

# Southwest Economy



## Texas Economy Cools in 2000

The Texas economy has known nothing but growth for more than a decade now. Steady employment gains and an increasingly diverse marketplace have been the hallmarks of this expansion. After 13 years of positive job growth, Texas came through once again. The Lone Star State added over 338,000 jobs last year despite a sizable falloff of domestic activity in the closing months of 2000.

However, Texas did not escape the economic softening in 2000 unscathed. Every sector except finance, insurance and real estate (FIRE) saw weakened employment growth during the second half. And statewide nonfarm employment growth waned from 5.1 percent in the first quarter to 2.8 percent in the fourth (*Chart 1*).<sup>1</sup>

Several factors curbed the rate of economic growth during the latter half of 2000. Higher interest rates and weakened U.S. and world economies negatively affected the Texas business environment. Excess capacity and increased input costs hurt the chemical and refining sector, and high technology suffered as sales of computers, semiconductors and telecommunications equipment ebbed from high levels.<sup>2</sup>

Consumer confidence took several hits toward  
(Continued on page 2)

## Bank Competition in the New Economy

Numerous economic forces, including technological innovations and prudent monetary and fiscal policy, account for the unprecedented growth and prosperity experienced over the past decade. However, an important, and often overlooked, factor is the relative stability and health of the banking system. A healthy, vibrant banking sector helps ensure that financial capital is directed to those businesses that would benefit most, thereby enhancing the nation's economic well-being.

Although the banking system has not experienced major problems over the past decade, it has undergone substantial changes; in particular, its market structure has been evolving. This evolution is due primarily to two factors: (1) financial deregulation, in particular the repeal of restrictive laws; and (2) technological innovations related to computers and the Internet. Both factors have the potential to produce long-lasting effects on market structure not

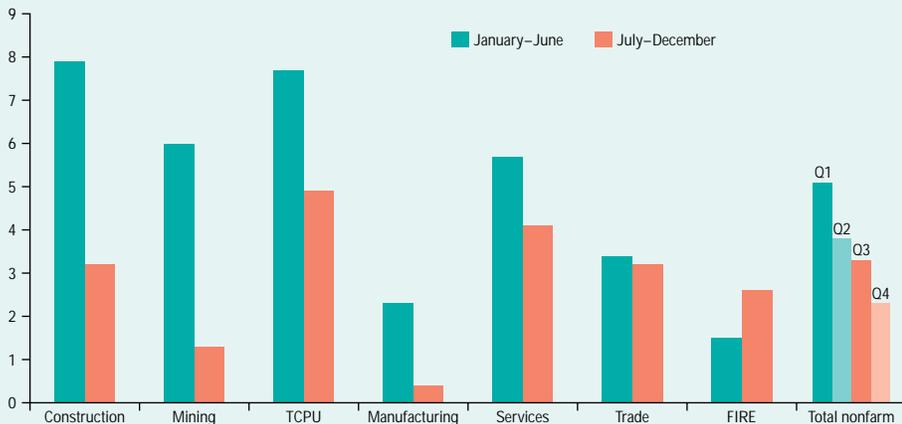
(Continued on page 6)

**INSIDE:**  
*Why Free Trade  
in the Americas?*

Chart 1

### Texas Job Growth in 2000

Percent change, annualized



NOTE: TCPU is transportation, communications and public utilities; FIRE is finance, insurance and real estate.

SOURCES: Bureau of Labor Statistics; Federal Reserve Bank of Dallas.

the end of the year as households began to internalize the effects of weakened investment portfolios and diminished equity values. Spending on consumer goods fluctuated as the so-called wealth effect adjustment began to work its way through the Texas economy.

Despite second-half weakening, Texas fared well overall. Annual employment growth registered a lofty 3.7 percent gain in 2000, easily surpassing the national figure of 1.6 percent. While high energy prices are generally unfavorable to the U.S. business climate, they continue to be a positive force for Texas by helping pump up cash flows and employment for oil and gas companies. Texas exports to Mexico, which make up about half the total, surged nearly 31 percent in the first three quarters over the same period in 1999. Texas exports to Asia improved dramatically over 1999, increasing more than 50 percent in the first three quarters of 2000.

The construction sector added 30,000 jobs in 2000, and the value of residential building contracts increased 14.7 percent (*Chart 2*). Even manufacturing employment, which has been anemic for three years, edged higher by 14,700 jobs (1.4 percent)—a good showing for an industry that lost 178,000 jobs nationwide. Gross state product (GSP) increased 2.7 percent in the first three quarters of 2000, and the December un-

employment rate remained in check at 3.7 percent.

### Energy

Fervent world demand and OPEC production controls combined to send energy prices through the roof in 2000. Oil prices tripled from 1998 levels, and natural gas prices quadrupled from 1999. The industry woke up to the high prices: Texas oil and gas employment grew 3.6 percent (4,900 jobs) on the year. Additionally, the number of oil and gas

drilling rigs continued to rise, exceeding 400 by year-end.

Energy companies had a heyday in 2000. Many oil firms, including Irving-based Exxon Mobil Corp., realized record fourth-quarter profits. With an increase of 124 percent over 1999, the firm's 2000 net income gain was the largest ever recorded by a U.S. corporation.<sup>3</sup> Such improvements did not go unnoticed on Wall Street; energy sector investments garnered 10.2 percent in aggregated returns during 2000.<sup>4</sup>

Only 5.2 percent of Texas GSP comes from the oil and gas industry (down from about 20 percent in the early 1980s), but high prices improved the financial viability of many energy firms and helped buttress the economy against slowing in other sectors. There was a downside, however; elevated oil and gas prices boosted production costs for chemical-manufacturing firms, punishing earnings.

