

## SouthwestEconomy

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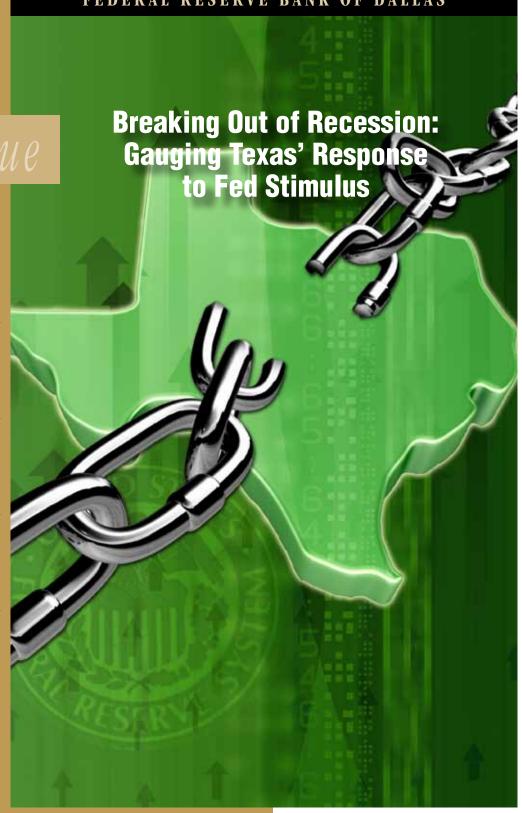
In This Issue

Mexico Rides Global Recovery but Still Faces Hurdles

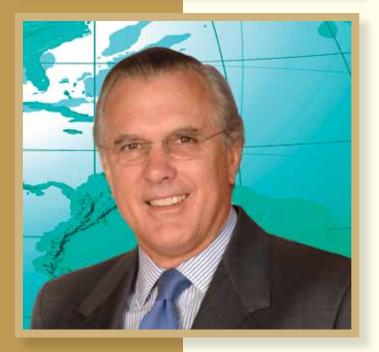
Underemployment Poses Long-Term Financial Risk to More Workers

On the Record: Shifting from World Population Explosion to Global Aging

Spotlight: New Instruments, Rules Boost Capital Investment in Mexico



## President's Perspective



America will overcome
its current challenges if
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hypercompetitive
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he forces of globalization are reconfiguring the economic landscape. Understanding their impact on the U.S. economy and monetary policy is a major research objective at the Dallas Fed and the main reason we created the Globalization and Monetary Policy Institute in 2007.

Globalization is shifting growth momentum toward emerging-market nations, heightening competition and accelerating the forces of Schumpeterian "creative destruction."

These developments are mirrored in the demographic trends facing the world today, Joseph Chamie, director of research at the Center for Migration Studies in New York, notes in his "On the Record" interview in this issue of *Southwest Economy*. Population growth is largely concentrated in developing nations, Chamie observes. India's population grows about as much in 10 days as the Euro-

pean Union's does in a year, according to the CIA World Factbook.

As economic growth increasingly concentrates in populous nations, poverty recedes and wages rise. Many developing nations have abandoned policies that burdened their economies and handicapped their progress in favor of those that fuel growth and economic opportunity for their burgeoning populations. They have promoted education and recruited the most talented to manage their companies, teach in their universities and create businesses. These nations recognize that capital and the types of services, industry and entrepreneurship that generate national wealth are more mobile than ever and will forsake countries that shackle business and labor with unnecessary burdens.

America will overcome its current challenges if we are able to replace government policies that were created for the 20th century and are out of sync in today's hypercompetitive environment. Our political leaders must develop an entirely new system of taxes, spending and regulation affecting private enterprise and investors and must craft trade, education, immigration and other policies that enhance our global competitiveness.

To outperform others and preserve our stature as the most attractive country in which to invest and to create new jobs, we need to do more than just bring federal spending, taxes and deficits under control; we must adopt new methods of incentivizing U.S. businesses to maintain our supremacy in efficiency and innovation.

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

Kichad Toke



## The Federal Reserve's Eleventh District has been more responsive to monetary stimulus than other regions.

### Breaking Out of Recession: Gauging Texas' Response to Fed Stimulus

By David Luttrell and Harvey Rosenblum

rom the time the U.S. recession began in December 2007 through the subsequent recovery, Texas and the Eleventh Federal Reserve District have outperformed the nation. While economic activity is better in Texas, it remains far from robust. And though Texas employment hasn't fully reclaimed levels reached before the crisis (*Chart 1*), the other 11 Federal Reserve districts remain 3 to 8 percent below predownturn employment peaks as a postrecessionary disquiet lingers.

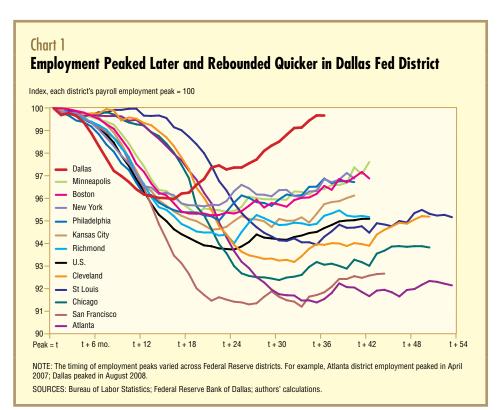
This sluggish national performance has occurred despite the enormous fiscal and monetary firepower unleashed to combat the financial crisis and accompanying recession.<sup>2</sup> Why has Texas achieved a comparatively greater recovery than the nation (*Table 1*)? State economies respond differently to economic shocks and policy

actions reflecting regional variations in industry composition and the health of institutions. Texas, entering recession about eight months after the nation, emerged from the downturn in third quarter 2009 and outpaced the rest of the country in employment growth with the aid of its healthier banking sector, subdued housing boom (and subsequent bust) and global trade competiveness.

Economists Kenneth Rogoff and Carmen Reinhart suggest that recoveries from recessions associated with financial crises tend to be sluggish, drawn-out episodes. This generalization applies to dozens of countries.<sup>3</sup> Through midyear, the recent U.S. recovery appears to be no exception, despite monetary and fiscal authorities' relatively large and timely policy responses based on the real-time data at their disposal.<sup>4</sup> The recent U.S. experience underscores Rogoff and Reinhart's "Second Great Contraction" label for the U.S. slow-growth predicament rather than the often used "Great Recession" tag.

#### Sizeable Stimulus

The first large legislative policy response was the \$700 billion Troubled Asset Relief Program (TARP), enacted in October 2008 and mostly used to recapitalize the banking and financial system. A second major fiscal policy effort, the \$787 billion American Recovery and Reinvestment Act, took effect in February 2009, 14 months after the recession began. It provided tax cuts, extended unemployment benefits, increased federal funds for education and health care, and promised "shovel-ready" infrastructure projects. The time lag associated with implementing fiscal stimulus prompted Stanford professor Robert Hall, the outgoing American Economic Association president, to say: "The government is incapable of executing a rapid and large increase in purchases."5



#### Table 1

#### **Recovery Appears Stronger in Texas Relative to Nation**

	U.S.	Texas	As of (2011)
Percent change from respective business cycle peak (%)*			
Employment	-5.0	-0.3	August
Real personal income	1.1	3.8	First quarter
Real per capita personal income	-1.8	-0.7	First quarter
Labor force participants	-0.2	4.9	August
Population	3.5	5.6	Second quarter
Most recent measure (%)			
Unemployment rate	9.1	8.5	August
Labor force participation rate	64.0	65.3	August
Home price change from peak	-25.2	-2.6	June

<sup>\*</sup> Peak-to-current percent change: the U.S. business cycle peak is dated December 2007 or fourth quarter 2007, and the Texas cycle peak is August 2008 or third quarter 2008.

SOURCES: Bureau of Economic Analysis; Haver Analytics; Bureau of Labor Statistics; authors' calculations

Federal Reserve monetary policy, the focus here, provided channels of economic support. Two inherent aspects of Fed policymaking—a relatively small number of decisionmakers and the ability to meet frequently—enable a timely response. But such action does not guarantee an immediate or sizeable impact. The Fed undertook policies aimed at stimulating aggregate demand and reducing the effects of deleveraging and the prospects of deflation. These moves included:

- A series of reductions in the Fed's traditional policy instrument, the federal funds rate, to near-zero, where it has remained since December 2008;
- Encouraging banks to borrow in large amounts and for extended maturities directly from the Fed through the discount window;
- Creation of a wide range of special and temporary credit facilities for lending to banks, nonbank primary dealers (which handle sales of Treasury securities), credit intermediaries and other central banks;<sup>6</sup>
- Reduction of long-term interest rates through Fed purchases of more than \$1.8 trillion of mortgage-backed bonds and Treasuries.

