Behavioural Economics and Financial Literacy in the Caribbean

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Overview of Presentation

- Introduction
- Traditional and Behavioural Economic Approaches – Implications for Financial Literacy Programmes
- Financial Literacy Developments in the Caribbean
- Conclusions and Recommendations

Introduction

- Traditional economic and financial models assume all agents in the market are rational and have full access to all relevant information to make financial decisions – Rational Expectations

- It has become patently clear that this view of the economic and financial world is far removed from reality – The 2007/2008 financial crisis - “irrational exuberance” and over confidence

Introduction

Asset Pricing	Corporate Finance	Personal Finance
Price Anomalies	IPO timing	Present Bias
IPO underperformance	Winner's curse	Emotional choice
Value Anomaly	Cash-flow sensitivity	Loss aversion
Sentiment	Overconfidence	Narrow Framing
Equity premium	Superstar CEO's	Return chasing
PEA drift		Financial illiteracy
Momentum		Home bias
Bubbles		Overconfidence
		Wishful thinking

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Introduction

- It has become patently clear that this view of the economic and financial world is far removed from reality – financial crisis, adequate provision for retirement, high investment losses especially for small investors

- Behavioural economics (BE) has made an important contribution to our understanding of how these market function by showing how people can be irrational, even when good information is available, and studying the conditions under which markets can be inefficient

- Finance is an area in economics where BE has made significant contributions - To get a comprehensive understanding of how finance works one must allow for rational and irrational human judgement and how physiological factors affect price determination in markets - Most studies in finance now incorporate some element of behavioural economics

- Since it appears that agents, some in particular, do not use information rationally even when it is available – some public policy response using BE to correct this can yield better outcomes in the financial market – Financial Literacy

- Recent financial developments have led to BE inspired policies such as financial literacy being used more intensively
  - Consumers confronted with a greater choice of financial products that are more complex
  - Realisation that deficits in financial literacy and numeracy cannot be adequately addressed by information disclosures alone

The Traditional Approach and BE

- The traditional approach – no substantial impact of financial literacy
  - A stable set of preferences or wants or desires
  - Perfect knowledge of alternatives relevant to a choice problem
  - The ability to forecast the expected consequences of particular choices in the present and into the future even when the future is highly uncertain
  - The ability to make use of this knowledge to maximize personal economic well-being or happiness
  - Rapid updating of behaviour based on new information
  - Consistency in the choices made by the individual – independent of choices made by other individuals
  - The insubstantial role of emotions and intuition in decision making

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BE - Kahneman–Tversky (2000, 2011) Errors and Biases Approach - Limited improvements from financial literacy

- Individuals tend to make irrational, error-prone decisions, which they eventually regret.
- Errors and biases in decision making are wired into the brain architecture.
- It is possible for the decision-making environment to be less than ideal.
- Individuals often do not know what is in their own best interest.
- The benchmark for rationality in decision making is based on conventional economics and focuses upon calculating behaviour.
- Decision-making shortcuts are regarded as typically error-prone.
- Individuals are easily fooled and deceived by how questions are framed and often reverse their preferred decisions with inconsequential changes in how questions or options are framed.
- Education can sometimes improve decision making.
- Government intervention in decision making is often thought to be the best-practice route to take for ideal choices to be made.
- Financial decision-making will be biased and error-prone without government intervention in choice behaviour.
- Some success predicted for improvements in the decision-making environment, less for the improvements to financial education.

BE – Simon - Bounded rationality – Potentially significant impact of BE

- BE - Herbert Simon awarded the Nobel Prize in economics in 1978 for his work in BE
- Individuals are assumed to make rational decisions as a result of how the brain is wired and the decision-making environment.
- Conventional benchmarks for rational or intelligent decisions are often rejected.
- Decision-making shortcuts are rational more often than not, even when they contravene conventional economic benchmarks.
- Individuals are not easily fooled, but they can be misled.
- Individuals can make decision-making errors and these can lead to decisions that are subject to regret.
- A major source of decision-making errors is a less than ideal institutional environment.
- Government plays an important role by establishing an ideal institutional environment and by providing the education required for ideal choices to be executed.
- Government should not intervene in individual choices unless these choices can be shown to cause harm to others.
- Financial decision-making can be improved by improving the decision-making environment and through improvement to financial education.
- Government intervention in choice behaviour is not considered to be best-practice if individuals make decisions in an ideal decision-making environment and with appropriate levels of financial education.

