Center for Social Development

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

Financial Capability:

What is It, and How Can It Be Created?

Margaret Sherrard Sherraden
University of Missouri – St. Louis
Center for Social Development

2010
CSD Working Papers
No. 10-17

The final version of this working paper appears as a chapter in Sherraden, M. S. (2013). Building blocks of financial capability. In J. M. Birkenmaier, M. S. Sherraden, & J. C. Curley, J. (Eds.) *Financial Capability and Asset Building: Research, Education, Policy, and Practice* (pp. 1–43). New York & Oxford: Oxford University Press.

Campus Box 1196 One Brookings Drive St. Louis, MO 63130-9906 • (314) 935.7433 • csd.wustl.edu

Washington University in St. Louis

Financial Capability: What is It, and How Can It Be Created?

Abstract: Financial literacy has been proposed widely as an effective approach to preparing people to manage their finances. This paper proposes an alternative concept, financial capability. Financial capability includes both the ability to act *(knowledge, skills, confidence, and motivation) and the* opportunity to act *(through access to quality financial products and services). Low-income households, who face lack of financial knowledge and institutional barriers to participation in quality financial services, require both financial literacy and financial inclusion. The paper begins by addressing how people acquire financial knowledge and skills through financial socialization, financial education and guidance, and financial advice and counseling. Next, it addresses how financial inclusion can be achieved through financial services that are accessible, affordable, financially attractive, easy to use, secure, and reliable. Then it illustrates how financial knowledge and skills and financial inclusion are linked. The paper concludes with a call for more research.*

Key words: *Financial capability, financial literacy, financial education, financial inclusion*

Growing financial vulnerability in poor households requires a thoughtful and vigorous response (Ehrenreich, 2009; Northwest Area Foundation, 2009). One approach that is receiving attention is to improve financial literacy, that is, "the ability to use knowledge and skills to manage financial resources effectively for lifetime financial security" (Jumpstart Coalition, 2007). When people are not financially literate, as Annamaria Lusardi writes in her blog "Financial Literacy and Ignorance," they are more vulnerable to economic hardship. Lusardi, who leads the national Financial Literacy Center,[1] points out that financial illiteracy is "concentrated among particular population subgroups—those with low income and low education, minorities, and women" (Lusardi, 2007). Financially illiteracy, she writes, "is often the result of personal choice, of parents' education, and of an individual's access and exposure to financial education." She calls for greater emphasis on financial education in the schools and to targeted populations. As now-Federal Reserve Chairman Ben Bernanke explained in 2006 testimony before the Committee on Banking, Housing, and Urban Affairs in the United States Senate, people need financial literacy to make effective decisions:

> Clearly, to choose wisely from the variety of products and providers available, consumers must have the financial knowledge to navigate today's increasingly complex financial services marketplace. Consumers with the necessary skills to make informed financial decisions about purchasing a home, financing an education or their retirement, or starting a business will almost certainly be economically better off than those lacking those vital skills.[2]

Policymakers, practitioners, and financial institutions have responded with growing numbers of financial literacy programs. For example, the states that require a personal finance course in high school increased from 0 to 15 between 1998 and 2009, including a 66% increase (9 to 15) in only

[1] The Financial Literacy Center is a joint project of Dartmouth, Wharton School, and Rand.
[2] http://www.federalreserve.gov/newsevents/testimony/Bernanke20060523a.htm

two years between 2007 and 2009 (CEE, 2009).

Financial Capability

Financial literacy will undoubtedly make people more capable of managing their finances. It is unclear, however, whether it will reduce financial vulnerability in low-income households if institutional barriers to beneficial financial products are not also addressed. The concept of *financial capability* includes financial literacy but also addresses these institutional barriers facing low-income households. Below, I explore the roots of the ideas behind financial capability and identify its features.

Scholars and practitioners in the United Kingdom and Canada pioneered the use of the term "financial capability," to describe people's financial knowledge and their confidence and motivation to manage personal finances (Atkinson et al., 2006; Dixon, 2006).[3] The UK government, for example, has adopted the following definition:

> Financial capability is a broad concept, encompassing people's knowledge and skills to understand their own financial circumstances, along with the motivation to take action. Financially capable consumers plan ahead, find and use information, know when to seek advice and can understand and act on this advice, leading to greater participation in the financial services market (HM Treasury, 2007, p. 19).

In late 2009, the U.S. government used the term financial capability for the first time in a call for the "National Financial Capability Challenge." The challenge asserts that, "Americans need better financial education and access to critical resources in order to make smarter financial decisions" (US Department of Treasury, 2009). Unlike earlier efforts that focused exclusively on financial education, this initiative states that "access to critical resources" is central to effective financial decision making. This is a major step toward recognizing the role of institutions in building financial capability.

This paper sets out a conceptual model for financial capability in a way that combines individual and institutional features. Financial capability is the ability of people "to understand, assess, and act in their best financial interest" (Johnson & Sherraden, 2007, p. 124). Financial capability requires financial literacy, but also requires access to appropriate financial products. In other words, financial capability requires both the *ability to act* (knowledge, skills, confidence, and motivation) and the *opportunity to act* (through access to beneficial financial products and institutions) (Johnson & Sherraden, 2007). Together, ability and opportunity contribute to a person's financial well-being and life chances. In this way, financial actions link explicitly to broadening access to quality financial institutions.

Amartya Sen's and Martha Nussbaum's seminal work on capability theory informs this concept. As Sen writes: "Capabilities . . . are notions of freedom in the positive sense: what *real opportunities* you have regarding the life you may lead" (Sen, 1987, p. 36, emphasis added). What makes an

---

[3] A more recent publication by the National Forum for Financial Inclusion in the UK defines financial literacy as "knowledge required to make informed financial decisions," while financial capability "recognises the more complex skills, motivation and confidence needed to fully manage finances effectively" (Transact, 2009). This definition of financial capability does not include explicitly access to financial services.

opportunity "real?" According to Nussbaum, the idea of capability takes into account a person's *internal capabilities* that develop "usually with much support from the material and social world," or "*external conditions*" (2000, pp. 82-85). She suggests that public policy "can do quite a lot to influence" people's basic functioning. Nussbaum is largely concerned with fundamental human functions (e.g., life, health, bodily integrity); nonetheless, we can apply the concept to financial life. Financial capability would require that a person have basic analytic capabilities (internal capabilities, or the "ability to act"), but also benefit from external conditions that allow them to exercise these abilities. People can develop internal capability, but not be able to exercise it if conditions do not permit it: " . . . developing an internal capability usually requires favorable external conditions; indeed, it very often requires practicing the actual function" (Nussbaum, 2000, p. 85). As Nussbaum writes, "a capabilities analysis . . . looks at how people are actually enabled to live" (2000, 99). In this sense, external conditions provide the "opportunity to act"; that is, policies, laws, regulations, and practices provide opportunity for people to develop the full range of capabilities that lead to well-being.

How do we know if people are financially literate? How do we know what environment supports and promotes financial capability? As Nussbaum points out, people must possess certain internal capabilities, but there must also be certain external conditions. In the following two sections, I examine two central elements of financial capability: financial knowledge and skills (financial literacy), and financial inclusion (financial services). Each begins with an appraisal of how well low-income households are doing, and follows with an analysis of approaches to increasing financial knowledge and skills in, and financial inclusion of, low-income households. The section on financial inclusion includes examples of basic financial products aimed at reaching low-income households. The paper concludes with discussion and evidence about linking financial literacy and financial inclusion toward financial capability, and a call for more research.

Financial Knowledge and Skills

In order to have the ability to act and be financially capable, people require *knowledge and skills* to manage their personal and household finances. All other things equal, people who have greater knowledge and understanding about finances and possess financial management skills are more likely to make good financial decisions. As a nationally representative study finds, financial knowledge is associated with positive financial practices (Hilgert et al., 2003).

Unfortunately, financial literacy levels are low among youth and adults in the United States (Bernheim, 1998; Hilgert et al., 2003; Lusardi, 2009; OECD, 2005). Most high school students failed in five waves of financial literacy assessments conducted by the Jump$tart Coalition for Personal Financial Literacy from 1997 to 2006 (Mandell, 2008). In another survey, students failed and adults barely passed a 24-question test of basic economic and personal finance concepts (NCEE, 2005). Most respondents in a nationally representative study failed a range of personal finance questions study (Hilgert et al., 2003). Although financial literacy levels are low in general, levels appear to be lower among particular groups. In the Jump$tart surveys, for example, African American, Hispanic, and Native American students scored significantly lower (45%, 47%, and 44% respectively) than White students (55%) on a test of financial knowledge, and students from lower-income families scored significantly lower than higher-income students (Mandell, 2008).

Low levels of financial knowledge and skills can take a financial toll, especially in low-income households, where the margin for error is low and a poor financial choice can have serious consequences. When a low-income family does not grasp the full meaning of credit card interest rates and fee structures, for example, the results can be more devastating than in a wealthier household where there is a financial cushion. To illustrate, a woman whom we interviewed as part of a study on savings in low-income households reported that she used her credit card to pay for everything. She assumed that she had to pay only the monthly minimum payment and did not realize that interest payments were stacking up.[4] "I didn't know that it worked like that," she explained, "I didn't read the fine print on some of them. So we wound up ruining the credit that we had" (Sherraden & McBride with Beverly, 2010, p. 109). Since credit ratings determine the likelihood and cost of future borrowing, as well as influence other aspects of people's lives, her lack of understanding about credit cards placed her in a difficult financial situation. It took her years to pay off the credit card balance and rebuild a decent credit rating. Affluent households also misuse credit cards but they have a financial cushion; even when they fail to keep up each month, they are less likely to default.

As we consider how to promote financial knowledge in low-income families, it may be useful to examine how people gain financial knowledge and skills. For this, we turn to two streams of inquiry: economic socialization and financial education.

Economic socialization

Economic socialization focuses on the cognitive, behavioral, and environmental influences that shape learning about personal finance. People acquire and develop "values, attitudes, standards, norms, knowledge, and behaviors" through a process of socialization that guides their financial understanding and approaches to financial decisions (Schuchardt et al., 2009, p. 86; see also Ward, 1974). Understanding the economic world and one's place in it begins in early childhood (Furnham, 1999; John, 1999).[5] The family is typically the first of many economic socialization agents (Beutler & Dickson, 2008; Furnham & Argyle, 1998; Moschis, 1985), including the media, which are a growing influence in shaping economic understanding and behavior (McNeal, 1987).

