DALLASFED

THIRD QUARTER 2012

# Southwest Economy

## Texas Housing Market Finally Building a Solid Recovery

*PLUS*

Judging by recent data, the housing sector has finally turned the corner after its prolonged slide. Home prices increased from the first to the second quarter in 92 percent of metropolitan areas covered by a National Association of Home Builders index. "The U.S. Housing Bust Is Over," the *Wall Street Journal* reported in July. This is great news—a turnaround in housing removes a significant impediment to economic growth.

As business economist D'Ann Petersen points out in this issue of *Southwest Economy*, Texas was not immune to the housing market's decline. However, the sector's collapse didn't affect our region as much as it did the rest of the nation, helping explain why Texas has outperformed most other states during the economic recovery.

Texas escaped the boom and bust in housing prices, in part, because of ample land availability and limited zoning restrictions. But prudent regulation also played a role. In 1997, Texas amended its constitution, liberalizing home equity lending but limiting it to no more than 80 percent of the home's equity in most cases.

Indeed, by limiting homeowners' ability to use their legally protected homesteads as ATMs, state law prevented housing from fueling the consumer spending booms and busts experienced elsewhere. Texas now has a relatively low percentage of borrowers with "underwater mortgages"—home loans that exceed the value of the house. Consumer spending makes up about 70 percent of our state's and our nation's economy. Because Texas consumers did not increase their debt burdens as much as consumers in other areas of the country, they had less debt relative to income, leaving them better positioned.

*An upturn in our nation's housing market is especially welcome amid the tepid economic recovery.*

An upturn in our nation's housing market is especially welcome amid the tepid economic recovery. However, as Petersen makes clear, challenges remain, including pending foreclosures, tight credit conditions and continuing fiscal uncertainty. A question still confronting legislators in Washington is how to ensure a resilient housing sector. Perhaps they should start by providing a greater sense of clarity of their intentions on taxes, spending and cleaning up the present regulatory mare's nest so as to enable and incent individuals and businesses to enter into financial commitments, including home purchases.

Richard Fisher

*Richard W. Fisher*
*President and CEO*
*Federal Reserve Bank of Dallas*

# Texas Housing Market Finally Building a Solid Recovery

By D'Ann Petersen

> *Construction jobs have contributed to total employment consistently beginning this year, making construction the last of the major private-sector industries in Texas to see a recovery.*

Texas housing is showing evidence of a sustained recovery in 2012. Home sales and construction have bounced back from recessionary levels, and apartment leasing remains robust thanks to solid employment and population gains. Other factors, including historically low interest rates and increased home affordability, are also playing a role, especially in a rebounding single-family market. Unlike the 2009–10 upturn, which resulted from a temporary tax incentive, the latest gains are due to improved fundamentals reflected in lower housing inventories and rising home prices.

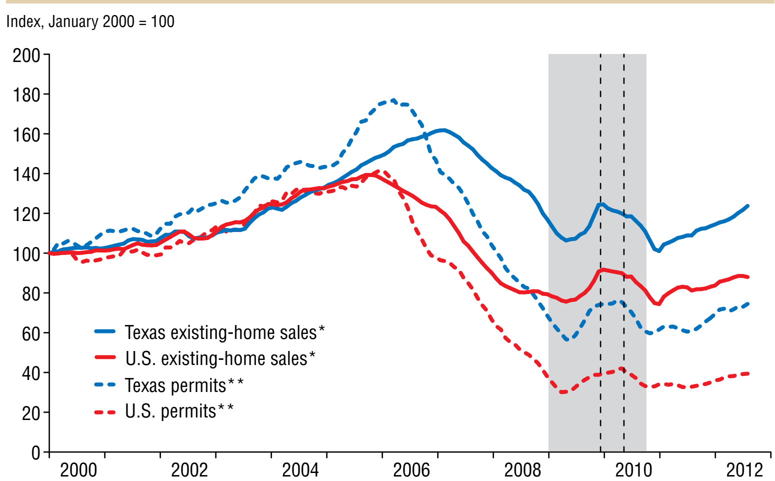
## No More Drag on Growth

Recent information suggesting the Texas single-family housing sector is finally on solid footing comes as good news for an industry that had been in the doldrums since before the recent recession. Sales and new-home construction in Texas and the U.S. fell precipitously through 2008. After that, the single-family housing market bounced along at a historically weak bottom—except in 2009 and 2010 when federal tax credits aimed at helping the ailing housing market created a temporary uptick in sales and construction (*Chart 1*).

Even with the tax-credit-motivated temporary boost, the Texas housing sector weighed on the state economy from 2008 until mid-2011. Residential construction jobs declined in each of those years, although on the whole, Texas employment began recovering from recessionary lows in December 2009—earlier than in many parts of the country. The hard-hit single-family sector, which typically makes up about two-thirds of Texas' residential construction jobs, shrank by 28 percent during the period. Multifamily building decreased when the tax credit was available as potential renters became homeowners. Residential construction starts remained near historic lows, restraining growth in overall state employment and output (*Chart 2*).[1]

The construction sector—which is made up of residential as well as nonresi-

**Chart 1** Single-Family Housing Sector on Firm Ground




* Six-month moving average, seasonally adjusted

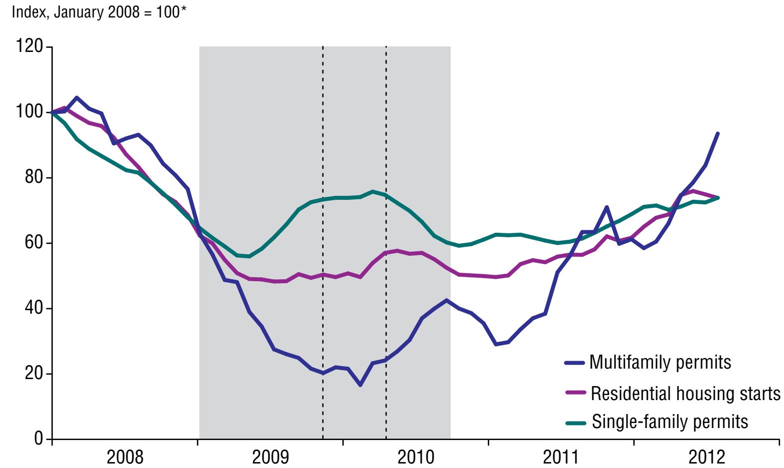
** Five-month moving average, seasonally adjusted

NOTES: Shading indicates when the homebuyer tax credit was active. Vertical dashed lines show original tax credit expiration dates.

SOURCES: National Association of Realtors; Multiple Listing Service; Census Bureau.

*Both the single-family and apartment markets should benefit from an expanding economy.*

**Chart 2** Residential Construction Weak in 2009–10 Despite Single-Family Tax Credit Boost




* Seasonally adjusted, five-month moving average

NOTES: Shading indicates when the homebuyer tax credit was active. Vertical dashed lines show original tax credit expiration dates.

SOURCES: Bank of Tokyo–Mitsubishi; Census Bureau; F.W. Dodge.

dential segments—shed 117,200 jobs, or 17 percent of its total, from mid-2008 to January 2011. Texas construction-related output, measured by gross state product, fell through early 2011 before bottoming out later in the year (*see the box, "Construction Has Broad Impact on State Economy"*).

Construction jobs have contributed to total employment consistently beginning this year, making construction the last of the major private-sector industries in Texas to see a recovery. Strength in single- and multifamily housing paced the recent improvement.

## Construction Has Broad Impact on State Economy

Total construction, which includes residential, nonresidential and heavy/civil engineering activity (roads and bridges, for example), has accounted for about 5.9 percent of total Texas employment on average since 2000 and makes up about 4 percent of the state's output, or gross state product. Construction's employment share is larger than the energy sector but small compared with other major industry sectors, such as manufacturing and professional services.

Construction activity, however, spills over into many other parts of the economy, impacting related manufacturing, real estate services and financial activities. Additionally, home price increases or declines affect housing wealth, which in turn can affect consumer spending. Research indicates that changes in housing wealth at the national level had a significant impact during the housing boom and subsequent bust.[1]

### Note

[1] See "When Will the U.S. Housing Market Stabilize?" by John V. Duca, David Luttrell and Anthony Murphy, Federal Reserve Bank of Dallas *Economic Letter*, vol. 6, no. 8, 2011.

Many factors restrained housing activity in the state's early jobs recovery—declining personal wealth arising from the financial crisis, low consumer confidence, stricter credit standards and a reduced homeownership rate. This last factor reflected a reduced desire to own a home following the severe housing bust and associated home value drop—down as much as 50 percent in some areas of the country. Decreased prices, in part, kept the single-family market from recovering sooner, as potential homeowners deferred purchases until prices stabilized.

On the multifamily side, construction activity was weak during the recession as the household formation rate slowed. Many potential renters, given employment-related uncertainty, moved back home with their parents or doubled up with roommates.

## Apartment Demand Up

In contrast to the single-family market, apartment demand improved in the early part of the state's economic recovery. Growth in leasing activity led to lower apartment vacancy rates in Texas' major metropolitan areas beginning in early 2010 as the Texas economy gained solid footing (*Table 1*).

Strong apartment demand since 2010 has led to rapidly rising rents in Texas' major metropolitan areas. In some locations, such as Dallas' Uptown market, demand is outstripping new supply, which is expected

**Table 1** Apartment Vacancy Rates Fall; Homeownership Stabilizes

| | Apartment vacancy (percent) | | | Real apartment rents (price/unit/month) | | | Homeownership rate (percent) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2010:Q2 | 2011:Q2 | 2012:Q2 | 2010:Q2 | 2011:Q2 | 2012:Q2 | 2010:Q2 | 2011:Q2 | 2012:Q2 |
| Austin | 6.5 | 5.0 | 4.3 | $895 | $896 | $940 | – | – | – |
| Dallas | 8.2 | 6.6 | 5.5 | $830 | $816 | $839 | – | – | – |
| Fort Worth | 8.5 | 7.4 | 5.6 | $737 | $723 | $737 | – | – | – |
| Houston | 9.7 | 8.8 | 7.0 | $849 | $835 | $852 | – | – | – |
| San Antonio | 6.9 | 6.3 | 5.9 | $772 | $759 | $777 | – | – | – |
| Texas | – | – | – | – | – | – | 66.3 | 64.6 | 64.7 |
| U.S. | 6.0 | 5.4 | 4.8 | $1,243 | $1,253 | $1,294 | 66.9 | 65.9 | 65.5 |

SOURCES: M/PF Research; Census Bureau.

to increase as construction picks up through the rest of 2012. Austin ranked sixth nationally in apartment rental rate increases, at 6.1 percent, for the year ended June 30. Dallas rents rose 4.9 percent during the same period, placing just below the top 10 metropolitan areas, according to data provided by M/PF Research.

