Institute for Public Policy and Business Research
The University of Kansas

U.S. AND KANSAS ECONOMIC FORECASTS FOR 1992

MIDYEAR UPDATE

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Preface

The Institute for Public Policy and Business Research is pleased to present this midyear update of its 1991 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 1991, and an appendix with detailed quarter by quarter forecasts for each sector. Although the Institute's official forecast for 1992 will be released in December of this year, this midyear update contains preliminary forecasts of some of the major economic variables for both Kansas and the nation.

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.

Table of Contents

U.S. AND KANSAS ECONOMIC FORECASTS FOR 1991

MIDYEAR UPDATE

	Page
Executive Summary	1
Introduction	6
The National Outlook	12
The Kansas Economy	21
Conclusion	26
Notes	27
Appendix	29

Executive Summary

The National Economy

The U.S. economy is in the midst of a somewhat sluggish recovery from the recent recession. When viewed simply as two quarters of negative growth at the end of 1990 and the beginning of 1991, the recession appears to have been somewhat mild. However, when the period of slow growth that proceeded those two quarters and the fairly anemic recovery that has followed are considered, the whole period is one of quite significant lost output. In fact, of all the recessions since 1959, only the recession of the early 1980's involved more lost output when considered in this way. The effect on employment appears to have been a little less severe, but still substantial. One feature of the recovery period has been a surprisingly low growth rate of the money supply; the Fed's obviously expansionary efforts to bring down interest rates have not been translated into an equally expansionary effect on money growth. As a result, the effect of the Fed's policies has been much less expansionary than intended.

The U.S. economy will continue to recover in 1992 and 1993, although the pace of the recovery will still be less than one would hope. Real output, which grew only 1.0 percent in 1990 and declined 0.7 percent in 1991, will grow 2.1 percent in 1991 and 2.3 percent in 1992. An important part of economic growth in 1992 will be increased consumption spending, which should be about 2.3 percent higher in 1992 after declining slightly in 1991. In particular, some consumer purchases of durable goods that were postponed in 1991 due to the high degree of economic uncertainty, will be realized in 1992; consumption spending on durable goods is expected to increase 4.4 percent in 1992, driven to a considerable extent by a 14.4 percent increase in auto purchases, which declined 17.7 percent in 1991. Consumer spending on services will grow 2.6 percent in 1992 and 2.5 percent in 1993, while consumer spending on non-durable goods will increase 0.8 percent and 1.0 percent for the two years.

Among the other categories of aggregate demand, net exports has been one of the bright spots for the economy. Except for two quarters, real export growth exceeded real import growth in 1990 and 1991, and the real balance of trade declined over the period. The forecast is for imports to grow slowly throughout 1992 and 1993, and for export growth to just keep pace; thus the trade deficit should remain roughly constant.

Government purchases of goods and services will not provide much direct economic stimulus in the near future, as a large decline in defense spending over the next two years will cause a drop in real Federal purchases of goods and services. Although state and local government purchases of goods and services will increase moderately, this will be insufficient to offset the decline in Federal purchases. On the other hand, there will be some indirect fiscal stimulus to the economy through an increase in the Federal government's budget deficit, as Federal transfers to state and local governments and individuals are expected to increase faster than Federal government receipts from taxes and other sources.

Firms decreased inventories significantly during the recession and even at times during the recovery. The forecast is for business inventories to increase very slowly over the next two years, as firms adopt a wait and see attitude toward the recovery. On the other hand, firm spending on new plant and equipment should increase at about a 5 percent annual rate over the same period, providing some positive stimulus for recovery.

The slow recovery implies fairly modest price increases, with the rate of inflation as measured by the change in the consumer price index expected to be about 3.3 percent in 1992 and 3.7 percent in 1993. Food prices and transportation costs should exhibit below average price increases, while housing and medical costs will increase at a higher than average rate.

Employment growth will begin to pick up slightly in 1992 and 1993, but will not be at a sufficient rate to reduce the unemployment rate significantly; the unemployment rate should decline form a high of 7.6 percent to around 7.3 percent by the end of 1993.

