DALLASFED

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Financial Literacy: Where Does Texas Rank?

by Camden Cornwell and Anthony Murphy

How well are Americans applying financial decision-making skills to their lives? Are Texans more or less financially literate compared with consumers from other states? Do educational mandates designed to improve financial understanding and capabilities result in better financial outcomes?

Financial literacy matters because households face increasingly complex economic decisions. Responsibility for retirement planning is falling more on individuals, financial instruments are more complex, student debt is rising and financial scams abound. While the level of financial literacy in Texas is relatively low, the Lone Star State has introduced a fairly rigorous mandate over the past decade to improve financial competence. Research suggests that this mandate is showing success, although there is still plenty of room for improvement.

Measuring Financial Literacy

Data from the 2012 Financial Regulatory Authority (FINRA) National Financial Capability Survey—the most recent available—reflect a relatively poor understanding of basic financial concepts in Texas and the nation.[1] Financial literacy may be measured by the number of correct answers to five questions. Scores are computed as the total number of correctly answered questions on basic financial literacy concepts. The national average is 2.88, showing that most respondents comprehend concepts such as compound interest, inflation and mortgages, but many do not understand the importance of financial diversification and how bond prices respond to changes in interest rates (*Table 1*).

Table 1 Responses to Financial Literacy Questions at National Level

Question/concept	Correct (%)	Incorrect (%)	Don't know (%)	Refused (%)
Compound interest	74.9	13.0	11.1	1.0
Inflation	61.3	17.2	20.2	1.3
Bond prices	28.1	33.3	37.4	1.2
Mortgages	75.0	9.0	15.2	0.7
Diversification	48.5	8.7	42.0	0.9

NOTE: All figures expressed as percentage of total respondents using national weights.

SOURCE: Financial Regulatory Authority, National Financial Capability Survey, 2012.

Financial Literacy in Texas

Financial literacy in Texas appears to be relatively low. Texas ranks No. 44 out of 50 in the average number of correct answers to the five questions (*Chart 1*), with a score of 2.73 out of 5. State population differences—age, sex, race and education—account for most of the disparities in average scores. For example, Texas is one of the youngest states by median age. Younger households have less wealth and less experience dealing with finances and are less likely to plan for the future. Consequently, their financial literacy scores tend to be lower.

DALLAS FED RESOURCES

Economic Updates

Regional—"Regional Economy Presents Mixed Picture"

National—"U.S. Output Growth Moderately Strong amid Slower Global Growth"

International—"Financial Markets React to Chinese Interventions"

Publications

Community Banking Connections—Second Quarter 2015

Dallas Beige Book
Sept. 2, 2015, Summary

Economic Letter
"Inflation Expectations Surveys Often Miss the Mark"

Southwest Economy
"Wage Flexibility in Texas May Ease Impact of Tighter Monetary Policy"

Surveys & Indicators

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Texas Business Outlook Surveys—Manufacturing, Service Sector, Retail

Texas Economic Indicators

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CALENDAR OF EVENTS

Oct. 22

Hobbs Banker Roundtable
Hobbs, N.M.

National Cybersecurity Symposium: Building Law Enforcement and Financial Services Sector Partnerships
Dallas, Texas

Oct. 28

Brenham Banker Roundtable
Brenham, Texas

Nov. 5

SWACHA (Southwestern Automated Clearing House Association) Payments Summit
Irving, Texas

Nov. 10

CUMASET (Credit Union Managers Association of Southeast Texas)
Houston

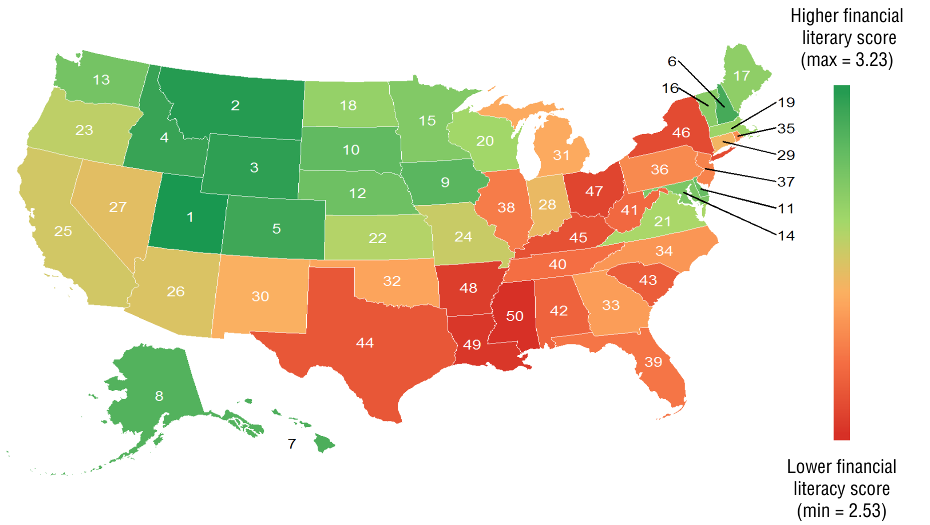
Nov. 19

McAllen Banker Roundtable
McAllen, Texas

Dec. 1

Corpus Christi Banker Roundtable
Corpus Christi, Texas

Chart 1 State Financial Literacy Rankings



NOTE: The rankings are from 1 (best) to 50 (worst).