Apartment rental rates are now high enough in some Texas metro areas to push renters or potential renters into the single-family market, according to business contacts the Dallas Fed interviews for the Beige Book, an anecdotal commentary on regional economic conditions published eight times a year. In fact, the Texas homeownership rate has edged up to 64.7 percent—gaining a percentage point since bottoming in first quarter 2011, which may reflect a change in potential buyers' willingness to purchase a home. Strong growth in rents has also prompted a pickup in apartment construction—30,186 multifamily permits were issued in Texas in 2011 versus 18,389 in 2010. Through July of this year, apartment permits total 27,634, up 46.5 percent.

Both the single-family and apartment markets should benefit from an expanding economy. Both sectors rely on growth in jobs and household formation. Nationally, apartment demand is strong, but the homeownership rate has not increased as it has in Texas. Weaker job growth nationally and continued uncertainty about a jobs rebound as well as the overall financial outlook may still be deterring would-be buyers.

## Single-Family Rebound

Following the U.S. housing bust, Texas home demand fell to levels not seen since 2002. A lack of available jobs along with heightened uncertainty—a product of financial turmoil that, in part, resulted from sliding home prices—kept sales weak. The tax credits shifted home demand by pulling forward a large share of sales that would have occurred anyway, providing a temporary uptick that eventually gave way to another sales drop. A 2011 Dallas Fed article estimated that after the expiration of the tax credit, housing demand would not improve until late 2011 or early 2012; in hindsight, that appears to have occurred.[2]

Overall, Texas home sales began improving in the second half of 2011, rising an annualized 9.5 percent. Tight credit conditions hampered first-time homebuyers, typically a large share of Texas buyers.[3] The national share of sales to first-time homebuyers fell to 37 percent in 2011, down from 50 percent in 2010. Dallas Fed housing contacts note that sales in 2011 shifted toward higher-end homes, also reflecting tighter credit. The proportion of Texas home sales priced above $200,000 increased in 2011 and is up from levels prior to the housing bust, according to Multiple Listing Service data compiled by the Texas A&M Real Estate Center.

The sales pace picked up in 2012. Through July 31, existing-home sales rose almost 20 percent on an annualized basis. This activity is consistent with 2003–04 levels, before the national housing boom. In addition, anecdotal reports suggest demand from first-time buyers is slowly accelerating.

Although sales of new homes began rebounding by early 2011, construction of new units did not immediately jump, in part because builders needed time to adjust to renewed demand after cutting production sharply. They are now optimistic, reporting high traffic and improved sales and a pickup in construction. New-home sales growth was up 18 percent in Dallas, 16 percent in Houston and 13 percent in Austin in second quarter 2012, based on data provided by MetroStudy. Recent reports from industry contacts suggest sales continue to outpace expectations and builders remain positive in their outlooks for the year.

## Construction Revival

Texas residential construction activity has emerged from the deepest downturn in recent history. Texas single-family permits rose at an annualized pace of 21 percent through July, and multifamily permits increased at an even faster pace. In total, residential construction starts rose 25 percent from June 2011 levels, when activity began picking up consistently. The current level of housing construction is still well below levels seen in 2003 and 2004, before the housing boom. But, with tight new-home inventories and low apartment vacancies, construction levels should continue rising if current demand is sustained.

## Texas Home Prices Rise

Perhaps the most important factor in the current Texas housing recovery is shrinking inventories. Even though the 2010 tax credits boosted home sales and construction, inventories of new and existing homes remained elevated, putting downward pressure on prices.

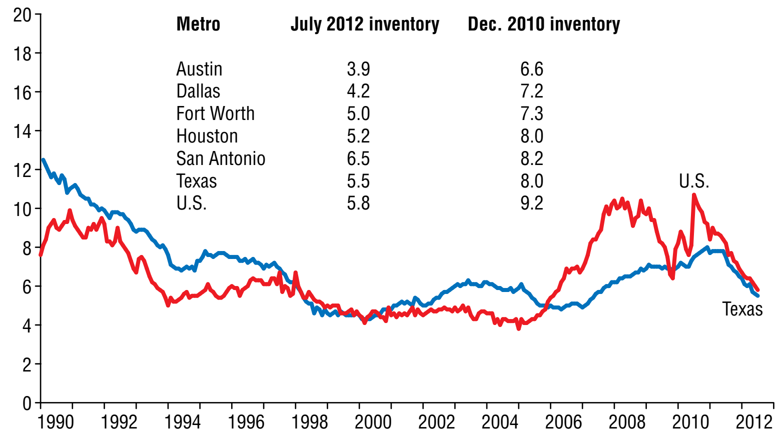
Current conditions support higher prices. Texas inventories of existing single-family homes are at 5.5 months of supply at the current sales pace. Inventories below about 6.5 months of supply are historically consistent with rising home prices. Inventories in several Texas metropolitan areas, including Austin and Dallas, are close to four months of supply (*Chart 3*). Inventories are also reduced if homeowners keep their homes off the market because their mortgages are under water, meaning the home is worth less than what is owed. Nationally, this may be a factor in lowering inventory levels, as homeowners in some parts of the country do not want to sell at a loss and are keeping their homes off the market.

Underwater mortgages are less of an issue in Texas than in other parts of the country. The share of Texans with an underwater mortgage edged down in first quarter 2012 from just above 10 percent to

> Foreclosures remain a concern because they can add to inventories. The foreclosure rate is still elevated in Texas but well below the national average.

**Chart 3** Low Texas Inventories Suggest Continued Home Price Gains

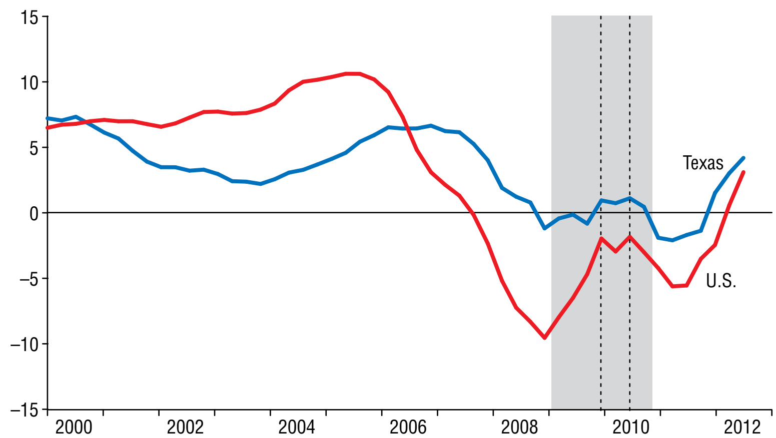
Months, seasonally adjusted




SOURCE: Multiple Listing Service.

**Chart 4** Texas Home Prices Turn the Corner

Four-quarter percent change




NOTES: Shading indicates when the homebuyer tax credit was active. Vertical dashed lines show original tax credit expiration dates.

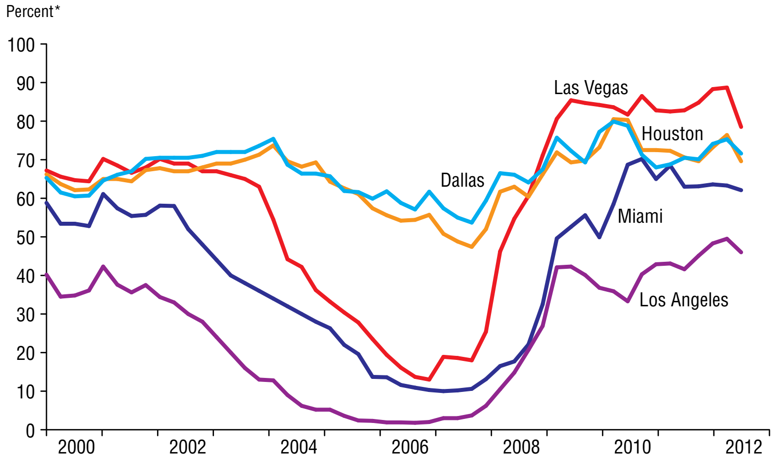
SOURCE: Federal Housing Finance Agency.

9.8 percent, well below the U.S. average of 23.7 percent and the 61.2 percent reported in Nevada, the state with the largest share of such mortgages.

Foreclosures remain a concern as well because they can add to inventories. The foreclosure rate is still elevated in Texas but well below the national average. The share of seriously delinquent Texas mortgages continues to decline, signaling that the foreclosure rate should improve with time. Currently 4.5 percent of Texas mortgages are seriously delinquent versus 7.4 percent nationally.[4]

Indeed, all the indicators for Texas suggest that prices are on an upswing. The Federal Housing Finance Agency purchase-only home price index shows Texas prices began increasing in fourth quarter 2011 (*Chart 4*). Similarly, the Standard & Poor's/Case-Shiller home price index for Dallas shows rising home prices through June.[5] For homes sold by Realtors through the Multiple Listing Service, the median Texas home price rose from $149,096 in January to $157,639 in July. The increase in this index, however, could partly be a result of the price distribution of homes sold—more

## Chart 5 Housing Affordability Improves After Bust




* Share of homes sold that could be considered affordable to a family earning the median income.
SOURCE: National Association of Home Builders–Wells Fargo Housing Opportunity Index.

sales of higher-priced homes will impact the median price. Recent anecdotal reports from industry contacts note that builders are considering raising prices due to rising labor and land costs, and competition for homes on the market is allowing more sellers to get their asking price.

## What's Driving Rebound

The Texas economy is one of the fastest growing in the country; by January 2012, it had regained the number of jobs lost during the recession, one of a handful of states to do so. Texas' population is also among the fastest growing. These factors, no doubt, have contributed to the housing recovery. Additionally, interest rates are at historical lows, Texas personal income is increasing faster than the national average and housing affordability has been rising.

Texas home prices are normally lower than the U.S. average, partly due to the ability of builders to react relatively quickly to increases in home demand—a product of land availability and comparatively light regulation. Still, prices statewide edged down during the housing bust—which helped expand the share of median-income Texas families that can afford a home.[6] While affordability has increased across a large part of the country, Texas metropolitan areas still fare better than other large population centers, such as Miami and Los Angeles, which also became much more accessible because of large home-price decreases (*Chart 5*). Las Vegas has become one of the most affordable areas in the country, following large price declines during the housing bust.