However, there are limits to what people learn through economic socialization. If parents lack financial knowledge and skills, they cannot model sound financial decision-making.[6] Children may receive positive reinforcement, especially from their peers, for poor economic choices. Barrie Stacey (1987) points out that young people from wealthier households are more likely to get more experience with financial products earlier in their lives:

> The young in higher, as compared with middle and lower, income families tend to have a wider range of experiences with money, including the saving and possibly investment of money. Their parents use more sources of information in consumer decision making, and are more likely to monitor their children's consumer activities in order to steer them towards appropriate social values and norms (1987, p. 20).

---

[4] Fortunately, recent regulatory changes will help prevent this type of situation, although more protections are needed, according to the Consumer Federation of America, The Center for Responsible Lending, and other consumer protection groups.

[5] There are cognitive developmental limits (Berti & Bombi, 1988).

[6] Scholars note a high correlation between financial literacy and parent education and financial investment (Lusardi, Mitchell, & Curto, 2010; Mandell, 2008).

People absorb from their environment what they have the opportunity to observe and experience. When parents lack financial knowledge, when they do not talk to their children about household finances, or when the media showers the public with messages to borrow and consume, it is unlikely that economic socialization leads to optimal financial decision-making.

Financial education and guidance

With widespread agreement that economic socialization does not prepare people adequately for financial decision making, there has been a groundswell of financial education initiatives (Braunstein & Welch, 2002; U.S. Treasury, 2010a). Sometimes financial education initiatives aim for broad and diverse audiences, such as public school students or the public at large. Sometimes they target specific groups, such as employees, community residents, or clients of an agency. The content of financial education varies widely as well, including topics such as spending, planning, budgeting, earning, credit, debt, bill paying, saving, managing financial risk, investing, and taxes (Godsted & McCormick, 2007; Hogarth, 2006). Methods for teaching also differ, and range from intensive experiential education aimed at a specific target group to public service announcements aimed at the public.

Regarding effectiveness of financial education, reviews of the evidence suggest that financial education has promising, yet mixed results (Braunstein & Welch, 2002; Courchane & Zorn, 2005; Fox, Bartholomae, & Lee, 2005; Hathaway & Khatiwada, 2007; Hogarth, 2006; Lyons, 2005; Lyons, Palmer, Jayaratne, & Scherpf, 2006; Martin, 2007; Schuchardt et al., 2009).[7] For example, one study finds that adults who grew up in states that mandated a personal finance course in high school tended to have higher savings rates than those who grew up in states that lacked such a mandate (Bernheim, Garrett, & Maki, 2001). A pre-post assessment of a nationwide high school personal finance curriculum showed that students retained financial knowledge over a three-month period and reported increased confidence in financial management (Danes, 2004). Studies of employer-based retirement education find higher enrollment in retirement plans and higher savings rates (Bayer, Bernheim, & Scholz, 1996; Bernheim & Garrett, 2003).

However, other studies show limited or negative results for financial education among some populations. Among the most important skeptics is Lewis Mandell, who has been following the Jump$tart Coalitions surveys of high school students for over a decade. He concludes that there is no apparent relationship between financial education in school and financial literacy scores (Mandell, 2008), and in a different small sample study finds no evidence of positive behavior changes in the five years after high school (Mandell & Klein, 2009). Another study found that people attending debtor education were less likely to complete repayment than those who did not attend, although the relationship is not necessarily causal (Braucher, 2001).

Effects of financial education are difficult to measure because of the range of objectives, audiences, activities, and timing (Hathaway & Khatiwada, 2007; Hogarth, 2006). Many questions remain unclear, including the optimal age to initiate financial education, the content that should be included, the best teaching methods, and how these factors might vary across target groups (Burhouse, Gambrell, & Harris, 2004). The ability to put new financial knowledge into action may take effect in

[7] The number of financial education and effectiveness studies is too numerous to cover here, therefore, I cover the reviews of research, along with a few examples.

stages (Xiao et al., 2004), although timing remains unclear. The effects of financial education on low-income and minority households and other financially vulnerable households, in particular, are seriously understudied (Hathaway & Khatiwada, 2007; Lyons et al., 2006; Schuchardt et al., 2009). For the most part, research does not test impact. Most studies use case study and pre-post test methods with small, non-representative samples, and while some include comparison groups, few use control groups (Collins & O'Rourke, 2009; Holden et al., 2009; Lyons et al., 2006; Martin, 2007; U.S. Department of Treasury, 2006). More well-designed and thorough research that includes impact assessment is required (Fox et al., 2005; Lyons et al., 2006; McCormick, 2008).

Financial advice and counseling

Periodically, people may need personal financial advice and counseling. Financial advice and counseling varies by substantive focus, method and intensity, and type of provider. First, the subject of financial advice and counseling includes a range of issues, such as higher education financing, home buying, credit, debt modification, bankruptcy, insurance, tax, investment, and retirement decisions.

Second, financial advice and counseling also differs by method, length of engagement, and intensity. Some people may need short-term personal financial advice, which may be dispensed in person, by telephone or online. Some people require in-depth financial guidance and counseling when facing a financial crisis, such as a job loss, divorce, gambling debt, medical debt, or home foreclosure, or when facing long-term financial instability, such as severe poverty, disability, chronic illness, or mental health problems. Finally, some people may benefit from a relationship with a coach or mentor who offers a financial model for positive financial actions (children who grow up without role models, former foster children).

Third, consumers often face a confusing patchwork of public, private, and non-profit counseling agencies. Online advice is of inconsistent quality, with some legitimate counselors and others charging fees for dubious advice or financial products. Advisors and counselors represent a variety of disciplines, including peer counselors, consumer and family economists, housing counselors, credit counselors, financial planners, lawyers, and social workers. For consumers, it is generally difficult to know where to get quality advice and counseling, although a number of organizations have or are developing professional certification.[8]

There are many studies that examine effectiveness of financial advisors and counselors (beyond the scope of this paper), but like studies of financial education, they frequently show positive association but do not determine causal relationships. Outcomes are difficult to study because of the diversity of programs and approaches, and lack of quality data (Hornburg, 2004). More research is needed to generate testable propositions, appropriate study designs, and better measures (Hornburg, 2004; Mallach, 2001).

[8] In the United Kingdom, which has made strides in designing a universally accessible system of financial advice, policymakers are examining a national accreditation system for personal advisors to ensure quality services (Ben-Galim & Lanning, 2010).

Financial Inclusion

Even with financial education, advice, and counseling, it is unrealistic that people actually will keep pace with the growing complexity of modern financial life. As Lauren Willis writes, "The gulf between the literacy levels of most Americans and that required to assess the plethora of credit, insurance, and investment products sold today—and the new products as they are invented tomorrow—cannot realistically be bridged" (2008, p. 3). Willis and others argue that a focus on financial education blames the victim and "provides a convenient excuse for society to refrain from assisting consumers who are experiencing poor financial outcomes" (p. 45; see also Gross, 2005).

From a practical point of view, it is also unclear if those who are most in need of financial education, advice, and counseling will seek them out (Bailey, Sorhaindo, & Garman, 2003). For example, an evaluation of the federal government's First Accounts program, which aimed to bring low-income households into mainstream financial services, finds that "the lure of free educational services was not sufficient to attract their target clients" (Abt Associates, 2006, p. xii). Furthermore, in another study, low-income participants were encouraged to open a bank account but were prevented from doing so by financial constraints (Lyons & Scherpf, 2004), suggesting the importance of reaching people with basic financial services at the same time as they receive financial education.

People may be more likely to engage in and learn something from financial education and advice when combined with quality financial products. If low-income families are to have the opportunity to act in their own best financial interests (be financially capable), they need access to quality financial products, including, at a minimum, a transaction account, a savings account, affordable and small dollar credit, simple insurance products, and if possible, low-cost investment and emergency saving products (Caskey, 1994; Kempson, Whiley, Caskey & Collard, 2000).

Unfortunately, this array of mainstream financial services and products is out of reach for many low-income households (Barr, 2004; Bucks et al., 2009; Carr & Schuetz, 2001; Hogarth, Anguelov, & Lee, 2005; O'Neill et al., 2000). In fact, approximately one-quarter of low-income US households are "unbanked," that is, they have neither a checking nor a savings account in a bank or credit union (Bucks et al., 2009).[9] Although the unbanked are a heterogeneous group, they tend to be members of minority groups, unmarried heads of household, young, have less formal education, and lower levels of income and financial assets (Abt Associates, 2006; Bachelder, Alexander, Yu et al., 2008; Caskey, 2005; Stegman, 2003).

When the poor lack access to quality banking products and services, they frequently also turn to available, but costly, credit and alternative financial products (Barr, 2004; Berry, 2004; Caskey, 1994; Karger, 2005).[10] Alternatives include check cashing outlets, pawnshops, payday loans, rent-to-own,

[9] The "unbanked, according to the FDIC includes all those who answer "no" to the question: "Do you or does anyone in your household currently have a checking or savings account?" (Bachelder et al., 2008). Similarly, the US Treasury defines "unbanked" as anyone who does not currently have an account at an insured depository institution, such as a bank, savings association or thrift, or credit union (2009).

[10] People who use *both* mainstream and alternative products are called "underbanked" because the mainstream products are not *adequate*. According to the FDIC, the "underbanked" have "used non-bank money orders, non-bank check-cashing services, payday loans, rent-to-own agreements, or pawn shops at least once or twice a year or refund anticipation loans at least once in the past five years" (Bachelder et al., 2008, p. 3).

tax refund lenders,[11] car title loans, pyramid schemes, loan sharks, rotating credit associations, and savings clubs (Caskey, 1994). Two-thirds of the "unbanked" use alternative financial products, according to a recent FDIC survey (Bachelder et al., 2008).[12]

Although alternatives offer easy access for some financial transactions, they are expensive and lack consumer protection (Fellowes & Mabanta, 2008). Predatory lending—lending that exploits vulnerable and unsophisticated borrowers—has been estimated to transfer over $9 billion annually in assets from the poor to lending institutions (Stein 2001; Squires, 2008). For example, refund anticipation loans (RALs) in Native communities in the United States offer EITC recipients early access to refunds, but in return, recipients pay between 50% and 500% annual percentage interest rate (First Nations Development Institute, 2008). Overall, according to one estimate, a family earning $18,000 a year can spend up to $500 on basic payment products at check cashing facilities (Caskey, 2005, p. 153; see also Fellowes, 2006).

