



OIL PRICES AND THE ECONOMY

SINCE IT FIRST bubbled from the ground in Pennsylvania in 1859, oil has affected the economy. And since its inception in 1960, OPEC has shaped oil prices. Do oil and OPEC still have a strong hold on the economy? This article examines oil-price movements from a long-term perspective and assesses the consequences for economic activity.

It seems we have less reason to be concerned about higher oil prices today. Even though oil prices tripled over the past 18 months, they are moderate by historical standards. Given its market share, large reserves and low production costs, OPEC will remain dominant in world oil markets. Both the national and regional economies have diversified away from energy-intensive and energy-producing industries. Consequently, our economy is less sensitive to oil-price changes. Still, a dramatic and persistent increase in oil prices would slow the U.S. economy while stimulating the economies of energy-producing states.



INSIDE

*Some Pleasant
Economic Side Effects*

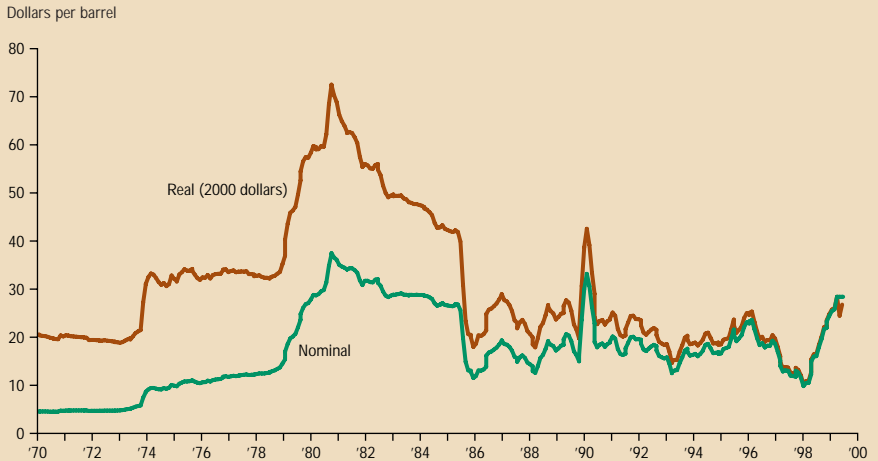
*U.S. - China Trade Relations:
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World Oil Market

OPEC has been a major factor in the recent volatility of oil prices, with help from fluctuating world demand. Prices dropped to a low of about \$11 per barrel in the last week of 1998, then climbed to a 10-year high of \$34 in early March of this year. The tripling of crude

When adjusted for inflation, crude prices today are about the same as they were in the early 1970s.

Chart 1
Oil Prices Volatile



SOURCES: Department of Energy; Bureau of Labor Statistics.

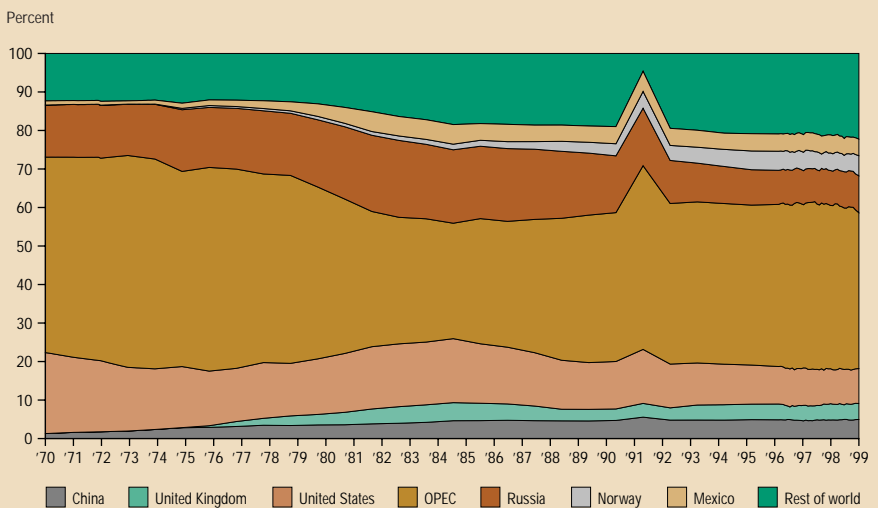
oil prices over the past 18 months reflects greater-than-anticipated demand and decreased supply. Mexico, Norway, Russia and Oman agreed to cut output along with OPEC, pushing prices up. This increase resembles the 1979–1981 price hike, which led to a severe recession (*Chart 1*).

When adjusted for inflation, however, crude prices are about the same as they were in the early 1970s and much lower than in the early 1980s. Prices doubled

to near \$10 per barrel in early 1974. In today's dollars that is equivalent to \$33 per barrel. The high of \$38 reached in 1981 would be \$72 today. Similarly, for gasoline prices to reach the highs of the early 1980s, they would have to average \$2.55 per gallon nationally. The current national average price is about \$1.50 per gallon.

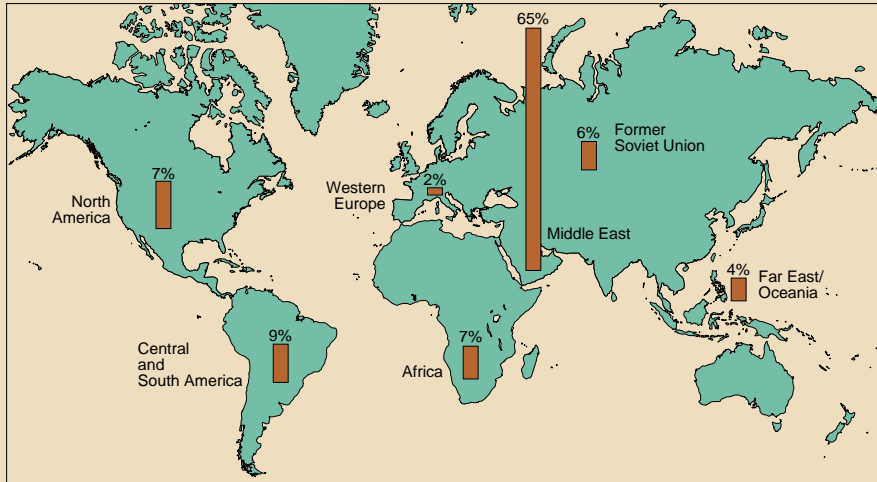
The United States is a mature oil-producing region. Our production peaked in 1970 and has been declining since

Chart 2
World Oil Production



SOURCE: Department of Energy.

