

WHAT DOES THE ASIAN CRISIS MEAN FOR THE U.S. ECONOMY?

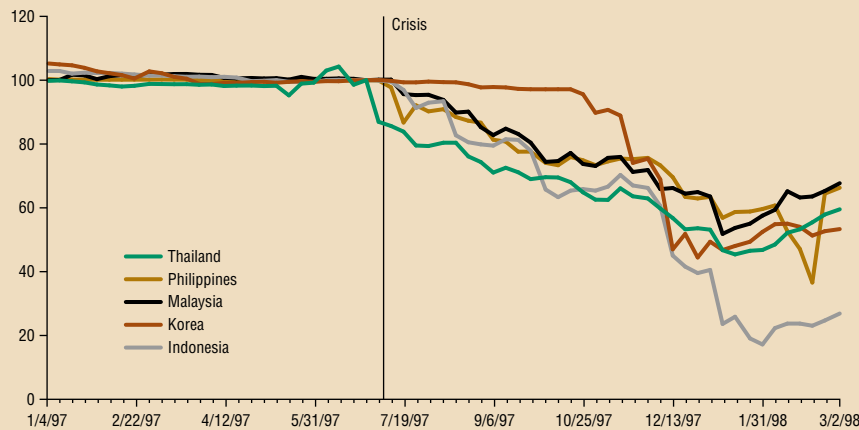
THE ASIAN CRISIS began in the summer of 1997 with the dramatic devaluation of the Thai baht, but serious turbulence did not begin to shake U.S. financial markets until last fall. What was first seen as an isolated correction in an exotic East Asian currency is now being viewed as a potential catalyst to global financial meltdown. Is it now time to batten down the hatches and hope we don't get smashed in the Asian turbulence, or is the recent tumultuous period just a mild swell on otherwise calm waters?

At the present time, the impact of the Asian crisis on the United States appears to be more of a swell than a tsunami. The direct effect on the national and U.S. regional economies will likely be modest but not trivial, with some industries feeling it more than others. The indirect impact from increased financial market uncertainty and spillovers to other emerging markets and Japan, however, has the potential to be much larger. Unfortunately, these indirect effects are particularly difficult to quantify.

*Special Issue
on the
Asian Crisis*

CHART 1
CURRENCY DEVALUATIONS

Index, June 28, 1997 = 100



Characteristics of the Asian Crisis

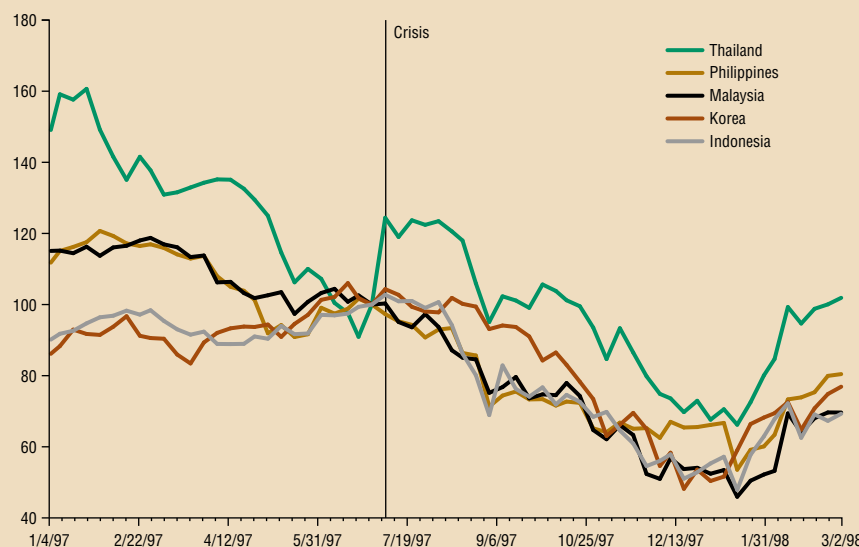
Three elements characterize the economic and financial crisis in Asia. First, as Chart 1 illustrates, there have been large currency devaluations. Since the Thai baht devalued on July 2, 1997, most of the frontline Asian currencies have lost nearly half their value. At one point, the Indonesian rupiah traded at one-fifth its predevaluation price. Second, there has been substantial asset deflation. Asian stock markets have

fallen by a third (Chart 2), and property values have plummeted. Finally, bank liquidity problems have contributed to a continuing credit crunch. Some export firms that would otherwise benefit from the devaluation of the local currency can't get letters of credit to buy raw materials.¹

If some of Asia's problems seem reminiscent of the Texas banking crisis of the 1980s, they should. Both crises can be traced in part to risky ventures, government guarantees and a lack of adequate supervision and regulation.²

CHART 2
STOCK MARKETS DROP

Index, June 28, 1997 = 100



Overall, the economic turmoil in East Asia is serious, and the outlook for the next six months remains uncertain. Most estimates for the Asian crisis countries predict flat to slightly negative growth in real GDP for 1998, a particularly dramatic slowdown when compared with the over 7 percent average annual growth recorded for most of these countries between 1990 and 1997.

