

## TEXAS UPDATE AND OUTLOOK

**T**HE TEXAS ECONOMY slowed dramatically in 1998. Total nonfarm employment grew at only a 3.3-percent annual rate in the first 11 months of the year, after very strong 4.6-percent growth in 1997. Furthermore, as Chart 1 illustrates, Texas employment growth slowed throughout the year. Total nonfarm employment grew at a 4.1-percent annual rate in the first half of 1998, at a 2.6-percent annual rate in the third quarter and at only a 2-percent annual rate in the fourth quarter (October and November).

Although all major sectors of the economy slowed from the torrid pace of 1997, weakness in the Texas economy was confined generally to the mining, manufacturing and agricultural sectors. Led by strong growth in business services and transportation, service sector employment grew at a 3.6-percent annual rate in 1998. Meanwhile, rising rents and low vacancy and interest rates fueled a banner year for the Texas construction industry. Office and apartment vacancy rates in Austin, Dallas, Fort Worth and Houston are all lower now than they were during the go-go days of the early 1980s.

Lower energy prices are the primary reason for weakness in the mining sector. Oil prices declined nearly 40 percent during 1998, while natural gas prices declined 25 percent. As Chart 2 illustrates, Texas drilling activity declined with prices. Employment in oil and gas extraction fell by 7,500 workers (5 percent), and the Texas rig count fell by 162 rigs (44 percent).



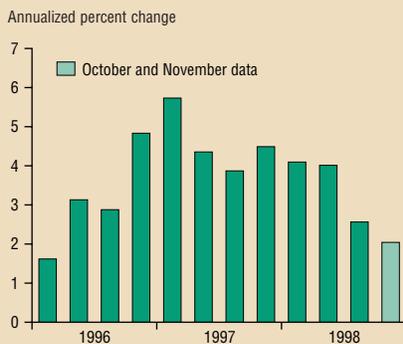
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*Do International Financial Crises  
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*Low prices and weak export markets both contributed to a bad year for Texas agriculture, but the primary culprit was Mother Nature.*

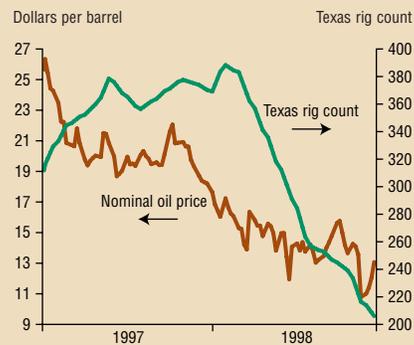
**CHART 1  
GROWTH SLOWS  
THROUGHOUT THE YEAR  
(Texas nonfarm employment)**



Much of the weakness in the manufacturing sector can be traced to economic weakness overseas. Texas real exports have declined for three consecutive quarters (Chart 3). In the first half of the year, modest increases in exports to Canada and Mexico partially offset declining exports to Asia and Latin America, but by the third quarter, exports to Texas' NAFTA partners also had declined. Texas exports are down especially sharply in energy products and agricultural crops.

Low prices and weak export markets both contributed to a bad year for Texas agriculture, but the primary culprit was Mother Nature. Severe drought devastated crop yields across the state and forced ranchers to liquidate their herds.

**CHART 2  
OIL SECTOR TANKS**

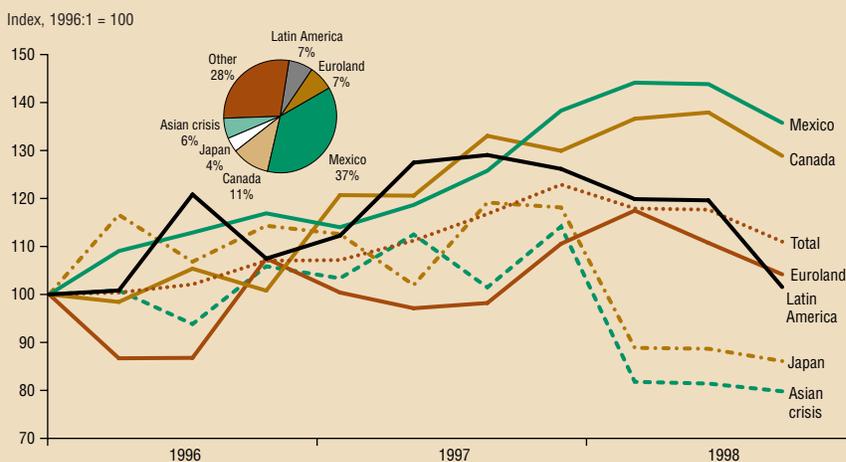


**Strong Economic Head Winds Should Continue to Blow in 1999**

Strong economic head winds will slow Texas economic activity in 1999. In particular, the state's economy will continue to face low oil prices, tight labor markets and weakened trading partners.

**Low Oil Prices.** Industry contacts report that energy producers are pulling back hard in preparation for a prolonged period of low prices. The futures market is forecasting a marked increase in oil prices by the end of 1999. However, even if the price of West Texas Intermediate crude returns to the \$14 range, the price will still be below the cost of production for some

**CHART 3  
TEXAS REAL EXPORTS DECLINE**



NOTE: Asian crisis includes Indonesia, Malaysia, Philippines, South Korea and Thailand. Latin America includes Argentina, Brazil, Colombia and Venezuela. Euroland includes Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.

**TABLE 1**  
**UNEMPLOYMENT RATES FOR**  
**TEXAS MSAs, NOVEMBER 1998**

Bryan	1.7	Tyler	4.6
Austin	2.5	Wichita Falls	4.8
Lubbock	2.8	San Angelo	5.2
Dallas	3.0	Sherman	5.5
Fort Worth/	3.0	Brazoria	5.8
Arlington		Galveston	6.1
Amarillo	3.3	Texarkana	6.2
San Antonio	3.3	Midland–Odessa	6.4
Abilene	3.6	Corpus Christi	6.5
Waco	3.6	Beaumont	7.3
Killeen	3.8	Longview	7.5
Houston	3.9	Laredo	9.3
Victoria	4.4	El Paso	9.9
		Brownsville	11.6
<b>U.S. Average</b>	<b>4.4</b>	McAllen	17.0

Texas firms, and the energy industry should continue to shrink.

The merger mania that has taken hold in the industry could also lead to substantial job cuts. For example, the British Petroleum–Amoco merger is expected to reduce worldwide employment in the two firms by 6,000 jobs, many of which may be in Texas. Similarly, the proposed Exxon–Mobil merger is expected to reduce worldwide employment in the two firms by 9,000 jobs. However, Texas could actually gain jobs if the merged firms consolidate into the region.