It is expected that the Fed has already achieved most of the reduction in interest rates that it will seek during the recovery, so that short-term rates will remain relatively constant. Long-term rates should

&decline somewhat, as the threat of long-run inflation is perceived to have receded.

Personal income is expected to grow 4.4 percent in 1992 and 5.0 percent in 1993. Wage and salary increases will be a driving force, offsetting declines in interest income in each of the two years.

Table 1
The National Forecast--Summary

	1989	1990	1991	1992	1993
Real GDP (billions)	4836.9	4884.9	4848.9	4948.9	5064.7
Growth Rate	2.5	1.0	-.7	2.1	2.3
Rate of Inflation	4.8	5.4	4.2	3.3	3.7
Civilian Employment (millions)	117.3	117.9	116.9	117.8	119.2
Growth Rate	2.1	.5	-.9	.8	1.3
Unemployment Rate	5.3	5.5	6.8	7.4	7.4
3-Month T-Bill Rate	8.1	7.5	5.4	3.6	3.5
Nominal Personal Income (billions)	4075.9	4380.2	4834.4	5046.3	5299.1
Growth Rate	7.5	6.8	3.3	4.4	5.0

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. There will be no changes in fiscal policy over the forecast period. It appears that Congress and the administration will be unable to agree on any fiscal initiatives during this election year, and therefore we expect no significant fiscal changes through the end of 1993. State and local taxes will increase at a slower rate during 1993, and state and local government employment will increase at a faster rate in 1993.

2. Money supply growth will accelerate somewhat from recent slow growth; the M2 measure of the money supply is expected to grow at about a 4 to 5 percent rate through the end of 1992, with that rate increasing to about 6 percent in 1993.

3. World oil prices will be fairly stable during the forecast period; the increased demand that

results from economic expansion will be offset by increased supply from the Middle East and, perhaps, Russia.

4. The exchange rate of the dollar[5] will remain constant over the forecast period. The growth rate of real exports will be about 3 percent during the first half of 1992, then increase to 4 percent for the second half of the year and the first quarter of 1993, and increase again to 5 percent over the last three quarters of 1993.

The Kansas Economy

The Kansas forecast is summarized in Table 2, below. The Kansas economy will continue to be somewhat stronger than the national economy in 1992 and 1993. Non-farm wage and salary employment in Kansas grew 1.0 percent in 1991, while it was falling by 1.3 percent in the nation as a whole. Such employment in Kansas is expected to increase 1.8 percent in 1992 and 1.3 percent in 1993.

Employment in mining is expected to decline slightly in 1992 as oil prices remain relatively stable. Construction employment is expected to increase a healthy 10.3 percent in 1992, returning to about the level that it had reached in 1987 before several years of decline.

Employment in durable goods manufacturing is expected to decline 1.6 percent in 1992 and remain flat in 1993, due to poor performances in fabricated metals and machinery manufacturing, and lack of growth in the important transportation equipment sector. Employment in non-durable goods manufacturing is expected to increase 1.4 percent and 1.2 percent in 1992 and 1993, respectively.

Employment in the transportation, utilities, and communication subsector is expected to decrease 0.5 percent in 1992 due to continued decline in railroad employment. Employment in retail trade will grow 1.3 percent in 1992 and 1.9 percent in 1993, while a decrease in banking employment will push down the employment level in finance, insurance, and real estate. Service employment will increase 4 to 5 percent over each of the next two years. Federal government employment in Kansas will decline in 1992, while state and local government employment will increase somewhat.

