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Financial Education, Savings and Investments

AN OVERVIEW

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Abstract/Résumé

Abstract: Savings and investments by individuals are important both for personal financial well-being and for economic growth. Many governments try to encourage their citizens to save more, or to save more appropriately, by preferring formal institutions to informal saving and by promoting more diversification.

However, there are considerable barriers to saving, including limited access to financial markets by some groups, complexity of financial products and information asymmetries. Knowledge and understanding of saving and investment concepts is particularly low in many countries. In addition, there are behavioural and cultural factors which may limit people's propensity to save.

As a consequence, policy makers have developed several strategies to influence whether and how individuals save. Policy responses typically involve a combination of prudential regulation and consumer protection legislation, financial incentives, financial education and awareness initiatives, as well as behavioural techniques to encourage people into sound saving decisions.

JEL codes:

- D14: Microeconomics / Household Behaviour and Family Economics / Personal Finance
- D18: Microeconomics / Household Behaviour and Family Economics / Consumer Protection
- E21: Macroeconomics and Monetary Economics / Macroeconomics: Consumption, Saving, Production, Employment, and Investment / Consumption; Saving; Wealth
- I28: Health, Education, and Welfare / Education and Research Institutions / Government Policy

Keywords: savings, investment, financial education, financial literacy, consumer protection

ÉDUCATION FINANCIÈRE, ÉPARGNE ET INVESTISSEMENT : VUE D'ENSEMBLE

Résumé : L'épargne et les investissements des particuliers sont importants, à la fois pour le bien-être financier personnel et pour la croissance économique. De nombreux pays s'efforcent d'encourager leurs citoyens à épargner davantage ou mieux, en préconisant des structures officielles plutôt qu'une épargne informelle et en favorisant une plus grande diversification.

Il existe toutefois des obstacles considérables à l'épargne, notamment l'accès limité de certains groupes aux marchés financiers, la complexité des produits financiers et les asymétries d'information. La connaissance et la compréhension des notions d'épargne et d'investissement sont particulièrement faibles dans de nombreux pays. En outre, des facteurs comportementaux et culturels peuvent limiter la propension des ménages à épargner.

Par conséquent, les responsables publiques élaborent diverses stratégies visant à influencer sur l'épargne des particuliers. Les mesures prises associent en général réglementation prudentielle et législation en matière de protection des consommateurs, de même que des incitations financières, des programmes d'éducation financière et de sensibilisation, et des techniques comportementales encourageant les particuliers à prendre des décisions appropriées en matière d'épargne.

Codes JEL : D14, D18, E21, I28

Mots clés : épargne, investissement, éducation financière, connaissances financières, protection des consommateurs

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I. INTRODUCTION

Relevance of the issue and scope of the paper

Savings and investments by individuals are as vital to personal financial well-being and security as to a healthy economy. People with savings are better able to weather economic shocks such as a loss of income, to build assets for the future, and are less reliant on credit to cover unexpected expenses. Savings also enable further welfare enhancing actions such as entrepreneurial activities and access to education and training. At the macroeconomic level, household savings¹ drive growth by enabling banks to lend to businesses, and by financing – directly or indirectly – investment in companies.

The ways in which individuals save can range from holding surplus income as cash, through simple informal saving mechanisms such as savings and loan clubs, to complex investments, or non-financial saving such as property or livestock. Some of these approaches are more suited to short-term savings and income smoothing, whilst others provide long-term savings to draw on in future periods. Following the financial crisis of 2007-08, credit has become more expensive and harder to obtain, which may have an impact on the use of credit to smooth income.

In more advanced financial markets, savings and investment products have become more complex, and individuals face more responsibility and risk for their own financial well-being. The shift from defined benefit to defined contribution pensions is one example of this. As a result, the need to manage personal money effectively has grown. This is particularly true of longer-term savings and investment products, where the opportunities to ‘learn by doing’ are infrequent, and the consequences of a wrong decision – or no decision at all – can have an adverse impact on individuals and their families, and ultimately on the social welfare net.

At the same time, distribution channels for savings and investment products have become more sophisticated. Innovations such as smart cards and mobile phone banking can open up access to formal savings opportunities for people who previously lacked access to financial services. People increasingly buy even quite complex investment products online, including across borders. But technological innovation also carries risks that consumers may be exposed to fraud or scams, or that products bought through non-traditional channels may not be adequately regulated.

In many economies, people are, on the whole, reluctant to save, even when they are aware of the benefits of doing so. It is for this reason that policy makers are looking to a range of tools to encourage saving and enable households to provide themselves with a financial cushion. These tools notably include a robust financial regulatory framework, financial consumer protection, incentives, choice architecture, as well as financial education, information and awareness campaigns.

¹ Household saving can be formally defined and measured in various ways. See Appendix A.

This paper begins by looking at the factors that influence saving across different countries and groups. It also discusses why and how people save, and the barriers to saving. The final section covers governmental policy issues in relation to savings and investments, and policy responses, with a focus on financial education, information and awareness. While the emphasis is on non-pension saving, there is inevitably some overlap with pension saving issues, and the extent to which governments prioritise support for pension saving over other forms of saving and investment may be of particular interest.

OECD context and process

The OECD recognized the importance of financial education and awareness in 2003, by launching a project on financial education under the aegis of the Committee on Financial Markets and the Insurance and Private Pensions Committee. In 2005 it produced the first major study of financial education at an international level (OECD, 2005). It subsequently established the International Network on Financial Education (INFE), a forum for exchanging ideas and information on financial education across OECD and non-OECD countries. The INFE currently has over 100 member countries.

The OECD has also agreed on good practices or guidelines in relation to financial education and awareness in the different areas of the financial sectors including insurance and private pensions in 2008 and credit in 2009 (OECD, 2008a; 2008b; 2009).

In order to respond to demand by various stakeholders, the OECD launched in 2011 a project dedicated to financial awareness and education in the areas of savings and investment.

As a first step, the OECD commissioned the development of a preliminary report looking at high-level policy issues relating to savings and investments and financial education and awareness, and relevant examples from INFE member countries.

The final draft of this paper was presented and approved for further dissemination at the 9th INFE meeting in Madrid. This paper draws on a preliminary survey of some INFE member countries, and comments and examples supplied by INFE members². It also draws on research from across the world. Where statements or facts are not supported by references, they are taken from countries' responses to the OECD preliminary survey, and other material supplied by INFE members.

As a second step, the OECD /INFE decided to create an INFE Expert Subgroup on Investor Education. The subgroup will hold its first meeting in Cartagena, Colombia, in October 2012. The present report will provide a sound basis for the development of the work of the subgroup.

² Contributing countries: Australia, Canada, China, Columbia, Czech Republic, Denmark, Estonia, India, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, New Zealand, Palestine, Poland, Portugal, Saudi Arabia, Singapore, Slovakia, Slovenia, Spain, South Africa, Turkey, UK, USA. Greece and Switzerland also responded to inform the Secretariat that they had no relevant examples.

II. INFLUENCES ON HOUSEHOLD SAVING RATES

Understanding influences on the household saving rate gives a context for national financial education and awareness programmes, and other initiatives intended to influence saving. It can help explain why initiatives may not work, or may not be transferable between countries. Equally, policy makers need to understand the impact of savings initiatives on macroeconomic variables. This section explores the macroeconomic influences on household aggregate saving rates, and variations between countries.

Across the world, household saving rates vary markedly³. For example, those in Anglo-Saxon economies, Korea and Japan are much lower than 20 years ago, whereas saving rates in China and India have risen sharply. Several researchers have investigated the determinants of private saving rates in developed and developing countries (Bailliu and Reisen, 1998; Edwards, 1996; Haque, Pesaran and Sharma, 1999; Horioka and Wan, 2007; Jongwanich, 2010; Loayza, Schmidt-Hebbel and Servén, 2000; Reddy, Naidu and Vosikata, 2005). Overall, many factors can explain variations in saving rates across countries and over time including:

- The extent of welfare provision. A welfare safety net, free or cheap healthcare, and state or employer pensions reduce the need to build up precautionary savings, including for retirement. Means-tested welfare benefits further reduce the incentive to save for those close to the threshold. The high personal tax rates often associated with high levels of social welfare also reduce the amount of money households have available for savings.
- Economic stability. Instability increases uncertainty, so saving rates tend to be countercyclical: people build precautionary savings when the future looks uncertain and spend more in a boom, when they have job security and are optimistic about the future. It may also be the case that greater uncertainty leads to demands for greater returns.
- Level and rate of growth of per capita income. High levels of income and growth appear to be associated with higher levels of saving. Moreover, the influence of income tends to be larger in developing countries than in developed ones.
- Interest rates and inflation. If real interest rates are very low this will tend to lead to reduced saving (Booth, Grimmond and Stroombergen, 2000); high real interest rates make saving more attractive. The effect of inflation depends on the type of inflation and the level of uncertainty associated with it. When prices are rising more rapidly than incomes, people may change their consumption habits, and will tend to dissave. If inflation is outstripping interest rates, individuals are likely to buy large ticket goods, such as vehicles or furniture, rather than put money into savings even if this means accessing additional credit to do so. If inflation is driven

³ See, for example, *Net household saving as a percentage of disposable income*. Source: OECD.Stat http://stats.oecd.org/Index.aspx?datasetcode=SNA_TABLE2

by price inelastic goods such as fuel or food, the impact is likely to be an increase in consumption costs and thus reduced ability to save.