#### **Monetary Policy and Healthy Banks**

Fed policy moves stimulated economic growth through four primary avenues: a) the bank loan channel; b) the securities market channel; c) the asset prices and wealth channel; and d) the exchange-rate channel (*Chart 2*). Regional economic factors account for significant differences in the functioning of bank lending, wealth effects and trade competitiveness. Only the securities market channel is

generally dominated by national economic and financial market developments.

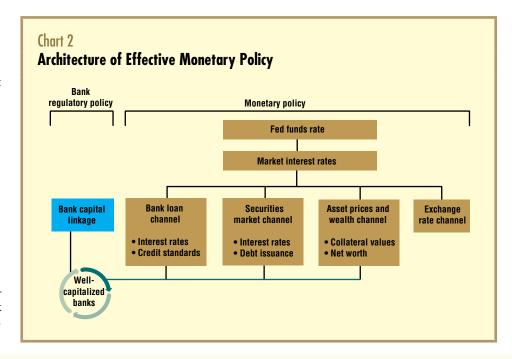
These four channels influenced the real economy during much of the quarter century preceding 2007 because banks generally held enough capital to safeguard against bad loans and other risks. The transmission mechanism connecting monetary policy and the macroeconomy depended on a well-oiled banking and financial sector that during the recent financial crisis became conspicuous by its absence.

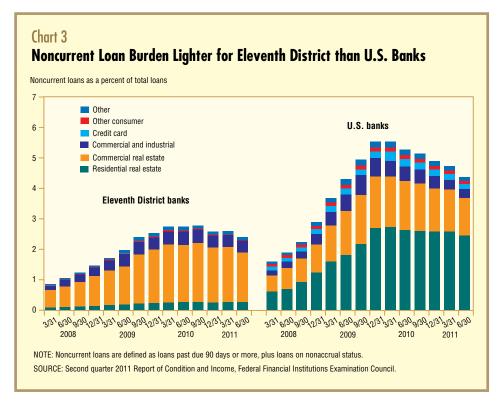
The bank capital linkage, which completes the financial market architecture of effective monetary policy, is a function of both regulatory policy and the economic shocks affecting the health and vitality of the banking sector.<sup>7</sup> The well-being of the banking system—not entirely within the power of the Fed—varied across the country and helped account for differences in monetary policy impact between regions.

Throughout the recession and subsequent recovery, Eleventh District banks experienced a smaller percentage of problem loans than banks in the nation as a whole (Chart 3). Noncurrent loans (generally 90 days past due) and loan write-offs erode bank capital, often prompting an institution to reduce its loan portfolio. This can create broader economic issues as decreased lending diminishes local economic growth, ultimately affecting the ability of other businesses and households to repay their loans and forcing further loan write-downs and capital reductions, accompanied by still more slowing. Texas banks entered the recession with a reasonably strong capital position and, subsequently, maintained much of it.8

#### Texas Banks and Lessons Learned

Plunging oil prices and a real estate crisis left Texas in near-depression condition and at the center of the savings-and-loan collapse of the late 1980s. From 1987 through 1991, Texas experienced 729 bank failures, representing 38 percent of national bank closures. By comparison, Federal Deposit Insurance Corp. data reveal that from 2007 through August 2011, only eight Texas banks failed, comprising just 2 percent of the period's U.S. closures. The state's less-pronounced housing market boom and bust is a key reason for this performance.





One frequently used gauge of overall banking-sector distress is the so-called Texas ratio, which attempts to assess banks' ability to withstand losses. A Texas ratio above 100 percent suggests the potential for troubled assets—principally noncurrent loans and real estate owned—to wipe out an institution's capital base. In the 1980s crisis, 20 percent of Eleventh District banks had a Texas ratio exceeding 100 percent thus, the origin of the ratio's name. Suggesting that Texas banks learned some difficult lessons during the 1980s, slightly more than 1 percent of district banks were at this danger threshold in second quarter 2011, compared with a bit more than 5 percent of U.S. banks (Chart 4).

Further, recapitalization and economic reconciliation during the 1980s helped district banks fare comparatively well in the current period along with much of the Northeast, whose regional banking crisis occurred in the early 1990s (*Chart 5*).

Economic expansion remains sluggish in many Fed districts (as noted in Chart 1). Some of the worst performers in terms of employment growth, such as the Atlanta and San Francisco districts, confront still-troubled commercial and residential real estate markets. Significant losses and capital write-downs on residential construction and commercial land development loans pressure banking capital, limiting the ability to lend. In some states in these re-

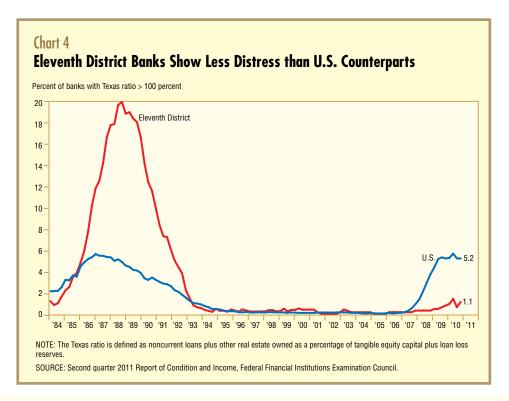
gions, housing prices fell 30 to 50 percent, engendering negative household wealth effects. The Atlanta and San Francisco districts consequently attracted fewer new residents and saw some of the country's highest unemployment. Reflecting housing wealth declines, overextended consumer mortgage debt and high-risk home equity lending, many homeowners in these re-

gions owe more on their mortgages than their houses are worth. Negative-equity issues remain severe in Nevada (63 percent of mortgaged properties), Arizona (50 percent), Florida (46 percent) and California (31 percent).

Following the 1980s collapse, Texas regulators bolstered rules governing loanto-value ratios on residential real estate loans and limited or delayed implementation of home-equity lending, reverse mortgages and home-equity lines of credit. Given this oversight and other factors such as ample land availability and fewer development and zoning restrictions, Texas housing stock increased during the national boom without the rapidly rising home prices and lax lending standards found elsewhere.<sup>10</sup> Burdened by less housing fallout, and consequently less household leverage, the Texas economy remained relatively healthy, with greater job-creating capability. 11 The state also avoided a major wealth shock and loss of collateral value underpinning loans, allowing the assetprice and wealth channel of monetary policy to remain relatively unblocked. Additionally, Texas sustained relatively fewer credit card and other consumer loan delinquencies.

#### **Trade Boosts Growth**

The impact of lower interest rates on the value of the dollar is an indirect but



#### Chart 5 Eleventh District Relatively Less Encumbered by Potential Bank Asset Problems (Second quarter 2011) Percent of banks with Texas ratio > 100 percent by Federal Reserve district 18 16 14 12 10 88 8 7 4 6 2 Atlanta Chicago SOURCE: Second quarter 2011 Report of Condition and Income, Federal Financial Institutions Examination Council

The key drivers of Texas'
favorable response to
monetary policy stimulus
were its relatively healthy
and well-capitalized banks,
the absence of a boom-andbust cycle in housing and
internationally competitive
export industries.

important monetary policy transmission channel. A weaker dollar spurs exports, and Texas is the country's largest exporter, comprising almost one-sixth of the nation's total by origin of movement. The state's top exporting industries in 2010 were chemicals, computers and electronics, petroleum and coal, and machinery and transportation equipment.<sup>12</sup> After the North American Free Trade Agreement took effect in January 1994, real (inflationadjusted) Texas exports to Mexico and Canada grew 12 percent annually through 2000. Further, Texas exports to China have expanded 25 percent annually following admission of China into the World Trade Organization in December 2001.

Mexico remained the state's largest trading partner last year, accounting for 35 percent of Texas exports, followed by Canada, 9 percent, and China, 5 percent. Texas is the nation's leading producer of crude oil, natural gas and lignite coal. Petroleum and coal exports have increased more than fourfold since 2005, making up 17 percent of total state exports in 2010. While the Texas economy is less dependent on oil and gas than in the 1970s and early 1980s, energy price increases remain generally beneficial, an advantage over most other states whose economies tend to slow when energy prices rise. <sup>13</sup>

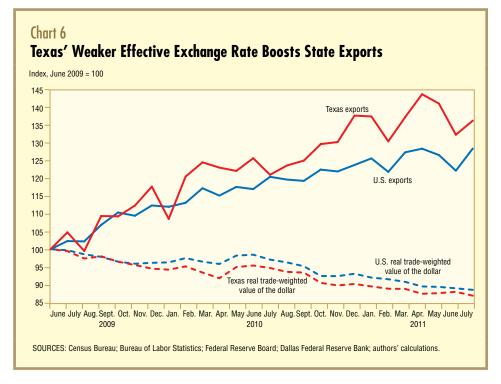
Differences in products states sell and where those exports go produce ef-

fective exchange-rate shifts reflecting a state's trade-weighted value of the dollar.14 In the case of Texas, the real value of the Mexican peso relative to the dollar especially influences export attractiveness. Differences in relative foreign currency prices for Texas products and the nation at large are depicted in Chart 6. Underlying the weakening real trade-weighted values of the dollar in Texas and the U.S. are the appreciating currencies of the largest U.S. trading partner, Canada, and the largest foreign buyer of Texas products, Mexico. Texas trade-competitiveness has increased, contributing to higher demand for its exports, boosting manufacturing output and buttressing the state economy through the exchange-rate channel of monetary policy.

