

Clouds on the District Horizon

by

Fiona Sigalla
Associate Economist

Lori L. Taylor
Senior Economist and Policy Advisor

and

Mine K. Yücel
Research Officer and Senior Economist

September 10, 1998

Research Department
Federal Reserve Bank of Dallas

CLOUDS ON THE DISTRICT HORIZON

By happy coincidence, the Eleventh District has completed eleven years of economic expansion. The economy remains strong, but we are beginning to see signs of slowing—or clouds—on the District horizon. Today, we are going to talk about the forces behind the recent cooling in the regional economy and discuss whether these factors are likely to persist. We will also discuss some factors we expect will add to the cool front facing the economy in the second half of this year. Finally, we will sketch out some of the scenarios that could darken our outlook, which is for continued growth in the District economy.

Tight labor markets and the Asian crisis are slowing District employment growth

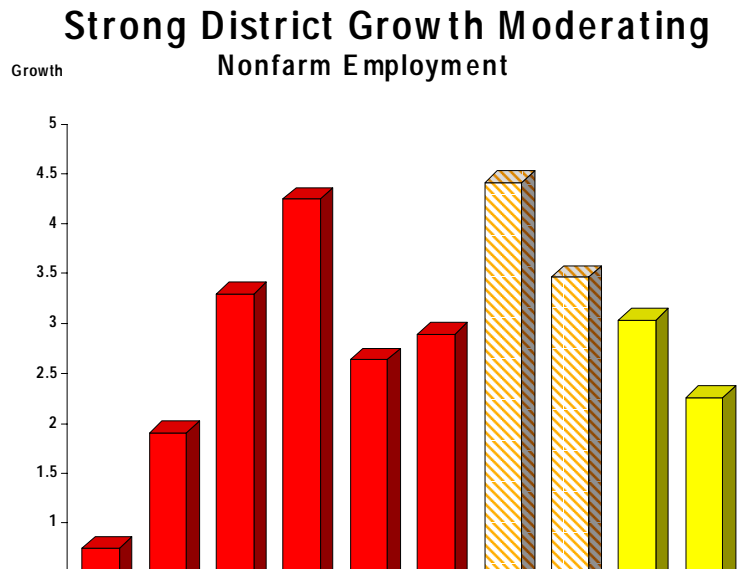
Job growth in the District has exceeded the national average throughout the 1990s, and remains very healthy. However, as figure 1 illustrates, it has slowed considerably over the past year.

The most likely explanations for the slowdown are tight labor markets and the Asian crisis. Firms across the District (especially in major metropolitan areas) have reported increasing difficulty finding all types of workers—from secretaries to statistical programmers. Industry contacts report that firms are turning away business because they don't have enough staff to do the work.

Meanwhile, world supplies for a number of commodities were becoming excessive prior to the Asian crisis, and then exploded as Asian demand tumbled. The resulting, sharp price reductions are good for inflation, but they're not so good for the growth of affected industries. District producers of oil, petrochemicals, semiconductors and agricultural products have been particularly hurt.

Now let's look at these factors in a little more detail.

Figure 1



Labor market tightness

Labor market tightness has very 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.

A lack of population growth is not the problem. In Texas, the population grows at twice the national rate (*figure 2*). Two important factors explain our faster growth—a faster rate of natural increase (meaning that our 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).

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

Because our labor force participation rate has held steady at roughly the national rate throughout the 1990s, the unemployment rate has been taking up the slack (*figure 3*). This May, Texas' unemployment rate dropped to its lowest level in more than 18 years. Excluding the border (which traditionally has very high population growth and high unemployment rates) the state's unemployment rate is 4 percent. In Austin, Dallas, Fort Worth, San Antonio, Abilene, Bryan and Lubbock, the unemployment rates are all less than 4 percent. Four percent unemployment is well below the rate that most economists use to define full employment.

In a full employment environment, population growth limits employment growth. As figure 4 illustrates, Texas' population has grown at roughly the same rate for roughly the same reasons throughout the 1990s. There is no reason to expect that it has changed recently or is going to change much in the near future. Therefore, tight labor markets are likely to boost wages and restrain employment growth for some time.