Chart 3
OPEC Dominates World Oil Reserves



SOURCE: Brown and Yücel 1995.

(Chart 2). In 1970, U.S. production was about 20 percent of world oil output. Today U.S. output is about 10 percent. OPEC's share has also declined from about 50 percent of world output in 1970, but it is still a hefty 40 percent today. When Russia, Norway and Mexico decided to join OPEC in cutting output last year, these countries produced 60 percent of world output.

Although the United States contributes about 10 percent of world output, we consume 22 percent; hence, we import about 55 percent of what we consume. As the U.S. economy grows and domestic oil production declines, this percentage will rise. A high dependency on im-

ported oil is not necessarily a bad thing. Japan and many European countries import 100 percent of their oil. Because a major share of world oil production comes from politically unstable parts of the world, however, imported oil may pose political and security risks. World dependence on oil from OPEC, which holds 65 percent of world reserves, will continue into the future (Chart 3).

OPEC recently decided to keep the price of oil in a band that would corre-

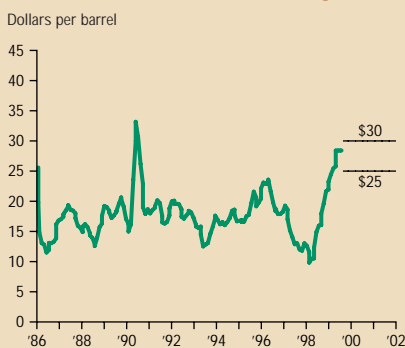
spond to \$25–\$30 per barrel for West Texas Intermediate crude oil (Chart 4). OPEC will increase production if prices go above \$30 for 20 days and reduce production if prices fall below \$25. OPEC does not consider a price above \$30 sustainable because such a price leads to oil conservation and an increase in non-OPEC supply. A price below \$25 is bad for OPEC finances. It is estimated that for each \$1 drop in the price of oil, Saudi Arabia loses \$2.5 billion in annual revenue.

Oil Prices and U.S. Economic Activity

A considerable body of economic research suggests that oil-price fluctuations have figured prominently in national economic activity since World War II. (For examples, see Hamilton 1983; Balke, Brown and Yücel 1999; and Brown and Yücel 1999). Oil's influence on the economy may be weakening, however.

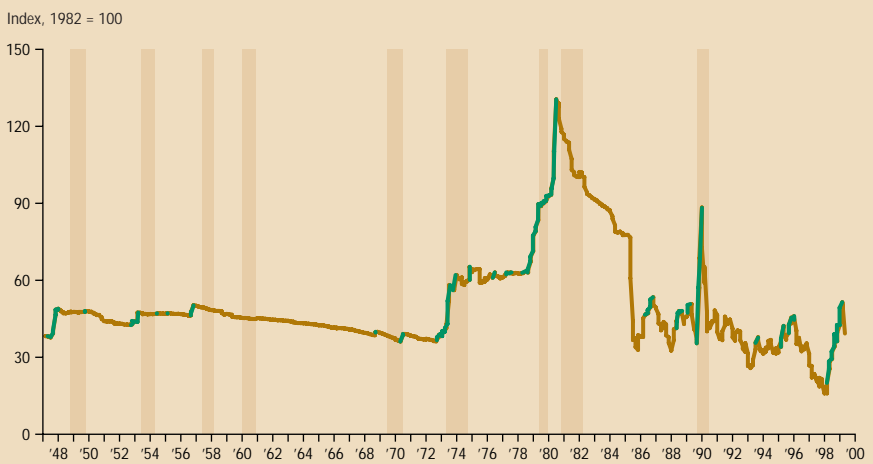
Rising oil prices preceded eight of the nine post-World War II recessions (Chart 5). The 1960 recession is the one exception. A small price hike preceded the recession in 1970. In the 1950s and 1960s, the economy was so sensitive to oil prices that small price increases led recessions. Since the mid-1980s, rising oil prices have not always led recessions. Oil-price fluctuations seem to have

Chart 4
OPEC Sets Oil Price Targets



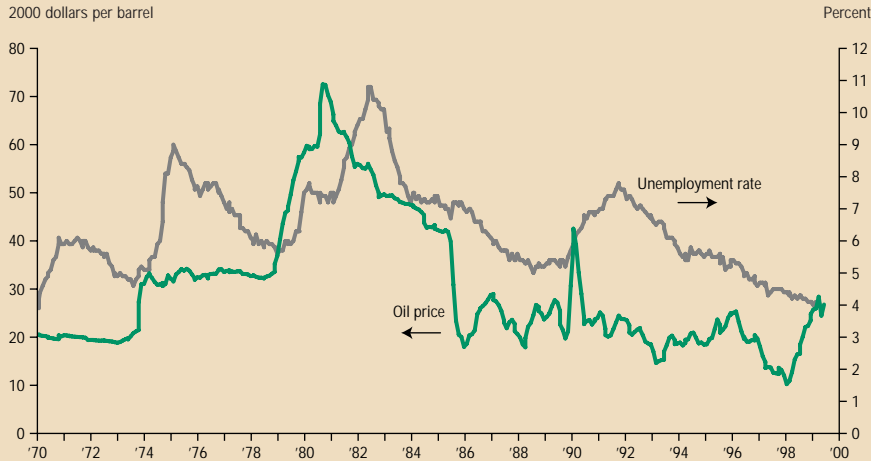
SOURCES: Department of Energy; authors' calculations.

Chart 5
Oil Prices and Recessions, 1947–2000



NOTE: Bars indicate recessions. Oil price increases that are not simply reversals of previous-year declines are shown in green.
SOURCES: National Bureau of Economic Research; authors' calculations.

Chart 6
Oil Prices and Unemployment



SOURCE: Bureau of Labor Statistics.

less effect on economic activity today than in the past.

Rising oil prices can be indicative of a classic supply-side shock (Brown and Yücel 1999), signaling increased scarcity of energy, a basic input to production. Consequently, output and productivity growth slow. The decline in productivity lessens real wage growth and increases the unemployment rate at which inflation accelerates. Under a monetary policy that maintains a constant nominal GDP, the price level rises by the amount GDP falls. If consumers expect the increase in oil price to be temporary, they will attempt to save less or borrow to smooth out their consumption. This will boost interest rates.