- Availability of credit. Evidence from developed countries suggests that consumption increases when credit is more freely available (Barrell and Davis, 2007). One study of developing countries in Asia found that a more developed financial system increases saving up to a point, after which the availability of credit reduces it (Horioka and Terada-Hagiwara, 2011). This suggests that the advantages of a formal financial system in providing a safe and efficient means of saving are at some point outweighed by the advantages of credit as a way of smoothing consumption.
- Age structure of the population. According to the life-cycle theory (discussed in the next section) individuals save during their working years to provide for their needs in retirement. Consistent with this, countries with higher shares of 'dependent' population (younger and older than working age) tend to display lower private saving rates.

The impact of the financial crisis

Decreasing saving rates in many economies over the decades prior to the financial crisis are likely to be due to a combination of factors: falling real interest rates, favourable lending conditions, rising asset prices and greater economic stability. Net wealth in many countries increased over this period, especially housing wealth. As people saw the value of their homes rise they saw less need for precautionary saving, especially if they were able to borrow against the increased valuations. In countries like France, where people cannot use their home as collateral for borrowing, the effect of house prices on the saving rate is much more muted (Nahmias, 2010). Credit was heavily promoted in some countries and, with hindsight at least, underpriced for the level of risk lenders were actually incurring.

The causes of the financial crisis of 2007-08 are many, but there is little doubt that individuals and financial institutions failed to understand the risks they were taking in the credit market.

The financial crisis precipitated a recession in many countries; wealth declined on average, unemployment increased and general confidence in the financial system eroded. Access to credit reduced significantly. These changes created uncertainty, older workers delayed retirement in order to offset their decline in wealth and the saving rate increased across many countries, despite, in many cases, persistent low interest rates (see Chai et al., 2011 for a discussion of the theoretical impacts of the financial crisis).

There is some evidence that people shift their investment portfolios into less risky, more liquid, financial assets in times of instability, although this effect may be muted by low short-term rates of return (Nahmias, 2012). Analysis of the US Survey of Consumer Finances found little difference between pre-retirement age groups whose assets had declined in value (by more than six months of usual income) during the financial crisis and those whose had gained (Duke, 2011). In both groups, there was an increase in the proportion of families unwilling to take financial risk from 2007 to 2009, and an increase in median precautionary savings. In fact, those who had seen the greatest *increase* in wealth increased their savings the most. This suggests that uncertainty may be a particularly powerful driver of savings behaviour.

As economies recover from the effects of the financial crisis, saving rates might be expected to decline again. There may, however, be a long-term impact on the availability of credit if lending conditions are tightened, and prices more accurately reflect costs and risks, including any costs of tighter regulatory requirements.

With the opportunities to ‘dissave’ less attractive or non-existent, many people will be inclined to save more, all other things being equal (Table 1). If there is lingering uncertainty about economic prospects, households may also seek to pay off debt or build precautionary savings. Low interest rates and rising inflation may also lead to a move away from traditional savings products, into riskier investments which offer a higher return, or assets which are seen as being safe in the long term, such as gold.

Table 1. Household saving rates – forecast (% of disposable household income)

	2006	2007	2008	2009	2010	2011	2012	2013
Net savings								
Australia	2.4	4.5	6.1	10.4	8.9	9.7	9.6	9.1
Austria	10.4	11.7	11.5	10.7	8.3	7.5	7.5	7.5
Belgium	10.8	11.4	11.7	13.7	11.2	11.2	10.5	9.5
Canada	3.5	2.8	3.9	4.6	4.8	3.8	3.3	3.0
Czech Republic	6.1	5.7	4.8	6.1	5.7	4.2	3.9	4.3
Denmark	-2.3	-4.0	-3.7	-0.4	-0.2	-1.3	-0.9	-1.8
Estonia	-13.1	-8.2	-2.6	5.7	3.7	1.4	0.6	0.5
Finland	-1.1	-0.9	-0.3	4.1	4.1	2.2	1.4	0.6
Germany	10.8	11.0	11.7	11.1	11.3	11.0	11.0	10.6
Hungary	7.2	3.3	2.7	4.5	2.5	3.0	3.2	3.7
Ireland	-0.9	-0.1	5.5	10.1	8.9	9.4	8.3	7.3
Italy	9.5	8.9	8.4	7.1	5.3	4.5	4.3	4.5
Japan	1.1	0.9	0.4	2.4	2.1	2.9	1.9	1.9
Korea	5.2	2.9	2.9	4.6	4.3	3.1	2.9	3.1
Netherlands	6.1	6.9	5.9	6.4	3.9	5.5	6.4	7.0
New Zealand	-8.9	-4.0	-4.5	-2.2	0.1	0.8	1.3	1.6
Norway	-0.5	0.8	3.4	6.6	6.1	8.0	8.9	7.6
Poland	6.1	4.6	-0.3	6.8	6.4	3.9	4.7	4.9
Slovak Republic	-0.1	2.0	0.9	2.7	6.4	5.4	5.3	5.2
Slovenia	11.7	10.3	9.4	9.1	10.0	9.0	7.6	5.7
Sweden	4.9	7.2	8.9	11.2	8.5	9.7	10.7	9.4
Switzerland	11.4	12.6	11.7	12.0	9.9	11.4	12.1	12.0
United States	2.6	2.4	5.4	5.1	5.3	4.7	4.3	4.0
Gross savings								
France	14.8	15.4	15.6	16.5	16.1	16.8	16.1	15.8
Portugal	8.0	7.0	7.1	10.9	10.2	9.7	10.5	12.1
Spain	10.2	10.4	13.5	18.5	13.9	12.0	11.6	13.6
United Kingdom	3.1	2.7	3.1	7.8	7.2	7.4	6.6	5.4

Source: OECD Economic Outlook No. 91, OECD Economic Outlook: Statistics and Projections (database)
doi: 10.1787/hssv-gr-table-2012-1-en

III. INFLUENCES ON SAVING BEHAVIOUR

As discussed in AppendixA, data on national household saving rates at the international level have shortcomings that reduce their usefulness to policy makers as it is difficult to draw conclusions at the micro-level from fluctuations in the saving rate, or differences between countries.

In designing interventions to encourage saving, it is important that policy makers take account of the reasons people do – or do not - save, and influences on how they save. These may be individual socioeconomic factors, such as income level or gender; or behavioural, which can in turn be influenced by prevailing culture and norms. The way financial markets operate can act as a barrier, by making it complicated or difficult to save. This may be compounded by financial exclusion, lack of financial literacy and low levels of trust in financial institutions.

Why people save

One model of household saving is based on the ‘life cycle’ theory, which suggests that individuals will attempt to smooth lifetime consumption by building up their saving whilst they are earning and running down their savings once in retirement (Modigliani, 1986). More sophisticated versions of the life-cycle model take into account uncertainty about lifespan, earnings, and interest rates as factors that make consumption smoothing more difficult. While this model can help explain saving patterns to some extent, saving motivations are, in practice, more complex.

There is an extensive literature on saving motives, which suggests that saving may be precautionary, for defined goals, or for more abstract reasons like self-esteem, or the need to feel independent (see for example Browning and Lusardi, 1996; Canova, Rattazzi and Webley, 2005; Fisher and Montalto, 2010). Some of the main reasons are shown below:

- The life-cycle motive, that is, to provide for anticipated future expenses during old-age, when individuals will not be able to rely on earnings and their income is likely to decrease. This includes pension saving, as a particular type of long-term saving.
- The precautionary (‘rainy day’) motive. This includes money put aside to cover unforeseen events or to provide a buffer against events like job loss, illness, relationship breakdown, or accidental damage to household goods.
- The improvement motive, that is to enjoy a gradually improving lifestyle. This can include short-term saving for consumer durables, holidays, or gifts, or longer-term saving for, say, a child’s education or wedding, or the deposit on a car or house (sometimes called the ‘down payment’ motive). Loan repayment is also a form of ‘improvement’ saving: for example, repaying a mortgage or a loan on assets such as property, livestock or machinery. Similarly, repayment of a student loan is a form of saving. In this case, the asset is human capital, which can be used to generate an income stream.