#### Other Contributing Factors

Even in the absence of extraordinary monetary and fiscal policy intervention, the Texas economy likely would have outperformed the nation during the recovery. Since 1990, the state's average annual job growth has exceeded the nation's by about a percentage point. Year to date through August, that advantage has increased to about 1.3 percentage points, providing a potent lure to prospective workers.

Data from the 2010 census show Texas' population expanded 48 percent since 1990, twice the national rate. Net births (births minus deaths) accounted for



60 percent of the growth; migration from other countries and states accounted for 40 percent.<sup>15</sup> Domestic inflows rose significantly in 2007–09, perhaps reflecting the relatively strong state economy before the recession and the shorter business-cycle contraction. In the long term, a relatively low cost of living, including no state income tax, and the availability of jobs attract workers.

In-migration from abroad often hinges on conditions in countries of origin. Recent violence in Mexico has produced an influx of middle- to high-income immigrants, bringing their human and financial capital across the border to El Paso, Houston, San Antonio and Austin. <sup>16</sup>

Texas has benefited from structural advantages such as natural resources, Gulf ports and geographic proximity to its largest trade partner. Additionally, regional economic drivers have contributed to the functioning of the bank loan, asset price/wealth and exchange-rate channels of monetary policy. Factors such as the relative health of the Texas banking sector and housing market and strong export industries helped promote national policy effectiveness and allowed the state to outperform the nation.

Luttrell is a senior economic analyst and coordinator of economic and financial analysis, and Rosenblum is executive vice president and director of research at the Federal Reserve Bank of Dallas.

#### Notes

Thanks to Pia Orrenius, John Duca, Jackson Thies and Tom Siems for their contributions.

- <sup>1</sup> The Eleventh Federal Reserve District consists of Texas, northern Louisiana and southern New Mexico. Texas accounts for 95 percent of the Eleventh District's output.
- <sup>2</sup> The Fed's ability to lower real interest rates was greatly inhibited by the zero bound and falling inflation rates during the recession.
- <sup>3</sup> See *This Time Is Different: Eight Centuries of Financial Folly*, by Carmen Reinhart and Kenneth Rogoff, Princeton, N.J.: Princeton University Press, 2009, or subsequent work, "After the Fall," by Carmen and Vincent Reinhart, paper presented at the Kansas City Economic Symposium, Jackson Hole, Wyo., Aug. 27, 2010, www.kansascityfed.org/publicat/sympos/2010/2010-08-17-reinhart.pdf.
- <sup>4</sup> Policymakers had to work with real-time data that, in this case, underestimated the extent and seriousness of the downturn. The initial estimate of real GDP performance was subsequently lowered to –8.9 percent for fourth quarter 2008 (from –3.8 percent) and to –6.7 percent for first quarter 2009 (from –6.1 percent) in the latest GDP revisions, released in July 2011. Indeed, the Business Cycle Dating Committee at the National Bureau of Economic Research (NBER) did not officially date the beginning of the recession until December 2008, a full year after the recession was deemed to have begun in December 2007.
- <sup>5</sup> The American Economic Association is the world's largest organization for economists. See "The Long Slump," by Robert Hall, AEA presidential address, *American Economic Review*, April 2011, p. 467.
- <sup>6</sup> See "Federal Reserve Liquidity Programs: An Update," by Niel Willardson and LuAnne Pederson, Federal Reserve Bank of Minneapolis *The Region*, June 2010.
- <sup>7</sup> See "Regulatory and Monetary Policies Meet 'Too Big to Fail,"

by Harvey Rosenblum, Jessica J. Renier and Richard Alm, Federal Reserve Bank of Dallas *Economic Letter*, vol. 5, no. 3, 2010, www.dallasfed.org/research/eclett/2010/el1003.html. <sup>8</sup> This analysis abstracts from the fact that Texas is home to branches of some of the nation's largest banks, a few of which required extraordinary federal government assistance during the financial crisis. See note 7. For earlier analysis at the regional level, see "What Reforms Are Needed to Improve the Safety and Soundness of the Banking System?" Harvey Rosenblum, Federal Reserve Bank of Atlanta *Economic Review*, vol. 92, nos. 1–2, 2007, pp. 101–13.

- <sup>9</sup> For data on negative equity, see CoreLogic first quarter 2011 negative equity report, June 7, 2011, www.corelogic.com/ about-us/news/asset\_upload\_file726\_7102.pdf.
- <sup>10</sup> For more Texas housing details, 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, www.dallasfed. org/research/swe/2011/swe1102b.cfm.
- <sup>11</sup> For more on Texas household debt burdens and the outlook for Texas' relative strength, see "Texas Economy to Ride Higher in the Saddle in 2011," by Keith R. Phillips and Emily Kerr, Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter 2011, www.dallasfed.org/research/swe/2011/swe1101b.cfm.
- <sup>12</sup> See "Industry Clusters Shape Texas Economy," by Laila Assanie and Mine K. Yücel, Federal Reserve Bank of Dallas Southwest Economy, no. 5, 2007, www.dallasfed.org/ research/swe/2007/swe0705b.cfm.
- <sup>13</sup> See "Oil and Gas Rises Again in a Diversified Texas," by Mine K. Yücel and Jackson Thies, Federal Reserve Bank of Dallas Southwest Economy, First Quarter 2011, www.dallasfed.org/research/swe/2011/swe1101g.cfm.
- <sup>14</sup> See "New Tool Gauges Impact of Exchange Rates on States," by Keith R. Phillips, Steve Brzezinski and Barbara Davalos, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter 2010, www.dallasfed.org/research/swe/2010/ swe1004b.pdf.
- <sup>15</sup> See "Keys to Economic Growth: What Drives Texas?" by Jason Saving, Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter 2009, www.dallasfed.org/research/swe/2009/swe0901c.cfm.
- <sup>16</sup> See "Life on the Line," by Andrew Rice, *New York Times Magazine*, July 28, 2011.

#### A Conversation with Joseph Chamie



#### **Shifting from World Population Explosion to Global Aging**

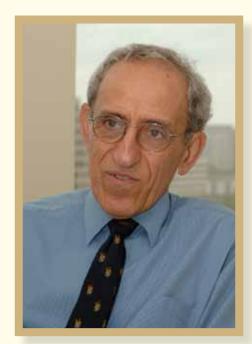
Joseph Chamie, former director of the United Nations Population Division, is research director of the New York-based Center for Migration Studies. He spoke at the recent Federal Reserve Bank of Dallas conference "Immigration Policy in an Era of Globalization," taking time out during his visit to discuss world demographic trends.

### Q. How is the world's population evolving? What are the long-run trends in world population growth? What countries are growing, declining?

**A.** Two thousand years ago, world population was estimated at about 300 million. It reached the first billion mark at the beginning of the 19th century—the estimate is about 1804—when Thomas Jefferson was U.S. president. The second billion mark was reached in 1927. We had a tripling of world population from 1927 to near the end of the 20th century, when it reached 6 billion. We're now approaching 7 billion people.

Why did that happen? It's because we had this wonderful thing occur: a decline in mortality rates. This decrease in mortality is humanity's greatest achievement. Every government wishes to see lower mortality and longer life. The world benefited from modern medicine and public health; antibiotics, of course; also better nutrition, better facilities, better working conditions. What lagged behind were changes in birth rates. This difference between birth rates and death rates gave rise to what is commonly called the population explosion. We reached a peak population growth rate of about 2.1 percent in the late '60s, and we reached the peak annual increase of about 87 million people in the late '80s. The latest United Nations projections show a world of about 10.1 billion people by the end of the 21st century.

Some regions and countries are growing slowly—such as Europe, Japan and Korea; others are growing rapidly—such as Africa, Niger, Mali, Uganda and many other sub-Saharan countries. And we have other countries growing moderately, but because of their vast size, such as India, they're adding a great number of people, with India accounting for roughly 22 percent of the world's annual growth. India alone will probably add half a billion people in the next 50 years,



making it far bigger than China. It will overtake China probably in 10 years and will continue growing. China's population is projected to peak at 1.4 billion around 2025 and then begin slowly declining unless authorities change their one-child policy and fertility rebounds above the replacement level of two children per woman.

#### **Q.** What is behind the increasing population growth rate?

**A.** Historically, even before biblical times, if your community didn't go forth and multiply, then disease and other factors would likely wipe you out. So every group had doctrines and principles advocating having many children. With the decrease in mortality, children survived and you didn't have them dying in infancy or childhood. The general trend has been that birth rates lag behind death rates.