Research by Carruth, Hooker and Oswald (1998) shows a strong relationship between oil prices and the unemployment rate. Changing oil prices led movements in the unemployment rate from the 1970s through the 1990s (*Chart 6*). Unemployment declined with oil prices from 1982 through 1990 and in the late 1990s. Rising oil prices retard productivity growth and raise the rate of unemployment at which inflation accelerates. Falling oil prices stimulate productivity growth and lower the rate of unemployment at which inflation accelerates. The chart suggests this relationship weakened in the late 1990s, as the economy increasingly turned away

from energy-intensive industries and toward the high-tech industries that characterize the new economy.

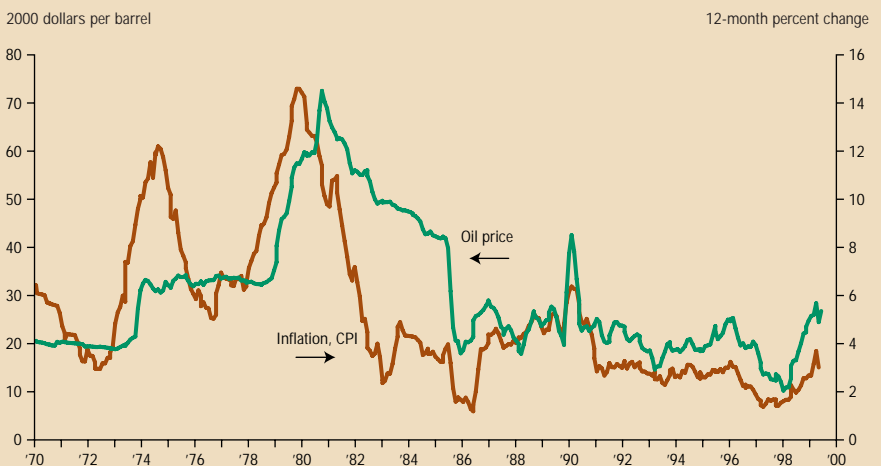
Economic research suggests that rising oil prices contribute to inflationary pressures (*Chart 7*). (For examples, see Balke, Brown and Yücel 1999; Brown and Yücel 1999). This relationship was obscured somewhat in the 1970s, however, when U.S. inflation appeared to lead increases in the price of oil. A rising U.S. price level put downward pressure on the real value of the dollar in international exchange. The weaker

dollar boosted the dollar-denominated demand for oil and helped push oil prices upward. At the same time, OPEC sought to maintain the purchasing power of its oil exports by increasing the price.

In the early 1980s, U.S. disinflation reversed the process. Since the mid-1980s, however, movements in inflation and oil prices have roughly coincided. We have also seen a weaker link between rising oil prices and core inflation—that is, inflation in all items except food and energy. This measure of inflation is thought to provide a better signal of underlying inflationary pressure because it is less susceptible to the fluctuations associated with food and energy prices. A recent study (Hooker 2000) on oil prices and inflation shows that, since 1980, oil-price changes have had little effect on core inflation. Before 1980, though, oil shocks contributed substantially to core inflation. The weaker link suggests monetary policy may have been more effective in combating the inflationary effects of oil-price shocks in the past 20 years.

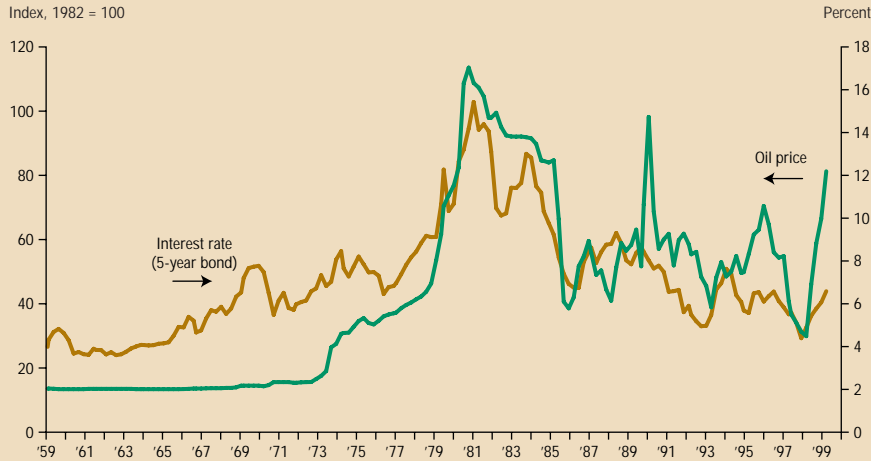
Nevertheless, rising oil prices seem to lead to higher interest rates (*Chart 8*). If consumers see oil-price increases as temporary, as is suggested by futures prices, they will also consider the loss of output and income associated with higher oil prices to be temporary. To smooth their consumption across periods

Chart 7
Oil Prices and Inflation



SOURCE: Bureau of Labor Statistics.

Chart 8
Oil Prices and Interest Rates



SOURCE: Federal Reserve Board of Governors.

The U.S. economy is about one-third less sensitive to oil-price fluctuations today than in the early 1980s.

of lower income, consumers will attempt to save less or borrow, which will boost interest rates.

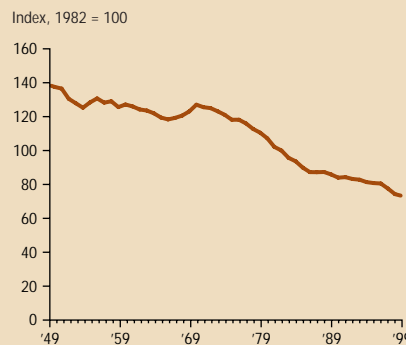
Some of the recent increases in the federal funds rate may be part of a general increase in interest rates that results from higher oil prices (Brown and Yücel 1999). To the extent the Federal Reserve does not allow the federal funds rate to rise with these increases in market interest rates, inflation would be more evident in the core measure of inflation.

One reason recent oil-price hikes may have had less negative impact on the national economy is that the amount of energy consumed in producing each dollar of GDP has declined. As Federal Reserve Chairman Alan Greenspan has said, "Today's GDP is lighter and smaller." However, this development is not new. The largest declines in energy consumption per dollar of GDP came during the 1970s through early 1980s, when oil prices were rising rapidly (Chart 9). The declines slowed after oil prices collapsed in 1986. Our informal calculations suggest the U.S. economy is about one-third less sensitive to oil-price fluctuations today than it was when oil prices were at their height in the early 1980s. Our calculations also suggest the U.S. economy is about half as sensitive to oil-price fluctuations as it was in the mid-1970s, when real oil prices were about the same as they are today.

