Financial education in the aftermath of the financial crisis

Ignazio Visco*

1. Introduction

The financial crisis and its roots have been widely analysed. The crisis arose out of the interaction of financial innovation, information asymmetries, regulatory failures and lax supervision with macroeconomic conditions characterised by low interest rates, asset-price misalignments, and large saving-investment imbalances. These factors prompted the financial sector to take large and poorly understood risks, to raise leverage to disproportionate levels, and to rely increasingly on wholesale short-term funding, thus creating further sources of contagion.

The crisis has shown us just how severe the unintended consequences of complexity can be. It has also revealed that many households and investors are unaware or only partially aware of the implications of many of the financial decisions they take. The credit boom that preceded the crisis, particularly in the United States, was fostered by overconfidence in ever-increasing home values and asset prices and persistently low interest rates. Overconfidence is usually present in credit booms and asset price bubbles. This time, however, the scope and depth of the crisis have been exceptional because the financial system's role in our economies has become so much larger than in the past.

As a result of the crisis, the financial system's ability to channel savings to the most productive investments and to assist in the inter-temporal allocation of resources has been substantially damaged. At the same time, confidence in the support it provides to risk diversification and portfolio management has been shattered. Restoring confidence and ensuring the long-run sustainability of financial flows is now paramount.

In response to the crisis, prudential regulation for banks through higher capital requirements is being tightened and new standards to contain liquidity risk are being introduced. Consultation and cooperation among national authorities are being reinforced and new forms of international coordination are being envisaged for crisis management

---

* Deputy Director General, Member of the Governing Board, Bank of Italy. Special Address to the OECD-Bank of Italy Symposium on Financial Literacy, "Improving financial education efficiency", Rome, 9 June 2010.

and resolution. These measures are aimed at increasing the stability of the financial system as a whole.

Attention is also being paid to the structure of incentives within financial firms and to the way business is conducted. Risks must be correctly evaluated and presented. A regulatory framework designed to ensure consumer protection and fair relations between financial intermediaries and their customers is necessary to limit conflicts of interest and is a prerequisite for customer confidence. However, within an appropriate system of incentives and sanctions to regulate the conduct of intermediaries, financial responsibility ultimately rests with individuals. This is why we must invest in financial education, to improve the way financial decisions are taken and to raise awareness of the risks inherent in financial assets and liabilities.

In the past households had fewer financial decisions to take and the choice of investments and debt instruments was more limited. Pension systems were mostly publicly funded, mortgage markets were less developed, consumption more tied to current income streams. As the financial system has grown more diversified and complex, households have enjoyed a broader set of opportunities while potentially facing substantial new risks. Furthermore, because of demographic changes and the tighter constraints on public finances, our welfare and that of our children are more likely to depend on financial decisions at the individual level. Education, healthcare, retirement living standards will depend heavily on sound financial planning.

At the same time, financial literacy is a key ingredient of competitive financial markets. Competition in the financial industry requires not only a multiplicity of suppliers to choose among, but also that consumers be properly informed when making their choices. Obstacles and difficulties in gathering and processing information increase switching costs. Informed and financially literate consumers are essential to the effectiveness of price and quality competition.

2. Financial education and customer protection

Consumer protection is pursued with regulations on transparency and conduct of business. These are essential in a relationship between customers and intermediaries where unavoidable information asymmetries make it impossible for the investor to monitor independently the work of the intermediary. In addition, deregulation of financial markets and the reduction in costs brought about by developments in information technology have resulted in a proliferation of new products; the pace of financial innovation is so fast that investors are faced with products with too short a history to make reliable estimates of the probability of returns. They must be made aware of this.

Customer protection promotes confidence in the enforceability of contracts, an essential ingredient for financial intermediation. Properly enforced consumer protection prevents intermediaries from adopting reprehensible practices and enhances competition based on prices, quality of services and product innovation. Appropriate regulation on the conduct of business makes it easier for customers to react to malpractices earlier and regardless of sanctions imposed by supervisory authorities.

While rules on transparency and the conduct of business have typically a top-down design, financial education can be held to protect confidence, stability and competition in a bottom-up perspective. Indeed, supervisory authorities are tackling the financial education issue as an important element in the wider context of their responsibilities. As the OECD put it in its 2005 report on *Improving Financial Literacy*, “financial education provides policymakers with another tool for promoting economic growth, confidence, and stability”.

