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#### Rationalizing Financial Literacy Policy

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It is hard to argue against the need for greater financial literacy.

But how can households learn to make better decisions and to what extent can public policy help?

Recent events in mortgage markets have placed front and center the issue of the financial literacy of households, and whether there is a public imperative to improve the level of such decisionmaking. By financial literacy, we mean the ability of individuals to understand the nature of the financial contracts they enter. Specifically, for those who enter contracts to save resources for their own futures, such as savings accounts, retirement plans, mutual funds, and stocks, financial literacy means they understand the rules governing the payoffs on their investments. Similarly, for borrowers, financial literacy means they have a clear understanding of their options and obligations in various situations that may arise in both the near and distant future. Put this way, it is hard to argue against greater financial literacy. Therefore, in this *Economic Brief*, we take it as given that it would be better, all else equal, for households to be "more financially literate." There are two questions, then, that one must answer prior to the implementation of any policy: How do we achieve greater literacy? And to what extent is this a public policy imperative? The remainder of this essay addresses these questions via a series of somewhat more specific queries.

# DOES THE MARKET FOR "EXPERT ADVICE" WORK MOST POORLY FOR THE POOR, AND IF SO, WHY?

One impetus for promoting financial literacy is that many people do not have the expertise to differentiate between a "good" and a "bad" financial product. However, there are many products that we buy each day whose mechanism we do not understand. In fact, the majority of consumer durables (for instance, refrigerators, cars, and televisions) are both expensive and rather mysterious in their inner workings. Moreover, refrigerators have only a short warranty, and yet, households seem to routinely make good choices about them.

So, to rationalize financial literacy schemes by appealing to the complexity of most such contracts, we need to be able to answer the question: "What exactly makes a loan or insurance product different than a car or plumbing, and why can't — or why don't some people get good advice?" One reason that consumer durables differ from consumer financial contracts is that concerns by sellers about their reputation may be relatively powerful in consumer durables because people repeatedly purchase these items and they may communicate with others. Financial contracts, by contrast, are infrequent and often private. For example, we may plan to stay in mortgage contracts for many years, and may not tell our friends

and neighbors about the precise nature of terms, or about any subsequent problems we face. As a result, lenders may not invest a societally optimal level of effort in communicating product attributes in a clear way to potential purchasers. Indeed, this is the view of many critics in the wake of high default rates on recently issued subprime mortgages.

Will the potential lack of incentives for financial intermediaries to invest in the long-term financial health of borrowers inevitably lead to harm? After all, financial literacy efforts are often targeted at the poor; a presumption is that those with high income "know better." But is this really true, or is it rather that the set of "reputable" financial intermediaries simply chooses not to deal with the high-risk (low-income) population? For example, a major financial institution may simply be wary of making high-risk loans, as it will fear being evaluated in the court of public opinion following the high-delinquency and default rates that high-risk loans necessarily create. Resolving the extent to which reputational mechanisms elicit good behavior from financial intermediaries is vital to constructing a coherent strategy for financial literacy. In a recent paper, Patrick Bolton, Xavier Freixas, and Joel Shapiro argue that as a result, there are plausible circumstances when a "one-stop" bank is better for consumers than a multitude of financial intermediaries, each of whom specializes in a specific product. The proliferation of mortgage brokers, especially in areas of concentrated poverty and immigrant households, may therefore have not been ideal. It is thus important to learn more about the extent to which targets for financial literacy lack access to such banking structures.

The more general problem is that sellers nearly always know more about the product they are selling than do potential buyers. This feature of transactions is another factor motivating the discussion to improve financial literacy. To the extent that competition among sellers does not ameliorate this "asymmetry" of information, there is cause to worry. A possibility, highlighted in the work of Paul Milgrom, is that when the menu of products being offered by a class of sellers, say brokers, omits products that would be ideal, competition may not solve the problem of matching the household to the ideal contract.<sup>2</sup> For example, if mortgage brokers lacked the freedom to sell arbitrary contracts to investors, they may restrict themselves to a small variety of contracts, none of which are ideal for their clients. These two papers are germane to the issue of financial literacy because efforts at literacy are fundamentally about providing buyers with useful information about the products they may purchase. It is therefore important to know when markets are likely to underprovide such information.