## A Rosier Housing Outlook

The U.S. economic recovery remains fragile, but Texas buyers and renters appear a little more confident. Housing indicators suggest that demand, both for apartments and for single-family homes, continues its steady rise. Population growth and job growth are fueling demand. Tight inventories and low interest rates are also likely spurring potential single-family homebuyers to act now, and anecdotal reports suggest that some apartment renters that were doubling up are now renting single units.

With the uptick in construction in the first half of the year, even a modest increase in the level of new home and apartment construction in the remainder of 2012 would mean an additional stimulus that was missing from the state's economy in 2011. National headwinds to the housing recovery remain, including elevated foreclosures, tight credit conditions and economic and political uncertainties. However, given a forecast for moderate growth in Texas jobs in 2012, Texas' housing recovery should continue.

*Petersen is a business economist in the Research Department of the Federal Reserve Bank of Dallas.*

## Notes

[1] Single-family permits are a proxy for new-home starts and multifamily permits are a proxy for apartment starts since neither series is available at the state level and permits lead starts only slightly. Residential starts (which include single-family and multifamily) are available at the state level.

[2] See "Texas Housing on Bumpy Road After Stimulus Effects Fade," by D'Ann Petersen and Adam Swadley, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter, 2011.

[3] Financing a home purchase became more difficult because of tight credit conditions imposed after the national housing collapse. Lenders required higher credit scores and larger down payments. The Federal Reserve's senior loan officer surveys indicated tight mortgage conditions from late 2006 to mid-2010.

[4] Seriously delinquent mortgages are defined as those with payments 90 days or more past-due plus the inventory of mortgages in foreclosure.

[5] Both the quarterly Federal Housing Finance Agency (FHFA) purchase-only house price index and the monthly S&P/Case-Shiller home price index measure the movement in existing single-family home prices. Both are based on repeat sales transactions, controlling for quality. The FHFA index is more broad in geographic coverage but only includes conforming, conventional mortgages, which are subject to the conforming loan limit.

[6] The National Association of Home Builders' NAHB–Wells Fargo Housing Opportunity Index represents the share of homes sold that could be considered affordable to a family earning the median income. It does not consider the cost of mortgage insurance. Also, the NAHB assumes a family can afford to spend 28 percent of gross income on housing.

*A Conversation with Stephanie Riegg Cellini*

# For-Profit Higher Education Attracts Students, Scrutiny

*Stephanie Riegg Cellini recently published a first-of-its-kind analysis of for-profit two-year colleges, "For-Profit Higher Education: An Assessment of Costs and Benefits." Cellini is associate professor of public policy and economics at George Washington University in Washington, D.C.*

### Q: What are for-profit colleges and why have they attracted federal regulators' attention?

For-profit colleges are an incredibly diverse group of postsecondary institutions organized as profit-seeking businesses. They do not enjoy the tax benefits of traditional private, nonprofit institutions (such as Harvard and Stanford universities) nor the public funding of state colleges and universities (such as the University of California, Berkeley, and the University of Michigan), although many receive substantial public support through federal, state and veteran student-aid programs. For-profit institutions offer everything from vocational certificates and nondegree programs to graduate degrees. Some are large national chains (the University of Phoenix, ITT Technical Institute), while others are small local schools offering specialized coursework (Puttin' on the Tips cosmetology school), and many exist purely online (Capella University). The for-profit sector grew dramatically in the last decade to 11 percent of total postsecondary enrollment, a substantial increase from 4 percent in 2000.

For-profits are attracting the attention of regulators because federal student aid—such as the Pell Grant Program and student loans—is a substantial source of revenue for these institutions, and it is unclear that students are acquiring the skills needed to find a job and repay their debt. On average, aid-eligible for-profits receive 74 percent of their revenue from federal aid programs. Put another way, the for-profits, while enrolling 11 percent of postsecondary students, receive about 25 percent of federal student-aid disbursements and have much higher default rates than other sectors.

In the first three years after graduation, about 25 percent of for-profit students default on student loans, compared with 8 percent of students in nonprofits and 11 percent in public institutions. Additionally, recent government reviews found instances of low graduation rates, questionable recruiting practices and indications of federal student-aid fraud at several large for-profit colleges, raising questions about whether these patterns are widespread.

### Q: What do these for-profit schools offer that traditional two-year colleges do not?

For-profit colleges have been around for a long time, but their numbers and enrollments have spiked in recent years. Their 11 percent enrollment share amounts to more than 2 million students. Availability of financial aid and the loosening of restrictions on aid to online institutions in the 1990s may have helped fuel this growth, but trends in college-going among working students and the growth of the Internet undoubtedly fueled the expansion as well.

Online institutions and chain schools with multiple branch campuses, either in one state or across the nation, account for most of for-profits' growth during the last decade, according to a new paper in the *Journal of Economic Perspectives* [Winter 2012] by David J. Deming, Claudia Goldin and Lawrence F. Katz. Within these institutions, the greatest expansion has been in bachelor's and graduate degree programs. Overall, though, for-profits still award a relatively small share of all bachelor's degrees (5 percent) relative to certificates (42 percent) and associate's degrees (18 percent).

### Q: Who chooses for-profit colleges and why?

Relative to other sectors, for-profit colleges generally serve more women, minorities, older students and lower-income individuals. Some of this is a function of the types of programs they offer—for example, lower-income students may be more likely to enroll in certificate programs, women may be more likely to enroll in nursing programs, and older students may be more likely to enroll in evening or weekend programs.

Understanding why students choose for-profits is a much more difficult question. It could be that community colleges are oversubscribed, especially in certain programs, so students wanting to get training quickly may have few other options. A second reason is that the evening class schedules or online coursework may better fit working students' needs, but public and nonprofit colleges seem to be offering similar evening and online courses, so this reason is perhaps becoming less central. A third reason is that for-profits may have better student services, such as on-site child care. Fourth, for-profits may offer some degrees or certificates in cutting-edge areas (in information technology, for example) or specialized fields (culinary arts) that are not typically offered in other sectors, although my research suggests that these programs are rare.

Finally, I think an important, but underexplored, reason is that students lack information about their full set of college options. They may have no idea that the school they are attending is for-profit, nor

> "For-profits are attracting the attention of regulators because federal student aid is a substantial source of revenue for these institutions."

that similar programs (for much lower tuition) may be offered at their local community college. The advertising and recruiting budgets of for-profits certainly outstrip those of the public sector. Compelling for-profit advertising—unlike what most public schools use—may persuade students with little knowledge of the postsecondary education market.

### Q: How do the costs of a two-year for-profit college education compare with those of a public community college?

A for-profit college education costs more than a community college education, but taxpayers bear less of the cost burden and students much more. My calculations suggest that a for-profit education costs taxpayers and students about $59,000 per year for a full-time student. By comparison, a similar community college education costs about $44,000 per year. On the other hand, taxpayers pay more for community colleges than for-profits: $11,400 versus $7,600, including direct subsidies, grant aid and the cost of defaults on student debt. But these figures pale in comparison to the cost to students. For-profit students incur about $51,600 in costs (or 87 percent of the total) in the form of foregone earnings, tuition and fees, and interest on student loan debt; community college students incur about $32,200 (or 73 percent of the total).

### Q: Are there greater gains associated with a for-profit education? What did you conclude from your cost–benefit analysis?

There has been surprisingly little research on the private and social benefits to a for-profit education. In my cost–benefit analysis [*National Tax Journal*, March 2012], I calculate what the private and social returns to education would have to be to fully cover the cost of attendance. Private returns consist primarily of earnings gained by the individual, while social returns could include productivity spillovers, reduced crime, increased civic participation or more direct benefits to society from college facilities or taxes paid by for-profits.

I find that private returns would need to be fairly sizable—8.5 percent per year of education for for-profit students and 5.3 percent for community college students—to offset their respective private costs. For society as a whole, returns would have to be 9.8 percent to for-profit colleges and 7.2 percent for community colleges.

### Q: Your research appears to conclude that for-profit colleges are expensive and the extra cost may not be worth it. Is that the case?

Every student's situation is different, so it's impossible to say what the right or wrong decision is for any particular individual. But, based on my research, it seems that for at least some students, the extra cost may not be worth it since many students could find suitable programs in local community colleges at a much lower cost.

My guess is that students see ads on TV, call the number on the screen and may be talked into enrolling in a for-profit institution with the promise of a high salary and abundant financial aid. Given the very limited advertising budgets of public institutions, students may be unaware that public institutions exist, or they may not know that they offer vocational certificates or nighttime course schedules.

Recent regulations take an important step in the right direction by requiring for-profits (and certain other institutions) to provide information on graduation rates, average salaries of graduates, average debt and loan repayment rates. This information is absolutely essential for students to weigh their personal costs and potential benefits of their education.

### Q: To what extent do federally backed student loan programs contribute to the growth of for-profit schools?

Federal student aid—both grants and loans—is undoubtedly a lifeline for many for-profit colleges. In a previous paper, I found that the number of openings at for-profits is correlated with the generosity of the Pell Grant Program, but I can't prove a causal relationship.

Perhaps more revealing is my paper with Claudia Goldin of Harvard University [National Bureau of Economic Research, 2012]. We first document the large number of for-profit institutions operating with absolutely no access to federal student-aid programs (although they may be eligible for state aid and veteran's benefits); we estimate that there are about 4,500 of these institutions in the U.S., serving roughly 670,000 students. We then compare the tuition of two-year degree and certificate programs in these institutions to observationally similar programs in institutions that participate in federal aid programs. We find that tuition is, on average, 75 percent higher in for-profit programs that are eligible for federal aid.

Some have taken our study to mean that federal student aid needs to be scaled back across the board, but I see it differently. Rather, I think we need to be more careful about which institutions and programs should be eligible for federal aid. We need to maintain access to postsecondary education for low-income students, but we also have an obligation to ensure this education is of sufficient quality that students may benefit from attending. At the very least, we need to provide students with the information they need to make accurate assessments of the benefits they can expect from attendance so they can more accurately conduct their own cost–benefit analysis.

# Eleventh District Savings and Loans Outperform Industry Nationwide

By Kenneth J. Robinson

While the larger banking industry grabbed most of the attention, U.S. savings and loans (S&Ls) also felt the strain of the recent financial crisis. Major institutions such as Countrywide Financial and Washington Mutual failed.