Fertility rates first started coming down

in Western Europe with the Industrial Revolution. A number of things push families to reduce their family size. First, death rates have to come down. Second, people move into cities, with smaller-size living arrangements. And they move to manufacturing from agriculture. That makes the children less valuable as a labor supply; they do fewer useful work-related activities in the city. On farms, they are valuable doing tasks even at ages 6, 7 and 8. Third, there is increasing education. We invest in the quality of the children rather than the quantity of the children. Fourth, with increasing education, we have people delaying marrying, delaying childbearing and then participating in the workforce. We have girls and women entering public schooling and college and subsequently being employed. This contributes greatly to decreasing fertility rates. With economic independence, women may choose not to get married and not to have families. We also have government programs now providing old-age assistance and social services, so you don't need to rely on children in old age.

## Q. What types of policies do governments enact to either encourage or control population growth? What is the future of China's one-child policy?

**A.** All countries have population policies. For example, every country has a policy to improve health and decrease mortality. The example that comes to mind most often is fertility-related policies: Can we encourage people to have children; can we discourage people from having children? These are sensitive issues, and these are the issues that often catch the headlines of newspapers. With regard to China's one-child policy, it has contributed to its population stabilization, or its projected stabilization. Fertility was coming down even before the one-child policy, and the one-child policy probably contributed to the decline. I believe that Chinese leaders are going to loosen the one-child policy, perhaps in gradual stages, mainly because of the rapid aging of the population and reductions in the size of its labor force. As the economy continues to expand, the benefit the Chinese have

## Between now and midcentury, something on the order of 70 percent of U.S. population growth will be due to immigration—the immigrants and their descendants.

had of a very active labor force, a large labor force and a relatively small elderly population will change and there will be increasingly larger proportions of the population in the older age groups and a contraction in the size of the country's labor force.

## Q. How does immigration policy interact with population trends? Do governments reach out to welcome immigrants to buttress their populations (Australia, Canada)? Or not (Japan)? Why not?

**A.** Immigration is a very important issue. If you move people from one part of the world to another, it might affect the fertility rates in both sending and receiving countries, but globally the effect is small. About 214 million people live outside of the place where they

were born. It's a relatively small proportion: 3 to 4 percent of the total population of the world. But it has had a big impact in certain areas. If immigration to the U.S. had stopped at its founding, when it declared independence on July 4,

1776, and U.S. demographic growth depended on natural increases, the population would be half of what it is today. Between now and midcentury, something on the order of 70 percent of U.S. population growth will be due to immigration—the immigrants and their descendants. In some Persian Gulf countries, immigrants are 70 to 80 percent of the labor force. Of course, those foreign workers aren't supposed to stay; they're supposed to

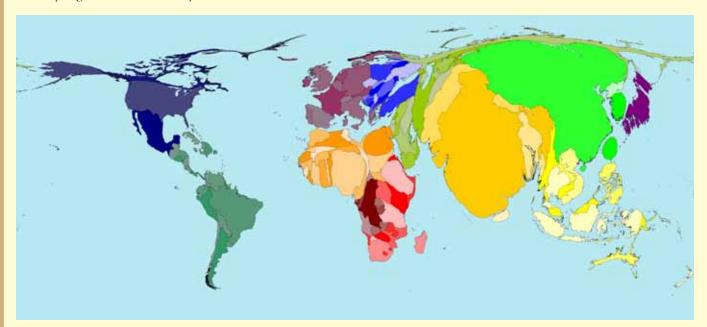


return to their home countries. Similarly, in Europe, where the fertility rate is low, immigrants have a large impact on the growth of the population and the labor force. Without immigrants in many of these countries, their labor forces would decrease even more rapidly and their populations would shrink. You would also have a much more rapid aging of the population in countries such as Italy, Germany, Russia, Spain and Greece.

#### Q. You've said it would be helpful for people in the U.S. to see a map with relative-population sizes depicted. Why?

**A.** When you look at a regular map, it distorts things, especially the flat map. Many people start thinking Greenland is as big as South America. Most people often have difficulty seeing the total picture unless it's presented graphically. You would see America as a very large land mass that's very blessed with a lot of resourc-

es, with a relatively small population compared with India and China and other densely populated areas. A map with relativepopulation sizes gives us more of a global appreciation of where we stand and what we could be doing.



Courtesy of Benjamin D. Hennig, University of Sheffield.



The aging of the world's population will be pervasive; it will affect every household. It will affect the economy, social interactions, voting patterns, lifestyles.

children per woman. Some countries are even closer to 1, meaning a single child per couple.

Because of the pressure on the economy, some of these countries are bringing in foreign workers, some on a temporary basis. We're talking about South Korea, Singapore, Japan, Italy, Spain, Germany and Russia, where population will be declining. But the number of immigrants they would

have to bring in to offset the population decline would likely overwhelm the country. It's far beyond what the political system in these countries could tolerate. We're talking about millions of migrants every year for decades because the deficit in the number of births is very large.

### Q. What are the greatest challenges posed by populations continuing to relocate to urban areas? What are the benefits of the shift?

A. The world's population became predominantly urban several years ago. This change has enormous implications for the world—economic activities, services, culture, politics and family size. It will also have an impact on the interactions of people. It particularly benefits women, who, by moving to cities, find greater economic, cultural and political freedoms. It also produces other benefits, such as concentrations of museums and libraries. It's not problem-free. It means redesigning lifestyles. You have to understand you're living in crowded areas, you need public transport, public safety, public health systems, sewers and so on.

Also, urban centers have a dramatic impact on political life. In rural areas, if you object to something and you start marching in a field, you might get the attention of a couple of cows. If you're marching in a city like New York, London or Calcutta—however outrageous your poster is—there will be some people who agree with you and start marching with you. This means tremendous changes in the political chemistry in parliaments and congresses.

### Q. How important is the evolving role of women in global demographic shifts? What other trends are particularly notable?

A. For centuries, women have been relegated to the home, doing domestic chores including, of course, bearing children and rearing them. Starting in the 19th century and accelerating in the second half of the 20th century, women have acquired political rights, they've joined the labor force in increasing numbers and they've begun interacting socially on equal levels with men. These important changes are spreading around the world and have profound consequences for our lives. Not only is this appropriate in terms of human rights, it's also benefiting the world because we are increasing the talent, the brainpower, the skills and the knowledge we have to deal with the world's problems.

While the 20th century was the century of demographic growth (and this growth will continue through the 21st century—we are likely to add 2 to 3 billion people), the world's population is aging. Very soon, we will see a reversal where the number of children, which has historically been more than the number of people above 65, will become less than the elderly. The aging of the world's population will be pervasive; it will affect every household. It will affect the economy, social interactions, voting patterns, lifestyles.

Finally, we are seeing changes in the family. In the past, most people's image was father, mother and children living together. This classic image, portrayed so effectively in the past on television and in movies, is now changing. We are seeing more people cohabitating, not getting married, especially in the developed world. We are seeing increasing births out of wedlock; we are seeing increasing levels of divorce and separation in many countries. And we are seeing a spread of same-sex marriages, which prior to the 21st century was unthinkable.

Japan and South Korea have been reluctant to bring in immigrants because they feel there are certain benefits to having a relatively homogeneous population. As a consequence, they face population decline and rapid population aging. There has also been a surge in groups trying to limit immigration to European countries, such as the U.K. and Germany, from outside the European Union. You may have heard [French President Nicolas] Sarkozy, [German Chancellor Angela] Merkel and also [British Prime Minister David] Cameron say multiculturalism has failed in their countries.

#### Q. What can nations that face declining populations do? What is replacement migration?

A. There are few models of sustained economic growth without a growing population. If you have a population that's either stable or declining, you may start going abroad seeking a larger market. If you're concerned about the labor force, you may find that the labor force is getting smaller and, therefore, you'll move your operations overseas. Some countries are concerned about those matters and are trying to raise fertility-Japan, Korea, Singapore, Italy, Greece, Spain—and they're providing incentives to couples to have children. You get cash bonuses; others have said we'll get you an advance in the queue for housing, or we'll give you better loan rates. Others talk about incentives such as free preschool, afterschool and day school. Some of the fertility rates are almost half of what's needed for replacement-1.2, 1.3 as opposed to 2.1

## Mexico Rides Global Recovery but Still Faces Hurdles

By Jesus Cañas, Roberto Coronado and Robert W. Gilmer

he Mexican economy has grown robustly following the worst recession since the peso crisis of 1994. Gross domestic product (GDP) growth surged 5.4 percent in 2010, surpassing expectations. Though the pace of expansion slowed in early 2011 as the U.S. engine sputtered, forecasts call for a slight pickup in the second half.<sup>1</sup>

The recovery is the product of primarily three factors: first, a rebound in manufacturing exports, mostly to the U.S. but also to other markets; second, a strengthening internal market fueled by a healthy domestic financial sector; and third, significant capital inflows from advanced economies seeking higher rates of return in emerging markets such as Mexico.

