

Institute for Public Policy and Business Research  
The University of Kansas

**U.S. AND KANSAS ECONOMIC FORECASTS FOR 1993**

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## **Preface**

The Institute for Public Policy and Business Research is pleased to present its 1993 economic forecast for the United States and Kansas. The forecast was generated with the Kansas Econometric Model and the Indiana University Econometric Model of the United States. This report includes an executive summary, an explanation of the assumptions used in making the forecasts, forecasts for the U.S. and Kansas economies for 1993, and an appendix with detailed quarter by quarter forecasts for each sector.

The forecast and this report were prepared by Norman Clifford, Research Fellow and director of the Kansas Econometric Model. The Kansas Econometric Model is a long-term project of the Institute; Professor Clifford, Professor Mohamed El-Hodiri, Dr. Gary Albrecht and Robert Glass, among others, have been instrumental in its development. Professor Donald Lien and David Rearden have been responsible for the development of a supporting ARIMA model.

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## Executive Summary

### The National Economy

The U.S. economy should continue its moderate recovery in 1993, with Gross domestic Product growing about 2.0 percent, about the same as in 1992. Although the growth in real consumption expenditures and real exports will be down slightly in 1993, these reduced growth rates will be offset by faster growth in real business fixed investment and real government purchases of goods and services.

The reduction in the growth rate of real consumption expenditures will be brought about by a sluggishness in the rate of increase of real disposable income. In nominal terms, personal income will grow about 5 percent, but after tax income will grow only 4.4 percent because of a nearly 10 percent increase in personal tax and nontax payments to Federal and state and local governments. Corrected for inflation, after tax income will increase only 1.5 percent, leading to a modest 1.6 percent increase in real personal consumption expenditures.

Real consumption spending on services will increase 2.2 percent, while real consumer spending on durable goods will continue its recent recovery, growing 2.4 percent after growing 5.3 percent in 1992. On the other hand, real consumer spending on nondurable goods will increase only 0.4 percent.

Growth in real spending on plant and equipment by businesses will help the U.S. economy in 1993, averaging about 6.3 percent for the year. In addition, firms' additions to inventory stocks should also contribute to output increases in the coming year. After many years of decline, real residential spending will continue to grow in 1993, although its 2.4 percent increase will not match the robust 11.8 percent increase in this category on 1992.

Weak growth of our trading partners and a weak dollar will reduce both real export growth and real import growth in 1993, leaving real net exports at about the 1992 level. The final category of aggregate demand, real federal and state and local government purchases of goods and services, should increase about 1.4 percent this year, following a 0.3 percent decline in 1992, giving a slight fiscal stimulus

to the economy.

Given the rather modest pace of the recovery, it is not surprising that the forecast is for inflation to remain relatively low and stable. As a result of weakened demand pressures, the inflation rate as measured by the Consumer Price Index fell from 5.4 percent in 1990 to 4.2 percent in 1991 and 3.0 percent in 1992. The forecast is for the rate of inflation to be 3.3 percent in 1993.

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**Table 1**  
**The National Forecast--Summary**

	1989	1990	1991	1992	1993
Real GDP (billions)	4838.1	4877.5	4821.0	4914.1	5014.1
Growth Rate	2.5	0.8	-1.2	1.9	2.0
Rate of Inflation	4.8	5.4	4.2	3.1	3.3
Civilian Employment (millions)	117.3	117.9	116.9	117.6	119.2
Growth Rate	2.1	.5	-.9	.7	1.3
Unemployment Rate	5.3	5.5	6.8	7.4	7.3
3-Month T-Bill Rate	8.1	7.5	5.4	3.5	3.4
Nominal Personal Income (billions)	4380.3	4664.2	4828.3	5054.5	5308.8
Growth Rate	7.5	6.5	3.5	4.7	5.0

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The pace of the recovery is also related to the employment forecast; the economic growth forecasted for 1993 will induce employment growth that barely exceeds the rate of growth of the labor force. Thus the unemployment rate is expected to decline almost imperceptibly, from 7.4 percent to 7.3 percent.

Although short-term interest rates have declined rather steadily since the beginning of 1990, the

decline appears to have bottomed out sometime during the fourth quarter of 1992. In general, however, the rate of economic growth, particularly during the first half of 1993, will not be sufficient to stir the Fed to raise rates significantly. The increase in these rates that accompanies increasing growth in the latter half of the year should be modest, with short-term rates ending the year about a half of a percentage point above their level at the end of 1992. Long-term rates should be even more stable, as the threat of inflation continues to recede.

The national forecast, which is summarized in Table 1, above, is based on the Indiana University Econometric Model of the United States. To arrive at our forecast, the following assumptions were imposed on that model.

1. In spite of the Fed's obviously expansionary interest reductions during 1992, the M2 measure of the money supply has grown very slowly. Although the Fed has made reserves available to the banking system at a very low cost, banks, with an apparently increased aversion to risk, have failed to make large amounts of new credit available. Additionally, it appears that there has been some portfolio reallocation away from the low rates available on certificates of deposit and savings accounts. The forecast assumes that this trend will ease somewhat in 1993, with M2 growing 4.6 percent, up from its 2.8 percent growth rate in 1992.
2. We assume that there will be only slight changes in federal fiscal policy over the forecast period. Our forecast includes a 5.6 percent decline in real federal defense spending in 1993. Total real federal spending is expected to grow 1.3 percent in 1993. The federal government's budget deficit is expected to jump to about the \$322 billion (NIPA basis)<sup>2</sup> level. The forecast assumes that some increases in state and local tax rates will be needed to reduce deficits in state and local operating budgets.
3. The trade weighted average of the exchange rate is expected to remain low (at about 89 on an index in which the 1973 level equals 100) throughout 1993. Nevertheless, our forecast takes the rather pessimistic view that real exports will grow at about a 4 percent annual rate over that same period. This assumption comes from a belief that economic growth among the U.S.'s major trading partners will be weak over the next year or so.
4. The forecast assumes that imported oil prices will remain fairly stable through the end of 1993, growing at about a 1 percent annual rate.

### **The Kansas Economy**

The Kansas forecast is summarized in Table 2, below. During the recession and the recovery, the Kansas economy appears to have outperformed the national economy. Unlike the 1981-1987 period

(when Kansas nonfarm wage and salary employment growth averaged half of the U.S.'s 1.8 percent per year), from 1990 through 1992 U. S. nonfarm wage and salary employment averaged no annual growth, while Kansas nonfarm wage and salary employment averaged 1.7 percent per year. A particularly dramatic year was 1991, during which U.S. nonfarm wage and salary employment fell 1.3 percent, while Kansas nonfarm wage and salary employment grew 1.0 percent. The forecast is for Kansas nonfarm wage and salary employment to continue its reasonably strong growth at a 1.7 percent rate in 1993, although the U.S. growth rate of nonfarm wage and salary employment will not be far behind at 1.4 percent. Unlike the U.S., the Kansas unemployment rate did not increase significantly in 1991 and 1992, and is expected to remain near 4 percent for 1993.

In terms of personal income, the Kansas performance has also been better in recent years, although the improvement has been less dramatic than for employment. Kansas personal income grew more slowly than the U.S. in every year during the 1983-1989 period. While Kansas personal income grew faster than the U.S. in 1990, it has grown at about the same rate as the U.S. since then. For 1993, Kansas personal income is expected to grow 5 percent, about the same rate as the U.S. Adjusted for inflation, Kansas personal income is expected to grow 2.1 percent.

Among the sectors with significant forecasted employment growth for 1993 are construction (2.4 percent), nondurable goods manufacturing (1.3 percent), transportation and public utilities (1.0 percent), wholesale and retail trade (1.6 percent), finance, insurance, and real estate (0.8 percent), services (4.7 percent), and state and local government (1.1 percent). Among the sectors with small or declining forecasted employment growth for 1993 are mining (0.3 percent), durable goods manufacturing (-1.6 percent), farming (-0.7 percent) and federal government (-2.6 percent).

**Table 2**  
**The Kansas Forecast--Summary**

	1989	1990	1991	1992	1993
Civilian Labor Force (thousands)	1285.0	1300.0	1295.0	1323.0	1342.9
Growth Rate	0.2	1.2	-0.4	2.2	1.5
Total Employment (thousands)	1233.0	1243.0	1238.0	1269.8	1288.1
Growth Rate	1.0	0.8	-0.4	2.6	1.4
Wage and Salary Employment (thousands)	1064.2	1084.7	1095.1	1118.5	1137.9
Growth Rate	2.8	1.9	1.0	2.1	1.7
Unemployment Rate	4.1	4.4	4.4	4.0	4.1
Nominal Personal Income (millions)	40767.3	44065.3	45706.3	47949.8	50335.0
Growth Rate	4.8	8.1	3.7	4.9	5.0
Real Personal Income (millions)	37298.8	38323.6	38098.0	38811.1	39639.9
Growth Rate	0.0	2.7	-0.6	1.9	2.1



## **Introduction**

A continuation of moderate recovery is expected for the U.S. economy in 1993: anchored by moderate growth in real consumer spending, U.S. real output should grow about 2.0 percent. Consumer spending will be supported by a 2.2 percent growth in real personal income, although increases in personal tax revenues will weaken the effect somewhat, allowing real disposable personal income to grow only about 1.5 percent. Additional strength will be found in investment spending by firms in 1993. The stimuli in this sector will come from spending on new plant and equipment as well as spending to replenish inventories that were depleted during the recession. Increases in residential investment spending will also help sustain output in 1993. Although the value of the dollar will be relatively low, export growth will be moderate because of slow growth of our major trading partners. On the other hand, the weak dollar will contribute to slow import growth, so that the trade deficit should remain relatively stable. A modest increase in real federal government purchases of goods and services will provide a slight fiscal stimulus in 1993.

On the positive side, the lower rate of inflation brought about by the recession will continue throughout the coming year, with the Consumer Price Index increasing about 3.3 percent. Employment growth, on the other hand, will probably be meager, so that the U.S. unemployment rate in 1993 should average about 7.3 percent, about the same as it did 1992. Short-run interest rates will probably bottom out during the fourth quarter of 1992, and then increase very gradually during 1993. Long-run rates, on the other hand, should decline slightly throughout 1993 as inflationary expectations continue to wane.

The forecast is a little more rosy for Kansas than for the nation as a whole. Measured by the performance of employment growth, Kansas has consistently outperformed the U.S. during and after the recession, and should continue to do so during 1993. The rate of employment growth should keep the Kansas unemployment rate at about 4.1 percent, well below the predicted U.S. rate. Nominal personal income should grow 5 percent; its 2.1 percent rate of growth after correcting for inflation is a sign of the

strength of our forecast for the state.

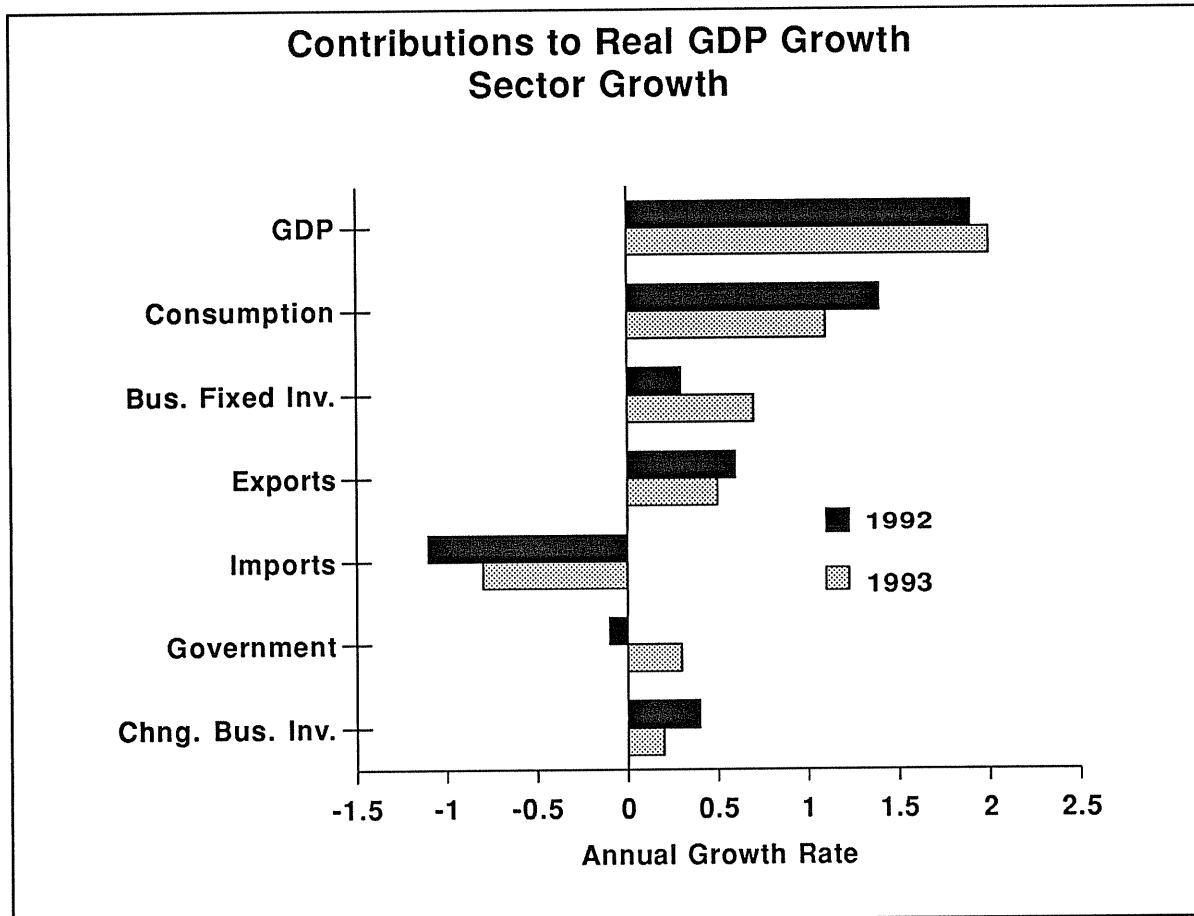
## The National Outlook

The national forecast presented below is based on the following major assumptions<sup>1</sup>:

1. In spite of the Fed's obviously expansionary interest reductions during 1992, the M2 measure of the money supply has grown very slowly. Although the Fed has made reserves available to the banking system at a very low cost, banks, with an apparently increased aversion to risk, have failed to make large amounts of new credit available. Additionally, it appears that there has been some portfolio reallocation away from the low rates available on certificates of deposit and savings accounts. The forecast assumes that this trend will ease somewhat in 1993, with M2 growing 4.6 percent, up from its 2.8 percent growth rate in 1992.
2. We assume that there will be only slight changes in federal fiscal policy over the forecast period. Our forecast includes a 5.6 percent decline in real federal defense spending in 1993. Total real federal spending is expected to grow 1.3 percent in 1993. The federal government's budget deficit is expected to jump to about the \$322 billion (NIPA basis)<sup>2</sup> level. The forecast assumes that some increases in state and local tax rates will be needed to reduce deficits in state and local operating budgets.
3. The trade weighted average of the exchange rate is expected to remain low (at about 89 on an index in which the 1973 level equals 100) throughout 1993. Nevertheless, our forecast takes the rather pessimistic view that real exports will grow at about a 4 percent annual rate over that same period. This assumption comes from a belief that economic growth among the U.S.'s major trading partners will be weak over the next year or so.
4. The forecast assumes that imported oil prices will remain fairly stable through the end of 1993, growing at about a 1 percent annual rate.