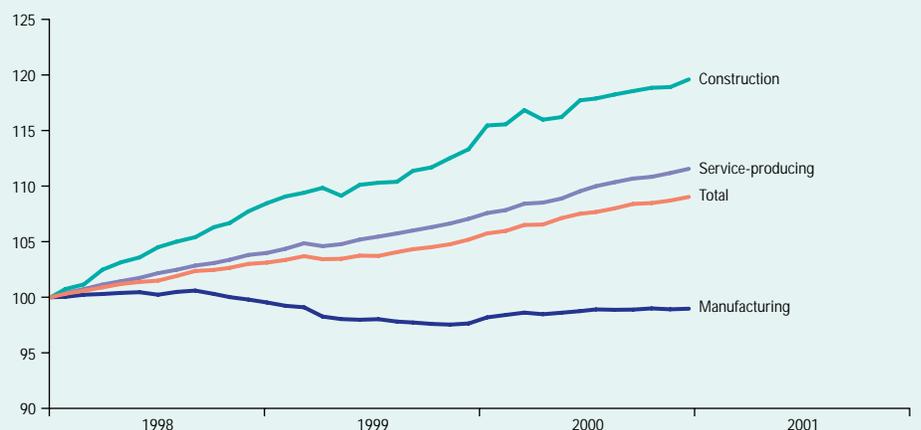
### Exports and Mexico

Texas trade conditions continued very strong in 2000. Total exports during the first three quarters exceeded \$78 billion, a 24.7 percent increase over the same period in 1999 and the largest percentage gain since 1987. Texas exports accounted for 13.4 percent of total U.S. exports in 2000 (second only to California's 15.2 percent share). Put a different way, over \$1 in every \$8 of

Chart 2

### Texas Employment in Selected Sectors

Index, January 1998 = 100

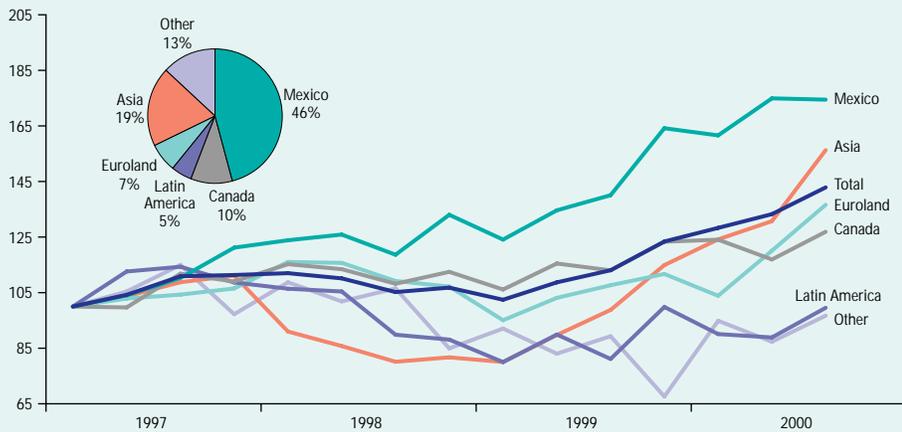


SOURCES: Bureau of Labor Statistics; Federal Reserve Bank of Dallas.

Chart 3

### Texas Exports by Region

Real seasonally adjusted index, 1997:1 = 100



NOTES: Euroland comprises Denmark, Switzerland, Greece, Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain. Latin America comprises Argentina, Brazil, Colombia and Venezuela. Asia comprises China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand.

SOURCE: Massachusetts Institute for Social and Economic Research.

goods shipped from U.S. ports came from Texas.

Export trade makes up 14 percent of Texas' total economic output. The state ranks third in per capita exports, behind Vermont and Washington. Three industries made up the lion's share of Texas exports in 2000: electronics accounted for 26.8 percent of the total; industrial equipment (including computers), 17.6 percent; and chemicals, 14.8 percent.

Much of the state's international output goes directly to Mexico (*Chart 3*). Thus, the overall economic climate in Mexico is key to maintaining the good times in Texas foreign trade. Texas' southerly neighbor did not disappoint in 2000, swallowing up \$38.3 billion in exports over the first three quarters. This translated into a 31 percent jump over 1999. Real Mexican GDP grew 5.3 percent in 2000.<sup>5</sup>

Texas companies shipped \$10.8 billion in electronic goods and \$5.4 billion in transportation equipment to Mexico in the first three quarters of 2000—increases of 38 percent and 20 percent, respectively, over a year earlier. Mexico also bought \$3.6 billion in industrial machinery and equipment and \$2.5 billion in chemicals from Texas.

Mexico's maquiladoras realized strong growth in 2000. Total employment in the sector increased 15.9 percent (128,799

jobs) from January through October. Trade with Mexican companies continued to revitalize Texas' border cities. In fact, 90 percent of El Paso's exports went to the maquiladoras in 2000. The value of total trade activity was \$35 billion for Laredo, \$16 billion for El Paso and \$5.7 billion apiece for Brownsville and Hidalgo.<sup>6</sup>

### High Technology

High-tech manufacturing has made steady gains in Texas in the past decade.<sup>7</sup> The cumulative output of firms like Texas Instruments, Dell Computer Corp. and Compaq Computer Corp. now makes up 4.9 percent of Texas GSP, a marked increase from the 1.7 percent share in 1990. Not only has high tech contributed more to GSP, but expansion of the industry has fueled much of the statewide economic growth over the past decade as well. The high-tech sector accounts for over 10 percent of Texas GSP growth in the past 10 years.

The year 2000 turned out to be quite a speed bump for high tech in Texas, though. Telecommunication service providers substantially underperformed the market, which led to widespread consolidation and company failures. Weaker than expected earnings among computer and semiconductor firms and a bubble bursting in the Internet sector also con-

tributed to slowing in the Texas technology sector.

Initially, stock values took the brunt of the blow, but by midyear the damage had bled over into employment levels as well. The stock market served the sector a severe comeuppance in March and April, and many firms saw their equity values plummet. By year-end, aggregate returns for technology-based portfolios were all in the red. Nationwide, semiconductor returns were down 19.8 percent, telecom 33.1 percent, and online retail and information 47.3 percent and 54.1 percent, respectively.<sup>8</sup>

Texas employment in durable manufacturing (which includes high tech) started the year out strong, increasing 4.9 percent in the first three months. But subsequent quarters exhibited steady declines in the growth rate; by the fourth quarter, job growth had slowed to 1.1 percent.

### Metropolitan Areas

Texas is a summation of its parts; five major metropolitan areas make up almost 70 percent of the state's total employment. Job growth was positive in every major area in Texas in 2000 (*Charts 4 and 5*). Here's how each metro area fared for the year.

**Austin.** Predictions that Austin's super-tight labor market would choke job growth in 2000 seemed unfounded. Nonfarm employment surged ahead another 4.5 percent (29,500 jobs) despite an average unemployment rate of 2 percent. The unemployment rate held steady at 2 percent from July to November before dropping to an exceptional 1.7 percent in December. While job growth fell off in September and October, it recovered in November and December, increasing 5.1 percent and 4.3 percent, respectively.