Table 2
The Kansas Forecast--Summary

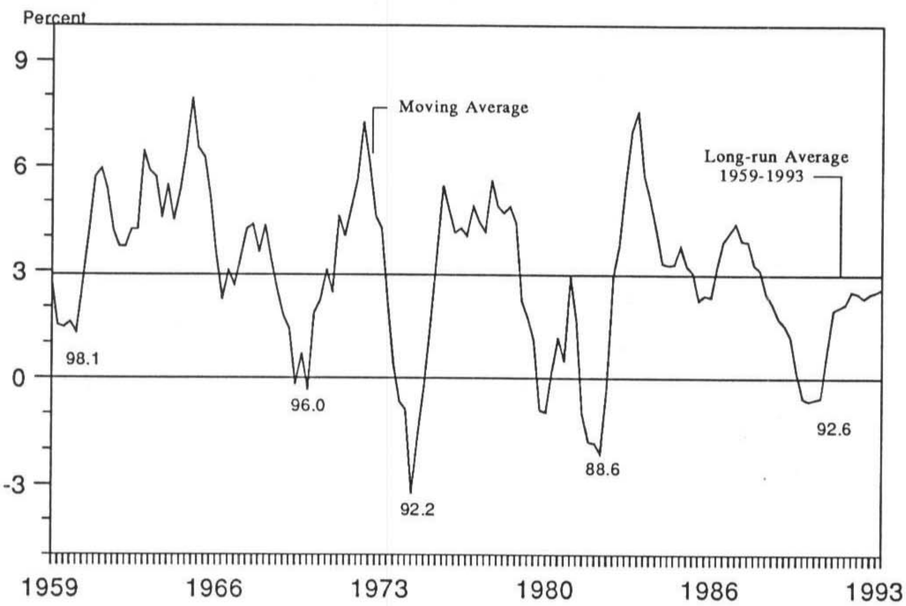
	1989	**1990**	**1991**	**1992**	**1993**
Civilian Labor					
Force (thousands)	1285.0	1300.0	1295.0	1324.1	1338.8
Growth Rate	0.2	1.2	-0.4	2.2	1.1
Total Employment					
(thousands)	1233.0	1243.0	1238.0	1271.7	1283.3
Growth Rate	1.0	0.8	-.04	2.7	0.9
Wage and Salary					
Employment (thousands)	1064.2	1084.7	1095.1	1115.1	1129.9
Growth Rate	2.8	1.9	1.0	1.8	1.3
Unemployment Rate	4.1	4.4	4.4	4.0	4.2
Nominal Personal					
Income (millions)	41943.5	44906.0	46176.5	48429.1	50735.9
Growth Rate	6.5	7.1	2.8	4.9	4.8
Real Personal					
Income (millions)	38427.5	39143.5	38693.2	39412.0	39988.5
Growth Rate	1.7	1.9	-1.2	1.9	1.5

Kansas personal income growth has about matched U.S. personal income growth since 1988, and is expected to continue to do so in 1992 and 1993. As in the U.S. as a whole, personal income growth in Kansas will be driven by an increase in wages and salaries and held back somewhat by a decline in interest income.

Introduction

A question of interest to economists and non-economists alike is: How serious was the recent recession? One method of answering that question was suggested by James Bullard of the Federal reserve Bank of St. Louis[1]. His method involves comparing the actual rate of output of the economy at the end of a recessionary period with the rate of output that would have obtained if the economy had grown at its long-run trend rate of growth over that period. The results of applying that method to the U.S. economy from 1959 through the 1993 forecast period are illustrated in Figure 1.

Figure 1
GROWTH RATE OF REAL U.S. GDP
Five-Quarter Centered Moving Average



Percent Change at Annual Rates

In Figure 1, the horizontal line represents the long-run average rate of growth of just under 3 percent for the period 1959 through 1991. The jagged line is a plot of the five quarter centered moving average of the growth rate of U.S. Gross Domestic Product for the same period, plus a forecast through the end of 1993. The 5 periods in which the growth rate of GDP is significantly below the long-run average growth rate correspond to the five periods since 1959 that have been classified as recessions by the National Bureau of Economic Research.