- The enterprise motive. This is saving to accumulate enough money to carry out speculative or business activity, i.e. saving for the purpose of generating more money.
- The bequest motive. Some people save with no intention of using the money in their lifetime – they put money aside, or keep assets, explicitly to pass on to children or other family members. The bequest motive explains why people save more in old age than the life-cycle model would predict.

Other issues may also be relevant to the development of financial education and awareness policies, in particular:

- ‘Motiveless’ saving. Some people build up savings simply because their income is consistently greater than their expenditure, and they do not actively manage the surplus. In this case, people may not be maximising their financial well-being.
- ‘Windfalls’. People occasionally get a sum of money unexpectedly, for example through an inheritance, redundancy payment, or even winning it. This requires active decision-making and perhaps consideration of products which have not been used before.
- ‘Dissaving’. An array of products becomes available when people start to draw down their wealth in old age. Pension assets and other long-term savings are generally used to generate an income in retirement. People may also have property, which can be used to release cash, either by ‘trading down’, or making use of equity release financial products. Decumulation brings people into contact with a different set of products from those which they have seen before and that require a different set of decision-making skills, including annuities and reverse mortgages.

How people save

The way people save can have a significant impact on the economy. Too much informal saving, or a preference for saving in property or livestock, for example, may mean insufficient financial investment for long-term growth. A reliance on foreign investment, or vulnerability to foreign hedge funds seeking a quick profit, can lead to financial market volatility.

In general, people with higher incomes are more likely to save with financial institutions, and in countries with well-developed capital markets more likely to buy stocks and shares and make other financial investments. Property is frequently used as the main non-financial investment. In lower income countries, people are more likely to invest in livestock, household goods, jewellery or gold.

People on low incomes are much more likely to save informally, most often keeping cash at home, or with family members. In many low-income countries, people use mutual savings clubs or self-help groups, for example, savings and credit associations, which build up savers’ funds to lend to members of the group⁴. Loans may be long-term, or short-term to cover emergencies. The groups are self-managed, community-based and democratic.

Research from the UK found that a high proportion of low-income households saved for birthdays and holidays, but did not save for the long term (Dolphin, 2009). Methods of saving were often informal:

⁴ A discussion of informal savings in sub-Saharan Africa can be found in CARE (2011).

as well as keeping cash at home, it was common to overpay on fuel prepayment meters, or put money into a 'hamper scheme'. These schemes enable people to save towards a basket of food or other goods, and are often used to spread the cost of Christmas or other festivals.

Saving money informally often means it is not protected, so the risk is higher and there is no redress. Savings clubs are not regulated and the safety of the money deposited depends on the members themselves, and in particular the treasurer. Hamper schemes are also not regulated as, legally, the saving is payment in advance for goods and services.

There are also gender differences in saving habits. A 2007 UK study found a 'savings gap' between women and men that could not be accounted for by income differences (Westaway and McKay, 2007). Women were as likely to save as men, but they saved less money and were more likely to save for the short term, whereas men saved for the long term. The same study also found that women's savings patterns were more likely to be disrupted by lifetime events such as having a child or getting divorced. Men were more likely to save when they became fathers; women less likely when they became mothers. The gender differences were much less evident for women without children. Young women (16-24) saved more than men, and were more likely to enrol in an employer pension scheme.

Australia reported a large gender savings gap – annual median savings of 150 AUD for women, and 620 AUD for men. This may be explained by women leaving the workforce to care for children, which reduces their compulsory superannuation contributions.

There is also some evidence that women tend to be more risk-averse than men (Jianakoplos and Bernasek, 1998; Eckel and Grossman, 2008), which may inhibit investment in stock market based vehicles, and lead to a preference for cash.

The consequence of different saving patterns in developed countries is that women are likely to be less well off in retirement than men, and to rely on state benefits.

Women's saving behaviour also differs from men's in developing countries. A World Bank study looked at household panel data for 20 countries (Floro and Seguino, 2002). This concluded that income and other sources of women's bargaining power, including education and assets, have a significant impact on household spending decisions. As in developed countries, women spend more of the money they control on food for their children and other family needs. This could be seen as an investment, as healthy children will live to look after their parents in old age. Women's saving behaviour also depends on local culture – e.g. the need to save for a dowry, or to remit money to parents – and their access to a safe place to keep their money. For example, other family members may take cash, whereas gold is regarded as belonging to the woman herself.

Behavioural influences on saving

People do not always act rationally. Deep-rooted behavioural biases and external influences can affect both the decision to save and how to save. Typically, impatient individuals prefer instant gratification (i.e. immediate consumption) rather than keeping their resources for future enjoyment, leading to lower saving.

Not only do many people prefer to live for today at the expense of tomorrow (i.e. they tend to prefer smaller, immediate payments to larger, more distant ones), but they often also display inconsistent time preferences. For example, some people prefer \$10 today rather than \$15 next week,

but prefer \$15 in two weeks time rather than \$10 in ten days time (Laibson, 1997). Those with a high preference for today are more likely to have credit card debt, even allowing for variables such as income (Meier and Sprenger, 2010). They may also naturally prefer ‘instant access’ savings products or, if self-aware, the opposite: to lock up their money to avoid the temptation to spend.

Starting to save is often perceived as difficult or time consuming, and procrastination is a common reason for not saving (O'Donoghue and Rabin, 1999). People know they should save, and have the best intentions of doing so but, when faced with complexity and choice overload, decide to ‘do it tomorrow’. At the same time, people also tend to exhibit a strong ‘status quo’ bias. Having made a decision, they will tend to stick with it.

There is also some evidence that personality traits can affect whether people save or not (Redhead, 2008). In one study, non-savers saw themselves as relatively less happy and healthy (Scottish Widows, 2009). They were more likely to feel unable to control their situation in life and less able to plan ahead. Non-savers claimed they could not afford to save, even though many had high incomes. In contrast, people who regarded themselves as happy were more likely to save, perhaps because they had a more positive vision of the future: seeing retirement as giving them opportunities to spend time on hobbies, family, or holidays. Unhappy people may have a more negative view, seeing only decline and ill health in old age.

Another driver of apparently irrational behaviour is ‘mental accounting’, or the tendency of people to virtually put money into different pots. This can explain, for example, why people may simultaneously save at low interest rates and borrow at high rates (Shafir and Thaler, 2006).

Moreover, people tend to be highly loss-averse⁵, that is, they place more weight on losing money than on an equivalent gain. Evidence suggests that people with a high degree of loss aversion are less likely to invest in the stock market in general, and, specifically, less likely to buy equities directly rather than invest in mutual funds (Dimmock and Kouwenberg, 2010).

Social norms

Social norms⁶ can also have a powerful effect on saving. In many countries there is pressure to consume. Conspicuous consumption can be associated with higher social status. Saving can be seen as ‘dull’.

In others, there is a cultural expectation that money will be shared with family or community. For example, In Australia, there is a strong expectation in Aboriginal communities that resources will be pooled, and saving may be seen as a self-interested act. The practice of ‘humberging’ – taking money from vulnerable relatives – in some communities may also act as a cultural disincentive to save (Demosthenous et al., 2006).

Saving behaviour is influenced by friends and family. Children and young people, in particular, are likely to pick up money management habit in childhood. One Dutch study based on two financial capability surveys found some significant correlations between parental saving habits and those of their children (CentiQ, 2008). Children of financially illiterate parents were particularly likely to spend money

⁵ Loss aversion is one of the assumptions of prospect theory, first discussed in Kahneman and Tversky (1979).

⁶ For further reading on social norms see Akerlof (2008).

rather than save it, to ask their parents for money and have debts. They perceived their parents as more generous than children of financially capable parents, who were less likely to give out extra money.

People also tend to be influenced by those around them. For example, a US study found that individuals investing in 401(k) plans were more likely to increase their exposure to risk when their co-workers had earned higher equity returns in the past relative to average returns (Lu, 2011). The same study found that lower returns by peers in the previous period led to a reduction in risk appetite. Another US study shows how retirement savings decisions (whether to enrol in an employer-sponsored Tax Deferred Account plan, and the choice of the mutual fund vendor) are affected by the decisions of colleagues (Duflo and Saez, 2002).

Financial literacy

Financial literacy is a combination of the awareness, knowledge, skills, attitude and behaviour necessary to make sound financial decisions and achieve individual financial well-being⁷. Some countries or authors use the term 'financial capability' with the same meaning; others use 'financial literacy' just to refer to financial knowledge and skills. Lack of financial literacy can act as a barrier to saving: if people do not manage their money well they may not have enough left to save after day-to-day expenses, or may accumulate debt they cannot repay. Lack of financial skills also means people do not plan ahead, or understand how financial products can help meet savings goals.