Oil Prices and Economic Activity in the Southwest

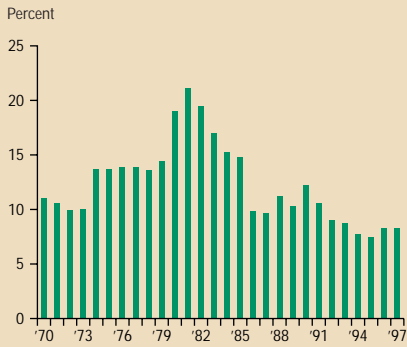
As the national economy has diversified away from energy-intensive industries, Texas has moved away from energy production. Texas' diversification is evident in its gross state product data. In 1981, the oil and natural gas sector accounted for about 20 percent of gross state product. In 1997—the most recent year for which we have data—oil and natural gas production accounted for about 8 percent of gross state product (Chart 10).

Chart 9
Energy/GDP Ratio Falling



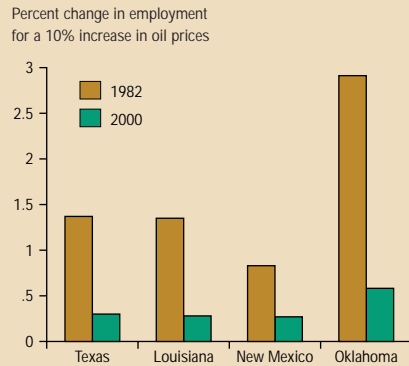
SOURCE: Authors' calculations based on data from Department of Energy and Bureau of Economic Analysis.

Chart 10
Oil Industry Less Important to Texas Economy



SOURCE: Bureau of Economic Analysis.

Chart 11
Energy-Producing States Less Helped by Rising Oil Prices



SOURCE: Brown and Yücel 1995.

Because the energy industry is less prominent in the state, Texas employment is about 75 percent less sensitive to oil-price movements today than it was in 1982. Similarly, employment in Louisiana and Oklahoma is about 80 percent less sensitive, and New Mexico employment is about 70 percent less sensitive (*Chart 11*).

We estimate that rising oil prices would have hurt economic activity in 37 states and the District of Columbia in 1982, as shown in Chart 12 (Brown and Yücel 1995). For the other 13 states, ris-

ing oil prices would have boosted economic activity in 1982.

At the present (2000), only eight states are helped by rising oil prices. Economic activity in Kansas, Mississippi, Montana, Utah and West Virginia has changed so much that these states are now hurt by rising oil prices rather than helped, as they were in 1982. More important, nearly all state economies that would have been hurt or helped by rising oil prices in 1982 are now less sensitive to oil-price increases. Diversification away from both energy-intensive

industries and energy production is making the states more alike in their responses to oil-price movements.

— Stephen P. A. Brown
Mine K. Yücel

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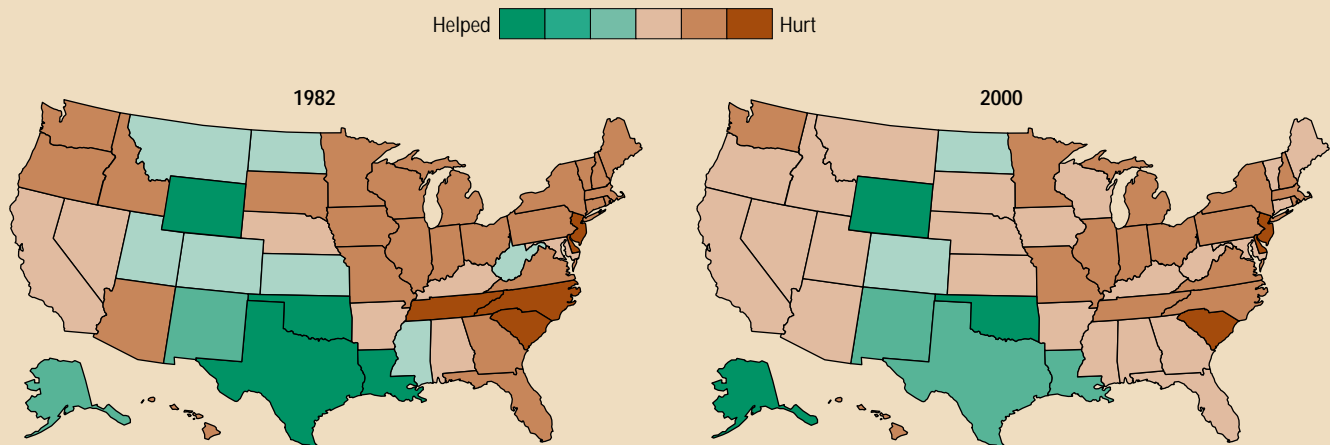
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Chart 12
Oil Price Sensitivity



SOURCE: Brown and Yücel 1995.

SOME PLEASANT ECONOMIC SIDE EFFECTS

BY VIRTUALLY EVERY popular measure, the U.S. economy is performing better today than in decades. Between October 1999 and March 2000, GDP grew at an annualized 6.3 percent and productivity at 4.6 percent. The next month, the expansion was a record 109 months long and unemployment hit a 30-year low of 3.9 percent. The nation has added an average of 162,000 jobs per month since the expansion began.

Just about every commonly cited statistic says that U.S. living standards have risen markedly over the past decade. With more Americans earning more money than ever before, people can afford to consume more, save more—or both. Perhaps more important, it has never been easier for ordinary Americans to find work or move to a better job.

Yet there are other ways—less celebrated but no less important—the strong economy has improved the everyday lives of ordinary people. Among these pleasant side effects are those on crime, welfare, charity, the budget deficit and minority well-being. The current expansion began in March 1991. But because America has had only eight months of recession since 1982, it can be seen as the second installment in a long boom that began about 210 months ago.

Crime

Estimates of the annual cost of crime in the United States range as high as \$1 trillion.¹ Many factors influence an individual's decision to commit crimes: the likelihood of being caught, the severity of punishment and the potential reward, to name a few. But high on the list are the job and income prospects one faces in pursuing lawful work. Research shows that economic incentives play a key role in influencing

crime, just as they do in many other decisions in life.² So it makes sense that crime rates, especially those economically linked—robbery, burglary, larceny and motor vehicle theft, for example—fell in the 1990s (*Chart 1*).³

What's remarkable about the decline is that all major types of crimes fell sharply. While non-economic factors such as demographic changes and more prisons can gradually reduce crime rates over time, what's remarkable about the 1990s is the sharp decline in virtually all major types of crime. Crime in every category has declined each year since the current expansion began, with the exception of small one-year increases in murder (1993) and larceny (1995). Declines have been so substantial that most types of crime are less prevalent now than they were in 1970. During the current expansion, robbery has fallen by 46 percent, murder by 45 percent, burglary by 41 percent, motor vehicle theft by 39 percent and larceny-theft by 23 percent.⁴ These numbers show that

one pleasant side effect of the nation's long economic boom has been a substantial reduction in crime.