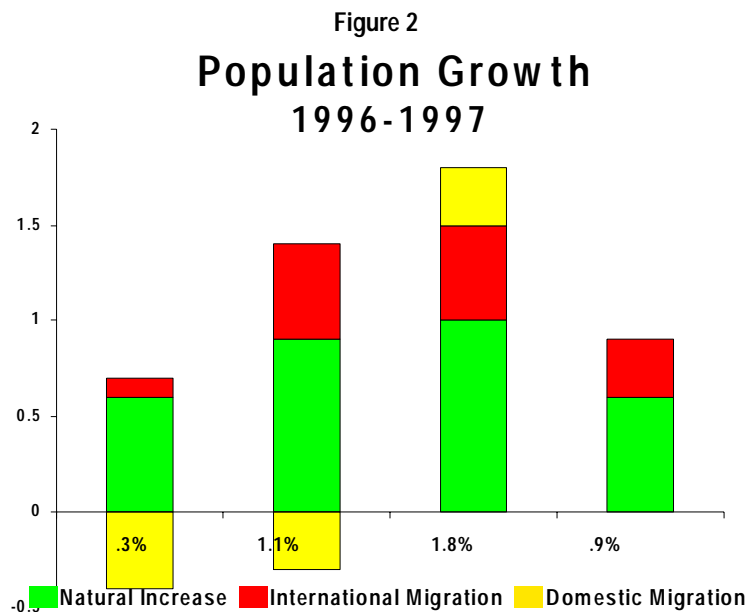


Figure 3

Falling Unemployment Rates Have Taken Up Slack

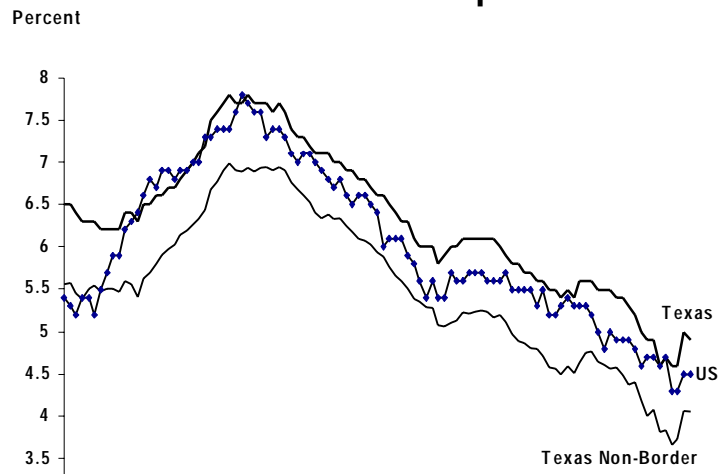
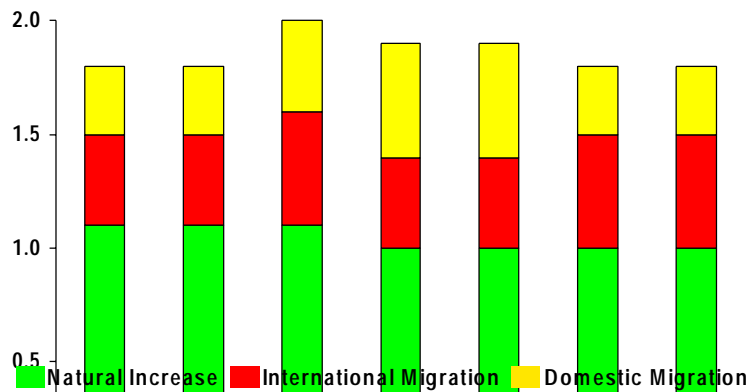


Figure 4

Texas Population Growth Unlikely To Change Much

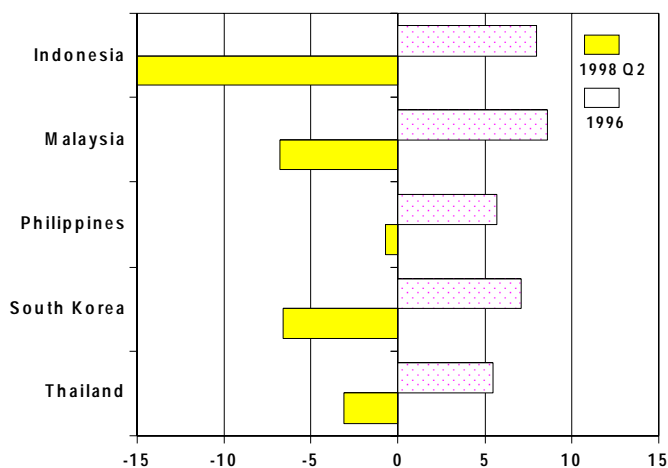


The Asian crisis

The Asian crisis began with the sharp devaluation of the Thai Bhat in July 1997 and quickly spread to Indonesia, Malaysia, Philippines, South Korea and Thailand.

Prior to the devaluation, all of these Asian crisis countries were growing more rapidly than the United States (*figure 5*). Not anymore. In the year since the crisis began, economic activity has contracted in all of these countries. Malaysia has entered its first recession in 13 years, while South Korea has posted the worst six months of economic performance since the government began keeping statistics in 1953.

Figure 5
Real GDP Growth
 (Year-Over-Year Estimates)



So, what does this all mean for Texas and the rest of the Eleventh District? Lower interest rates, rising imports and falling exports.

Interest rates have fallen dramatically since the crisis began, in part because anxious overseas investors sought a safe haven for their funds. Interest sensitive industries like construction have particularly benefitted from the infusion of cheaper capital.

Anecdotal evidence suggests that the Asian crisis has increased Texas imports for a handful of commodities, particularly lumber and pulp paper. Retail contacts expect lower-priced consumer goods to start hitting the shelves this fall.

Exports are showing definite signs of the Asian crisis. Total Texas exports declined 4.2 percent in the first half of 1998.

