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# SPECIAL REPORT

## TD Economics



November 14, 2011

## FINANCIAL LITERACY – THE INVESTMENT OF A LIFETIME

### Highlights

- All financial decisions involve a tradeoff: spend money now or save it for later. But since financial decisions inevitably involve the future, they also carry risks. Having the knowledge and tools to manage those risks is the essence of financial literacy.
- The need for financial literacy begins even before the first paycheck is earned. For many young people the decision to enter college and take on a student loan is the first, but also one of the most important financial decisions of their lives.
- The need to make financial decisions increases as life progresses. The housing crisis of the last several years is a wake-up call to the need for good financial decisions around debt. But good savings decisions are also necessary. As defined contribution plans gain in popularity, individuals are having to bear more risk in planning for their retirement.
- Ensuring people have adequate financial literacy skills means building a foundation in reading and numeracy in school. But this is only the beginning. Studies show that financial literacy programs work best when they are well targeted and well timed - right before a financial decision is made.

From credit cards to mortgages, student loans to retirement investments, Americans today have greater financial needs and access to a wider array of financial products than ever before. As the world of personal finance grows increasingly sophisticated, so too does the skill set required to navigate through financial decisions. However, despite living in these financial times, many Americans lack the tools necessary for making sound financial choices. Studies show a considerable number of Americans have a poor understanding of compound interest, for example, and end up shouldering a disproportionate burden of credit card fees.<sup>1</sup> Moreover, less than half of U.S households have given thought to the amount of savings they would need to retire comfortably, despite the reality that retirement planning has shifted markedly onto their shoulders in recent decades.<sup>2</sup>

Without adequate financial literacy, individuals are at greater risk of taking on too much debt and accumulating too little savings. Since poor financial decisions can carry lasting consequences, financial literacy should be acquired early on, well before an individual earns his first paycheck. Moreover, a foundation in reading, writing and numeracy provides the building blocks upon which financial literacy is based. This is only just the beginning. Continuing into adulthood there are a number of distinct occasions – getting a job, opening a savings account, purchasing a home – in which the financial choices made can be the difference between a life of worry and a life of ease. Fortunately, these occasions are also opportunities for improving financial acumen. Financial literacy, then, should be a lifelong pursuit, and one that it is never too late to enter into.

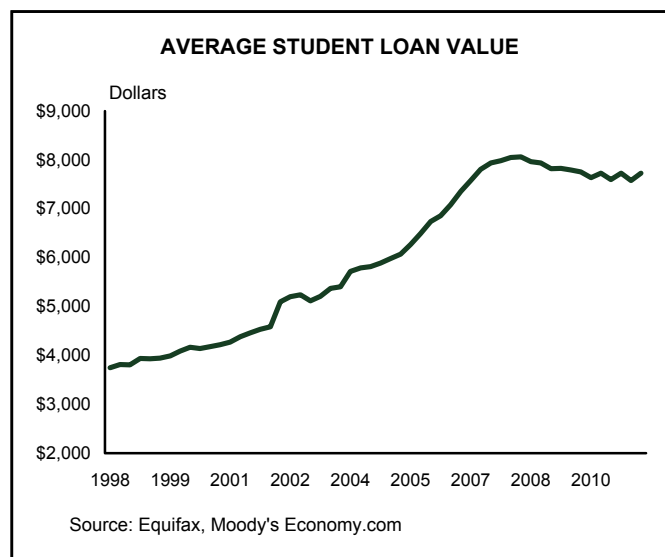
## Sound financial decision making requires the pursuit of financial literacy

All financial decisions – whether it is buying a cup of coffee or putting aside money for a new car – involve a tradeoff: spend money now or save it for later. In fact, this trade-off features so prominently in our decision-making process that economists have an entire theory to describe how it works. The “life-cycle” theory of consumption argues that individuals prefer to “smooth” consumption over time even as their incomes vary. Earlier in life, when earnings haven’t reached their full potential, people take on debt to finance a level of consumption above their current incomes. Later on, they forgo a certain amount of new spending in order to pay back debts from prior years as well as to save for retirement.

Both borrowing and saving have large potential upsides. Debt allows us to invest in education or finance the acquisition of new assets like a home. Savings allows us to maintain in retirement the standard of living we enjoyed while working. However, when we make a financial decision we also expose ourselves to a degree of risk. Financial literacy is about possessing the knowledge and tools to manage these risks, and ensure that the financial choices we make are in our best interests in both the short and long term.