# DO WE REALLY KNOW "BAD" FINANCIAL CHOICES WHEN WE SEE THEM?

Any financial literacy campaign must equip consumers to differentiate between a "good" and a "bad" financial choice. However, the choices of the

poor often look only superficially "worse" than the choices of the rich. Indeed, very rarely — if ever — do we find contractual arrangements that could not possibly be useful to a household. When it comes to borrowing decisions, a more general point is: All borrowing is a gamble, as the future is uncertain. Therefore, any evaluation of the appropriateness of others' borrowing choices is an evaluation of the gamble they have taken. But most of us do not like risk, and pay insurance companies to protect us from it. Therefore, we need to know if households are truly taking big risks in terms of putting their well-being at stake, and if so, we need to know why.

Wherever households are taking big financial risks, it is useful to address the extent that they are implicitly or explicitly protected in the event that the risk turns out badly. The recent experience of high mortgage default rates suggests that at least some households may have been comfortable with taking financial products requiring little or no payments, with the clear understanding that if house prices fell, they could return to renting temporarily. After all, default rates have been highest on high loan-to-value subprime adjustable rate mortgages (ARMs), few of which require substantial downpayments. In fact, that is precisely the reason for their attractiveness to low-income, low-wealth households.

Moreover, default rates have been highest on subprime ARMs issued just before house prices started to fall, again consistent with the idea that those with little equity stake had a diminished interest in making payments on a mortgage that was "underwater." If by contrast, mortgage default was penalized by draconian measures, such households would suffer a great deal more — but may be more careful when borrowing. In sum, when evaluating the usefulness of widespread financial literacy campaigns, it is crucial to keep in mind what households place at risk when making financial decisions.

More generally, cash-flow considerations loom large for borrowers with low income. For example, the monthly payment on a mortgage that amortizes very slowly may be low enough to be attractive to low-income households even though much more is paid in interest over the life of the loan. Similarly, a low-wealth person's decision to borrow at 35 percent to fix his car is not automatically a "bad" financial choice. If the car is necessary to get to work, then it is a transaction whose return may easily exceed its costs for the household – especially, for instance, if health insurance is tied to employment. Therefore, a useful step in any overall strategy to improve financial decisionmaking would be to identify contractual arrangements that are "bad" for households, regardless of the particular situations facing them. One example is that many households appear to revolve expensive credit card debt while also holding lowreturn savings in bank accounts. With the exception of incentives created by bankruptcy law, this behavior seems to be irrational. Of course, to the extent that such choices are driven by decisionmakers who "succumb to

temptation," it may be useful to simply restrict, rather than discourage, such choices. In doing so, though, we must be comfortable in the knowledge that such restrictions will inevitably either restrict credit access for some or force others to seek less formal and possibly more dangerous forms of credit.

### WHAT SHOULD BE THE SCOPE OF FINANCIAL LITERACY EFFORTS?

One argument for actively using public resources to improve financial literacy is that society as a whole may benefit from expanding the population of better financial decisionmakers. In recent work, cognitive scientists, economists, and biologists have argued that information-processing demands are overwhelming and far exceed the capacity of any in our species. With respect to financial contracts, it is often found in experiments that the "framing" of contractual terms can exploit our cognitive biases and so be used to routinely mislead people into entering contracts that they would prefer to avoid. Lastly, and perhaps most tellingly, the professional economist himself cannot directly solve the problems he poses for households. Instead, he employs powerful computers to solve problems that are putatively representative of those faced by households in daily life.

These weaknesses in households' decisionmaking therefore seem fairly universal, as they arise from deep characteristics of brain chemistry that are common to many people. That is, they are hardly likely to be the province of only the poor and ill-educated. Nonetheless, few argue for universal improvement in financial literacy. Instead, currently, most advocates and organizations which seek to promote literacy do so under the premise that some sections of society are more disadvantaged along this dimension relative to others.