As figure 6 shows, combined exports to the Asian crisis countries are less than one sixth of Texas exports to Mexico alone, and just over half of our exports to Canada or Latin America. Therefore, the aggregate decline is masking much sharper declines in exports to Asian countries. Texas exports to the Asian crisis countries dropped 29 percent in the first half of the year, while exports to Japan dropped 25 percent and exports to China/Hong Kong dropped 26 percent (*figure 7*).

It does not appear that we're going to see the back side of the Asian crisis anytime soon. Figure 8 shows stock market indices for each of the Asian crisis countries. Stock market indices are good leading indicators of economic activity because they reflect expectations about profit growth and interest rates, although they cannot capture unanticipated shocks like a devaluation or change in government policy. Rising stock indexes signal improving investor sentiment about economic conditions. As you can see, these indicators are signaling continued weakness in Asia.

Figure 6

Texas Trading Partners (Shares of 1997 Texas Exports)

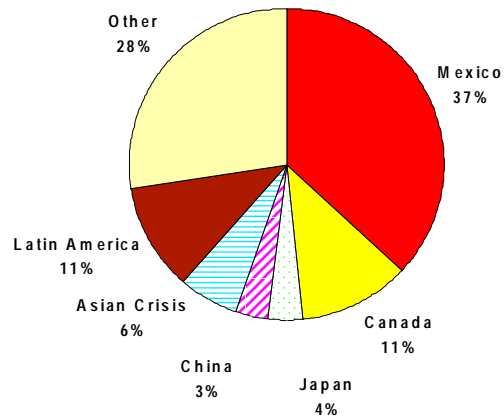


Figure 7

Texas Exports

Real, SA
96Q1=100

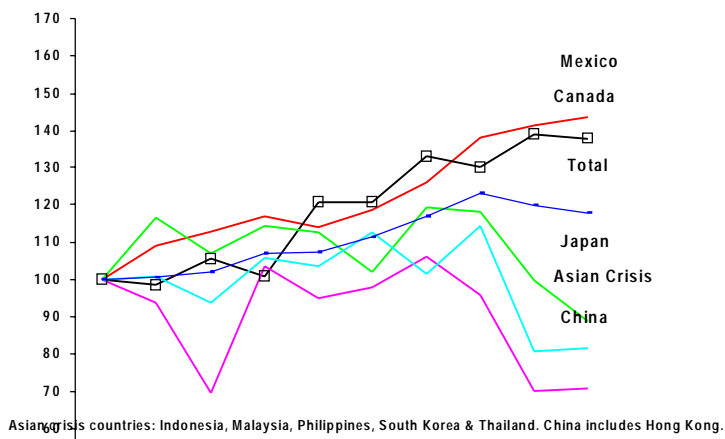
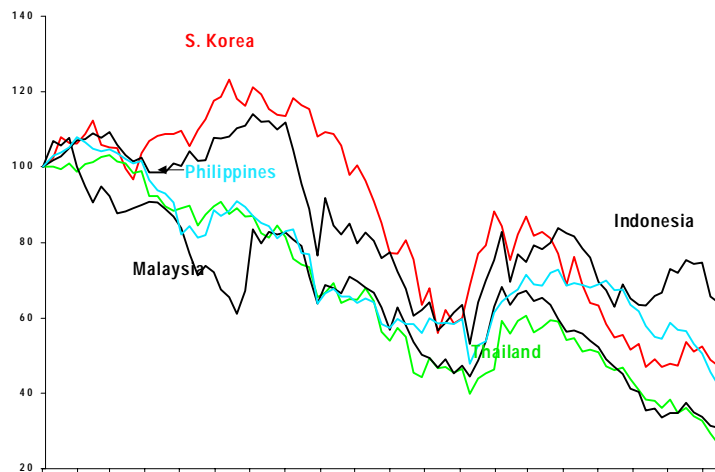


Figure 8

Stock Market Indexes

Index,
Jan. 3, 1997=100



Industry analysis

The Asian crisis has accentuated the trends in the region, further weakening already weak industries while boosting already strong ones. We'd like to look at four of the affected industries in some detail—energy, semiconductors, agriculture and construction.

Energy

The current downturn in the energy industry is particularly difficult because it is hitting both upstream and downstream industries at the same time.

Real oil prices are now about 25 percent lower than they were prior to the OPEC oil embargo in 1973 (*figure 9*). Our colleague Steve Brown estimates that 40 percent of the decline in oil prices can be attributed to the Asian meltdown, 30 percent to plentiful OPEC and non-OPEC supply, and 20 percent to the warm winter.

As you might expect, the low oil prices have slowed the region's vibrant energy industry. Drilling activity has plunged. Several large oil producers have announced cuts in their capital budgets for the coming year and we're beginning to see layoffs in the oil and gas extraction sector.

Although low oil prices should be beneficial for the petrochemical industry, the fall in input prices was more than offset by falling output prices. Margins for ethylene—the building block of the petrochemical sector—have been on a downward trend since well before the start of the Asian crisis (*figure 10*). Reduced demand from Southeast Asia exacerbated what had already been a soft market for ethylene because of overcapacity.