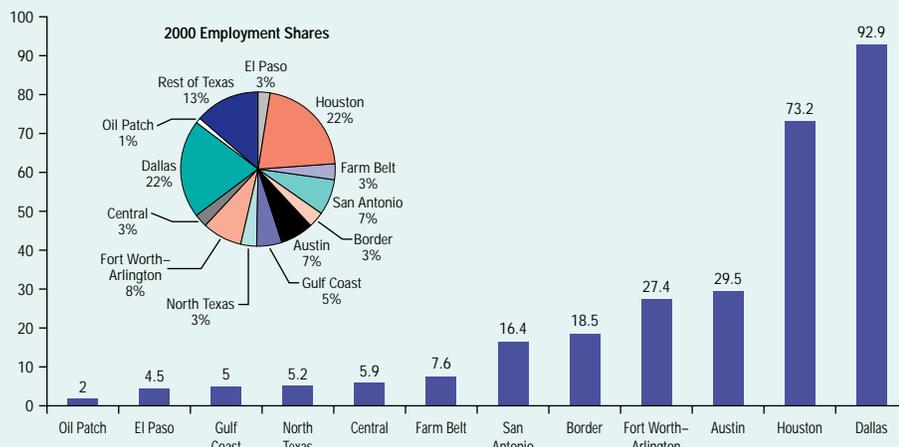
A 10 percent jump in durable goods employment (7,200 jobs) and a 7.5 percent increase in wholesale trade employment led job growth in 2000. Services employment increased 6.4 percent, and transportation, communications and public utilities (TCPU) employment grew 3.6 percent.

High demand for software, semiconductors and consumer electronics sustained the Austin business environment in early 2000. Fallout from the 1997

Chart 4

### Employment Level Increases

January–December 2000 (in thousands)



NOTES: Border comprises Laredo, Brownsville and McAllen. Central comprises Waco, Bryan and Killeen. Farm Belt comprises Abilene, San Angelo, Amarillo and Lubbock. Gulf Coast comprises Brazoria, Beaumont, Galveston, Corpus Christi and Victoria. North Texas comprises Texarkana, Longview, Tyler, Sherman and Wichita Falls. Oil Patch comprises Midland–Odessa.

SOURCES: Bureau of Labor Statistics; Federal Reserve Bank of Dallas.

Asian financial crisis had a less-than-expected effect on the economy, thanks to pent-up demand for high-tech goods. Nevertheless, Austin was not immune to high-tech market difficulty. As the dot.com center of Texas, Austin saw three major Internet companies fold in 2000. Eight more are expected to follow in 2001.

Falling equity prices may have affected spending for some high-end products late in the year. Sales of homes priced above \$500,000 dropped off near the end of 2000, suggesting that New Economy employees were not “feeling” as rich.

The economic and high-tech situation in Austin is still very good, however. There seemed to be no slowing in business investment; venture capital funding for the first three quarters of 2000 reached a record \$1.3 billion on 102 deals, up from \$407 million on 75 deals in the first three quarters of 1999.<sup>9</sup>

**Dallas/Fort Worth.** Dallas’ favorable business environment and large airport hub, combined with a growing national economy, kept the city on a solid growth path throughout 2000. The local economy profited from major construction activity, early strength in the high-tech sector and robust international and domestic trade. Total nonfarm employ-

ment grew a whopping 4.8 percent (92,900 jobs) from January to December.

TCPU employment led all sectors, with an 8.3 percent growth rate in 2000. Employment in construction and services followed, increasing 7.1 percent and 6 percent, respectively. Dallas continued its role as a major distribution center and retail outlet. As a result, jobs in both wholesale and retail trade increased more than 4 percent. But later in 2000,

air and ground freight business declined in the wake of a slowing national economy.

Homebuilding in Dallas was particularly strong in 2000. Single-family building permits increased 16.3 percent from January to November.<sup>10</sup> An oversupply in the multifamily market squelched apartment building, however. Multifamily permits dropped 40.5 percent on the year. While increased energy prices translated into statewide growth in mining employment, these jobs did not show up in Dallas. Mining employment declined 4.6 percent on the year because of industry consolidation and firm relocations to Houston. Though not as extreme as Austin’s, the Dallas labor market was among the tightest in the state, registering a 2.8 percent unemployment rate in December.

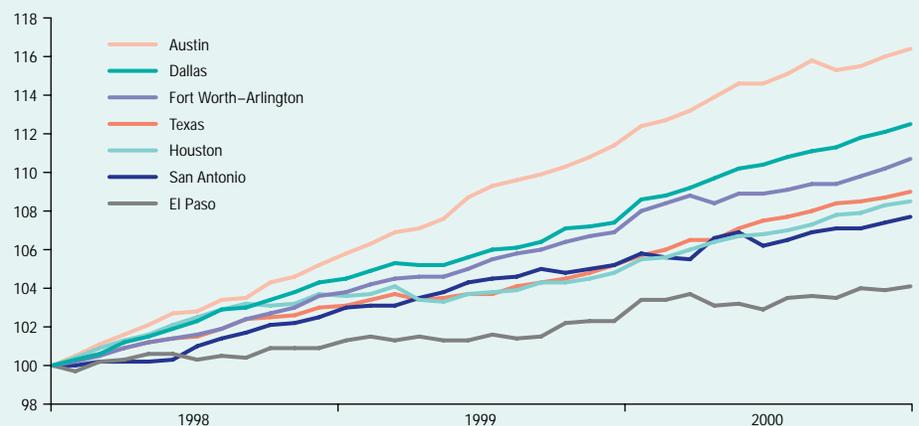
The Fort Worth economy plowed ahead in 2000 and continues to benefit from economic synergies with Dallas. Overall nonfarm employment grew a solid 3.5 percent (27,400 jobs) for the year. Construction employment outpaced all other sectors in Cowtown, increasing 11.8 percent. FIRE jobs rose 7.4 percent; TCPU employment, 4.7 percent; and wholesale trade employment, 3.7 percent.