Given these assumptions, the national forecast is for the recovery to continue at a more or less moderate pace. U.S. output, measured by real GDP, should grow about 1.9 percent in 1992, and 2.0 percent in 1993. A summary of the contributions of the various sectors of aggregate demand to the overall growth rate of GDP is presented graphically in Figure 1. As the figure illustrates, 1993 should very much resemble 1992, with slightly weaker performance by the consumption and export sectors offset by stronger investment spending and reduced growth of spending on imports. Some of the details of these movements are presented below.

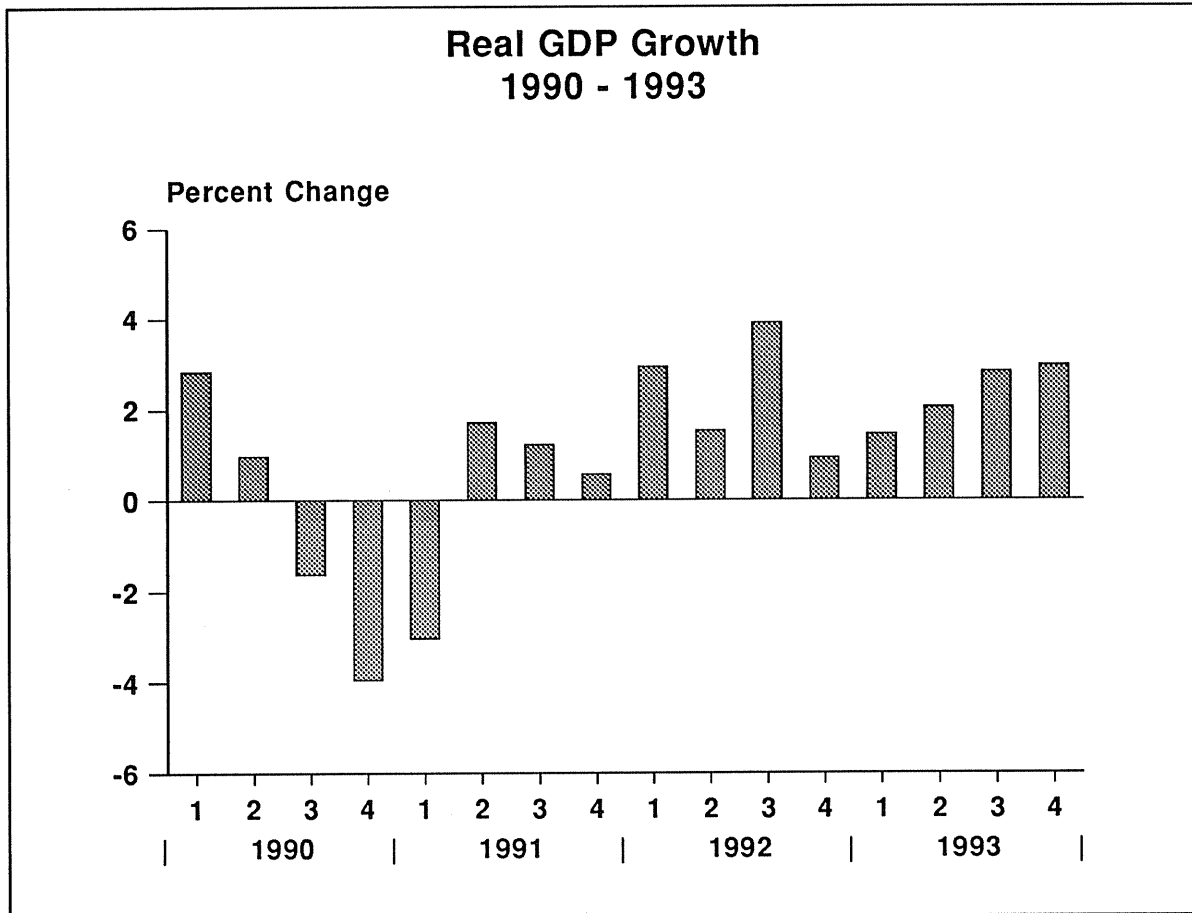
The quarterly pattern of forecasted GDP growth is illustrated in Figure 2. Although real GDP grew 3.9 percent during the third quarter of 1992, the increase was driven by a big jump in real



**Figure 1**

consumption spending (3.7 percent). This growth in consumption spending, however, was not induced by growth in real disposable income, which grew only 0.4 percent. Thus, the rather robust consumption spending that occurred in the third quarter would be unlikely to persist, and in fact real consumption growth is expected to be significantly weaker throughout the rest of the forecast.

The modest growth in personal consumption expenditures forecasted for 1993 is a result of an equally modest forecast for personal income growth and an even less lively growth in disposable personal income. Nominal personal income is expected to grow only about 5.0 percent in 1993, slightly more than it did in 1992. Growth in wage and salary disbursements, which make up nearly 60 percent of personal income, is expected to be only 4.5 percent, due to weak employment growth and small wage increases. On the other hand, property income (dividends, interest, and rents) is expected to grow 3.3 percent, after



**Figure 2**

declining 1.5 percent in 1992 and increasing a mere 0.6 percent in 1991. Proprietors' income is expected to grow 3.9 percent, while transfer payments are forecasted to increase 9.0 percent. Although the 5.0 percent expected growth in personal income is modest, the forecast for personal disposable income growth is even less encouraging at only 4.4 percent, due to a forecasted increase of more than 9.7 percent in personal tax and nontax payments to both the federal and state and local governments.

If we adjust the personal income and disposable personal income forecasts for inflation, we get a forecasted increase of 2.2 percent in real personal income, and 1.5 percent in real disposable income. Given these income forecasts real consumption spending is expected to grow 1.6 percent in 1993. Since consumption spending is about two-thirds of gross domestic product, this growth in consumption spending alone almost guarantees some growth in real output, while simultaneously indicating that output growth

will be at best moderate.

Most of the increase in real consumer spending for 1993 will come from spending on services, which will increase 2.2 percent following a 2.1 percent increase in 1992. Consumer spending on durable goods, on the other hand, will grow about 2.4 percent after growing 5.3 percent in 1992. One notable indication of the slowness of the recovery is this still weak behavior of consumer spending on durable goods. Because consumer spending on durables declined 0.3 percent in 1990 and a further 5.6 percent in 1991, the forecasted growth in 1992 and 1993 still leaves the level of consumer spending on durable just above its 1989 level. One bright spot in the forecast for consumer spending on durable goods is new automobiles: the forecast is for this category of consumer spending to increase 4.4 percent after growing 4.0 percent in 1992. Once again, however, this forecast puts the level of consumer spending on new autos in 1993 well below its pre-recession level. In fact, spending on new autos was above the 1993 forecasted level in every year from 1984 through 1990.

Consumer spending on nondurable goods is expected to grow about 0.4 percent in 1993, about half as its 0.8 percent growth in 1992. Although the growth rate of consumer spending on nondurables did not fall as dramatically as the growth rate of spending on durables (real spending on nondurable goods grew 0.5 percent in 1990 and declined 1.3 percent in 1991), these forecasted growth rates are much lower than the ones for durable goods for 1992 and 1993. Nevertheless, the forecasted level of consumer spending on nondurable goods in 1993 is about the same as its level in 1990, its previous highest year. Thus, our forecast can be characterized as presenting a slightly stronger market for consumer nondurables than consumer durables in 1993. Consumer spending on food will grow 0.4 percent, spending on clothing and shoes is expected to grow 1.6 percent, while spending on gasoline and oil will increase 1.7 percent.

Although consumer spending will not be a particularly strong sector of aggregate demand in 1993, business spending on plant and equipment is expected to perform rather well. In real terms, such purchases declined slightly in 1990 and then fell 7.1 percent in 1991 before rebounding modestly with a

2.5 percent increase forecast for 1992. For 1993, real spending by firms on new plant and equipment is expected to increase a healthy 6.3 percent. Once again, however, the weakness of the recovery over the last two years is illustrated by the fact that even strong growth in 1993 will bring firm spending on new plant and equipment to only about the same level that it was in 1989. Most of the forecasted increase in new plant and equipment comes from an expected 9.1 percent increase in spending on equipment, even better than the 6.9 percent increase in this category in 1992. However, spending on structures is expected to grow 0.6 percent, following its 12.2 percent, and 7.1 percent declines in 1991 and 1992. The level of spending on new structures will be well below its 1990 peak. Indeed, one of the most important and long-lasting effects of the recession and weak recovery will be that the long period during which the level of

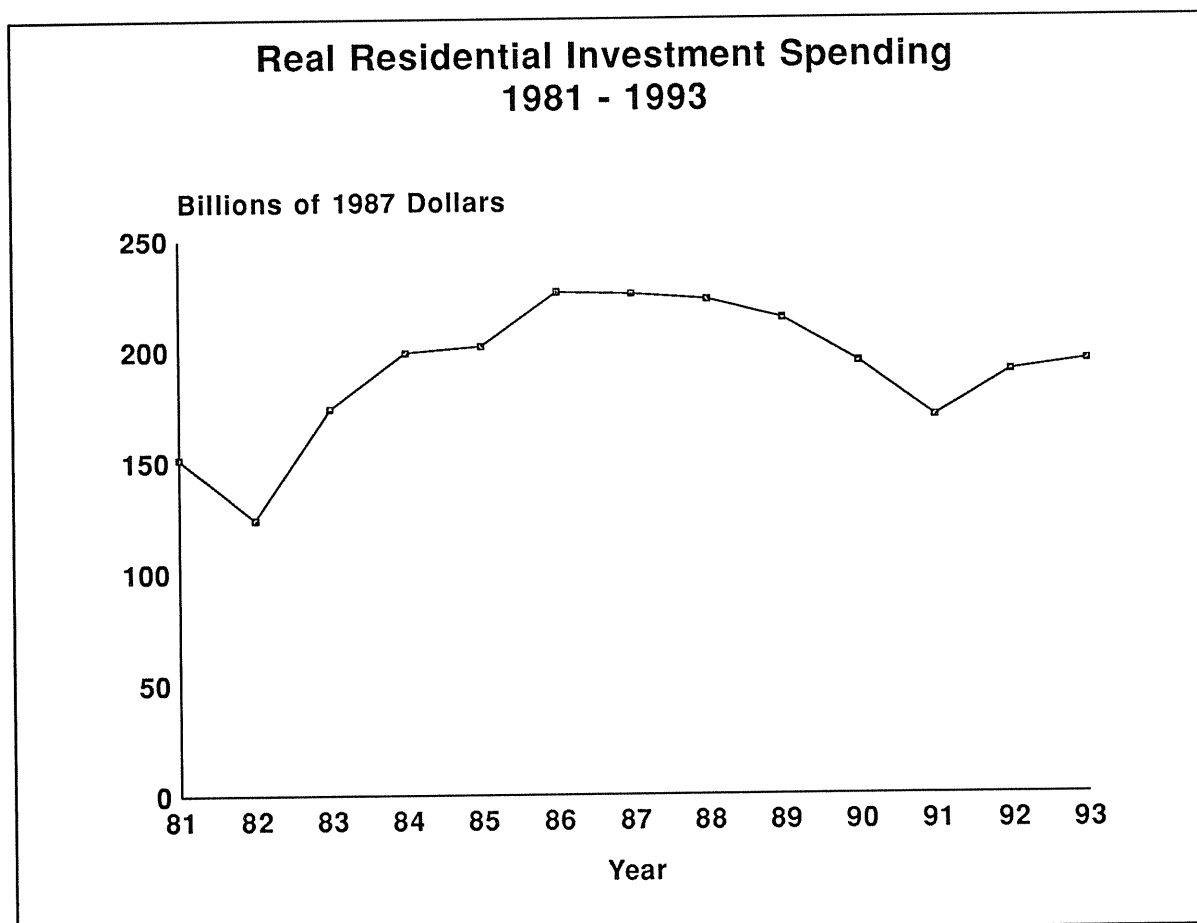


Figure 3

investment spending was low will lead to less capital stock and lower productivity in the future.

Residential investment spending will also exhibit strong growth in both 1992 and 1993, with increases of 11.8 percent and 2.4 percent respectively. As Figure 3 illustrates, residential investment reached its peak level in 1986, and then declined for the next 5 years, with near double digit drops occurring in 1990 and 1991. Thus, we once again see that although the strong growth predicted for 1993 should contribute significantly an increase in aggregate demand, the level of real residential investment spending in 1993 will be well below the 1986 peak.

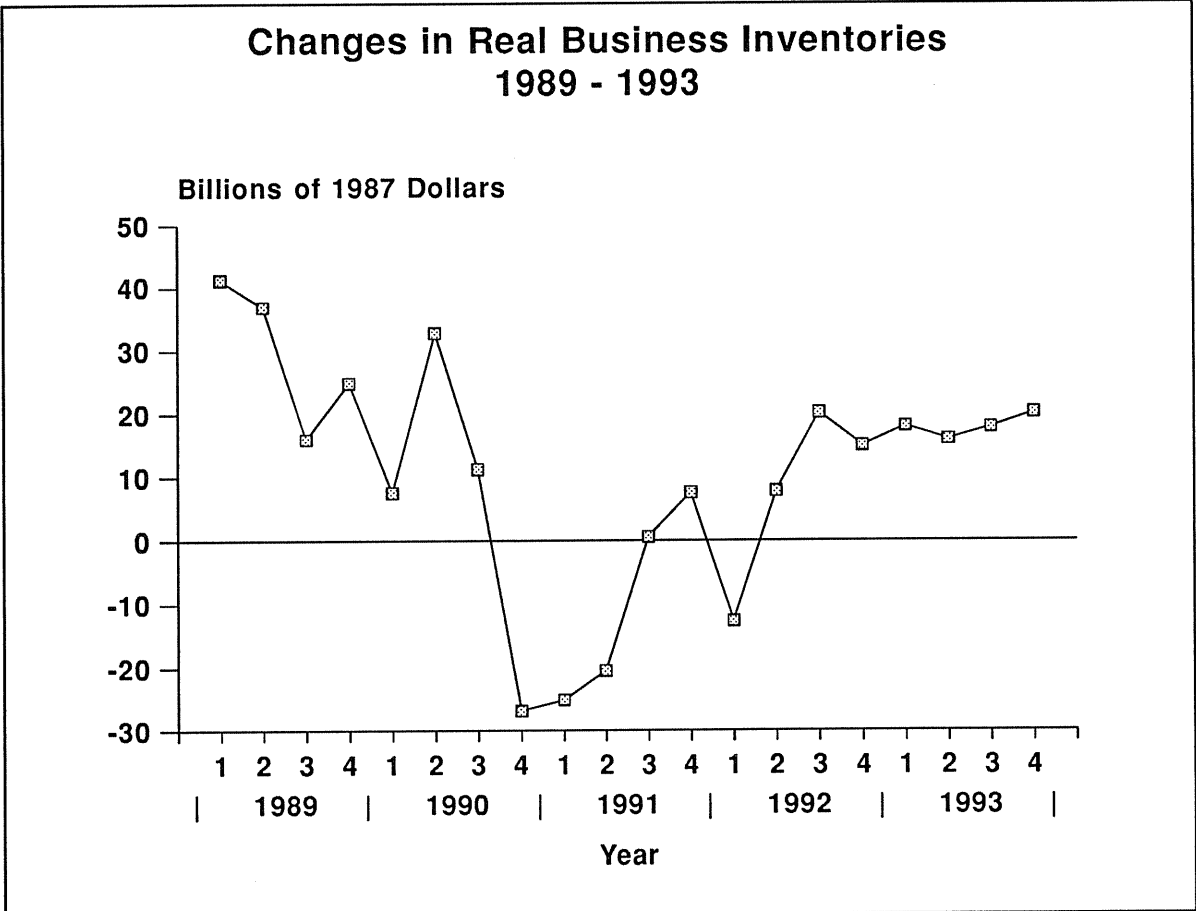


Figure 4

The final category of investment spending, firms additions to inventories, should also exhibit a significant increase in 1993. As Figure 4 illustrates, firms began to draw down their inventory stocks in the last quarter of 1990 and had not significantly reversed that process by the third quarter of 1992. The

forecast is for firms to finally begin to replenish their inventory stocks in the fourth quarter of 1992, and to continue that process through 1993. At the forecasted rate of increase, firms' real inventories should return to their pre-recession level sometime in the second quarter of 1993. These additions to inventories by firms should contribute somewhat to GDP growth during 1993.