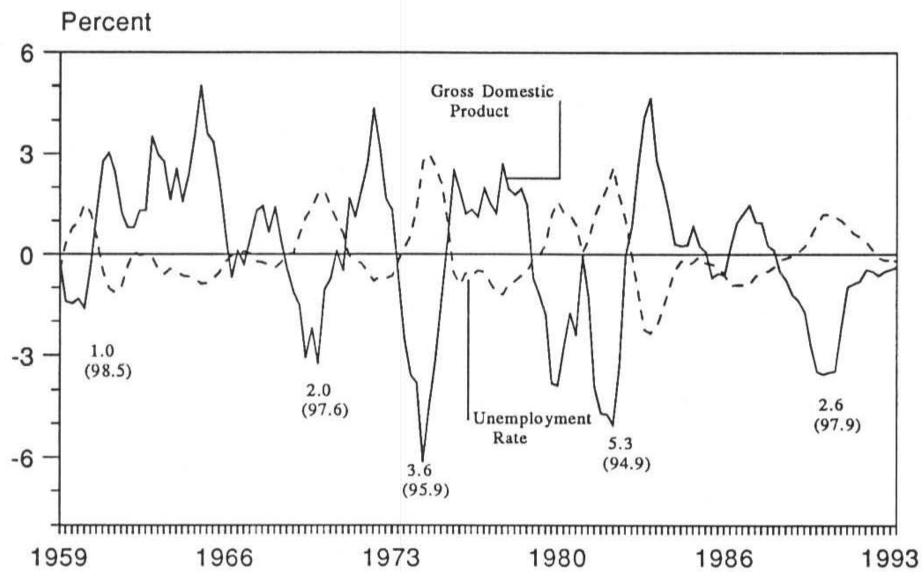
A working definition of a recession used by many economists is that a recession occurs whenever there are two consecutive quarters of declining real output. Starting from that definition, one might be tempted to conclude that the recent recession was minimal, since it consisted of only two quarters of declining real output: the fourth quarter of 1990, when real output fell at a 3.9 percent annual rate, and the first quarter of 1991 when the rate of output declined a further 2.5 percent. However, it is easy to argue that such an analysis takes a too narrow view. A broader view would look not only at the quarters of declining output, but also the periods just before and after the decline. If the economy was growing very slowly for an extended period before actually falling into declining output, and if the recovery period is one of lackluster growth, then the overall effect is obviously much worse than if the recession itself was just an interlude between two boom periods.

Keeping the above approach in mind, we can see that one feature of the current recession and recovery is strikingly illustrated in Figure 1; it is characterized by an extended period of below average output growth. The period during which output has grown at less than the long-run average rate of growth began in the first quarter of 1989, and has continued through the first quarter of 1992, the most recent quarter for which we have data, spanning 13 consecutive quarters. Even worse, although our forecast has output growing modestly, the forecasted rate of growth is less than the long-run average rate of growth through the end of 1993. Thus, if we include the forecast period, the rate of output growth will have been below the long-run average rate of output growth for 20 consecutive quarters. By way of comparison, during each of the 1969-70 and 1973-75 recessions and recoveries, the rate of output growth was below the long-run average rate of output growth for 8 to 10 quarters. Even during the 1979-1982 period that included a very severe recession, the rate of output growth was below the long-run average rate for 16 quarters, four quarters less than are forecasted for the current period.

Of course, the severity of a recession must be measured not only by the length of the period of below average growth, but also by the how far below average output growth was during the period. In order to capture both the length and depth of the slow growth periods, we can easily calculate what the level of output would have been at the end of the period if output had instead grown at the long-run average during the period. We then take the difference between this calculated rate of output and the actual rate of output at the end of the period as a measure of the severity of the recession and its associated recovery. In Figure 1, the number below the dip in GDP corresponding to each recession is the actual level of output at the end of the period expressed as a percentage of the level that output would have reached if it had grown at the long-run average rate of growth during the period. Thus, for example, the number 92.2 beneath the 1973-75 period indicates that the level of output at the end of that period was only 92.2 percent of what it would have been if output had instead grown at the long-run historical trend rate of about 2.9 percent. By this measure, lower numbers indicate more severe recessions, and so of the five recessions since 1959, only the 1979-82 period exceeded the recent downturn in terms of the severity of the effect on output, and only the 1973-75 period equaled the recent downturn. We conclude that this recession was significantly more severe in terms of lost output than it would appear if one focused simply on the 2 quarters of negative output growth.