Recent investment in the Fort Worth Alliance Airport and the adjacent industrial park has catalyzed an increase in economic activity. High-tech prospects

Chart 5

### Texas Total and Major Area Employment

Index, January 1998 = 100



SOURCES: Bureau of Labor Statistics; Federal Reserve Bank of Dallas.

in Fort Worth are strong and continue to gain steam, as evidenced by a recent American Electronics Association study that pinpointed the combined Dallas/Fort Worth area as the fastest-growing high-tech center in the country. However, Fort Worth saw employment losses in mining and manufacturing in 2000. The December unemployment rate registered 2.6 percent.

**El Paso.** Spurred by steady growth in the maquiladoras, increases in the number of call centers and high construction activity, El Paso's economy continued to chug along at a fairly strong pace. Overall nonfarm employment grew 1.8 percent (4,500 jobs) in 2000. Much of this growth was fueled by firms tied to the maquiladora industry, as jobs in transportation, warehousing, finance, accounting and customs were rapidly added to the economy.

TCPU employment rose 9.2 percent on the year, while services employment increased 3 percent. The apparel industry in El Paso continues to suffer in NAFTA's wake, but emerging maquiladoras have absorbed many displaced workers.

El Paso is a growing hot spot for call centers. Recent investments by insurance and telemarketing firms pushed call center employment to about 9,300 workers. The new centers are increasing their reliance on modern information technology and are demanding employees with better skills. As a result, wages in business services have been climbing. Construction employment increased 5.5 percent, and retail trade grew 1.1 percent, but manufacturing employment declined. The December unemployment rate came in at a record low 7.3 percent.

**Houston.** The Houston economy continued to ride a wave triggered by the coincidence of a strong U.S. and global economy and high energy prices. During 2000, Houston nonfarm employment grew 3.6 percent, adding 73,200 jobs to the local economy. Employment gains were led mostly by the service-producing sectors, with retail trade and TCPU both increasing 3.9 percent and FIRE growing 2.5 percent. Services employment rose 3.6 percent and manufacturing employment 3 percent. Houston's unemployment rate fell to 3.5 percent in December, a half percentage point

below the national rate of 4 percent.

While higher oil prices stoked economic activity in Houston, employment growth in the energy sector was somewhat muted in 2000. Mining employment (which includes oil and gas extraction) grew a moderate 2.9 percent, compared with 3.6 percent statewide. Construction employment grew 6.4 percent. Single-family permits rose 6.2 percent through November, as Houston experienced rather strong demand for new homes. However, multifamily permits dropped 25.6 percent over the same period.

**San Antonio.** Military downsizing and declines in mining and manufacturing employment dampened San Antonio's economic growth throughout most of 2000. However, relative strength in the service-producing sector kept the local economy moving. The combined effect of these forces put total nonfarm employment growth at 2.3 percent (16,400 jobs) on the year. As in most Texas metropolitan areas, San Antonio's labor market was squeezed tight, with the unemployment rate measuring 3 percent in December.

Kelly Air Force Base is set to shut down the last of its operations in 2001. Employment at the facility has dropped from 20,000 in the early 1990s to about 2,400 employees, who will leave over the next several months. Despite this loss and declines in manufacturing employment, the San Antonio economy is in good shape.

Wholesale trade employment grew 3.2 percent in 2000, and retail trade increased 2.7 percent. Services employment grew 2.9 percent. The peso's current strength relative to the dollar, combined with the near completion of construction at the downtown convention center, promises to stimulate retail sales. In addition to a solid trade sector, business services employment will continue to grow as call centers locate in San Antonio.

## Outlook

Moderated economic growth is anticipated in 2001, with a slowing U.S. economy the primary threat to Texas. High energy prices and sustained export trade with Mexico and Asia should buffer the state against unfavorable economic

winds, however. Statewide growth is expected to surpass that of the United States as a whole in 2001.

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## Notes

Thanks to Bill Gilmer, Keith Phillips and Lucinda Vargas for their input and to Mine Yücel and Steve Brown for helpful comments.

<sup>1</sup> All percent changes in employment levels are annualized; seasonal and other adjustments by the Federal Reserve Bank of Dallas.

<sup>2</sup> Sigalla, Fiona, and Mine K. Yücel (2001), "Another Great Texas Boom," Federal Reserve Bank of Dallas *Southwest Economy*, Issue 1, January/February, 1–5.

<sup>3</sup> Some of the record increase in net income emanated from the proceeds from asset sales related to the 1999 merger of Exxon Corp. and Mobil Corp.

<sup>4</sup> These figures from *Stock Performance by Industry*, The Year in Review, 2000, Morningstar, Inc.

<sup>5</sup> Seasonal adjustment by the Federal Reserve Bank of Dallas.

<sup>6</sup> These figures, from Texas A&M International University's College of Business Administration and Graduate School of International Trade, measure the U.S. dollar values of total trade activity through the border cities, including transshipments.

<sup>7</sup> High-tech manufacturing is defined here by Standard Industrial Classifications 357, 366 and 367.

<sup>8</sup> From *Stock Performance by Industry*, The Year in Review, 2000, Morningstar, Inc.

<sup>9</sup> PricewaterhouseCoopers, *MoneyTree U.S. Report*, Third Quarter 2000.

<sup>10</sup> Building permit figures and construction contract values are measured in five-month moving averages.

# Bank Competition in the New Economy

(Continued from front page)

only in the banking sector, but also in the financial sector, which includes banking, insurance, securities underwriting and similar businesses.

This article explores the likely impact of these recent events on both concentration and competition within the banking and financial sectors. It is important to distinguish between concentration and competition. Concentration refers to the market share held by the largest producers in an industry; competition refers to a company's ability to dictate prices. Although the two are linked, highly concentrated industries are not necessarily less competitive. For example, although there are fewer than 10 major banks in Canada (high concentration), the banking system is extremely competitive because all banks compete against each other in every region of the country.

The elimination of some legal restrictions on banks' activities as a result of financial deregulation has contributed to numerous mergers and fewer banks. The impact has been to increase concentration in the banking industry without lessening competition between banks. The effect of technological innovations is less clear. While better technology generally helps lower costs, allowing easier entry by new competitors, it is unclear, long

term, whether increased competition will follow; greater access to a market does not guarantee new entrants success.