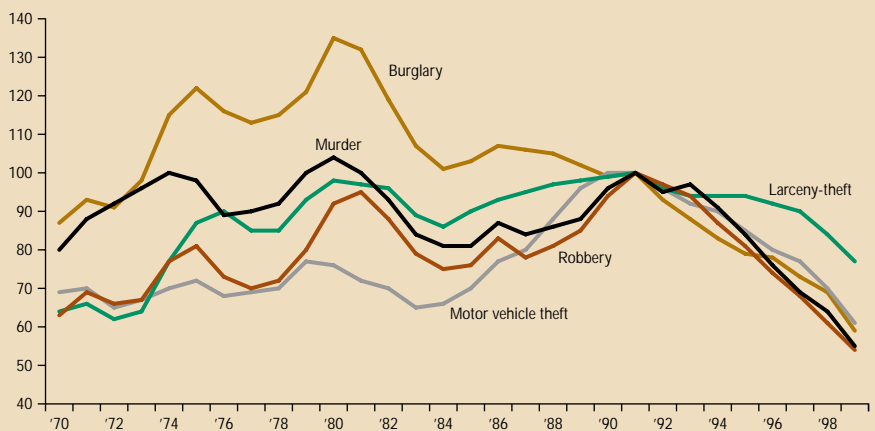
Welfare

Since the social safety net was created in 1936, numerous programs have been established to assist out-of-work Americans. As conceived, the nation's welfare system would rescue unfortunate but well-intended citizens from occasional hard times. In practice, however, the system also created incentives for able-bodied and otherwise competent individuals to opt out of the labor market in return for welfare benefits—cash, food and food vouchers, medical care, rent subsidies and others.

While America's growing economy has been providing ever-greater incentives for individuals to work, for those in some categories (such as the less skilled), an increasingly generous welfare system has been providing incen-

Chart 1
Criminal Offenses per 100,000 People, 1970–99

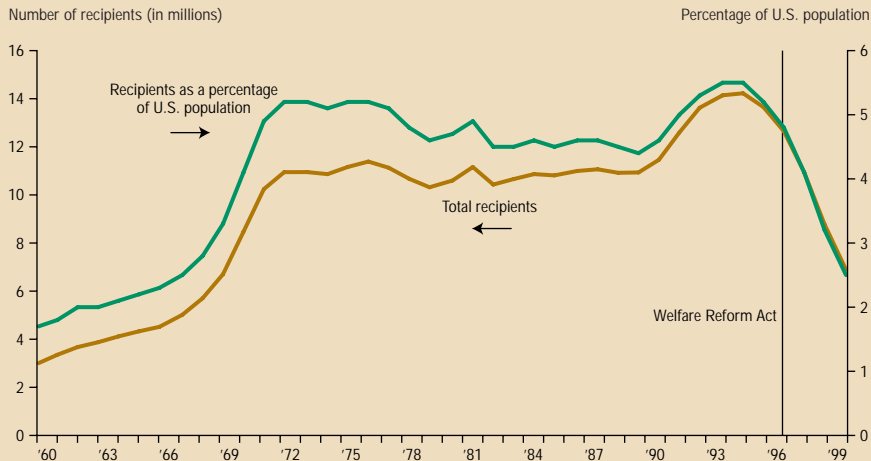
Index, 1991 = 100



NOTE: 1999 data are calculated using growth rates from the Uniform Crime Report, January–June 1999.

SOURCE: Federal Bureau of Investigation.

Chart 2
Temporary Assistance for Needy Families, 1960–99



SOURCE: Department of Health and Human Services.

tives to seek social welfare. By 1994, the number of Americans receiving cash welfare payments had reached an all-time high of 14.2 million, or 5.5 percent of the population (*Chart 2*).

Two factors changed the welfare cost-benefit calculus: the landmark welfare reform law enacted in 1996 and the prolonged economic expansion. It is difficult to pinpoint how much of the decline is due to the current expansion, and the General Accounting Office credits both factors for reducing welfare reciprocity. As *Chart 2* shows, however, the welfare rolls began to fall roughly three years into the expansion, two and a half years before welfare reform was signed into law.

The decline in welfare reciprocity has been broad-based, touching every state. Looking at reciprocity on a region-by-region basis provides further evidence that economic growth has helped cut welfare rolls (*Chart 3*). Regions with the greatest percentage decline in per capita reciprocity in the '90s tended to be those with greater percentage growth in median per capita real income.⁵

The fraction of Americans on welfare has declined by well over half—from 5.5 percent in 1994 to 2.5 percent in 1999. Welfare rolls are down by 53 percent over that period—from 14.2 million in 1994 to 6.8 million in 1999. Of course, the strong economy can't eliminate the need for welfare. But fewer

Americans are on welfare today than at any time since 1967—clearly another pleasant side effect of the nation's long boom.

Charity

In recent years, stories of self-absorbed millionaires and Internet billionaires have convinced many that Americans have abandoned their commitment to charity.

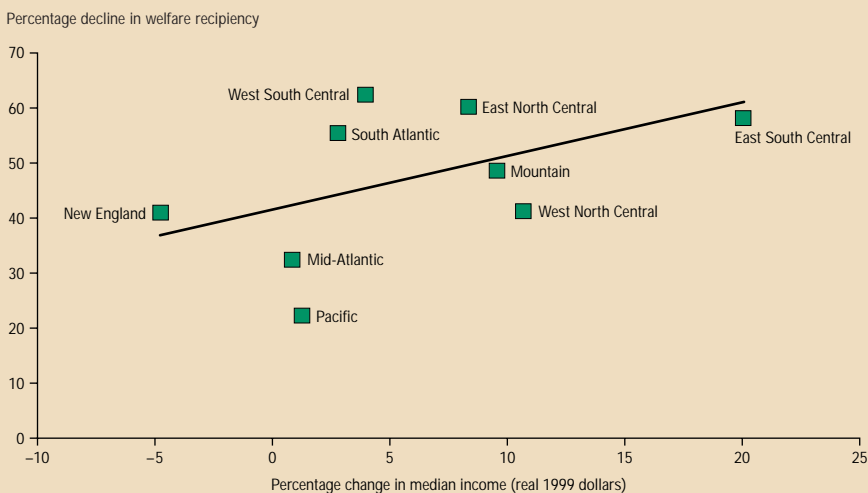
The data, however, provide evidence that Americans are contributing more than ever.