Thrifts, as S&Ls are also called, became a particular source of concern at the onset of the downturn. The industry experienced "disproportionate losses during the financial crisis," according to a 2010 congressional study on the housing and financial industry collapse.[1] Citing figures from the Federal Deposit Insurance Corp. (FDIC), which guarantees the safety of deposits at U.S. banks and thrifts, the study noted that 95 percent of failed-institution assets in 2008 were attributable to thrifts regulated at the time by the federal Office of Thrift Supervision (OTS). The failed-asset figure was 73 percent from 2008 to April 2010, "even though the agency supervised only 12 percent of all bank and thrift assets at the beginning of this period," the study said.

The Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 introduced a number of changes to the thrift industry. Specifically, the law abolished the OTS, transferring supervision over S&L holding companies (SLHCs) to the Federal Reserve. The new regulatory structure was a response to concerns about thrift losses and questions about the efficacy of regulatory efforts.[2]

Since the financial crisis, the S&L industry has recovered in the Eleventh Federal Reserve District and across the nation. In fact, like banks in the district, thrifts here are outperforming their counterparts nationally. This likely reflects the relative health of the regional economy.[3]

## What's Different About Thrifts?

Thrifts are generally smaller than banks—in quantity and size. The number of S&Ls peaked at 3,677 in 1986, when assets totaled $1 trillion; commercial banks reached a high of 14,470 in 1984, when assets totaled $2.5 trillion.[4] These kinds of differences have persisted even as the number of institutions has declined. At the end of 2011, the nation had 1,067 thrifts with assets of $1.1 trillion, and 6,278 banks with assets of $12.6 trillion.

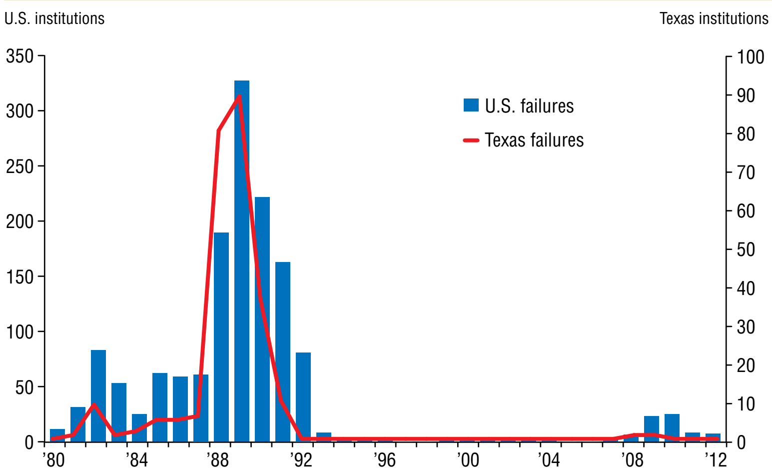
Savings and loans have their origins in the public-policy goal of encouraging homeownership at a time when banks didn't lend money for residential mortgages. The first S&L was established in Pennsylvania in 1831. Thrifts were originally organized by groups of people wishing to buy their own homes but lacking sufficient resources to do so. Group members pooled their savings, lending money back to a few members to finance home purchases. As the loans were repaid, funds were lent to other members.

States initially oversaw the thrift industry, but the federal government later assumed a role similar to the one it plays in the dual banking system of state and federally chartered banks. Federal regulation of savings and loans began with the Federal Home Loan Bank Act of 1932. It established the Federal Home Loan Bank system to provide a source of liquidity to the industry. The Home Owners' Loan Act of 1933 authorized Home Loan Banks to charter and regulate federal savings and loans. The National Housing Act of 1934 created the Federal Savings and Loan Insurance Corp. (FSLIC), the savings-and-loan counterpart to the FDIC, to insure thrift deposits.

Reflecting their role in housing finance, thrifts historically concentrated more on mortgage lending than banks did, though that focus has shifted somewhat over time. In 1985, mortgage loans accounted for 43 percent of thrift assets, compared with 7 percent at commercial banks. At year-end 2011, mortgages accounted for 32 percent of assets at thrifts, versus 16 percent at banks.

The relatively greater concentration of mortgage lending, however, made savings institutions vulnerable to interest rate increases and housing price declines. During times of stress, thrift failures have moved higher (*Chart 1*).

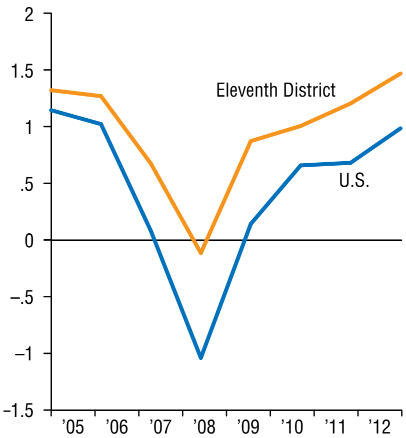
Chart 1 Thrift Failures Soar in 1980s




NOTE: Includes failures and assisted transactions; failures are through June 15, 2012.
SOURCE: Federal Deposit Insurance Corp.

**Chart 2** Thrift Profitability Stronger in District than U.S.

Return on average assets (percent)




NOTE: Data are through March 31, 2012, annualized.
SOURCES: Thrift Financial Report, Office of Thrift Supervision; Report of Condition and Income, Federal Financial Institutions Examination Council.

When rates began rising rapidly in the late 1970s, many S&Ls suffered extensive losses. Their earning assets tended to be in long-term, mostly fixed-rate mortgages, but because they held mostly short-term deposits, their cost of funds increased dramatically when interest rates rose. When housing prices nationally turned sharply downward in the recent crisis, thrifts again suffered losses as mortgage defaults mounted.

While particularly vulnerable to interest rate and housing price movements, thrifts have faced other economic stressors. Beginning in the early 1980s, thrift woes were tied to factors that included the shock of an oil-price collapse in energy-rich Texas. The regional economy fell into recession, deeply impacting residential and commercial real estate. In 1988, more than 40 percent of thrift failures nationwide occurred in Texas.

S&L difficulties spread to other parts of the country, ultimately bankrupting the FSLIC and forcing taxpayers to cover liabilities estimated at as much as $124 billion.[5] In response, Congress passed the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 to restructure the industry and establish the Office of Thrift Supervision. Simultaneously, commercial banking suffered from its own problems, in Texas and elsewhere.[6]

The 1990s and early 2000s were relatively tranquil for the thrift and banking industries. However, with the onset of financial turmoil in 2007–09, thrift failures again increased. While the total was substantially lower in the recent crisis than in the prior downturn, the industry was also significantly smaller. Slightly more than 1,000 thrifts remained at the end of 2011, reflecting the failure since 2007 of 71 S&Ls with assets of $594 billion.

Dodd–Frank specifically addresses the thrift industry in Title III, which abolished the OTS, effective July 21, 2011. While the thrift charter was left intact, the regulatory and rulemaking authorities of the OTS were transferred to the Federal Reserve, the Office of the Comptroller of the Currency (an independent agency within the Treasury) and the FDIC. The Federal Reserve assumed responsibility for S&L holding companies and their nondepository subsidiaries, while the Comptroller of the Currency gained oversight of federally chartered savings associations. The FDIC assumed the OTS's duties over state-chartered savings associations. On the July 21 transfer date, the Federal Reserve became responsible for about 430 SLHCs, 23 of them based in the Eleventh District. One is the largest Texas-based financial institution—USAA of San Antonio.

S&L holding companies, like their banking counterparts, can engage in activities other than taking deposits and making loans. These include insurance and broker/dealer services. For most SLHCs, however, the main line of business is the underlying thrift institution. A total of 126 holding companies nationally filed regulatory statements for first quarter 2012, reporting consolidated assets of $959 billion.[7] Of those holdings, 58 percent were in thrift subsidiaries.

## Performance Measures

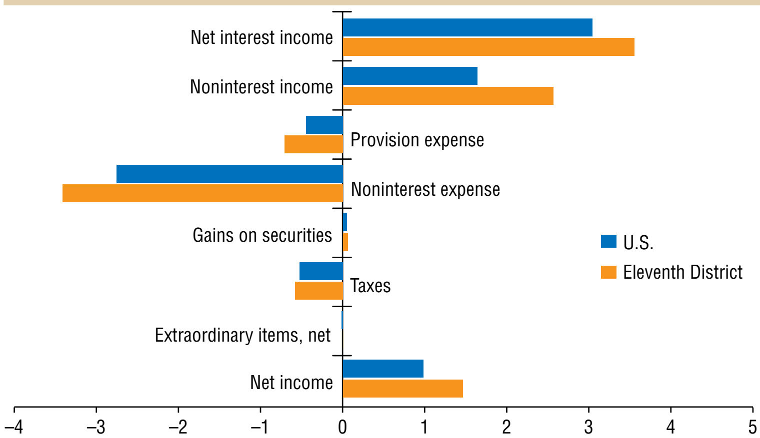
In contrast to circumstances in the 1980s, Eleventh District thrifts have outperformed S&Ls nationwide during the recent crisis. This comparatively strong showing has also occurred among district banks.[8] The relative strength of regional thrifts is evident in key performance measures.

Thrift profitability as calculated by return on assets declined sharply both regionally and nationally beginning in 2007 as the housing bust hit and the ensuing financial crisis spread (*Chart 2*).

S&Ls suffered losses in 2008 but began recovering in 2009. District thrifts earned an annualized return on assets of 1.5 percent in first quarter 2012, compared with the national performance of 0.98 percent. The biggest contributor to profitability was net interest income, or the difference between interest earned on loans and interest paid on deposits (*Chart 3*). This component was more important to profitability for regional than national thrifts.

Noninterest income, or what is sometimes referred to as fee income, was also a relatively more important contributor to regional thrift profitability. Noninterest expense, including salaries and benefits, was

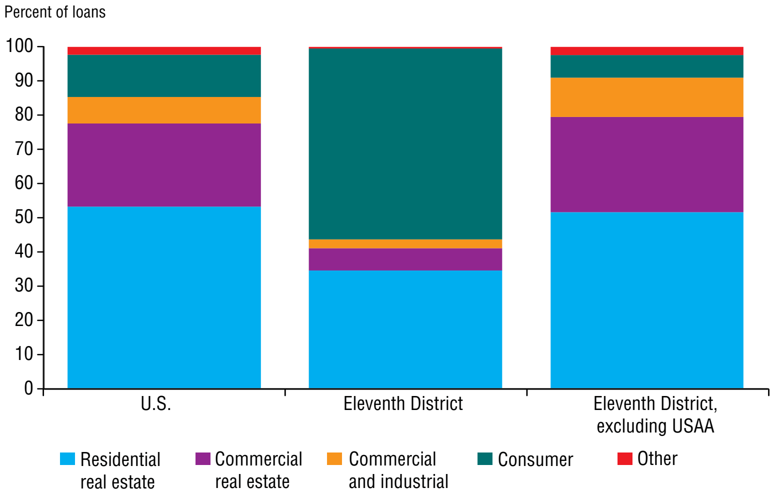
**Chart 3** Net Interest Income a Key Profitability Component
(Percent of average assets, annualized)




NOTE: Data are as of March 31, 2012.
SOURCE: Report of Condition and Income, Federal Financial Institutions Examination Council.