## An Engine of Economic Growth and Stability

Although banking has not generated the headlines garnered by the Internet phenomenon, it has been crucial to sustaining the New Economy. Banks have traditionally played the pivotal role in providing financial capital via loans. Over the past few decades, however, firms have gained access to a variety of financing sources (Chart 1). As a result, banks have adapted, with larger banks now also providing venture capital for start-ups and securities underwriting for initial public offerings and with smaller community banks still providing loans for local businesses.

Bank stability has also been critical to our recent prosperity. During much of the 19th and early 20th centuries, every major recession was preceded by bank failures. Since the inception of the Federal Reserve System in 1914, both the banking system and the economy have been far less volatile. The importance of a stable banking sector was also demonstrated recently when economic problems in other countries, such as Japan,

Indonesia and Russia, were all related to unhealthy, fragile banking sectors.

In particular, a comparison with Japan highlights the importance of banking to economic health. While the United States experienced many bank failures during the savings and loan crisis of the late 1980s, it established institutions, like the Resolution Trust Corp., to quickly deal with the failed banks. Once the banking system was restored to health, economic growth ensued. In contrast, Japan did not swiftly reform its banking sector after suffering many large bank failures in the 1990s, and the banking system's ongoing ills have contributed to Japan's 10-year malaise.

Given the importance of the banking sector to economic growth, it is vital to understand how financial deregulation, with the resulting consolidation in the banking sector, and technological evolution, especially the rise of the Internet, will affect the economy. In particular, how does the degree of competition within the banking system affect economic growth and prosperity? And, will the specific events listed above affect the level of competition in the financial sector?

## Financial Sector Structure and Economic Growth

Although recent mergers and legislation are unlikely to lead to a monopoly in financial services, it is, nevertheless, important to understand the effects of reduced competition. There are both detrimental and beneficial aspects of reduced competition in the financial services industry.<sup>1</sup>

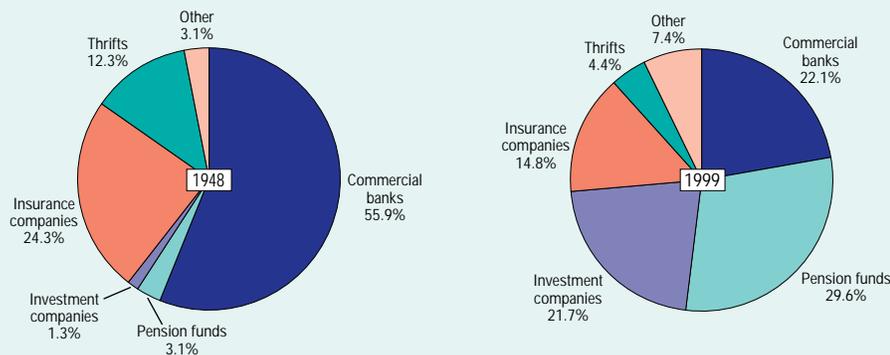
As economics textbooks teach, reduced competition in any market harms the macroeconomy by raising prices and reducing output. In banking, this might translate into higher fees, higher loan interest rates, lower deposit interest rates and fewer new services. Higher loan rates result in less productive and more risky projects obtaining funding and increase the likelihood of bankruptcies and defaults. Lower interest rates on deposits and higher fees for services reduce the savings available to finance investment. These distortions on fees and interest rates reduce productive investment, lessen growth and lower our standard of living.

The benefits of a less competitive banking system are less well known.

Chart 1

### Source of Funds in the United States

Percentage of assets held



SOURCES: Anthony Saunders and Ingo Walter (1996), *Universal Banking: Financial System Design Reconsidered* (Chicago: Irwin Professional Publishing); Federal Reserve Board of Governors.

Reduced competition helps overcome the biggest problem facing borrowers and lenders: a lack of information. Usually, the largest costs banks incur when making loans come from obtaining information about prospective borrowers. With a competitive banking system, it is likely that more than one bank will seek information about a borrower, a cost duplication that wastes resources. Also, once a borrower secures a loan, it is possible for the funds to be redirected to highly risky or inappropriate projects. Monopoly banks, in general, can exert greater influence over how funds are used, since the borrower has no other access to future funds.

Whether the costs of a less competitive banking system outweigh the benefits depends on the severity of the information problems. In the United States, where information retrieval is relatively inexpensive, the costs from a reduction in competition would likely outweigh the benefits, thereby adversely affecting the nation's macroeconomic well-being.

### Will Deregulation Lessen Competition?

Given that less competition is detrimental to the overall economy, what are the likely net effects on the degree of competition as a result of recent deregulation and technological innovation? Financial deregulation, especially laws passed in 1994 and 1999, has spurred considerable merger activity within the banking sector and is also likely to lead to consolidation throughout the financial sector.

**Banking Sector Consolidation.** Like many areas of the economy, the banking sector has experienced numerous mergers of late, notably Citicorp with Travelers Group, NationsBank with BankAmerica and, most recently, Chase Manhattan with J.P. Morgan. These mergers have involved not only the largest banks but also numerous other banks with considerable asset values (*Table 1*).

Many recent mergers have been made possible in part by the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. This law repealed the McFadden Act of 1927 and Douglas Amendment of 1970, which curtailed interstate banking.<sup>2</sup> (*Table 2* summarizes some of this federal legislation.) Since

Table 1

### Dollar Value of Recent U.S. Bank Mergers

Acquired or merged bank		Asset value of acquired/merged firm (in billions of dollars)
<b>Total value for 1998 (Top 50 bank holding companies)</b>		<b>1,017</b>
Largest mergers		
Travelers Group	Citibank	311
NationsBank	BankAmerica and Barnett Banks	304
Bank One Corp.	First Chicago NBD Corp. and First Commerce Corp.	132
<b>Total Value for 1999 (Top 50 bank holding companies)</b>		<b>309</b>
Largest mergers		
Deutsche Bank	Bankers Trust	156
Fleet Financial Group	BankBoston Corp. and Mewan BancShares	76
Firststar Corp.	Mercantile Bancorporation	36
<b>Total Value for 2000 (Top 50 bank holding companies)</b>		<b>494</b>
Largest mergers		
Chase Manhattan Corp.	J.P. Morgan & Co.	282
Citigroup Inc.	Associates First Capital Corp.	93
Wells Fargo & Co.	First Security Corp.	23

SOURCE: Federal Reserve Board of Governors.

1997, banks have been allowed to own and operate branches in different states. Equally important, though, the recent wave of mergers is the result of banks attempting to achieve larger, more cost-efficient organizations. For example, mergers often eliminate duplicate services such as branches, automated teller machines and information technology-related services.