Having completed this analysis of the severity of the recent recession in terms of the effect on output, it is natural to ask if a similar analysis could be performed to estimate its severity in terms of any other important macroeconomic variables. One important economic measure that we would like to consider is employment. In analyzing the effect of the recession on employment, we are fortunate to have available a longstanding economic relationship known as "Okun's Law"[2]. Okun's Law formalizes an empirical regularity relating changes in the unemployment rate and the growth rate of output. It states that for every 2.5 percentage points above the long-run trend rate that output growth is sustained for one

Figure 2
Illustration of Okun's Law
Five-Quarter Centered Moving Average



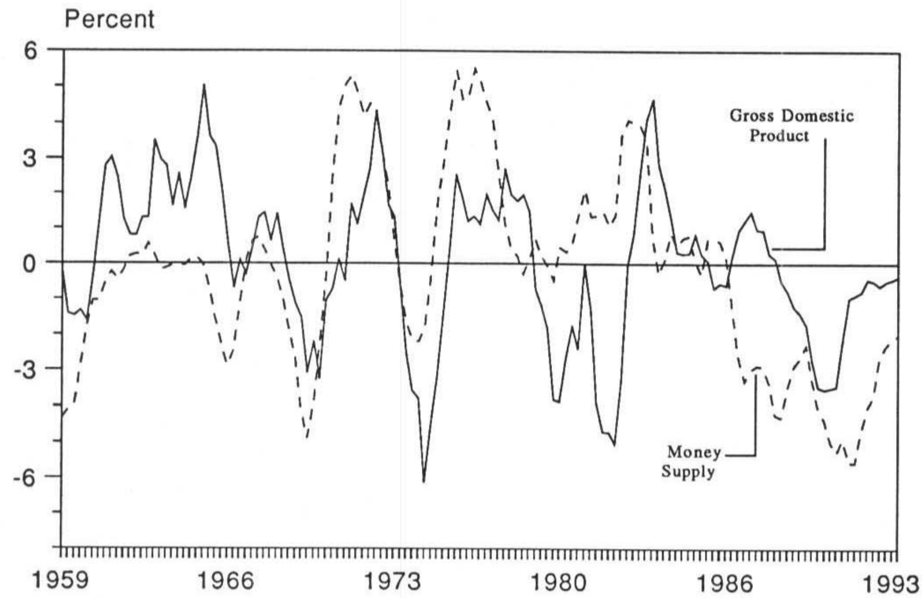
GDP = Percent Change Above Trend - Annual Rate
Unemployment Rate = Change in Annual Unemployment Rate

year, the unemployment rate will decline by 1 percentage point. For example, if real output grows 5.4 percent for 1 year (2.5 percent above the approximate long-run trend rate of 2.9 percent) then the unemployment rate should decline about 1 percentage point during the year. This relationship is illustrated in Figure 2, where the solid line measures the rate of growth of real GDP less the long-run trend rate of growth, and the dashed line measures the change in the unemployment rate. The figure clearly shows the very close relationship between periods of greater (less) than average output growth and a declining (increasing) unemployment rate.