A number of countries have now carried out financial literacy surveys of their adult populations, which provide insights into savings-related knowledge, attitudes and behaviour. These surveys suggest that people are ill-equipped to take complex financial decisions, do not plan ahead sufficiently, and have a poor understanding of investment concepts like risk and diversification.

For example, in the UK financial capability baseline survey 40% of people with a stocks and shares Individual Savings Account (ISA) were not aware they were exposed to stock market risk (Atkinson et al., 2006). People were also poor at planning ahead. Seventy percent of people had made no provision for a sudden drop in income; 81% thought the state pension would be inadequate for their retirement, but 37% of this group had not made additional provision.

There are similar findings from the US. In the 2009 survey, only 49% of respondents had set aside 'rainy day' funds to cover expenses for three months in the event of job loss or illness. Equally, few planned for the longer term: only 42% who had not retired said they had worked out how much they needed to save for retirement. People also did not appear to use the information they were given to support financial decisions. Two thirds of respondents reported getting annual Social Security statements, but a large majority of these did not use them when making decisions about when to retire or claim benefits.

In Australia, the 2008 financial literacy survey found that only 52% of people would not take up "an investment advertised as having a return well above market rates and no risk" (Australia and New Zealand Banking Group, 2008). Two thirds understood that "short-term fluctuations in market value can be expected, even with good investments" and half of survey respondents considered diversification of investments to be "very important". As in the US, people did not appear to use the information they were given. A quarter of people said they did not get, or did not read, statements from their superannuation fund. Of those who did, nearly one third found them difficult to understand. Forty-two percent of

⁷ As defined in Atkinson and Messy (2012).

employed fund members were unable to name anything which might result in underperformance of superannuation funds. The survey also found that only 58% of employed superannuation fund members knew that superannuation is taxed at a lower rate than other investments.

The OECD/INFE has found, in developing an international measure of financial literacy, that although there was high variability in knowledge of savings-related concepts between countries, the lowest average scores related to compound interest and diversification (Atkinson and Messy, 2012).

Across countries, financial knowledge is generally lower amongst young people (and the very old), women, those on lower incomes, the financially excluded, those without a college education, people who rent rather than own their home, and particular ethnic groups⁸. However, different groups have different financial skills. For example, the UK baseline survey found that those on low incomes were capable at keeping track and managing their money day-to-day, but poor at planning ahead.

The findings from these surveys are also borne out by other research evidence, which suggests there is widespread lack of knowledge and understanding about investment risk (Collard, 2009).

Even when people understand the need to diversify, they may adopt simple strategies like dividing their money equally between the options on offer. There is a general preference for equities amongst those choosing how to allocate their pension fund, but one US study found that some people put nothing in equities and others everything. Those on higher incomes tend to invest a greater proportion of their pension fund in equities, as do those with alternative pension sources, whether state or private (Lu, 2011).

There also appears to be a relationship between knowledge about risk and risk aversion. The 2009 US national survey of financial capability found that 42% of respondents to the survey who were very risk averse did not know the answer to a question about risk and diversification, compared with 33% in the general population, and 27% of the less risk-averse group (FINRA Investor Education Foundation, 2009). However, the OECD/INFE pilot study suggests that the relationship does not hold in every country.

Market factors

Financial exclusion

Formal saving requires access to financial products – at the minimum a bank transaction account or savings account. A May 2011 article in *The Economist* estimated that 2.4 billion adults (62%) in developing countries were unbanked and even in developed countries 95 million (12%) did not have a bank account. In developing countries, mobile telephone banking is revolutionising access to transactional banking, allowing users to receive payments into ‘mobile wallets’, send payments to other users, and obtain cash. These virtual accounts are of limited use as savings vehicles – they do not pay interest and usually have limits on the amount of money that can be held – but they do offer a potential route into formal financial products.

⁸ For cross-country evidence on the distribution of financial literacy in the population see Australia and New Zealand Banking Group (2008), as well as the papers published in the special issue of the *Journal of Pension Economics and Finance*, Volume 10, Issue 04, October 2011. <http://journals.cambridge.org/action/displayIssue?jid=PEF&volumeld=10&seriesld=0&issuelld=04> and the results of the OECD INFE financial literacy measurement pilot published in Atkinson and Messy (2012).

Using savings products, therefore, requires access to the banking system. However, people on the lowest incomes often cannot afford bank charges, or fear penalties if they go overdrawn. Banks are concentrated in wealthier urban areas so many people do not have access to a local branch. Internet use is also less prevalent amongst those on low incomes. Banks do not actively seek low-income current account customers, as they are not profitable and the opportunities to 'cross-sell' other products are very limited.

Choice: too much or too little

Conventional economic theory suggests that choice is good because it will make a market operate more efficiently and hence benefit all consumers. This relies on people being able to make the best choice from the options on offer and to buy (or switch to) that choice.

There is evidence that this does not work in complex markets. In some contexts there are too many choices and they are too complicated. For example, in the UK there are over 2,000 retail savings products on the market. The costs of obtaining and analysing the relevant information are high (Agnew and Szykman, 2005; Iyengar and Kamenica, 2010). The decision may also be further complicated by the tax treatment of products: some may be tax-incentivised, others, which perform apparently the same function, are not. Faced with too much choice, people will make the wrong decision or no decision at all: they will not buy a product or stick with what they already have.

Despite the apparent proliferation of choice, there may at the same time be a lack of appropriate products. Poorer households, for example, value the ability to save small amounts, maybe irregularly. Instant access is usually important although, conversely, some may want the money locked in for a specific time so they are not tempted to spend it (Kempson and Finney, 2009). Some consumers are also likely to prefer face-to-face contact. A study of informal roving deposit collectors in Benin found that clients valued the convenience of door-to-door collection and the interaction with the individual deposit collector (Deshpande, 2008). Convenience meant being able to deposit money on a schedule that suited the client; the fact that the collector came to the client; and the speed of transactions (three minutes on average). Clients further appreciated that savings collectors came from the local area, spoke the local language, and demonstrated "the qualities of a good person".

Products may also fail to meet religious or cultural needs. In responding to the OECD/INFE stock-take on savings and investments, for example, Saudi Arabia cited a lack of Islamic savings products as a barrier to Muslim savers.

Complexity

The way financial services providers present choices can also act as a barrier to saving. Firms make extensive use of jargon, and may interpret disclosure requirements in a legalistic way. This means that the 'small print' can run to dozens of pages, and be incomprehensible to the consumer. In consequence, products may look more complicated than they actually are, or people may not understand important product features, like charges and risks. Faced with information they do not understand, many consumers may be deterred from buying products which could be useful to them.

Language may also be a problem. For example, around 60 countries have English as an official language, and disclosure and other financial documents are likely to be written in English. These documents are difficult enough to understand for native English speakers. For those for whom English is a

second or third language, the lack of clear documentation in their local language can act as a significant barrier.

Saving can also be bureaucratic. Saving with a financial institution requires a lot of form-filling and, in many countries anti-money laundering regulations mean depositors have to produce forms of identity and proof of address. Assembling the necessary information is time consuming and may be a problem for people who live in shared accommodation or move around a lot, for example due to fragmented or seasonal employment. For those unused to dealing with financial institutions, the formal bureaucracy may reinforce a feeling of exclusion.

Trust

Lack of trust in financial institutions is often cited as a reason why people do not save. This may arise due to a lack of confidence that the bank will look after the savers' money. For those unused to dealing with financial institutions, this could be due to an unspecified fear of the unknown (Deshpande, 2008). In other cases, lack of trust may arise from financial markets crisis. In some countries, the financial crisis of 2007-08 led to banks and other financial institutions, even large ones, going bust. Although governments stepped in to ensure ordinary depositors did not lose money, the belief that money was always safe in the bank was shattered, and some investors lost considerable sums.

Trust also appears to be an issue in relation to stock market investment. A worry about being cheated may be part of the reason, reinforced by high profile fraud cases. However, research suggests that stock market participation may be related to a more generalised concept of trust (Guiso, Sapienza and Zingales, 2008).⁹ The researchers suggest that less trusting individuals will buy less stock, even after allowing for different degrees of risk aversion and loss aversion. If true, this may help explain why levels of stock market investment vary widely between countries, even those where people have similar income levels.

The way products are sold can also act as a source of mistrust. Investment products, including life insurance, are often sold through an adviser. Even when the adviser is independent, that is, required to recommend the most suitable product on the market, he may be driven by sales commission, rather than the interests of the customer. People are often not clear about the boundary between advice and sales, nor what they are paying for. Their bank, for example, may appear to be advising them on their household budget or asset portfolio, when in fact the adviser is incentivised to sell particular products.