Numerous studies have analyzed the effects of mergers on concentration in banking.<sup>3</sup> Mergers have had little impact on local market concentration. At the national level, mergers have increased concentration somewhat—although not enough to dramatically alter the industry's competitive nature. In addition, the U.S. banking industry remains much less concentrated than that in many coun-

Table 2

### Summary of Federal Banking Legislation

Legislation	Impact
Federal Reserve Act of 1913	Established the Federal Reserve System
McFadden Act of 1927	Placed national and state banks on equal footing regarding branching; prohibited banks from branching across state lines
Banking Act of 1933 and 1935 (Glass-Steagall)	Established the Federal Deposit Insurance Corp.; separated commercial and investment banking
Bank Holding Company Act of 1956 and Douglas Amendment of 1970	Gave the Federal Reserve regulatory oversight and established rules governing bank holding companies
Financial Institutions Reform, Recovery, and Enforcement Act of 1989	Established the Office of Thrift Supervision and Resolution Trust Corp. to clean up savings and loan crisis; provided funding to resolve savings and loan failures
Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994	Allowed interstate banking and branching across state lines
Gramm-Leach-Bliley Financial Services Modernization Act of 1999	Eliminated barriers separating commercial banking, investment banking and insurance

SOURCE: Mishkin, Frederic S. (1998), *The Economics of Money, Banking, and Financial Markets*, 5th ed. (New York: Addison-Wesley).

tries. Finally, increased concentration also leads to greater banking stability. Having more regional and national banks and fewer local banks should reduce the incidence of bank failures because larger banks tend to have more diversified portfolios, which can better absorb adverse economic shocks.

As for competition, there are few signs that banking is becoming less competitive. Recent studies find little evidence of a decrease in the number of small business loans, of higher prices for services or of increased profits resulting from a more concentrated market—all indicators of a less competitive market.<sup>4</sup> Even if the industry were to become highly concentrated, it is doubtful that this would have a negative effect on bank competition. It is probable that our banking system, like Canada's, would have fewer (potentially more efficient) banks, but still be highly competitive. (See box titled "Mergers and New Bank Formation.")

**Financial Sector Consolidation.** In addition to recent banking mergers, consolidation across the financial sector is likely as a result of the passage of the Gramm–Leach–Bliley Financial Services Modernization Act of 1999, which repealed parts of the Glass–Steagall Act (officially known as the Banking Act of 1933). Glass–Steagall had separated banking, insurance and investment banking into three distinct, nonoverlapping sectors (for example, banks could not offer insurance or underwrite securities and vice versa). Although the legal barriers between these three activities had eroded over time, they still prevented banks from completely entering the other two businesses. For example, although Citicorp (a bank) and Travelers Group (an insurance company) merged in 1998, if not for the repeal of Glass–Steagall, Citigroup, the resulting company, would have been required to divest its insurance underwriting business in a few years.

The Financial Services Modernization Act of 1999 will likely foster a consolidation of the financial sector as banks, securities firms and insurance companies combine.<sup>5</sup> Mergers involving banks, insurance companies and investment banks will be motivated by potential economies of scope and diversification rather than by the economies of

## Mergers and New Bank Formation

Although mergers over the past decade have reduced the number of banking institutions in the United States, the increase in bank mergers in the second half of the 1990s also coincided with an increase in new bank charters. Economic research has yet to establish a conclusive connection (causality) between these two events. Seelig and Critchfield (1999) find that mergers do not lead to increased bank formation. Consolidation within a local market results in fewer, more concentrated banks that can more easily act to bar potential entrants.

However, Berger et al. (1999) find that mergers can increase new bank formation. Mergers often involve acquisition of smaller banks by larger banks or local banks by distant banks, leading to a reduction in personal, local services and dissatisfaction among the acquired bank's customers. This provides a market for new, local banks to serve the dissatisfied constituents. Keeton (2000) also finds that mergers are likely to lead to new bank formation.<sup>1</sup> This relationship is strongest when mergers involve smaller banks being acquired by larger banks or local banks by distant banks.

Thus, merger activity appears to provide the stimulus for new bank formation. This is an additional reason why the banking sector will continue to be competitive in spite of (or as a result of) recent merger activity.

<sup>1</sup> This article provides a good overview and explanation of the other two articles cited above.

scale that motivate mergers solely between banks. Recent studies conclude that banks benefit from diversifying into certain types of insurance underwriting and that investments in insurance underwriting and securities brokerage can reduce the probability of insolvency.<sup>6</sup>

In the end, consolidation will likely help to create a single, unified financial market where firms and individuals can address all their financial needs at a single integrated financial company. Economic research suggests that removal of statutory barriers between banking, insurance and securities will result in fewer banks but a more competitive financial system.<sup>7</sup> As with mergers within the banking sector, consolidation will likely occur within the financial sector without an appreciable loss of competition.

## Technology, Banking and the New Economy

In addition to the legal reforms, another major force affecting the banking industry is the rapid advancement in technology and the Internet. Consolidation in financial markets, along with technological advances, may bring about one-stop financial shopping at a potentially limited number of large, national financial institutions. If this happens, it is not clear how concentration in the industry will affect competition. In addition, the Internet is creating considerable competition to traditional banks from firms both in and out of the financial sector. Whether these new firms can remain in business and provide sustained com-

petition is an open question, especially given the recent rash of business failures in the high-tech sector. Thus, the overall impact of technological change on competition in the financial system is ambiguous.

**One-Stop Shopping.** Technological advances, combined with recent legislative reforms, make it easier and more efficient for firms to obtain financing from a single entity capable of handling everything from loans to stock offerings to insurance. This one-stop shopping should reduce the costs firms currently incur finding various companies to meet these different needs. It will also lessen the information-gathering costs finance companies incur by facilitating more efficient exchanges of information. Both of these benefits strengthen the competitive environment. These cost-saving benefits also apply to consumers, who, for example, can use the Internet to find multiple rates for car loans and mortgages.

However, there are two other issues to consider when examining competition. First, the creation of integrated finance companies may result in a few extremely large, national financial companies but eliminate small local firms from the industry because they lack economies of scale. These few large firms may, or may not, compete fiercely across all local markets. Second, it is not clear whether these integrated financial companies will actually emerge and dominate the market. With lower search costs, both businesses and consumers may find

it cost-efficient to continue using different financial companies to handle their various needs. This would eliminate the anticipated savings derived from having integrated financial companies. Consequently, the impact on competition is unclear.