In sum, the complexity of decision problems is potentially a rationale for universal financial literacy training, but it does not justify singling out low- or middle-income households for generalized advice on how to make financial decisions. Instead, it suggests that some of our efforts should perhaps take the form of widespread "basic training" similar to the emphasis currently placed on English language literacy. Nonetheless, as we argue further below, the door should still be left open to targeted programs that help some groups in the population evaluate the terms and conditions of complex financial contracts.

# WHAT ABOUT A "FINANCIAL DRIVER'S LICENSE," AND CAN WE IMPROVE DISCLOSURE?

As mentioned above, behavioral economists and other scientists have made progress in identifying a number of very specific ways in which people tend to behave "irrationally." These findings may hold promise for formulating very selective efforts, such as a simple test of financial literacy, as well as minimally invasive restrictions on contracts to help

large numbers of people overcome specific predispositions. For example, John Beshears and his colleagues survey a body of evidence which argues that many households save more when "defaulted" into retirement-savings programs than when they must actively enroll. In some sense, the former are then better off later in life, as they will have accumulated savings, and perhaps no worse off during working life, as those funds are available to them at only a small cost. Therefore, a productive direction for financial literacy efforts may be to help people avoid a few widespread forms of irrationality. This remains a topic for future work.

Perhaps we should institute the financial equivalent of "driver's ed," but the preceding reasoning suggests that any tests of competency might have to be weak. As a result, improved disclosure may be more promising. In the case of home loans, we might need to restrict a test to a few concepts — say, the amortization implied by a given mortgage contract, or how sudden changes in the payment requirements might occur when an ARM "explodes." Given the earlier discussion of "framing," a potentially useful policy might be to improve disclosure along the specific dimensions that households may care about most. For example, with an ARM, we may want contracts to convey the cash-flow requirements in a "worst-case" scenario.

More generally, instead of focusing on tests of a borrower's financial savvy, we may wish to provide consumers with summary information aimed at avoiding catastrophic mistakes. An existing example of disclosure is the so-called "Schumer Box," which details some salient features of credit card contracts, such as the annual percentage rate. In the case of a mortgage, such a disclosure might specify potential payment requirements under varying interest rate scenarios, for instance. In contrast to the concise disclosure of the Schumer Box, current disclosure requirements for mortgages may well have had a detrimental effect in recent years, as they have given rise to voluminous contracts that many find difficult to understand – and easy to ignore. To the extent that the current distress among mortgage borrowers occurred in an era of "thorough" disclosure, it suggests perhaps that how we disclose may be as important as what we disclose. Disclosure is most likely to be useful when it is simple; as such, this may mean restricting disclosure to identifying only the most serious consequences of entering any given contract.

# DO WE REALLY KNOW A SUCCESSFUL FINANCIAL LITERACY EFFORT WHEN WE SEE IT?

Another hurdle to cross before endorsing widespread financial literacy efforts is to understand which programs are most helpful. Indeed, at present there is relatively little research on the efficacy of programs. It is easy to measure the success of programs with precise goals, but much harder to measure the success of programs aimed at providing general financial training. Some studies have found that programs with specific

goals have been successful, meaning that people in these programs reach their goals more than those who are not. The same measure must be used when evaluating general financial training programs as well. One such study by the Freddie Mac Consumer Credit Survey found that specific knowledge of financial topics had little effect on the behaviors of consumers and that confidence and a broad understanding provided greater financial success. The study also found that consumers appeared to benefit from practical and applied learning, such as a difficult financial experience; however, teaching financial literacy in the abstract tended to be ineffective. It seems that those who choose to participate in these programs generally succeed in reaching their goals. Teaching financial literacy to a person who has no immediate, direct application may not be an effective method. This raises the question of how to reach such households.