Semiconductors

The well-publicized glut of memory chips on the market is the result of three intermingling factors at work: overcapacity in semiconductors, weak demand due to problems in Southeast Asia and lower domestic demand for high-end computers. The slowdown in Southeast Asia also hurt the demand for all kinds of devices that use chips, putting further downward pressure on chip prices. All these factors are causing producers to delay investment and capacity decisions. TI, Hitachi, Motorola, AMD and Applied Materials have all announced layoffs in the District.

Agriculture

Agriculture is one of the industries that was expected to be negatively affected by the Asian crisis, but as it turns out, Asia was the least of their worries. After a 1996 drought, many farmers entered 1998 in financial stress, and things only got worse. Bumper crops around the world have resulted in low prices for many cash grain commodities (*figure 11*). The drop in demand from Asian countries merely aggravated the situation.

Many District farmers planted corn instead of cotton because the cost of producing cotton exceeded its projected selling price. Unfortunately, the region saw a return of hot, dry conditions. Cotton fared better than corn, but severe drought devastated yields across the District. As a result, farmers here are facing low production *and* low prices. Ranchers have been aggressively liquidating beef cow herds, filling auction barns and driving local cattle prices lower. Because financial cushions are thin and agricultural price forecasts are below the cost of production for many District farmers, marginal producers will have a tough time staying in the industry.

Figure 9

West Texas Intermediate Oil Prices and Rig Count

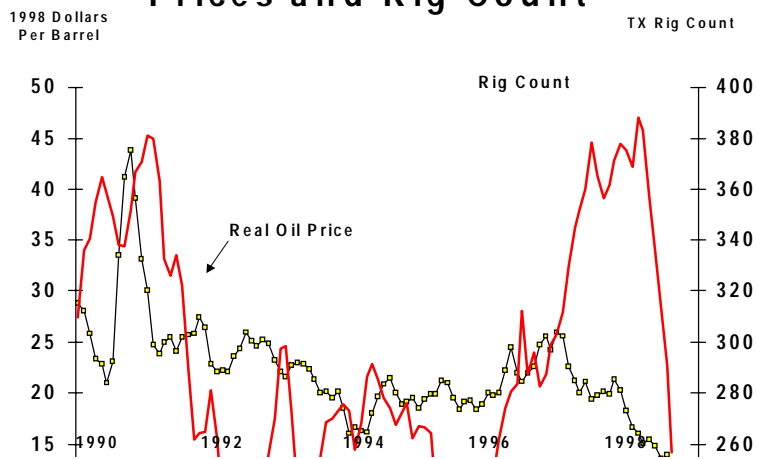


Figure 10

Ethylene Margins

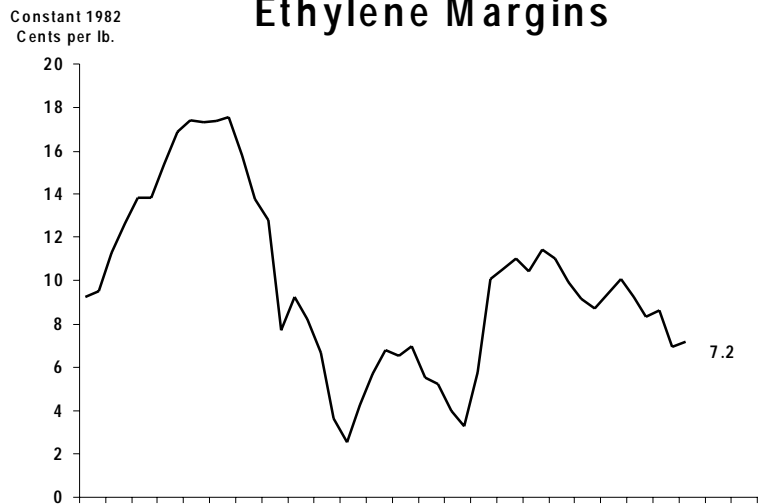
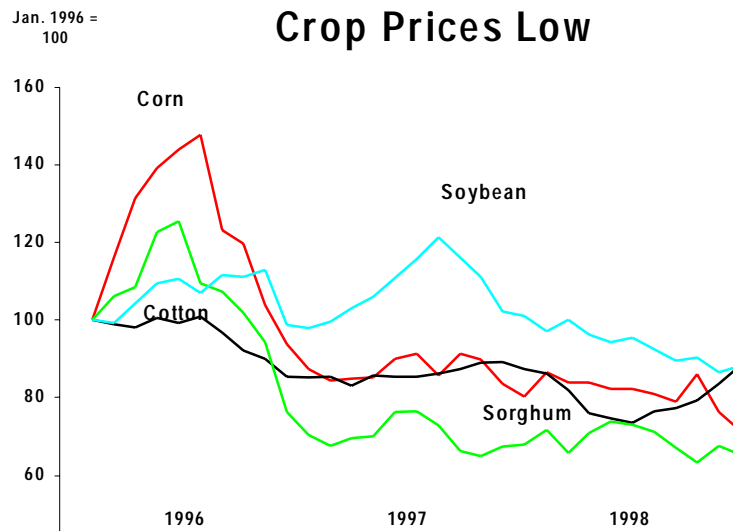