**The Internet and Outside Competition.** The Internet and new technologies may also increase competition by making it harder to exclude new entrants. New technology makes both workers and machines more efficient, thereby reducing fixed costs, start-up costs and operating costs. This makes it easier for potential new competitors to enter a market.

With the advent of Internet banking, new banks (both large and small) are able to compete against the more traditional bricks-and-mortar banks. In the last two to three years, the banking sector has seen the formation of stand-alone Internet-only banks, nonbanking businesses forming Internet banks and large, traditional banks forming Internet-only banks. Thus, it has already become extremely hard to exclude new banks from a market. However, merely having access to the market is not sufficient to guarantee competition. Some smaller banks have decided not to form Internet-only banks because they do not have the resources to compete. Also, many Internet-only banks have either merged, exited the market or been swallowed up by more traditional banks.<sup>8</sup>

In addition to competing with Internet start-ups, traditional banks are beginning to face competition from non-financial sources, including AOL Time Warner, Microsoft Corp., Yodlee and CheckFree Corp. Two major areas of new competition are electronic bill payment and presentment (EBPP) and account aggregation (the ability to view all one's financial accounts on a single web page). Both EBPP and account aggregation have recently become areas of intense competition between banks and non-banks. Many companies in addition to banks, including the U.S. Postal Service and Microsoft, offer bill-payment services, while most portals, such as Yahoo!, and financial web sites, such as Quicken.com, offer account aggregation. In fact, account aggregation was provided by nonbank firms long before many larger banks, such as Citigroup,

began offering this service. Thus, in the future, traditional banks could face greater competition sparked by new technology and the Internet. However, the long-term viability of these new competitors, as well as traditional banks' forays into the Internet, remains uncertain.

## An Evolving, Competitive Banking System

An important, although often overlooked, source of our recent economic prosperity has been our healthy and stable banking sector. While avoiding major problems, the banking and financial sectors have been subject to numerous changes that have affected their underlying structure.

The two major forces affecting competitiveness have been financial deregulation and technological innovation. As a result of deregulation, merger activity within the banking sector will continue, albeit at a slower pace, while the extent of merger activity in the broader financial sector is still unclear. Although these consolidations are likely to result in a more concentrated banking sector, the impact on financial market competition will probably be negligible. Mergers will lead to fewer, larger banks that compete fiercely across national markets and may spur new, smaller competitors at the local level.

The effects of consolidation may also be more than offset by the increased competition stemming from the Internet and new technologies that make it easier for both nontraditional banks and non-bank firms to compete with more traditional banks.

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## Notes

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<sup>1</sup> Guzman (2000) provides a detailed overview of some of the recent literature examining the theoretical impact of financial sector market structure on the economy. See the references therein for a more detailed explanation of some of the ideas mentioned in this section.

<sup>2</sup> Not all interstate branching was eliminated, since various states entered into regional pacts that allowed some interstate branching or holding companies.

<sup>3</sup> For recent works, see Stiroh and Poole (2000), Osterberg and Thomson (1999), DeYoung (1999) and Moore and Siems (1998).

<sup>4</sup> Although fees for some services (ATM, overdraft and so forth) have been rising, these increases are not directly linked to greater concentration and less competition in the banking sector.

<sup>5</sup> As of March 2, 2001, the Federal Reserve Board had granted 509 firms financial holding company status, a first step toward being allowed to combine banking, insurance and securities underwriting.

<sup>6</sup> For recent work regarding the impact of banks' expansion into insurance and securities underwriting, see Laderman (2000) and the references therein.

<sup>7</sup> See Boot and Thakor (2000).

<sup>8</sup> Examples of Internet-only banks include Net.B@ank and First Internet Bank of Indiana; an example of a nonbank is Sony; examples of traditional banks include Citigroup's Citi f/i and Bank One's Wingspanbank.com. North Fork Bancorporation is an example of a bank that decided against an Internet bank due to cost constraints. Finally, Citigroup's Citi f/i is an example of an Internet-only bank that has been absorbed by its bricks-and-mortar parent company.

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## Why Free Trade in the Americas?

This April Quebec City will host the third summit of the ongoing Free Trade Area of the Americas (FTAA) initiative. But even though President Bush will attend and has made trade liberalization in the Americas a high priority for his administration, many Americans' attitude toward FTAA—if they are aware of it at all—is likely to be “So what?” Compared with the time and space the media devote to other topics, the attention FTAA has received in recent years suggests that a free trade agreement spanning the Western Hemisphere carries far less news value than the average four-car pileup.

But FTAA is much more important to the economies of the Americas than this lack of interest would indicate. FTAA would mean lower trade barriers in Latin American countries, where average tariffs are two to three times those in industrialized countries.<sup>1</sup> Some Latin Americans oppose FTAA because they believe their countries would bear the brunt of virtually all the agreement's trade liberalization. Where is the benefit, they ask, when the United States already has such low tariffs that an FTAA agreement will not lower them much more? What they fail to consider is that even though average U.S. tariffs are markedly lower than those of Latin American countries, some types of U.S. protectionism are very high. Some of the products on which U.S. trade barriers are highest—and most damaging to U.S. consumers—are those for which Latin America has a marked cost advantage.

A second reason for FTAA is that trade agreements typically induce participants to trade more.<sup>2</sup> Rivera-Batiz and Romer (1991), among others, demonstrate that economic integration—and that is what FTAA would be—accelerates economic growth. As a corollary, Frankel and Romer (1999) find a correlation between the importance of trade in a country and the country's income level. Moreover, the direction of causality runs from trade to income, not the other way around.

Coe, Helpman and Hoffmaister (1997) show that productivity growth in developing countries increases with the openness of their trade with developed countries and with the research and development efforts of their industrialized trading partners.

And yet most Western Hemisphere developing countries, the targets of the FTAA, are not very open to trade and also do not generally trade very much.<sup>3</sup> For the average lower or middle-income country—a broad category that includes all Western Hemisphere nations except the United States and Canada—exports as a percentage of GDP run about 21 percent. Exports of Latin American and Caribbean countries average about 14 percent of GDP; South American countries separately average about 11 percent. Chart 1 compares Latin American and Caribbean export-to-GDP percentages with those of selected countries and regions of the world, and the differences are striking.