Ultimately, neither mainstream nor alternative financial products are meeting the needs of low-income households. As Michael Barr writes, "The financial services mismatch between the needs of [low- and moderate-income] households and the products and services offered to them largely forces these households to choose among the high-fee, ill-structured products offered by both banking and [alternative financial services] institutions" (2009, p. 67). As a result, many households rely instead on cash transactions and cash saved at home (Bachelder et al., 2008). As a respondent in our savings study reported, he does not "have that much money to put in a bank" and "saving at home is more convenient" because "I can just go to my closet when I need money." Asked about the risk of robbery, he shrugged. "That's just the risk I'm willing to take" (Sherraden & McBride with Beverly, 2010). Regrettably, cash on hand not only is unsafe because of the threat of robbery, but also is much more likely to be spent (Beverly, McBride, & Schreiner, 2003; Mullainathan & Shafir, 2009).

Emerging evidence in behavioral economics, sociology, and social work suggests features of financial products that are important to consider (Sherraden, Schreiner, & Beverly, 2003; Thaler & Sunstein, 2008; Tversky & Kahneman, 1981). When financial products are accessible, affordable, financially attractive, easy to use, secure, and reliable, they are more likely to appeal to low-income households. Below, we discuss these features, followed by examples illustrating how the features inform ways to reach low-income households with quality checking and savings account products.[13]

Accessible

Access refers to the ability and right that people have to approach, enter, use, and communicate with an institution (Beverly, Sherraden, Cramer et al., 2008). A variety of factors, small and large, can pose barriers to access to financial products in low-income households. Eligibility may disqualify some low-income households, including people with poor credit records and those whose prior

---

[11] These are known as Refund Anticipation Loans (RALs).

[12] Alternative financial services include money orders and check cashing from non-bank outlets, pawnshops, payday loans, rent-to-own agreements and refund anticipation loans in the FDIC survey (Bachelder et al., 2008).

[13] There are other important areas for consideration, including other ways that people transfer funds, save, manage risk and credit, and invest. However, we limit the discussion to checking and savings accounts because they are the building blocks of basic financial management, and for space considerations.

problems with financial products prevent them from holding regular accounts.[14] Banking products may not accommodate irregular income streams in many low-income households. Other access barriers include location, personnel, hours of operation, language, social class, culture, and age (Berry, 2004; Caskey, 1994, 2005). Immigrants, for example, may not feel welcome in some financial institutions because they are not fluent in English. In a recent study, 9% of the unbanked report that "banks do not feel comfortable or welcoming," 7% report language barriers, 4% report no bank located near home or work, and 4% report inconvenient hours (Bachelder et al., 2008). Among the underbanked (people who have a checking or savings account but used an alternative financial service transaction in the prior month), 34% prefer to do their financial transactions in a grocery or other store, compared to 35% who prefer a bank or credit union (CFSI, 2008). In other words, although mainstream financial institutions are often located near or even within low-income communities (Fellowes & Mabanta, 2008), they are not necessarily convenient.[15]

Affordable and financially attractive

Many unbanked people do not use mainstream financial products because they are too expensive, especially given the small amount of money they have to manage (Bucks et al., 2009; Bachelder et al., 2008; Caskey, 2005).[16] Among the top five reasons cited by the *previously banked* for why they are *now unbanked*, 34% said they do not have enough money to warrant an account, 26% do not want or see the value in an account, and 12% said services charges are too high (Bachelder et al., 2008). When asked what would induce them to open a bank account, unbanked respondents say that lower fees (29%) is most important, followed by less confusing fees (16%), and lower minimum balances (14%) (Barr, 2009, p. 76). These findings suggest that low-income households will be more likely to open checking and savings accounts when they are low-cost, require low minimum deposits and balances, and provide reasonable ways to avoid penalties.

Perhaps even more important, financial services and products should be financially attractive. Financial institutions offer numerous incentives—including subsidies, higher returns, lower fees, and other benefits—to make products financially attractive to bank customers who maintain high account balances. Unfortunately, these features do not benefit—and even may penalize—the poor.[17] So, while wealthier customers who can afford to keep large bank balances reap higher rates of return and are exempt from certain fees, low-income customers with small bank balances are not eligible. In fact, low-income customers often are subject to penalties for falling below minimum balance requirements that exceed fees charged to wealthier customers (Berry, 2004; Caskey, 1994).

This is a reason why lower-income households avoid mainstream financial institutions. Turning back to the FDIC study, among the previously banked, 10% reported they are unbanked now because the minimum balance requirement is too high, and 8% said they no longer have a checking account because they bounced too many checks or had too many overdrafts (Bachelder et al., 2008). In our

[14] Insufficient funds in an account can lead to fees for overdraft fees and bounced checks, refusal by banks to issue a checking account, and reports to the ChexSystem®, which, similar to a credit report, follow a patron and may prevent the individual from opening accounts in other banks for a period up to five years.
[15] Fellowes and Mabanta (2008) report that 56%of lower-income neighborhoods have bank and credit union branches, compared to non-banks, which are located in 31% of such neighborhoods.
[16] For their part, banks also argue that offering low balance accounts is expensive (Barr, 2004).
[17] As David Caplovitz (1967) pointed out several decades ago, the poor "pay more." This is true also for financial services (Fellowes, 2006).

savings study, for example, a young mother of three and her husband had to pay $240 in bank fees—$20 for each of 12 bounced checks—because her husband's paycheck arrived late at the bank: "I was just devastated. . . We paid hundreds of dollars in check charges that just killed me. And I thought, 'No more!'" They closed their checking account (Sherraden & McBride, 2010).

Easy to use

Financial services transactions and decisions require confidence, numeracy skills, willpower, and an ability to differentiate among various and often-complex options. Even for those who grow up observing and learning how to use mainstream financial products, they can often be confusing and difficult to use. For those with little experience, they can be daunting (Berry, 2004). Moreover, low numeracy skills among much of the U.S. population make financial decision-making challenging (Lusardi & Mitchell, 2007a). Unfortunately, people tend to procrastinate and avoid making decisions they perceive as difficult or unpleasant (Tversky & Shafir, 1992). Making them more accessible, affordable, and financially attractive will help, but it is also important to make them easier to use.

For clues, we turn to behavioral economics, a field that analyzes how psychology affects economic decisions. People tend toward a "path of least resistance"; they do what comes more easily and what happens automatically (Choi, Laibson, Madrian, & Metrick, 2002). This is particularly true for difficult or unpleasant decisions. For example, when saving for retirement, people are more likely to save when they are part of an employer-based retirement plan that automatically transfers part of their wages to a retirement account. If they must manually transfer funds to a retirement account every time they are paid, they are much more likely to skip payments. In the first instance, an employee precommits to send part of her wages to a retirement savings account automatically. This keeps cash out of her pocket or checking account, with the result that she thinks about this money differently and is much less likely to spend it (Tversky & Kahneman, 1981). Automatic deposit also saves time. As a form of default, automatic deposit reduces the willpower required to save. It "pads the path of least resistance," channeling people toward better choices (Thaler & Sunstein, 2008, p. 83).

Unfortunately, features that make financial products easier to use frequently are not available and are unfamiliar to low-income households. Employers may not offer direct deposit of paychecks into a checking account, or automatic deposit into retirement saving. Low-income employees may be unbanked, their work may be temporary, or they may receive their wages in cash. Reaching low-income households with easy to use financial products and services requires specially designed innovations. Debit cards, mobile phone banking, electronically based bank accounts, and payment cards offer possibilities, but require further testing with low-income populations (Barr, 2009, p. 69).

Secure and reliable

Low-income households need access to secure and reliable financial products. A legacy of exploitation and discrimination by financial services providers in low-income and minority communities in the United States (Carr & Schuetz, 2001) has led to skepticism reflected in a national survey: Seven percent of the previously banked say they "do not trust banks" (Bachelder et al., 2008). A study of unbanked households in Detroit suggests that account security is a key concern (Barr, 2009). As a result, many families rely on cash transactions, or use mainstream products in ways that are not optimal. For example, a man in the savings study said that he chose to deposit his

IDA savings in person because he did not trust direct deposit or mail-in options (Sherraden & McBride, 2010).

Consumer protections and regulations can help protect low-income consumers from unsafe financial products (Barr, 2004; Warren, 2008). As Peter Tufano writes, "If there are meaningful conflicts of interest between businesses and consumers, or limitations in the capacities of consumers to search for information, analyze it, or make good decisions, then laws and regulations play an important role" (2009, p. 241; also see Campbell, Jackson, Madrian, & Tufano, 2010). Lauren Willis suggests several top considerations, including regulating sellers' incentives, imposing product liability on sellers to protect consumers, and prohibiting sale of high risk or harmful products (2008, p. 53). Clearer information and transparency will facilitate people's ability to evaluate and choose products and services (Bertrand et al., 2006; Willis, 2008, 53). Proposals for a new Consumer Financial Protection Agency may address some of these issues (White House, 2010).

In sum, accessibility, affordability, financial attractiveness, ease of use, security, and reliability are key features of quality financial products. These features lead to strategies for improving and developing appropriate financial products for low-income households. The next section describes efforts to reach low- and moderate-income households with basic financial products, and assesses the extent to which these features are included.

Reaching low-income households with basic financial products

The focus is on access to quality savings and checking accounts. Although households need other types of financial products, these are basic. Widespread access to savings and checking would benefit low- and moderate-income households because bank accounts are less expensive than alternative financial products, help people keep their money safe, help households manage their finances, provide a gateway to other financial products, and lead to lower-cost credit (Stuhldreher, no date; U.S Department of Treasury, 2010b). As Matt Fellowes of the Brookings Institution writes, "Bank accounts are essentially an on-ramp to economic mobility and wealth in this country. Without access to that on-ramp, people are basically living in a cash economy where there's no opportunity to convert that into wealth" (Buchanan, 2007).