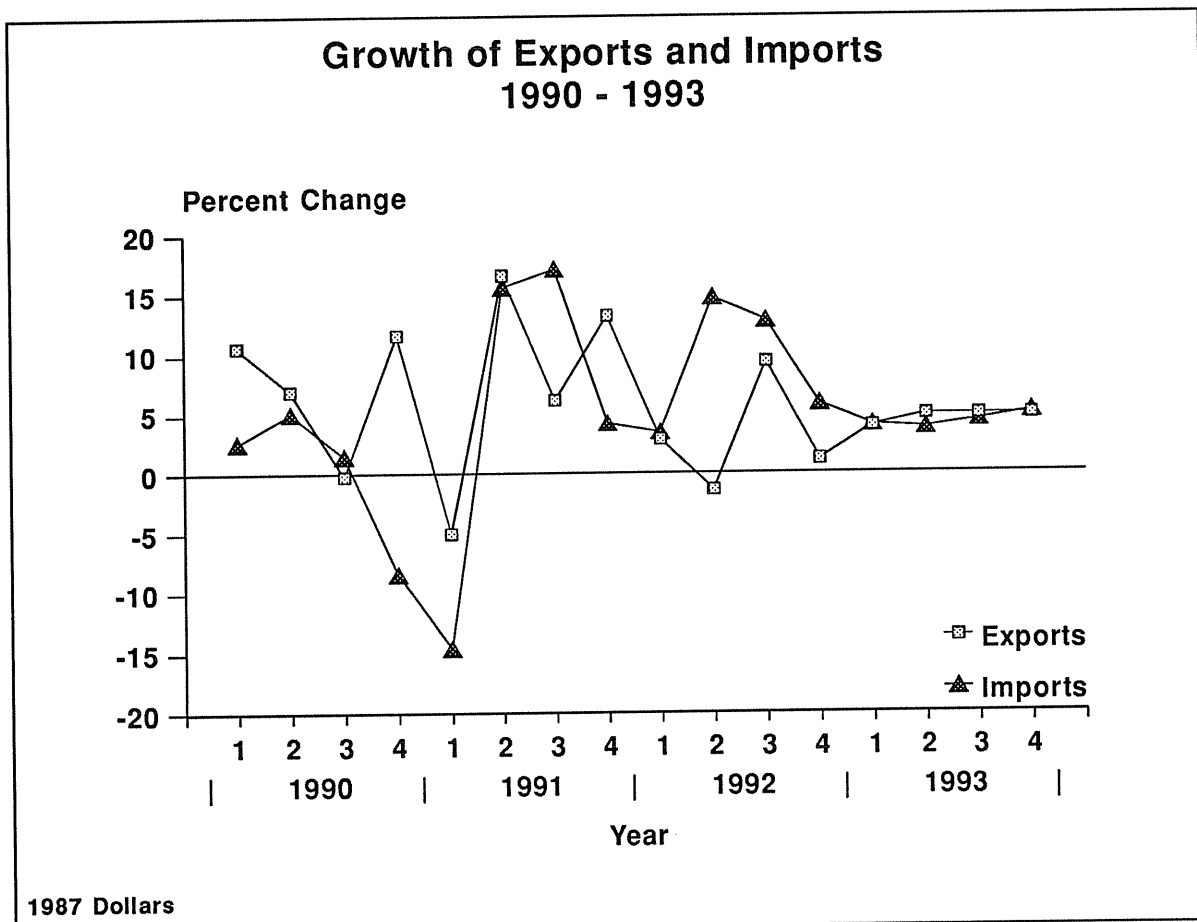


Figure 5

Import and export growth are expected to slow somewhat in 1993. Although the value<sup>3</sup> of the dollar is relatively low at the time of the forecast and is expected to increase only slightly over the forecast period, suggesting that U.S. goods will be attractively priced overseas, the forecast is for very modest export growth in 1993, based on a somewhat pessimistic view of the prospects for growth among the nation's major trading partners. On the other hand, the rate of import growth is expected to slow as well, as the weak dollar means that imported goods will be relatively expensive in the U.S. Thus, at least some

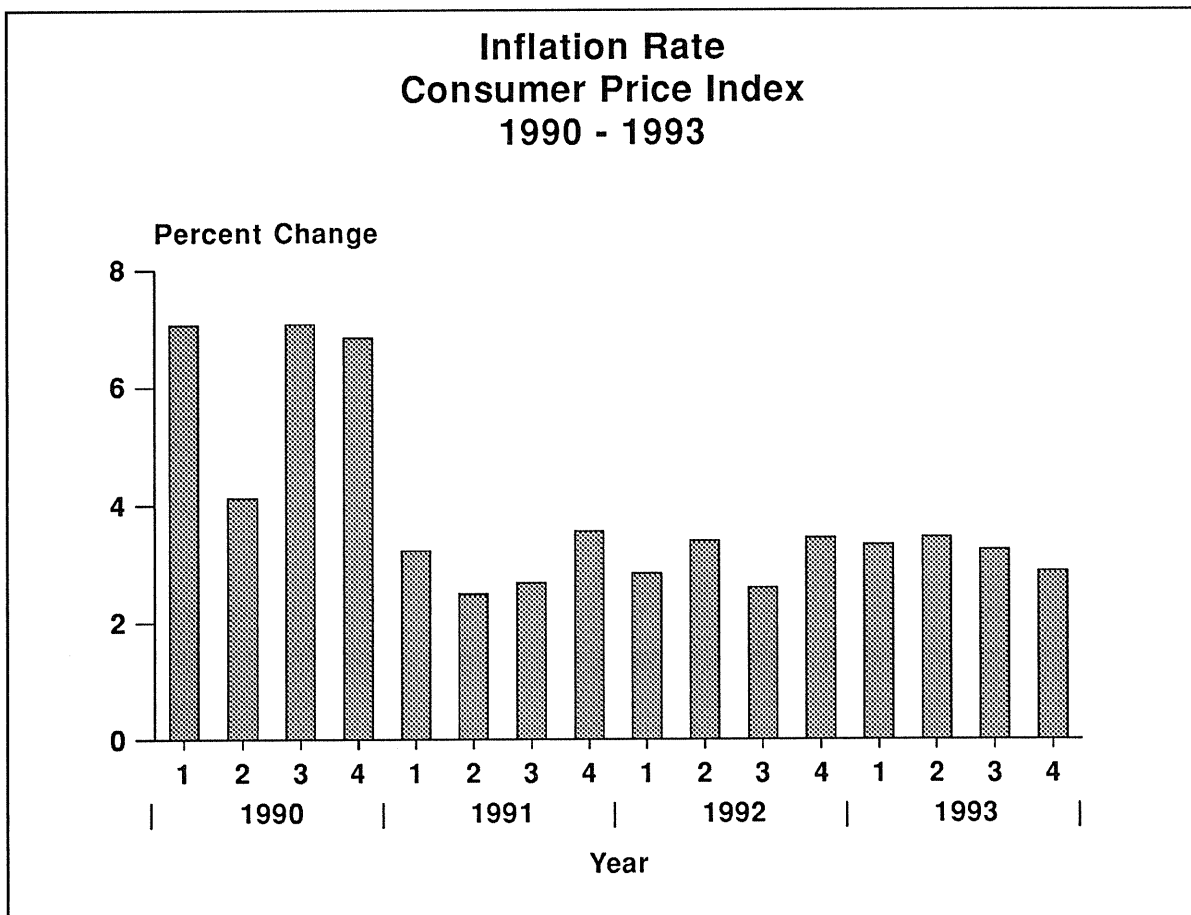


of the negative effect of decreased export growth will be offset by a slower rate of increase in imports. According to this forecast, the trade balance will remain relatively stable. The forecasted growth of imports and exports is illustrated in Figure 5.

The final category of aggregate demand, government purchases of goods and services, will grow 1.4 percent in 1993, after declining 0.3 percent in 1992. Federal defense spending has fallen in every year but one since 1987, declining at an average rate of 2.2 percent per year over the period, and it is forecasted to decline an additional 5.6 percent in 1993. Federal nondefense purchases have increased an average of 3.7 percent per year since 1987; they are forecasted to increase 17.6 percent in 1993. Total federal purchases of goods and services have declined at an average rate of 0.6 percent per year since 1987 and are forecasted to fall increase only 1.3 percent in 1993. In contrast to this declining trend in federal purchases, state and local purchases of goods and services have grown an average of 2.5 percent per year since 1987, and they are expected to increase 1.5 percent in 1993. Aggregating these federal and state and local trends yields a growth rate of 1.1 percent in total government purchases of goods and services since 1987; aggregating the forecasts yields an expected 1.4 percent increase in total government purchases of goods and services.

One of the salient features of the federal budgets of recent years is the seemingly inexorable climb in the federal budget deficit. This has occurred in spite of the fact, observed in the preceding paragraph, that total federal purchases, adjusted for inflation, have declined slightly over the period. On average, federal tax collections over the 1987-1992 period have increased about a half of a percentage point faster per year than federal government purchases, and total federal government receipts (which includes contributions for social insurance) have increased nearly 2 percentage points per year faster than federal government purchases. However, federal government outlays other than expenditures, which include transfer payments, grants-in-aid to state and local governments, and net interest payments, have grown more than 3 percent faster per year than federal government receipts, accounting for the rapid increase in

federal government budget deficits. Over the 1987-1992 period, grants-in-aid to state and local governments have grown fastest, averaging 11.2 percent per year in current dollars, while transfers have grown at an average rate of 8.6 percent per year and net interest payments have grown at an average rate of 6.6 percent per year. A large part of the growth in transfer payments is due to a nearly 19 percent increase in 1992, a rate of increase that presumably will not persist in coming years. On the other hand, net interest payments increased only 0.6 percent in 1992, and will probably increase significantly when interest rates go up, as they are likely to do sometime in 1993. Thus, some of the reduced growth of transfer payments in 1993 should be offset by an increase in net interest, and there will be little change in the federal government's budget deficit.



**Figure 6**

As Figure 6 shows, probably the best news in the forecast is the continuation of relatively low

rates of inflation. Inflation decreased significantly in 1991, when the rate of inflation, as measured by the change in the Consumer Price Index, fell from 5.4 percent to 4.2 percent. The inflation rate fell again in 1992, running at just above 3 percent for the year, and should be just above 3 percent in 1993. Just as in 1992, food and beverage prices should show very modest increases, growing 2.0 percent in 1993 following a 1.4 percent increase in the previous year. Housing costs will increase at 3.5 percent, close to the overall rate of inflation and up just slightly from 1992's 3.0 percent rate of increase. Transportation costs will increase 2.6 percent in 1993, up from their 2.1 percent increase in 1992 but still in line with the overall inflation rate. New car prices are expected to increase only about 1.9 percent in 1993, down about 0.6 of a percentage point from the previous year's increase, but this decrease will be offset by a 2.4 percent increase in motor fuel prices, which declined 1.3 percent in 1992. Increases in the costs of medical care will occur above the overall rate of inflation at 5.9 percent, but will be much less than the 8.7 and 7.4 percent increases of 1991 and 1992.

A less bright picture appears when we turn to employment. The forecast for employment and the civilian labor force is illustrated in Figure 7. An important feature is that the forecasted rate of output growth leads to a rate of employment growth that barely exceeds the rate of growth of the civilian labor force; thus the forecast is for the unemployment rate to barely decline from 7.4 percent in 1992 to 7.3 percent in 1993, again a sign of the lack of vigor in the recovery.

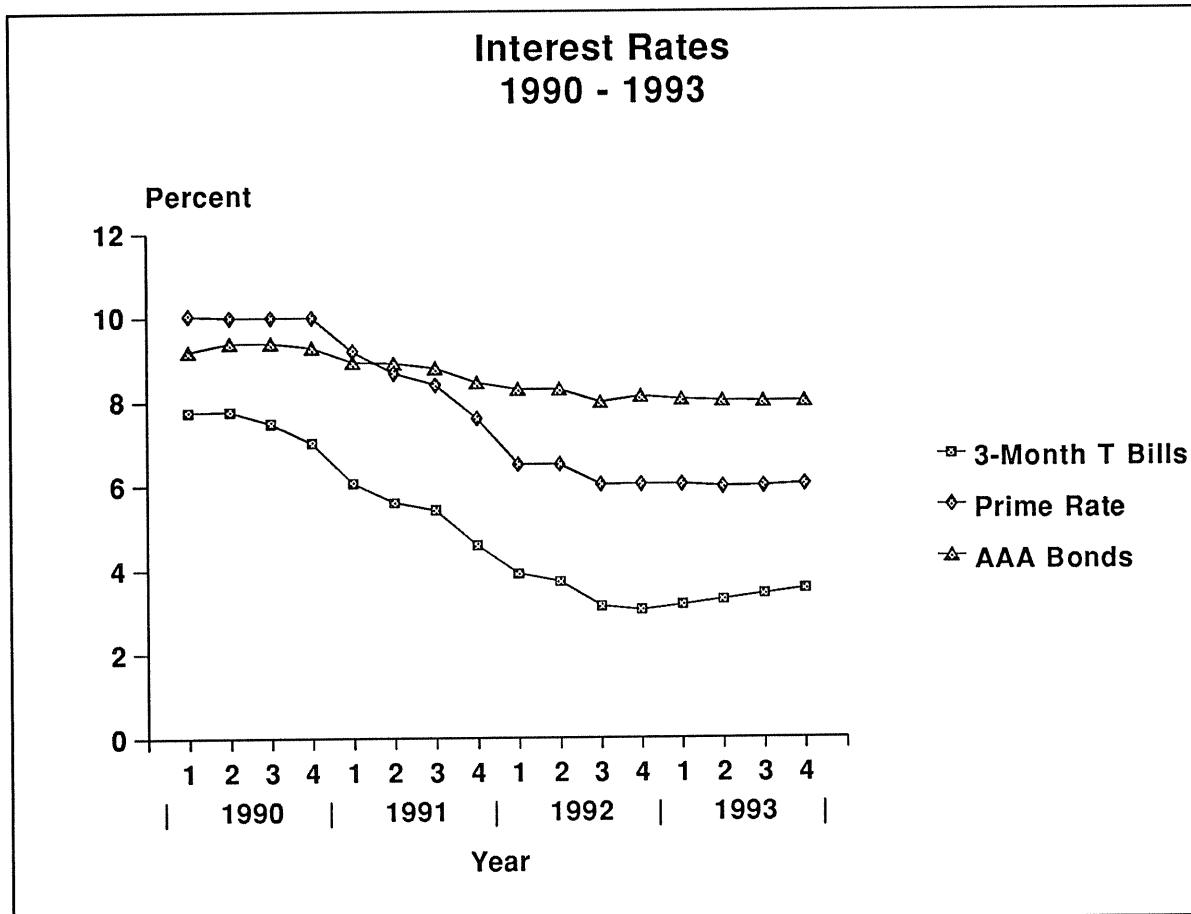
In some ways, the unemployment rate may understate the seriousness of the economic situation, since there is some reason to believe that poor economic conditions tend to reduce the size of the labor force: people who would actively seek work if the prospects were better might be inclined to choose alternative actions (pursue further training, for example) when the outlook is unpromising. There appears to be some evidence for this in the behavior of the civilian labor force over the last several years. During the three years from 1987 to 1989, civilian labor force growth averaged 1.7 percent per year. However, during the three years from 1990 through 1992, civilian labor force growth averaged just 0.8 percent per



**Figure 7**

year. Of course, we cannot attribute all of the reduction in labor force growth to the recession and slow recovery, but just to give some idea of the magnitudes that we are talking about, if, during the three years 1990 to 1992, the civilian labor force had grown at the annual 1.7 percent that it averaged during the previous 10 years, instead of the historical average rate of 0.8 percent, and if employment had grown at its historical rate, then the 1992 unemployment rate would be 9.7 percent instead of 7.4 percent. This figure in some sense represents an upper bound on the amount of understatement represented by the published unemployment rate.