Financial education helps investors to monitor intermediaries. Households better acquainted with the notions of risk and return, compound interest and inflation can better identify abuse and fraud as well as understand the real terms of what they are being offered. There are many recent examples where the placement of financial instruments has been largely based on poor understanding of the fact that unusual earnings can be offered only against unusual risks and in ways not necessarily consistent with the risk aversion, financial situation and investment objectives of many investors.

For reputational concerns to play a role in checking the behaviour of financial intermediaries, investors must be able to compare different financial products and assess the quality of the services provided by different institutions. Financial education can therefore complement the supervisory action of the authorities in fostering enhanced competition.

Finally, financially literate households are less likely to believe that they have been cheated when that was not the case. Thus, financial education helps to sustain confidence in the financial system and can have a beneficial effect on the stability of intermediaries by reducing their legal and reputational risks. Indeed, the financial industry is likely to benefit from having more literate customers.

For all its merits, however, financial education should not be regarded as a silver bullet by any of the interested parties (consumers, regulators, industry). First, knowledge takes time to build. Second, evidence on the effectiveness of financial education in improving financial behaviour is mixed, and clearly depends on the kind of programmes provided. Third, we should not expect financially literate consumers never to make mistakes: the financial sophistication of the people fooled by Bernie Madoff, and their numbers, are a sober reminder that financial education does not provide foolproof protection against fraud. Indeed, it might even, to some extent, induce overconfidence.

But, all said, investing in financial education still seems the safest bet if we want to improve individuals' ability to take advantage of the opportunities offered by the financial system.

3. Promoting financial education

The Italian public debt, currently running at around 115 per cent of GDP, is high by international standards. It is well known that most of the growth in public debt took place during the 1980s, when large budgetary deficits piled up and disinflation was slow and incomplete; this eventually led to the financial crisis of 1992-1993. Afterwards, in the run-up to the economic and monetary union (EMU), substantial stability was restored as public debt was progressively reduced from a peak of over 125 per cent of GDP in 1995 to about 105 per cent in 2007. This was largely the result of two factors: the reduction in interest payments and the rise in revenues from privatization programmes. The fall in interest rates reflected not only the taming of inflation but also the reduction in "sovereign risk".

It is also well known that Italian households used to have high saving rates, while it is less well known that their levels of debt, and in general those of the whole of the private sector, have always been relatively low by international standards. The high saving has meant that interest earnings have been an important component of households' disposable income. However, when interest rates were reduced in the second half of the 1990s, the income share of net interest flows fell from an average of about 12 per cent in 1992-1996 to 8 per cent in 1999-2001. The negative trend continued over the initial years of the EMU, reaching a low of around 6 per cent in 2005.

Two main factors have been at work: the progressive reduction of government bond yields and the reallocation of households' portfolios from relatively "safe" to riskier assets. This process was particularly in evidence in the second half of the 1990s, as government bonds held by households contracted from about 21 per cent of total gross financial wealth in 1995 to 12 per cent in 1999. After a partial recovery at the beginning of the new decade (in connection with the stock market crash of 2001), the share of government bonds over total financial assets fell below 10 per cent.

According to the Bank of Italy's Survey on Italian Households' Income and Wealth (SHIW), the portfolio shift out of government bonds was widespread across different groups of investors. The proportion of households with low education (at or below lower secondary school level) holding government bonds fell from 49 per cent in 1995 to 23 per cent in 2000 and 15 per cent in 2004; it increased slightly in the following years (up to 20 per cent in the 2008 survey). At the same time, the share of low-education households investing in risky assets increased from 15 per cent in the mid-1990s to 32 per cent at the turn of the century, averaging around 25 per cent since then. This most likely reflected the attempt to compensate for the fall in government bond yields caused by the reduction in inflation and in real rates without being fully aware of the higher risks involved; a stunning example of this was the massive investment in Argentinean bonds by Italian households.

To the extent that education proxies financial literacy, these trends may raise concerns about households' ability to manage the higher risk in their financial portfolios, especially as financial innovation deepens and increasingly complex financial tools become available. Indeed, in Italy, levels of financial literacy still appear to be low. As the SHIW has shown, about one third of the population is unable to read a bank statement, calculate changes in purchasing power, distinguish between different types of mortgage and evaluate the associated interest rate risk. More than half of Italian households do not understand the importance of investment diversification, and two thirds do not know the difference between shares and bonds in terms of risk. Less than one household out of three knows the main features of supplementary pension schemes.

Although it may be difficult to make generalisations on financial literacy at the international level, findings like these seem to be common to several countries. They show that there is little knowledge of basic financial concepts and low computational and statistical skills. A couple of examples will suffice.