Chart 4

Bulk of Thrift Lending Is in Mortgages

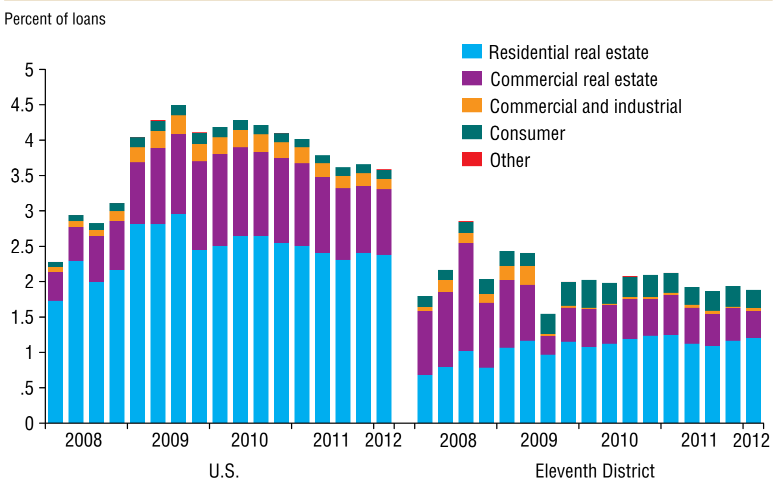



NOTES: Data are as of March 31, 2012. District results are presented with and without USAA to account for the effect of the large thrift's somewhat unique focus on consumer lending.

SOURCE: Report of Condition and Income, Federal Financial Institutions Examination Council.

Chart 5

Noncurrent Loans Lower in District than U.S.




SOURCES: Thrift Financial Report, Office of Thrift Supervision; Report of Condition and Income, Federal Financial Institutions Examination Council.

the largest expense category affecting first-quarter profitability, again more so in the district than the nation. Provision expense, or what thrifts set aside to cover potential bad loans, was slightly higher for regional thrifts in the quarter. This expense peaked in the recent crisis at about 2 percent of assets both regionally and nationally in 2008 and has steadily declined.[9]

Given that S&Ls were originally chartered to provide mortgage loans, it stands to reason that real estate lending represents the bulk of thrifts' loan portfolios (*Chart 4*).

Nationwide, residential mortgages accounted for more than half of all loans outstanding, with commercial real estate loans making up 24 percent of all loans. In the district, residential mortgages were only 35 percent of the loan portfolio, with commercial accounting for 6 percent. However, district numbers are affected by USAA's heavy concentration of consumer lending. Excluding USAA, the district's numbers are similar to those of the nation, with district thrifts exhibiting a slightly higher concentration of commercial and industrial loans and a lower concentration of consumer loans.

The S&L industry's overall real estate loan portfolio tends to resemble that of community banks (those with less than $10 billion in assets). Nationally, real estate lending accounted for 78 percent of all loans at thrifts, compared with 68 percent at community banks. The difference reflects thrifts' greater involvement with residential mortgages.

Asset quality, as measured by noncurrent loans, worsened at thrifts regionally and nationally as the recent crisis unfolded (*Chart 5*). Noncurrent loans are defined as those in which payment is 90 days or more past due, plus those not accruing interest.

Before the crisis, the noncurrent loan rate was similar for thrifts in the district and the nation. However, starting in 2009, the national rate has significantly exceeded the district figure. The noncurrent loan rate for thrifts nationally peaked at 4.5 percent in third quarter 2009, while it topped out regionally at 2.9 percent in third quarter 2008.

Not surprisingly, most of these loans have been in the real estate category. Noncurrent residential and commercial real estate loans accounted for 92 percent of all noncurrent loans nationally and 83 percent regionally in first quarter 2012.

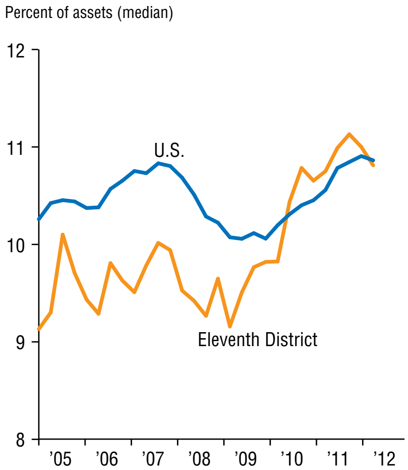
## Charge-Offs Improve

The percentage of loans charged off—the proportion of loans in a thrift's portfolio that have been written off as uncollectible, net of any recoveries—has improved. These loans amounted to 1.5 percent of S&L assets regionally and 1.2 percent nationally in the first quarter—down from a regional peak of 1.9 percent in 2010 and a national high of 1.8 percent in 2009.

One important measure of the state of the thrift industry is equity capital relative to assets. Capital represents the cushion available to absorb losses. Equity capital ratios declined during the crisis at thrifts regionally and nationally (*Chart 6*).

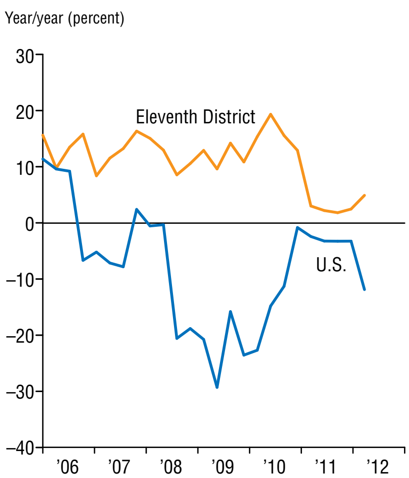
Before the crisis, thrifts nationally had higher capital ratios than those in the district, but more recently, the situation has reversed. The good news: 98 percent of district thrifts and 97 percent of U.S. S&Ls were considered well capitalized as of first quarter 2012.[10] Another important cushion, the reserve coverage ratio—or the amount set

**Chart 6** Equity Capital Ratios Strengthen in District




SOURCES: Thrift Financial Report, Office of Thrift Supervision; Report of Condition and Income, Federal Financial Institutions Examination Council.

**Chart 7** District Sees Total Loan Growth; U.S. Contracts




SOURCES: Thrift Financial Report, Office of Thrift Supervision; Report of Condition and Income, Federal Financial Institutions Examination Council.

aside to cover bad loans—was at 110 percent of noncurrent loans regionally, compared with 42 percent nationally.

Despite the financial industry's general recovery from the crisis, lending activity remains a concern. Low profitability and asset-quality problems can make it difficult for institutions to supply credit. The recession, which ended in June 2009, also damped demand for loans—although there is now some evidence of strengthening demand.[11]

Thrifts, like banks, don't report the amount of new loans extended but rather the total amount of loans outstanding. Using this measure, district loan growth has considerably exceeded the national pace (*Chart 7*). Almost 70 percent of S&Ls in the district reported a year-over-year increase in loans outstanding as of first quarter 2012. Fewer than half of S&Ls nationwide reported an increase.

District growth was mostly driven by increases in commercial and industrial loans, especially from 2008 to 2010, with consumer loans showing strength since early 2010.

## It's the Economy

Like their commercial banking brethren, Eleventh District thrifts have outperformed their national counterparts, whether measured by profitability, asset quality or lending. The achievement by both banks and S&Ls suggests that the regional economy is an underlying factor.

Texas, by far the largest economy in the region, suffered less from the housing downturn and subsequent financial crisis than the nation as a whole. It entered the recession later, and its recovery has been more robust. In 2011, employment grew 2.2 percent in the state, compared with 1.2 percent for the nation.

Far from its volatile past, the regional S&L industry is progressing in key performance measures and can expect to continue its impressive run if the Eleventh District economy remains relatively healthy.

*Robinson is an assistant vice president in the Financial Industry Studies Department at the Federal Reserve Bank of Dallas.*

## Notes

[1] See Senate Committee on Banking, Housing, and Urban Affairs, Report 111-176, April 30, 2010, p. 25.

[2] Dodd–Frank contained important changes to the regulatory structure of the U.S. financial industry outside the thrift sector. One of the most prominent was establishment of the Financial Stability Oversight Council, composed of the heads of 10 major regulatory agencies, to oversee systemic risks to the U.S. economy emanating from banks, thrifts and other financial institutions. The Federal Reserve was charged with supervising what the council designates as systemically important financial institutions and developing enhanced prudential standards for these institutions. All banking organizations with consolidated assets of $50 billion and above are automatically considered to be systemically important. It takes a vote of two-thirds of the council (with the chairman's approval) for nonbank financial institutions to be designated as systemically important. For a description of enhanced prudential standards, see www.federalreserve.gov/newsevents/press/bcreg/20111220a.htm.

[3] As used here, the term "thrift" encompasses federal and state savings associations, savings-and-loan associations and mutual savings banks. The Eleventh Federal Reserve District encompasses all of Texas, northern Louisiana and southern New Mexico. All thrift data for the Eleventh District have been adjusted for structure changes.

[4] Consistent data for the thrift industry are available beginning in 1984.

[5] See "The Cost of the Savings and Loan Crisis: Truth and Consequences," by Timothy Curry and Lynn Shibut, *FDIC Banking Review*, vol. 13, no. 2, 2000. For more on the difficulties at savings and loans during this time, see *The S&L Insurance Mess: How Did It Happen?* by Edward J. Kane, Washington, D.C.: The Urban Institute Press, 1989. For a perspective on the problems in Texas, see "The Texas Thrift Situation: Implications for the Texas Financial Industry," by Genie D. Short and Jeffery W. Gunther, Federal Reserve Bank of Dallas *Financial Industry Studies*, September 1988, pp. 1–11.

[6] See *History of the Eighties–Lessons for the Future: An Examination of the Banking Crises of the 1980s and Early 1990s*, Washington, D.C.: Federal Deposit Insurance Corp., 1997.

[7] Only savings-and-loan holding companies with consolidated assets of $500 million and above were required to file the Y9-C report in the first quarter.

[8] For an account of how the banking industry in the Eleventh District performed during the crisis, see "Eleventh District Banking Industry Weathers Financial Storms," by Kenneth J. Robinson, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter 2010. For more on the area economy, see "Texas Economy Shakes Off Rough Ride," by Laila Assanie and Pia Orrenius, Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter 2010.

