeira – a proposal for a financial education programme

- **BLINKER:**

- **example on consuming:**

Sometimes we wonder whether spending money on something is important or not. Do we really need that? How can we decide about it? Here is one hint: don’t buy it immediately, but rather allow yourself a brief interval, count up to 100, leave the store, or wait to purchase it the next day. This really works. If it was not important, but rather guided by impulse, using these strategies pushes the impulse aside and in general we will not buy something when we really did not need it. (p.69)
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- BLINKER:

- example on credit:

The use of cards or checks stimulates further spending, more than we would had we been using cash – this has already been confirmed by several studies. It seems that watching the money actually leaving the wallet is felt to be more “painful”, while using credit or debt cards seems painless. The same goes for filling a check. After all, away from the eyes... (p.83)
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- BLINKER:
- example on the perspective of buying a computer:

1. You are not forced to always try and get as much money as possible. The cost of a choice is not always measured by money. Happiness, well-being and health may be more important too. Don’t forget that happiness implies sacrifices and giving up as well, so be careful when you exchange a greater happiness later on for a little immediate satisfaction. Just be aware of the costs involved and decide what is best for you in each situation, calculating well the cost of your decisions. (p.116)
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- BLINKER:
- example of brief explanations on psychological ‘traps’, on consumption:

  **Focalism** – when I imagine, NOW, what I will be feeling when I actually have the product, I am dedicating all my attention to this subject, therefore

  I will suppose that I will be very happy, or not, when I do buy it. However, if I wind up buying it, that is going to happen in another moment, when I will have other concerns and feelings in mind, and there is no guarantee that I will feel the same as I had previously supposed I would. That is, focus changes (p.130).
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- BLINKER:

- example of brief explanations on psychological ‘traps’, on consumption:

  Difference between the "hot self" and the "cold self" – when I am burning with the desire to have an object, I lend this object the power to make me the happiest person in the world, the most powerful and beautiful etc. “I’ll be amazing when I wear this shirt”, “This mobile is more than perfect”, and so on. Later on, though, when I really purchase it, I realize that nothing has changed, I am still the same person and all. “Oh boy, that wasn’t all the success that I had anticipated.” It is similar to going grocery shopping when one is hungry (“hot”), or after eating (“cold”). Usually, people who go to the supermarket hungry will buy much more products than those who go in a more serene state. (p.130)
2. IN DEBATE – CHOICE ARCHITECTURE AND POLICY-MAKING

Assumptions
- debatable efficacy of education, awareness and empowerment
- mounting evidence on systematic errors by decision-makers
- hard to learn with experience (scarce opportunities and/or biases)
- a “seemingly self-destructive side of human behavior”
- most common sources of mistakes: lack of information or insight, including self-insight, limited computational ability, self-control and incapacity of implementing changes in spite of having the knowledge that would theoretically allow it
FINANCIAL EDUCATION AND ECONOMIC PSYCHOLOGY – A PROMISING DIALOG

2. IN DEBATE – CHOICE ARCHITECTURE AND POLICY-MAKING

[light or libertarian paternalism, asymmetric paternalism]

Therefore: policies ought to help make those choices more successful

How: NUDGES

- selection and presentation of better default options in the first place
- careful designing strategies to encourage better decision-making by turning limitations into advantages
- respecting freedom of choice [strategies guarantee availability of other alternatives]
But is choice architecture the only way out??

Or are there other alternatives to help people to get insights into how they actually behave, where the dangerous traps are (as far as psychological shortcomings go), and how they could improve these skills?

- In several instances “nudges” are quite helpful → using them might make the ultimate difference

Yet, can you learn from experience if you are [too] often nudged?
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3. IN THE FUTURE – AN INTERACTIVE MUSEUM OF ECONOMIC PSYCHOLOGY TO FURTHER DEVELOP FINANCIAL EDUCATION IN BRAZIL [AND OTHER COUNTRIES]

THE COLLECTION:
- displayed on different electronic formats – text, photos, audio, video, simulators, games:
  1. basic notions on economic psychology/behavioural economics, decision-making and systematic errors [short explanations and practical examples of heuristics and biases]
  2. academic and scientific production
  3. interviews, testimonies and stories by users/visitors
  4. “antidotes” against systematic errors and excessive consumption
  5. examples of choice architecture

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3. IN THE FUTURE – AN INTERACTIVE MUSEUM OF ECONOMIC PSYCHOLOGY TO FURTHER DEVELOP FINANCIAL EDUCATION IN BRAZIL [AND OTHER COUNTRIES]

THE COLLECTION:

6. suggestions for policy-making
7. games, music, sketches and plays
8. links for other relevant websites
9. research, debates and symposia
10. history of the field [economic psychology, behavioural economics and finance, neuroeconomics]

OBS.: collection permanently increased by users and specialists, constant adding of new information and data → updated tool for psychological-economic orientation for individuals and groups
3. IN THE FUTURE – AN INTERACTIVE MUSEUM OF ECONOMIC PSYCHOLOGY TO FURTHER DEVELOP FINANCIAL EDUCATION IN BRAZIL [AND OTHER COUNTRIES]

GOALS:

1. protect individuals, groups and organizations from errors and offer tools to better manage their economic decisions with responsibility and autonomy
2. disseminate warnings on psychological traps in mass scale
3. contribute to micro finance initiatives
4. encourage interactivity, exchange of ideas and experience among users/visitors, specialists and policy-makers
5. become a think tank → provide content and strategies to reflect, debate and build alternatives to improve economic and financial decision-making

IT’S ABOUT ADDRESSING SYSTEMS 1 AND 2!
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WE HOPE SO!

- we see a promising partnership here

- and this is an invitation towards further cooperation!