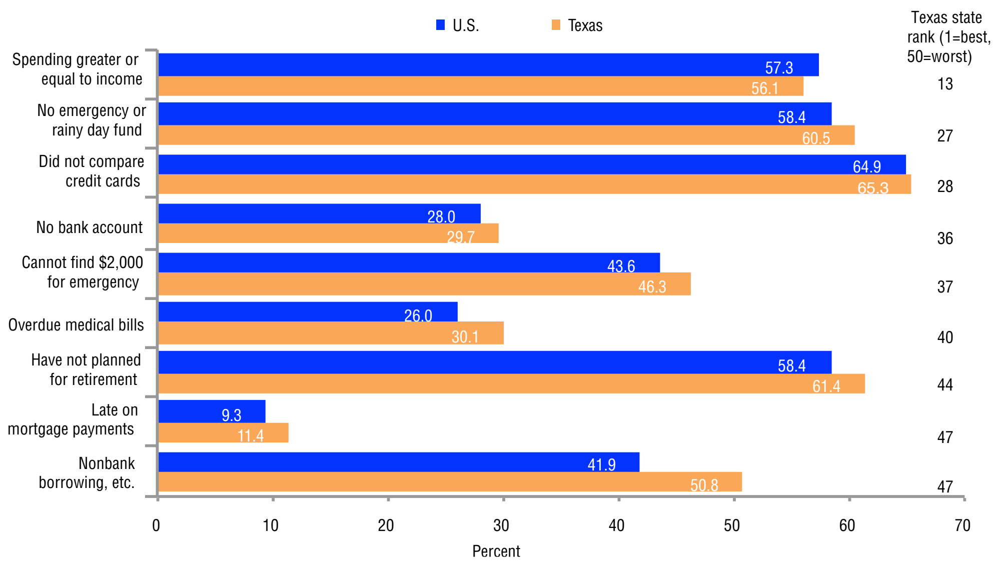
SOURCE: Financial Regulatory Authority, National Financial Capability Survey, 2012.

Education is also an important factor that influences financial literacy. Higher levels of education have positive effects on average financial literacy scores and many forms of financial behavior. Texas again ranks poorly compared with other states in the relative share of the population over age 25 with a high school education or higher.

Financial Behavior and Outcomes

Consistent with this result, the survey results show that financial behavior and outcomes in Texas often rank toward the bottom when compared with other states (*Chart 2*). More than 30 percent of Texas respondents had overdue medical bills, a rate 4 percentage points higher than the national

Chart 2 Financial Behaviors and Outcomes—Texas vs. U.S.



NOTE: "Late on mortgage payments" indicates that a respondent has been late on at least one payment the past two years. "Nonbank borrowing" indicates that a respondent used check cashing stores, money orders, advances on tax refunds, payday loans, pawnshops, auto titles and rent-to-own in past five years.

SOURCE: Financial Regulatory Authority, National Financial Capability Survey, 2012.

ABOUT *FINANCIAL INSIGHTS* AND FIRM

Financial Insights is published periodically by FIRM—Financial Institution Relationship Management—to share timely economic topics of interest to financial institutions.

FIRM was organized in 2007 by the Federal Reserve Bank of Dallas as an outreach function to maintain mutually beneficial relationships with all financial institutions throughout the Eleventh Federal Reserve District. FIRM's primary purpose is to improve information sharing with district financial institutions so that the Dallas Fed is better able to accomplish its mission. FIRM also maintains the Dallas Fed's institutional knowledge of payments, engaging with the industry to understand market dynamics and advances in payment processing.

FIRM outreach includes hosting economic roundtable briefings, moderating CEO forums hosted by Dallas Fed senior management, leading the Dallas Fed's Community Depository Institutions Advisory Council and Corporate Payments Council, as well as creating relevant webcast presentations and this publication. In addition, the group supports its constituents by remaining active with financial trade associations and through individual meetings with financial institutions.

average, ranking the state 40th. The use of nonbank borrowing and financial services—which includes payday loans, auto title loans, pawnshops, check cashing and other forms of expensive financing—is 9 percentage points higher in Texas than the nation on average. More than 61 percent of Texans said they had not yet planned for retirement, a rate exceeded by only six other states.

The FINRA results show that other household financial conditions in Texas (cannot find $2,000 in case of emergency, no emergency or rainy-day fund and no bank account) are closer to, yet still higher than, the national average. One exception is household spending. About 56 percent of Texas respondents reported that they spend all or more than their income; still, Texas fared better in this category than all but 12 other states. It is uncertain, however, by how much spending exceeded income.