Implications for Financial Literacy

- Traditional approach - no role for FL
- The errors and biases approach to behavioural economics suggests limited improvements to decision making from financial education as errors and biases are largely hardwired in the brain – Some role for FL
- The bounded rationality approach implies a big role for FL in improving financial decision making
  - Focus on smart decision makers and the importance of institutional and environment constraints on decision making
  - Better quality information presented in a non-complex fashion
  - An institutional environment conducive to good decisions
  - An incentive structure that internalize externalities involved in financial decision making
  - Financial education that will facilitate making the best use of the information at hand within a specific decision-making environment

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Financial Literacy Programmes

- A standard definition of financial literacy is "having the knowledge, skills and confidence to make responsible financial decisions." – Altman 2013
- The institutional environment is also important to financial decision making - influencing the extent and quality of relevant information, as well as incentivising good behaviour
- Financial education and quality information go hand and hand, forming key ingredients to effective financial literacy programmes (Lusardi and Mitchell, 2007)

Financial Literacy Programmes

- The level of financial education throughout the world is very low - especially among the more vulnerable groups: those with very low levels of education or income, the elderly and women (Lusardi, 2008; Hung *et al., 2009)*
- FL programmes have therefore become increasingly widespread in the last decade with support from important multilateral financial institution (Lyons, 2005, 2010)
- Many studies show that FL programmes have improved decision making
  - Chan and Stevens (2004), Mastrobuoni, (2009): greater knowledge of pension systems and Social Security positively affected retirement decisions
  - Staten *et al. (2002): individuals who attended credit counselling* programs for 3 years were able to reduce their debt and to improve their credit card handling
  - Hirad and Zorn, (2001): individuals who received credit counselling before buying their house had a smaller default rate than those who had not done so
  - Hilgert *et al. (2003): from the Survey of Consumers Finances* documented the positive relationship between financial knowledge and financial behaviour

Financial Literacy Programmes

- In contrast other studies are less optimistic
  - Lusardi (2008)
    - Most of the empirical literature on the effects of financial education programmes did not demonstrate a positive result
    - The need to seek out more effective models for information transmission since the information given in an isolated course does not seem to change financial behaviour
  - De Meza *et al., (2008)*
    - Financial education and training programs did little to encourage individuals to make better decisions regarding financial products
    - The financial behaviour of individuals depends more on their psychological traits than on the information and skills they possess or on how they decide to use them
    - There are cognitive biases that seem to be relevant for financial decision making
    - Personalized counselling would be more effective in producing positive change than methods that provide isolated information or passive education during a limited period of time

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Financial Literacy Programmes

- Lyons *et al.* 2006
  - The apparently contradictory results are the product of
    - Disagreement about how to define the success of a program or even how to define financial education
    - There are also enormous differences in the nature and rigor of existing empirical methodologies

Financial Literacy Programmes in the Caribbean

- Most jurisdictions in the Caribbean have adopted FL programmes in the last decade
- Support from major multilateral financial institutions and local buy in from stakeholders IMF, World Bank, IADB and CARTAC
- Main promoters are state agencies – Financial regulators
- S&P Global Financial Literacy Survey builds on early efforts by the International Network on Financial Education (INFE)
  - The measurement of FL based on questions in 4 main areas – knowledge of interest rates, interest compounding, inflation and risk diversification
  - FL if you get at least 3 of 4 right
  - Only 33% global FL rate
  - The S&P 2015 Report shows very low levels of financial literacy in the Caribbean countries covered
  - Not much movement in FL Rates
  - Effectiveness of FL Programmes