Electronic banking. Electronic banking has the potential to reach more low-income households with inexpensive banking products, increasing their ability to pay, receive, and save money, and eventually increasing interest in other financial products (Mas, 2009).[18] Electronic banking uses computer technology to substitute for checks. Cards or codes give people access to accounts through automated teller machines (ATM) or 24-hour tellers, direct deposit, pay-by-phone systems (or mobile banking), personal computer banking, debit card purchase transactions, and electronic check conversion.[19] Often these methods are simple, time saving, and secure. They reduce the need to carry cash, and they make handling and exchanging money easier. For instance, when consumers use debit cards, they can make payments without cash and can withdraw cash as needed.

[18] Internationally, governments and financial institutions are linking branchless banking and government-to-people (G2P) programs that use electronic banking to transfer social assistance payments, pay wages, and send pension payments to households (Mas, 2008; Pickens, Porteous, & Rotman, 2009).
[19] http://www.ftc.gov/bcp/edu/pubs/consumer/credit/cre14.pdf

The federal government requires that unbanked recipients of federal payments, such as social security and SSI, have access to an electronic transfer account (ETA) designed to be affordable, protected, and accessible (Stegman, 1999, 2003).[20] Many states now transfer social assistance funds through electronic benefits transfer (EBT). Electronic banking can reach more low-income households through federally insured debit card-based bank accounts that do not allow check writing, overdraft, or hidden or back-end fees, and have no minimum deposit or minimum balance (Barr, 2007). These could be linked to an ETA or EBT, and over time, financial institutions could add products if people manage these cards and accounts responsibly (Stegman, 2003).

Electronic banking has potential for greater access, ease of use, financial attractiveness, and reliability. For example, in a study of unbanked households in Detroit, a majority of respondents said they would use low-cost, low-risk options such as debit cards, prepaid debit cards, and payroll cards that allow unbanked patrons to withdraw funds through an ATM (Barr, Bacheldor, & Dokko, 2007; Fellowes & Mabanta, 2008; Hogarth et al., 2005). However, there are limitations that may be particularly salient for low-income households. Respondents in the Detroit study said that cost and consumer protections would guide their ultimate decision about such products (Barr et al., 2007). Despite protections spelled out in the federal EFT Act,[21] electronic banking card owners may be liable for losses if they do not promptly report errors, or lost or stolen cards. Furthermore, in most cases, there is no right to stop payment if a purchase is defective or an order is not delivered.[22]

Theoretically, electronic-banking is accessible, affordable, easy to use, secure, and reliable. Services are not dependent on locating bank and credit union branches within reach. With training, electronic banking is safe and reliable. However, for low-income households, which are less likely to have dependable computer and Internet access, there are significant challenges and financial risks.

Low-cost financial products. Some financial institutions have created products and pioneered service delivery systems in order to meet the financial needs of low-income households (Abt Associates, 2006). For instance, in an effort to win customers over from check cashing outlets, Union Bank in California created Cash & Save outlets in 1993. Through focus groups, the bank learned that customers "didn't want marble lobbies, comfy chairs, free coffee, and regular business hours. For them, Formica countertops were perfectly fine, so long as they could access their money when and where they needed it" (Beaudin, 2006, p. 69). Cash & Save outlets offer basic check cashing service, free money orders, inexpensive check cashing products, no fee savings with small initial and annual deposits, and secured credit cards (Beaudin, 2006; Stegman, 2001). Almost half of the new customers became full bank customers and deposits grew by more than 40% (Beaudin, 2006).

California municipal and state policymakers embraced this model. In 2006, the Mayor of San Francisco spearheaded creation of the Bank on San Francisco (BSF), in partnership with the City Treasurer's Office, County of San Francisco, the Federal Reserve Bank of San Francisco, a local nonprofit, and more than 170 bank and credit union branches.[23] BSF's goal is to provide checking

[20] http://fms.treas.gov/eta/background.html
[21] http://www.fms.treas.gov/eft/regulations.html
[22] Although the FTC advises card owners to notify their financial institution by certified letter with return receipt requested (keeping a copy for their own records), this advice is likely to go unheeded in many households. Moreover, there is little recourse after 60 days. http://www.ftc.gov/bcp/edu/pubs/consumer/credit/cre14.pdf
[23] http://bankonsf.org/about

and savings accounts to approximately 50,000 unbanked San Franciscans, and to reduce the estimated $40 million a year they spend at check cashers and payday lenders.[24] Since then, the State of California and other U.S. cities have initiated a similar statewide model (CA Office of the Governor, 2008; Meek, 2010). These and other initiatives across the country led to formation of Cities for Financial Empowerment (CFE), an advocacy coalition of municipal governments across the country aiming to advance financial empowerment initiatives to decrease expenses, reduce debt and encourage savings.[25]

These basic financial products initiatives increase accessibility, affordability, financial attractiveness, ease of use, security, and reliability. Thus far, although there have not been any independent evaluations, in two years, BSF helped 25,000 people open accounts (Stuhldreher, no date).[26] The statewide initiative, Bank on California, uses a system-wide data collection mechanism for the project to measure and track accounts opened and calculate estimated savings across participating financial institutions, but these data are not yet available.

Direct deposit into savings. The Earned Income Tax Credit (EITC) split refund option permits low-income earners, who receive a refundable federal income tax credit, to send their credit into two to three separate accounts, including checking, savings, or retirement (which can be located in different financial institutions).[27] Tax refunds are usually the largest lump sum of cash that low-income households receive each year, and families often use their refund to pay bills or buy things that they cannot cover out of regular income streams (Beverly, 2002). Unfortunately, these funds are often spent quickly (Beverly, 2002). Direct deposit of the EITC into different accounts offers several benefits, including convenience (the recipient does not have to deposit or cash a check), safety (it goes directly into the accounts), and speed (refund is deposited faster than regular refunds). Additionally, split refunds might encourage people to open checking and savings accounts, and they can help build savings (Beverly, Schneider, & Tufano 2006; Beverly, Tescher & Romich, 2004).

EITC split refunds are affordable, financially attractive, secure, and reliable. However, they are not necessarily accessible and easy to use. Low-income earners must fill out a form each year and own checking, savings, or retirement accounts to receive the credit. Although this does not sound difficult, low-income tax filers may not know about or understand the EITC or the split refund option, or have accounts to which the IRS can send the refund (Beverly et al., 2006).

Financial incentives for savings. Bundling products and services together provides opportunity to incorporate financial incentives into financial products and build savings at the same time (Tufano & Schneider, 2009). For example, "Keep the Change" is a simple, customer recruiting and loyalty

[24] BSF partners offer low-cost checking with no minimum balance requirement; features that help customers prevent overdrawing their account; special services to immigrants; outreach strategies to targeted low-income neighborhoods; and community-based financial management training. The partners also offer "second chance" programs forpeople with a poor history of managing bank accounts. An example is "Checking Network USA," a program where participants attend online or classroom-based financial education, receive a certificate, and open a checking account. According to Stuhldreher (no date), 98%of accountholders of its predecessor, "Get Checking," successfully maintained their checking accounts.

[25] http://www.cfecoalition.org/cfeAboutCFECoalition.aspx?ID=2

[26] http://bankonsf.org/index

[27] EITC recipients fill out an IRS Form 8888 ("Direct Deposit of Refund to More Than One Account") instructing the IRS where to deposit the refund.

program that encourages bank customers to use a debit card and build small savings simultaneously (Mierzwa, 2007; Tufano, 2009, pp. 159-60). When people use their debit card, the bank rounds up the amount to the nearest dollar, and transfers the difference to the customer's savings account (McGeer, 2007). The bank matches these savings one-to-one for three months and 5% after that up to an annual maximum of $250. In a year and a half, savings among 4.3 million customers who signed on reached $400 million ($93 on average).[28] The bank reports that "Keep the Change" attracts customers as well as offering a "gateway for customers to get into the habit of saving" (Mierzwa, 2007). Although others suggest that such programs contribute to consumer confusion about the difference between spending and saving (Mierzwa, 2007), "Keep the Change" illustrates the power of incentives (Tufano & Schneider, 2009). Although initial evidence on "Keep the Change" suggests that it is affordable, financially attractive, easy to use, secure, and reliable, it is limited to bank customers, and therefore, is not widely accessible to low-income households.

Another program, "Save to Win", a savings and lottery program, reaches further into low-income communities. Hoping to attract new members and increase savings, credit unions awarded everyone who made a $25 deposit into their savings accounts a chance to win $100,000, along with monthly prizes of up to $100. Save to Win encouraged more than 11,000 people to open a savings account and save $8.6 million throughout 2009, including a large proportion with people with low incomes who had not saved regularly in the past (Stuhldreher, 2010). People save in programs like these because they like lotteries and believe they are more likely to accumulate wealth through a lottery than by saving (Tufano & Schneider, 2009).[29] Although financially attractive, "Save to Win" is accessible only to those low-income households in the targeted area who enroll in the program.

Despite the challenges, these innovations suggest that it is possible to design products and services that reach low-income households with checking and savings accounts. Appropriate services can encourage low-income families to open accounts, use mainstream financial products, better manage their money, and build savings. Although such programs reach more people than in the past, persistent numbers of "unbanked" households suggest these innovations are not enough. Moreover, although access to savings and checking accounts is an important first step to building financial capability, long-term financial stability and opportunities for development will require more than basic financial products. Nonetheless, these examples illustrate how features—such as accessibility, affordability, financial attractiveness, ease of use, security, and reliability—can help shape quality financial products and improve financial inclusion. The next section addresses how, by combining financial inclusion and financial literacy, we can generate financial capability in low-income households.

Linking Financial Literacy and Financial Inclusion: Toward Financial Capability

Figure 1 is a schematic depiction of the hypothesized relationship between financial education and financial stability and well-being through improved financial literacy and improved use of financial products.

[28] The bank has benefited from the 1.8 million new savings accounts and 1.3 million new checking accounts over 19 months (Mierzwa, 2007).
[29] In 2007, lottery revenues in the United States reached almost $24 billion (American Gaming Association, 2010).