[9] Consistent data on provision expense for thrifts were not available before 1987. The prior peak in provision expense in the Eleventh District occurred in 1987 and was approximately 4 percent of average assets.

[10] To be considered well capitalized, a thrift needs to have a total risk-based capital ratio equal to or greater than 10 percent, a tier 1 risk-based capital ratio equal to or greater than 6 percent and a tier 1 leverage capital ratio equal to or greater than 5 percent.

[11] See the Senior Loan Officer Opinion Survey on Bank Lending Practices, Board of Governors of the Federal Reserve System, April 2012.


## EMPLOYMENT: Dallas, Houston Among Best Cities for New Grads

Dallas (No. 5) and Houston (No. 8) returned to the Top 10 Best Cities for New Grads in the fifth annual study by Apartments.com and CareerBuilder.com. Both areas, along with San Antonio, have been in the top 10 before—making Texas one of the best states for recent college graduates. This year, Texas is the only state with two cities in the ranking.

While class of 2012 college graduates possess higher skills than many other people in the 20–24 demographic, the age group's unemployment rate was 13.7 percent in June, up from 8 percent in June 2007, according to the Bureau of Labor Statistics. With many graduates still struggling to find jobs, deciding where to look is vital, and availability of employment was an important factor in the study.

Dallas and Houston scored well, with lots of entry-level jobs in information technology, engineering, health care and energy. Additionally, while the unemployment rate has hovered around 8 percent nationally, the jobless rate in Dallas and Houston stands at 7 percent or lower.

The study also focused on the affordability of housing and quality of life for young professionals. Dallas and Houston scored well in housing; the average one-bedroom apartment costs 30 percent of the average income for entry-level job holders, compared with more than 50 percent in Washington, D.C., and New York City.

*—Christina Daly*

## IMMIGRATION: How Many Youths Will Get Deportation Reprieve?

An estimated 210,000 undocumented Texas immigrants under age 31 can seek two-year renewable work permits as part of a national program that would no longer make them subject to deportation. The policy was announced by President Barack Obama in June and is being implemented by the Department of Homeland Security.

To qualify, applicants must have arrived in the U.S. before age 16, continuously lived in the U.S. for at least five years and acquired no criminal record. They also must have a high school diploma or GED or be enrolled in school. Across the country, the program covers 800,000 immigrants, according to federal officials; the Migration Policy Institute estimates the number at 1.8 million. The Texas estimate of 210,000, which comes from the institute, represents about 1.8 percent of the state's population below 31.

Once approved, immigrants can get state identification cards such as a driver's license, pursue higher education and ultimately move into better-paying jobs. The program doesn't convey permanent status or citizenship, thus preventing qualification for public programs such as welfare assistance and the ability to sponsor relatives for legal permanent residence.

The regional economy is expected to benefit from fewer workers employed off the books and from increased productivity, spending and tax revenue. Some of these gains could be mitigated if the provision attracts more unauthorized migration. Additionally, implementation costs will be incurred for such functions as processing biennial renewals and inducing eligible individuals to apply.

*—Melissa LoPalo*

## FINANCE: Inflation-Protected Sovereigns Catch On in Mexico

The Mexican government's Bonos de unidades de inversión, or Udibonos, offer sovereign debt investors protection against inflation. Like Treasury Inflation-Protected Securities (TIPS) in the United States, the securities' principal adjusts as the consumer price index changes, preventing inflation from eroding its value.

When unveiled in May 1996, Udibonos had a three-year maturity. The government increased the maturity to five years in 1997 and to 10 years in 1999. The securities—traded in the secondary market, allowing holders an alternative to retaining them to maturity—have helped develop Mexico's capital markets.

Udibonos are denominated in unidades de inversión, or UDIs, an inflation-adjusted unit of account. The amount of the initial placement, interest payments and amortization is converted to pesos when money exchanges hands—at maturity or sale—or when interest payments are made. While Udibonos guarantee an above-inflation return to investors, market conditions can impact value. Future declines in real interest rates raise the return on Udibonos outstanding, while increases in real interest rates lower the return.

Outstanding Udibonos totaled UDI147.5 billion, or MXN699.1 (US$52.1 billion) as of June 30. The securities account for 17.1 percent of Mexico's government paper outstanding. Almost 89 percent of Udibonos are held domestically, mostly by institutional investors such as pension and retirement funds and insurance companies.

*—Edward C. Skelton*

# Turning to Toll Roads

## Gas Tax Trends Drive Highway Funding Shift

By Jason Saving and Michael Weiss

Toll roads have become a key part of officials' strategy to keep pace with growing local economies and populations. Many economists regard tolls as an efficient revenue source for road construction because such levies tax users of resources rather than society as a whole.[1]

However, greater reliance on toll roads has led to shifting priorities in infrastructure planning away from broader goals such as ensuring access for poor neighborhoods to major thoroughfare projects—and the opportunities these projects may bring. Officials must now add revenue projections and the coverage of bond debt for construction to their list of considerations for road placement.

Gasoline taxes have historically helped fund the construction of new highways, but this revenue hasn't kept pace in recent years. While the price per gallon that Texas motorists pay at the pump has steadily increased over the past two decades, the portion attributable to taxes has not because taxes are set at a flat rate per gallon purchased rather than a percentage of the sales price. At 20 cents per gallon, the state gasoline tax hasn't risen since 1991, while the Consumer Price Index has increased an average of 2.5 percent annually. The federal gasoline tax of 18.4 cents per gallon last rose in 1993.[2]

Reflecting largely flat gas-tax receipts and a booming population, Texas has led the nation in construction of toll roads since 1991, accounting for a quarter of those built from 1992 to 2008. The toll-road boom has occurred mostly in the fast-growing Houston, Dallas–Fort Worth and Austin metropolitan areas.[3]

A separate toll-road authority operates in each of the three metro areas, administering existing toll facilities and constructing new ones. The Harris County Toll Road Authority is responsible for 132 miles of roadway in metropolitan Houston, while the North Texas Tollway Authority operates almost 100 miles of highways in Dallas–Fort Worth and the Central Texas Regional Mobility Authority oversees about 84 miles in the Austin area. The agencies' growth, measured in tolls collected, has been pronounced (*Chart 1*).

Toll-road agencies increasingly consider bond ratings almost as intensively as routes. Standard & Poor's said its rating of A- on $266.25 million in North Texas Tollway Authority senior debt last November "reflects our view of the highly leveraged system of toll facilities that increasingly relies on higher traffic and revenue growth levels" to meet debt service. A Central Texas issue of almost $306 million last year was rated BBB-, S&P's lowest investment grade. The Harris County authority's debt is higher grade chiefly because the county, rather than an independent toll-road agency, stands behind the debt.

Road placement has generally occurred in areas where personal incomes have been higher, making the toll collections used to repay bonds more predictable and, thus, supporting the credit rating.

U.S. Department of Transportation-funded projects are subject to the Civil Rights Act of 1964, and siting cannot occur "with the purpose or effect" of "denying benefits" to any group. Often, road location provokes a more subtle decision involving a "trade-off between efficiency and equity," according to a study by the Transportation Research Board of the National Academies.[4]

Providing what the study describes as "new services to the most mobile and economically secure travelers" may be at odds with "choices that distribute services more broadly across income groups." But it's an age-old tension that toll roads, whatever their merits, cannot alone assuage.

### Notes

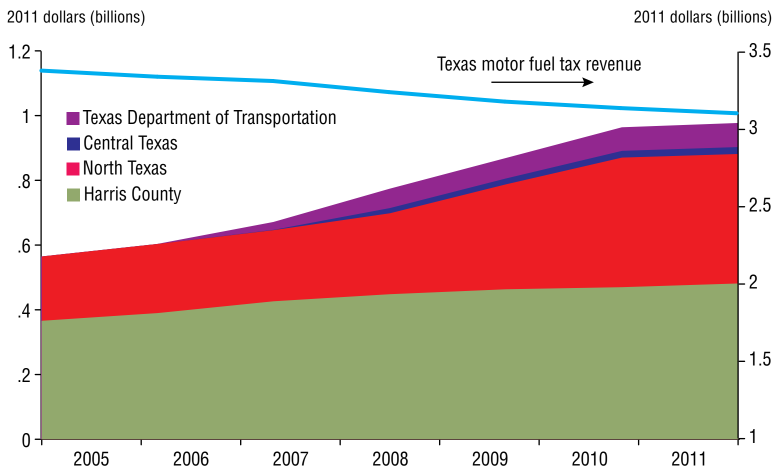
[1] See "Future Financing Options to Meet Highway and Transit Needs," National Cooperative Highway Research Program, December 2006.

[2] See "Motor Fuel Taxes," American Petroleum Institute, July 2012, www.api.org/oil-and-natural-gas-overview/industry-economics/fuel-taxes.aspx.

[3] "Current Toll Road Activity in the U.S.," by Benjamin Perez and Steve Lockwood, Office of Transportation Policy Studies, U.S. Department of Transportation, January 2009.

[4] See "Equity of Evolving Transportation Finance Mechanisms," Transportation Research Board of the National Academies, Special Report 303, 2011, p. 50.

**Chart 1** Texas Toll Revenue Growth Eclipses Motor Fuel Taxes




SOURCES: Office of the Texas Comptroller; North Texas Tollway Authority; Harris County Toll Road Authority; Central Texas Regional Mobility Authority; Texas Department of Transportation.

# Mexican Banks Get Ahead of New Global Capital Standards

By Edward C. Skelton

Mexico is a prominent example of an emerging-market economy with a world-class macroeconomic policy framework and stable financial system.[1] Even when the Mexican economy contracted 6 percent and per-capita gross domestic product (GDP) dropped almost 10 percent in 2009, the banking system remained strong. Although earnings have fallen over the past three years, Mexican banks have managed to post relatively healthy and consistent profits for more than a decade (*Chart 1*). By comparison, U.S. institutions lost money in 2009 and subsequently recorded a return on assets of about half the Mexican sum.

The impending adoption of world-class capital adequacy standards highlights the Mexican system's advances. Following the global financial crisis, the Basel Committee on Banking Supervision released new capital and liquidity requirements for the industry worldwide.[2] Mexico has announced it will install the Basel III capital standards by early 2013 and plans to be one of the first countries to complete full implementation. Financial regulators elsewhere are also introducing new capital regulations consistent with Basel III. However, most countries, including all of the industrialized economies, have indicated they will phase in the more stringent requirements over the next few years.