Figure 11

Crop Prices Low



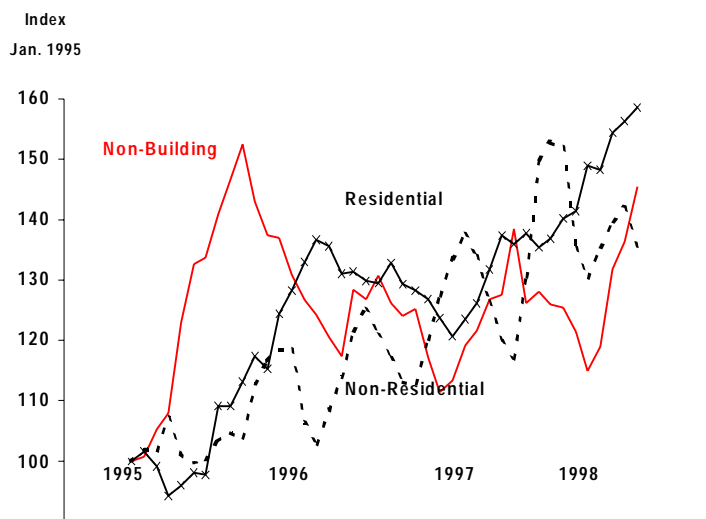
Construction

Construction is one of the reasons why even with all these weak industries, the District economy continues to outperform the nation (*figure 12*). Nonbuilding construction (which is mainly roads) has risen sharply in 1998 and should get stronger as the states start to spend newly allocated federal highway money. Construction of nonresidential buildings has been climbing, encouraged by low interest rates, double-digit rent increases and falling office vacancy rates. Office vacancy rates in Austin, Dallas, Fort Worth and Houston are now lower than they were during the go-go days of the 1980s. Although hampered by a shortage of skilled construction labor, residential construction has boomed. Apartment vacancy rates are generally falling and rents are rising. Prices of single-family homes are also rising, and inventories of vacant, finished homes are very tight.

In fact, construction activity in the District has been too hot not to cool down, and we're starting to hear anecdotes about cooling. Real estate trusts and insurance companies have scaled back their operations, citing the stock market slump and dramatic flattening of the yield curve. Industry contacts are wondering aloud whether or not the office market has reached its peak and note that although absorption remains good, rents are not rising as rapidly as they did last year. Concerns about overbuilding have led Texas contractors to recently stop building offices on speculation. On the residential side, contacts report a deceleration in the sales of new homes, which one contact partially attributed to a decline in buyer qualifications. In his words, "all

Figure 12

Construction Values For Texas



the easy ones have already bought.”

The outlook

In addition to the tight labor markets and the Asian crisis, there are some new clouds forming on the horizon: a slowing U.S. economy and a slowing Mexican economy.

A slowing U.S. economy

What hurts the U.S. economy hurts the District economy, and a number of leading indicators suggest that U.S. economic growth is weakening.

Consumer confidence appears to have been shaken. The Conference Board's index of consumer confidence has fallen for two consecutive months while the University of Michigan's measure of consumer confidence has declined for four consecutive months. Recent declines in the stock market are not likely to calm consumer's fears.

Speaking of the stock market, research suggests that the stock market and the yield curve are the most reliable predictors of GDP growth. Both of these indicators are flashing ominous signals. The stock market has fallen sharply since July, and the yield curve is flat and dangerously close to inverting. An inverted yield curve is a strong signal of slower growth.

A slowing Mexican economy

As our neighbor to the South and our largest export market, Mexico remains important to Texas. The Mexican economy is sharing many of the same problems as Texas—Asia-effects and low oil prices. We have some concern that Mexico's economy could weaken further.

There is general agreement among analysts that the Mexican economy is slowing, although the severity of this slowdown remains unclear. Over the course of this year, the Banco de Mexico and most analysts have revised down their forecasts for Mexican expansion. Figure 13 shows a decline in year-over-year Mexican GDP—these are the figures reported by the Banco de Mexico and used by most analysts. Here at the Dallas Fed, we've been working on adjusting the data for seasonal patterns. Quarterly movements in the seasonally adjusted data are more timely and informative. Our estimates suggest that the first quarter was much weaker than the year-over-year estimate, but that the economy rebounded in the second quarter.

As figure 14 illustrates, the second quarter rebound is unlikely to persist. Six of these seven leading indicators for Mexico were weak or negative in the second quarter. The only indicator suggesting strength was imports of capital goods, which increased about 1.5% (*figure 15*).

Small declines in the peso are considered a negative leading indicator for Mexico because they have historically been associated with weaker economic growth in that country. Furthermore, some analysts interpret the recent declines in the peso as a sign of reduced investor confidence in Mexico. On the other hand, some analysts were becoming concerned that the peso was overvalued and see its gradual descent as much preferable to the sharp devaluation that would have been necessary under a less-flexible exchange rate regime.