The interest rate forecasts are shown in Figure 8. As the figure illustrates, short-term rates, as represented by the three month Treasury bill rate, have declined rather steadily since the beginning of 1990, and have been followed rather closely by the prime rate charged by banks to their best customers.



**Figure 8**

As the graph also illustrates, long-run rates, as represented by the Moody's AAA bond rate, have also declined over the period, although at a slower pace than short-run rates. This is a good illustration of the inertia present in long-run rates due to the fact that they in part reflect inflationary expectations.

The forecast is for short-run rates to reach their lowest point sometime during the fourth quarter of 1992, when rates achieve a level at which the Fed believes that further reductions will not provide any useful stimulus to aggregate demand. In our forecast, that point corresponds to a three month Treasury bill rate of just over 3 percent, which is then expected to increase gradually throughout 1993, reaching above 3.5 percent by the end of the year. The prime rate charged by banks will similarly reach a trough in the fourth quarter of 1992, at about 6.0 percent, and will remain at that level throughout the year. Long-run rates, however, will continue to decline slightly throughout 1993, reflecting a continued reduction in inflationary expectations.

## Kansas Forecast

During both the recession and the recovery period, the Kansas economy appears to have significantly outperformed that of the U.S. Figures 9, 10, and 11 compare the recent history of the Kansas and U.S. economies, as well as the forecasts for 1993. Figure 9 illustrates nonfarm wage and salary employment<sup>4</sup> growth for Kansas and the U.S. As the figure rather strikingly shows, during the period from 1981 to 1987, U.S. employment grew faster than Kansas employment in every year. During the 1982 recession, Kansas employment was hit much harder than U.S. employment, declining 3 percent while U.S. employment declined 1.8 percent; furthermore, in 1983 U.S. employment began to recover, while Kansas employment remained flat. During the whole period, U.S. employment grew at an average rate

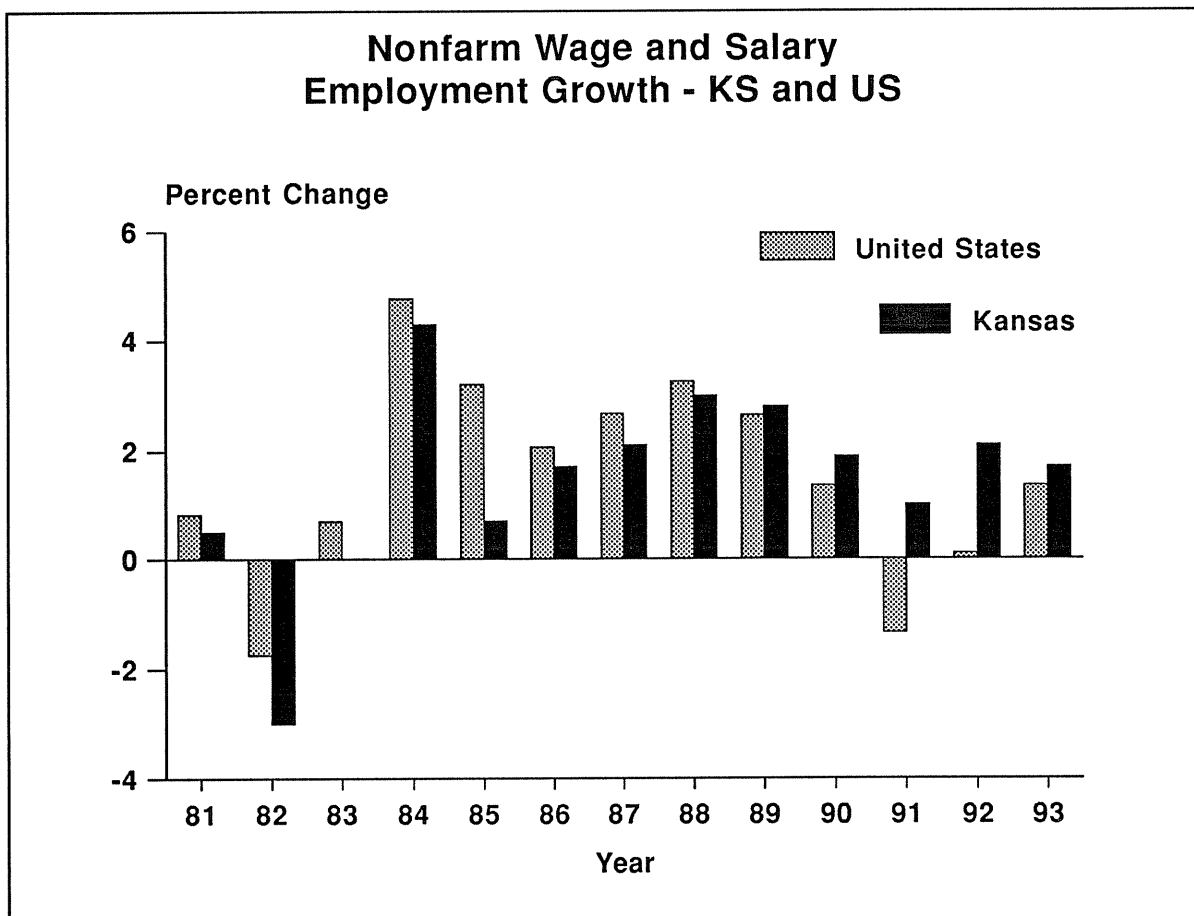
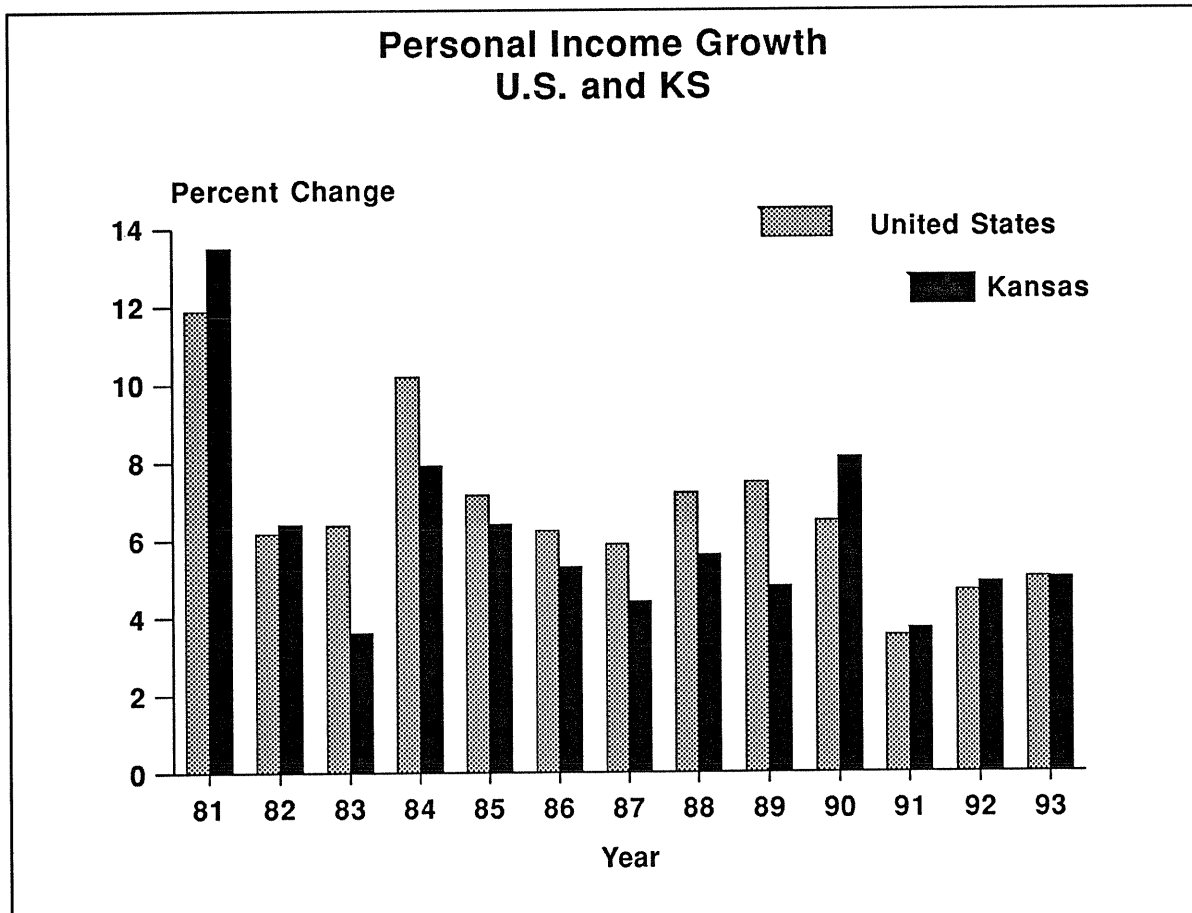


Figure 9

of 1.8 percent per year, while Kansas employment grew at an average annual rate of 0.9 percent, only half the U.S. average. As the figure also shows, this pattern is absent during the 1988-1989 period. In fact, both economies averaged 2.9 percent employment growth over that period. During the 1990-1993 recession and recovery period, the 1981-1987 pattern appears to have been dramatically reversed. During 1991, U.S. employment fell 1.3 percent as a result of the recession, while at the same time Kansas employment grew 1 percent. During 1992, preliminary data suggest that U.S. employment will grow only about 0.1 percent, while Kansas employment increases 2.2 percent. Over the four year period 1990-1993, historical data and our forecasts suggest that U.S. employment growth will average 0.3 percent per year, while Kansas employment growth will average 1.7 percent. From the point of view of employment, Kansas appears to have come through the recession and its immediate aftermath much better than the U.S.

Figure 10 compares the U.S. and Kansas in terms of personal income growth. Once again, it appears that Kansas performance relative to the U.S. has been better in recent years, although the contrast is not as sharp for personal income as it is for employment. During the 1981-1989 period, U.S. personal income growth averaged 7.6 percent per year, while in Kansas it averaged 6.6 percent. During the 1990 - 1993 period, historical evidence plus our forecasts suggests that U.S. personal income growth will average 4.6 percent per year, while Kansas personal income growth will average 4.9 percent.

As Figure 11 illustrates, the behavior of the U.S. and Kansas unemployment rates also strongly supports the thesis that the Kansas economy has been performing better relative to the nation in recent years. Heading into a recession during the 1981-1982 period, the unemployment rate in the U.S. averaged 8.7 percent, and the Kansas unemployment rate averaged 5.3 percent, a difference of 3.4 percentage points. As the recession developed and the Kansas recovery, in particular, was very sluggish, the gap between the U.S. and Kansas unemployment rates closed, until by the 1988-1989 period the U.S. unemployment rate averaged 5.4 percent and the Kansas unemployment rate averaged 4.4 percent, a difference of only 1 percentage point. Beginning in 1990, however, the gap began to widen once again, as Kansas

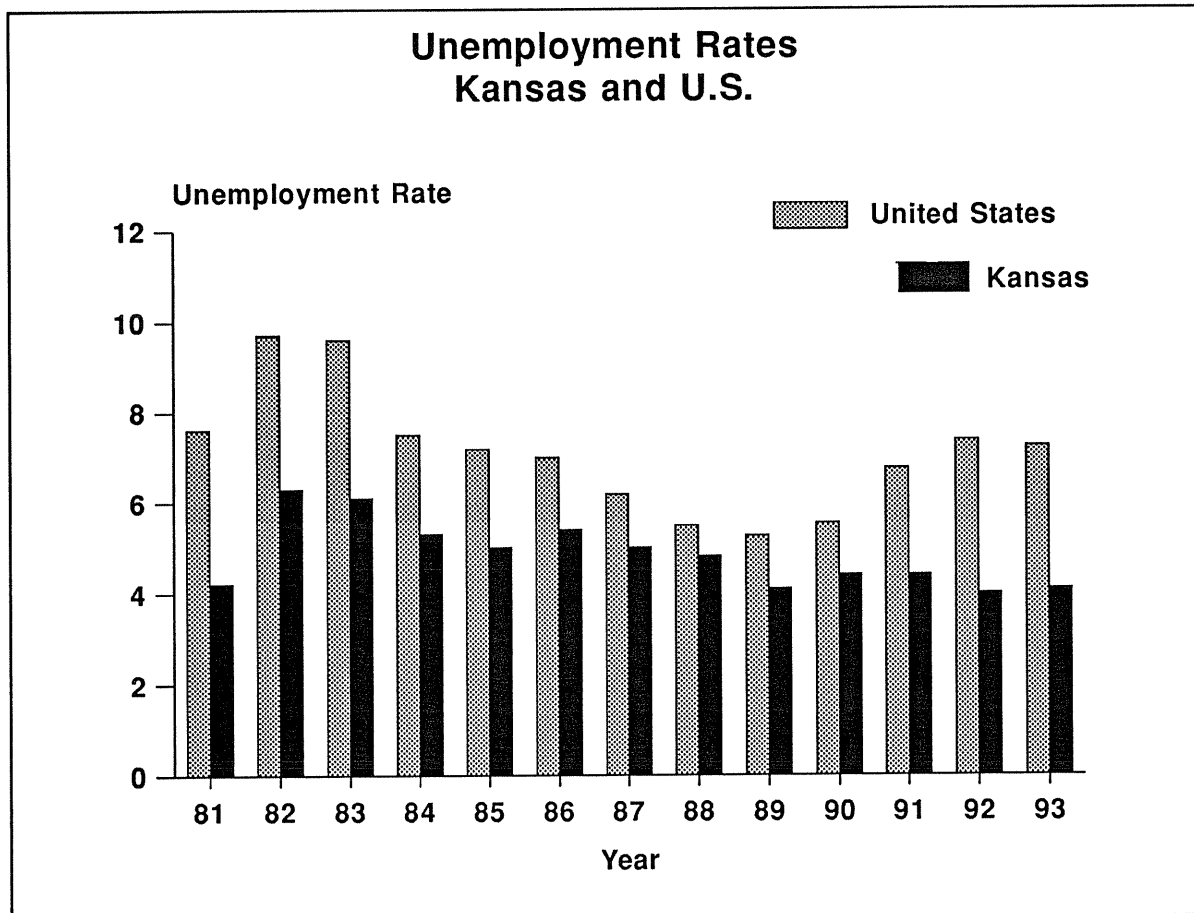


**Figure 10**

performance relative to the nation improved. Historical data and our forecasts suggest that for the 1992-1993 period, the U.S. unemployment rate will average 7.4 percent, while the Kansas unemployment rate will average 4.1 percent, a difference of 3.3 percentage points. Even more striking is that during the 1990- 1993 period, the Kansas unemployment rate is falling slightly, while the U.S. unemployment rate is increasing rather sharply.

Provided with some perspective about Kansas economic performance relative to the U.S., we turn now to some details of the Kansas forecast for 1993. In general, the forecast for Kansas is moderately good. Total Kansas employment is forecasted to increase 1.4 percent in 1993, down slightly from its 2.6 percent increase in 1992. This coupled with a similar 1.5 percent growth in the labor force, leads to a projection of a 1993 unemployment rate of 4.1 percent, about the same as its 1992 4.0 percent average.