Figure 1: Financial literacy

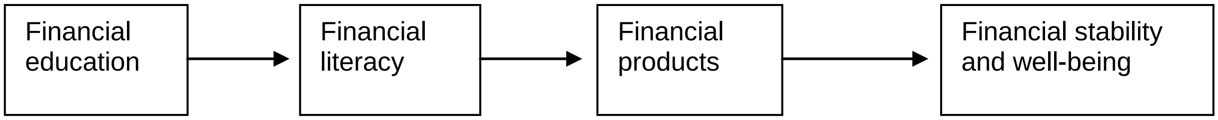
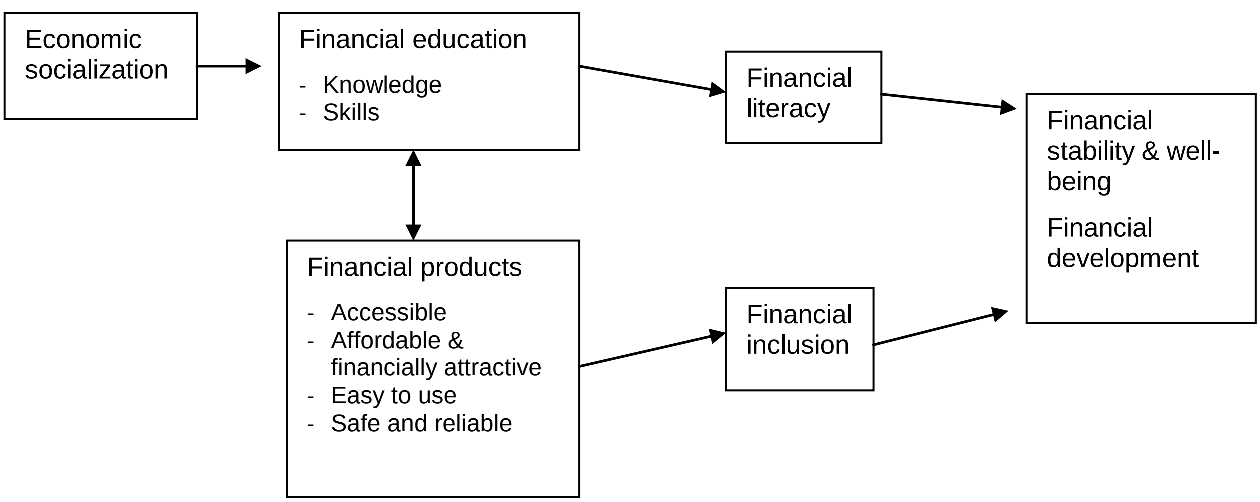


Figure 2 is a depiction of hypothesized relationship between access to financial products and financial stability and well-being through financial inclusion and improved knowledge and skills.

Figure 2: Financial inclusion

Figure 3 is a depiction of financial capability. In this graphic, financial knowledge and skills (from economic socialization and financial education), generates improved financial literacy. At the same time, accessible, affordable, financially attractive, easy to use, secure, and reliable financial products lead to financial inclusion. Together financial literacy and financial inclusion build financial capability in low-income households. Increases in financial capability lead to greater financial well-being, and more opportunities for financial development. Financial well-being and opportunity for financial development generate more financial literacy and financial inclusion.

Figure 3: Financial capability



We turn to a hypothetical example. Let's say a 16-year old youth begins her first job at a fast food franchise. Simultaneously, she enrolls in a financial education course in her high school, where she learns how to open and manage a secured checking account, and how to sign up for direct deposit. When she goes to the bank to open the checking account, she also learns about a special no-fee youth savings account that requires only a small initial deposit, and bonuses for reaching savings targets.[30] She opens the savings account and arranges to send $20 a month automatically from checking to her savings account. In school, she also learns about higher yield savings vehicles. Eventually, she wants to buy a house, so she sets a target date in her mind for shifting her savings. When she finishes high school and enters community college, she moves into a slightly better paying job. After several years, during which she participates in a free homebuyer course, she reaches her savings goal, transfers her money to a higher yield savings instrument and continues saving. Although she has to borrow occasionally from her savings, after 12 years of saving, when she is 28 years old, she has saved enough for a down payment on a house and repairs, with a little left over for emergency expenses.

In this example, we observe a young person actively engaging in her financial life, learning and doing at the same time. This interaction between financial literacy and financial inclusion is central to the idea of financial capability. Using knowledge she gains from school, she develops an early and positive relationship with a financial institution, gains a sense of mastery in money management, feels more secure because her money is safer and she is accumulating savings (financial well-being). Eventually she has enough money to invest in a house (financial development). Moreover, she is likely to feel more empowered and in control of her life, which may make build her personal resilience. We have little empirical evidence on financial empowerment and well-being. However, there is evidence of the negative case in the correlation between debt and psychological ill health, although causation is not established (Jenkins et al., 2008; Taylor et al., 2007).

Over time, feedback effects may generate even more learning (higher financial literacy) and lead to more beneficial financial products and services (more financial inclusion), and greater financial capability. As Nussbaum (2000) writes, internal capabilities (in this case, financial knowledge and skill, or improved ability to act) and external conditions (financial products and services, or improved opportunity to act) are each important, but may also interact in ways that make the combination more beneficial than the sum of its parts.

According to this schema, financial education without access to financial products and services—or access to financial products without financial education—is less effective and potentially harmful (Lyons, Chang, & Scherpf, 2006). Suppose this same young woman learns in school that it is a good idea to use direct deposit and have a portion of earnings automatically deposited into a savings account. Luckily, her employer offers a direct deposit option. She arranges to have $20 a month transferred to a regular savings account, but the bank does not offer a special youth savings account. She occasionally withdraws some savings using the bank's ATM.[31] She has trouble tracking the withdrawals, and the bank begins to assess fees because of her low balance. When she realizes what is happening, she becomes discouraged. She withdraws her remaining savings and closes the account. Saving seems futile and the bank unfair. Instead, she saves her money at home, where it is more likely to be spent, lent, or stolen. What may be worse, the experience leaves her with a negative view of the financial institution, and thus a diminished capability to act in her best financial interests in the future.

Unfortunately, the second scenario is more likely than the first. Even with high school financial

[30] Some Children's Development Account programs offer these kinds of incentives.
[31] Some banks now offer ATM withdrawal protection so that customers cannot over-withdraw from their accounts; nonetheless, many charge fees for low balances.

education classes, low-income youth are not likely to have access to special youth savings accounts, and their employers are unlikely to encourage direct deposit. Their parents, who may use alternative financial products for some financial transactions, may not be in a position to help their children navigate mainstream financial products. Moreover, youth may not be thinking about long-term saving in part because their parents may not own a home and may have had no experience in long-term financial investing.

The consequences of low financial capability can be even more serious. In recent years, easy credit, low incomes, and poor money management, among other factors, contributed to financial problems among low- and moderate-income families (Mind, 2007). For example, many low-income families purchased houses with subprime loans, subsequently losing them to foreclosure. In pursuit of homeownership, many followed investment advice in the media and in homebuyer programs. Even a financially literate borrower eligible for a regular loan was a candidate for a subprime loan because of heavy marketing and targeting in low-income communities (Squires, 2008). Unfortunately, many of these home loans fell into foreclosure. In one year alone (2009), almost three-quarters of a million subprime loans were in foreclosure (Mortgage Bankers Association, 2010).

These examples suggest that from a theoretical perspective, failing to connect the ability to act (or internal capability, including financial knowledge and skills), and the opportunity to act (or external conditions, including financial products and services), could produce what Amartya Sen calls an "unfreedom" (1999, p.86). In practical terms, the first example cited above represents potential liability, and the second represents widespread and tragic loss of homes and family net worth. Moreover, financial instability and loss have associated negative psychological costs (Taylor et al., 2007) that may have repercussions for other areas of people's lives.

Evidence on Financial Capability

There is evidence that combining financial education and experience with financial products matters. Programs that provide financial education and a financial product often emphasize one or the other. Evidence from programs led by financial education—but also including experience with a financial product—suggests that the addition of the product may increase motivation to learn and assimilation of financial information. This type of experiential approach to teaching financial education may be more effective (McCormick, 2008; Russell, Brooks, & Nair 2006). For example, using a stock market game in financial education with youth has better outcomes than didactic approaches (Mandell, 2008). In another study, having a bank representative present at financial education workshops to help participants open bank accounts appears to have a positive effect. The take up rate (and use of other complementary bank products) was significantly higher among a group of unbanked participants who met with the bank representative than among those who attended the workshop without a bank representative present (Bertrand et al., 2006).

Evidence from programs led by a financial product—but also including a financial education component—suggests that the addition of information and education may improve understanding of the product and related financial actions. For example, Individual and Child Development Accounts, college savings plans, homeownership programs, income tax preparation assistance, and savings clubs focus on product outreach, but typically also offer some financial education. Outcomes may be better when they include financial education. For example, analysis of evidence from IDAs suggests an independent contribution of financial education on opening an account and saving performance (Schreiner & Sherraden, 2007).

Nonetheless, research evidence on financial capability is scant and results are mixed (Baker & Dylla, 2007). For example, students who own stock in their own name or credit cards are not more knowledgeable about investments or credit, respectively, than students who did not own stock or owned stocks in their parents' name or did not own credit cards (Mandell, 2004). It is likely that different kinds of financial experiences may have different results. For example, children who grow up in families that encourage experience in spending and saving appear to have more effect on financial knowledge and skills than opportunities to earn money at home or a regular allowance (Marshall & Magruder, 1960). A qualitative study of a youth savings account and financial education program finds that participants attribute increased financial knowledge to workshops and not to holding assets (Scanlon & Adams, 2009). In contrast, another study finds that variance in investment knowledge is better explained by experience with financial products than with taking a college level financial education course (Peng, Bartholomae, Fox, & Cravener, 2007). These results suggest a need for more research that sorts out effects of financial education and financial inclusion.

Understanding the contribution of financial education and financial products in building financial capability will require more research and testing. Future research should focus on understanding the discrete and summative contributions of financial education and financial products and services. This will require randomized studies with controls that can sort out effects. Research should also explore if effectiveness differs by approaches to financial education, and variations in types of financial products. For example, we would expect that linking financial education and a savings account would have stronger effects on financial knowledge and savings than linking financial education and a transaction account or a debit card, but research has not confirmed these relationships. It would also be helpful to identify key indicators of financial literacy and financial inclusion, as well as financial stability, well-being, and financial development in order to assess financial capability in low-income households. Understanding these key questions will provide direction for effective policy, regulation, and evidence-based practice.