Using the relationship expressed in Okun's Law, we can compare the effects of various recessions on employment in a way that is analogous to the way that we compared their effects on output. We can simply ask how much greater employment would have been at the end of each recessionary period if output had grown at its long-run average during the period. According to Okun's Law, if output grows at its long-run average rate over a period, then the unemployment rate should remain constant over that period. Thus, we can calculate what the level of employment would have been at the end of the period if output had grown at the long-run average rate by applying the unemployment rate at the beginning of the period to the actual[3] level of the civilian labor force at the end of the period. The results of such a calculation are shown by the numbers beneath the recessionary dips in Figure 2. The top number is the number of additional jobs (in millions) that the economy would have had at the end of the period if the economy had grown at its long-run average rate, while the number in parentheses is the actual number of jobs at the end of the period as a percentage of the number of jobs that there would have been if the economy had grown at its long-run average rate. These numbers suggest that the employment effects of the recent recession have been less severe than the output effects. For example, the 2.6 million job loss associated with the recent recession is significantly less than either the 3.6 million job loss associated with the 1973-75 recession or the 5.3 million job loss associated with the 1980-82 recession, and only slightly greater than 2.0 million job loss associated with the recession of the late 1960's. In percentage terms, the contrast with the output effect is even more striking. By the end of 1993, we expect the level of employment to be 97.9 percent of the level that employment would have reached if the economy had grown at trend throughout the period. This compares extremely favorably to the 95.9 percent associated with the 1973-75 recession and the 94.9 percent associated with the 1980-82 recession, and is slightly better than the 97.6 percent associated with the recession of the late 1960's.

A final feature of the recent recession and recovery that is worth noting is the behavior of the money supply over the period. This feature is illustrated in Figure 3. In that figure, the solid line is once again the rate of growth of GDP less the trend rate of growth of GDP, while the dashed line represents the rate of growth of the M2 measure of the money supply less the trend rate of growth of M2. Probably the most striking feature of the graph is the way in which the strong recoveries associated with the

Figure 3
M2 GROWTH LESS TREND
Five-Quarter Centered Moving Average



Percent Change at Annual Rates

recessions and recoveries of the late 1960's, 1973-75, and 1980-82 were accompanied by money supply growth rates well above the long-run trend growth of the money supply. During the recent weak recovery period, however, the money supply continued to grow at a rate well below its long-run trend. Thus, the Fed's well publicized actions to reduce interest rates substantially over the last year or so have had a very modest effect on the money supply.

In summary, there have been three salient features of the recent recession. First, although up to now there have been only two quarters of declining output, the effect of the recession and weak recovery on output has been rather severe compared with other recessions since 1959. Second, the effect on employment appears to have been somewhat more moderate than the effect on output. Third, the money supply has grown much more slowly during the recent weak recovery period than it did during the stronger recovery periods after other recessions since 1959.

The usual wisdom is that although there are many obvious costs to society from a recession, an often unnoticed benefit is that firms are forced to cut waste and become more efficient, and that one of the mechanisms through which the adjustments are made is a temporary increase in unemployment. If that is the case, then the analysis above suggests that, relative to the output effect, firms have adjusted employment levels less than we might have expected from looking at earlier recessions. It is possible that one of the reasons for the brevity of the recession is that firms were not as quick to adjust employment levels as they might have been. This also means, of course, that when the recovery began, it was not necessary firms to hire so intensively. Thus, some of the usual stimulus for a recovery was missing.

The National Outlook

The national forecast presented below is based on the following major assumptions[4]:

1. There will be no changes in fiscal policy over the forecast period. It appears that Congress and the administration will be unable to agree on any fiscal initiatives during this election year, and therefore we expect no significant fiscal changes through the end of 1993. State and local taxes will increase at a slower rate during 1993, and state and local government employment will increase at a faster rate in 1993.

2. Money supply growth will accelerate somewhat from recent slow growth; the M2 measure of the money supply is expected to grow at about a 4 to 5 percent rate through the end of 1992, with that rate increasing to about 6 percent in 1993.

