THE WEB AND FINANCIAL LITERACY: CHALLENGES AND OPPORTUNITIES

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WHAT IS FINANCIAL LITERACY?

- Understanding of basic financial concepts
- For example, interest rates, inflation, GDP
- Long-standing cross-national research now well established with a common measurement system
- Consistent finding of very limited financial literacy in substantial proportion of public (c 30-40%)
- Demographics: typically women, young people and poorer people score lower on financial literacy
## TRENDS IN FINANCIAL LITERACY

<table>
<thead>
<tr>
<th>Pre-Crisis</th>
<th>Post-Crisis</th>
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<tbody>
<tr>
<td>Little interest in financial news</td>
<td>Increased interest in economic news</td>
</tr>
<tr>
<td>Weak literacy skills</td>
<td>Literacy unchanged</td>
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<tr>
<td>Financial capability</td>
<td>Financial capability</td>
</tr>
<tr>
<td>Lack of future planning</td>
<td>-changed ideas</td>
</tr>
<tr>
<td>High levels of debt</td>
<td>-unchanged behaviour</td>
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WHY IS THIS A PROBLEM?

-Difficult to make informed decision
-Less public debate about policy
-Less trust in decision-makers
FINANCIAL CAPABILITY

Can make informed decisions
Future orientated
Not dependent on income
Correlates closely with satisfaction
NEED FOR FINANCIAL CAPABILITY

- State support for personal finance declining
- Individuals need long-term plans
- Financial products more complex
<table>
<thead>
<tr>
<th><strong>FINANCIAL LITERACY</strong></th>
<th><strong>FINANCIAL CAPABILITY</strong></th>
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</thead>
<tbody>
<tr>
<td>- concepts</td>
<td>- practical skills</td>
</tr>
<tr>
<td>- Short-term</td>
<td>- long-term</td>
</tr>
<tr>
<td>- Impersonal</td>
<td>- part of life course</td>
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<tr>
<td>- Machine learning?</td>
<td>- personal interaction?</td>
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<tr>
<td>- Outcome: informed public</td>
<td>- Outcome: improved financial decisions</td>
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FINANCIAL LITERACY AND CAPABILITY

Financial literacy is a pre-condition for capability
But capability also involves
- attitude change
- change in decision making and long-term thinking
- product information

EXAMPLE: Less time spent on deciding on which mortgage than a mobile phone contract
IMPROVING FINANCIAL LITERACY: EVIDENCE

- Teaching financial literacy in school
- Government information campaigns
- Industry initiatives
- The role of the media and personal finance pages
- Face-to-face interactions (eg advice centres)

RECEPTIVE PERIODS: LIFE COURSE CHANGES (LEAVING HOME, MARRIAGE, DIVORCE, RETIREMENT)
PERSONAL FINANCE ON THE WEB: PLUSES AND PITFALLS
# PERSONAL FINANCE ON THE WEB

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>More information</td>
<td>Misinformation</td>
</tr>
<tr>
<td>Wisdom of crowds</td>
<td>Gaming the system</td>
</tr>
<tr>
<td>Interactivity</td>
<td>Taking quick decisions</td>
</tr>
<tr>
<td>Up-to-date data</td>
<td>Too much data</td>
</tr>
<tr>
<td>Demographic reach</td>
<td>Self-selected audience</td>
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</table>
EXAMPLE: COMPARISON SITES

HELPFUL
Wide range of options
Quicker purchase
Ability to compare products

UNHELPFUL
Undeclared limits
Lack of reflection
Financial interest in selling particular products
SOCIAL MEDIA AND FINANCIAL LITERACY

- friends as sources of information
- reluctance to share personal details
- promotional tool for company brands
ISSUES OF VERIFICATION

ADVANTAGES
Quick access to key information
Wide range of sources
Complex information and products

RISKS
Easier to manipulate information
How to verify sources
Lack of literacy and understanding
CHALLENGES FOR WEB-BASED TOOLS

- Motivation
- Visibility
- Attention span
- Level of complexity
- Appropriate audience (segmentation)
BEYOND THE WEB: IMPROVING THE CONSUMER EXPERIENCE

The role of experts
The role of government
The role of NGOs
The role of companies
The role of the media
THE MARKET FOR LEMONS

USED CAR MARKETS
(SELLER KNOWS MORE)

INSURANCE MARKETS
(BUYER KNOWS MORE)

COMMODITY MARKETS
(SELLER KNOWS MORE)

FINANCIAL MARKETS
(SELLER KNOWS MORE)
ASSYMMETRIC INFORMATION IN FINANCE

- GENERAL PUBLIC HAS LESS INFORMATION THAN FINANCIAL PROFESSIONALS
- POTENTIAL FOR THEM TO GAME THE SYSTEM
- FUNDAMENTAL PROBLEM OF FINANCIAL MARKETS – LACK OF EQUAL ACCESS TO TIME-SENSITIVE INFORMATION
- COMMUNICATION CHANNELS ARE DIFFERENT FOR PROFESSIONALS
BEHAVIOURAL ECONOMICS AND FINANCE

KEY CONCEPTS

- OPTIMISM BIAS
- LOSS AVERSION
- ANCHORING
- HEURISTIC

EFFECT ON DECISIONS

- Stocks always go up
- Don’t sell when stocks go down
- Suggestible to pricing
- Don’t adjust portfolio when things change
BEHAVIOURAL PERSONAL FINANCE

- DEVELOP PERSONAL RELATIONSHIP
- TAKE FIRST SUGGESTION OFFERED
- LOCK INTO TO PRODUCTS WITH DEFAULT OPTION
- USE PEER PRESSURE
- MAKE OPTIMISTIC PROJECTIONS
FINANCIAL MARKETS ONLINE
BACK TO THE FUTURE
THE POWER OF THE WEB

Predicting market movements
Automated trading
Spotting long term trends
Manipulating large data sets
Lowering costs (eg transactions)
THE WEB AND FINANCIAL MARKETS

Increased speed of transactions (but less transparency)

Possibility of predicting market moves (but danger of false information)

Self-fulfilling predictions (automated crashes)

Increased communication (but limited to key actors not general public)
ASYMETRIC OUTCOMES

- HIGH FREQUENCY TRADING: WEB TECHNOLOGIES ALLOW FRONT RUNNING
- DARK POOLS: NON-TRANSPARENT PRICING
- AUTOMATED STOCK TRADING: THE DECLINE OF JOBBER
- FOLLOW YOUR NEIGHBOR: INCREASED VULNERABILITY TO CRASHES?
- FEES AND CHARGES: THE HIDDEN COSTS OF TRADING
TRADING DANGERS ON THE WEB

FALSE INFORMATION
GROUP THINK
NEED FOR REFLECTION
LIMITS OF AUTOMATED PROGRAMS
MANIPULATED MARKETS
DECLINE OF ROLE OF TRADER
PRICING POWER
IMPROVING MARKET EFFICIENCY

OPEN DATA SETS
LONG TERM TREND DATA
REAL TIME INFORMATION
ONE MARKETPLACE
EASIER ACCESS TO COMPANY INFORMATION
LIMITS ON GAMING AND RECOMMENDATION
PROTECTING CONSUMERS

Lowering the cost of transactions
Getting objective advice
Limiting online marketing and recommendation
Reducing market asymmetry
Increasing transparency
CONCLUSIONS: TRANSFORMING FINANCE

Disruptive technology for both consumers and traders
Regulation has lagged behind technology
Consumers face risks from mis-information
Traders face risks from less market transparency
Asymmetric information challenge is still great
Behavioural economics: web can increase bias
Potential gains: speed, range, sophistication