According to a survey by ING, trust in professional advisers and banks varies considerably between countries, but in every country surveyed friends and family were the most widely trusted source of help in financial decision-making (ING, 2012). Trust in the advice provided by banks was particularly low in Poland (16%), the UK and US (17%). Even in the country with the highest level of trust in banks' advice (Luxembourg) less than half of those surveyed (45%) said they would trust this source for advice. People in the Czech Republic (41%) were the most likely to trust qualified financial advisers, while people in France (7%), Thailand (8%), Turkey (10%), Poland (11%), Italy (11%) the least.

In the UK, several high profile mis-selling cases, like endowment mortgages and payment protection insurance, have led to widespread mistrust of intermediaries.

⁹ Using the same survey question to measure trust as the World Values Survey www.worldvaluessurvey.org

IV. NATIONAL POLICY ISSUES

All other things being equal, the saving rate is important as higher levels of household saving generate cash to fund infrastructure, business expansion and other investment, and reduce reliance on foreign investment. On the other hand, consumption adds to GDP growth. Governments may therefore face a delicate balancing act between encouraging consumption to boost short-term growth, and promoting household saving for longer-term sustainable investment and growth.

On the whole, most countries which responded to the OECD survey reported that saving rates in their economies were too low. The main exceptions were China, India and Malaysia. Rising inflation is a concern in Malaysia and China, as this may encourage people into riskier investments in search of higher returns, and expose them to scams. It is also the case that the developing capital markets in these countries may not allocate investment efficiently to support long-term growth. Singapore, which also has a high saving rate, did not report any policy concerns.

For those countries which said they had concerns about low saving rates, the main policy issues can be summarised as:

- Insufficient long-term saving. There is strong evidence from many countries of a pensions 'gap', that is, a projected deficit in retirement income compared with in-work income. Most countries have now grasped this issue and are taking a range of measures to encourage citizens to save for retirement, or to work longer. Gender remains an issue: women save far less than men for long-term goals, including retirement. As women live longer, on average, than men, many face poverty or dependence on welfare in old age. Long-term saving is also still an issue for those on low incomes, especially in developing countries, where access to formal financial products is limited, or people assume that their children will provide for them in old age.
- Low and variable saving rates. In most countries, a significant proportion of people do not save at all. This is to some extent related to income, but not entirely. Many countries have looked at the particular issue encouraging low-income savers to build assets, but none has policies specifically targeted at non-savers across the income range.
- Asset allocation. In many countries, people tend to be risk-averse. Financial saving is heavily concentrated in bank deposits, which may be inefficient as a means of generating growth. Bank deposits are also inefficient for individual saving for the longer term, as the returns are (or at least have been historically) much lower than those to be gained from stock market based investments. Many countries have responded to this by incentivising investment and emphasising investor education. In some developed countries, home ownership is the predominant means of long-term saving. This lack of diversification concentrates risk, which is further exacerbated by high leverage. Some countries expressed concern that overinvestment in property may crowd out other investment.

- Distortions in saving choices. The decision to save and the allocation of assets can be influenced by the interaction with the tax and welfare systems. Historical tax subsidies may not be achieving their original objectives, or products which essentially do the same thing may be taxed differently. Means-tested benefits may exclude assets such as pension saving or property. Tax breaks often benefit middle and high-income earners disproportionately.

V. POLICY RESPONSES: INFLUENCING WHETHER AND HOW TO SAVE

At the macroeconomic level, national authorities can potentially influence overall saving rates by a combination of income tax and welfare policy, ensuring financial markets are well regulated, and keeping inflation under control. In practice, however, the policy drivers for such changes are more usually directed at economic reform and financial stability and any changes in saving rates are a by-product.

Policy makers therefore tend to use microeconomic levers to influence saving behaviour. These interventions may be universal, or targeted at particular groups of the population, depending on the saving objectives. These are discussed in this section, with particular emphasis on consumer/investor education and awareness.

Financial regulation and consumer protection

Well-regulated financial markets are important to maintain confidence in the financial system. People need to know that deposits are safe, and that capital markets are well run and trustworthy. Financial consumer protection - rules about products and how they are sold, and redress mechanisms - can help offset information asymmetries by attempting to ensure the market does not operate to the disadvantage of the consumer. Given the degree of risk and complexity in investment products, these tend to be heavily regulated.

Product regulation

Product regulation may include pre-approval, banning products considered to have the potential to cause widespread consumer detriment; or withdrawing products which are already generating detriment. The UK government has proposed a product intervention measure for the new Financial Conduct Authority (HM Treasury, 2011). This will not include pre-approval. The European Commission is also considering product intervention in its current review of the Markets in Financial Instruments Directive (MiFID).

Sales and marketing

Many countries regulate the advertising and promotion of financial products, with rules specifying, for example, that promotional material should not mislead the consumer. Investment products are often sold through an intermediary. This may be a financial institution or an independent adviser. In Europe, the promotion and sales of investment products are governed by the MiFID. Among other things, the MiFID requires firms to take account of the needs of the customer and to act in his best interests. It also contains requirements about the information firms must send to customers post-sale.

Disclosure

Disclosure documents can at times be confusing and full of jargon. In Europe, investment disclosure requirements are increasingly being harmonized across the European Economic Area¹⁰. These will be set out in a new EU Directive – the Packaged Retail Investment Products Directive (PRIIPs). This Directive will cover products which:

- offer exposure to underlying financial assets;
- have the main function of capital accumulation; and
- are designed to be medium- to long-term, and marketed directly to retail investors.

This would include, for example, investment (or mutual) funds; investments packaged as life insurance policies; or structured products. The aim is to simplify and standardize information for investors, so that products can be easily compared. Under the Directive, information given to investors should be fair, clear and not misleading; enable investors to make informed investment decisions (information about performance, risks, charges, etc.); be short, simple and timely. The disclosure requirements in the PRIIPs Directive will replace measures currently contained in a number of other EU Directives.

Some countries are also looking at whether risk disclosure can be simplified through, for example, ‘traffic lights’ labelling – red for high risk products, amber for medium, green for low – or straightforward descriptions, like ‘cautious’, ‘balanced’ and ‘active’ to reflect the degree of risk. The problem with this type of disclosure is that risk is subjective: ‘green’ or a ‘cautious managed’ fund might mean ‘completely safe’ to some people, while others may understand there is still a degree of risk to capital involved.

Redress and deposit guarantee schemes

Redress mechanisms provide for the mediation of disputes between consumers and firms; and for paying compensation where appropriate. They provide an alternative to legal action, and are normally free to complainants.

Insurance schemes protect consumers if the financial firm with which they hold money becomes insolvent and cannot pay back the deposit or investment. Banks ‘borrow short and lend long’. This mismatch in the maturity of assets and liabilities can lead to instability if too many depositors lose confidence and withdraw their money at the same time. During the 2007-08 financial crisis banks had difficulty getting access to money on the wholesale markets, and maintaining the confidence of retail depositors became even more important. The Australian and New Zealand governments introduced temporary guarantees on all deposits following the financial crisis. All other countries which responded to the OECD survey have a permanent depositor insurance scheme. In the case of EU member states, the terms of the scheme are determined at EU level. Deposits are currently protected to a limit of 100,000 EUR.

Some countries also have investor protection schemes. These do not compensate for losses due to investment risk, but, subject to limits, may pay out where an investment firm becomes insolvent and cannot pay the investor, or where fraud is involved.

¹⁰ The EEA includes EU Member States and Iceland, Liechtenstein and Norway.

Compulsory savings

Compulsory saving schemes need to be distinguished from payroll taxation that is typically used to fund pay-as-you-go pensions or social security payments. The individual taxpayer/worker does not build up a fund, nor have any choice about what happens to the money they put in: they do not own the money in any sense. In a compulsory saving scheme there will usually be an element of choice – e.g. over allocation of the fund – and the money belongs to the individual, even though access may be restricted, or prohibited, until maturation date.

Few countries have compulsory individual savings, and the use of compulsion is confined to pensions saving¹¹. Examples include Canada, Estonia, Malaysia, Mexico, Singapore, and Spain, the latter mainly for the public sector. Australia and New Zealand have compulsory employer contributions, the latter only for those individuals who participate voluntarily in KiwiSaver. The UK is planning to introduce a similar scheme to that in New Zealand, from late 2012. Alongside compulsion, auto-enrolment also ensures that employees are automatically enrolled in a pension scheme without making any active decision to participate, although workers are also free to opt-out of such arrangements.

Incentives to save

Incentives typically provide a financial benefit, sometimes over and above the interest earned on the savers' money. This may be in the form of matched funding or tax advantages. Many countries have savings incentives, some universal, and some targeted at particular groups. Appendix B shows some examples of incentives to stimulate saving in general or for specific forms of savings and investment (e.g., pension saving, asset building, home ownership).