In spite of the recovery, the country faces significant challenges both in the short and long run, including the worst violence since the Mexican Revolution.

#### **Export-Led Recovery**

Mexico's rebound began in summer 2009, led by manufactured goods exports to the U.S., where the recession had ended that June. Factory production accounted for 82 percent of Mexican exports in 2010, with oil representing 14 percent and mining and agriculture 4 percent. The U.S. took in 80 percent of all Mexican exports.<sup>2</sup>

Mexico has increasingly looked globally, especially to fast-growing developing countries such as China, Brazil and Colombia, to offset its largest trading partner's relatively slow growth. Activity with the rest of the world jumped 152 percent from 2000 to 2010, while exports to the U.S. expanded 28 percent (*Chart 1*). Though non-U.S. exports accounted for just 20 percent of the Mexican total in 2010, sales to developing nations bounced back from the recession further and faster than exports to the U.S.

#### **Domestic Demand Rises**

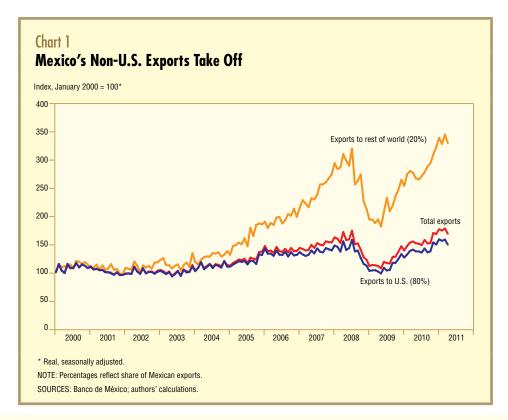
Rapid revival of internal markets is an important part of Mexico's recovery. Both

bank lending and employment are driving personal consumption higher.

Damage to the domestic banking industry was limited, and unlike in the U.S., there was no housing crisis or excessive consumer debt. These factors allowed the quick restoration of broad-based bank lending that now exceeds precrisis levels (*Chart 2*). Mortgage lending barely paused during the global crisis, while commercial lending slowed before expanding in 2010 and early 2011.

Consumer lending, mostly involving credit cards, contracted significantly during the crisis. It began to rebound in early 2010 but remains roughly 20 percent below prerecession peaks. One positive: Lending for consumer durables has recovered to precrisis levels.

The job market quickly responded to the recovery. Formal employment—jobs with government protections and pensions—grew The central question is not if Mexico can expand, but whether it can do so fast enough to significantly improve living standards.



by 700,000 positions in 2010, the best year since 1998. Mexico added another 280,000 jobs from December 2010 through June, and formal-sector average wages neared precrisis levels (*Chart 3*).

Led by consumer lending and employment growth, real (inflation-adjusted) personal consumption moved upward beginning in first quarter 2010, expanding at an average rate of 5 percent per quarter. Additionally, retail sales, which fell 7.8 percent during the downturn, are now within 2 percentage points of the prior peak.

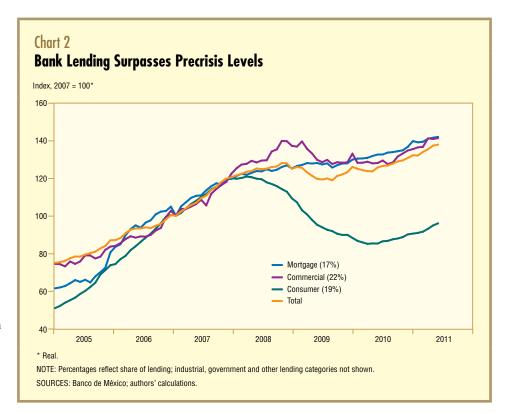
#### **Investment Resilient Despite Violence**

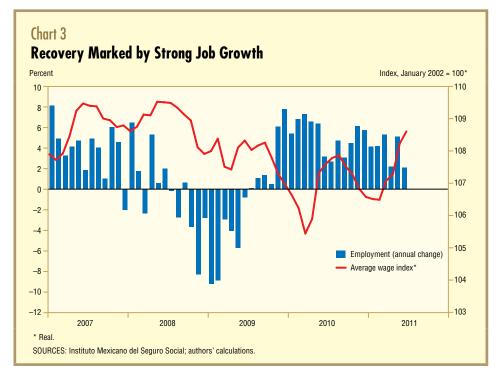
Mexico's higher rates of return visà-vis advanced economies have attracted significant flows of foreign direct and portfolio investment.<sup>3</sup> Portfolio investment such as publicly traded debt and stock reached \$24 billion in 2010, surpassing foreign direct investment (FDI) for the first time since 1993. Partly as a result, the peso has appreciated 10 percent against the dollar since December 2009.

The relatively strong currency helped mitigate inflation pressures from high commodity prices, allowing Banco de México to keep its benchmark lending rate at a record low 4.5 percent for two years. The accommodative monetary policy permitted quick restoration of domestic business investment, with spending in construction and machinery and equipment growing for almost two years. A recent central bank survey of Mexican business executives indicated that the current environment is likely to encourage further investment in coming months.

FDI has also contributed to the recovery, bouncing back in 2010 after falling in 2008 and 2009. It totaled \$19 billion in 2010, up 20 percent from the previous year, but is still 40 percent below 2007 levels. Despite unprecedented, drug cartelrelated violence, particularly along the northern border, 42 percent of FDI was channeled to states adjacent to the U.S. Five of the most violent states, Baja California, Chihuahua, Durango, Nuevo León and Tamaulipas, were among the country's top 10 FDI recipients in 2010 (*Chart 4*).

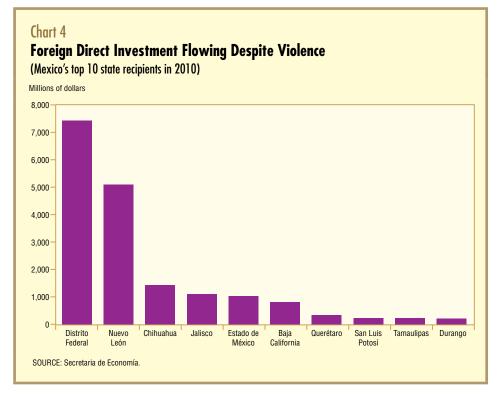
Maquiladoras, or offshore manufacturing plants, have a strong presence along the U.S.–Mexico border and, consequently, are responsible for a significant share of FDI.<sup>4</sup> More than 140,000 jobs have returned in these export-oriented facilities along the border since December 2009.





The auto and electronics sectors account for the majority of maquiladora activity in northern Mexico. After China joined the World Trade Organization in 2001, several maquiladoras closed as China's lower wages lured away production. However, recent anecdotal evidence suggests that some plants have returned to northern Mexico.

There are several explanations for this emerging trend. First, higher energy prices raise transportation costs for products headed to the American market. Second, consistent Chinese worker pay increases have narrowed the wage gap between China and Mexico. Third, while the peso has recently appreciated against the dollar, China's currency has retained its strength against its U.S. counterpart. Finally, anecdotal evidence suggests that China hasn't consistently delivered the quality standards of Mexico, especially within the transportation and high-tech electronics sectors.



#### **Immediate Obstacles**

Potential challenges confront the Mexican recovery, five of them in the near term.

Significantly, Mexico's economy remains coupled to the U.S., which still suffers from uncomfortably slow growth even though demand for durable goods such as autos, home appliances, televisions and other consumer electronics led the Mexican manufacturing export rebound. The U.S. faces the combined effects of the Japanese earthquake on global manufacturing, the housing market's inability to find a definitive bottom and spillover from the European sovereign debt crisis. This soft patch has quickly extended into Mexico, where private-sector analysts have revised down their forecasts for 2011 GDP growth.

Second, developing nations that buffered Mexico from U.S. sluggishness now face their own threats. Rapid growth, capital inflows and higher commodity prices have bred inflation in several countries. As these nations tighten monetary policy and rein in bank lending to slow their economies, they risk overshooting and reducing growth too much. Conversely, policymakers may not be sufficiently vigilant in controlling inflation and risk harming development and longerterm growth. A potential emerging-market cooldown would, in turn, slow Mexican exports.

Third, while it appears escalating vio-

lence hasn't yet significantly slowed investment, it may take a toll on the economy in the near future, particularly among small businesses. Mexico's central bank recently published its first regional economic report. It highlights northern Mexico as the fastest-growing region and one where more than 68 percent of companies have been touched by organized crime. Extortion, which local media as well as anecdotal evidence suggest has accelerated, has caused small-business closures.