Recent signals indicate Asian markets may be regaining some calm, however. Since mid-January several of the currencies have begun to show signs of stability as debt and austerity agreements have been negotiated with the International Monetary Fund and international banks. Most Asian equity markets have also shown improvement since the beginning of the year. Despite these positives, we do not expect smooth sailing in 1998. Asia's markets are likely to see further turbulence interspersed with periods of calm as some banks are declared insolvent and some firms fail.

U.S. Markets Tied to Asia

If the United States were completely isolated from the rest of the world, Asia's crisis would not affect this country. However, the United States trades heavily with Asia and benefits greatly from being able to export to and import from the region. Americans also benefit from lending money to the region at higher rates than they receive at home. Of course, these ties also mean that, at least to some degree, we're all in the same boat. Turbulence on one side of the Pacific will affect the other side.

Table 1 shows the United States' top five manufacturing exports and imports as a share of total trade with the Asian crisis countries. These are the U.S. industries most likely to be affected by the recent Asian turmoil. As the table shows, electrical goods and machinery dominate both exports and imports with these Asian countries. In addition, our imports from Asia are dominated by apparel, rubber products and vehicles, while our exports to Asia are weighted heavily toward the aerospace industry, optical equipment and chemicals.

As Chart 3 shows, overall U.S. trade with the Asian crisis countries has grown since the mid-1980s, rising from around 5 percent of total U.S. trade in

TABLE 1
U.S. TRADE WITH ASIA

	Percent
Imports	
Electrical goods	37
Machinery	20
Apparel and clothing	9
Rubber articles	3
Vehicles	3
Exports	
Electrical goods	31
Machinery	18
Aerospace	10
Optical equipment	4
Organic chemicals	3

Effects of the Asian Crisis on the U.S. Economy

Because trade and capital flows are the economic points of contact between the United States and Asia, they will also be the channels through which the Asian crisis influences the United States. There are both positive and negative aspects to this influence, and the effects of the Asian crisis are not likely to be the same across time.

Positives and Negatives of the Asian Crisis

On the positive side, the lower value of Asian currencies causes import prices to fall, benefiting not only consumers but also manufacturers that use imported Asian products in their production processes. Lower import prices also can reduce inflation in the near term.

Another positive from the Asian crisis is lower interest rates. The Asian crisis may reduce U.S. interest rates by increasing capital flows into the United States, which is often considered a safe haven for international capital. The Asian crisis may also lower nominal U.S. interest rates by reducing both global demand for credit and the outlook for U.S. inflation. Lower interest rates benefit borrowers in general and the construction industry in particular.

Finally, corporate profits can rise in those sectors, such as retailing and construction, that benefit from cheaper imported products and lower interest rates. Higher corporate profits can have positive wealth effects for those who hold stocks in these sectors. Employment in these sectors can rise as well.

The Asian crisis also poses a number of negatives for the United States. Cheaper imports make it difficult for sectors, such as apparel manufacturers, that compete with imported Asian goods. So far, this effect has been muted because of financing problems in Asia and the difficulty some exporters are having in purchasing raw materials.

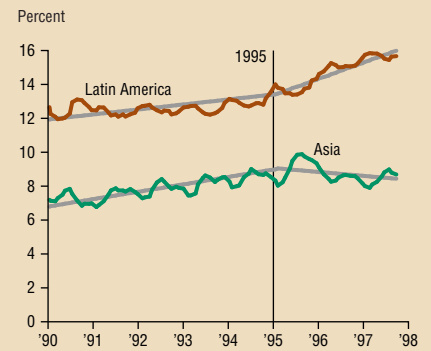
In addition, the crisis is likely to reduce Asian demand for U.S. exports. For example, Korea reported that its demand for foreign goods fell 40 percent in January from year-earlier levels. Lower U.S. interest rates can also adversely

1986 to roughly 8 percent in 1997. However, the U.S. share of trade with these countries has declined slightly from its 1995 peak.