**Tight Labor Markets.** Unemployment rates remain below the national average in many parts of the state (Table 1), and the national average is low enough to be considered full em-

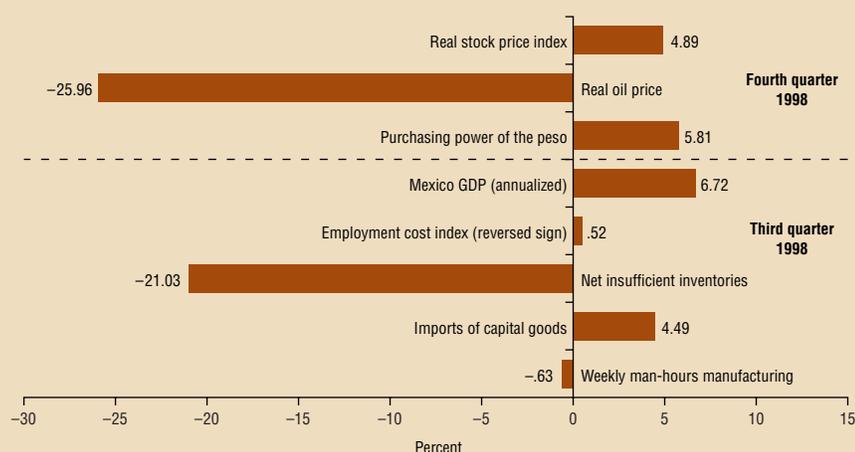
ployment by many analysts. In a full employment environment, labor force growth limits employment growth (see box entitled “Labor Market Tightness”), and Texas will be hard pressed to generate labor force growth much in excess of 2 percent in 1999. Because labor markets are much tighter in north and central Texas than they are along the Gulf Coast or the border, difficulties finding workers are more likely to restrain growth in the Dallas/Fort Worth area than in Corpus Christi or El Paso.

**Weakened Trading Partners.** None of Texas’ major trading partners is in particularly robust health, so export growth is likely to be anemic in 1999. Mexico continues to post solid GDP numbers; however, other economic data suggest weakness (Chart 4). Falling oil prices are a significant drag on the Mexican economy and have forced the Mexican government (which receives more than a quarter of its revenues from oil) to adopt an austere budget for 1999. The real peso has regained some of its recent losses in purchasing power relative to the dollar, primarily because Mexican inflation has risen sharply. The purchasing power of the average Mexican consumer has probably not improved. Texas retailers indicate that sales to Mexican nationals have been disappointing.

Canadian purchasing power fell even more than Mexican purchasing power in 1998 (Chart 5). Exports to Canada (Texas’ No. 2 trading partner) fell 6.6 percent in third quarter 1998 and are

*Even if the price of West Texas Intermediate crude returns to the \$14 range, the price will still be below the cost of production for some Texas firms, and the energy industry should continue to shrink.*

**CHART 4**  
**MEXICAN ECONOMIC INDICATORS**



## Labor Market Tightness

For several years, Texas has been in the grips of a tightening labor market. Firms across the state (but especially in major metropolitan areas away from the Mexican border) have reported increasing difficulty finding all types of workers—from secretaries to statistical programmers. Industry contacts report they are turning away business because they don't have enough staff to do the work.

Labor market tightness has simple causes. For employment to grow, one of three things has to happen—the population has to grow, labor force participation has to rise or the unemployment rate has to fall.

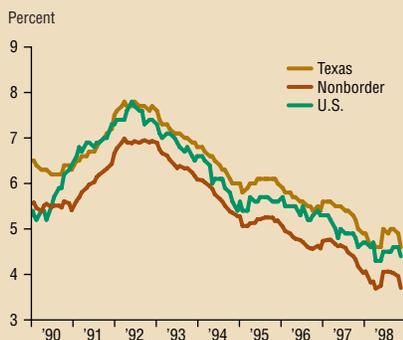
Slow population growth is not the source of Texas' tight labor markets. Texas population has grown at twice the national rate, or nearly 2 percent per year, throughout the 1990s. Two important factors explain the faster growth—a faster rate of natural increase (meaning that Texas' young population produces substantially more births than deaths each year) and strong net domestic migration (meaning that more people from other states move in than Texans move out).

Texas population growth may be strong, but at more than 3 percent per year, the state's typical job growth is even stronger. Sustaining job growth greater than population growth requires either that an increasing fraction of the population enter the labor force each year or that the unemployment rate fall.

Because the labor force participation rate has held steady at roughly the national rate throughout the 1990s, the unemployment rate has been taking up the slack. Texas' unemployment rate has dropped to its lowest level in over 18 years (see chart). Take out the border, and the rest of the state's unemployment rate is below 4 percent. Four percent unemployment is well below the rate that most economists use to define full employment.

In a full employment environment, labor force growth limits employment growth and, barring a major change in the labor force participation rate, population growth limits labor force growth. Because there is no reason to believe that the rate of population growth has increased recently or is going to increase much in the near future, tight labor markets are likely to restrain Texas employment growth for some time.

### FALLING UNEMPLOYMENT RATE TAKING UP THE SLACK



unlikely to rebound much in the near term. The sharpest declines in exports came in oil and gas, furniture and primary metals.

Elsewhere, Japan continues to be mired in recession, the Asian crisis countries (Indonesia, Malaysia, Philippines, South Korea and Thailand) are at best bouncing along the bottom, the European economies are expected to slow and recent political events in Brazil and Venezuela have increased concern about Latin America.

### Outlook for 1999:

### Slower Growth but No Recession

The construction industry should continue to register solid growth in 1999. The industry weathered a financing scare in fall 1998 that industry contacts view

as the pause that refreshes. Concerns about overbuilding have eased somewhat, and builders who were cut off by the pullback of real estate investment trusts (REITs) and insurance companies

are finding other, more conventional sources of finance. Housing markets are generally tight, although Houston contacts report that some buyers are backing out of contracts. Residential rents are increasing at twice the rate of inflation and have been rising faster in Texas than in the nation as a whole—two factors that should fuel continued building activity in 1999. There should also be a substantial increase in high-way construction in 1999.