## What Is Basel III?

Basel III is the third set of international rules to which central bankers and financial system regulators have agreed since the initial Basel Accord in 1988.[3] The rules are designed to address weaknesses exposed during the most recent financial crisis. Basel III consists of three pillars:

- Enhanced minimum capital and liquidity requirements.
- Enhanced supervisory review for firmwide risk management and capital planning.
- Enhanced risk disclosure and market discipline.

## New Rules on Capital

Under the new rules, banks must more than triple the amount of top-quality, or core, capital held in reserve (*Table 1*).[4] Capital is important to banks because it represents the cushion allowing them to absorb losses and ride out difficult times. The common equity requirement essentially limits core capital to retained earnings and common stock issued (*see "Basel III Definitions" on page 19*).

The new standards will be phased in by Jan. 1, 2019. Upon full implementation, banks must maintain a ratio of total core capital to risk-weighted assets of at least 7 percent, compared with a pre-Basel III standard of 2 percent.

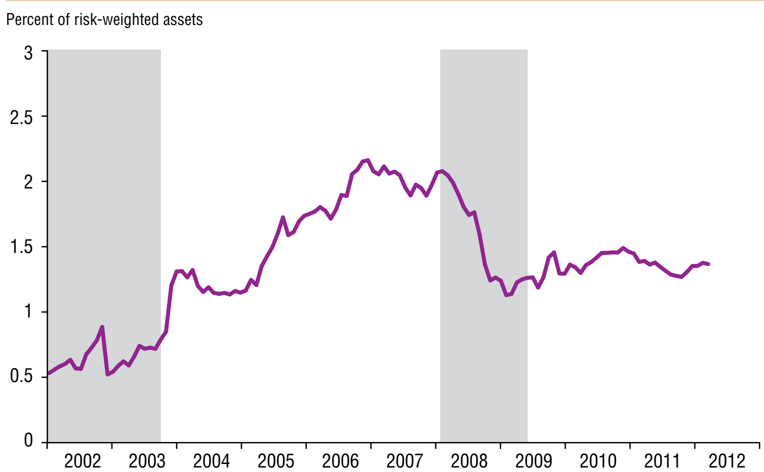
Perhaps more importantly, the Basel III standards create internationally consistent capital standards and also improve financial institutions' transparency. The Basel committee developed a standardized template that banks will use to disclose their capital positions and their progress toward full bank safety-net compliance. The new disclosure requirements take effect June 30, 2013.

## Applying Lessons Learned

Mexico began setting the stage for world-class capital standards long before global regulators contemplated Basel III. The country undertook a comprehensive financial system reform and modernization following the so-called Tequila Crisis of 1994, after the near-collapse of the financial system, which was marked by a sudden devaluation of the peso and spike in inflation.[5]

Following the crisis, the government bailed out the banking system at a cost of about $100 billion, or 17 percent of Mexico's GDP. The fallout included a 10-year credit crunch, with bank loan portfolios contracting by more than half between 1994 and 2004.[6] Although the portfolios have grown

**Chart 1** Mexican Banks Maintain Profitability




NOTE: Shaded areas denote recessions as defined by the Instituto Nacional de Estadística y Geografía (INEGI).
SOURCES: Mexico Banking and Securities Commission; INEGI.

relatively consistently in recent years, the ratio of bank credit to GDP remains low by international standards. According to the World Bank, domestic credit to the private sector amounted to 26 percent of Mexican GDP in 2011. Within Latin America, Mexico's ratio is similar to that posted by Venezuela and Guatemala and well below that of Chile, Brazil, Honduras, Costa Rica and Colombia. For most industrialized countries, the ratio is well above 100 percent.

After the Tequila Crisis, there were insufficient domestic funding sources from which banks could rebuild their balance sheets, prompting a recapitalization via foreign firms' purchases of Mexican institutions. In 1994, only two foreign banks operated in Mexico, representing a 1.3 percent market share based on assets. As of April 2012, foreign entities owned four of the country's five largest banks, with a total market share of 74 percent.

The country, while dealing with the Tequila Crisis, learned the importance of world-class regulatory practices. Mexican financial system regulations now generally conform to international regulations and are often even more demanding in terms of risk management, internal controls and capital adequacy. The conservative standards have helped maintain the system's solid financial condition; bank loan portfolios quickly resumed growing as the most recent global economic downturn ended.

While many of Mexico's banks are foreign owned, regulations stipulate that a Mexican subsidiary be run on a stand-alone basis, with separate operations, capital, lending and funding. To insulate the domestic financial market from problems in foreign-held banks' home offices, rules on related-party lending limit Mexican operations' ability to repatriate capital and support offices in other countries.

## Mexican Banks Well Positioned

Mexico's capital adequacy standards offer a striking example of the country's financial modernization. Basel III does not require the 7 percent ratio of core capital to risk-weighted assets to be in place until January 2019. Current Mexican capital requirements are already consistent with Basel III standards, and no Mexican banks are expected to need additional capital or to change their balance-sheet structure. Capital ratios for the banking system as a whole from year-end 2006 are shown in Chart 2. The system reported a core capital ratio of 13.7 percent as of April 30, 2012.[7] The bank with the lowest level of core capital reported a ratio of 9.8 percent, well in excess of the fully implemented Basel III minimum.

By comparison, many European and U.S. banks fall short of the new, more-stringent capital standards. As of June 30, 2011, Europe's 27 biggest banks would have confronted a combined core capital shortfall of €242 billion ($351 billion at the then-prevailing exchange rate) if Basel III regulations were in place, a European Banking Authority research report found.[8] Similarly, the Federal Reserve indicated that the 19 largest U.S. banks are at least $50 billion short of meeting the fully phased-in capital requirements, and smaller lenders are about $10 billion short.

Mexico's main adjustment to capital standards will be implementation of the countercyclical capital buffer, requiring banks to hold additional capital equal to between zero and 2.5 percent of risk-weighted assets. The countercyclical buffer is designed to take effect during times of excessive credit growth or any other condition resulting in system-wide accumulation of risk. Implementation will depend on national circumstances, the Basel committee said, suggesting that the countercyclical buffer would be rarely needed—no more than once every 10 to 20 years. The requirements are "marginal" for Mexico, and banks won't need additional capital to meet them, according to Guillermo Babatz, president of Mexico's Banking and Securities Commission.[10]

## Capital Weaknesses Remain

Mexican institutions, however, aren't completely compliant. Bank accounting standards fall short of Basel III standards for complementary, or noncore, capital. For

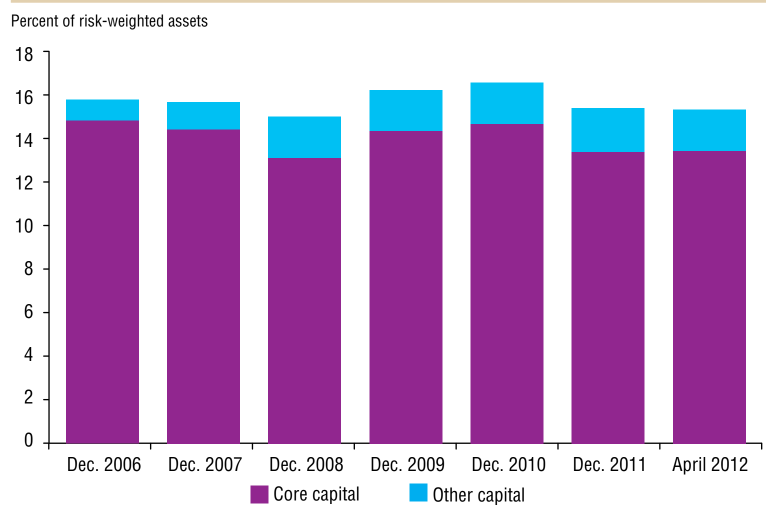
**Table 1** New Standards Require Higher Quantity, Quality of Bank Capital

| | Prior to Basel III (percent)* | Basel III (percent)* |
|---|---|---|
| Minimum common equity | 2 | 4.5 |
| + Capital conservation buffer | 0 | 2.5 |
| = Total core capital requirement | 2 | 7 |
| Minimum tier 1 ratio | 4 | 8.5 |
| Minimum total captial ratio | 8 | 10.5 |
| Countercyclical buffer | 0 | Up to 2.5 |

*Percent of risk-weighted assets.

SOURCE: Bank for International Settlements, Basel Committee on Banking Supervision.

**Chart 2** Mexican Banks Remain Well Capitalized




SOURCE: Mexico Banking and Securities Commission.

*The nation's banking system remains a lightning rod for public criticism due to the Tequila Crisis bailout, foreign bank ownership and a continued perception of limited credit availability.*

example, subordinated, nonconvertible debt counts as complementary capital under Mexican bank regulations.[11] Subordinated debt represented 81 percent of the banking system's complementary capital and 10 percent of total capital as of April 30 of this year. The capital ratios for the five largest banks in Mexico and the system as a whole are shown in Chart 3.

To make Mexican standards consistent with Basel III, instruments that cannot be converted to equity will be considered debt and not counted as equity beginning next year. Mexican authorities have not disclosed the length of a phase-out period or any implementation details. Although the Basel III accord phases out these instruments over 10 years, Mexico will likely adopt a shorter time frame.

Moreover, early signs suggest that subtracting subordinated debt from complementary capital will have some positive effects on the Mexican banking system. New capital regulations raised the minimum capital ratio in January. They stipulated that subordinated debt could be included in regulatory capital only if the instrument could be converted to equity and was issued by a publicly listed bank. Most of the country's banks aren't on the local stock exchange because the costs were believed to exceed the potential benefits. The rule seeks to entice medium-sized banks and the Mexican subsidiaries of foreign banks to list their shares locally.