Fourth, to the extent Mexico confronts the rising inflationary pressures noted in other emerging-market economies, its central bank will need to step in, possibly slowing the recovery and braking growth in the short run. The country's comfortable fiscal position—a budget deficit of around 2.5 percent of GDP and public debt at about 35 percent of GDP—will facilitate central bank movement toward monetary tightening, if needed.

Fifth, capital flows could potentially reverse amid global investor fickleness, weakening the peso, driving up interest rates, depressing asset prices and reducing funding availability. Policymakers have two main weapons to combat capital flight: international reserves and an International Monetary Fund contingent credit line. By combining the two, Mexico's central bank has around \$200 billion in reserves to defend the peso, if needed.

#### **Longer-Term Challenges**

The development of oil production, which is critical to government finances, and the implementation of structural economic reforms lead the list of medium-to long-term challenges confronting Mexico.

The country is the world's seventh-largest oil producer, though output has declined about 24 percent from its 2004 peak. Production is contracting twice as fast as expected at Cantarell, national oil company Pemex's largest field. Oil exports account for about 40 percent of public revenue, with higher prices offsetting tumbling production. Nevertheless, the combined effects of falling prices and accelerating oil output declines could significantly depress government finances. Mexico may need to open its energy sector and expand production by allowing foreign capital.

Mexico successfully implemented several economic reforms during the second half of the 1980s and the early 1990s, most notably privatization of some government enterprises, trade liberalization and deregulation. Mexico has enjoyed macroeconomic stability, thanks largely to an independent central bank and fiscal discipline. However, a large informal sector (characterized by off-the-books businesses outside government regulation), tax loopholes and weak competition in key industries such as telecommunications must be addressed in a new round of structural reforms if Mexico is to achieve greater economic growth and, ultimately, a higher living standard.

Mexico's informal sector is a drag on the country's economic development. By some estimates, it accounts for as much as one-third of Mexico's \$1 trillion economy. Informal-sector firms lack access to credit and legal protections—limiting their ability to innovate and grow. Labor informality also suppresses the accumulation of human capital required for sustainable economic growth.<sup>7</sup> Finally, the informal sector pays no taxes. Mexico's tax revenue totals only 20 percent of GDP. That figure drops to 12 percent when oil revenues are excluded from the calculation.8 To secure mediumterm sustainability of public finances, fiscal reform must achieve a more efficient tax system less dependent on oil.

In addition to the challenge posed by a large informal sector, key industries lack meaningful competition. Mexico started privatization of its public sector during the '90s. Unfortunately, the effort was flawed

(Continued on back page)



**QUOTABLE:** "While sectors of the regional economy tied to consumer activity such as housing and retail sales have weakened, they appear to be performing better in Texas than in other parts of the country."

- D'Ann Petersen, Business Economist



#### **EDUCATION:** Hispanic Students Score Higher in Texas, but Progress Stalls

Texas Hispanic students in the fourth and eighth grades perform better on reading and math tests than their counterparts nationally, though the difference between them narrowed over the past two years, according to a June report by the National Center for Education Statistics.

Hispanic students in Texas tend to score higher because a greater proportion are U.S. born—69 percent compared with 63 percent nationally. Native-born students tend to have greater English proficiency and less frequently live in poverty than their foreign-born counterparts. Paradoxically, adult Hispanics in Texas average less educational attainment than Hispanics in the rest of the nation.

Hispanic fourth graders in Texas improved their math

scores by 13 percent and reading by 6 percent from 1992 to 2007. While Texas maintained its lead on average test scores among Hispanics, actual scores declined or remained relatively unchanged from 2007 to 2009.

Nationally, including Texas, Hispanic students' test scores have consistently been 90 percent of non-Hispanics whites' results since testing began in the early 1990s.

Hispanics made up 22 percent of national public school students and 49 percent of Texas students in 2009. Among major minority groups, Hispanics are the fastest-growing and their scholastic achievement portends the future qualifications of America's workers.

-Yingda Bi



#### **OIL PRICES: Muted Reaction as Strategic Reserve Release Falls Short**

The International Energy Agency (IEA) announced on June 23 that its 28 member countries would release 60 million barrels of oil from their reserves, only the third such drawdown ever. The prior two occurred at the beginning of the Gulf War in 1991 and after Hurricane Katrina in 2005. The U.S. said it would tap the Strategic Petroleum Reserve to contribute 30 million barrels to the latest effort.

The IEA became concerned that rising oil prices spurred by reduced Libyan production since March could slow economic growth and stifle the budding recovery. However, the desired outcome of the release—lower oil prices—didn't occur. While the price of West Texas Intermediate crude oil initially dropped 4.6 percent following the announcement, and Brent crude declined 5.3 percent, prices subsequently re-

turned to previous levels.

This response may reflect oil sales from reserves substantially less than the announced 60 million barrels. Because part of the release was to come in the form of lower government-mandated holding requirements in Europe and Japan, where the amount of oil kept in inventory typically exceeds the requirements, reserve sales were less than anticipated. The actual amount of oil sold should, instead, total around 38 million barrels, just less than two-thirds of the announced amount.

Even if prices remained suppressed, the reserve release would have a limited effect on long-term prices because it is a temporary measure intended to tide markets over until Libyan production resumes or Saudi Arabia increases output.

—Jackson Thies



#### **TEXAS AGRICULTURE: Cotton, Beef Exports Higher on Global Demand**

Texas agriculture and food exports soared 45.9 percent during the final three months of last year and another 41.3 percent in the first quarter of this year, reflecting high commodity prices and increasing global demand.

The data for the first months of 2011 don't yet reflect the impact of a statewide drought that has diminished crops and livestock food sources.

Texas is the nation's No. 1 cotton producer and exporter. The value of U.S. cotton exports rose 35.9 percent in 2010 and advanced 18.1 percent in the first four months of this year. Cotton prices rose 12.2 percent in the first five months of the year and 103.3 percent on a year-over-year basis in May. A severe world cotton shortage, coupled with an improving global economy, boosted cotton prices, the U.S.

Department of Agriculture (USDA) said. China, the leading importer of U.S. cotton, received 5 percent of total Texas exports in first quarter 2011.

Texas also leads U.S. beef production. The value of beef exports increased 36 percent in 2010 and rose 7.1 percent in the first four months of this year, according to USDA data compiled by the U.S. Meat Export Federation. Steer prices advanced 6.8 percent year-to-date through May, while retail beef prices reached record nominal (non-inflation-adjusted) highs each month from February through May 2011. Beef, like cotton, benefited from the strengthening world economy, which increased demand. Shrinking herds in the U.S. and Canada also pushed prices higher.

—Adam Swadley



#### Mexican Financial Markets

## Spot Light New Instruments, Rules Boost Capital Investment

exico's financial markets have surged since 2010, recovering from the global financial crisis and benefiting from new capital instruments and rules. Among the most prominent instruments are Certificados de Capital de Desarrollo (CKDs), or trust securities, and the country's first real estate investment trust.

Additionally, modernization of Mexico's market operations has helped drive initial public equity offerings (IPOs) and debt issuance.

#### New Securities Make Mark

The Bolsa Mexicana de Valores, Mexico's stock and securities market, introduced CKDs in August 2009. These securities fund the development of specific existing or future projects, often some type of construction, approved by the issuing trust's technical committee.

In the first 20 months after approval of the instrument, there were 15 offerings, raising \$3.2 billion, or 38.4 billion pesos (Chart 1). Fifty-three percent of the offerings funded infrastructure, 25 percent real estate and 22 percent businesses (mostly medium sized). The CKD's structure allows investment in either an individual firm or multiple firms, so even medium-sized companies that lack the resources for a public offering can obtain funding.

A CKD's value is tied to project success, with returns derived from dividends or sales of shares in underlying trust assets. Payments to CKD holders come from income earned by the project or business, including the amortization of principal and interest, dividends or sale of the project or firm. Under revised Mexican regulations aimed at boosting sources of capital for long-term construction and development, pension funds may invest in CKDs. Overall, pensions have provided approximately 90 percent of CKD funding. Ten additional CKD issuances worth \$1.4 billion, or 16.7 billion pesos, are in the pipeline this year.

#### Real Estate Investment Trusts Arrive

Mexico's first real estate investment trust (or Fibra, the Spanish acronym for Fi-

deicomiso de Infraestructura y Bienes Raíces) came to market in March. The initial listing, Fibra Uno, raised \$302 million (3.62 billion pesos). Fibra Uno consists of 16 properties, including malls, offices and industrial sites. There were 883 subscribers. with Mexican citizens buying 77 percent of the offering.