To gauge the extent of increased giving, it's helpful to compare the growth in giving per capita over the 1970s, 1980s and 1990s. The years 1970, 1982 and 1991 are business cycle peaks, so it makes sense to calculate and compare the growth in real giving per capita over three periods: 1970–82, 1982–91 and 1991–99.

The data show that real per capita contributions to charity declined at an average annual rate of 0.2 percent from 1970 to 1982, then rose at an average of 1.2 percent during the expansion of the 1980s. Since 1991, however, real per capita charitable contributions have grown at an annual average of 4 percent (*Chart 4*).⁶

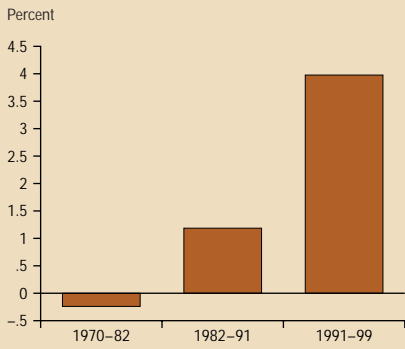
More recent data show an even stronger increase in giving. Since 1995, total real charitable contributions have grown 9 percent annually, rising from \$135.9 billion to \$191.7 billion in 1999. Real giving per capita has risen 8.4 percent annually over the period. Real contributions from individuals—the biggest category of giving—have grown 7.1 percent annually, rising to \$750 per adult. Other forms of charity have grown even faster, with foundations upping their contributions by 17 percent in 1999

Chart 3
Income Growth and the Per Capita Decline in Welfare Reciprocity: 1990–98



SOURCES: Department of Health and Human Services; Census Bureau.

Chart 4
Annual Growth in Real Giving per Adult



NOTE: Adults are individuals 20 years of age or older.
SOURCE: A.A.F.R.C. Trust for Philanthropy.

alone. Roughly half of all charitable contributions in the 1990s went to religious organizations such as churches, but the fastest-growing types of charities deal with social issues, such as environmental concerns.

From these data, it is clear a charitable renaissance is under way, powered in large part by the strong economy.

The Budget Deficit

The federal budget deficit has caused concern for more than three decades. Since 1969, the government has amassed debt of over \$5 trillion. In the first full year of the current expansion (1992), the deficit reached a record \$290.4 billion, and many analysts expected deficits in excess of \$400 billion annually by the end of the decade. But although federal spending has grown by about 4 percent annually since 1992, the budget has moved into surplus. Current projections call for a surplus of almost \$200 billion in fiscal 2000 and an end to the federal debt by 2013, or even 2009.⁷

The primary factor improving fiscal balance has been income tax revenues, which rose from \$468 billion in 1991 to \$880 billion in 1999 (Chart 5). This increase is largely due to growth in personal income, which expanded from \$5 trillion in 1991 to almost \$8 trillion last year. However, effective income tax rates have climbed, too. Between 1991 and 1999, the average citizen's federal income tax bite rose from 9.2 percent to

11.3 percent—a 23 percent increase.

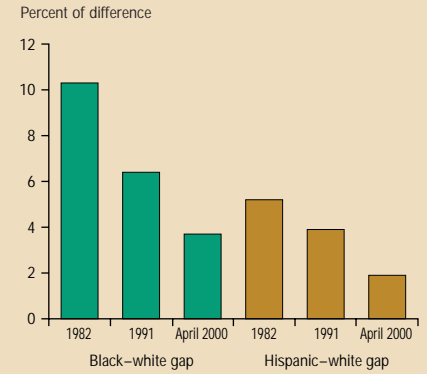
How did this happen? Part of the answer lies in a 1993 tax hike, but part is due to the way the tax system handles growth. A little-known aspect of the tax code is that real economic growth raises the proportion of income subject to taxes—and pushes people into higher tax brackets in the process. This means average Americans don't just pay more taxes when times are good, they actually pay a higher percentage of their income. Bracket creep isn't something that just happens to individuals when they get better jobs. It's designed into current national policy by a code that adjusts tax brackets only for inflation, not for real economic growth.⁸

Owing partly to the effects of strong economic growth on real taxable income, the average income tax rate rose significantly in the 1990s. But while we can lament a tax policy that shifts an ever-greater portion of society's output to government as economic growth proceeds, we can also celebrate the growth that has helped reduce government red ink.

Minority Well-Being

Historically, most minorities have fared worse than whites on standard measures of economic well-being. Aver-

Chart 6
Unemployment Rate Gaps



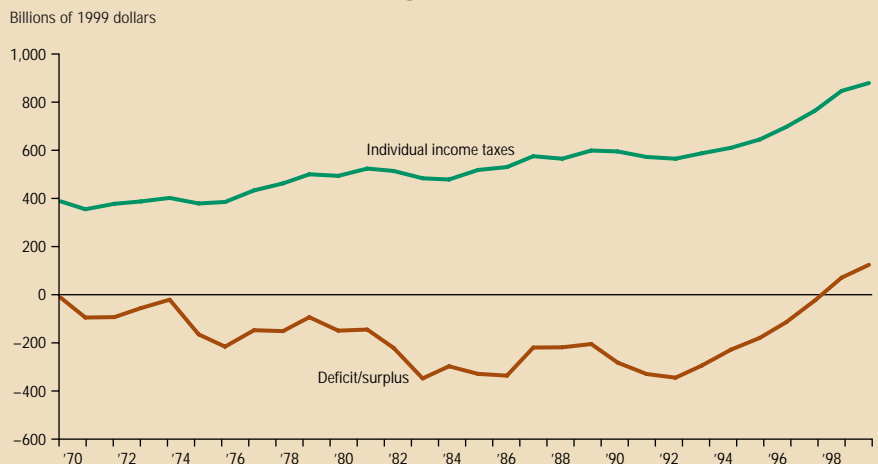
SOURCE: Bureau of Labor Statistics.

age wages earned by blacks and Hispanics have generally fallen short of those earned by whites. Unemployment rates among blacks and Hispanics have lingered well above those of whites. And poverty has plagued the minority population.