According to surveys conducted in the United Kingdom, households' ability to plan ahead seems to be fairly poor. More than 80 per cent of the pre-retired think that a state pension will not provide them with the standard of living they hope for in retirement. Nevertheless, only slightly more than half of them have made some additional pension provision. Also, 70 per cent of the population have made no personal provision to cover an unexpected drop in income. Households also expend little effort in choosing products. For example, one out of two holders of saving accounts is unaware of the current interest rate. One out of ten holders of credit cards simply use them because they came with their bank account, and only half of credit card users choose their credit card on the basis of the interest rate charged on it. One out of three of those who have only general insurance bought their policy without comparing it with even one other product.

The latest survey conducted in high schools and colleges in the US by the Jump$tart coalition shows that more than 50 per cent of high school students do not correctly understand how to manage their credit card debts or choose the repayment rates; only 17 per cent are able to appreciate the different returns of stocks, savings bonds, savings accounts and checking accounts; 60 per cent are not familiar with their health insurance coverage; 36 per cent are unaware of the impact of inflation on savings.

Poor knowledge and skills may have serious medium-to-long term consequences for the well-being of households. Financial literacy programmes might help. However, given that the competences required depend on people's needs at a certain moment in their life, a one-size-fits-all approach to improving the skills of the entire population, from students to retired people, is not feasible.

This means that priorities need to be clearly set, in terms of targets and goals. Financial education programmes could be targeted to leveraged households and to the very poor, who have the most to lose if they make bad decisions; to students, who will be the consumers of the future. The OECD has identified two priorities. First, education in schools: younger generations are likely to bear increasing financial risks; schools are regarded as an efficient and fair way of reaching an entire generation nationwide and putting all young people in the same age group on an equal footing. Retirement-saving literacy programmes addressed to the labour force are also a priority. In fact, several countries are shifting towards a more or less compulsory system of private savings accounts. Thus, as pointed out in a 2005 G10 report on *Ageing and Pension System Reform*, also published by the OECD, one of the policy challenges for these countries is to develop financial education programmes that "can help consumers avoid abuse and fraud, improve their investment choices, and raise their contributions to private pension plans".

Once the target has been determined, it is necessary to identify the skills that should be acquired with the programme. Especially important in this respect is the recognition that not only are levels of financial education generally low, but so is awareness of the need for it.

Closer investigation of the causal connections between different programmes of financial education and investment decisions is still needed and more effort must be put into identifying those forms of financial education that more effectively improve financial behaviour. As a further caveat, it should be remembered that the financial industry evolves quickly. It is therefore better to focus on general principles rather than on detailed information about specific products.

The provision of information, however important, cannot always fully protect unsophisticated consumers. Even when, as regulators rightly require, the information disclosed to the public is not deceitful or manipulative, an information overflow might generate confusion and ultimately hamper customers' decision making. Indeed, financial education programmes developed as a mere delivery of information may fail to reach the expected goal. The limited available evidence seems to suggest that education strategies are most effective if those trained are actively involved and experience effective gains and losses from simulated decisions.

It is worth emphasising again that the success of financial education programmes largely depends on people's awareness of their level of financial literacy and of the enormous impact this will have on their medium-to-long term well-being. People who are aware that their level of financial literacy is low may be more receptive to educational programmes and proactively strive to acquire the information and knowledge they need. Financial educators should use mass media and effective communication strategies to develop such awareness.

Knowledge of the costs associated with short-sighted financial decisions is also very important. Consumers are used to shopping around for relatively sophisticated goods or for important investments (such as in real estate). In fact, the cost of not doing so is evident to them. Customers need to be encouraged to shop around even for banking and financial products and services.

4. The Bank of Italy's financial education initiatives

In Italy, financial education has only recently entered the limelight. As one of the first institutions to point out the importance of this issue to the country, the Bank of Italy has, on several occasions, stressed the need for investors to acquire appropriate and up-to-date financial education as one of the key components of comprehensive action to foster economic and business growth. Since then several initiatives have been launched.

In the last two editions of the Bank's SHIW (for 2006 and 2008) specific questions were included to measure the financial literacy of the Italian population (ability to read a bank statement, calculate variations in purchasing power, measure bond yields, calculate accrued interest, understand the relations between the various securities and distinguish between types of mortgage loan). As mentioned before, the findings were in line with those of other advanced countries and confirm the need for financial education programmes: about 50 per cent of Italian households do not possess the basic knowledge required to make informed decisions on the most common financial transactions.