One explanation for this decline is increased trade with Latin America, particularly Mexico, since 1995. As shown in Chart 4, Latin America's share of our imports grew substantially beginning in 1995, while trade with the Asian crisis countries declined. Greater openness in Latin America and Mexico's peso devaluation are likely factors in this shift in trade shares and may have contributed to Asia's recent troubles.

Direct investment in Asian crisis countries has also increased dramatically since the mid-1980s (Chart 5). U.S. direct investment in the region (which includes primarily U.S. investments in Asian plants and equipment) grew from less than \$500 million in 1986 to \$4.1 billion in 1996—an eight-fold increase.

CHART 4
U.S. IMPORT SHARES FOR LATIN AMERICA AND ASIA



affect savers. Finally, corporate profits will fall in those sectors that suffer from reduced export demand, greater import competition and market uncertainty. This can depress stock prices, reduce wealth and lead to employment losses.

Initial Effects of the Asian Crisis: What Have We Seen So Far?

Financial markets are able to respond more rapidly than goods markets to an economic disruption. Thus, the initial impact of the Asian crisis on the United States has mainly come from the effects of capital flows on stock prices and interest rates.

After rising on a strong upward trend in the three prior years, U.S. stock prices generally traded in a flat range from early October 1997 through much of January 1998. This flattening suggests that the Asian crisis is removing a source of economic stimulus rather than

CHART 3
U.S. TRADE SHARE WITH ASIAN CRISIS COUNTRIES

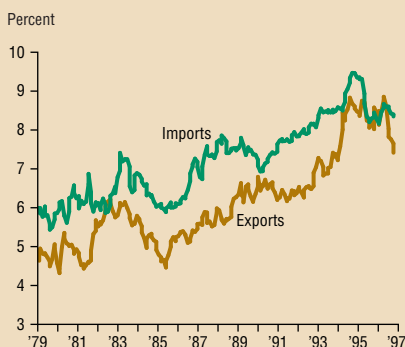
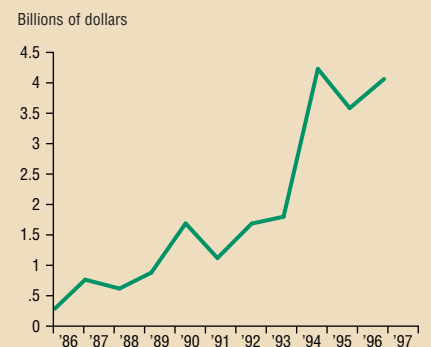


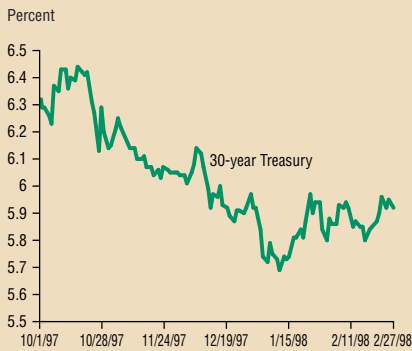
CHART 5
U.S. DIRECT INVESTMENT IN ASIAN CRISIS COUNTRIES



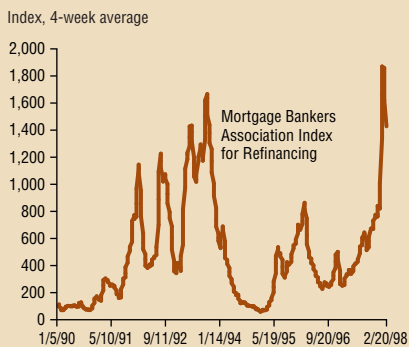
imparting an outright negative effect. Nevertheless, the less rosy outlook for profit growth is apparently inducing some U.S. firms to announce a new series of restructurings designed to bolster their bottom lines. Indeed, announced layoffs in December 1997 were 56 percent higher than those in December 1996, even though announcements through the first 11 months of 1997 were nearly 15 percent below those posted through the first 11 months of 1996.³

On a brighter note, for reasons men-

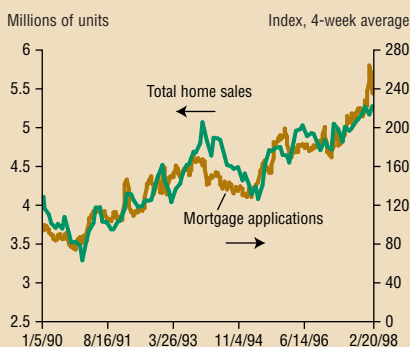
CHART 6
ASIAN CRISIS PUSHES DOWN INTEREST RATES...