Financial education and awareness

Financial education and awareness is complementary to financial consumer protection. Regulation will always be necessary to a certain extent as even the most financially literate consumer will not have sufficient knowledge and understanding to overcome information asymmetries, especially in the complex field of investments. However, even the best disclosure document will contain technical information which the consumer needs to understand and evaluate, and thus financial education is vital.

Financial education and awareness initiatives can take many forms. Financial education includes instruction in personal finance concepts and the financial services landscape, and the development of the skills, attitudes and behaviours needed to make the right decisions for the individual. Elements of the landscape might include types of financial institution, products, how consumers are protected, and getting advice. Skills would include, for example, understanding risk and reward, planning and budgeting, evaluating information, and comparing products. Attitudes and behaviours are particularly complex in the area of savings and investments, as individual risk preferences vary widely. It is important that education leads to a self-awareness of risk appetite and other drivers of saving behaviour. As well as increasing the capability to make sound financial decisions, financial education should also lead to more appropriate savings as people gain confidence and the skills to determine financial goals and the means of meeting them.

¹¹ See OECD Pensions Outlook (OECD, 2012b) for a full list of countries with mandatory pension schemes. Not also that some countries (e.g. Iceland, Finland, Switzerland) have mandatory funded defined benefits schemes with no individual choice.

Information is the provision of facts or other data that will support or influence individual decision-making, by making consumers aware of choices and consequences. It may consist of quite general messages about savings and investment, or be targeted to specific audiences. A lot of information comes from the financial services industry, for example comparison tables and product disclosure. This needs to be distinguished from information provided by national authorities or educators. In itself, information will not necessarily improve decision making, as it is the ability to evaluate and use information which determines financially capable decision-making but it will ensure that consumers are more knowledgeable.

Advice or guidance supports individuals' financial decision-making by helping them evaluate the options that meet their particular circumstances and life stage. Advice can be tailored to individuals, and interactive, often face to face or on the telephone. Increasingly, advice is available on the internet, through applications which guide people through options. These applications will usually require the user to input personal data about, for example, income and expenditure, existing savings, debts and even savings goals and risk appetite. This kind of advice is always generic, that is, it will not result in the recommendation of a specific product from a particular supplier. This is what sets it apart from the financial advice provided by intermediaries, which is part of the process of selling products. Advice may increase financial well-being as it helps an individual through the process of evaluating information; the extent to which it improves financial literacy will depend on the outcome and the extent to which an individual learned anything during the process.

Different types of saving need different levels of awareness, knowledge and skills, as outlined in Table 2.

Table 2. Saving and financial education

Type of saving	Financial education and awareness requirements	
Precautionary	Estimating risk and costs of events like losing a job, or the house needing a new roof. Choosing between saving and insurance	Understanding the risks of informal saving, and the extent of depositor protection. Understanding interest rates and inflation. Learn how to recognise and, if necessary, overcome one's own behavioural biases and attitudes
Short-term	Setting short-term financial goals and planning. Choosing between credit and saving. Comparing different products	
Medium/long-term investment	Setting long-term goals. Understanding compounding, risk and return (including potential loss of capital), and the importance of diversification. Awareness of tax and other incentives. Understanding what different products do, and interpreting disclosure documents. Knowing where to get impartial advice. Awareness of rights and responsibilities, and availability of redress	
Non-financial assets	Understanding the risk and potential volatility of non-financial assets	
Decumulation	Understanding options for generating an income in retirement, and the costs and benefits of each. Comparing products.	

Delivering financial education and awareness initiatives

Schools

For many countries, the financial crisis and subsequent economic downturn gave added impetus to the drive to improve citizens' ability to manage their money, and the need to teach children about money. Personal finance education is now included in school curricula in over 20 OECD and non-OECD countries, and many more are planning to introduce it, often as part of a national financial literacy strategy. Financial education in schools is efficient as can reach almost all children and young people. It can also help overcome the disadvantages of financially illiterate parents (OECD INFE, 2012 forthcoming).

The OECD Programme for International Assessment (PISA) assesses the reading, mathematics and science ability of 15 year-olds. The 2012 survey will focus on mathematics and, for the first time, include a module on financial literacy. This will be the first large-scale international assessment of the financial literacy of young people. The PISA assessment framework includes savings-related concepts, for example, budgeting, planning ahead, benefits of medium and long-term savings and investments, building human capital, and smoothing spending through saving or borrowing (OECD, 2012c). These topics are usually taught as part of financial education in schools, adapted as appropriate to the age of the child.

The OECD has developed guidelines on financial education in schools (OECD, 2012a). Among other things, these emphasise the need for resources to be 'of high quality, diversified, engaging and attractive for students, using real world contexts, case studies, inquiry/activity-based learning and problem solving approaches or community-based activities directly involving students'.

A number of countries have developed resources for classroom use, from booklets to online games and quizzes. Some are developed by the body responsible for financial literacy (e.g. finance ministry or regulator); others by financial services firms, or NGOs. To widen access to resources, there may be a central 'clearing house', like the Personal Finance Education Group (pfeg) in the UK, Jump\$tart in the USA, or www.teachingfinancialliteracy.gov.au in Australia. Pfeg has also developed a 'Quality Mark' to ensure resources used in schools are thoroughly tested and free from 'selling bias'.

Activities are also a popular way of delivering financial education. Entrepreneurial activities are often used in schools, for example, the students set up a shop or raise money for charity. Stock market games are also frequently used to teach children about investment. School banking is another example of a 'real world' resource which can be used to encourage children to save by giving them hands-on experience. School-based bank savings programmes give students the opportunity to open savings accounts at school and, in some cases, training to operate the service.

Websites

Providing information on the internet is an efficient way of reaching a large number of people, although the effectiveness of this medium relies on the individual being motivated enough to look at the website. Access to websites may be encouraged through incentives (such as winning a prize), or through advertising campaigns. A number of countries have developed websites which emphasise information and advice about savings and investments. These include Australia, Ireland, Mexico, New Zealand, Serbia, Singapore, South Africa and Turkey. Many of these use advertising and social media to encourage use of the sites.

Interactive advice – internet, telephone and face to face

Interactive advice can be better tailored to the needs of individuals, and answer the questions they may have. Social media are increasingly used as an interactive tool as well as to transmit messages about savings and investments. Some countries encourage debate through social media and email (Mexico, New Zealand, Singapore), or provide a telephone service (Mexico, Palestine, UK). Mexico and the UK also have a face-to-face service. Specialised telephone advice about pensions is also available in some countries, including Mexico and the UK.

Seminars, workshops and adult financial education

As discussed above, financial education is often used to support initiatives based on asset building incentives. Aside from these specialised programmes, financial education serves a wide range of objectives, from encouraging saving to increasing knowledge and skills about aspects of money management, including budgeting and saving. Some examples include:

- In **Colombia**, the programme for rural communities provides 200-450 hours of e-learning, focused on money management, business plans and saving.
- In **Ireland** ‘Money skills for life...’ is a workplace programme providing financial education to employees.
- In **Japan**, the Central and Local Councils for Financial Services Information hold more than a thousand seminars for adults in a year, covering such topics as money management and securities investment. In addition, other governmental and private organisations in Japan give seminars and lectures on financial literacy for adult citizens.
- In **Mexico**, CONDUSEF and CONSAR run workshops and seminars in the workplace and at universities.
- In **Romania**, the Private Pension System Supervisory Commission launched a campaign in 2010: “Learn to choose! Private pension, a young decision”. This includes financial education events in universities, a web banner campaign, and TV and radio coverage.
- The National Bank of **Serbia** runs workshops for adults throughout the country. The topics are based on the complaints about financial products and services received by the NBS. Attendees are encouraged to raise questions about their needs and misunderstandings about products and services.
- In **Saudi Arabia**, there are recorded workshops on investment available on YouTube.
- In **Singapore**, the MoneySENSE programme covers money management, financial planning and investment know-how. The programme includes regular investor education seminars, providing information on the features and risks of savings and investment products. University experts share their views on products, and highlight risk-return trade-offs. Recordings of the seminars are available online.
- In **South Africa**, the Financial Services Board and other regulators participate in work-based Employee Assistance Programmes. These encourage employees to save for rainy days and retirement and include topics like planning, budgeting and saving, rights and responsibilities, and redress.