High-tech manufacturing should contribute more to the economy in 1999 than it did in 1998. The Semiconductor Industry Association predicts that sales will grow 9 percent in 1999, after shrinking nearly 11 percent in 1998.<sup>1</sup> Computer industry contacts report that PC sales have increased. Continued concerns about the Year 2000 problem may also foster some increase in sales of computers and computer equipment in 1999 (although a 1999 sales binge could mean a hangover for the computer industry in 2000).

Exports, agriculture and energy will be a drag on the Texas economy, but are unlikely to completely upset the economic apple cart. Texas is much less sensitive to energy prices now than it was during the early 1980s (see box entitled "The New Texas Economy"). Resources that are freed up from these industries are likely to be snapped up by other industries looking to expand, thereby easing some of the problems created by tight labor markets.

**Bottom Line.** As long as the U.S. economy continues to grow, the Texas economy should do likewise. We expect that Texas employment will grow approximately 2 percent in 1999, thereby registering the 11th consecutive year in which Texas employment growth exceeds the national average.

—Lori L. Taylor  
Stephen P. A. Brown  
Fiona Sigalla  
Mine K. Yücel

### CHART 5 DECLINING PURCHASING POWER OF NAFTA TRADING PARTNERS

Index, January 1990 = 100



### Note

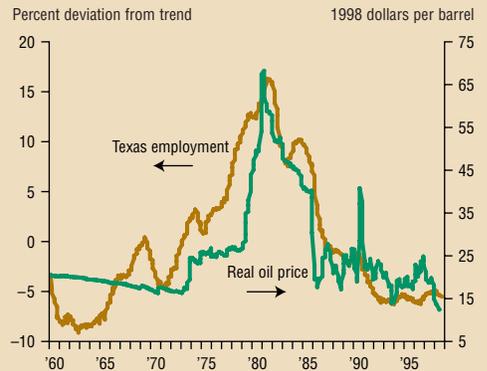
<sup>1</sup> See Dean Takahashi (1998), "Chip Industry Forecasts a Broad Recovery," *Wall Street Journal*, November 12, A3.

# The New Texas Economy

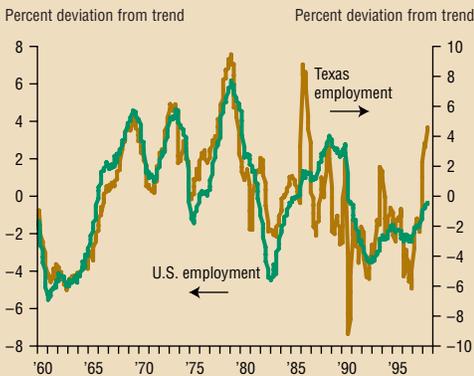
The last time nominal oil prices hit \$11 per barrel—in 1986—the Texas economy fell off a cliff. This time the economy is likely to do little more than stumble.

Chart A illustrates the strong correlation between oil prices and the Texas economy during the 1980s. The figure plots inflation-adjusted oil prices and deviations from trend employment. Deviations from trend employment indicate the extent to which the actual level of employment differs from the level of employment one would have expected if the economy were growing at its long-term trend rate of growth (3.3 percent per year). When the deviations are rising (as was the case during the boom), employment is growing faster than trend. When the deviations are falling (as was the case during the bust), employment is growing more slowly than trend. A horizontal line indicates that employment is growing at trend.

**CHART A**  
**TEXAS' HISTORIC SENSITIVITY TO OIL PRICES**



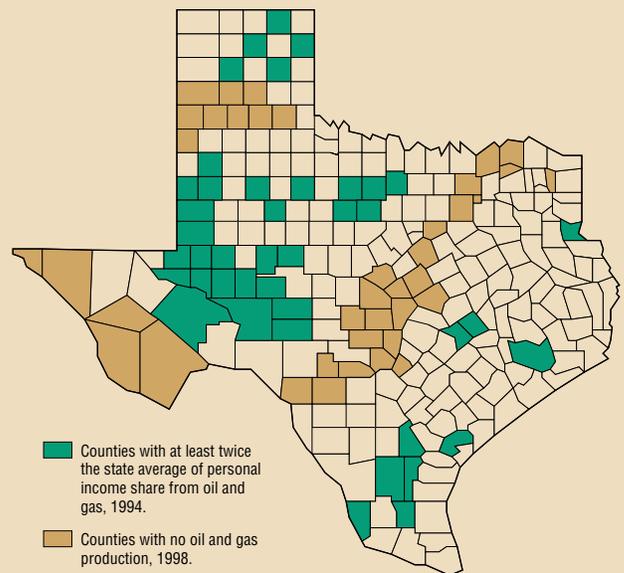
**CHART B**  
**TEXAS AND U.S. EMPLOYMENT CLOSELY RELATED**  
*(Controlling for oil)*



If we assume that the influence of oil prices has remained unchanged and remove it from the picture, we can see a fairly strong, historical correlation between Texas and U.S. employment (*Chart B*). However, the relationship seems to have broken down recently. Controlling for the negative influence of falling oil prices, Texas was well above its long-term trend in 1998, while the United States was not. In other words, the Texas economy is doing much better than would be predicted on the basis of its historical relationships with oil prices and the U.S. economy. This evidence implies that either Texas' economic relationship with the United States has changed or the economic influence of oil prices has changed.

Work by Dallas Fed economists Stephen Brown and Mine Yücel suggests that the economic influence of oil prices has changed. Although Texas is still hurt by falling oil prices, Brown and Yücel estimate that the state is 75 percent less sensitive to oil price fluctuations today than it was in 1982. In 1982, a 10-percent reduction in oil prices would have reduced total Texas employment by an estimated 1.37 percent when multiplier effects are included. In 1998, the same 10-percent reduction would lower total Texas employment by an estimated 0.36 percent (about 32,000 jobs) including multiplier effects. Even with the slower growth the state experienced in 1998, Texas still added nearly 24,000 jobs per month.

**CHART C**  
**THE DISTRIBUTION OF OIL AND GAS ACTIVITY IN TEXAS**



One reason for the declining influence of oil prices is the rising importance of energy consumers to the Texas economy. For example, the airline industry had a very good year in 1998 and would benefit substantially from continued low fuel costs. Three of the nation's top seven airlines are based in Texas (American, Continental and Southwest).