Has the recent economic expansion helped minorities? Since 1993, the poverty rate has dropped considerably among Americans of all races, especially minorities. From its 1990s peak of 7.6 percent (in 1993), the poverty rate among white non-Hispanic families fell

(Continued on back page)

Chart 5
Federal Income Taxes and Budget Balance, 1970–99



SOURCE: Office of Management and Budget.

U.S. – China Trade Relations: The Best of Both Worlds

THIS YEAR'S BIGGEST trade battle so far has been over permanent normal trade relations between the United States and China. The U.S. House of Representatives voted in May to permanently normalize trade relations, paving the way for China's membership in the World Trade Organization. The issue is now before the U.S. Senate. The vote has sparked controversy, perhaps because the details of the WTO accession agreement are not well understood. The most striking detail of the agreement, which is essentially a work in progress, is that the United States does very little in exchange for much reduction in China's protectionism.

This one-sided liberalization is not unusual. In trade agreements between the United States and developing countries, the latter do most of the liberalizing. The reason is simple. The United States is already more open to imports, foreign investment and international trade in services than many other countries, especially developing ones. In the China-U.S. agreement, U.S. tariffs do not go down, and other types of trade protectionism are generally not reduced either. Important from the Chinese perspective, however, is the United States' commitment to make permanent the trade privileges it has been extending to China one year at a time.

Chinese tariffs do come down. Chinese industrial tariffs are at an average ad valorem value of 24.6 percent. The average will fall to 9.4 percent. Despite this large reduction, average Chinese tariffs are markedly higher than those of industrial countries. According to some estimates, the average industrial tariff among the WTO member nations is under 4 percent. While China's trade reduction is important, it is not NAFTA. The WTO is not a free trade organization.

In addition to tariff reductions, China will reduce nontariff barriers. Import quotas will be phased out. Import licensing will ebb. Government monopolies on the importation of some products will fade, as will government decrees that only certain enterprises may import products the government itself doesn't monopolize. Arcane government purchas-

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ing programs—essentially “buy China” programs—will be made transparent and opened to foreigners.

Foreign investment rules will also change. Foreign firms will not have to agree to local content requirements, technology transfer requirements or minimum export requirements. Some of the biggest openings involve trade in services rather than in goods. Retailing and wholesaling, from which foreigners have been excluded up to now, will be opened. Foreign firms will be permitted

to hold up to 50 percent interest in telecommunications operations. Right now in China, foreign banking operations can only do business with foreign firms and in designated locations. By the time the accession is five years old, foreign banks will be able to do business in Chinese currency with both Chinese companies and individual customers at any geographic location. This is a significant opening.

The results of the U.S.-China negotiations last November are only part of a larger agreement—China's accession to the WTO. WTO membership means not only trade openings for China but also access to the organization's dispute settlement mechanisms. China will no longer be subjected to arbitrary unilateral decisions involving so-called administrative protectionism, such as anti-dumping. Administrative protectionism exists within the WTO framework, but this protectionism is more fully rationalized than that experienced by countries in some bilateral relationships.

The WTO agreement includes tariff and nontariff reductions that will be “multilateralized.” This means each of the bilateral agreements reached between China and every other country in the WTO will be merged. The best deal that China gives to any particular country will, in the merged agreement, be extended to all the WTO countries. Thus, the agreement between the United States and China can only get better.

—William C. Gruben

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Regional Update

THE TEXAS ECONOMY has cooled slightly from a strong first quarter but remains more robust than a year ago. High energy prices and continued strength in the high-tech sector have combined to sustain economic growth in recent months. Anecdotal evidence suggests, however, that higher interest rates are slowing construction activity.

Crude prices remained high throughout June at around \$30 per barrel. Oil exploration and extraction continue to increase in response to the price rise. The Texas rotary rig count has increased at an annual rate of 43.4 percent since the beginning of 2000.

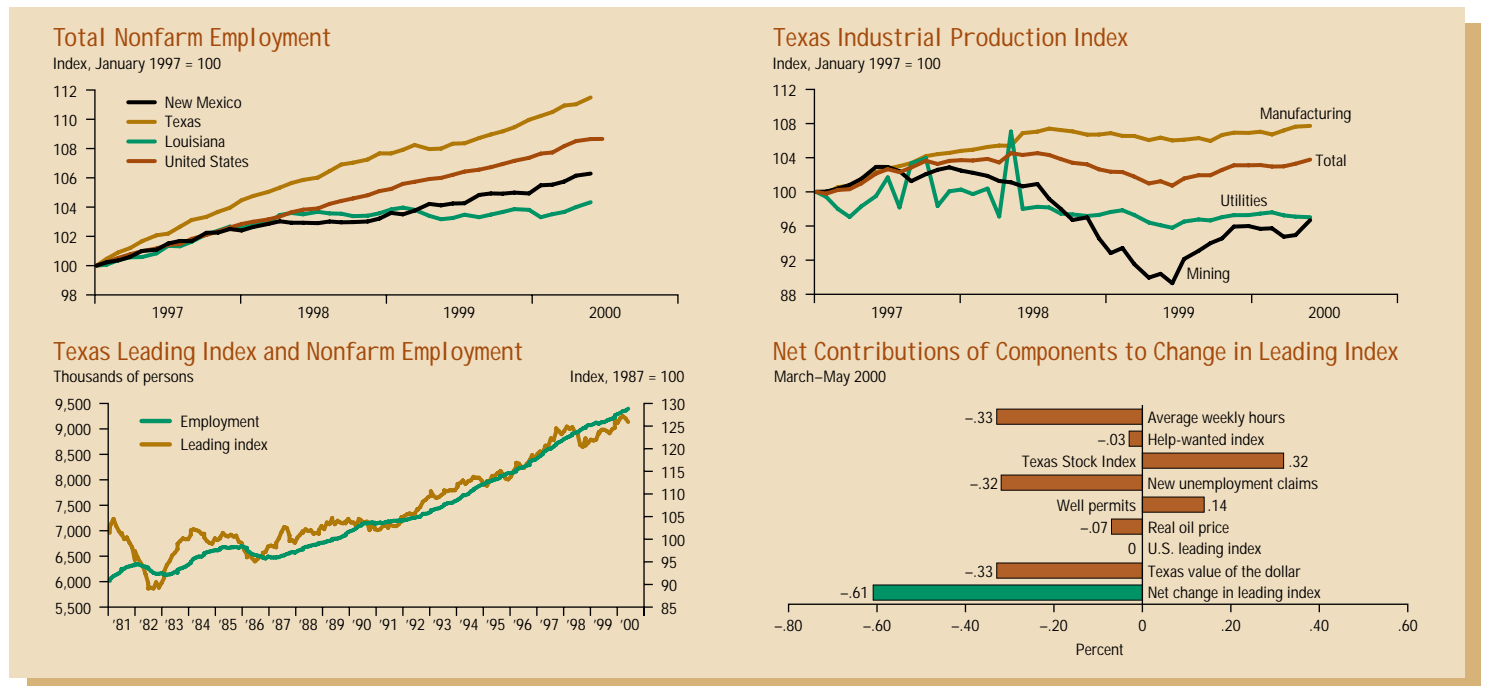
Manufacturing activity expanded in April and May. Productivity gains and extended working hours led to output growth of 4.7 percent (annual rate) over the two-month period. Manufacturing employment grew at a strong 2.7 percent in May after declining for most of the past year.