...SPURRING HOUSEHOLDS TO REFINANCE THEIR MORTGAGES...



...AND PURCHASE HOMES



tioned earlier, the Asian crisis has already induced a decline in interest rates, such as the 30-year Treasury yield (*Chart 6*). These declines have boosted some sectors, especially mortgage markets, where refinancing activity and applications to buy homes recently set new records (see *Chart 6*). Because rising mortgage applications indicate a further rise in overall home sales,⁴ the Asian crisis has already stimulated construction and benefited homebuilders like Centex Corporation, whose stock price has recently outperformed the S&P 500 by rising roughly 30 percent between early October and early March.

On the other hand, the negative effects of the Asian crisis on traded goods industries may be evident in durable goods orders, a leading indicator of investment spending (*Chart 7*). After surging in November, durable goods orders plunged in December and then edged up in January. Cutting through the November spike, durable goods orders appear to have flattened out since September.

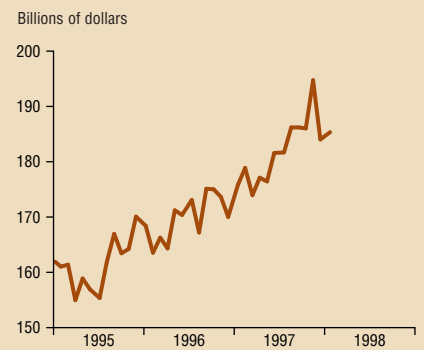
More timely data from the January and February surveys conducted by the National Association of Purchasing Management imply an even bigger Asian effect in the future.⁵ As shown in *Chart 8*, an index of import orders has firmed slightly since October, but export orders have plunged. Together, these indexes imply that the U.S. trade deficit will widen substantially in early 1998. In addition, the Asian crisis is apparently reducing the backlog of U.S. orders. For example, Boeing has seen cancellations of some prior airplane orders.

What Are We Likely to See in 1998?

Overall, the Asian crisis will likely put downward pressure on U.S. inflation and economic growth in 1998. Most private-sector economists assume that the crisis will not mushroom into a worldwide financial meltdown and estimate that the Asian fallout will lower U.S. GDP growth by one-half to one percentage point in 1998.

Inflation Effects. How much downward pressure the Asian crisis will put on U.S. inflation remains uncertain. The strengthening of the dollar against East Asian currencies could, by some estimates, cut Consumer Price Index in-

CHART 7
DURABLE GOODS ORDERS SURGE IN NOVEMBER BUT PLUNGE IN DECEMBER



flation by one-quarter to one-half of a percentage point this year. Along with other factors, the crisis has also put downward pressure on oil prices. Together, these effects will lower inflation, particularly in the first half of 1998, which will help counteract price pressures arising from tight labor and real estate markets.

Note, however, that energy and import price declines prior to the Asian crisis had already cut U.S. inflation last year. Thus, much of Asia's effect on inflation will merely sustain prior downward price pressure from foreign and energy sources.

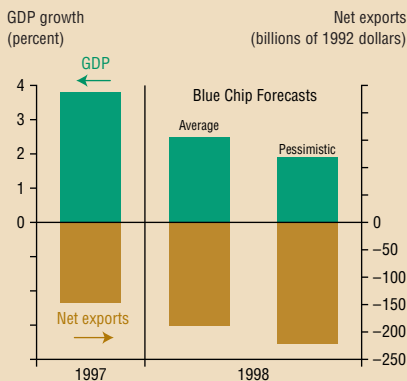
Output Effects. Most analysts are expecting a negative overall effect of the Asian crisis on U.S. GDP growth. Net exports will likely fall hard in the

CHART 8
PURCHASING MANAGERS SURVEY SHOWS REAL SIGNS OF THE ASIAN CRISIS



SOURCE: Based on data from National Association of Purchasing Management.

CHART 9
GDP AND TRADE SCENARIOS



first half of 1998, as slower Asian growth and the stronger dollar shrink exports and boost imports. Nevertheless, the magnitude of the negative effect is uncertain. For example, there are sizable differences between two scenarios in which the Asian crisis has conventional effects (*Chart 9*).

The first scenario is based on the average forecasts from the January Blue Chip Survey of economists. According to this scenario, U.S. net exports will deteriorate from a deficit of \$146 billion to nearly \$190 billion (1992 dollars), while GDP growth decelerates to an annual average of 2.5 percent.