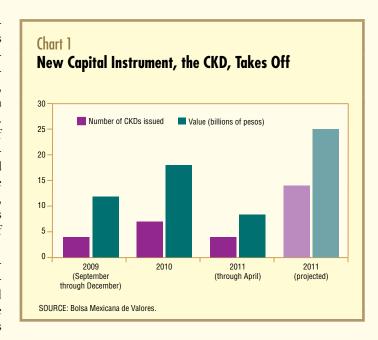
Authorities gan making the necessary legal and fiscal changes to permit the formation of Fibras in 2004. To qualify as a Fibra, at least 95

percent of the returns must be distributed to investors, and a minimum of 70 percent of holdings must be in real estate.1 Perhaps the most important regulatory change was put into place at the end of 2009 when new rules liberalized the permissible investment mix for pension and insurance funds.2

#### **Bolsa Modernization Bears Fruit**

In addition to the new instruments and record capital inflows for securities, Mexican markets have been bolstered by exchange modernization. Under rules implemented in August 2010, brokerages will have multiple access points to the electronic trading system instead of just one. Previously, orders were executed one at a time according to size. The new system is expected to increase efficiency and liquidity, while generating more orders and greater investment.

The modernization seems to be paying dividends. Debt issuance through Mexico's stock market reached unprecedented levels in 2010, following two years of relative inaction. According to the Bolsa, financing totaling \$3.5 billion (43.8 billion pesos) was raised during 2010. The trend continued this year, with debt issuance growing 40 percent in April on a year-over-year basis.



The debt market has proven a viable source of funding for local firms of all sizes. Bolsa modernization and new rules allowing pension funds to directly invest in the stocks of Mexican companies helped ignite a wave of IPOs. After two years with no new listings, six companies went public in 2010 and another 11 are expected to do so this year.

Although Mexico's capital markets remain small and relatively vulnerable, recent developments herald a deeper and more vibrant role for finance in the country's economic development.

—Edward C. Skelton

#### Notes

<sup>1</sup> In the U.S., real estate investment trusts (REITs) must pay dividends totaling at least 90 percent of the REIT's taxable income and must invest a minimum of 75 percent of their holdings in real estate. Fundamentally, there is no difference in structure across the two countries.

<sup>2</sup> In Mexico, pension fund companies are the largest institutional investors, with 42.2 million accounts and 1.6 trillion pesos in assets under management as of May 31, 2011.

# Underemployment Poses Long-Term Financial Risk to More Workers

By Anil Kumar and Michael Weiss

The underemployed and the discouraged—those who have given up trying to find work—are additional indicators of labor dislocation.

n the aftermath of the Great Recession, a significant portion of the potential labor pool remains largely unnoticed. The underemployed and the discouraged—those who have given up trying to find work—are additional indicators of labor dislocation. These are individuals whose diminishing skills and reduced earning capacity may linger well into the recovery.

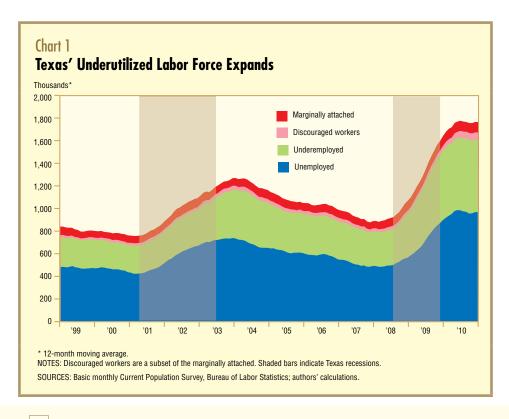
For every five unemployed Texans last December, four others either were underemployed (working 35 hours or less while reporting they sought full-time jobs) or had sought work but quit looking, according to the Bureau of Labor Statistics' (BLS) Current Population Survey (*Chart 1*).

Nationally, the underemployment rate, which varied considerably across states, averaged 6.4 percent for 2010, with unemploy-

ment accounting for another 9.6 percent.1

Texas, with a 5.7 percent underemployment rate, fared better than the nation and most other states, including the traditional Sunbelt growth states—Georgia, Florida and Arizona. The latter two were especially hard-hit by the residential building bust, a lesser factor in Texas.

If wages were completely flexible and labor markets perfect, unemployment and underemployment would be largely transitory and low: When the number of willing workers exceeded the number of jobs, wages would fall, reducing labor costs and making it profitable for companies to hire. Yet, many imperfections can keep wages from adjusting freely, and unemployment and underemployment can rise, particularly during economic downturns.



Underscoring recent market slack, the top-line unemployment rate for the nation reached a postwar high of 10.1 percent in October 2009. Nationally, the jobless rate rose nearly twice as much in 2009 as predicted by Okun's law, which links rising unemployment with falling national output. Such performance is indicative of highly disproportionate job loss relative to the decline in economic activity.<sup>2</sup>

#### **Underemployment Counts**

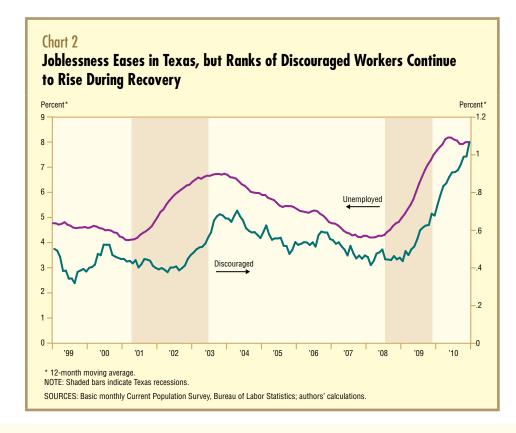
To fully capture labor force slack, the BLS constructs six measures of underutilization. The broadest includes the unemployed, the underemployed and those the Labor Department categorizes as marginally attached—people who unsuccessfully sought work at some point in the past 12 months but not in the past four weeks. Together, they totaled 14.4 percent of the combined total Texas civilian workforce and marginally attached in 2010. That compared with 22.1 percent of such workers in California, 23.6 percent in Nevada and a U.S. average of 16.7 percent. In 2006, as the economy boomed before the recession, Texas underemployment averaged 2.9 percent, with a total of 8.6 percent including the unemployed and marginally attached.

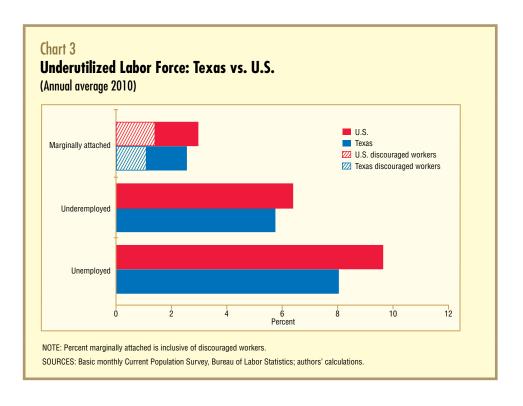
"Discouraged workers" are a subset of the marginally attached. These are people out of the labor force because no employment is available, they couldn't find work or they have given up, perhaps because they think they are too young or too old or sense some other form of discrimination. Of the Texans marginally attached as of December, about 45 percent (on a non-seasonally adjusted basis) were discouraged workers, compared with more than 50 percent nationally.

Even as unemployment shows signs of easing, the upward trend of discouraged workers, as a percentage of the Texas labor force, remains little changed, pointing to a still-nascent recovery (*Chart 2*). However, compared with the nation, Texas retains an advantage in all measures of labor force underutilization (*Chart 3*).

This labor force underutilization occurred in tandem with the historic rise in long-term unemployment as people, off the job for more than six months, stopped looking for work and became marginally attached or settled for part-time work as a stopgap, adding to the ranks of the underemployed. The persistence of unemployment is reflected in the average number of weeks that the jobless are out of work. The national figure, compiled since 1948, stood at a seasonally adjusted 36.9 weeks in January, a record. That is more than 50 percent greater than the next-highest, 20.8 weeks in June 1983 following the recession of the early 1980s.

Even as unemployment shows signs of easing, the upward trend of discouraged workers, as a percentage of the Texas labor force, remains little changed, pointing to a still-nascent recovery.





The negative association between underemployment and the subsequent year's earnings is more pronounced for workers with a college degree than for those who dropped out of high school.

#### **Lowered Earnings**

To be sure, joblessness and underemployment are an integral part of labor market reallocation, as firms and workers each seek an optimal situation. Some unemployment can exist while workers canvass the marketplace to determine for whom they want to work. Short periods of unemployment can enhance economic efficiency if, in the process, poor matches between firms and workers are replaced by better ones. This frictional unemployment is distinct from cyclical unemployment, which is largely involuntary and often results in future earnings losses.

A negative correlation between underemployment and future earnings is evident when annual average real weekly earnings—obtained from the monthly Current Population Survey for the U.S. for 1998 through 2010—are plotted against the incidence of job loss and underemployment among groups defined by age, race, sex and year (*Chart 4*).