Since 2007, the Bank of Italy's website contains a section dedicated to financial education. It attempts to provide easily understandable information on the main banking products as well as clear explanations of banking, economic and financial matters. In the near future it will be made more interactive and attractive to the public.

Young people, students in particular, are a priority target of the Bank of Italy's financial education programmes. Based on a Memorandum of Understanding with the Ministry of Education signed in November 2007, an experimental project to incorporate financial education into school curricula was launched in 2008. This initiative, inspired by international principles and best practices, is the first project in Italy to be launched by public authorities in this field and specifically addressed to students. Experts from the Ministry of Education and the Bank of Italy jointly prepared lessons on money and payment instruments to be delivered in schools.

The first wave of the programme took place in the 2008-2009 school year and involved a limited number of primary, lower secondary and secondary schools in northern, central and southern Italy. The effectiveness of the educational programme was measured by means of tests administered to students before and after lessons were delivered. Students who had not received any financial training were also given the tests to serve as a reference sample. The tests were developed in cooperation with INVALSI, the National Institute for Assessment of the Efficiency of the Educational System. The results showed that the educational programme was effective in improving students' familiarity with money and alternative payment systems (the percentage of correct answers rose from 81 to 89 per cent in primary schools, from 70 to 76 in lower secondary schools and from 60 to 69 per cent in secondary schools).

Those results led the Bank of Italy and the Ministry of Education to extend the project to the current school year and involve up to 250 schools and 8,500 students nationwide. The test results confirm, on a larger scale, the efficacy of the educational programme.

Measuring the impact of financial education programmes is no easy task, however. There are technical challenges, as the adoption of a rigorous experimental protocol can be difficult in a school environment, where the standardization of treatment clashes with the discretion teachers need to maintain, risks of contamination are high and ethical problems can be strong. More fundamentally, the impact on financial behaviour, which is the ultimate goal, cannot be measured straigthforwardly, since students may still be years away from important financial decisions.

To address some of these difficulties, a new programme will be launched next year, specifically designed to verify whether financial education improves the ability to take advantage of the opportunities offered by the financial system (borrowing, retirement saving, taking out an insurance policy, investing savings). The programme adopts an experimental protocol "treating" secondary school students: they will be given, in a standardized way, some notions on the role of the financial system, on sound decision making, on the identification, impact and assessment of risks and returns. Before and after the treatment, both the treated students and a control sample will be involved in simulated problems, mimicking the main features of actual financial decisions. The objective is to gauge, through the changes in the quality of the decisions observed, the effectiveness of financial education.

While providing financial education initiatives, policymakers could and should cooperate with other parties, in particular consumer and industry associations. The Bank of Italy is cooperating with the other supervisors and regulators, such as Consob, Isvap, Covip, AGCM, which are all represented here today, to define a coordinated national strategy. A single financial education web portal will be developed to pool all the educational material and tools already present in the websites of the individual supervisory authorities.

5. Conclusions

It is unlikely that a higher degree of financial literacy worldwide would have significantly helped to contain the financial crisis. And it is also unlikely that complex financial decisions could be made by each person becoming their own personal financial adviser. We must use regulation and supervision to make the financial system more resilient to shocks and to enhance efficiency in a more competitive and also a more stable environment. Substantial changes are needed, and they need to be introduced through a cooperative and coordinated international process. Most likely they will imply less risk-taking and possibly lower returns for the financial industry, but also for its customers.

The latter, however, is already a significant reason why investing in financial education is important. Some of the non-negligible effects of the crisis could in fact be a substantial loss of trust in the financial industry; a reluctance to take fundamental and conscious decisions related to saving for retirement; for some people, discouragement from exploiting even the safest, though not risk-free, investment opportunities, while for others a renewed search for high yields in a world of diminished returns without understanding the higher risks attached; for most, a wariness concerning the use of debt.

Thus, while not a panacea, investing in financial education is an important means to perform our institutional duties: protecting savings, ensuring stability and promoting competition. In Italy, the fact that financial education programmes are just beginning to see the light can offer the opportunity to build sound future initiatives on the basis of international best practices. We have to identify the financial education needs of the population, develop the necessary framework, and share responsibilities among the various stakeholders.

Financial literacy requirements should be identified in a national perspective. Nonetheless, as this Symposium shows, developing common strategies and sharing information and experience at the international level is essential for satisfactory achievements.