Conclusion

There is ample evidence that low-income households, in poor and rich nations alike, actively engage in making complex and difficult financial decisions, often with skill and perseverance (Collins, Morduch, Rutherford, & Ruthven, 2009; Davis, 1992; Edin & Lein, 1997; Muske & Winter, 1999). People in poverty – like the non-poor – track, evaluate, and engage with others as they make financial decisions (Rainwater, Coleman, & Handel, 1959; Zelizer, 1989). Low-income families weigh the advantages and disadvantages of using mainstream and alternative financial products to manage their money (Barr, 2004; Caskey, 1994). Despite small incomes, even the poorest households in the world set aside small savings for emergencies, life cycle needs, and future opportunities (Collins et al., 2009; Rutherford, 2000). To help make ends meet, households also make use of other resources in families, communities, and social assistance systems (Edin & Lein, 1994; Stack, 1979; Venkatesh, 2006).

Efforts to strengthen financial capability in low-income households can build on these time-honored financial survival strategies. Financial information, education, and training can improve people's knowledge and skills. However, families also need access to quality financial products. Low-income households cannot address the deficiencies of mainstream and alternative financial services industries alone. Policy and regulatory changes are required to build financial capability in low-income households.

References

American Gaming Association (2010). Gaming revenue: Current-year data. Retrieved February 17, 2010 from http://www.americangaming.org/Industry/factsheets/statistics_detail.cfv?id=7

Atkinson, A., McKay, S., Kempson, E., & Collard, S. (2006). *Levels of financial capability in the UK. Results of a baseline survey*. Bristol: University of Bristol. Retrieved November 27, 2006, from http://www.pfrc.bris.ac.uk/completed_research/fincap_baseline.html

Bachelder, E., Alexander, E. K., Yu, L., Bellows, C., Stanton, J., Rumble, J., & Barr, M. S. (2008). *Banks' efforts to serve the unbanked and underbanked for the Federal Deposit Insurance Corporation* (Final Report). Boston, MA: Dove Consulting.

Baker, C., & Dylla, D. (2007). *Analyzing the relationship between account ownership and financial education.* Washington, DC: New America Foundation. Retrieved May 4, 2010, from http://www.newamerica.net/files/Microsoft%20Word%20-%20Account%20Ownership%20and%20Financial%20Education-Elec.pdf

Bailey, W. C., Sorhaindo, B., & Garman, E. T. (2003). Educational desires of credit counseling clients. *Financial Counseling and Planning, 14*(1), 51-56.

Barr, M. (2004). Banking the poor. *Yale Journal on Regulation, 21*, 121.

Barr, M. (2007). An inclusive, progressive national savings and financial services policy. *Harvard Law and Policy Review, 1*, 161-184.

Barr, M. (2009). Financial services, saving, and borrowing among low- and moderate-income households: Evidence from the Detroit Area Housing Financial Services Survey. In R. M. Blank & M. S. Barr (Eds.), *Insufficient funds: Savings, assets, credit, and banking among low-income households* (pp. 66-96). New York: Russell Sage Foundation.

Barr, M. S., Bachelder, E., & Dokko, J. (2007). Payments innovations in serving low- and moderate-income households: Policy, and evidence from a new survey. Proceedings of the Federal Reserve Bank of Chicago 42nd Annual Conference on Bank Structure and Competition, 448-460.

Bayer, P. J., Bernheim, B. D., & Scholz, J. K. (2006). *The effects of financial education in the workplace: Evidence from a survey of employers* (NBER Working Paper No. W5655). Retrieved May 5, 2010, from http://www.nber.org/papers/w5655

Beaudin, L. (2006). From marble to Formica: How the Union Bank of California attracts lower-income people to traditional banking. *Stanford Social Innovation Review*. Retrieved May 5, 2010, from http://faculty-gsb.stanford.edu/heath/documents/2007/2006FA_wworks_UnionBank.pdf

Bell, C., Gorin, D., & Hogarth, J. M. (2009). *Does financial education affect soldiers' financial behavior?* (Working Paper 2009-WP-08). Terre Haute, IN: Indiana State University, Networks Financial Institute.

Ben-Galim, D., & Lanning, T. (2010). *Strength against shocks: Low-income families and debt.* London: ippr.

Bernanke, B. S. (2006, May 23). Financial literacy. Testimony before the Committee on Banking, Housing, and Urban Affairs of the United States Senate. Retrieved May 4, 2010, from http://www.federalreserve.gov/newsevents/testimony/bernanke20060523a.htm

Bernheim, D. (1998). Financial literacy, education, and retirement saving. In O. S. Mitchell & S. J. Scheiber (Eds.), *Living with Defined Contribution Pensions: Remaking responsibility for retirement* (pp. 38-68). Philadelphia: University of Pennsylvania.

Bernheim, B. D., & Garrett, D. M. (2003). The effects of financial education in the workplace: Evidence from a survey of households. *Journal of Public Economics, 87*, 1487-1619.

Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving: The long-term effects of high school financial curriculum mandates. *Journal of Public Economics,* 80(3), 435-465.

Berry, C. (2005). To bank or not to bank? A survey of low-income households. In N. P. Retsinas & E. S. Belsky (Eds.), *Building assets, building credit: Creating wealth in low-income communities* (pp. 47-70). Cambridge, MA: Joint Center for Housing Studies, and Washington, DC: Brooking Institution Press.

Bertrand, M., Mullainathan, S., & Shafir, E. (2006). A behavioral-economics view of poverty. *American Economic Review*, *94*(2), 419-423.

Berti, A. E., & Bombi, A. S. (1988). *The child's construction of economics* (G. Duveen, Trans.). Cambridge: Cambridge University Press.

Beutler, I., & Dickson, L. (2008). Consumer economic socialization. In J. J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 83-102). New York: Springer.

Beverly, S. (2002). What social workers need to know about the Earned Income Tax Credit. *Social Work, 47*(3), 259-266.

Beverly, S. G., Moore McBride, A., & Schreiner, M. (2003). A framework of asset-accumulation stages and strategies. *Journal of Family and Economic Issues, 24*(2), 143-156.

Beverly, S. G., Sherraden, M., Cramer, R., Shanks, T. W., Nam, Y., & Zhan, M. (2008). Determinants of asset holdings. In S. M. McKernan and M. Sherraden (Eds.), *Asset building and low-income families* (pp. 89-152). Washington, DC: Urban Institute Press.

Beverly, S. G., Schneider, D., & Tufano, P. (2006). Splitting tax refunds and building savings: An empirical test. In J. M. Poterba (Ed.), *Tax policy and the economy*, vol. 20, 111–162. Retrieved May 4, 2010, from http://www.nber.org/chapters/c0068

Beverly, S. G., Tescher, J., & Romich, J. L. (2004). Linking tax refunds and low-cost bank accounts: Early lessons for program design and evaluation. *Journal of Consumer Affairs*, *38*, 332-341.

Beverly, S. G., Tescher, J., Romich, J. L., & Marzahl, D. (2001). *Linking tax refunds and low-cost bank accounts: Findings from the extra credit savings program*. Chicago: Shorebank.

Braucher, J. (2001). An empirical study of debtor education in bankruptcy: Impact on Chapter 13 completion not shown [Electronic version]. *American Bankruptcy Institute Law Review.*

Braunstein, S., & Welch, C. (2002, November). Financial literacy: An overview of practice, research, and policy. *Federal Reserve Bulletin*, 445-457.

Bucks, B. K., Kennickell, A. B., Mach, T. L., & Moore, K. B. (2009, February). Changes in U.S. family finances from 2004 to 2007: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*, A1-A56. Retrieved May 5, 2010, from http://www.federalreserve.gov/pubs/bulletin/2009/pdf/scf09.pdf

Buchanan, W. (2007, December 4). Program helps low-income S.F. residents start bank accounts. *San Francisco Chronicle*, p. A1. Retrieved May 4, 2010, from http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/12/04/MNC0TKIH3.DTL#ixzz0hW23VCkA

Burhouse, S., Gambrell, D., & Harris, A. (2004, September 22). Delivery systems for financial education in theory and practice. *FYI: An update on emerging issues in banking.* Retrieved May 4, 2010, from http://www.fdic.gov/bank/analytical/fyi/2004/092204fyi.html

California Office of the Governor (2008). *Bank on California: Helping Californians achieve financial mobility*. Fact Sheet. Retrieved May 4, 2010, from http://gov.ca.gov/fact-sheet/8599/

Campbell, J., Jackson, H., Madrian, B., & Tufano, P. (2010). *The regulation of consumer financial products*. Paper presented at "Moving Forward: The Future of Consumer Credit and Mortgage Finance, A National Symposium," Joint Center for Housing Studies, Harvard University, Cambridge, MA. Retrieved May 4, 2010, from http://www.jchs.harvard.edu/moving_forward_symposium/draft_papers.html

Caplovitz, D. (1967). *The poor pay more: The consumer practices of low-income families*. New York: The Free Press.

Carr, J. H., & Schuetz, J. (2001). *Financial services in distressed communities: Framing the issues, finding solutions*. Washington, DC: Fannie Mae Foundation. Retrieved May 4, 2010, from http://www.fanniemaefoundation.org/programs/financial.PDF

Caskey, J. P. (1994). *Fringe banking: Check-cashing outlets, pawnshops, and the poor.* New York: Russell Sage Foundation.

Caskey, J. P. (2005). Reaching out to the unbanked. In M. Sherraden (Ed.), *Inclusion in asset building: Assets, poverty, and public policy* (pp. 149-66). New York: Oxford University Press.

Center for Financial Services Innovation (2008). *The CFSI Underbanked Consumer Study: Underbanked consumer overview and market segments fact sheet.* Fact Sheet. Retrieved May 4, 2010, from http://cfsinnovation.com/system/files/imported/managed_documents/underbankedconsumerstudy_factsheet_june82008_final1cw.pdf

Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2002). Defined contribution pensions: Plan rules, participant decisions, and the path of least resistance. In J. M. Poterba (Ed.), *Tax policy and the economy,* vol. 16 (pp. 67-113). Cambridge, MA: MIT Press.