### Financial decision making begins early, so must financial literacy

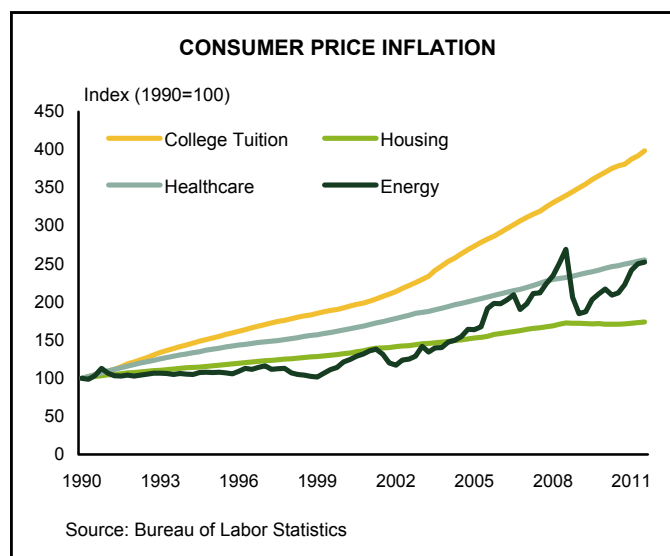
Even before earning their first paycheck, many young adults will face a myriad of financial decisions, such as how to finance a college education or whether to open a credit card. For some, the choice to take on student debt is the first

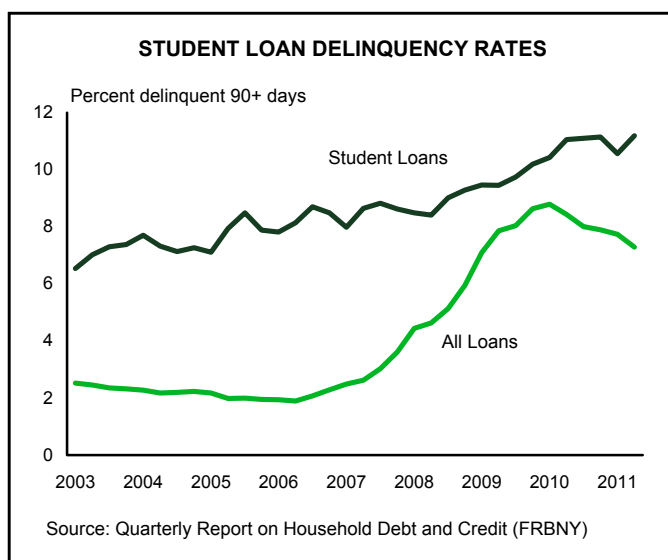


major financial decision they will make. Education can be a worthwhile investment, leading to a higher future income than would otherwise be attainable. But, as with any investment, it also carries risks. Therefore, a prospective student must carefully evaluate the costs involved and determine whether the benefits of having the degree justify its expense.

The choice to take on student debt must not be taken lightly. Demand for high-skilled labor among employers has grown dramatically in recent decades as globalization and technological progress have sparked a fierce competition for talent. Today, a college degree is essential for remaining competitive in the labor market and securing the best-paying jobs. But a college education isn’t cheap, nor is it necessarily a one-way ticket to employment after graduation. Over the last ten years, average tuition fees have increased over 30%, while average student debt burdens have grown by nearly 50% after adjusting for inflation.<sup>3</sup> At the same time, the recession has made it more difficult for new graduates to find jobs. High unemployment and low incomes during the recovery has led to a spike in student loan default rates: 8.8% in 2009, the most recent year of data, up from 4.6% in 2005.

The job market will recover, but the unfavorable economic climate means students need to be smarter than ever when it comes to investing in education. They should give thought to the program they are pursuing and develop an appreciation for how that program can improve their job prospects in both the short and long term. They should also understand how student debt factors into their future financial obligations, since loan repayments begin soon after graduation regardless of employment status. Students who





fail to have a firm grasp on the costs associated with their borrowing decisions risk digging themselves into a financial hole early on from which they could have difficulty getting out of later.

Of course, student loans aren't the only exposure young people have to financial products. College also marks the first time many acquire access to credit cards, which carry their own set of risks and rewards. Credit card usage on college campuses has surged in recent years. According to Sallie Mae, 84% of college students reported having at least one credit card and half reported having four cards or more.<sup>4</sup> Median credit card debt for students stood at \$1,645 in 2008, up from \$946 in 2004 after adjusted for inflation. Meanwhile, average credit card debt has ballooned to \$3,173.