Construction activity is showing signs of cooling from a very strong pace. Nonresidential construction contract values declined in May. Growth of residential sales slowed from an annual rate of 20.1 percent in April to 5.5 percent in May. Construction employment declined by 700 jobs in May after posting strong growth the first four months of this year.

The Texas labor market remains very tight and was further squeezed by the hiring of census workers. The Texas unemployment rate dropped from 4.5 percent in April to 4.4 percent in May. The energy, manufacturing and service sectors have all reported difficulty in increasing and maintaining payroll levels.

After rising in February and March, the Texas leading index fell in April and May. This dampening in the leading index suggests a possible cooling in employment growth over the next six months.

—John Thompson



Regional Economic Indicators

	Texas Leading Index	TIPI† total	Texas employment*				Total nonfarm employment*			
			Mining	Construction	Manufacturing	Government	Private service-producing	Texas	Louisiana	New Mexico
5/00	125.9	129.0	146.6	559.0	1,078.8	1,591.5	6,020.7	9,396.6	1,905.1	743.6
4/00	126.7	128.4	146.4	559.7	1,076.4	1,563.6	6,011.4	9,357.5	1,899.0	742.6
3/00	127.2	128.0	146.7	554.8	1,081.8	1,560.3	6,006.7	9,350.3	1,893.0	739.8
2/00	126.7	128.0	146.1	552.0	1,081.8	1,553.2	5,979.9	9,313.0	1,890.2	738.3
1/00	125.7	128.2	146.2	548.5	1,081.4	1,551.6	5,962.7	9,290.4	1,886.4	738.0
12/99	126.4	128.2	145.9	542.5	1,079.4	1,544.1	5,956.3	9,268.2	1,895.6	734.1
11/99	124.6	128.2	145.8	537.6	1,077.7	1,534.8	5,929.3	9,225.2	1,896.5	734.5
10/99	124.3	127.5	145.6	532.9	1,077.9	1,533.6	5,911.6	9,201.6	1,892.9	734.0
9/99	123.4	126.7	144.4	532.1	1,080.5	1,535.1	5,891.6	9,183.7	1,889.7	734.1
8/99	123.9	126.7	144.0	526.5	1,081.1	1,532.1	5,879.5	9,163.2	1,886.4	733.4
7/99	124.2	126.3	143.5	527.0	1,083.3	1,514.7	5,864.2	9,132.7	1,889.5	729.4
6/99	124.2	125.2	144.4	525.6	1,080.8	1,534.0	5,845.8	9,130.6	1,885.4	729.3

* 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.



SOME PLEASANT ECONOMIC SIDE EFFECTS

(Continued from page 9)

to 6.1 percent by 1998.⁹ Among blacks, the drop has been greater, with the rate declining from 31.3 percent to 23.4 percent—a nearly 8 percentage point drop. Poverty rates among Hispanic families fell from 27.3 percent to 22.7 percent over this period, which is especially remarkable given the large number of poor Hispanics who migrated to the United States in the 1990s.

The minority unemployment picture is even better. During America's long boom, overall unemployment has fallen from its 1980s high (in 1982) of 9.7 percent to a 1990s high of 7.5 percent (in 1992) to 3.9 percent in April 2000. Unemployment rate gaps, however, have shown steeper declines (Chart 6). The gap between black and white unemployment rates narrowed from 10.3 percent in 1982 to 6.4 percent in 1991 and 3.7 percent in April. The Hispanic-white gap went from 5.2 percent in 1982 to 3.9 percent in 1991 and 1.9 percent in April.

Minorities have faced many obstacles in the 20th century. But

after nearly two decades of strong economic growth, falling unemployment rates and intensifying global competition, these obstacles have lessened. Minorities have seized the opportunities the New Economy affords to narrow the gap with the broader population and provide a better standard of living for themselves and their families—another pleasant side effect of the strong economy.

—Jason L. Saving
W. Michael Cox

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Notes

- ¹ See David A. Anderson, "The Aggregate Burden of Crime," *Journal of Law and Economics*, October 1999, pp. 611–42.
- ² The seminal article on the subject is Gary S. Becker, "Crime and Punishment: An Economic Approach," *Journal of Political Economy*, March/April 1968, pp. 169–217. More recent work that confirms the importance of economic factors to criminal behavior is Ralph C. Allen and Jack H. Stone, "Market and Public Policy Mechanisms in Poverty Reduction: The Differential Effects of Property Crime," *Review of Social Economy*, June 1999, pp. 156–73.
- ³ Both homicide and forcible rape have also declined since 1992. Although initially one might view these crimes as un-

related to the economy, there is good reason to believe they might be indirectly linked to job and income prospects. Working citizens have less time to commit crime, and they are apt to feel more included in society, less frustrated and marginalized and therefore less antisocial.

⁴ The rate of motor vehicle theft continued downward in the 1990s, but it has been in decline since the early 1980s.

In some cases, technologies introduced since the early 1980s have likely reduced crime as much as the economic expansion has. Examples are car alarms and home security systems, largely unavailable until the early 1980s but now found in nearly a quarter of U.S. residences and vehicles.

⁵ The regions in the article and Chart 3 are the standard nine U.S. Census divisions.

⁶ The figures used here are real giving per adult to help control for demographic changes.

⁷ The \$200 billion includes a \$40 billion non-Social Security surplus.

⁸ Under the tax code, all Americans could be in the 39.6 percent tax bracket someday. The obvious solution is to change the way tax brackets are indexed. Tax brackets could be raised by the full extent of nominal income growth annually, not just the portion due to higher prices.

⁹ Data are the most recent available.

Southwest Economy

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