**Figure 11**

Nominal personal income is expected to grow 5.0 percent in 1993, up just slightly from its 1992 growth rate of 4.9 percent. Adjusted for inflation, personal income growth is expected to improve from 1.9 percent in 1992 to 2.1 percent in 1993, in contrast to a real income decline in 1991 of 1.4 percent.

The forecasts of growth rates of employment in several major sectors of the Kansas economy are given in Table 3. Since 1990, when mining employment, which in Kansas is mostly employment in oil and gas extraction, grew 5.5 percent, mining employment has been shrinking. The major factor in this decline has been the stabilizing of world oil prices at a relatively low level. Although imported oil prices rose sharply during the latter half of 1990, they fell to nearly their early 1990 level by the beginning of 1991 and continued to decline slightly for the rest of the year. They then fell steeply again during the first quarter of 1992, and slight increases through the rest of the year were not of sufficient magnitude to

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**Table 3**  
**Kansas Employment Growth Breakdown**

	<b>1991</b>	<b>1992</b>	<b>1993</b>
Mining	-1.3	-2.7	0.3
Construction	0.4	9.8	2.4
Durable Goods Manufacturing	-1.4	-2.2	-1.6
Nondurable Goods Manufacturing	-0.0	1.2	1.3
Transportation and Utilities	-2.3	-0.5	1.0
Wholesale Trade	0.1	1.1	1.0
Retail Trade	0.8	1.2	1.8
Finance, Insurance and Real Estate	0.4	0.1	0.8
Services	2.8	4.1	4.7
State and Local Government	2.8	4.0	1.1
Federal Government	-1.8	0.8	-2.6
Farm	-0.2	-2.9	-0.7

---

stimulate oil and gas activity in Kansas. The expected 1 percent increase in oil prices in 1993 will also not be sufficient to stimulate new activity, hence the forecast of essentially no employment growth in this sector in 1993.

Probably the most prominent single entry in Table 3 is the 9.8 percent growth in construction employment in 1992. Although this increase is significant, it should be put in perspective by noting that such an increase restores construction employment to about its 1987 level; after peaking in that year, construction employment fell 8.2 percent in 1988, and a further 3.6 percent in 1989, before leveling off in 1990 and 1991. Thus, even with a 2.4 percent forecasted growth in 1993, construction employment in Kansas will still be at a somewhat moderate level.

A further look at Table 3 reveals that in terms of manufacturing, the outlook, as well as recent history, is better for nondurable goods manufacturing than for durable goods manufacturing. The

forecasted 1.3 percent growth rate for 1993 in nondurable goods manufacturing employment is driven by a forecast of 2.6 percent growth in employment in the food and kindred products sector. More modest increases of 1.4 percent and 1.3 percent are predicted for the printing/publishing and petroleum/coal products sectors, respectively. Small declines in employment are forecasted for the apparel and chemical and allied products sectors.

The forecasted 1.6 percent employment decline in durable goods manufacturing in 1993 is in line with the 1991 and 1992 decreases in that sector. Employment in this sector grew robustly in 1988 and 1989, averaging nearly 3 percent per year, but leveled off in 1990 with the onset of the recession, actually beginning its decline during the second half of that year. The forecasted 1993 decline in the sector is quite general, including decreases of 7.8 percent in fabricated metals, 1.2 percent in machinery (including electrical), and 1.4 percent in the important transportation equipment sector. Only the very small primary metals sector appears headed for an employment increase (1.1 percent).

Within the transportation and public utilities sector, the forecast is for another decline in railroad employment (employment in this sector last increased in 1984, and the 1993 forecasted level is just over half of the 1984 level), to be offset by an increase in employment in trucking and warehousing. Employment in electric, gas, and sanitary services is also expected to increase slightly. The predicted employment growth in wholesale and retail trade includes a 1.0 percent increase in wholesale trade, a 0.6 percent decrease in merchandise stores, a 1.0 percent increase in food stores, a small decline in auto dealers/gas stations, and a small increase in apparel/accessory stores. The 0.8 percent increase in employment in finance, insurance, and real estate sector includes a 0.8 percent decline in banking employment and a 1.0 percent increase in employment in insurance.

A not uncommon feature of the Kansas economy in recent years has been an above average increase in employment in the services sector, and the forecast for 1993 is unexceptional in this respect. The forecast includes a 4.1 percent increase in employment in hotels and lodging, and a 4.0 percent

increase in employment in personal services. An unusual feature of service sector growth in Kansas, relative to the rest of the nation, has been the large portion of this growth that has occurred in the high paying business services area.

The predicted 0.7 percent decline in farm employment is in line with recent history. The average annual rate of decline in farm employment from 1980 through 1991 has been 2.4 percent. Finally, the 1.0 percent increase in government employment is comprised of a 2.6 percent decline in federal government employment in the state, and a 1.1 percent increase in state and local government employment.

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**Table 4**  
**Kansas Personal Income Growth Breakdown**

	1991	1992	1993
Personal Income - Nominal	3.7	4.9	5.0
Wages and Salaries	4.1	5.1	4.4
Nonfarm Proprietors' Income	0.6	9.3	4.7
Farm Proprietors' Income	-35.4	-4.3	22.2
Dividends Interest and Rent	4.4	-1.4	2.8
Personal Contributions for Social Insurance	7.8	6.1	6.9
Transfer Payments	10.2	11.2	8.8
Other Labor Income	8.0	6.3	5.1

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The breakdown for the Kansas personal income forecast is shown in Table 4. Although many of the categories show 1993 increases that are below their 1992 increases, it is important to keep in mind that the rates of increase are not corrected for inflation. If we adjust for inflation, which is expected to be low again in 1993, we find that real personal income is expected to grow 2.1 percent, compared to

1.9 percent in 1992. The category of personal income whose growth is expected to change most drastically between 1992 and 1993, is dividends, interest, and rents. Because of the end of the decline in interest rates and therefore the end of the decline in interest income, income in that category is forecasted to increase 2.8 percent in nominal terms, after falling in both 1991 and 1992.

### **Conclusion**

Several factors appear to be contributing to the rather slow recovery of the U.S. economy. Consumer spending is dampened not only by slow personal income growth but also by consumers' actions to reduce somewhat their level of indebtedness. Whether this is a short-run phenomenon related to consumer confidence or a longer-run attitude, based upon the aging of the population bulge known as the baby boom generation, is not clear. In addition, large government deficits and a change in the world political climate have made government spending a drag on, rather than a stimulus to, the recovery. Finally, a weak world economy has caused the expansionary effects of a relatively weak dollar to be less than one might have hoped. A stronger world economy than the one that we have conjectured for 1993 could lead to a stronger performance than indicated in our forecast.

The Kansas economy, especially relative to the U.S., seems to have made a dramatic turnaround between the early and mid-1980's, on the one hand, and the early 1990's on the other. A good balance among manufacturing, agriculture, oil and gas extraction, and business services appears to be an important factor in this performance. The growth in high quality service jobs seems to have been an especially notable influence. Whether or not this turn around is a long-run phenomenon will depend upon the ability of the manufacturing sector, especially the durable goods manufacturing subsector, to remain a viable area of growth, and whether the effects of the creation of business services jobs will be felt sufficiently throughout the state.

## Notes

1. The forecasts for the national economy are produced by the Econometric Model of the United States developed at the Center for Econometric Model Research at the University of Indiana, using assumptions generated at the Institute. The directors of the CEMR are R. Jeffery Green and Morton J. Marcus. The Kansas forecasts are produced by the Kansas Econometric Model, which is a product of the Institute for Public Policy and Business Research.

2. National Income and Product Accounts basis.

3. Trade weighted average of the dollar's exchange rate.

4. Employment refers to total number of Kansas residents employed in civilian (including nonmilitary government) jobs. Nonfarm wage and salary employment refers to total nonfarm civilian (including nonmilitary government) jobs in Kansas. Thus, to go from nonfarm wage and salary employment to employment, one must correct for farm employment, Kansans who have more than one job, Kansans who work out of state, and non-Kansas residents who work in Kansas.

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GNP AS EXPENDITURE - 1982 DOLLARS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Gross Domestic Product	4873.7	4892.4	4939.4	4950.8	4968.7	4993.8	5028.6	5065.4	4914.1	5014.1
Percent Change From Last Qtr (AR)	2.9	1.5	3.9	0.9	1.5	2.0	2.8	3.0	1.9	2.0
US: Personal Consumption Expend.	3289.3	3288.5	3318.4	3336.2	3343.8	3353.2	3367.1	3383.2	3308.1	3361.8
Percent Change From Last Qtr (AR)	5.1	-0.1	3.7	2.2	0.9	1.1	1.7	1.9	2.1	1.6
US: Per. Con. Exp.-Durables	432.3	430.0	439.9	445.2	445.5	446.2	448.0	449.8	436.8	447.4
Percent Change From Last Qtr (AR)	16.5	-2.1	9.5	4.9	0.3	0.7	1.6	1.7	5.3	2.4
US: PCE-Nondurables	1049.6	1045.6	1052.2	1054.2	1053.2	1052.8	1054.2	1057.2	1050.4	1054.3
Percent Change From Last Qtr (AR)	5.5	-1.5	2.5	0.8	-0.4	-0.2	0.5	1.1	0.8	0.4
US: PCE-Services	1807.3	1812.9	1826.3	1836.9	1845.1	1854.2	1865.0	1876.2	1820.8	1860.1
Percent Change From Last Qtr (AR)	2.2	1.2	3.0	2.3	1.8	2.0	2.3	2.4	2.1	2.2
US: Fixed Nonresidential Invest.	495.8	514.7	517.1	523.0	530.4	539.9	550.3	559.9	512.7	545.1
Percent Change From Last Qtr (AR)	3.0	16.1	1.9	4.6	5.7	7.4	7.9	7.2	2.5	6.3
US: Producers Durable Equipment	346.4	365.6	373.7	379.1	385.5	394.4	404.2	414.1	366.2	399.5
Percent Change From Last Qtr (AR)	3.2	24.1	9.2	5.9	6.9	9.6	10.4	10.2	6.9	9.1
US: Investment in Structures	149.4	149.1	143.4	143.9	144.9	145.5	146.1	145.8	146.5	145.6
Percent Change From Last Qtr (AR)	2.7	-0.8	-14.4	1.4	2.8	1.8	1.5	-0.9	-7.1	-0.6
US: Residential Investment	185.6	191.2	191.6	192.9	194.6	194.5	194.9	195.4	190.3	194.9
Percent Change From Last Qtr (AR)	20.1	12.6	0.8	2.8	3.6	-0.2	0.8	1.1	11.8	2.4

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.



	1992-1993				US Forecast				13-JAN93		A2
	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993	
US: Change in Bus. Inventories	-12.6	7.8	20.2	15.0	18.0	16.0	17.9	20.2	7.6	18.0	
US: Change in Farm Inventories	-1.9	1.8	5.3	0.0	0.0	0.0	0.0	0.0	1.3	0.0	
US: Change in Nonfarm Inv.	-10.7	6.0	14.8	15.0	18.0	16.0	17.9	20.2	6.3	18.0	
US: Net Exports	-21.5	-43.9	-49.8	-56.9	-57.7	-56.7	-56.6	-57.7	-43.0	-57.2	
Percent Change From Last Qtr (AR)	21.0	1638.2	65.6	70.9	5.3	-6.8	-0.5	7.7	97.0	32.8	
US: Total Exports	565.4	563.4	576.2	577.9	583.6	590.6	597.8	605.0	570.7	594.3	
Percent Change From Last Qtr (AR)	2.9	-1.4	9.4	1.2	4.0	4.9	4.9	4.9	5.8	4.1	
US: Total Imports	586.8	607.3	625.9	634.9	641.3	647.3	654.4	662.7	613.7	651.4	
Percent Change From Last Qtr (AR)	3.5	14.7	12.8	5.9	4.1	3.8	4.4	5.2	9.4	6.1	
US: Total Government Purchases	937.0	934.2	941.8	940.6	939.6	946.8	955.0	964.3	938.4	951.5	
Percent Change From Last Qtr (AR)	1.7	-1.2	3.3	-0.5	-0.4	3.1	3.5	3.9	-0.3	1.4	
US: Fed. Govt. Purchases	375.3	372.7	378.4	375.3	373.3	377.3	382.4	387.9	375.4	380.2	
Percent Change From Last Qtr (AR)	-3.0	-2.7	6.3	-3.3	-2.1	4.4	5.4	5.9	-3.3	1.3	
US: Fed. Defense Purchases	265.6	262.1	266.4	263.0	259.0	252.0	246.0	241.0	264.3	249.5	
Percent Change From Last Qtr (AR)	-7.7	-5.2	6.7	-5.0	-5.9	-10.4	-9.2	-7.9	-6.5	-5.6	
US: Fed. Nondefense Purchases	109.7	110.6	112.1	112.3	114.3	125.3	136.4	146.9	111.2	130.7	
Percent Change From Last Qtr (AR)	9.7	3.3	5.5	0.6	7.4	44.6	40.1	34.7	5.3	17.6	
US: State and Local Govt. Purch.	561.8	561.5	563.4	565.3	566.3	569.5	572.7	576.4	563.0	571.2	
Percent Change From Last Qtr (AR)	5.1	-0.2	1.4	1.4	0.7	2.3	2.2	2.6	1.9	1.5	

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

GNP AS EXPENDITURE - CURRENT DOLLARS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Gross Domestic Product	5840.2	5902.2	5982.5	6039.6	6096.0	6163.3	6238.4	6309.9	5941.1	6201.9
Percent Change From Last Qtr (AR)	6.2	4.3	5.6	3.9	3.8	4.5	5.0	4.7	4.6	4.4
US: Personal Consumption Expend.	4022.8	4057.1	4108.1	4159.4	4200.0	4244.2	4292.0	4337.7	4086.9	4268.5
Percent Change From Last Qtr (AR)	8.4	3.5	5.1	5.1	4.0	4.3	4.6	4.3	5.1	4.4
US: Per. Con. Exp.-Durables	469.4	470.6	482.7	489.5	491.1	493.4	496.5	499.7	478.0	495.2
Percent Change From Last Qtr (AR)	18.0	1.0	10.7	5.7	1.3	1.9	2.6	2.6	7.2	3.6
US: PCE-Nondurables	1274.1	1277.5	1293.0	1302.0	1306.1	1311.9	1318.6	1326.7	1286.6	1315.8
Percent Change From Last Qtr (AR)	7.5	1.1	4.9	2.8	1.3	1.8	2.1	2.5	2.8	2.3
US: PCE-Services	2279.3	2309.0	2332.4	2368.0	2402.8	2439.0	2476.9	2511.3	2322.2	2457.5
Percent Change From Last Qtr (AR)	7.0	5.3	4.1	6.2	6.0	6.2	6.4	5.7	6.0	5.8
US: Fixed Nonresidential Invest.	531.0	550.3	547.9	551.2	555.7	562.5	569.4	575.0	545.1	565.6
Percent Change From Last Qtr (AR)	1.8	15.4	-1.7	2.4	3.3	5.0	5.0	4.0	0.7	3.8
US: Producers Durable Equipment	360.8	380.0	383.0	384.5	386.9	391.9	397.4	402.6	377.1	394.7
Percent Change From Last Qtr (AR)	2.1	23.0	3.2	1.6	2.5	5.3	5.7	5.4	4.5	4.7
US: Investment in Structures	170.1	170.3	164.8	166.7	168.8	170.6	172.1	172.4	168.0	171.0
Percent Change From Last Qtr (AR)	0.9	0.5	-12.3	4.6	5.2	4.3	3.5	0.8	-6.7	1.8
US: Residential Investment	207.2	214.8	217.5	220.5	223.7	224.9	226.4	227.9	215.0	225.7
Percent Change From Last Qtr (AR)	19.4	15.5	5.1	5.7	5.9	2.2	2.7	2.7	13.0	5.0