Collins, D., Morduch, J., Rutherford, S. Ruthven, O. *Portfolios of the poor: How the world's poor live on $2 a day*. Princeton & Oxford: Princeton University Press.

Collins, J. M., & O'Rourke, C. (2009, May). *Still holding out promise: A review of financial literacy education and financial counseling studies*. Presentation at Improving Financial Literacy and Reshaping Financial Behavior conference, Indianapolis, IN. Retrieved May 4, 2010, from http://www.networksfinancialinstitute.org/News/Documents/Collins.pdf

Council for Economic Education (2009). *Survey of the states: Economic, Personal finance and entrepreneurship education in our nation's schools in 2009, a report card*. Retrieved May 4, 2010, from http://www.councilforeconed.org/about/survey2009/CEE_2009_Survey.pdf

Courchane, M., & Zorn, P. (2005). Consumer literacy and credit worthiness. Paper presented at "Promises and Pitfalls: As Consumer Options Multiply, Who Is Being Served and at What Cost?" conference. Retrieved May 4, 2010, from http://www.chicagofed.org/digital_assets/others/events/2005/promises_and_pitfalls/paper_literacy.pdf

Danes, S. (2004). *Evaluation of the NEFE high school financial planning program, 2003-2004*. Minneapolis, MN: University of Minnesota. Retrieved May 4, 2010, from http://hsfpp.nefe.org/loadFile.cfm?contentid=273

Davis, E. P. (1992). Financial management practices among households with differing resource constraints. *Journal of Consumer Education, 10*, 27-31.

Dixon, M. (2006). *Rethinking financial capability: Lessons from economic psychology and behavioural finance*. London, UK: ippr. Retrieved May 4, 2010, from https://www.ippr.org/publicationsandreports/publications.asp?id=471

Edin, K., & Lein, L. (1997). *Making ends meet: How single mothers survive welfare and low-wage work*. New York: Russell Sage Foundation.

Fellowes, M. (2006). *From poverty, opportunity: Putting the market to work for lower income families*. Washington, DC: The Brookings Institution, Metropolitan Policy Program. Retrieved May 4, 2010, from http://www.brookings.edu/~/media/Files/rc/reports/2006/07poverty_fellowes/20060718_PovOp.pdf

Fellowes, M., & Mabanta, M. (2008). *Banking on wealth: America's new retail banking infrastructure and its wealth-building potential*. Washington, DC: The Brookings Institution, Metropolitan Policy Program

First Nations Development Institute and Center for Responsible Lending (2008). *Borrowed time: Use of Refund Anticipation Loans among EITC filers in Native American communities.* Longmont, CO: First

Nations Development Institute. Retrieved May 4, 2010, from http://www.responsiblelending.org/other-consumer-loans/refund-anticipation-loans/borrowed-time-rals-in-native-american-communities.pdf

Fox, J. J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *Journal of Consumer Affairs, 39*, 195-214.

Furnham, A. (1999). The saving and spending habits of young people. *Journal of Economic Psychology, 20*, 677-697.

Furnham, A., & Argyle, M. (1998). *The psychology of money*. London: Routledge.

Godsted, D., & McCormick, M. H. (2007). *National K-12 financial literacy research overview* (Networks Financial Institute Report 2007-NFI-03). Retrieved May 4, 2010, from http://www.networksfinancialinstitute.org/Lists/Publication%20Library/Attachments/86/2007-NFI-03_Godsted-McCormick.pdf

Gross, K. (2005). Financial education: Panacea, palliative, or something worse? Washington University *St. Louis Public Interest Law Review, 25,* 1.

Hathaway, I., & Khatiwada, S. (2008). *Do financial education programs work?* (Federal Reserve Bank of Cleveland Working Paper No. 08-03). Retrieved May 4, 2010, from http://www.clevelandfed.org/research/workpaper/2008/wp0803.pdf

HM Treasury (2007). *Financial capability: The government's long term approach*. Norwich, UK: HM Treasury. Retrieved November 16, 2009, from http://www.hm-treasury.gov.uk/d/fincap_150107.pdf

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin* (July), 309-322.

Hogarth, J. (2006, November). *Financial education and economic development*. Paper presented at the G8 International Conference on Improving Financial Literacy, Moscow.

Hogarth, J. M., Anguelov, C. E., & Lee, J. (2005). Who has a bank account? Exploring changes over time, 1989–2001. *Journal of Family & Economic Issues*, *26*(1), 7-30.

Hogarth, J. M, Beverly, S. G., & Hilgert, M. (2003, February). *Patterns of financial behaviors: Implications for community educators and policy makers* (Discussion Draft). Paper presented at the Community Affairs Research Conference, Federal Reserve Board. Retrieved May 5, 2010, from http://www.federalreserve.gov/communityaffairs/national/CA_Conf_SusCommDev/pdf/hogarthjeanne.pdf

Holden, K., Kalish, C., Scheinholtz, L., Dietrich, D., & Novak, B. (2009). *Financial literacy programs targeted on pre-school children: Development and evaluation*. Retrieved May 4, 2010, from http://www.cunapfi.org/download/168_CUNA_Report_PHASE_ONE_FINAL_4-28-9.pdf

Hornburg, S. P. (2004). *Strengthening the case for homeownership counseling: Moving beyond "a little bit of knowledge."* Cambridge, MA: Harvard University, Joint Center for Housing Studies. Retrieved May 4, 2010, from http://www.jchs.harvard.edu/publications/homeownership/w04-12.pdf

Jenkins, R., Bhugra, D., Bebbington, P., Brugha, T., Farrell, M., Coid, J., et al. (2008). Debt, income and mental disorder in the general population. *Psychological Medicine*, *10*, 1-9.

John, D. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *The Journal of Consumer Research, 26*(3), 183-213.

Johnson, E., & Sherraden, M. S. (2007). From financial literacy to financial capability among youth. *Journal of Sociology and Social Welfare*, *34*(3), 119-145.

Jump$tart Coalition for Personal Financial Literacy (2007). *National standards in K–12 personal finance education*. Washington, DC: Jump$tart Coalition. http://www.pueblo.gsa.gov/cic_text/education/jumpstart/k-12.pdf

Karger, H. (2005). *Shortchanged: Life and debt in the fringe economy*. San Francisco, CA: Berrett-Koehler.

Kempson, E., Whyley, E., Caskey, J., & Collard, S. (2000). *In or out? Financial exclusion: A literature and research review*. London: UK Financial Services Authority. Retrieved May 4, 2010, from http://www.bris.ac.uk/geography/research/pfrc/themes/finexc/pfrc0002.pdf

Lusardi, A. (2007, October 28). The importance of being financially literate. Retrieved May 5, 2010, from http://annalusardi.blogspot.com/2007/10/importance-of-being-financially.html

Lusardi, A. (2008). Are we a nation of financial illiterates: Some comments. Retrieved May 5, 2010, from http://annalusardi.blogspot.com/2008/08/are-we-nation-of-financial-illiterates.html

Lusardi, A. (2010). *The importance of financial literacy*. Retrieved May 5, 2010, from http://www.dartmouth.edu/~alusardi/Papers/NBER_Reporter.pdf

Lusardi, A., & Mitchell, O. (2009). Financial literacy: Evidence and implications of financial education. *Trends and Issues* (May), 1-10. New York: TIAA-CREF Institute. Retrieved May 5, 2010, from http://www.dartmouth.edu/~alusardi/Papers/T&I--Financial%20Literacy--Lusardi%20and%20Mitchell.pdf

Lusardi, A., & Mitchell, O. S. (2007). Baby boomer retirement security: The role of planning financial literacy, and housing wealth. *Journal of Monetary Economics*, *54*, 205-224.

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). *Financial literacy among the young: Evidence and implications for consumer policy*. Retrieved May 4, 2010, from http://www.dartmouth.edu/~alusardi/Papers/Financial_literacy_young.pdf

Lyons, A. C. (2005). Financial education and program evaluation: Challenges and potentials for financial professionals. *Journal of Personal Finance*, *4*(4), 56-68.

Lyons, A. C., Palmer, L., Jayaratne, K. S. U., & Scherpf, E. (2006). Are we making the grade? A national overview of financial education and program evaluation. *Journal of Consumer Affairs*, *40*(2), 208-235.

Lyons, A. C., & Scherpf, E. (2004). Moving from unbanked to banked: Evidence from the Money Smart Program. *Financial Services Review, 13*(3), 215-231.

Lyons, A. C., Chang, Y., & Scherpf, E. (2006). Translating financial education into behavior change for low-income populations. *Financial Counseling and Planning, 17*(2), 27-45.

McCormick, M. H. (2008). The effectiveness of youth financial education. Washington, DC: New America Foundation. Retrieved May 4, 2010, from http://newamerica.net/publications/policy/effectiveness_youth_financial_education_0

McGeer, B. (2007, May 31). Bankers hope a dollar saved is a customer earned. *American Banker,* p2A. Retrieved May 5, 2010, from http://www.brandkeys.com/news/press/053107.AB.Banks.pdf.pdf

McKernan, S. M., & Sherraden, M. (Eds.) (2007). *Asset building and low-income families*. Washington, DC: Urban Institute Press.

McNeal, J. U. (1987). *Children as consumers: Insights and implications*. Lexington, MA: Lexington Books.

Mallach, A. (2001). *Home ownership education and counseling: Issues in research and definition* (Federal Reserve Bank of Philadelphia Discussion Paper). Retrieved May 4, 2010, from http://www.phil.frb.org/community-development/publications/discussion-papers/homeowner.pdf

Mandell, L. (2004). *Financial literacy: Are we improving? Results of the 2004 National Jump$tart Survey*. Washington, DC: Jump$tart Coalition.

Mandell, L. (2008). Financial literacy in high school. In A. Lusardi (Ed.), *Overcoming the saving slump: How to increase the effectiveness of financial education and saving programs* (pp. 257-279). Chicago: University of Chicago Press.

Mandell, L., & Klein (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning, 20*(1), 15-24.