The second scenario, that of Chase Securities, is the most pessimistic of the January Blue Chip Survey responses. According to this scenario, real net exports fall to an annual average deficit of \$221 billion. The larger estimated deficit reflects, among other things, larger assumed impacts of the Asian crisis on Japanese and Asian economic growth and larger assumed impacts of higher interest rates on Latin American economies.

In addition to the wide range of the conventional scenarios, several other factors compound uncertainty about the impact of the Asian crisis. First, neither of the scenarios presented assumes the Asian crisis will cause a financial crisis in Japan, Latin America or Eastern Europe—events that would magnify the effects already in train. Second, the restructuring of the Asian economies away from a model of export-led growth to a more market-driven system

may be more drawn out and pronounced than was initially believed.

Finally, previous experiences with currency crises—most notably the Mexican peso crisis of 1994—provide only limited guidance in understanding the current crisis. U.S. net exports to Mexico hit bottom two quarters after the peso devaluation. It may take longer than that for U.S. net exports to bottom out this time because the Asian crisis differs from the peso crisis in some key respects. For example, the rescue plan was drawn up more promptly in the case of Mexico, and Mexico more readily adopted reforms—especially compared with Indonesia.

Effects of the Asian Crisis on the Texas Economy

Because the Asian crisis will have positive effects on some industries and negative effects on others, it will likely have an uneven effect across the regions of the United States. Fortunately, Texas is in a good position to weather the storm.

The Texas economy has been expanding briskly (*Chart 10*). In 1997, employment growth exceeded the national average for the ninth consecutive year. Total nonfarm employment increased 4.2 percent, with strong increases in all major industry groups.

The outlook calls for continued healthy growth in Texas for a variety of

CHART 10
1997 TEXAS GROWTH SURPASSED U.S. GROWTH
(Total Nonfarm Employment)

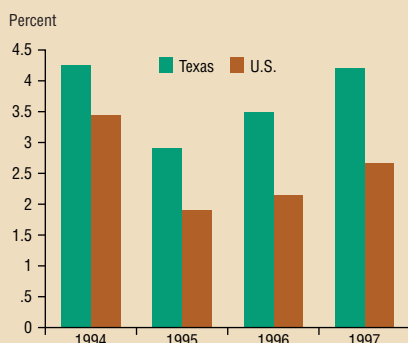


TABLE 2
EFFECTS OF ASIAN CRISIS ON SELECTED TEXAS INDUSTRIES

	Interest rate effects	Trade effects
Agriculture		-
Chemicals		-
Construction	+	
Energy		-
Fabricated metals	+	
Primary metals	+	
Retail		+
High-tech		
Computers	+	+
Semiconductors		-

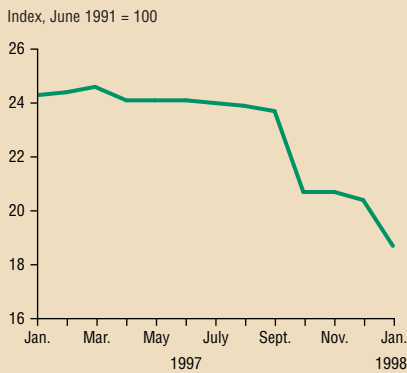
reasons. While the Asian crisis has widened the range of economic forecasts, most forecasters expect only moderate slowing in the U.S. and Mexican economies in 1998. The construction industry should get a boost from low vacancy rates and recent tax law changes that favor housing investments.⁶ The recent expansion of home equity lending in Texas should generate a one-time economic boost in 1998 as homeowners gain better access to their largest asset.

However, because some industries are more exposed to the Asian crisis than others, the crisis is likely to have a meaningful effect on the composition of the Texas economy. As was the case for the U.S. economy, the Asian crisis will affect Texas industries through its influence on interest rates and international trade flows.

Table 2 presents some of the interest-sensitive industries in Texas that are particularly likely to benefit from lower interest rates in the wake of the Asian crisis.⁷ If historical patterns are any guide, the construction industry is likely to gain employment almost immediately, while employment gains in other highly sensitive industries are unlikely to appear until late 1998 or even 1999.