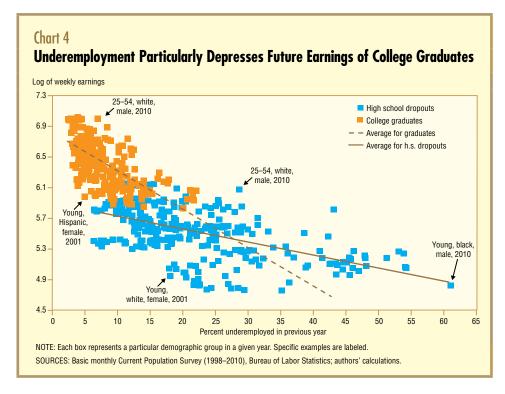
The negative association between underemployment and the subsequent year's earnings is more pronounced for workers with a college degree (seen in the steeper downward line) than for those who dropped out of high school. A similar relationship holds for older workers (55+ years), suggesting that these groups suffer the greatest job quality deterioration.

Erosion of earnings and job quality, particularly among the highly educated and

older workers, is not surprising. Employed workers accumulate two types of skills—general skills applicable at a variety of jobs and nontransferable company-specific proficiencies accumulated through experience and training. Older workers accrue more firm-specific skills due to longer tenure. The highly educated have lower turnover and benefit the most from on-the-job training, as education and training are often complementary.<sup>3</sup>

Firm-specific skills become largely obsolete when workers join a new company. Even more-widely applicable skills erode significantly if workers are long-term unemployed. Although much of the earnings lost due to joblessness can be recouped following reemployment, longer duration unemployment can produce a persistent income drag. Research indicates an immediate 30 to 40 percent earnings decline that is only partially recouped with a new job. After six years back on the job, workers still confront a 10 to 15 percent earnings reduction.<sup>4</sup>

With one in five jobs held by people over age 55, up from one in seven 30 years ago, the baby boom, post-World War II demographic bulge is particularly at risk of earnings losses. Younger workers, by comparison, are likely to leave the workforce, returning to school for additional training. However, they may also suffer a long-term earnings loss. One study found that college graduates entering the workforce during a recession, and thus more likely facing



underemployment, earned 2.5 percent less than they otherwise would 15 years after starting on the job. This suggests that "workers who graduate in bad economies are unable to fully shift into better jobs after the economy picks up." Often, the newest graduates with the latest skills obtain employment ahead of those who finished school earlier and haven't found full-time work.

#### **Choosing Underemployment**

With underemployment and unemployment potentially costly, policymakers might want to get workers back to work as soon as possible. However, while unemployment compensation helps maintain income, it also discourages a return to work.6 Last December, President Obama signed a reauthorization of federal unemployment extension benefits, providing 13 additional months, to a maximum of 99 weeks of payments. A Chicago Fed study suggests that extended jobless benefits added close to 1 percentage point to the national unemployment rate.<sup>7</sup> While the U.S. relied primarily on the fiscal stimulus and jobless benefits to protect workers during the recession, other countries followed different approaches.

One example is Germany's "Kurzarbeit" short-time work program. Although many factors may have shielded the German labor market during the recession, the short-time work plan is widely believed to have played a role. It encourages firms to lower

their labor costs by reducing total hours instead of cutting jobs. So while the German gross domestic product shrank 2 percentage points more than that of the U.S. from peak to trough in the Great Recession, Germany's unemployment rate remained largely flat.

The plan, in effect, promotes underemployment over unemployment by spreading the downturn's impact on hours and earnings across many workers rather than a few. Under the program, the government replaces 60 to 67 percent of lost earnings of the underemployed and reimburses half of the firm's public pension contribution due to lost hours. By keeping workers employed, the plan limits skill deterioration during the downturn and helps firms expand quickly during the recovery. On the other hand, Kurzarbeit interferes with labor market reallocation and may be inefficient in the long run.<sup>8</sup>

#### Slack in the Workforce

The number of people engaged in involuntary part-time employment or who have sustained a reduction in the terms of employment—mandatory unpaid time off, demotion, reduced pay and benefits—is characteristic of the economic downturn from which the country is slowly emerging. Longer-term implications include worker obsolescence that may slow economic growth as employers search for properly skilled individuals. Moreover, such labor slack in the economy, as evidenced by still relatively high unemployment

and underemployment rates regionally and nationally, helps account for a lingering economic malaise and pessimistic sentiment amid the slow pace of recovery.

Kumar is a senior research economist and advisor and Weiss is the economic writer/editor in the Research Department at the Federal Reserve Bank of Dallas.

#### **Notes**

- <sup>1</sup> 2010 is the last full year for which data are available; unless otherwise specified, all analysis in this article is restricted to 2010.
- <sup>2</sup> Okun's law states that for every 2 percent decline in GDP relative to long-term trend, the unemployment rate should increase by 1 percentage point. See "Okun's Law and the Unemployment Surprise of 2009," by Mary Daly and Bart Hobijn, FRBSF Economic Letter, Federal Reserve Bank of San Francisco, March 8, 2010.
- <sup>3</sup> "Education and Unemployment," by Jacob Mincer, National Bureau of Economic Research, Working Paper no. 3838, September 1991.
- <sup>4</sup> "Earnings Losses of Displaced Workers Revisited," by Kenneth A. Couch and Dana W. Placzek, *American Economic Review*, vol. 100, no. 1, 2010, pp. 572–89.
- <sup>5</sup> See "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy," by Lisa B. Kahn, *Labour Economics*, vol. 17, no. 2, 2010, pp 303–16.
- <sup>6</sup> "Unemployment Insurance and Job Search Decisions," by Dale T. Mortensen, *Industrial and Labor Relations Review*, vol. 30, no. 4, 1977, pp. 505–17.
- <sup>7</sup> "How Did Unemployment Insurance Extensions Affect the Unemployment Rate in 2008–10?," by Bhash Mazumder, *Chicago Fed Letter*, Federal Reserve Bank of Chicago, April 2011.
- <sup>8</sup> For details, see "Short-Time Work: The German Answer to the Great Recession," by Karl Brenke, Ulf Rinne and Klaus F. Zimmermann, IZA Discussion Paper no. 5780, Institute for the Study of Labor (IZA), June 2011.

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### Mexico Rides Global Recovery but Still Faces Hurdles

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and public monopolies were replaced by private ones. As a result, consumers still face expensive and outdated electricity, telecommunications and Internet services. Enhancing competition and lowering market entry barriers would promote a higher quality and greater variety of consumer-related services.

Mexico joined the global recovery not only via the external sector but also through a healthy domestic market. The current U.S. slowdown is diminishing growth prospects. The central question is not if Mexico can expand, but whether it can do so fast enough to significantly improve living standards. This can be accomplished by building on structural reforms principally aimed at reducing informality, promoting business competition and boosting public finances.

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#### **Notes**

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<sup>1</sup> The Mexico GDP growth rate is calculated year over year. Measured quarter over quarter, Mexico GDP growth slowed to a 2.4 percent annual rate in first quarter 2011 but bounced back in the second quarter, growing at a 4.4 percent rate. Year over year, GDP growth slowed to a 3.3 percent rate in second

quarter 2011 from 4.6 percent in the first quarter.

<sup>2</sup> For more details behind the strong trade ties between both nations and the recent trade recovery, see "Trade Conference Explores U.S.—Mexico 'Common Bonds,'" by Jesus Cañas, Roberto Coronado and Robert W. Gilmer, Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter, 2011.
<sup>3</sup> In 2010, Mexico was included in the World Government Bond Index, which further spurred capital inflows.
<sup>4</sup> For more details on maquiladoras, see "Maquiladora Recovery: Lessons for the Future," by Jesus Cañas, Roberto Coronado and Robert W. Gilmer, Federal Reserve Bank of Dallas *Southwest Economy*, no. 2, 2007, and "Maquiladora Industry: Past, Present and Future," by Jesus Cañas and Roberto Coronado, Federal Reserve Bank of Dallas *Business Frontier*, no. 2, 2002.

<sup>5</sup> The Banco de México report on the regional economy can be found at www.banxico.org.mx/publicaciones-y-discursos/publicaciones/informes-periodicos/reportes-sobre-las-economias-regionales/reportes-economias-regionales.html.

<sup>6</sup> For more details, see comments by Banco de México's Governor Agustin Carstens in "Mexico's Economic Reforms Propel Postrecession Rebound," Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter, 2011.

<sup>7</sup> See La Era de la Productividad, by Carmen Pagés, Washington, D.C.: Inter-American Development Bank, 2010.

<sup>8</sup> See "Economic Survey of Mexico 2011," Organization for Economic Cooperation and Development, May 2011, www.oecd.org/document/34/0,3746,en\_2649\_34569\_47781730\_1\_1\_1\_1,00.htm.

<sup>9</sup> See *No Growth Without Equity? Inequality, Interests, and Competition in Mexico*, Santiago Levy and Michael Walton, ed., Washington, D.C.: World Bank, and Houndmills, U.K., and New York: Palgrave Macmillan.