A partial explanation for these low trade ratios is the distance of the more remote Latin American nations from potential industrialized trading partners. Another is that the high tariff barriers of Latin American countries compared with developed countries affect not only

imports but also exports. High tariff barriers, after all, make imports more costly. When these imports are used as inputs to products that are exported—or when they embody new technologies that make production of potential export products cheaper and more efficient—then high import barriers also mean low export-to-GDP ratios. Moreover, as previously noted, lower trade generally means lower GDP.

### Why Liberalize Trade?

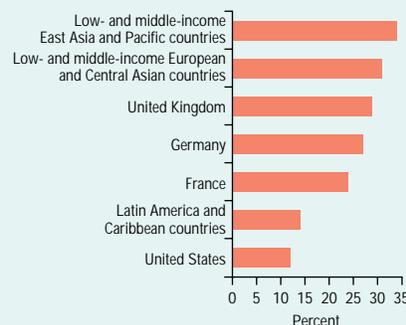
To answer the question “So what?” about trade agreements, politicians who advocate trade liberalization generally respond that it provides more jobs. Jobs are a red herring. While trade liberalization typically results in increased output by each participating country, the real benefit is increased efficiency in the form of higher output per worker even if no more workers are employed. The reason is that protectionism not only discourages imports but also creates artificially high profits in protected industries, diverting resources away from more productive and efficient but less protected industries.

In addition to artificially high profits, protectionism promotes inefficiency. Using data from a 1981 survey of more than 3,000 Brazilian firms, Braga and Willmore (1991) find that the firms' likelihood of purchasing foreign technology or of developing their own technology through research and development was negatively related to the degree to which their industries were protected from foreign competition. If you don't have to compete, why mess with success?

Opponents of trade liberalization look at it another way. They remind us that if these protected industries had to compete on world markets, many would close and their employees would lose their jobs. A closer look shows that the factors of production (labor and capital) devoted to these industries would be reallocated to business endeavors that could be profitable without charging the

Chart 1

### Exports as a Percentage of Gross Domestic Product



SOURCE: World Bank.

consumer-gouging prices that government protectionism allows. This does mean, however, that during the transition from protectionism to trade liberalization, some types of labor and capital would be out of work.

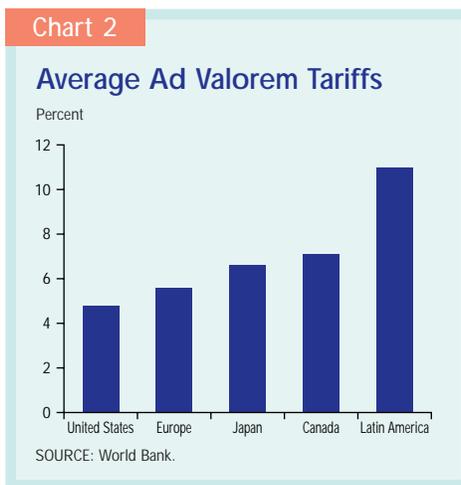
It is instructive, though, to consider the cost of preserving their employment in protected industries. In a 1990 study of 21 trade-protected U.S. economic sectors, Hufbauer and Elliott (1994) report that the average annual cost to Americans per job saved as a result of trade barriers was \$54,348. In contrast, average earnings per year per worker in these industries was \$15,649. In one sector—sugar production—the cost per year per job saved was \$256,966, even though the average worker earned only \$21,810 per year. In peanut production—another highly protected endeavor—the average cost per job saved was \$55,416, but the average annual salary was just \$17,104. Eleven years after this study, many of the same products are still highly protected.

### The Price of Protectionism

Indeed, while many Americans believe that the United States and other developed countries have lowered trade barriers across a broad front, the overall picture is more complicated. It is true that the average tariff on industrial goods imported into industrialized countries dropped from roughly 40 percent in 1947 to 1.5 percent by the late 1990s (Hertel 2000).<sup>4</sup> However, agricultural protection has risen from about 30 percent in the late 1960s to 60 percent in 1998 (Roberts et al. 1999).

There is a reason for the conventional wisdom, though. On average, trade barriers in developed countries are lower than those of developing countries. Chart 2 shows that average tariffs in Latin America are in the 11 percent range, compared with 4.8 percent for the United States, 5.6 percent for the European Union, 6.6 percent for Japan and 7.1 percent for Canada. But these are just averages. In fact, U.S. tariffs exceed 12 percent for approximately one-tenth of the types of products imported, and the closer you look, the worse it gets.

For example, under the putatively trade-liberalizing Uruguay Round, the United States imposes import quotas on



many products. Import quantities above these quotas then incur so-called tariff peaks, one-fifth of which exceed 30 percent ad valorem. Such peak tariffs apply to cow's milk (66 percent), yogurt (63 percent), butter (80 percent), cheese (42 percent), raw cane sugar (90 percent), peanuts and peanut butter (132 percent), chilled/frozen beef (26 percent) and sports footwear with fabric uppers (58 percent) (United Nations Conference on Trade and Development 2000). Under the Generalized System of Preferences, developing countries can export a limited number of the products at half these rates before the peak tariffs go into effect. But even at one-half off, these tariff rates hurt consumers. Also, as noted previously, only a small portion of the total income the protected companies make as a result of protectionism goes to reimburse workers.

To put these rates in perspective, it should be noted that Japanese peak rates for many products are far higher than those of the United States. In fact, based on peak rates, Japan is far more protectionist than any other developed country. Nevertheless, the fact remains that despite the ho-hum attitude of American consumers, they—and their counterparts in other Western Hemisphere countries—continue to feel the effects of punishing trade barriers.

—William C. Gruben

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### Notes

- <sup>1</sup> Latin American tariffs are higher than those in industrialized countries even though Latin American countries have generally lowered their tariffs significantly in recent decades.
- <sup>2</sup> Some Americans do not want more trade in any event, on the grounds that it leads to environmental damage. For a related article, see Gruben (2000).
- <sup>3</sup> Mexico is an obvious exception.
- <sup>4</sup> Industrialized countries here are members of the Organization of Economic Cooperation and Development, which includes the United States, Canada, Japan, the European countries and, as a recent inductee, Mexico.

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