Martin, M. (2007). *A literature review on the effectiveness of financial education* (Working Paper 07-03). Richmond, VA: Federal Reserve of Richmond. Retrieved May 4, 2010, from http://www.richmondfed.org/publications/research/working_papers/2007/wp_07-3.cfm

Mas, I. (2008, October). *Realizing the potential of branchless banking: Challenges ahead* (CGAP Focus Note 50). Retrieved May 5, 2010, from http://www.cgap.org/gm/document-1.9.6433/FN50.pdf

Meek, A. (2010, March 19). 'Bank On Memphis' to reach 'unbanked.' *Memphis Daily News*. Retrieved May 5, 2010, from http://www.memphisdailynews.com/editorial/Article.aspx?id=48654

Mierzwa, E. (2007). Bank of America wants customers to keep their change. *Cascade*, *64*. Retrieved May 5, 2010, from http://www.philadelphiafed.org/community-development/publications/cascade/64/08_bank-wants-customers-to-keep-their-change.cfm

Mills, G. B., Wood, M., Herbert, C. E., Muehlegger, J., Clay, E., Cowan, S. et al. (2006). *Findings from the First Accounts Program*. Washington, DC: U.S. Department of the Treasury.

Mind (2008). *In the red: Debt and mental health*. London, UK: author. Retrieved May 4, 2010, from http://www.mind.org.uk/assets/0000/0102/In_the_red.pdf

Mortgage Bankers Association (2010). *National Delinquency Survey, 2009*. Washington, DC: Mortgage Bankers Association.

Moschis, G. P. (1985). The role of family communication in consumer socialization of children and adolescents. *Journal of Consumer Research, 11*, 898-913.

Mullainathan, S., & Shafir, E. (2009. Savings policy and decisionmaking in low-income households. In R. M. Blank & M. S. Barr (Eds.), *Insufficient funds: Savings, assets, credit, and banking among low-income households* (pp. 121-146). New York: Russell Sage Foundation.

Muske, G., & Winter, M. (1999). Cash flow management: A framework of daily family activities. *Financial Counseling and Planning, 19*(1), 1-12.

National Council on Economic Education (NCEE) (2005). *NCEE Report Card: Survey of the states: Economic and personal finance education in our nation's schools in 2004*. Retrieved May 1, 2005, from http://www.ncee.net/about/survey2004/ NCEESurvey2004web.pdf

Northwest Area Foundation and Lake Research (2009). *Struggling to Make Ends Meet National Poll*. St. Paul, MN: Northwest Area Foundation. Retrieved May 5, 2010, from *http://www.nwaf.org/content/SurveyIntro*

Nussbaum, M. (2000). *Women and human development: The capabilities approach*. Cambridge, MA: Cambridge University Press.

O'Neill, B., Xiao, J. J., Bristow, B., Brennan, P., & Kerbel, C. M. (2000). Successful financial goal attainment: Perceived resources and obstacles. *Financial Counseling and Planning, 11*(1), 1-12.

Organization for Economic Cooperation Development (OECD). (2005). *Improving financial literacy: Analysis of issues and policies*. Paris: OECD.

Peng, T. M., Bartholomae, S., Fox, J. J., & Cravener, G., (2007). The impact of personal financial education delivered in high school and college courses. *Journal of Family and Economic Issues, 28*, 265-285.

Pickens, P., Porteous, D., & Rotman, S. (2009, December). *Banking the Poor via G2P Payments* (Focus Note 58). Washington, DC: CGAP & DFID.

Rainwater, L., Coleman, R. P., & Handel, G. (1959). *Workingman's wife*. New York: Oceana Publications.

Russell, R., Brooks, R., & Nair, A. (2006). *Evaluation of the youth financial literacy trial program*. Melbourne, Australia: RMIT University.

Rutherford, S. (2000). *The poor and their money*. New Delhi and New York: Oxford University Press.

Scanlon, E., & Adams, D. (2009). Do assets affect well-being? Perceptions of youth in a matched savings program. *Journal of Social Service Research*, *35*, 33-43.

Schreiner, M., & Sherraden, M. (2007). *Can the poor save? Saving and asset building in individual development accounts.* New Brunswick: Transaction.

Schuchardt, J., Hanna, S. D., Hira, T. K., Lyons, A. C., Palmer, L., & Xiao, J. J. (2009). Financial literacy and education research priorities. *Journal of Financial Counseling and Planning, 20*(1), 84-95.

Sen, A. (1987). The standard of living: Lecture II, lives and capabilities. In G. Hawthorn (Ed.), *The standard of living* (pp. 20-38). Cambridge: Cambridge University Press.

Sen, A. (1999). *Development as freedom*. New York: Anchor Books.

Sherraden, M. S., & McBride, A. M., with Beverly S. G. (2010). *Striving to save: Creating policies for financial security of low-income families*. Ann Arbor: University of Michigan Press.

Sherraden, M., Schreiner, M., & Beverly, S. (2003). Income, institutions, and saving performance in Individual Development Accounts. *Economic Development Quarterly, 17*(1), 95-112.

Seidman, E. (2008, February 13). The Community Reinvestment Act: Thirty years of accomplishments, but challenges remain. Testimony presented to House Committee on Financial Services. Retrieved August 1, 2009, from http://financialservices.house.gov/hearing110/ht021308.shtml

Squires, G. (2008a). *Do subprime loans create subprime cities? Surging inequality and the rise of predatory lending* (Briefing Paper #197). Washington, DC: Economic Policy Institute. Retrieved May 4, 2010, from http://www.sharedprosperity.org/bp197/bp197.pdf

Stacey, B. G. (1987). Economic socialization. In S. Long (Ed.), *Annual Review of Political Science, 2*, 1-23.

Stack, C. B. (1974). *All our kin: Strategies for survival in a black community*. New York: Harper and Row.

Stegman, M. A. (1999). *Savings for the poor: The hidden benefits of electronic banking*. Washington, DC: Brookings Institution Press.

Stegman, M. A. (2001) Banking the unbanked: Untapped market opportunities for North Carolina's financial institutions. *North Carolina Banking Institute Journal of the University of North Carolina*

School of Law, 5, 23-47. Retrieved May 5, 2010, from http://ccc.unc.edu/documents/CC_BankingUnbankedNC.pdf

Stegman, M. A., Lobenhofer, J. S., & Quinterno, J. (2003). *The state of electronic benefit transfer (EBT)* (Working Paper). Chapel Hill, NC: The University of North Carolina at Chapel Hill, Center for Community Capitalism. Retrieved May 4, 2010, from http://www.ccc.unc.edu/documents/cc_ebt2003.pdf

Stein, E. (2001). Quantifying the cost of predatory lending. Retrieved May 4, 2010, from http://www.responsiblelending.org/pdfs/Quant10-01.pdf

Stuhldreher, A. (no date). Bank on San Francisco. Washington, DC: CFED. Retrieved May 5, 2010, from http://preview.cfed.org/knowledge_center/publications/Bank%20on%20SF%20case%20study%20electronic%20version%20FINAL.pdf

Stuhldreher, A. (2010, January 7). Credit unions launch a savings lottery, and everyone hits the jackpot. *The Washington Post.*

Taylor, M., Jenkins, S., & Sacker, A. (2009). *Financial capability and wellbeing: Evidence from the BHPS* (Occasional Paper Series 34). London: The Financial Services Authority.

Thaler, R. H. & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth and happiness*. New Haven and London: Yale University Press.

Transact: National Forum for Financial Inclusion. (no date). Financial inclusion and capability. Retrieved November 15, 2009, from http://www.transact.org.uk/page.asp?section=248&sectionTitle=Financial+Capability

Tufano, P. (2009). Consumer finance. *Annual Review of Financial Economics, 1*, 227-47.

Tufano, P., & Schneider, D. (2009). Using financial innovation to support savers: From coercion to excitement. In R. M. Blank & M. S. Barr (Eds.), *Insufficient funds: Savings, assets, credit, and banking among low-income households* (pp. 149-190). New York: Russell Sage Foundation.

Tversky, A., & Kahneman, D. (1981). The framing of decisions and psychology of choice. *Science, 211*(30), 453-458.

Tversky, A., & Shafir, E. (1992). Choice under conflict: The dynamics of deferred decision. *Psychological Science, 3*, 358-361.

U.S. Department of the Treasury, Financial Literacy and Education Commission (2006). *Taking ownership of the future: The national strategy for financial literacy.* Retrieved May 4, 2010, from http://www.mymoney.gov/ownership.pdf

U.S. Department of Treasury (2009). Administration officials promote enhanced financial capability among America's youth. Press Release. Retrieved May 5, 2010, from http://www.treas.gov/news/index1.html

U.S. Department of Treasury (2010a). Office of Financial Education: Financial Education Resources—Credit Management. Retrieved May 5, 2010, from http://www.treas.gov/offices/domestic-finance/financial-institution/fin-education/

U.S. Department of Treasury (2010b). President's Advisory Council on Financial Literacy: Community Financial Access Pilot. Retrieved May 5, 2010, from http://www.treas.gov/offices/domestic-finance/financial-institution/fin-education/council/cfap.shtml

Venkatesh, S. A. (2006). *Off the books: The underground economy of the urban poor*. Cambridge, MA and London: Harvard University Press.

Ward, S. (1974). Consumer socialization. *Journal of Consumer Research, 1*, 1-14.

Warren, E., & Bar-Gill, O. (2008). Making credit safer. *University of Pennsylvania Law Review, 1*, 1-101.

The White House (2010). An Essential Part of Financial Reform: A New Consumer Watchdog. Retrieved May 23, 2010, from http://www.whitehouse.gov/sites/default/files/rss_viewer/fact_sheet_an_essential_financial_watchdog_for_consumers.pdf

Willis, L. (2008). Against financial literacy education. *Iowa Law Review, 94*, 3-55. Retrieved May 4, 2010, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1105384

Xiao, J. J., Newman, B. M., Prochaska, J. M., Leon, B., Bassett, R. L., & Johnson, J. L. (2004). Applying the transtheoretical model of change to consumer debt behavior. *Financial Counseling and Planning*, *15*(2), 89-100.

Zelizer, V. A. (1989). The social meaning of money: Special monies. *American Journal of Sociology, 95*, 342-377.