Although falling energy prices are becoming less influential for Texas as a whole, they are likely to have a substantial influence on the distribution of economic activity in the state. As Chart C illustrates, Mother Nature serves Texas Tea in only some parts of the state; in other parts, energy consumers dominate the economic landscape. For example, in Dallas/Fort Worth, which represents one quarter of economic activity in the state, the transportation industry is much more important than the energy industry. The total employment of Dallas/Fort Worth mining firms approximately equals the local employment at American Airlines alone. Total transportation employment is more than seven times mining employment in Dallas/Fort Worth. Therefore, Dallas/Fort Worth may benefit from lower oil prices, while other parts of the state—such as Houston—will undoubtedly lose.

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# THE CHURN AMONG FIRMS

## *Recycling America's Corporate Elite*

**N**OTHING LASTS FOREVER. The maxim is particularly apt when it comes to America's dynamic economy. Each day brings something new. Companies expand into new markets, and they downsize. They add new products and discontinue others. In three short years, an enterprise like Amazon.com can go from start-up to a market value of \$17 billion—surpassing even that of century-old Sears.<sup>1</sup> Boeing buys McDonnell Douglas; Citicorp absorbs Travelers; Exxon merges with Mobil. These events are only a sampling of the way our economy continually shifts. Recent generations have witnessed mind-boggling transformations in the way we work, what we consume and how we do business. Change may be the only constant in our vibrant capitalist system.

A few years ago, the Federal Reserve Bank of Dallas' Annual Report focused on economic change. An essay titled "The Churn: The Paradox of Progress" examined the economic forces that continually roil labor markets.<sup>2</sup> Jobs are created and destroyed as new ideas, new products, new technologies, new markets and new forms of industrial organization upset the status quo. The essay emphasized that this relentless, unsettling mechanism—what economist Joseph Schumpeter called "creative destruction"<sup>3</sup>—isn't a curse on the capitalist system. To the contrary, it is the way to economic progress and higher living standards.

Economic forces don't agitate only labor markets, though. They also produce a corresponding "churn" among employers. Companies, just like jobs, are in a constant state of flux. Every day, new firms are born. Every day, some enterprises gain sales and profits while others lose them. Every day, companies merge, divest, downsize and go out of business. As with the churn of

employment, this process is ultimately healthy for the economy.<sup>4</sup> It shifts resources to more productive uses, and it rewards companies for giving consumers better products, greater variety and lower prices.

The churn is most apparent among small enterprises, which are often launched with great energy and optimism but too little financing and experience. Some start-ups do make it, but small businesses fail at a high rate.<sup>5</sup> This sector of the economy would serve as a good illustration of the churn at work, but data on small private companies are sketchy. Larger, publicly held companies are only part of the economy, but regular reports on their activities produce a comprehensive and reliable picture of the shifting fortunes of American business.

A series of five snapshots of the corporate elite provides a long-term view of the churn among firms (*Table 1*). In the early years of this century, companies engaged in the production of metals, oil, meatpacking and basic machinery dominated the U.S. economy. They were, in their own ways, the technology leaders of their day. They introduced new products and new production methods and emerged as national suppliers to an early industrial economy.

Although General Electric, AT&T and the big oil companies have remained among the largest U.S. industrial concerns decade after decade, newcomers are always driving toward the top of the rankings. At the end of World War II, the producers of everyday products—for example, Coca-Cola and Kodak—made the top 20, evidence the nation had begun its move from mass production to mass consumption. In the past decade, such companies as Microsoft, Intel and Cisco Systems have jumped into the top echelon, testimony to the micro-chip's growing importance to the American economy. The rankings of Merck,

Pfizer, Bristol-Myers Squibb and Eli Lilly reflect the advances in pharmaceuticals.

The churn is as relentless in the corporate sector as it is in the labor market. Of today's 100 largest public companies, only five are holdovers from the top 100 of 1917. Half the firms in the top 100 are newcomers over just the past two decades. Although flux is a constant for the economy, the evidence suggests that the pace has picked up. In the 60 years after 1917, it took an average of 30 years to replace half the companies in the top 100. Between 1977 and 1998, supplanting half the top 100 required an average of 12 years, nearly tripling the turnover rate.<sup>6</sup>

## *Market Capitalization Soars*

Expanding the inquiry to cover *all* publicly held U.S. companies, ranked by change in market capitalization since 1990, provides a more detailed portrait of the economy's shifting ground. During the current eight-year expansion, the market value of the overwhelming majority of companies has increased. Indeed, the total market capitalization of U.S. companies has soared from \$2.6 trillion to almost \$10 trillion during the decade.<sup>7</sup> Beneath the surface, however, a lot of churning has occurred. To depict the changing fortunes of America's companies, we looked at the relative performance of market capitalization—firms moving up and down in the pecking order. When the market-value ranking of Cisco Systems, a major Internet supplier, jumped from 956 in 1990 to 15 in 1998, it reflected vast shifts in how consumers are spending their money. Oshkosh B'Gosh, a maker of children's clothing, dropped from 967 to 2,479, suggesting it didn't fare as well.

For the economy as a whole, it's been a dynamic time. Two entirely new

**TABLE 1**  
**AMERICA'S TOP 20**

Rank	1917	1945	1967	1987	1998 (August)
1	U.S. Steel	AT&T	IBM	IBM	General Electric
2	AT&T	General Motors	AT&T	Exxon	Microsoft
3	Standard Oil of New Jersey	DuPont	Kodak	General Electric	Coca-Cola
4	Bethlehem Steel	Standard Oil of New Jersey	General Motors	AT&T	Exxon
5	Armour & Co.	General Electric	Standard Oil of New Jersey	General Motors	Merck
6	Swift & Co.	Union Carbide	Texaco	DuPont	Wal-Mart
7	International Harvester	Humble Oil & Refining	Sears, Roebuck	Ford	Pfizer
8	DuPont	Sears, Roebuck	General Electric	Merck	Intel
9	Midvale Steel & Ordnance	U.S. Steel	Polaroid	Amoco	IBM
10	U.S. Rubber	Texas Co.	Gulf Oil	Digital Equipment	Procter & Gamble
11	General Electric	Coca-Cola	DuPont	Philip Morris	Philip Morris
12	International Mercantile Marine	Standard Oil of Indiana	Xerox	Chevron	Bristol-Myers Squibb
13	American Smelting & Refining	Standard Oil of California	Minnesota Mining & Manufacturing	Sears, Roebuck	Lucent Technologies
14	Anaconda Copper Mining	Chrysler	Standard Oil of California	Mobil	Johnson & Johnson
15	Standard Oil of New York	Kodak	Mobil	BellSouth	Cisco Systems
16	Phelps Dodge	Gulf Oil	GTE	Kodak	AT&T
17	Singer	International Nickel	Avon	Standard Oil	American International Group
18	Jones & Laughlin Steel	Socony-Vacuum Oil	Hewlett-Packard	Hewlett-Packard	Berkshire Hathaway
19	Westinghouse Electric	Kennecott Copper	Procter & Gamble	Coca-Cola	Eli Lilly
20	American Tobacco	Pennsylvania Railroad	Standard Oil of Indiana	Wal-Mart	SBC Communications

NOTE: Rankings are based on market value.