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

	1992-1993				US Forecast				13-JAN93	A4
	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Change in Bus. Inventories	-15.8	8.1	21.1	20.6	23.8	21.5	23.9	27.1	8.5	24.1
US: Change in Farm Inventories	-2.4	1.7	5.3	0.0	0.0	0.0	0.0	0.0	1.1	0.0
US: Change in Nonfarm Inv.	-13.3	6.4	15.8	20.6	23.8	21.5	23.9	27.1	7.4	24.1
US: Net Exports	-8.1	-37.1	-34.9	-40.2	-39.6	-36.8	-35.5	-35.6	-30.1	-36.9
Percent Change From Last Qtr (AR)	-93.4	43910.4	-21.7	75.8	-5.8	-25.5	-13.5	1.4	38.1	22.6
US: Total Exports	628.1	625.4	639.5	643.6	652.1	663.2	673.9	684.6	634.1	668.5
Percent Change From Last Qtr (AR)	3.4	-1.7	9.3	2.6	5.4	7.0	6.6	6.5	6.0	5.4
US: Total Imports	636.2	662.5	674.4	683.8	691.7	700.0	709.4	720.2	664.2	705.3
Percent Change From Last Qtr (AR)	-1.7	17.6	7.4	5.7	4.7	4.9	5.5	6.2	7.1	6.2
US: Total Government Purchases	1103.1	1109.1	1122.9	1128.0	1132.4	1147.1	1162.2	1177.8	1115.8	1154.9
Percent Change From Last Qtr (AR)	4.8	2.2	5.1	1.8	1.6	5.3	5.4	5.5	2.3	3.5
US: Fed. Govt. Purchases	445.0	444.8	454.1	454.3	455.3	463.9	473.2	482.6	449.5	468.7
Percent Change From Last Qtr (AR)	3.9	-0.2	8.6	0.2	0.9	7.8	8.3	8.2	0.5	4.3
US: Fed. Defense Purchases	313.6	311.7	318.4	317.2	314.7	308.6	303.2	298.6	315.2	306.3
Percent Change From Last Qtr (AR)	-1.4	-2.4	8.9	-1.5	-3.1	-7.6	-6.8	-6.0	-2.6	-2.8
US: Fed. Nondefense Purchases	131.4	133.1	135.7	137.1	140.6	155.3	170.0	184.0	134.3	162.4
Percent Change From Last Qtr (AR)	17.9	5.3	8.0	4.1	10.5	48.9	43.7	37.3	8.7	20.9
US: State and Local Govt. Purch.	658.0	664.3	668.8	673.7	677.2	683.2	689.0	695.3	666.2	686.2
Percent Change From Last Qtr (AR)	5.3	3.9	2.7	3.0	2.1	3.6	3.4	3.7	3.6	3.0

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

RELATION OF GNP, NNP, NAT. INCOME & PERS. INCOME	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Gross Domestic Product	5840.2	5902.2	5982.5	6039.6	6096.0	6163.3	6238.4	6309.9	5941.1	6201.9
Percent Change From Last Qtr (AR)	6.2	4.3	5.6	3.9	3.8	4.5	5.0	4.7	4.6	4.4
US: Cap. Cons. Allow. with Adj.	631.4	638.2	697.8	678.2	683.6	689.4	695.1	700.5	661.4	692.1
Percent Change From Last Qtr (AR)	-3.5	4.4	42.9	-10.8	3.2	3.5	3.3	3.1	5.6	4.6
US: Cap. Cons. Allow w/o Adj.	598.0	608.9	642.8	630.2	635.6	641.4	647.1	652.5	620.0	644.1
Percent Change From Last Qtr (AR)	6.8	7.5	24.2	-7.6	3.5	3.7	3.6	3.4	8.0	3.9
US: Cap. Cons. Adjustment, Total	-33.5	-29.3	-55.0	-48.0	-48.0	-48.0	-48.0	-48.0	-41.4	-48.0
Percent Change From Last Qtr (AR)	-77.8	-41.5	1141.6	-42.0	0.0	0.0	0.0	0.0	-20.1	15.8
US: Net National Product	5228.3	5271.1	5295.3	5368.3	5419.2	5480.7	5550.0	5616.1	5290.7	5516.5
Percent Change From Last Qtr (AR)	8.1	3.3	1.8	5.6	3.9	4.6	5.2	4.8	4.4	4.3
US: Indirect Business Taxes	493.8	497.6	506.1	513.8	521.1	528.1	535.2	543.2	502.8	531.9
Percent Change From Last Qtr (AR)	4.9	3.1	7.0	6.2	5.8	5.5	5.5	6.1	5.8	5.8
US: Business Transfer Payments	29.4	29.8	29.8	30.3	30.7	31.0	31.4	31.8	29.8	31.2
Percent Change From Last Qtr (AR)	11.7	5.6	0.0	6.8	5.3	4.6	5.1	4.3	6.3	4.7
US: Statistical Discrepancy	29.0	30.9	41.7	30.6	30.6	30.6	30.6	30.6	33.1	30.6
US: Sub. less Cur. Sur.-Gov. E.	3.2	3.6	-3.3	3.1	2.8	2.5	2.2	1.9	1.7	2.3
Percent Change From Last Qtr (AR)	-84.5	60.2	-29.4	-22.1	-33.4	-36.4	-40.0	-44.4	214.3	42.4
US: National Income	4679.4	4716.5	4714.3	4796.9	4839.8	4893.6	4955.1	5012.6	4726.8	4925.3
Percent Change From Last Qtr (AR)	7.2	3.2	-0.2	7.2	3.6	4.5	5.1	4.7	4.0	4.2

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

Institute for Public Policy and Business Research, University of Kansas										1992-1993 US Forecast				13JAN93		A6
	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993						
US: Corp. Prof. w. IVA + CCADJ	384.0	388.4	370.4	380.2	384.2	392.6	402.7	415.0	380.8	398.6						
Percent Change From Last Qtr (AR)	49.8	4.7	-17.3	11.0	4.2	9.0	10.7	12.8	10.0	4.7						
US: Net Interest	430.0	420.0	411.5	405.6	403.8	406.2	410.4	415.2	416.8	408.9						
Percent Change From Last Qtr (AR)	-14.3	-9.0	-7.9	-5.6	-1.8	2.4	4.1	4.8	-7.3	-1.9						
US: Cont. to Soc. Ins.-Total	546.2	550.8	553.8	560.9	571.2	576.8	583.1	588.8	552.9	580.0						
Percent Change From Last Qtr (AR)	8.5	3.4	2.2	5.2	7.6	4.0	4.5	3.9	4.6	4.9						
US: Wage Accruals less Disburs.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
US: Govt. Trans. to Pers.-Total	818.6	835.3	849.1	865.6	887.5	909.5	929.9	948.3	842.1	918.8						
Percent Change From Last Qtr (AR)	23.5	8.4	6.8	8.0	10.5	10.3	9.2	8.2	12.5	9.1						
US: Personal Interest Income	684.8	675.2	666.7	663.1	664.9	670.9	678.4	687.6	672.5	675.4						
Percent Change From Last Qtr (AR)	-10.1	-5.5	-4.9	-2.1	1.1	3.6	4.6	5.5	-4.0	0.4						
US: Personal Dividend Income	133.9	136.6	141.0	144.5	147.5	149.8	152.2	154.7	139.0	151.0						
Percent Change From Last Qtr (AR)	-1.2	8.3	13.5	10.4	8.4	6.4	6.6	6.8	1.5	8.6						
US: Personal Income	4980.5	5028.9	5060.2	5148.2	5205.7	5273.7	5345.4	5410.5	5054.5	5308.8						
Percent Change From Last Qtr (AR)	6.1	3.9	2.5	7.1	4.5	5.3	5.5	5.0	4.7	5.0						

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

DISPOSITION OF PERSONAL INCOME - CURRENT DOLLARS		1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Personal Income		4980.5	5028.9	5060.2	5148.2	5205.7	5273.7	5345.4	5410.5	5054.5	5308.8
Percent Change From Last Qtr (AR)		6.1	3.9	2.5	7.1	4.5	5.3	5.5	5.0	4.7	5.0
US: Wage and Salary Disburse.		2877.6	2901.3	2919.3	2963.4	2999.0	3030.1	3065.0	3094.8	2915.4	3047.2
Percent Change From Last Qtr (AR)		4.7	3.3	2.5	6.2	4.9	4.2	4.7	3.9	3.7	4.5
US: Other Labor Income		299.2	303.6	307.9	312.4	316.0	319.1	322.6	325.6	305.8	320.8
Percent Change From Last Qtr (AR)		5.8	6.0	5.8	5.9	4.7	4.0	4.5	3.8	6.1	4.9
US: Total Proprietors Inc.		393.6	398.4	397.6	419.0	413.2	416.0	419.5	423.1	402.1	417.9
Percent Change From Last Qtr (AR)		17.7	5.0	-0.8	23.3	-5.4	2.7	3.5	3.4	9.3	3.9
US: Farm Proprietors Inc.		40.1	38.5	31.5	42.7	34.9	34.8	34.8	35.1	38.2	34.9
Percent Change From Last Qtr (AR)		25.3	-15.0	-55.2	237.8	-55.2	-1.9	0.3	3.2	6.9	-8.6
US: Nonfarm Proprietors Inc.		353.6	359.9	366.1	376.3	378.3	381.2	384.7	388.0	364.0	383.0
Percent Change From Last Qtr (AR)		17.0	7.3	7.1	11.6	2.1	3.1	3.8	3.5	9.6	5.2
US: Rental Income of Persons		-4.5	3.3	5.0	10.0	12.0	15.0	17.0	18.0	3.5	15.5
Percent Change From Last Qtr (AR)		-78.4	-71.1	427.0	1500.0	107.4	144.1	65.0	25.7	-133.2	349.3
US: Personal Interest Income		684.8	675.2	666.7	663.1	664.9	670.9	678.4	687.6	672.5	675.4
Percent Change From Last Qtr (AR)		-10.1	-5.5	-4.9	-2.1	1.1	3.6	4.6	5.5	-4.0	0.4
US: Personal Dividend Income		133.9	136.6	141.0	144.5	147.5	149.8	152.2	154.7	139.0	151.0
Percent Change From Last Qtr (AR)		-1.2	8.3	13.5	10.4	8.4	6.4	6.6	6.8	1.5	8.6
US: Total Transfer Payments		842.7	859.7	873.9	890.6	912.8	935.3	956.0	974.8	866.7	944.7
Percent Change From Last Qtr (AR)		23.2	8.3	6.8	7.9	10.4	10.2	9.2	8.1	12.4	9.0

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

Institute for Public Policy and Business Research, University of Kansas										
	1992-1993				US Forecast				13-JAN93	A8
	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Tot. Pers. Tax + Nontax Pay	619.6	617.1	629.4	641.2	662.4	685.5	696.6	707.1	626.8	687.9
Percent Change From Last Qtr (AR)	-1.7	-1.6	8.2	7.7	13.9	14.7	6.7	6.1	1.3	9.7
US: Disposable Personal Income	4360.9	4411.8	4430.9	4507.0	4543.3	4588.2	4648.7	4703.4	4427.6	4620.9
Percent Change From Last Qtr (AR)	7.3	4.8	1.7	7.0	3.3	4.0	5.4	4.8	5.2	4.4
US: Personal Consumption Expend.	4022.8	4057.1	4108.1	4159.4	4200.0	4244.2	4292.0	4337.7	4086.9	4268.5
Percent Change From Last Qtr (AR)	8.4	3.5	5.1	5.1	4.0	4.3	4.6	4.3	5.1	4.4
US: Int. Paid by Cons. to Bus.	113.3	112.0	111.3	110.6	110.6	110.5	110.2	110.6	111.8	110.5
Percent Change From Last Qtr (AR)	1.8	-4.5	-2.5	-2.6	0.1	-0.3	-1.1	1.4	-0.7	-1.2
US: Pers. Trans. Pay. to For.	10.2	10.4	10.6	10.4	10.4	10.4	10.4	10.4	10.4	10.4
Percent Change From Last Qtr (AR)	22.3	8.1	7.9	-7.3	0.0	0.0	0.0	0.0	7.2	0.0
US: Personal Saving	214.6	232.3	201.0	226.6	222.3	223.0	236.1	244.7	218.6	231.5
Percent Change From Last Qtr (AR)	-8.5	37.3	-43.9	61.5	-7.3	1.3	25.5	15.4	9.5	5.9
US: Disposable Personal Income	3565.7	3576.0	3579.2	3614.8	3616.9	3624.8	3646.8	3668.2	3583.9	3639.2
Percent Change From Last Qtr (AR)	4.0	1.2	0.4	4.0	0.2	0.9	2.4	2.4	2.1	1.5
US: YSAV as a Percent of YPD	4.9	5.3	4.5	5.0	4.9	4.9	5.1	5.2	4.9	5.0

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

NATIONAL INCOME - CURRENT DOLLARS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: National Income	4679.4	4716.5	4714.3	4796.9	4839.8	4893.6	4955.1	5012.6	4726.8	4925.3
Percent Change From Last Qtr (AR)	7.2	3.2	-0.2	7.2	3.6	4.5	5.1	4.7	4.0	4.2
US: Wages and Salaries	2877.6	2901.3	2919.3	2963.4	2999.0	3030.1	3065.0	3094.8	2915.4	3047.2
Percent Change From Last Qtr (AR)	4.7	3.3	2.5	6.2	4.9	4.2	4.7	3.9	3.7	4.5
US: W. and S.-Govt. + Govt. Ent.	554.6	561.4	564.0	572.0	576.4	581.4	588.3	592.1	563.0	584.6
Percent Change From Last Qtr (AR)	6.1	5.0	1.9	5.8	3.1	3.5	4.8	2.6	3.6	3.8
US: W. and S.-Other	2323.0	2339.9	2355.3	2391.4	2422.5	2448.7	2476.7	2502.7	2352.4	2462.6
Percent Change From Last Qtr (AR)	4.3	2.9	2.7	6.3	5.3	4.4	4.6	4.3	3.7	4.7
US: Supplements to w. and s.	598.7	605.0	610.5	618.7	627.7	633.7	640.6	646.5	608.2	637.1
Percent Change From Last Qtr (AR)	7.0	4.3	3.7	5.5	6.0	3.9	4.4	3.8	5.1	4.8
US: Emp. Cont. to Soc. Ins.	299.4	301.5	302.6	306.3	311.7	314.7	318.0	320.9	302.4	316.3
Percent Change From Last Qtr (AR)	8.0	2.8	1.5	5.0	7.3	3.8	4.3	3.8	4.2	4.6
US: Other Labor Income	299.2	303.6	307.9	312.4	316.0	319.1	322.6	325.6	305.8	320.8
Percent Change From Last Qtr (AR)	5.8	6.0	5.8	5.9	4.7	4.0	4.5	3.8	6.1	4.9
US: Total Proprietors Inc.	393.6	398.4	397.6	419.0	413.2	416.0	419.5	423.1	402.1	417.9
Percent Change From Last Qtr (AR)	17.7	5.0	-0.8	23.3	-5.4	2.7	3.5	3.4	9.3	3.9
US: Farm Proprietors Inc.	40.1	38.5	31.5	42.7	34.9	34.8	34.8	35.1	38.2	34.9
Percent Change From Last Qtr (AR)	25.3	-15.0	-55.2	237.8	-55.2	-1.9	0.3	3.2	6.9	-8.6
US: Nonfarm Proprietors Inc.	353.6	359.9	366.1	376.3	378.3	381.2	384.7	388.0	364.0	383.0
Percent Change From Last Qtr (AR)	17.0	7.3	7.1	11.6	2.1	3.1	3.8	3.5	9.6	5.2