The trade effects will be more mixed. Not surprisingly, retailers and other importers should gain, while import-competing industries and exporters should lose. Because they represent a large share of our exports to Asia, agriculture and chemicals manufacturing are particularly likely to lose sales in the

CHART 11
SEMICONDUCTOR PRICES
FALLING SHARPLY
(Producer Price Index - DRAM)



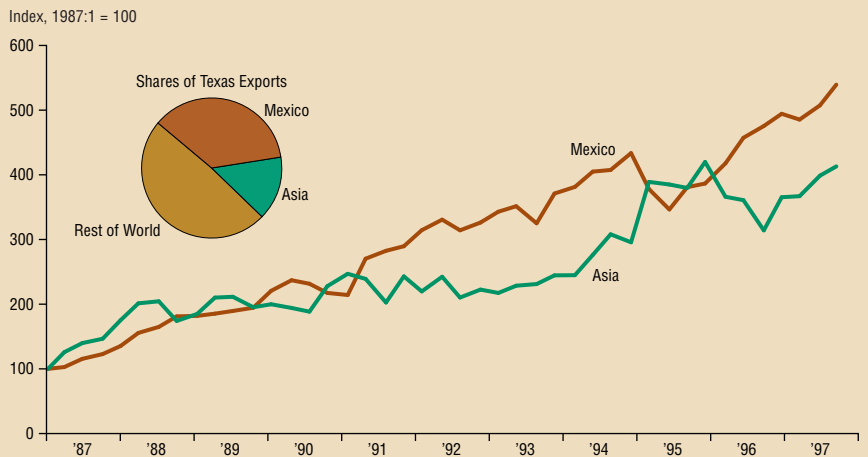
SOURCE: Bureau of Labor Statistics.

wake of the Asian crisis. Cattle hides bound for South Korea are already stacking up on the West Coast, and prices paid to producers are down \$2–\$3 per hide as a result of canceled orders.

One by-product of the Asian crisis is the sharply falling price of semiconductors. While it would be inappropriate to attribute all the recent price declines to the devaluations and the subsequent drop in Asian demand and increase in Asian supply, these effects undoubtedly depress chip prices (*Chart 11*). The net effect of the Asian crisis on the Texas high-tech industry is difficult to determine, however, because lower chip prices benefit Texas computer manufacturers (such as Compaq and Dell), while they hurt Texas manufacturers of semiconductors and semiconductor equipment (such as Texas Instruments, Motorola and Applied Materials). The overall effect is likely to be close to a wash.

An important factor in determining the net trade effects of the Asian crisis will be its impact on Texas trade with Mexico. As the pie in *Chart 12* illustrates, Texas exports considerably more to Mexico than it does to Asia. Despite this difference in relative size, however, Mexico and Asia (broadly defined) have historically acted like substitute markets for Texas products. For example, a temporary surge in exports to Asia nearly offset the drop in exports to Mexico following the peso crisis. Such a pattern

CHART 12
ASIA AND MEXICO AS SUBSTITUTE MARKETS FOR TEXAS GOODS
(Real Texas Exports)



NOTE: Countries in Asia are China, Taiwan, Singapore, Hong Kong, Malaysia, Indonesia, Korea, Thailand and Philippines.

is not surprising since, to a large extent, the industries that dominate Texas exports to Asia—electronics, nonelectrical machinery and chemicals—also dominate Texas exports to Mexico. If history repeats itself, then an increase in exports to Mexico could dampen the impact of the Asian crisis for Texas exporters.

On net, the impact on Texas of the Asian crisis will probably depend on its effect on oil prices, because lower oil prices hurt not only the Texas economy but also the Mexican economy. Energy economist Stephen Brown of the Federal Reserve Bank of Dallas estimates that the Asian crisis can account for approximately one-quarter of the recent

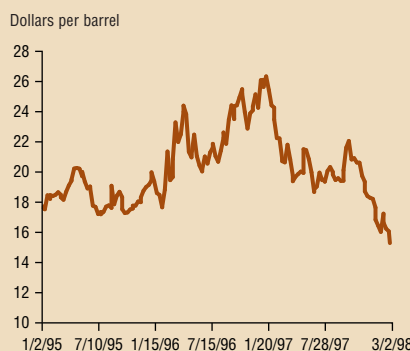
decline in the price of oil (*Chart 13*). As such, the crisis only slightly dampens the forecast for Texas.

Conclusion

Asia has suffered a significant economic crisis, but its financial markets are beginning to stabilize. Unless the recent calm is merely the eye of the storm, the Asian crisis should have only a modest impact on the U.S. economy. It is likely that the crisis will moderately slow U.S. output growth and temporarily reduce U.S. inflation. In Texas, the net effects of the crisis will arise primarily from its impact on oil prices.

—John V. Duca
 David M. Gould
 Lori L. Taylor

CHART 13
WEST TEXAS INTERMEDIATE CRUDE



(Notes are found on page 8.)