Impact and evaluation

Many financial education and awareness programmes are still relatively new. Most are evaluated at 'point of use', that is, participants are asked about their experience of the programme after completion. This may include questions about, for example, intentions to budget or save. There are very few evaluations of the longer-term impact of financial education and awareness initiatives designed to influence saving or investment decisions. Most evidence about long-term effects comes from research studies. These have shown that financial education can encourage planning and saving, and lead to better saving choices (Lusardi and Mitchell, 2007; Hilgert, Hogarth, and Beverly, 2003). Better knowledge (e.g., understanding of interest rates, inflation, and compound interest) can improve investment decision making, and, conversely, low levels of knowledge are associated with poor investment decisions (e.g., failure to diversify and lack of long-term planning) (Guiso and Jappelli, 2008). Evidence also suggests that people with low levels of financial knowledge are significantly less likely to invest in stocks, or to participate in pension plans (van Rooij, Lusardi and Alessie, 2011).

Programmes which provide financial education alongside incentives to save have been well evaluated, probably due to their high cost. One example is Saver Plus in Australia, described in Appendix B. The latest evaluation of Saver Plus found the following impacts (Russell et al., 2011):

- 86.6% of Saver Plus participants who were enrolled in the programme between 2006 and 2009 are saving the same amount or more since completing Saver Plus;
- 80.9% of respondents were better able to cope with unexpected expenses than they were before Saver Plus;
- 83.8% of respondents agreed or strongly agreed that involvement in the Saver Plus programme improved their ability to plan ahead and stay on top of things financially;
- 68% of respondents felt more confident about talking to banks or lending organisations as a result of their participation in Saver Plus;
- 84.5% of respondents reported that through Saver Plus they were able to encourage other family members to save, with almost two thirds also sharing Saver Plus lessons and experiences with family and/or friends.

A further report found that several factors influenced whether participants continued to save (Bodsworth, 2011). These included the use of direct debit as opposed to face-to-face banking, a stable income, presence of a 'buffer' in their bank account to cover the direct debit and having a clear savings goal.

Behavioural measures

Behavioural initiatives can be used to overcome (or exploit) inertia, or to 'nudge' people into a financial decision, to make saving seem more interesting or attractive, or to encourage people to continue saving. Some examples include:

- 'Pay yourself first', a simple mental reminder to put money into savings before spending.
- 'Save more tomorrow' schemes help overcome the reluctance to commit to saving today by getting people to start saving a small amount from their pay, and increasing this as, for example, their salary rises. In this way, they see some of their pay increase, but also benefit from the increased savings. Deductions from earnings at source mean that, in effect, the employee has to opt out of the scheme to stop saving (Thaler and Benartzi, 2004).

- ‘Rounding up’ - saving at the supermarket or other retail outlet by rounding up the bill to the nearest whole euro/five euros, and putting the spare cents into a savings account. The technology is being developed now to allow this to happen automatically.
- Choice architecture: This refers to careful design of the environments in which people make choices, so as to nudge people to make certain choices without necessarily forcing certain outcomes upon them (Thaler and Sunstein, 2008). One example is the ‘framing’ of portfolio choices in a pension scheme, which has been shown to have a large influence on the decisions people make (Benartzi and Thaler, 2007).
- Auto-enrolment and ‘opt out’: Usually used for pensions saving but can be used for other savings schemes as well: the consumer has to make an active choice not to be part of the scheme. Auto-enrolment requires the use of a default fund or account, to cover the eventuality the consumer does not make an active choice.
- Saving groups: Informal saving schemes can be effective at encouraging people to keep saving. Where a group saves for the benefit of one of its members, or for a common goal, peer pressure and support mean that members of the group are more likely to carry on rather than let down friends and neighbours.
- Lottery-linked savings accounts: These pay a lower rate of interest than normal but give account holders a small chance of winning a large prize in a regular draw. These types of accounts are likely to appeal to those on lower (but not the lowest) incomes: the group most likely to spend on lottery tickets.

In general, behavioural ‘nudges’ do not enhance financial literacy. Policies based on behavioural economics assume that people often make the ‘wrong’ decisions and need forcing or ‘nudging’ to the ‘right’ decision. This requires policy makers to determine what the right decision is for individuals or groups of people. It arguably takes away individual responsibility, and does not equip people to make choices in other areas of personal finance. It may also cause people to equate the option they are given with advice. So, for example, people may assume that an opt-out pension will deliver them enough savings for retirement; or that a default option will be the right one for them. This suggests that behavioural interventions should not be used in isolation, but always accompanied by financial education initiatives.

Enhancing financial education and awareness initiatives

Although initiatives based on behavioural economics have limitations in raising financial literacy, understanding why saving behaviour is often irrational can help design more effective financial education and awareness interventions. Lessons from behavioural economics¹² suggest that the following may be helpful:

- Using the best person or channel to provide education or information, the ‘trusted intermediary’;
- Exploiting social norm behaviour by framing information in relation to a peer group – e.g. ‘People like you usually save \$50 a month for a rainy day’; and
- Providing feedback on how people are doing (e.g. regular information on how savings are growing, or expected income in retirement).

¹² See for example CFEB (2010) and Yoong (2011).

VI. CONCLUSIONS

Most countries want to encourage their citizens to save more, or at least to save differently: to invest rather than save in cash; or to use financial institutions rather than save informally. There are differences in the needs of developing and developed countries. While the need to generate domestic investment is a common concern, developing countries are more likely to emphasise also the need to encourage the use of formal savings vehicles. Developed countries are more motivated by a desire for their citizens to become more financially responsible.

The barriers to saving and investing are considerable, perhaps even more so than for other financial products and services. As well as the usual financial market problems of access, complexity and information asymmetries, there are behavioural and cultural factors which deter people from saving or investing, even when they are aware of the benefits of doing so. Knowledge and understanding of investment concepts is particularly low in many countries, which may inhibit the use of stock-market based vehicles. Lack of trust in financial institutions is also an issue, particularly amongst the financially excluded.

Despite the importance of saving to economies across the world, and the significant barriers to saving, this preliminary report found no articulated strategies which set out explicit savings goals and means of achieving them. Surveyed governments appear to use a mix of regulation, financial incentives and financial education without any clear idea of whether the individual interventions have an impact, much less whether the mix is right.

Prudential regulation can help reassure savers that their money is safe, and consumer protection legislation can reduce information asymmetries. However, so far, this area does not have much emphasis in financial education programmes. The risks of informal saving, or saving with unregulated firms, need to be made more explicit, as does information about what is covered by consumer protection regulation (e.g. deposits), and what is not (investment risk). The issue of trust is partly about the regulatory framework, but also about how financial institutions treat their customers.

There is widespread use of incentives to encourage savings, particularly tax breaks and employer contributions for pensions, and (less frequently) for deposits and investments. Universal incentives are a blunt instrument, and achieving their intended impact will depend on people understanding them. In fact, there is evidence that many people are not aware of tax incentives. There is also evidence that tax breaks may affect the choice of saving vehicle but do not generate much new saving.

Matching incentives for asset building, particularly when supported with financial education, appear to be more effective and can generate positive outcomes beyond the immediate impact on saving. There is evidence that matching is more effective than tax incentives, because it is more transparent and easy to understand.

Many developed countries subsidise home ownership, particularly for first-time home buyers. This may reduce productive investment, although there does not appear to be any clear evidence for this. It is

likely, however, that home owners do not appreciate the risks they are taking on, as was seen only too clearly in the 2007-08 financial crisis. It may be helpful for financial education to emphasise 'whether' to buy a home, rather than 'how' to do so.

Financial education and awareness initiatives cover a wide spectrum of activities. Increasingly, countries are incorporating personal finance education into their school curricula, and supporting teaching with innovative and imaginative resources. There is also widespread use of websites, seminars, advice and other channels to equip people with the knowledge and skills to make choices about saving. There is little empirical evidence, as yet, of the cost-effectiveness of different approaches, although research evidence suggests that financial education and awareness can encourage saving and improve financial decision-making. In particular, investor education can have an impact on stock market participation.

Many countries have also started using behavioural techniques to encourage or 'nudge' people into saving decisions. 'Opt out' pension schemes are a notable example; and the use of very few funds within these schemes takes account of the difficulty people have in choosing between many options. Behavioural techniques recognize that changing behaviour may be difficult, especially when there are such strong behavioural biases against saving. However, while 'nudge' techniques can be cheap and effective, they may not generate the right outcome for everyone, or even a majority. Moreover, following a default option or a nudge does not require consumers to learn how to engage in healthy financial behaviours, so that they do not enhance their financial literacy and the benefits of financial education are not fully exploited.

Financial education initiatives are relatively new, and changing saving behaviour is a long-term and challenging process. Further research and evidence are needed to identify best practices. Future work of the OECD INFE and its Expert Subgroup on Investor Education will be devoted to develop policy analysis and guidance on effective financial education initiatives as a complement to regulatory measures aimed at encouraging sound saving and investment behaviour.