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	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Rental Income of Persons Percent Change From Last Qtr (AR)	-4.5 -78.4	3.3 -71.1	5.0 427.0	10.0 1500.0	12.0 107.4	15.0 144.1	17.0 65.0	18.0 25.7	3.5 -133.2	15.5 349.3
US: Corp. Prof. w. IVA + CCADJ Percent Change From Last Qtr (AR)	384.0 49.8	388.4 4.7	370.4 -17.3	380.2 11.0	384.2 4.2	392.6 9.0	402.7 10.7	415.0 12.8	380.8 10.0	398.6 4.7
US: Net Interest Percent Change From Last Qtr (AR)	430.0 -14.3	420.0 -9.0	411.5 -7.9	405.6 -5.6	403.8 -1.8	406.2 2.4	410.4 4.1	415.2 4.8	416.8 -7.3	408.9 -1.9
US: Corp. Prof. before Taxe Percent Change From Last Qtr (AR)	366.1 47.3	376.8 12.2	350.5 -25.1	358.9 9.9	362.0 3.5	371.3 10.6	380.3 10.1	391.0 11.8	363.1 8.5	376.2 3.6
US: Profits Tax Liability Percent Change From Last Qtr (AR)	136.4 41.8	144.1 24.6	131.7 -30.2	133.9 6.7	131.5 -6.8	131.0 -1.5	132.2 3.6	133.5 4.0	136.5 10.0	132.0 -3.3
US: Corp. Prof. after Taxes Percent Change From Last Qtr (AR)	229.7 50.5	232.7 5.3	218.8 -21.8	225.0 11.9	230.5 10.1	240.3 18.1	248.1 13.7	257.5 16.1	226.6 7.5	244.1 7.7
US: Dividends-Total Percent Change From Last Qtr (AR)	143.6 -0.8	146.6 8.6	151.1 12.9	154.8 10.3	157.9 8.1	160.3 6.2	162.8 6.4	165.4 6.6	149.0 1.8	161.6 8.4
US: Undistributed Corp. Prof. Percent Change From Last Qtr (AR)	86.2 241.7	86.1 -0.5	67.7 -61.8	70.2 15.6	72.6 14.6	80.0 47.1	85.3 29.5	92.2 36.1	77.5 20.8	82.5 6.4
US: Inventory Valuation Adj. Percent Change From Last Qtr (AR)	-5.4 354046.4	-15.5 6688.2	-9.8 -84.0	-13.0 207.4	-12.1 -24.0	-12.9 28.8	-11.7 -32.4	-10.1 -44.6	-10.9 -449.4	-11.7 7.2
US: Corp. Cap. Cons. Adj. Percent Change From Last Qtr (AR)	23.3 645.7	27.0 80.3	29.7 46.4	34.3 78.4	34.2 -0.9	34.2 -0.9	34.1 -0.9	34.0 -0.9	28.6 238.2	34.1 19.4
US: Net Interest Percent Change From Last Qtr (AR)	430.0 -14.3	420.0 -9.0	411.5 -7.9	405.6 -5.6	403.8 -1.8	406.2 2.4	410.4 4.1	415.2 4.8	416.8 -7.3	408.9 -1.9

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

PRICE DEFLATORS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: CPI-All items	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.4	1.4
Percent Change From Last Qtr (AR)	2.8	3.4	2.6	3.4	3.3	3.5	3.2	2.9	3.0	3.3
US: Implicit Deflator - GDP	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Percent Change From Last Qtr (AR)	3.1	2.7	1.6	2.9	2.3	2.4	2.1	1.7	2.7	2.3
US: Implicit Deflator - C	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.3
Percent Change From Last Qtr (AR)	3.1	3.6	1.4	2.9	3.0	3.1	2.9	2.4	3.0	2.8
US: Implicit Deflator - IOIL	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1
Percent Change From Last Qtr (AR)	-48.6	70.7	26.7	-2.8	-3.7	1.0	1.0	1.0	-4.1	5.0

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

EMPLOYMENT

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Civilian Labor Force Percent Change From Last Qtr (AR)	126.3 2.6	127.2 2.8	127.4 0.7	127.2 -0.6	127.8 1.7	128.2 1.4	128.7 1.6	129.2 1.6	127.0 1.4	128.5 1.1
US: Civilian Employment Percent Change From Last Qtr (AR)	117.2 1.3	117.6 1.6	117.7 0.3	118.0 1.0	118.5 1.6	118.9 1.2	119.4 1.7	119.9 1.9	117.6 0.7	119.2 1.3
US: Unemployment Percent Change From Last Qtr (AR)	9.1 21.1	9.5 19.0	9.7 5.7	9.2 -18.4	9.3 3.6	9.4 3.3	9.3 -0.3	9.3 -2.6	9.4 11.2	9.3 -0.8
US: Unemployment Rate-Total	7.2	7.5	7.6	7.2	7.3	7.3	7.3	7.2	7.4	7.3
US: Tot. Nonfarm Empl. Percent Change From Last Qtr (AR)	108.1 -0.2	108.4 1.1	108.5 0.2	108.6 0.5	109.2 2.0	109.6 1.5	110.1 2.0	110.7 2.2	108.4 0.1	109.9 1.4
US: Total Govt. Empl. Percent Change From Last Qtr (AR)	18.5 1.0	18.5 1.5	18.6 2.0	18.7 1.7	18.7 0.7	18.8 1.1	18.8 1.1	18.9 1.5	18.6 1.1	18.8 1.3
US: Fed. Govt. Empl. Percent Change From Last Qtr (AR)	3.0 0.3	3.0 -0.4	3.0 -2.5	3.0 1.1	3.0 -0.7	3.0 -0.9	3.0 -0.9	2.9 -0.9	3.0 0.3	3.0 -0.7
US: S & L Govt. Empl. Percent Change From Last Qtr (AR)	15.5 1.2	15.6 1.8	15.7 2.9	15.7 1.8	15.8 1.0	15.8 1.5	15.9 1.5	16.0 2.0	15.6 1.3	15.9 1.6
US: Output Per Manhour-Pr. Nonag. Percent Change From Last Qtr (AR)	22.5 2.7	22.6 1.4	22.8 4.0	22.7 -1.9	22.7 -0.4	22.8 1.2	22.8 1.6	22.9 1.5	22.7 1.7	22.8 0.7

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

FINANCIAL AND GOVERNMENT BUDGET DEFECIT

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: M1 Money Supply	926.8	949.6	974.1	999.5	1012.8	1026.4	1040.1	1053.7	962.5	1033.3
Percent Change From Last Qtr (AR)	17.5	10.2	10.7	10.9	5.4	5.5	5.5	5.3	11.9	7.4
US: M2 Money Supply	3465.9	3469.6	3471.9	3512.8	3560.6	3613.4	3667.0	3721.4	3480.0	3640.6
Percent Change From Last Qtr (AR)	3.1	0.4	0.3	4.8	5.6	6.1	6.1	6.1	2.2	4.6
US: 3-Month T-Bill Rate	3.9	3.7	3.1	3.0	3.2	3.3	3.4	3.5	3.5	3.3
Percent Change From Last Qtr (AR)	-47.0	-17.8	-50.1	-10.7	16.0	16.3	17.8	15.9	-36.2	-2.9
US: Prime Rate Charged By Banks	6.5	6.5	6.0	6.0	6.0	6.0	6.0	6.0	6.3	6.0
Percent Change From Last Qtr (AR)	-46.4	0.0	-27.1	1.1	-0.5	-3.8	0.9	3.3	-26.1	-4.2
US: Moody's AAA Corp. Bond Rate	8.3	8.3	8.0	8.1	8.1	8.0	8.0	8.0	8.2	8.0
Percent Change From Last Qtr (AR)	-7.7	-0.2	-13.6	7.4	-3.4	-2.1	-0.6	0.1	-6.9	-1.8
US: Federal Govt. Surplus	-289.2	-302.9	-301.9	-304.4	-301.6	-309.1	-328.8	-346.4	-299.6	-321.5
Percent Change From Last Qtr (AR)	56.2	20.3	-1.3	3.4	-3.7	10.4	28.1	23.1	42.4	7.3

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

EMPLOYMENT

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS EMP: Civilian Labor Force	1307.1	1333.0	1331.3	1320.7	1325.3	1352.5	1351.9	1341.9	1323.0	1342.9
Percent Change From One Year Ago	1.8	2.7	2.2	2.0	1.4	1.5	1.5	1.6	2.2	1.5
KS EMP: Employed	1254.2	1279.9	1278.7	1266.5	1265.5	1299.0	1300.0	1287.9	1269.8	1288.1
Percent Change From One Year Ago	2.9	3.1	2.4	1.9	0.9	1.5	1.7	1.7	2.6	1.4
KS EMP: Unemployed	52.9	53.1	52.6	54.2	59.8	53.5	51.9	54.1	53.2	54.8
Percent Change From One Year Ago	-18.6	-6.6	-2.8	4.1	13.2	0.8	-1.3	-0.2	-6.7	3.1
KS EMP: Unemployment Rate	4.0	4.0	3.9	4.1	4.5	4.0	3.8	4.0	4.0	4.1
Percent Change From One Year Ago	-20.4	-8.4	-4.8	1.7	12.0	-1.1	-2.3	-1.8	-8.7	1.7
KS EMP: Adj. for Res. & Self Emp.	106.0	101.5	103.8	80.7	101.3	98.3	103.7	85.4	98.0	97.2
Percent Change From One Year Ago	10.2	23.4	10.8	0.9	-4.4	-3.1	-0.0	5.9	11.3	-0.8
KS EMP: Farm	46.8	54.0	59.2	53.4	46.2	58.5	61.5	45.6	53.4	53.0
Percent Change From One Year Ago	-6.1	-7.4	-3.5	6.2	-1.4	8.3	4.0	-14.5	-2.9	-0.7
KS EMP: Total Non-farm Wage & Salary	1101.4	1124.4	1115.8	1132.5	1118.0	1142.2	1134.7	1156.8	1118.5	1137.9
Percent Change From One Year Ago	2.7	2.1	2.0	1.7	1.5	1.6	1.7	2.2	2.1	1.7
KS EMP: Mining	9.3	9.5	9.8	9.6	9.3	9.5	9.8	9.7	9.6	9.6
Percent Change From One Year Ago	-6.7	-3.4	-0.3	-0.5	-0.4	0.2	0.5	1.0	-2.7	0.3

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	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS EMP: Oil & Gas Extraction Percent Change From One Year Ago	8.0 -8.0	8.1 -4.0	8.2 -1.2	8.2 -0.8	8.0 -0.0	8.1 -0.4	8.3 1.0	8.2 0.5	8.1 -3.6	8.1 0.3
KS EMP: Mining Residual Percent Change From One Year Ago	1.3 2.6	1.4 -0.0	1.6 4.4	1.4 1.4	1.3 -2.7	1.5 3.4	1.5 -2.3	1.5 3.7	1.4 2.1	1.4 0.5
KS EMP: Construction Percent Change From One Year Ago	41.5 16.7	46.8 10.0	48.4 8.0	46.2 5.9	40.6 -2.1	47.8 2.2	50.5 4.3	48.3 4.6	45.7 9.8	46.8 2.4
KS EMP: Non-durable Goods Percent Change From One Year Ago	77.2 1.6	77.8 1.1	77.5 1.2	77.1 0.9	77.4 0.2	78.7 1.2	79.0 1.9	78.6 2.0	77.4 1.2	78.4 1.3
KS EMP: Food & Kindred Percent Change From One Year Ago	27.4 1.9	27.5 -0.1	27.8 0.7	27.9 0.8	27.6 0.7	28.2 2.5	28.8 3.6	28.9 3.6	27.6 0.8	28.4 2.6
KS EMP: Apparel Percent Change From One Year Ago	3.3 2.0	3.5 3.9	3.4 -1.0	3.3 -0.8	3.2 -3.5	3.3 -7.7	3.3 -4.7	3.2 -2.7	3.4 1.0	3.2 -4.7
KS EMP: Printing & Publishing Percent Change From One Year Ago	21.3 1.9	21.6 2.5	21.3 3.4	20.9 2.3	21.7 1.6	22.0 1.5	21.4 0.5	21.3 2.0	21.3 2.5	21.6 1.4
KS EMP: Chemicals & Allied Prod. Percent Change From One Year Ago	7.4 -3.5	7.2 -4.8	7.0 -6.6	7.0 -7.1	6.9 -6.6	6.9 -4.5	6.8 -2.9	6.7 -4.4	7.1 -5.5	6.8 -4.6
KS EMP: Petroleum & Coal Percent Change From One Year Ago	12.1 2.5	12.2 2.8	12.2 2.2	12.2 2.3	12.1 0.5	12.4 1.5	12.5 2.3	12.3 0.6	12.2 2.5	12.3 1.3
KS EMP: Non-durables Residual Percent Change From One Year Ago	5.7 3.6	5.7 4.9	5.7 4.9	5.8 4.7	5.9 3.4	6.0 6.1	6.2 7.6	6.2 6.8	5.7 4.5	6.1 6.0

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS EMP: Durable Goods Percent Change From One Year Ago	106.1 -0.7	105.6 -1.6	104.5 -3.1	104.1 -3.4	102.9 -3.0	103.4 -2.1	103.2 -1.3	104.2 0.1	105.1 -2.2	103.4 -1.6
KS EMP: Stone Glass Clay Percent Change From One Year Ago	5.8 -3.3	6.3 1.6	6.5 3.2	6.3 3.4	6.0 2.8	6.3 -1.1	6.4 -1.7	6.2 -0.8	6.2 1.2	6.2 -0.3
KS EMP: Primary Metals Percent Change From One Year Ago	2.8 0.0	2.8 0.0	2.8 3.7	2.9 7.7	2.9 2.8	2.9 1.8	2.9 1.2	2.9 -1.4	2.8 2.8	2.9 1.1
KS EMP: Fabricated Metals Percent Change From One Year Ago	9.8 -7.2	9.7 -8.2	9.6 -9.1	9.3 -11.0	9.0 -8.9	8.9 -7.8	8.8 -8.2	8.7 -6.3	9.6 -8.9	8.9 -7.8
KS EMP: Machinery, Incl. Electrical Percent Change From One Year Ago	28.0 -4.6	27.9 -3.0	28.1 -2.8	28.4 -0.7	28.2 0.7	27.9 -0.3	27.6 -1.9	27.4 -3.3	28.1 -2.8	27.8 -1.2
KS EMP: Transportation Equipment Percent Change From One Year Ago	49.3 2.4	48.4 -0.8	46.9 -4.2	46.9 -5.6	46.7 -5.3	46.9 -3.1	46.8 -0.2	48.4 3.3	47.9 -2.1	47.2 -1.4
KS EMP: Durables Residual Percent Change From One Year Ago	10.3 4.7	10.4 2.6	10.5 1.3	10.4 0.3	10.1 -1.8	10.6 1.3	10.7 1.7	10.5 1.0	10.4 2.2	10.5 0.5
KS EMP: Transportation & Utilities Percent Change From One Year Ago	64.2 -0.4	64.5 -0.6	64.9 -0.6	65.3 -0.4	64.3 0.1	65.4 1.4	65.8 1.3	66.1 1.2	64.7 -0.5	65.4 1.0
KS EMP: Railroads Percent Change From One Year Ago	6.7 -2.9	6.8 -4.7	6.9 -2.8	6.9 -1.5	6.6 -1.5	6.6 -2.6	6.6 -4.2	6.5 -5.8	6.8 -3.0	6.6 -3.5
KS EMP: Trucking & Warehousing Percent Change From One Year Ago	21.2 -1.1	21.8 0.3	22.1 0.9	22.2 1.9	21.5 1.4	22.3 2.4	22.8 3.0	22.6 1.9	21.8 0.5	22.3 2.2