Credit cards are not inherently bad, but revolving credit can be dangerous if misused. Credit cards normally carry high interest rates, so even low balances can compound quickly. And, unlike student loans, credit cards don't come with a grace period. The cardholder is responsible for making the monthly payment right away, even if they are still in school. This puts students – especially those without a steady income stream – at greater risk of delinquency and default. Such negative credit events blemish a young person's credit history and could restrict access to credit later in life.

While student credit card use is growing, there is less evidence that financial capability has increased along with it. In fact, over four-fifths of the students in the Sallie Mae survey reported carrying balances on their credit cards and paying the interest charges each month, even though less than half admitted to ever having charged items they knew they couldn't afford.

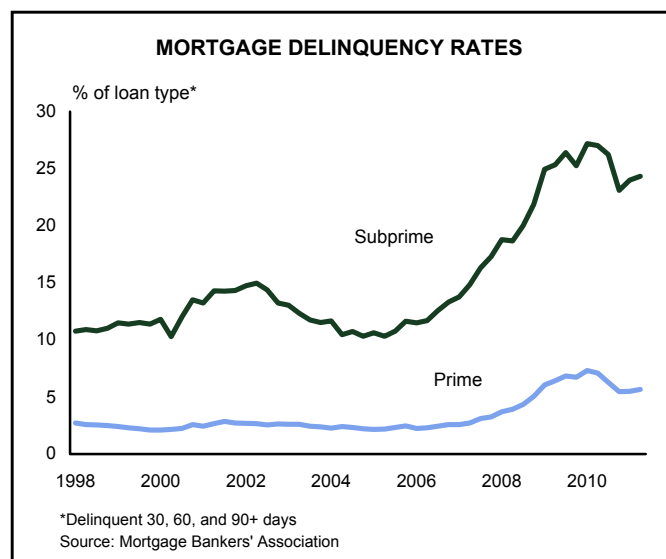
The fact that most student cardholders believe they are spending within their means yet still fail to pay off their monthly balances may signal an inadequate level of financial awareness that is leading them to underestimate the costs of their financial choices. In fact, the vast majority of college students in the Sallie Mae survey indicated they needed more education on topics of financial management. Many also admitted they rarely discussed credit cards with their parents. Thus, many students are not getting advice about personal finances even from readily available sources.

### The need for financial literacy grows into adulthood

Passing on financial wisdom to the younger generation is one reason adults need a strong foundation in financial literacy. Better managing their own decisions about debt is another reason why an adequate level of financial knowledge is important.

The events of the last several years highlight just how severe the consequences of taking on too much debt can be. Today, over 5.6 million mortgages are either delinquent or in foreclosure. The homeownership rate has fallen by over 3 percentage points from its peak in 2004 to 66%, and will likely fall further as more delinquent mortgages move into foreclosure.

It is impossible to quantify just how much inadequate financial literacy contributed to the housing crisis. To be sure, overly aggressive lenders share part of the blame. However, an inadequate understanding of risks and final obligations among borrowers could have played a role as well. A recent study asked a sample of adults to estimate how long it would take to pay off a credit card with a 1%



interest rate by making a \$30 minimum payment on a \$3,000 starting balance. Only a third of the adults recognized that the minimum payment was exactly equal to the monthly interest charge.<sup>5</sup> By simply paying \$30 each month, the principal would never go down. Having a grasp of basic financial concepts could go a long way to ensuring that individuals make sound decisions.

In addition to borrowing considerations, working adults must also make important decisions around saving for retirement. Building a nest egg for retirement assures that individuals can maintain in old age the standard of living they enjoyed during their working years. This requires foresight, advanced planning, and a clear understanding of concepts like interest compounding and investment risk.

In fact, today more than ever, individuals are responsible for planning their own retirement. Over the last thirty years, increased labor mobility and regulatory changes have instigated a shift away from the employee sponsored defined benefit (DB) plans that were the norm in decades past. Under a DB plan, a worker receives a recurring monthly payment from the company in retirement in exchange for years of service. Today, most private-sector employers offer defined-contribution (DC) plans, where the onus is on individuals to manage their contributions to the plan, as well as managing how those contributions are invested.<sup>6</sup>

While the demands on individuals to manage their own financial futures have increased, only a third of Americans nearing retirement age in 2004 acknowledged ever having tried to put a retirement plan in place, according to one study.<sup>7</sup> Moreover, only half of all workers in the private sector work for an employer that sponsors a retirement

plan.<sup>8</sup> Those that do not are at a disadvantage when it comes to acquiring information about recommended contribution levels and investment options.