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APPENDIX A – THE SAVING RATE

Measuring savings – the saving rate

Household saving is measured as the difference between household disposable income and consumption. Disposable income is income from employment or self-employment plus interest, dividends and social benefits *less* tax, interest and social security contributions. Consumption is spending on goods or services. It also includes imputed rents for owner-occupiers.

The international standard of System of National Accounts 1993 (SNA93) introduced special treatment of contributions to, and benefits from, funded pension schemes. This would have resulted in pension fund saving being excluded from the measure of household saving, so an adjustment is made to the income measure to compensate. For those countries that did not adopt the SNA93 treatment of pensions, the adjustment is not needed. The saving rate is hence calculated as household saving divided by disposable income (plus the change in net of households' saving in pension funds).

The saving rate can be measured gross, or net of depreciation. The net measure is the one most commonly used.

The saving rate is a flow concept; it measures additions to the stock of wealth.

Limitations of the saving rate

The numerator to the saving rate is the difference between two large numbers (household disposable income on the one hand, and consumption on the other), which are often subject to revision in national accounts. The result is a number that is therefore volatile, and apparently, short-term fluctuations may be caused by this volatility rather than any real change in saving rate. Comparison between countries is complicated by the use of gross or net measures in different jurisdictions. Interpreting the results is difficult as the reasons for between-country differences are many, including culture, different social security and pension systems, and different taxation.

APPENDIX B – EXAMPLES OF INCENTIVES TO SAVE

General saving

Rationale: to encourage saving in general, amongst particular groups, or to stimulate formal saving.

Examples include:

- Australia. Tax discount of 50% on interest up to 1,000 AUD on a range of savings products.
- Canada. Tax concessions for registered Disability Savings Plans.
- Colombia. Tax exemption for savings with regulated providers.
- Estonia. Tax free interest on bank deposits.
- Ireland. Tax exemption for certain government-backed savings.
- Mexico. Government matched contribution for savers living in communities of less than 50,000.
- UK. Tax free interest on Individual Savings Accounts, subject to an annual limit on the amount deposited.

Pensions saving

Rationale: to encourage saving for retirement, to reduce poverty and reliance on welfare benefits in old age.

Tax relief

Tax relief can be on contributions to a pension fund, investment gains, or on post-retirement income. The most widely used approach is to exempt contributions and investment gains, usually within limits, but tax retirement income (the 'EET' model¹³). Other countries use different combinations as follows (Johnson, 2010):

- TEE: Hungary, Luxembourg;
- ETT: Denmark, Italy, Sweden;
- TTE: Australia, Greece, New Zealand;

¹³ The 'E' stands for exempt and the 'T' for taxed. The three letters refer respectively to the three elements: pension fund contributions; investment gains; and retirement income.

- TET: Czech Republic.

In some cases, the 'T' may be partial, that is, the tax rate is still favourable compared to taxation on income or profits.

Compulsory employer contributions and matching

In addition to tax advantages, some countries also include government or mandated employer contributions to pension schemes.

- The New Zealand 'Kiwisaver' has a start-up government contribution of 1,000 NZD. Members' contributions are matched (up to a limit) by their employer, and by an annual government contribution. It is a defined contribution, opt-out, scheme.
- In Australia, employers are required to pay a minimum of 9% of the employees basic earnings into a superannuation fund (rising to 12% by 2019-20). There is also a matching scheme for people on low to middle incomes. For every eligible dollar put into a superannuation fund out of taxed income, the government will add a dollar. There is an annual limit of 1,000 AUD.
- In 2012, the UK will introduce the National Employment Savings Trust (NEST), a pension scheme for low to middle income earners. This will be a defined contribution, opt-out scheme, with mandated employer contributions of a minimum of 3% of basic earnings. There will be annual limit on contributions of 3,600 GBP.
- Slovakia also has mandatory employer contributions to employee pensions saving.

Investment

Rationale: to influence asset allocation to generate productive growth and encourage people to get the most out of their long-term savings.

A number of countries have tax incentives in place to encourage personal investment, whether in unit trusts or other pooled investment vehicles, or in investments 'wrapped' in life assurance.

Examples include:

- Czech Republic. Capital gains tax exemption for investments held longer than six months.
- Mexico. Opportunity to save small amounts in Treasury Bills and Bonds free of commission and charges, and at the same interest rate as for larger investments.
- New Zealand. Tax advantaged investments in qualifying investments (Portfolio Investment Entities)
- Singapore. Encouragement to top up Retirement or Special Accounts for individuals or eligible family members. Tax relief of 1 SGD for every top-up 1 SGD invested, to a limit of 14,000 SGD in one year.
- Slovenia. Tax exemption for life insurance payouts after 10 years or more.

- UK. Tax exemption for capital gains in stocks and shares Individual Savings Accounts. Subject to an annual limit – more generous than for cash ISAs.

Financial asset building

Rationale: to generate increased opportunity for disadvantaged groups, by encouraging saving for education, training, or to start a business. Asset building is a particular form of (usually) medium-term saving, often for young people or poorer communities. It is designed with the specific purpose of facilitating socioeconomic development (New America Foundation, 2008). Evidence suggests that ownership of financial assets, particularly earlier in life, has many benefits. It can lead to the acquisition of other assets, increase long-term planning, and lead to more engagement in the local community (New America Foundation, 2008).

Unlike other incentivised savings, asset-building schemes often include an element of financial education, and the involvement of local community groups. Matched funding is also frequently used, as evidence suggests this is easier to understand, and therefore more likely to be effective, than interest payments or tax breaks.

Some examples of financial asset building schemes include:

- Australia. Saver Plus is intended to help disadvantaged Australians save for education. The scheme matches savings dollar for dollar, up to a limit of 500 AUD. It also provides around 10 hours of financial education, and community support.
- Canada. Individual Development Accounts encourage low-income adults to save for, and participate in, further education. Participants earn 3 CAD in matched credits for every 1 CAD they deposit in a Learn\$ave account, up to a limit of 4,500 CAD in matched credits (1,500 CAD savings). Credits can be used for education or to start a small business. The scheme also includes financial education – building knowledge and skills like planning and budgeting. There is also support, and regular feedback on amounts saved.
- South Africa. The Fundisa Fund encourages people to save for their children’s education by adding a 25% government contribution to the total saved over a year. There is a minimum saving requirement of 40 ZAR a month.
- US. Individual Development Accounts matched with government contribution, for low-income families to save for home ownership, to start a business or for education and training.

Across the world, there are also numerous Children’s Development Accounts (CDAs), or Children’s Savings Accounts, which help children and young people build financial assets for adulthood. These may be offered by governments, NGOs, and financial institutions. The purpose of the accounts varies, but usually includes: building a savings habit, financial and social inclusion, increasing financial literacy, and reducing poverty. The accounts are usually low cost, incentivised with matched deposits or small ‘in kind’ incentives¹⁴.

One example of a CDA is the US Saving For Education, Entrepreneurship and Downpayment Initiative (SEED), which promotes matched savings accounts and financial education for children and young

¹⁴ For further discussion and examples, see New America Foundation (2008).

people. CDAs are long-term asset-building accounts, established for children from birth onwards. The accounts are generally started with an initial deposit from public or philanthropic sources, and built by contributions from family, friends and the children themselves. To provide further incentive for poorer households to save, the accounts of lower-income children may receive additional financial assistance in the form of a larger initial deposit or a higher match. At 18, the savings in the accounts may be used for a range of asset-building purposes – most often to finance higher education, but also potentially to start a small business, buy a home or start a retirement fund.

Non-financial asset building

Rationale: to enable or encourage people to acquire an asset, usually a home.

In many countries, home ownership is popular and seen as desirable. Some of the financial asset building schemes described above can be used to fund house purchase (e.g. in the US). Other countries provide broader incentives for home ownership, including use of pensions saving, for example:

- Australia. Tax-advantaged First Home saver accounts. 7,000 AUD payment to first-time home buyers to offset the effect of sales tax.
- Luxembourg. Tax relief on mortgage interest (tapering after five years) and on home savings plans.
- Mexico. A housing account is included in the mandatory pension scheme for formal workers. Employers and workers contribute to the account, which is intended for a housing down payment. If not used for this purpose it accumulates as retirement savings.
- Singapore. Savings in the Central Provident Fund may be used to purchase housing.
- Slovakia. Subsidies for home savings and support for young people in repaying mortgages.
- Slovenia. Tax exemption on savings in government housing schemes, after a period of saving for at least five years.
- South Africa. Low-income households (less than 3,500 ZAR a month) can apply for a grant to help with the cost of buying a first home.
- UK. 10% equity loans for first-time buyers, interest free for the first five years.
- New Zealand. Members of KiwiSaver can withdraw their savings after three years to put towards a deposit on a first home, and there is also a first-home deposit subsidy, of up to 5,000 NZD for eligible individuals.

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