A weakening peso is also bad from the Texas perspective. Declines in the purchasing power of Mexican nationals reduce retail sales on the Texas side of the border and discourage Texas exports to Mexico.

Figure 13
Mexican GDP Growth
 (Year-Over-Year, Not Seasonally Adjusted)

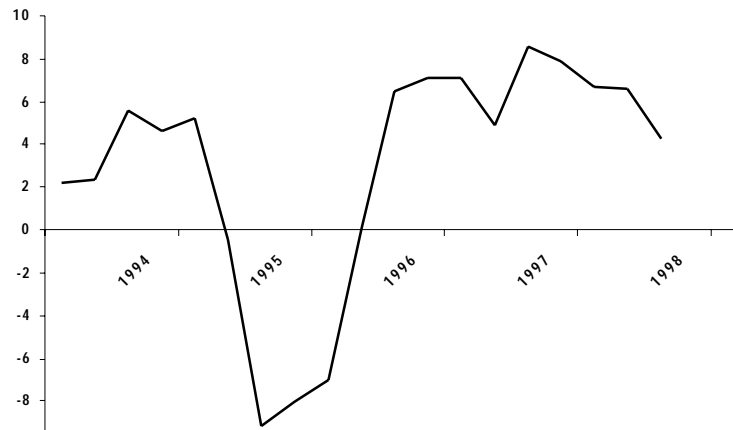


Figure 14
Mexican Leading Indicators
 (Second Quarter 1998)

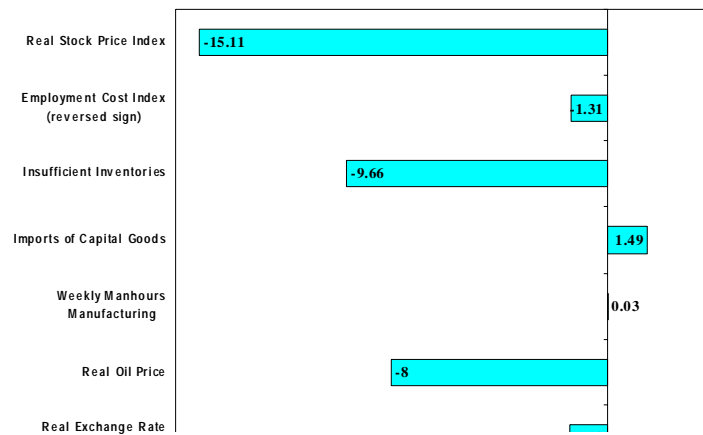
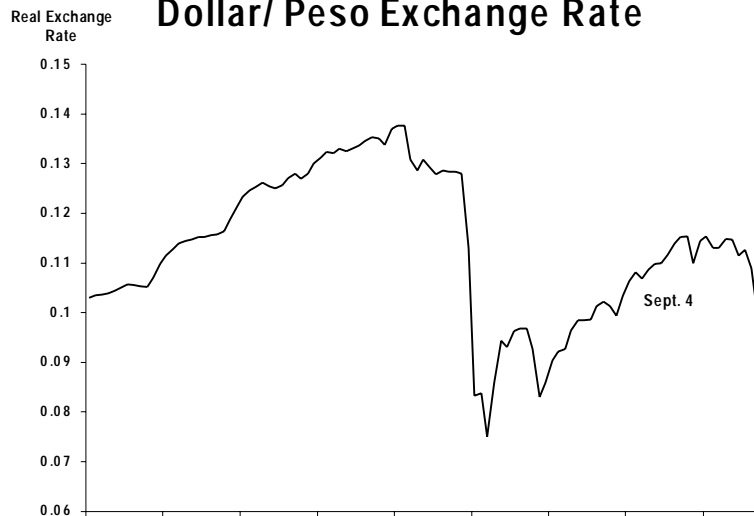


Figure 15
Dollar/ Peso Exchange Rate



The District forecast

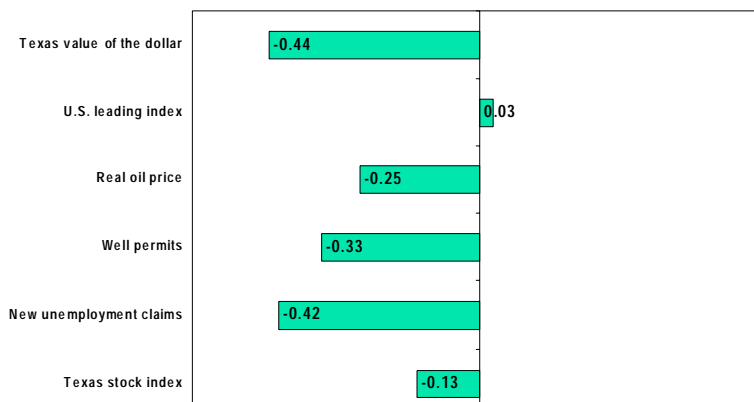
All of the factors that we have discussed thus far—tight labor markets, the Asian crisis, and slowdowns in the U.S. and Mexican economies—significantly influence the outlook for the District economy.