REGIONAL UPDATE

THE TEXAS ECONOMY continues to expand, but at a slower pace. Employment grew at a 2 percent annualized rate in January 1998, down from a 4.2 percent rate in 1997. January's growth was led by a 4.2 percent annualized growth rate in goods-producing industries. Service-producing industries, though, only managed a 1.4 percent annualized growth rate, with severe contractions in business and personnel services and slow growth in government. Retail trade and the finance, insurance and real estate sector showed continued strength with better than 6 percent employment growth in January.

Construction contract values softened but remain high, with January showing \$960 million of residential and \$635 million of nonresidential construction in Texas. Construction employment swelled at a 14.6 percent annualized rate. Energy

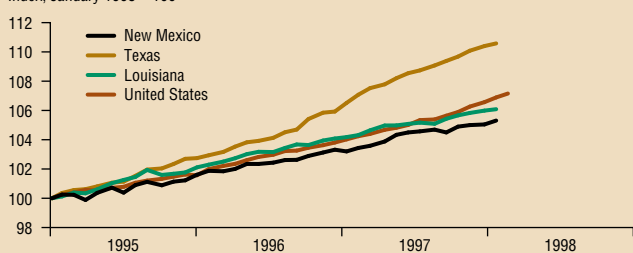
prices have hit a recent dip, as oil prices declined to below \$15 a barrel. When adjusted for inflation, the current price of oil is lower than the price during the 1986 bust. However, energy industry growth remained robust with energy employment increasing at a 12.8 percent annualized rate in January.

There are reports that prices and wages are beginning to increase. While overall wages held steady near the end of the year, some sectors claim substantial increases. The wage increases are beginning to be passed along in modest price increases in business services, construction and manufacturing. The strongest inflation has come in office rents and the housing price index. However, these increases seem to be counterbalanced by stable or decreasing product prices, especially in imports from Asia.

—John Benedetto

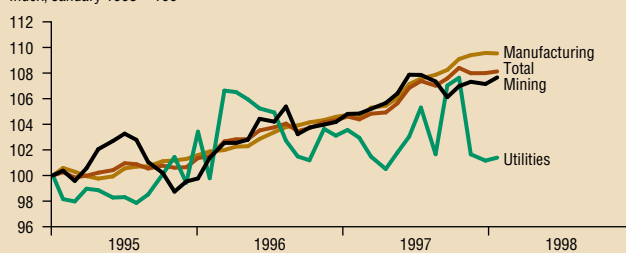
TOTAL NONFARM EMPLOYMENT

Index, January 1995 = 100



TEXAS INDUSTRIAL PRODUCTION INDEX (TIPI)