A lack of savings is likely hindering many Americans ability to retire comfortably. According to one study by economists at Boston College, the 401(k) account of a typical worker nearing retirement age in 2007 with annual earnings of roughly \$50,000 had only \$73,000. The authors figure that number would need to be closer to \$320,000 for this hypothetical worker to maintain the same standard of living in retirement.<sup>9</sup> The savings picture has no doubt worsened in the wake of the recent financial crisis and slow recovery.

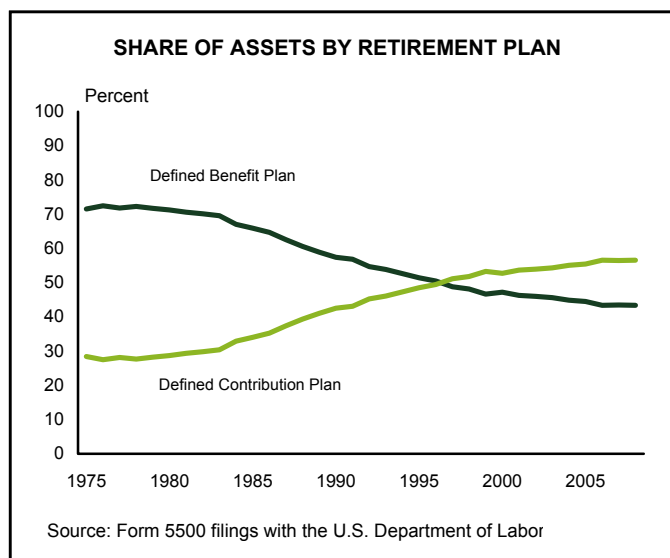
### What should be done?

We have argued that financial literacy is the basis for sound financial decision-making, and that failure to understand basic financial concepts has the potential to undermine personal prosperity. The natural question to ask now is: what can be done about it?

The first thing to recognize is that financial literacy education must start early, even before high school, and certainly before the first major financial decisions are made. Numeracy and reading literacy are the basic building blocks of financial knowledge. Unfortunately, children in the United States have fallen behind on these fronts. Results from the 2009 PISA exam, an international assessment of reading and numeracy skills, placed the United States below the OECD average in mathematics, and only in-line with the average in reading.<sup>10</sup> Part of the path towards improved financial literacy, then, lies in better ways of teaching students how to manipulate numbers, as well as improving their abilities to solve problems and research effectively.

Of course, classes that deal directly with topics related to personal finance and money management can help improve financial literacy as well. Numerous studies have uncovered a link between full-semester personal finance courses in high school and positive financial outcomes later in life. College students who took a high school money management course, for example, are less likely to bounce a check.<sup>11</sup> In fact, the biggest benefits of classes may not become clear until years later. Financial classes may play into students' emotions, getting them to think critically about saving wisely or, as one economist suggested, instill in them a fear of poverty that can act as a powerful trigger to influence behavior later on.<sup>12</sup>

Studies also show that financial literacy programs work best when they are well targeted and well timed. A significant portion of financial knowledge is highly specialized



and people generally don't spend much time thinking about financial decisions until they need to be made. Yet it is in the moments right before a key financial decision is made when a person's decision-making behavior is most easily modified. Researchers at the Federal Reserve found that individuals were less likely to default on a mortgage or a credit card if they had been counseled beforehand on the terms of the debt and how it could affect their household budget.<sup>13</sup> Face-to-face counseling has the benefit of cutting through the euphoria of the moment and providing clarity to the financial decision being considered.

Finally, when it comes to the problem of not saving enough for retirement, policies could be put in place whereby employees are automatically enrolled in savings plans sponsored by their employer that they can opt out of later. The success of "default" options has been well-documented. One of the great contributions of behavioral economics over the last decade is the revelation that people are likely to take the mental path of least resistance. This means that employees are less likely to opt out of a plan once they are enrolled in it.<sup>14</sup>

## Conclusion

Few decisions in life carry the weight of decisions around finances. For young people, deciding to invest in higher education may be one of the most important decisions of their lives. A firm foundation in reading and numeracy is essential for providing young people with the tools they need to make sound financial decisions later. With this foundation in place, financial literacy courses in high school can also help to ensure sound financial choices. Exposure to financial education right before a financial decision is made has been shown to have the best success at improving financial outcomes.

Financial decisions often seem more complex than they are. Finance comes with its own language; but, once the terms are understood, the actual decisions are rarely difficult. In many cases gaining the necessary knowledge may be as easy as asking for it. There are many people at financial institutions and charitable groups that are available to help – often with no cost. In short, financial literacy is a lifetime pursuit – it must start early and continue to be upgraded through life in order to pay dividends in a comfortable retirement.

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## **End Notes**

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