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS EMP: Electric Gas & Sanitary Serv Percent Change From One Year Ago	12.5 -1.1	12.3 -2.9	12.3 -3.1	12.3 -2.5	12.3 -1.4	12.4 1.3	12.6 2.4	12.4 0.9	12.3 -2.4	12.4 0.8
KS EMP: Trans. & Utilities Residual Percent Change From One Year Ago	23.9 1.4	23.7 1.0	23.7 0.0	23.9 -1.0	23.9 0.1	24.1 1.6	23.9 0.9	24.6 2.6	23.8 0.4	24.1 1.3
KS EMP: Wholesale Trade Percent Change From One Year Ago	69.5 2.3	71.0 0.5	71.5 0.6	71.0 1.1	70.6 1.6	71.9 1.3	72.1 0.9	71.0 -0.1	70.7 1.1	71.4 1.0
KS EMP: Retail Trade Percent Change From One Year Ago	196.8 2.3	200.8 1.0	202.2 0.8	204.8 0.7	199.3 1.3	204.1 1.6	205.9 1.8	209.8 2.4	201.2 1.2	204.8 1.8
KS EMP: Gen. Merchandise Stores Percent Change From One Year Ago	26.4 -0.4	26.3 -0.4	26.5 0.0	27.8 0.1	25.9 -1.9	25.9 -1.7	26.3 -1.0	28.3 2.1	26.7 -0.2	26.6 -0.6
KS EMP: Food Stores Percent Change From One Year Ago	31.0 4.6	30.9 -0.4	31.0 -0.4	31.2 -0.5	30.9 -0.5	31.1 0.6	31.4 1.3	32.0 2.5	31.0 0.8	31.3 1.0
KS EMP: Auto. Dealers & Gas Stations Percent Change From One Year Ago	23.1 0.9	23.2 -0.1	23.1 -1.7	22.7 -2.5	22.5 -2.6	23.1 -0.4	23.3 1.0	23.1 1.7	23.0 -0.9	23.0 -0.1
KS EMP: Apparel & Accessory Stores Percent Change From One Year Ago	10.1 -3.8	10.0 -2.3	9.9 -4.5	10.6 -2.1	10.0 -0.9	9.9 -0.6	10.0 1.3	10.6 0.6	10.1 -3.2	10.2 0.1
KS EMP: Retail Trade Residual Percent Change From One Year Ago	106.2 3.2	110.4 2.3	111.7 2.4	112.6 2.2	110.1 3.6	114.0 3.3	114.9 2.9	115.8 2.8	110.2 2.5	113.7 3.1
KS EMP: Finance, Insurance, R.E. Percent Change From One Year Ago	58.0 0.2	58.3 -0.9	58.6 -0.2	58.7 1.2	58.3 0.5	59.1 1.4	59.4 1.5	58.5 -0.2	58.4 0.1	58.9 0.8

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.



Institute for Public Policy and Business Research, University of Kansas										1992-1993 Kansas Forecast				13JAN93		A18
	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993						
KS EMP: Banking	23.4	23.3	23.6	23.7	23.5	23.4	23.4	23.0	23.5	23.3						
Percent Change From One Year Ago	-3.7	-3.2	-1.5	0.8	0.4	0.4	-0.9	-3.1	-1.9	-0.8						
KS EMP: Insurance	13.1	13.1	13.1	13.1	13.1	13.2	13.4	13.3	13.1	13.3						
Percent Change From One Year Ago	4.8	1.0	0.3	0.6	-0.2	0.9	1.7	1.5	1.6	1.0						
KS EMP: F.I.R.E. Residual	21.5	21.8	21.8	21.9	21.7	22.5	22.7	22.2	21.8	22.3						
Percent Change From One Year Ago	2.1	0.6	1.1	2.0	1.1	2.9	3.9	1.8	1.4	2.4						
KS EMP: Services	253.0	257.9	261.8	262.3	262.8	270.7	273.7	275.9	258.7	270.8						
Percent Change From One Year Ago	4.7	4.1	4.1	3.7	3.9	5.0	4.6	5.2	4.1	4.7						
KS EMP: Hotels & Lodging	9.0	9.6	9.8	9.7	9.2	10.0	10.3	10.1	9.5	9.9						
Percent Change From One Year Ago	0.0	-1.7	0.3	0.6	2.3	4.1	5.3	4.4	-0.2	4.1						
KS EMP: Personal Services	11.1	11.0	11.0	11.1	11.7	11.5	11.3	11.5	11.1	11.5						
Percent Change From One Year Ago	-5.1	-2.4	0.3	0.6	5.7	4.3	2.6	3.6	-1.7	4.0						
KS EMP: Services Residual	232.9	237.3	240.9	241.5	241.9	249.3	252.1	254.4	238.2	249.4						
Percent Change From One Year Ago	5.4	4.6	4.5	4.0	3.8	5.0	4.6	5.3	4.6	4.7						
KS EMP: Federal Gov.	29.1	29.4	29.2	28.6	28.1	28.6	28.5	28.1	29.1	28.3						
Percent Change From One Year Ago	3.3	1.5	-0.1	-1.5	-3.5	-2.8	-2.5	-1.6	0.8	-2.6						
KS EMP: State & Local Gov.	196.7	202.8	187.4	204.8	204.5	202.9	186.7	206.7	197.9	200.2						
Percent Change From One Year Ago	2.7	4.3	5.1	4.1	3.9	0.0	-0.4	0.9	4.0	1.1						

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HOURS AND WAGES

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS HRS/WK: Food & Kindred Products	43.7	43.0	43.4	43.9	42.3	42.1	42.2	41.1	43.5	42.0
Percent Change From One Year Ago	4.3	4.2	2.6	2.2	-3.2	-2.1	-2.6	-6.2	3.3	-3.5
KS HRS/WK: Apparel&Other Fin. Prod.	37.9	37.9	37.7	41.0	39.3	38.9	38.7	38.3	38.6	38.8
Percent Change From One Year Ago	9.7	11.7	7.1	11.2	3.6	2.6	2.6	-6.6	9.9	0.4
KS HRS/WK: Pet. Refining & Rel. Ind.	41.0	40.9	39.3	40.2	40.0	40.8	40.6	40.7	40.4	40.5
Percent Change From One Year Ago	9.6	5.7	3.4	3.7	-2.4	-0.3	3.3	1.2	5.6	0.4
KS HRS/WK: Fabricated Metal Products	37.8	37.2	37.8	37.7	36.8	37.3	37.4	37.5	37.6	37.3
Percent Change From One Year Ago	1.9	-4.3	-1.6	-0.5	-2.6	0.4	-1.0	-0.6	-1.2	-1.0
KS HRS/WK: Machinery, Incl. Elec.	39.1	39.5	40.9	41.7	41.2	40.8	40.1	41.0	40.3	40.8
Percent Change From One Year Ago	-1.4	0.3	5.0	6.4	5.3	3.4	-1.9	-1.7	2.6	1.2
KS HRS/WK: Transportation Equipment	41.2	41.1	40.1	40.6	40.2	40.4	40.4	41.2	40.7	40.5
Percent Change From One Year Ago	1.1	-2.1	-1.6	-2.8	-2.3	-1.6	0.8	1.6	-1.3	-0.4
KS WAGE/HR: Food & Kindred Products	9.5	9.7	9.8	9.7	9.8	9.9	9.9	10.0	9.7	9.9
Percent Change From One Year Ago	1.1	1.2	-1.3	-0.2	3.0	2.0	2.0	2.3	0.2	2.3
KS WAGE/HR: Apparel&Other Fin. Prod.	6.4	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.3	6.4
Percent Change From One Year Ago	9.1	2.9	3.6	2.1	0.1	3.7	3.0	3.6	4.4	2.6
KS WAGE/HR: Pet. Refining & Rel. Ind	11.9	12.1	11.9	12.6	12.7	12.8	12.9	13.0	12.1	12.8
Percent Change From One Year Ago	8.0	9.6	9.3	13.4	6.3	6.2	7.6	3.0	10.1	5.8
KS WAGE/HR: Fabricated Metal Product	9.5	9.5	9.6	9.6	9.6	9.7	9.8	9.9	9.5	9.7
Percent Change From One Year Ago	5.9	6.1	5.7	3.5	1.8	2.0	2.1	2.8	5.3	2.2
KS WAGE/HR: Machinery, Incl. Elec.	10.0	10.3	10.3	10.4	10.4	10.5	10.6	10.7	10.2	10.5
Percent Change From One Year Ago	2.0	4.6	2.0	3.9	4.4	1.7	3.0	2.8	3.1	3.0
KS WAGE/HR: Transportation Equipment	14.9	15.0	15.1	15.6	15.7	15.7	15.9	16.1	15.2	15.9
Percent Change From One Year Ago	5.9	3.4	3.9	4.3	4.9	5.3	4.9	3.2	4.4	4.6

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WAGE BILLS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS WG BILL: Total Wages & Salaries	25382.0	25527.0	25814.0	26116.7	26266.1	26700.7	27043.0	27318.1	25709.9	26831.9
Percent Change From One Year Ago	5.7	5.0	4.6	4.9	3.5	4.6	4.8	4.6	5.1	4.4
KS WG BILL: Farm Wages & Salaries	213.0	216.0	216.9	217.2	218.3	218.7	219.2	219.5	215.8	218.9
Percent Change From One Year Ago	0.0	1.4	3.8	3.9	2.5	1.2	1.1	1.1	2.3	1.5
KS WG BILL: Agricultural Services	117.0	120.0	122.0	124.1	126.2	128.2	130.3	132.4	120.8	129.3
Percent Change From One Year Ago	0.9	0.8	4.3	4.3	7.8	6.9	6.8	6.7	2.6	7.0
KS WG BILL: Mining	246.0	244.0	246.1	247.7	249.1	251.7	254.4	256.8	246.0	253.0
Percent Change From One Year Ago	-8.2	-5.4	-2.7	1.1	1.3	3.2	3.4	3.7	-3.9	2.9
KS WG BILL: Construction	1100.0	1084.0	1102.1	1095.4	1081.3	1145.6	1179.6	1178.3	1095.4	1146.2
Percent Change From One Year Ago	11.7	10.6	9.1	10.8	-1.7	5.7	7.0	7.6	10.5	4.6
KS WG BILL: Durable Goods	3240.0	3205.0	3195.2	3237.2	3230.2	3267.1	3292.1	3380.9	3219.4	3292.6
Percent Change From One Year Ago	3.3	1.6	2.6	1.5	-0.3	1.9	3.0	4.4	2.2	2.3
KS WG BILL: Nondurable Goods	1928.0	1913.0	1951.5	2008.0	2013.5	2041.5	2068.0	2076.7	1950.1	2049.9
Percent Change From One Year Ago	2.7	2.5	2.5	5.4	4.4	6.7	6.0	3.4	3.3	5.1

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	1992-1993				Kansas Forecast				13JAN93	A21
	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS WG BILL: Trans. & Public Utilities	2113.0	2135.0	2149.9	2179.5	2187.2	2218.3	2238.0	2263.5	2144.4	2226.8
Percent Change From One Year Ago	2.3	3.1	0.6	3.1	3.5	3.9	4.1	3.9	2.3	3.8
KS WG BILL: Wholesale Trade	1892.0	1908.0	1928.6	1952.2	1964.5	1997.4	2013.7	2015.3	1920.2	1997.7
Percent Change From One Year Ago	2.2	0.8	1.8	2.2	3.8	4.7	4.4	3.2	1.8	4.0
KS WG BILL: Retail Trade	2540.0	2547.0	2565.5	2582.5	2596.7	2612.0	2632.0	2648.9	2558.8	2622.4
Percent Change From One Year Ago	6.3	4.9	4.0	4.1	2.2	2.6	2.6	2.6	4.8	2.5
KS WG BILL: Finance, Insurance, & R.E	1533.0	1524.0	1546.2	1578.4	1593.5	1623.8	1647.9	1652.6	1545.4	1629.4
Percent Change From One Year Ago	4.0	3.6	3.8	4.5	3.9	6.5	6.6	4.7	4.0	5.4
KS WG BILL: Services	5115.0	5188.0	5328.5	5400.1	5485.6	5655.2	5809.4	5898.0	5257.9	5712.1
Percent Change From One Year Ago	9.0	8.0	8.4	7.9	7.2	9.0	9.0	9.2	8.3	8.6
KS WG BILL: Govt. & Govt. Enterprises	5344.0	5443.0	5461.5	5494.4	5520.1	5541.1	5558.3	5595.2	5435.7	5553.7
Percent Change From One Year Ago	8.2	7.9	5.6	5.5	3.3	1.8	1.8	1.8	6.8	2.2

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PERSONAL INCOME

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS PERS INC: Total Personal Income	47066.0	47485.0	47845.0	49403.1	49134.5	49965.3	50601.9	51638.4	47949.8	50335.0
Percent Change From One Year Ago	5.7	4.1	5.3	4.7	4.4	5.2	5.8	4.5	4.9	5.0
KS PERS INC: Real Personal Income	38484.2	38489.2	38647.8	39623.3	39116.5	39474.1	39695.7	40273.4	38811.1	39639.9
Percent Change From One Year Ago	2.4	0.8	2.4	1.9	1.6	2.6	2.7	1.6	1.9	2.1
KS PERS INC: Farm Proprietors Income	400.0	459.0	369.9	1343.8	657.7	712.6	668.7	1105.3	643.2	786.1
Percent Change From One Year Ago	26.2	-52.8	516.5	0.3	64.4	55.3	80.8	-17.7	-4.3	22.2
KS PERS INC: Non-farm Proprietors Inc	3418.0	3494.0	3543.9	3622.2	3642.1	3668.5	3699.4	3728.4	3519.5	3684.6
Percent Change From One Year Ago	9.8	10.2	7.9	9.2	6.6	5.0	4.4	2.9	9.3	4.7
KS PERS INC: Dividends Interest & Ren	8636.0	8607.0	8576.7	8622.0	8685.2	8791.9	8905.4	9024.9	8610.4	8851.8
Percent Change From One Year Ago	-0.6	-0.7	-2.1	-2.1	0.6	2.1	3.8	4.7	-1.4	2.8
KS PERS INC: Adj. For Residence	1295.0	1307.0	1312.0	1323.3	1337.5	1353.8	1370.7	1388.4	1309.3	1362.6
Percent Change From One Year Ago	2.9	4.1	4.0	2.9	3.3	3.6	4.5	4.9	3.5	4.1
KS PERS INC: Pers. Cont. For Soc. Ins	2318.0	2356.0	2378.8	2420.9	2478.8	2513.4	2551.4	2586.0	2368.4	2532.4
Percent Change From One Year Ago	5.9	6.4	5.4	6.6	6.9	6.7	7.3	6.8	6.1	6.9
KS PERS INC: Transfer Payments	7558.0	7699.0	7821.7	7968.0	8163.9	8361.4	8544.0	8709.6	7761.7	8444.7
Percent Change From One Year Ago	11.2	11.6	11.2	10.9	8.0	8.6	9.2	9.3	11.2	8.8
KS PERS INC: Other Labor Income	2695.0	2748.0	2785.7	2827.9	2861.0	2889.8	2922.3	2949.7	2764.1	2905.7
Percent Change From One Year Ago	5.9	6.6	6.3	6.2	6.2	5.2	4.9	4.3	6.3	5.1

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.