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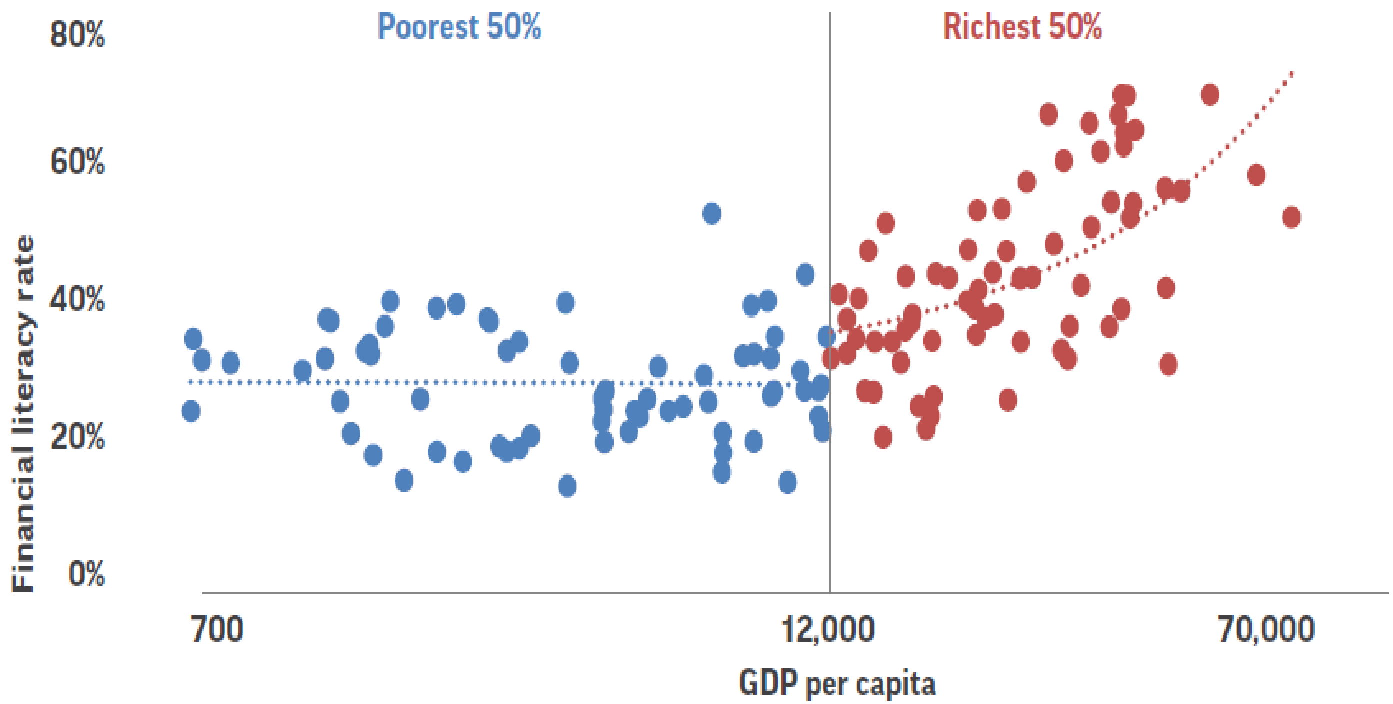
Financial Literacy Programmes in the Caribbean

FIGURE 2: HIGH ECONOMIC DEVELOPMENT TIED TO HIGH FINANCIAL LITERACY



Source: S&P Global FinLit Survey and Global Findex database.

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Financial Literacy Programmes in the Caribbean

	at least 3 out of 4 answers correct (% adults)						
	men	women	adults living in the richest 60% of households	adults living in the poorest 40% of households	age 15-34	age 35-54	age 55+
Belize	31%	34%	34%	30%	36%	22%	33%
Denmark	76%	67%	75%	65%	76%	81%	65%
Dominican Republic	36%	35%	40%	29%	38%	37%	32%
Haiti	17%	19%	21%	14%	16%	26%	14%
Jamaica	40%	26%	40%	22%	37%	36%	21%
Sweden	72%	70%	76%	64%	71%	78%	71%
United States	62%	52%	64%	47%	57%	65%	57%
Yemen, Rep.	18%	8%	17%	7%	16%	10%	9%

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Financial Literacy Programmes in the Caribbean

	At least 3 out of 4 answers correct (% adults)	Percentage of adults that answer correctly:			
		Risk Diversification	Inflation	Interest	Interest Compounding
Belize	33%	38%	61%	41%	34%
Dominican Republic	35%	45%	40%	50%	52%
Haiti	18%	48%	26%	34%	28%
Jamaica	33%	60%	33%	41%	41%
Sweden	71%	75%	66%	69%	72%
United States	57%	69%	63%	52%	61%
Yemen, Rep.	13%	28%	44%	16%	28%

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Conclusions and Recommendations

- Human behaviour is influenced by psychological elements, as well as by anthropological, cultural, historical and social elements, the results obtained in the theoretical and empirical works should not be generalized (Cassar and Wydick, 2010)
- Individual education programmes are more effective than those targeted at groups
- Individuals must be given the opportunity to gain experience by putting their lessons into practice
- Programmes must not be overly ambitious and should instead encourage the consumer to make small changes in his financial behaviour
- Ongoing education, support and motivation are all necessary for a successful program
- Other informational areas such as consumer protection policies or regulations are necessary to complement the education programs
- Focus on low income, women and elderly
- Better outcomes in FL correlated with good math ability
- Best results when all stakeholders involved – government, labour and the private sector

THANK YOU FOR YOUR ATTENTION

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