SOURCES: *Forbes*, July 13, 1987 (1917, 1945, 1967, 1987); Standard & Poor's Compustat database (1998).

categories of companies have emerged in the 1990s—biological products and computer communications (Internet). In eight years, hundreds of new firms have entered the rankings and zoomed past such established companies as Tandy, Sunbeam and Pizza Inn. Falling in the rankings, however, doesn't necessarily mean failure. An overwhelming majority of companies increased their market value. For example, Sears, Roebuck and Co.'s value on financial markets nearly doubled from 1990 to 1998. Nevertheless, Sears' ranking in corporate America

fell 66 places—from 87 to 153, proving that even well-run, profitable enterprises have found it difficult to stay up with the streaking Microsofts and Intels.

The gainers during 1990–98 were technology, finance and health care. Consumer products, both perishables and durables, maintained their large chunk of the economic pie. The share of market capitalization slipped in recent years for utilities, energy and basic materials. Some highlights from the data:<sup>8</sup>

- Companies on the upswing include Disney and Time Warner, a re-

flection of the rise of information and entertainment. Holding its place among the corporate elite was McDonald's, the quintessential expression of America's taste for fast food. Starbucks, the ubiquitous purveyor of coffee, came out of nowhere to rank among the 500 largest U.S. companies.

- The number of pharmaceutical companies increased by 103 between 1990 and 1998—going from 65 to 168. Every pharmaceutical company in business for the entire period moved up in the rankings, marching ahead on new treatments for AIDs, impotence and other conditions. Genentech, a firm working on DNA products, leaped over 303 enterprises in market value.

- Prepackaged software has been one of the economy's high fliers. The number of publicly traded companies rose from just 58 in 1990 to 328 by 1998. Microsoft shot straight to the top ranks of corporate America. Oracle, Computer Associates, BMC Software, Compuware, PeopleSoft and other software manufacturers also improved their positions among public companies.

- Led by industry giants Intel and Texas Instruments, producers of semiconductors and related devices increased their value relative to the market. Others in this group include Micron Technology, Maxim Integrated Products, Linear Technology and Altera Corp.

- Results have been mixed among telecommunications businesses. Some of the biggest names slipped—AT&T, BellSouth, GTE Corp. and US West, for example. The expanding long-distance market allowed Sprint, MCI and WorldCom to improve their positions even before the latter two companies merged.

- In financial services, the biggest banks tended to get bigger and move up in the rankings, a fact that shouldn't surprise after a decade of highly publicized mergers. Wachovia, Sun Trust and First Chicago resisted the urge to merge and lost ground. There were 182 new savings institutions—most of them small, regional operations.

- For security brokers and dealers, the great bull market of the 1990s has paid off handsomely. Morgan Stanley, Paine Webber and Merrill Lynch leaptfrogged over hundreds of companies. Charles Schwab, leader of a new breed

**TABLE 2**  
**THEY COME AND THEY GO**

Selected shrinking industries	Number of establishments	
	1970	1996
Fur goods	980	133
Barber shops	24,577	4,499
Asbestos products	133	30
Drive-in theaters	1,567	408
Leather and leather products	3,430	1,938
General merchandise stores	25,032	14,797
Glass containers	128	78
Brooms and brushes	449	278
Trailer parks and campsites	6,419	3,984
Bowling centers	9,215	5,735
Concrete block and brick	1,332	901
Manufactured ice	800	578
Variety stores	14,439	10,848
Radio and television repair	7,953	6,212
Labor organizations	20,376	19,536
<b>Selected expanding industries</b>		
Videotape rental	0	20,816
Computer and data processing services (1975)	6,517	88,911
Carpet and upholstery cleaning	816	8,879
Prepackaged software (1975)	1,522	9,084
Vocational schools	1,188	6,816
Movie production and services	2,922	14,680
Semiconductors and related devices	291	1,052
Amusement parks	362	1,174
Chocolate and cocoa products (1975)	51	165
Car washes	4,624	13,334
Political organizations	928	2,579
Office and computing equipment	923	2,112
Eating and drinking places	233,048	466,386
Colleges and universities	1,855	3,663
Florists	13,865	26,728
Tour operators (1988)	2,464	4,725
Dental offices	63,817	113,054
Internal combustion engines	162	277
Passenger car rental	2,556	4,231
Pharmaceuticals	1,041	1,637
Aircraft	163	255
Plastic bottles (1988)	280	437
Aircraft engines and parts	247	355
Physical fitness facilities (1990)	7,723	10,720
Hotels and motels	34,674	45,252
Travel agencies (1988)	22,609	28,735
Space vehicle equipment (1975)	39	45
Beauty shops	70,967	81,872

NOTE: Establishments are classified based on their major activity.

SOURCE: U.S. Bureau of the Census *County Business Patterns*, various years.

of discount brokers, showed the most striking gain, moving up 733 notches to 311th place.

- Some specialty retailers did well. Staples and Office Depot jumped up sharply. So did Ross clothing outlets, the Gap and Abercrombie & Fitch. Among grocery stores, Safeway, Kroger, Fred Meyer and Publix moved up.<sup>9</sup> The success of Amazon.com and other Internet retailers was just part of a boom that resulted in the creation of 55 new, publicly held catalog and mail-order houses. Wal-Mart held its own, but other variety stores slid, with Kmart down 239 places and Venture Stores falling 8,025 spots. Department stores are losing favor: only one of 12 existing chains gained ground.

- Air transportation was a mixed bag. Stock prices reflected the success of low-cost airlines. Continental surged more than 1,100 places; Southwest and US Airways rose, too. Traditional carriers slipped in the rankings, with UAL Corp., parent of United Airlines, falling 265 places.

- Many old-line restaurant chains lost their luster. Of the 54 public companies operating eating places from 1990 to 1998, 52 fell in the rankings. Luby's, Shoney's, Spaghetti Warehouse and Sizzler all declined at least 1,682 spots.<sup>10</sup> Eighty-six new restaurant companies emerged in the 1990s, evidence that Americans are dining out more often. Jumping into the corporate rankings at relatively high spots were the companies behind Planet Hollywood, Papa John's Pizza and Outback Steakhouse.