#### **HOW DO WE ENGAGE THE UNENGAGED?**

A 2001 survey of consumers looked at the effectiveness of different means of information delivery and money management. It found that the sources which are most effective are individually focused and readily available "on demand" – consumers could access them at a time convenient to them. Only the most engaged consumers found a group environment helpful. Information in this "on demand" format is readily available on the Internet both from the Federal Reserve and other organizations, but consumers must still take the initiative to learn. One must acknowledge that it will likely be difficult to reach those financially illiterate consumers who choose not to seek financial training. An additional risk arising from disseminating information on financial contracting is that of "overconfidence." That is, is a little knowledge a dangerous thing? Lauren Willis has argued that in eschewing more direct legislation and one-on-one counseling, merely talking about literacy can give consumers a false sense of security, and lead them to overestimate their financial savvy.4 This again seems an important caveat to keep in mind.

### WHAT IS THE RELATIONSHIP BETWEEN ECONOMIC AND FINANCIAL LITERACY?

The preceding question of how to measure success in financial literacy efforts is related to a deeper issue — namely, economic literacy. Even when people are fully capable of understanding their obligations when entering a financial contract, to what extent do they understand the economic environment in which they operate? As mentioned earlier, all borrowing is a gamble, given the uncertainty of the future. The important question is: Can people make good forecasts? Starting in the early 2000s, when house prices were rising very rapidly, many purchased houses both as a place to live and as "investments." The ranks of these buyers included many first-time home buyers, as well as those who used very aggressive strategies to borrow to finance their "investments." In undertaking such a strategy, households were betting against those who sold them the houses, and in

some cases, against the banks who lent borrowers cheap funds instead of taking on equity investments themselves in real estate. As of early 2006, it became clear that some of the expectations for rapid homeprice growth would not be realized. To the extent that many borrowers simply used the recent "past experience" as a guide to future returns, the consequences were bad.

A related puzzle is why many households insist on picking their own stocks. Aside from managing a tax liability and overall risk-exposure, the overwhelming evidence is that such efforts are at best useless, and at worst ruinous. The best predictor of future stock prices is, roughly speaking, the current price. On average, households earn higher returns from investing in broad stock indices than individual stocks. Financial literacy is not the problem here; economic literacy is. Moreover, the illusion that one is "in charge" may lead to the type of overconfidence mentioned earlier. For example, the knowledge of how to execute a complex trade via desktop computer at home can hardly be useful to a user who thinks that stock picking is a good use of time. The lesson here is that financial literacy has little or nothing to do with the risks that some may choose to take. As a result, even a comprehensive financial literacy effort may not lower the likelihood of large losses for large groups of households.

#### CONCLUSION

In this *Economic Brief*, we have suggested some directions for further research before committing substantial resources toward a targeted campaign to improve financial literacy. We think that such programs have the potential to be useful, but should also be applied primarily in those circumstances in which we have good reason to suspect that market outcomes would lead to unsatisfactory results. We have also argued that it is important to be able to define unambiguously what actions constitute "bad" choices, as well as what criteria to use to determine if our efforts have succeeded. We suggest that recent research which has uncovered systematic biases in decisionmaking may prove useful in developing programs that steer households toward sounder decisionmaking — and may help especially in making disclosure more productive. Finally, financial literacy will not be as useful as it could be if not accompanied by improved economic literacy.

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#### **ENDNOTES**

- <sup>1</sup> Bolton, Patrick, Xavier Freixas, and Joel Shapiro. 2007. "Conflicts of Interest, Information Provision, and Competition in the Financial Services Industry." *Journal of Financial Economics* 85: 297-330.
- $^2$  Milgrom, Paul. 2008. "What the Seller Won't Tell You: Persuasion and Disclosure in Markets." <code>Journal of Economic Perspectives 22: 115-131.</code>
- <sup>3</sup> Beshears, John, James J. Choi, David Laibson, and Brigitte C. Madrian. 2006. "The Importance of Default Options for Retirement Savings Outcomes: Evidence from the United States." National Bureau of Economic Research Working Paper 12009.
- $^4 \, Willis, Lauren \, E. \, 2008. \, '' Against \, Financial-Literacy \, Education.'' \, \textit{lowa Law Review} \, 94:197-285.$