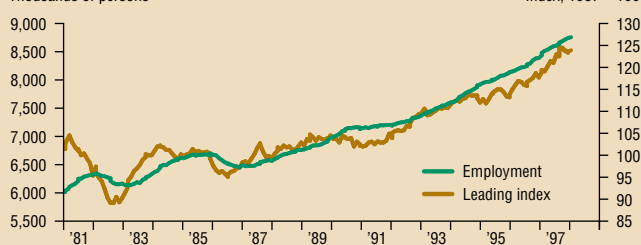
Index, January 1995 = 100



TEXAS LEADING INDEX AND NONFARM EMPLOYMENT

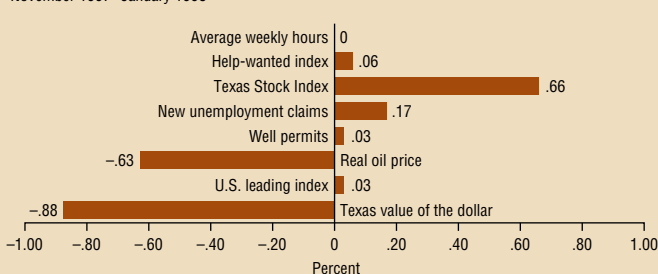
Thousands of persons

Index, 1987 = 100



NET CONTRIBUTIONS OF COMPONENTS TO CHANGE IN LEADING INDEX

November 1997–January 1998



REGIONAL ECONOMIC INDICATORS

Texas employment*

Total nonfarm employment*

FURTHER INFORMATION ON THE DATA

	Texas Leading Index	TIPI** total	Texas employment*				Private service-producing	Total nonfarm employment*		
			Mining	Construction	Manufacturing	Government		Texas	Louisiana	New Mexico
1/98	123.9	128.5	168.4	468.8	1,092.0	1,494.7	5,532.7	8,756.6	1,858.4	714.2
12/97	123.6	128.4	166.8	463.5	1,093.0	1,494.1	5,524.9	8,742.3	1,856.7	712.4
11/97	123.9	128.3	166.7	461.4	1,090.1	1,491.8	5,506.9	8,716.9	1,853.9	712.1
10/97	124.5	128.8	166.8	458.1	1,087.1	1,488.4	5,484.9	8,685.3	1,851.0	711.4
9/97	124.6	127.9	166.6	459.9	1,086.2	1,487.9	5,461.1	8,661.7	1,846.9	708.7
8/97	122.8	127.2	166.4	459.6	1,085.2	1,481.5	5,444.5	8,637.2	1,840.9	710.0
7/97	123.0	127.6	166.4	456.3	1,083.2	1,473.4	5,431.4	8,610.7	1,842.3	709.2
6/97	121.3	127.0	165.4	457.8	1,082.5	1,470.6	5,419.1	8,595.4	1,840.8	708.7
5/97	121.4	125.5	164.8	457.0	1,079.5	1,476.9	5,390.3	8,568.5	1,839.0	707.6
4/97	120.2	124.7	163.7	453.6	1,075.9	1,475.4	5,366.6	8,535.2	1,838.9	704.5
3/97	119.1	124.6	162.7	453.9	1,073.0	1,475.6	5,349.4	8,514.6	1,833.1	702.5
2/97	119.4	124.1	162.1	454.4	1,069.5	1,472.0	5,320.9	8,478.9	1,827.4	701.5

* in thousands

** Texas Industrial Production Index

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.

ASIAN CRISIS

(continued from page 6)

Notes

The authors thank John Benedetto, Sheila Dolmas, Timothy Hopper, Ricardo Llaudes, Niki Maas, Justin Marion, Keith Phillips, Marci Rossell and Fiona Sigalla for their assistance with this project.

- ¹ For example, the *Wall Street Journal* reported that a Korean company was unable to buy aluminum ingots because a Singapore bank was not willing to accept its letter of credit from the state-owned Korea Development Bank. See "Tight Credit Squeezes Southeast Asian Exporters—Bankers in Region Reluctant to Lend," *Wall Street Journal*, January 23, 1998.
- ² Paul Krugman, "What Happened to Asia?" <http://web.mit.edu/krugman/www/DISINTER.html>, February 23, 1998.
- ³ "U.S. December Announced Job Cuts Rose 56% from a Year Earlier," *Bloomberg News*, January 7, 1998.

⁴ For further evidence on and discussion about the link between mortgage applications and home sales, see John V. Duca, "Can Mortgage Applications Help Predict Home Sales?" Federal Reserve Bank of Dallas *Economic Review*, Fourth Quarter 1996, 21–30.

⁵ These indexes reflect whether and to what degree more purchasing managers surveyed experienced rising orders than falling orders. The indexes are constructed so that readings below (above) 50 imply that orders are falling (rising). For evidence on the link between these indexes and the real merchandise trade balance, see Goldman Sachs U.S. Economic Research, "The Pocket Chairman," January 1998, p. 3.

⁶ Tax law changes that favor investments in housing include the new federal law allowing married homeowners to shelter up to \$500,000 in residential capital gains every two years and the recent increase in the Texas homestead exemption (from \$5,000 to \$15,000).

⁷ For further discussion, see Lori L. Taylor and Mine K. Yücel, "The Interest Rate Sensitivity of Texas Industry," Federal Reserve Bank of Dallas *Economic Review*, Second Quarter 1996, 27–34.

SOUTHWEST ECONOMY

Executive Editor
Harvey Rosenblum

Editors
W. Michael Cox, Mine K. Yücel

Publications Director
Kay Champagne

Copy Editors
Anne L. Coursey, Monica Reeves

Design & Production
Laura J. Bell

Southwest Economy is published six times annually by the Federal Reserve Bank of Dallas. The views expressed are those of the authors and should not be attributed to the Federal Reserve Bank of Dallas or the Federal Reserve System. Articles may be reprinted on the condition that the source is credited and a copy is provided to the Research Department of the Federal Reserve Bank of Dallas. *Southwest Economy* is available free of charge by writing the Public Affairs Department, Federal Reserve Bank of Dallas, P.O. Box 655906, Dallas, TX 75265-5906, or by telephoning (214) 922-5257.

FEDERAL RESERVE BANK OF DALLAS
P.O. BOX 655906
DALLAS, TEXAS 75265-5906

BULK RATE
U.S. POSTAGE
PAID
DALLAS, TEXAS
PERMIT NO. 151