The Texas leading index suggests slowing District economic growth in the second half of this year but is not signaling recession. The index has been slightly negative in four of the last five months. As figure 16 shows, from May to July of this year, six of the eight components of the index were negative. The only indicator signaling strength is average weekly hours worked, (perhaps because of the tight labor market). The Texas leading index has been sluggish since October of last year.

We've highlighted the District's weak spots, but it also has a lot of strengths. The factors that have made us grow faster than the U.S. throughout the 1990s—particularly a young, rapidly growing population, central location and favorable business climate—are still in place. As long as the U.S. economy continues to expand, the District economy will continue to expand. Because Blue Chip analysts continue to forecast expansion for the U.S. economy, we feel confident forecasting continued growth in the District economy.

Figure 16

Net Contributions of Components Texas Leading Index (May 1998 - July 1998)



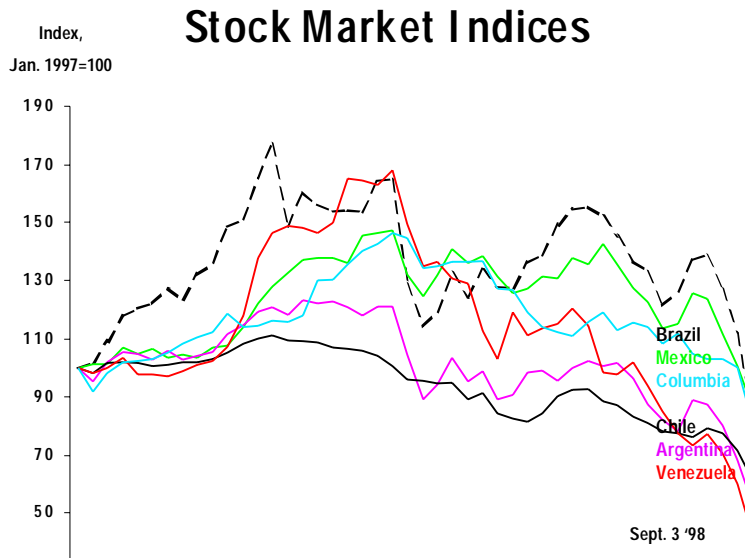
On the radar screen?

The best bet for the District calls for continued growth, but a lot of factors that are causing concern in the world could dampen economic conditions in the District. While it is not possible to discuss every negative scenario, we'd like to sketch out some of the most popular or most problematic from a District perspective. We admit to speculating here. As John Kenneth Galbraith once said, "We have two classes of forecasters, those who don't know and those who don't know they don't know." We know our limitations.

Latin American collapse

The Latin American economies are exposed to many of the factors that are affecting the District and Mexican economies. Low prices hammered many of these commodity-dependent economies while the Asian crisis shook investor confidence in emerging markets. Texas and the U.S. may have benefitted from financial inflows following the Asian crisis, but many Latin countries found themselves battling capital outflows by raising interest rates. In turn, higher interest rates hurt firm profitability and real economic growth. As the stock market indices in figure 17 show, investors continue to be pessimistic about the prospects for economic growth in Latin America.

Figure 17



Columbia devalued its currency last week, and analysts are increasingly concerned about the prospects of a Brazilian devaluation. If Brazil devalues, it could trigger another round of capital flight from developing countries, further damaging Latin economies, including Mexico. Some analysts are concerned that capital flight in the wake of a devaluation could trigger a recession (or even a depression) in South America.

Canadian recession

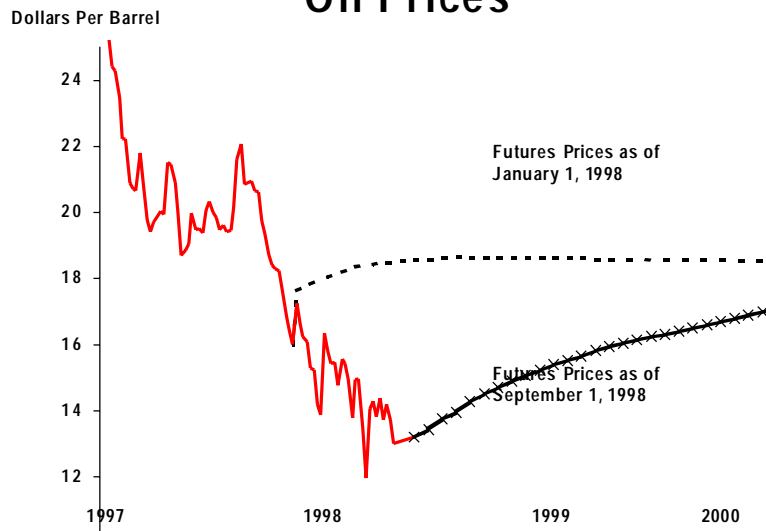
Canada is also being hurt by low commodity prices and the economic turmoil in Asia. The country's output grew at an annual rate of 1.8 percent in the second quarter, down sharply from the 3.4 percent rate of the first quarter. Some of the decline is related to the GM strike, but recent interest rate increases designed to defend the Canadian dollar are leading analysts to revise downward their forecasts for the year. The real Canadian dollar lost 10 percent of its value between April and August, plunging to the lowest nominal level ever recorded before rebounding slightly in September. Because Canada is Texas' second largest trading partner, the decline in Canadian purchasing power will have a negative impact on our export sector in the second half of the year. A Canadian recession would exert considerable drag on the economy as a whole.