- As the economy moved toward technology and services, basic industries continued their relative declines. The tally of companies falling in the corporate rankings: 88 of 91 crude oil and natural gas producers, 10 of 12 agricultural companies, all 10 woven-fabric mills, 11 of 12 women's clothing stores, 44 of 46 electric utilities and all shoe manufacturers except athletic footwear kingpins Nike and Reebok.

## The Establishment View

Market value isn't the only measure of corporate America's ups and downs. While market value anticipates future

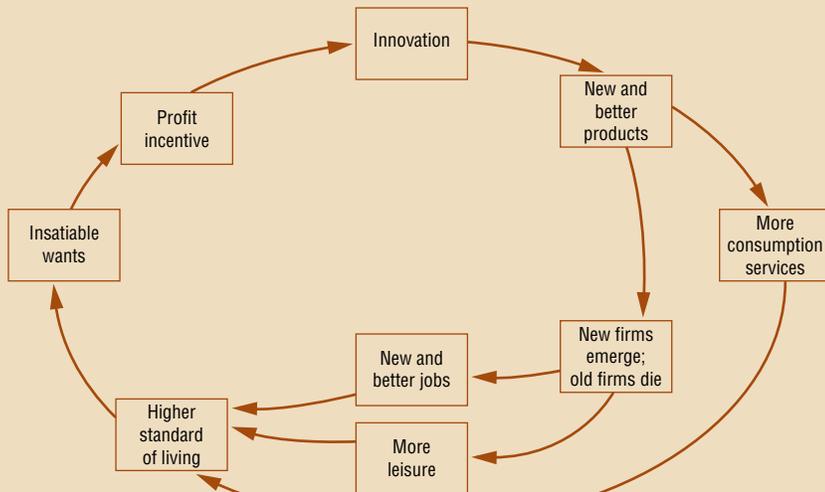
profits—and thus future sales—the same patterns are often already apparent in companies' current sales.<sup>11</sup> An entirely separate view of the churn, however, comes from looking at the total number of establishments (publicly and privately held) in each industry (*Table 2*). Fur goods showed the largest decline from 1990 to 1996, most likely a reflection of changing tastes and animal rights campaigns. Once health concerns became paramount, asbestos producers went into decline. Movie buffs aren't going to drive-ins anymore. Among the other businesses experiencing declines are barber shops, broom and brush manufacturing, bowling alleys, manufactured ice, and radio and television repair.

Consumers' preferences and new technologies lie behind the biggest winners. Videotape rentals have boomed as the VCR has become a fixture in American households. New technology also lies behind the boom in prepackaged software, semiconductors and computing equipment. As Americans have gotten wealthier, they've spent a greater part of their disposable income on entertainment and services. So the country has more movie production, more amusement parks, more eating and drinking establishments and more travel-related businesses. It has more carpet cleaners and car washes. The demands of health-conscious Americans have also given rise to nearly 3,000 new physical fitness facilities in just the past six years.

## Appreciating the Churn

The churn among firms illustrates that a free enterprise system never stands still. Constant, sometimes unsettling change is an indispensable part of what could be called the Great American Growth Machine. At its core are consumers and their endless list of needs, wants, conveniences, amusements and luxuries. Unlimited wants clash with the fundamental fact of limited resources—a.k.a. scarcity. We can't have everything we want, but we can satisfy more of our desires if we conserve and stretch our resources. For employers and workers, it means boosting productivity, the driving force for higher wages. For consumers, it means shop-

**CHART 1**  
**HOW PROGRESS HAPPENS**



ping for the best value. The system works because of competition: companies vie for customers, making more money if they're able to cut costs while offering consumers a better deal (*Chart 1*).

With many competitors, there's a constant drive to find new ways to meet consumers' needs—that is, to innovate. Companies offer lower prices, better performance, new features, catchier styling, faster service, more convenient locations, higher status, aggressive marketing or attractive packaging. Innovation comes in constant waves: inventions of new goods and services, improvements to existing products and increases in the efficiency of the factory, farm and office. The interplay of innovation and competition roils the status quo. New firms and industries emerge to take the market from existing ones. Surviving firms reorganize production using more, newer and better tools, making workers more productive. Consumers' tastes and expectations evolve. Companies that can no longer deliver what consumers want at ever-cheaper prices don't survive.

As with the churn of jobs, there's no mistaking where the change in America's corporate pecking order is taking us—to a postindustrial economy that provides what Americans want. We may lament the tragedies of the churn's downside, but we shouldn't lose sight of its very powerful and important upside: it makes us better off.

What's really going on is a healthy recycling of resources. In other words, it's conservation, not carnage.

—W. Michael Cox  
Richard Alm

## Notes

- <sup>1</sup> On December 22, 1998, Sears, Roebuck and Co.'s market capitalization was \$15.8 billion, compared with \$17 billion for Amazon.com.
- <sup>2</sup> Federal Reserve Bank of Dallas, 1992 Annual Report.
- <sup>3</sup> Schumpeter (1950, p. 83).
- <sup>4</sup> Although typically scorned, hostile takeovers, too, are a vital part of the economy's health-revitalization process. Corporate raiders and liquidators, in essence, act like an autoimmune system for the economy—surrounding, terminating and removing bad management practices that plague company profitability, thereby restoring the overall economy to health.
- <sup>5</sup> In 1997, 83,384 businesses failed in the United States, most of them small enterprises. Over the past quarter century, the failure rate doubled—from 44 per 10,000 concerns in 1970 to 88 in 1997—again, indicative of a faster churn.
- <sup>6</sup> Further discussion of downsizing and economic churn can be found in Cox and Alm (1999, Chapter 6).
- <sup>7</sup> With the exception of Amazon.com and Sears, all market values in this article are calculated as of August 1998. All rankings (including those of Sears and Amazon.com) are also as of August.
- <sup>8</sup> Again, the analysis involves publicly traded companies only.
- <sup>9</sup> Kroger and Fred Meyer announced a \$13 billion merger in October 1998.
- <sup>10</sup> In September 1998, Consolidated Restaurant Cos. announced it would buy Spaghetti Warehouse in a \$60 million deal. Once the transaction is completed, Spaghetti Warehouse will disappear from the corporate rankings.
- <sup>11</sup> Because tomorrow is more uncertain than today, rankings based on market value are generally more volatile than those based on sales; but market value data more clearly reveal coming shifts in employment and sales.