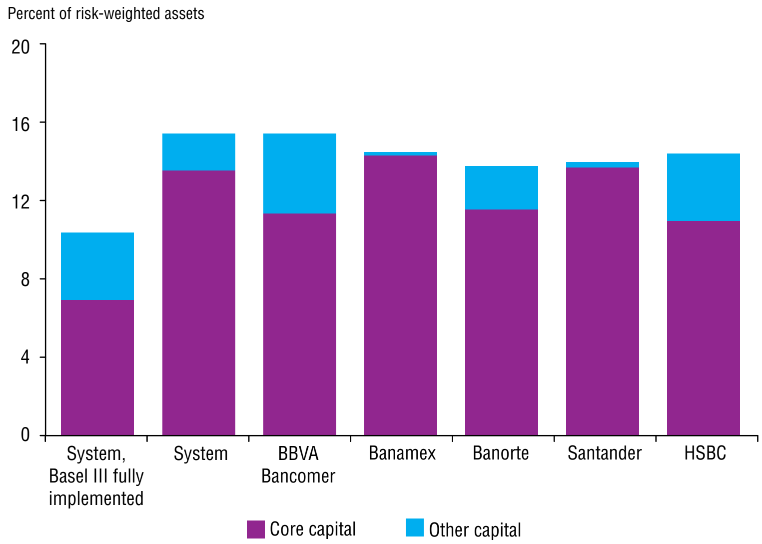
A recent announcement by the Mexican subsidiary of Spanish bank Santander suggests this regulatory change is already paying dividends. Parent company Grupo Santander recently disclosed an initial public offering (IPO) equal to a 24.9 percent ownership stake in its Mexican subsidiary. The sale is estimated to be worth $4.3 billion, which would make it Mexico's largest-ever IPO.

Through the new regulations, authorities gain more oversight over locally listed multinationals' financial firms. At the same time, the listing can benefit the foreign company, raising brand awareness while providing its headquarters office a market-based measure of local unit performance. There are also liquidity and funding advantages. The financial group can use its existing subsidiary as an acquisition vehicle, financing a purchase by issuing new stock locally.

Local public listings have allowed some European banks to raise funds amid difficult conditions at home by selling emerging-market assets that still command high valuations, rather than issuing new shares in Europe at a steep discount. Similarly, a local listing makes it easier to sell small chunks of an emerging-market subsidiary and maintain ownership control.

Although Mexican financial authorities do not foresee problems meeting the Basel III capital standards, concerns have arisen within emerging markets in general about unintended consequences. Banks in developed countries may decide to strengthen their capital ratios by shedding assets in developing countries. Such a move could reduce competition and increase the cost of credit by causing the banking industry to become more concentrated as local units consolidate.

**Chart 3** Mexican Banks Retain Reliance on Subordinated Debt
(Data as of April 30, 2012)



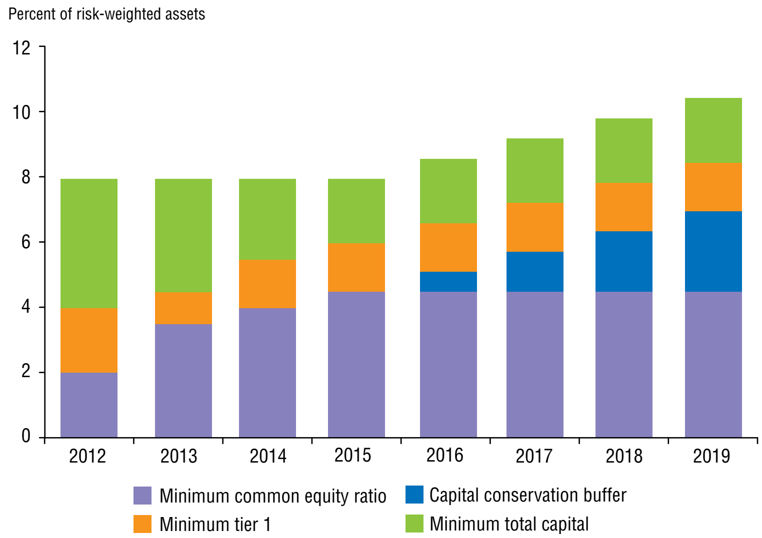

NOTE: Subordinated debt accounted for 81 percent of other capital and 10 percent of total capital systemwide.
SOURCE: Mexico Banking and Securities Commission.

## Capital Levels Buttress Mexico

In the mid-1990s, Mexico learned the hard lesson that the social costs of failed banks can be very large. The nation's banking system remains a lightning rod for public criticism due to the Tequila Crisis bailout, foreign bank ownership and a continued perception of limited credit availability.

Greater levels of required capital allow institutions to absorb losses without disrupting operations, thereby reducing the risk of financial difficulties. Higher capital levels can reduce lending by raising the cost of credit

**Chart 4** Basel III to Be Implemented Gradually Through 2019




SOURCE: Bank for International Settlements, Basel Committee on Banking Supervision.

and/or reducing funding available to businesses and households. However, in the long run, higher capital levels are socially beneficial because they ensure a financial system that operates more smoothly and reduces taxpayers' exposure to loss.

The Basel III Accord is designed to improve the stability of the financial system, address some weaknesses exposed by the volatility experienced since 2008, and create more consistent global reporting and regulatory standards. Although these requirements won't be fully implemented until 2019 (*Chart 4*), Mexico is already on pace to be one of the first countries to comply. The impending early adoption of the new, more stringent capital and liquidity standards is an example of the country's commitment to policy discipline.

*Skelton is a business economist in the Financial Industry Studies Department at the Federal Reserve Bank of Dallas.*

## Basel III Definitions

**Common equity capital:** The highest-quality capital—generally consisting of common stock and retained earnings—held by banks to guard against risk on their balance sheets.

**Capital conservation buffer:** Additional high-quality capital that banks must hold against potential future losses.

**Tier 1 capital:** All core capital, plus any common-stock share premium, preferred stock convertible to equity, and other instruments that are 1) loss-absorbing, 2) do not contain incentives to be redeemed before their maturity and 3) can be converted to equity at the discretion of the holder or regulator.

**Countercyclical buffer:** Additional common-equity capital that regulators may require banks to hold during times of very high credit growth or if authorities determine that certain institutions or the system face a greater risk exposure.

**Risk-weighted assets:** Total of all assets weighted by credit risk, with riskier assets receiving a higher weight and less-risky assets a lower weight. The greater the weight of the assets, the more capital is necessary to protect against potential losses.

## Notes

[1] See "The Conquest of Mexican Inflation" by Mark Wynne and Edward C. Skelton, Globalization and Monetary Policy Institute 2011 Annual Report, pp. 13–20.

[2] The capital standards can be found at www.bis.org/publ/bcbs189.pdf, and the liquidity standards are available at www.bis.org/publ/bcbs188.pdf.

[3] Basel I, also called the 1988 Basel Accord, focused on credit risk and set minimum capital requirements that took effect in 1992. Basel II superseded the 1988 agreement and was initially published in June 2004. The goal of Basel II was to strengthen capital requirements by establishing an international standard for financial system regulators. However, it was politically difficult for many countries to implement Basel II. Progress was slow until the 2008 crisis caused the Basel Committee to turn its attention to preparing the Basel III Accord.

[4] For simplicity, common equity capital is referred to as core capital in the article.

[5] For more detail on the evolution of Mexico's financial system after the Tequila Crisis, see "Financial Globalization: Manna or Menace? The Case of Mexican Banking," by Robert V. Bubel and Edward C. Skelton, Federal Reserve Bank of Dallas *Southwest Economy*, January/February 2002.

[6] For more information about the impact of the banking crisis on lending, see "Mexico Emerges from 10-Year Credit Crunch," by Robert V. Bubel and Edward C. Skelton, Federal Reserve Bank of Dallas *Southwest Economy*, May/June 2005.

[7] Current Mexican bank regulations refer to high-quality, tier 1 capital as *capital básico*; the standards for this type of capital are consistent with Basel III standards for core capital.

[8] The report can be found at www.eba.europa.eu/cebs/media/Publications/Other%20Publications/QIS/EBA-BS-2012-037-FINAL--Results-Basel-III-Monitoring-.pdf.

[9] The Federal Reserve study divided U.S. banks into the 19 largest whose total assets exceeded $150 billion and those with assets below $150 billion.

[10] From comments before the Mexican Bankers Association annual convention, May 17, 2012.

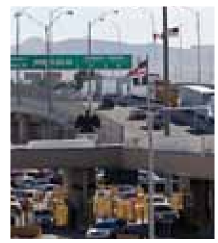
[11] Subordinated, nonconvertible debt is publicly issued debt bearing a maturity of at least 10 years. It is usually unsecured, and the holders of this instrument are paid after other debt holders but before shareholders.

Federal Reserve Bank of Dallas
P.O. Box 655906
Dallas, TX 75265-5906

PRSRT STD
U.S. POSTAGE
PAID
DALLAS, TEXAS
PERMIT NO. 151

# México
## How to Tap Progress






**November 2, 2012** | Federal Reserve Bank of Dallas, Houston Branch

Over the past decades, the Mexican economy has achieved milestones in macroeconomic reform, such as openness to trade, low inflation and fiscal discipline. However, economic growth has been tepid and per capita income stagnant, ultimately resulting in little improvement in living standards. This conference will explore what holds Mexico back and what the future may bring.

Learn more about the conference at www.dallasfed.org/research/events/2012/12mexico.cfm

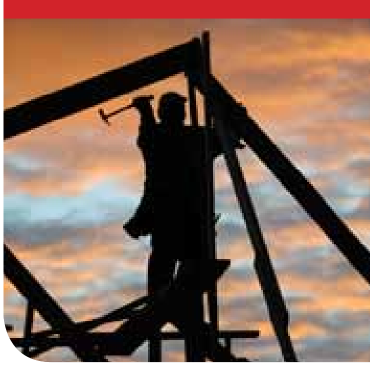
**Distinguished speakers include:**

**The Honorable Antonio Garza, Former U.S. Ambassador to Mexico**

**Gordon H. Hanson, Director, Center on Emerging and Pacific Economies, University of California, San Diego**

**Timothy J. Kehoe, Distinguished McKnight University Professor, University of Minnesota**

DALLAS**FED**



**Southwest Economy** is published quarterly by the Federal Reserve Bank of Dallas. The views expressed are those of the authors and should not be attributed to the Federal Reserve Bank of Dallas or the Federal Reserve System.

Articles may be reprinted on the condition that the source is credited and a copy is provided to the Research Department of the Federal Reserve Bank of Dallas.

*Southwest Economy* is available free of charge by writing the Public Affairs Department, Federal Reserve Bank of Dallas, P.O. Box 655906, Dallas, TX 75265-5906; by fax at 214-922-5268; or by telephone at 214-922-5254. This publication is available on the Dallas Fed website, www.dallasfed.org.

**Harvey Rosenblum**, *Executive Vice President and Director of Research*
**Mine Yücel**, *Director of Research Publications*
**Pia Orrenius**, *Executive Editor*
**Michael Weiss**, *Editor*
**Jennifer Afflerbach**, *Associate Editor*
**Kathy Thacker**, *Associate Editor*
**Samantha Coplen**, *Graphic Designer*
**Ellah Piña**, *Graphic Designer*

FEDERAL RESERVE BANK OF DALLAS
2200 N. PEARL ST., DALLAS, TX 75201