Oil price crash

Currently the futures market is expecting oil prices to recover to the fifteen-dollar range by the end of this year, but there is no guarantee that the futures market is correct. As figure 18 shows, in January, the futures market was predicting that right now we'd be seeing \$18.50 oil. We're not. Oil has been bouncing around \$13 to \$14 for the past few weeks. One prominent energy economist estimates that, if OPEC were to disintegrate, the competitive price of oil could be as low as \$8 per barrel. A \$10 oil price would damage the District economy and lower net employment by nearly 1 percent.

Figure 18

Oil Prices



Year 2000

While all of us are familiar with the year 2000 problem, it's everyone else we're worried about. As the global economy has become more integrated, our computer systems have become a tangled web of information. Many companies and governments showed a distressing lack of urgency about this problem even before they were distracted by the economic turmoil of the past year. As the deadline approaches, the demand for programmers and the cost of repairs escalates. Business economist Ed Yardeni is forecasting a 70 percent chance of a global recession in 2000 as a result of the disruption in the flow of information and the world's inability to fix it quickly.

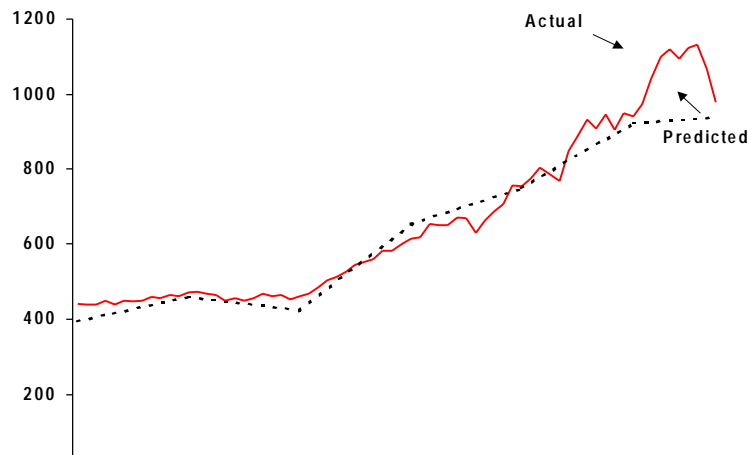
Stock market crash

In figure 19 we update the analysis Steve Prowse presented to this board last year. The dashed line shows the stock price that would be predicted given economic fundamentals. The solid line shows actual weekly movements in the S&P 500. This analysis suggests that the recent correction has brought the market more in line with economic fundamentals. However, market psychology doesn't always follow fundamentals. The market could easily overcorrect.

If the stock market continues to fall, consumer and business confidence are likely to fall with it. Although our retail contacts tell us that small changes in the stock market have no discernable impact on sales, large changes in the market will undoubtedly discourage consumer spending. It will also become increasingly difficult for businesses to raise operating capital. We have already seen a sharp reduction in initial public offerings. Given the international situation, the economy is dead in the water without growth in consumption and business investment.

Figure 19

S&P 500 Index: Actual vs. Predicted



U.S. capital flight

The recent stock market gyrations imply increased risks of investing in the U.S. stock market. Increased risk, combined with lower U.S. profit forecasts will make the United States less attractive to global capital. Further, if the Euro is credible, its introduction could provide an alternative for the dollar and would make Europe a more attractive destination for global capital.

Just as capital inflows in the wake of the Asian crisis pushed down interest rates, capital outflows would push rates up. Rising interest rates would remove a major source of District stimulus and would choke off economic activity in interest sensitive sectors.

On the other hand, a move toward capital controls in developing countries could accelerate rather than slow the flight from emerging markets, by making investors even less willing to invest new money. Such controls were recently instituted in Malaysia and have been discussed by prominent economists as a possible remedy for struggling Asian economies. This could increase the attractiveness of the U.S. market, further lowering U.S. rates and goosing an already stimulated construction sector.

Some analysts have expressed concern that a combination of the events we've discussed could push the U.S. economy into recession. According to the *Economist* magazine, two-fifths of the world's economy is already in recession or is teetering on the brink. Because the U.S. represents an additional fifth of the global economy, a contracting U.S. would likely tip the balance into global recession. The District economy will not be immune.

Conclusions

The District economy has been slowing and will continue to slow. Labor market tightness, the Asian crisis and slowing U.S. and Mexican economies will all act to constrain our expansion.

As we've discussed, we live in interesting times. The risks to the forecast are global in scope and unusually large. Still, at the present time, we foresee continued moderate growth in the District economy.