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## The Churn According to Schumpeter

*"Most new firms are founded with an idea and for a definite purpose. The life goes out of them when that idea or purpose has been fulfilled or has become obsolete or even if, without having become obsolete, it has ceased to be new. That is the fundamental reason why firms do not exist forever. Many of them are, of course, failures from the start. Like human beings, firms are constantly being born that cannot live. Others may meet what is akin, in the case of men, to death from accident or illness. Still others die a 'natural' death, as men die of old age. And the 'natural' cause, in the case of firms, is precisely their inability to keep up the pace in innovating which they themselves had been instrumental in setting in the time of their vigor."* Schumpeter (1939, pp. 94–95)

*"Individual innovations imply, by virtue of their nature, a 'big' step and a 'big' change. A railroad through new country, i.e., country not yet served by railroads, as soon as it gets into working order upsets all conditions of location, all cost calculations, all production functions within its radius of influence; and hardly any 'ways of doing things' which have been optimal before remain so afterward."* Schumpeter (1939, p. 101)

*"The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation—if I may use that biological term—that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists in and every capitalistic concern has got to live in."* Schumpeter (1950, p. 83)

## *Do International Financial Crises Defy Diagnosis?*

**I**N DECEMBER 1994, the world watched the financial meltdown of Mexico in disbelief. Most analysts had regarded Mexico's economic prospects as among the brightest in Latin America, especially after the inception of the North American Free Trade Agreement at the beginning of that year. Mexico's sudden and unexpected collapse started when its central bank devalued the peso about 15 percent on December 20. What was intended as a minor correction triggered a massive capital outflow that forced the Banco de México to abandon the defense of the peso and let it float. Within a month, the peso had lost almost 40 percent of its value. In the form of the so-called tequila effect, the crisis spread to other Latin American countries, especially Argentina, and even to East Asia.

The crisis' devastating effect on emerging markets everywhere finally seemed to be subsiding when, on July 2, 1997, Thailand sought a small correction of its own exchange rate and let its currency float. The pattern seen in Mexico was repeated. A relatively small devaluation of about 20 percent triggered a financial stampede, and by year's end the Thai baht had lost almost 50 percent of its value against the U.S. dollar.

The crisis did not remain confined to Thailand. Like its Mexican counterpart almost three years earlier, the crisis quickly spread to other countries in the region, with Malaysia, Indonesia and South Korea the most affected. Analysts were stunned by such a turn of events in what had been the fastest growing part of the world for two decades. The aftershocks of the financial earthquake were felt as far afield as Latin America (especially Brazil) and Russia.

The dramatic occurrence of financial crises just three years apart has prompted much research. Unfortunately, much paper and ink later, economists have yet to produce any convincing answers. The explanations they offer are typically

little more than working hypotheses, many of them seemingly aimed at making headlines rather than science. Explaining these crises requires hard work, not overnight inspiration. In attempting to understand them, economists and policymakers face the same difficult task as doctors do in researching and curing cancer.

Indeed, there are many parallels between cancer and exchange rate and financial crises. Doctors can recognize cancer and sometimes explain how it works once a person has it, but they usually cannot predict whether and when the disease will strike a particular person. Likewise, economists can recognize a financial or currency crisis when they see one, but they generally are unable to anticipate whether or when it will hit a particular country.

Moreover, doctors know much about metastasis, the process by which cancer in certain organs of the human body can quickly and lethally spread to other organs. Similarly, economists are knowledgeable about the contagion effects of financial crises and how they can spread from one country to the next almost overnight.

Despite recent progress, medical researchers are still far from fully understanding the ultimate causes of cancer, and they often cannot cure or eradicate it as a result. Their situation is analogous to that of economists examining financial and currency crises. Many in the profession who thought they completely understood such occurrences are less sure of it since the Mexican and East Asian crises.

Until those episodes, most economists considered a lack of fiscal discipline the culprit in currency and financial disease. The diagnosis appeared correct because fiscal indiscipline did seem responsible for some crises in the past. From there, economists jumped to the conclusion that fiscal indiscipline is the ultimate cause of all currency crises

and financial meltdowns. But in 1994, Mexico had an exchange rate crisis even though the country was fiscally sound. Because the Mexican crisis defied conventional wisdom, the managing director of the International Monetary Fund dubbed it the first crisis of the 21st century.

What is puzzling about the latest generation of crises is that they seem as unforgiving as cancer: both can strike in the absence of behavior that might have increased the odds of getting the disease. Lung cancer can certainly hit heavy smokers. But some heavy smokers never get the disease, while some people who have never smoked do get lung cancer.

Mexico and East Asian countries were not "heavy smokers," in the sense that by OECD standards, their fiscal accounts were exemplary at the time they were hit by crisis. In fact, Mexican and South Korean policies were considered sound enough to gain the two countries admission into the OECD not long before their respective crises.

But when Thailand's crisis hit and Indonesia's and Malaysia's followed, economists decided that even if current fiscal imbalances (current smoking) were not part of the problem, it must have been the anticipation of future fiscal problems (future smoking) that spooked investors. According to this explanation, the problem in East Asia was not the explicit fiscal deficit but the deficit implicit in fragile financial systems that eventually would require bailouts. Bailouts did, indeed, occur, increasing government debt by as much as 15 percent of GDP in Mexico and South Korea, for example.

This theory is not without its flaws. That a loan is bad becomes obvious to everyone once a borrower has defaulted. To be convincing, such a theory should prove that the loans that went sour were an obviously bad bet before

*(Continued on page 12)*

# REGIONAL UPDATE

**T**EXAS AS A whole grew at a 3.3-percent annual rate in the first 11 months of 1998, but the growth was not evenly distributed throughout the state. Low commodity prices and inclement weather depressed growth in agriculture and energy, causing problems not only for Texas but also for Texas' major trading partners—Mexico and Canada. While some regions of the state were largely insulated from these effects by low interest rates and the continued strength of the U.S. economy, other regions were fully exposed. As a general rule, agricultural areas, the oil patch and the border with Mexico grew more slowly than the rest of the state.