Texas Financial Literacy Mandate

"Good" financial outcomes are highly correlated with higher average levels of financial literacy, so it's logical that improving financial literacy should result in better financial behaviors. Generally, the research literature does not find strong causal links between interventions aimed at improving financial literacy and better financial outcomes.[2] However, recent results evaluating the effect of high school financial literacy mandates in a handful of states, including Texas, find notable improvements in credit outcomes for young adults exposed to carefully implemented, rigorous programs.[3]

In 2004, Texas enacted an education mandate that required personal financial literacy courses for high school graduation.[4] The courses were based on a standard curriculum embedded within the economics curriculum already required by Texas high schools.[5]

The study tracked the credit behavior of young adults for four years after they graduated from high school between 2000 and 2009. The three cohorts affected by the mandate graduated in 2007, 2008 and 2009. Changes in the credit scores and delinquency rates of young Texas adults before and after the mandate was introduced were compared with the differences among young adults in New Mexico and similar states where no mandate was introduced. This approach was used to determine the "true" effect of the state financial literacy mandate, excluding, for example, the effects of changes in unemployment rates and other relevant factors.

Following implementation of the mandate, the credit scores of young Texans rose significantly and delinquency rates on credit rates fell significantly. Interestingly, the effects were much stronger and more significant with each subsequent cohort, evidence that teachers honed the efficacy of their financial literacy courses. Compared with New Mexico, young Texans who graduated from high school in 2009 averaged 32 points higher on their credit scores (an increase of 5 percentage points). Their 90-day delinquency rates on credit accounts—auto loans, credit cards, etc.—decreased by 6 percentage points, or one-third.

Conclusions

Financial literacy is relatively low in Texas, which is reflected in the financial behaviors and outcomes of Texans. However, evidence suggests that carefully implemented, rigorous financial literacy programs, as well as higher educational attainment, will help Texans improve their financial behaviors and their financial well-being.

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NOTES

[1] See "Financial Capability in the United States: Report of Findings from the 2012 National Financial Capability Study," Financial Regulatory Authority Investor Education Foundation, May 2013. The authors are grateful to the foundation for granting them access to the detailed survey data.

[2] For example, see "Financial Literacy, Financial Education and Downstream Financial Behaviors" by Daniel Fernandes, John G. Lynch and Richard G. Netemeyer, *Management Science*, vol. 60, no. 8, 2014, pp. 1,861–83.

[3] See "State Mandated Financial Education and the Credit Behavior of Young Adults," by Alexandra Brown, J. Michael Collins, Maximilian Schmeiser and Carly Urban, Finance and Economics Discussion Series No. 2014-68, Federal Reserve Board, 2014.

[4] See Section 28.0021 of the Texas Education Code.

[5] In 2007, the Federal Reserve Bank of Dallas first published Building Wealth—a personal finance education resource that presents an overview of wealth-building strategies for consumers, community leaders, teachers and students. It is on the Texas State Board of Education's list of approved materials for instruction on personal financial literacy.

Noteworthy Items

Federal Reserve Chair Janet L. Yellen gives a speech at the City Club of Cleveland entitled "Recent Developments and the Outlook for the Economy" (July 10, 2015)
Yellen presents on the conditions of the U.S. economy since the 2007–09 recession—particularly noting the Fed's role in the process of achieving its dual mandate from Congress of achieving maximum employment and price stability.

Federal Reserve Chair Janet L. Yellen gives the semiannual monetary policy report to the U.S. Congress (July 15, 2015)
Yellen presents to Congress about the progress the Federal Reserve is making in the economy. Her report indicates further improvement toward the Federal Reserve's objective of maximum employment and indicates that inflation is lower than the level the Federal Open Market Committee deems as aligned with the Congressional mandate of price stability.

Robert Steven Kaplan named president and CEO of the Dallas Fed (Aug. 17, 2015)
The Federal Reserve Bank of Dallas announces the appointment of Robert Steven Kaplan as president and CEO of the Eleventh District. Kaplan was a professor at Harvard Business School and a previous vice chairman of Goldman Sachs Group Inc. He succeeds Richard W. Fisher, who retired from the Dallas Fed in March 2015.

Federal Reserve Vice Chairman Stanley Fischer speaks at the Federal Reserve Bank of Kansas City Economic Symposium in Jackson Hole, Wyo., on U.S. inflation (Aug. 29, 2015)
Fischer indicates that even though the Federal Reserve is achieving its goals in terms of maximum employment, inflation is below where the Federal Open Market Committee wants it to be in order to sustain stable growth in the economy. He attributes this lower-than-targeted inflation to the recent drop in oil prices and other energy-related items.

Federal Reserve releases FOMC statement (Sept. 17, 2015)

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