The major exception was El Paso, which grew more rapidly than the state average in 1998 (see chart below). El Paso added 8,500 jobs between December 1997 and November 1998 as strong job growth in services, government and trans-

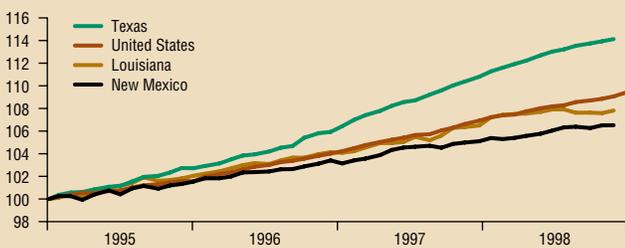
portation more than offset job losses in other industries. Maquiladora industries are a bright spot in the Mexican economy, and much of El Paso's strength relative to other cities along the border with Mexico can be attributed to El Paso's position as a service, supply and distribution center for the maquiladoras.

Primarily as a result of the solid employment growth, El Paso's traditionally high unemployment rate fell in 1998 to its lowest average annual rate of the decade—10 percent. Despite the recent declines, however, the unemployment rate in El Paso remains more than double that of any other large Texas metropolitan area. Among Texas cities, only Brownsville and McAllen have higher unemployment rates than El Paso.

—Lori L. Taylor

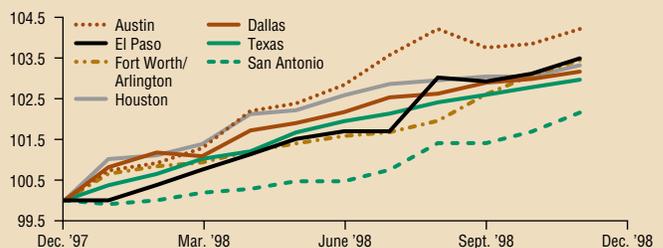
### TOTAL NONFARM EMPLOYMENT

Index, January 1995 = 100



### TEXAS TOTAL AND MAJOR AREA EMPLOYMENT

Index, December 1997 = 100



### TEXAS LEADING INDEX AND NONFARM EMPLOYMENT

Thousands of persons

Index, 1987 = 100



### NET CONTRIBUTIONS OF COMPONENTS TO CHANGE IN LEADING INDEX

September–November 1998



## REGIONAL ECONOMIC INDICATORS

Texas employment\*

Total nonfarm employment\*

	Texas Leading Index	TIPI** total	Texas employment*					Total nonfarm employment*		
			Mining	Construction	Manufacturing	Government	Private service-producing	Texas	Louisiana	New Mexico
11/98	120.5	128.8	163.7	500.6	1,106.9	1,524.0	5,742.6	9,037.8	1,889.2	722.3
10/98	122.1	129.2	164.5	497.3	1,107.8	1,521.9	5,730.6	9,022.1	1,885.2	722.2
9/98	120.0	129.7	166.1	495.2	1,109.2	1,522.5	5,714.4	9,007.4	1,886.0	720.6
8/98	120.6	129.7	167.2	498.4	1,108.3	1,512.0	5,704.6	8,990.5	1,885.9	721.4
7/98	123.1	129.9	168.4	496.4	1,106.2	1,505.1	5,689.9	8,966.0	1,891.0	721.0
6/98	123.4	129.7	168.6	494.7	1,108.8	1,500.7	5,677.8	8,950.6	1,890.9	719.1
5/98	124.6	130.0	168.8	495.2	1,106.8	1,492.9	5,660.5	8,924.2	1,887.2	717.2
4/98	124.6	128.6	168.8	491.8	1,105.7	1,489.0	5,631.1	8,886.4	1,884.5	715.9
3/98	124.4	129.1	171.1	483.4	1,106.7	1,494.2	5,607.6	8,863.0	1,883.8	714.7
2/98	124.9	128.9	171.1	482.2	1,104.7	1,491.6	5,587.9	8,837.5	1,882.6	714.0
1/98	123.9	128.9	170.3	477.7	1,104.5	1,490.9	5,568.6	8,812.0	1,878.8	714.6
12/97	123.2	128.8	171.2	472.4	1,097.2	1,487.5	5,546.2	8,774.5	1,866.1	712.7

\* in thousands

\*\* Texas Industrial Production Index

## FURTHER INFORMATION ON THE DATA

For more information on employment data, see "Reassessing Texas Employment Growth" (*Southwest Economy*, July/August 1993). For TIPI, see "The Texas Industrial Production Index" (Dallas Fed *Economic Review*, November 1989). For the Texas Leading Index and its components, see "The Texas Index of Leading Indicators: A Revision and Further Evaluation" (Dallas Fed *Economic Review*, July 1990).

Online economic data and articles are available on the Dallas Fed's Internet Web site, [www.dallasfed.org](http://www.dallasfed.org).

## Beyond the Border

(Continued from page 10)

the fact. Such proof will be hard to find because it would imply that the lenders were negligent when they evaluated the loans and decided they were acceptable risks. Do theoretical economists know more than bankers and financial intermediaries about the quality of a loan? Do they know more than those who recommended OECD membership for Mexico and South Korea? Or is this theory just another example of Monday morning quarterbacking?

Despite what remains unknown about cancer, one thing doctors do know is that history seems to play a role in the disease. A person is more likely to get cancer or a particular form of cancer if there is a family history of it. Likewise, countries that experience capital account blowouts and financial meltdowns are often countries that may be behaving well (not smoking) now but have a history of policy instability (smoking in the past) that some in the investment commu-

nity have not forgotten. This does not mean that countries with an exemplary past will always dodge financial crises, any more than patients with no family history of cancer always elude the disease. It does mean that reputation is important in a world where countries of recent virtue are penalized for histories of impropriety, as Mexico and Argentina had. Perhaps one reason Chile was not as seriously hit by the tequila effect was that its most recent improprieties were much farther in the past than Mexico's and Argentina's or, for that matter, Brazil's.

Another thing economists do know is that both Mexico and Thailand had a policy of pegged exchange rates—that is, exchange rates that fell somewhere between fully flexible and absolutely fixed. The apparent commonality has led to speculation that as a result of these financial crises, “the options for currencies have been... hollowed out.’ Governments should let them either float, or fix them permanently (with a currency board, or in a monetary union).” (*The Econ-*

*omist*, November 28, 1998, p. 82)

Such speculation will have to meet scientific standards before it can be regarded as anything more than just that—speculation.

Meanwhile, intellectual honesty requires that economists admit they do not fully understand the currency and financial crises of the late 20th century. Sadly, this means the only sure bet is that many such crises will occur in the 21st century before their causes and cures are found.

—Carlos E. J. M. Zarazaga

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