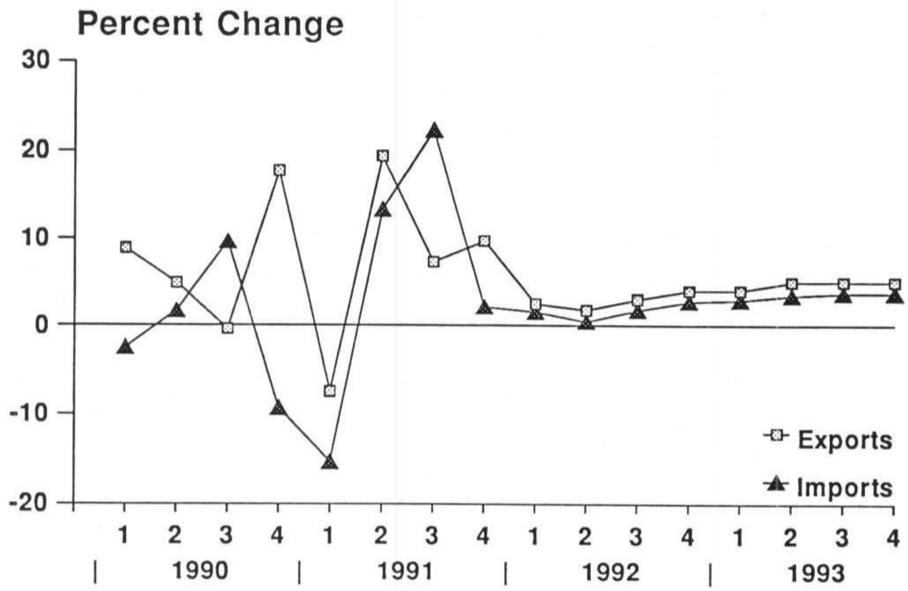
3. World oil prices will be fairly stable during the forecast period; the increased demand that results from economic expansion will be offset by increased supply from the Middle East and, perhaps, Russia.

4. The exchange rate of the dollar[5] will remain constant over the forecast period. The growth rate of real exports will be about 3 percent during the first half of 1992, then increase to 4 percent for the second half of the year and the first quarter of 1993, and increase again to 5 percent over the last three quarters of 1993.

The forecast is for 1992 and 1993 to be a continuation of what appears to be a very modest recovery. Real output grew only 1.0 percent in 1990 and declined 0.7 percent in 1991, so that the level of output in 1991 was a bare quarter of a percent higher in 1991 than it was in 1989. The forecast is for real GDP to grow 2.1 percent in 1992 and 2.3 percent in 1993. For 1992, one of the forces behind the increased growth rate will be a rebound in consumption spending. Spending by consumers adjusted for inflation declined slightly in 1991, but is expected to increase 2.3 percent in 1992. This increase will be lead by a strong rebound in purchases of durable goods. Consumer spending on such goods declined 0.4 percent in 1990 and 6.0 percent in 1991 as consumers postponed major purchases in the face of increased uncertainty about the economy. It is expected that some of this postponed demand will be realized in 1992, and that spending on consumer durables will increase 4.4 percent. In particular, new car sales are expected to increase 14.4 percent for the year, following a 17.7 percent decline in 1991. Real consumer spending on services is expected to increase 2.6 percent in 1992, while consumer spending on non-durable goods will grow only 0.8 percent following a 0.7 percent decline in 1991. In 1993, growth in consumer spending will weaken slightly, as much of the postponed demand for durables will have been satisfied in 1992; consumer spending is expected to increase 1.9 percent in 1993, with spending on consumer durables growing a modest 1.7 percent, while spending will increase 1.0 percent on non-durable goods and 2.5 percent on services.

One of the brighter spots for the economy during the recession and recovery has been the behavior of exports and imports. As Figure 4 illustrates, except for two quarters, real export growth exceeded real import growth throughout 1990 and 1991. As a result, the real balance of trade declined over the period. Declining growth in imports during a recession is the usual case, since a recession is by definition a period of reduced income and spending, and one of the things that people and firms reduce their spending on is goods from abroad. This natural reduction in spending on imports tends to ameliorate some of the negative effects of reduced spending on the domestic economy. As Figure 4 also illustrates, the forecast is for imports and exports to grow slowly, at about the same rate, through the end of 1993. Thus, although exports are not expected to grow fast enough to provide a strong stimulus to the economy, they

Figure 4
Forecasted Growth of U.S. Exports and Imports



1982 Dollars

are expected to grow fast enough relative to import growth to avoid the drain of an increasing trade deficit.

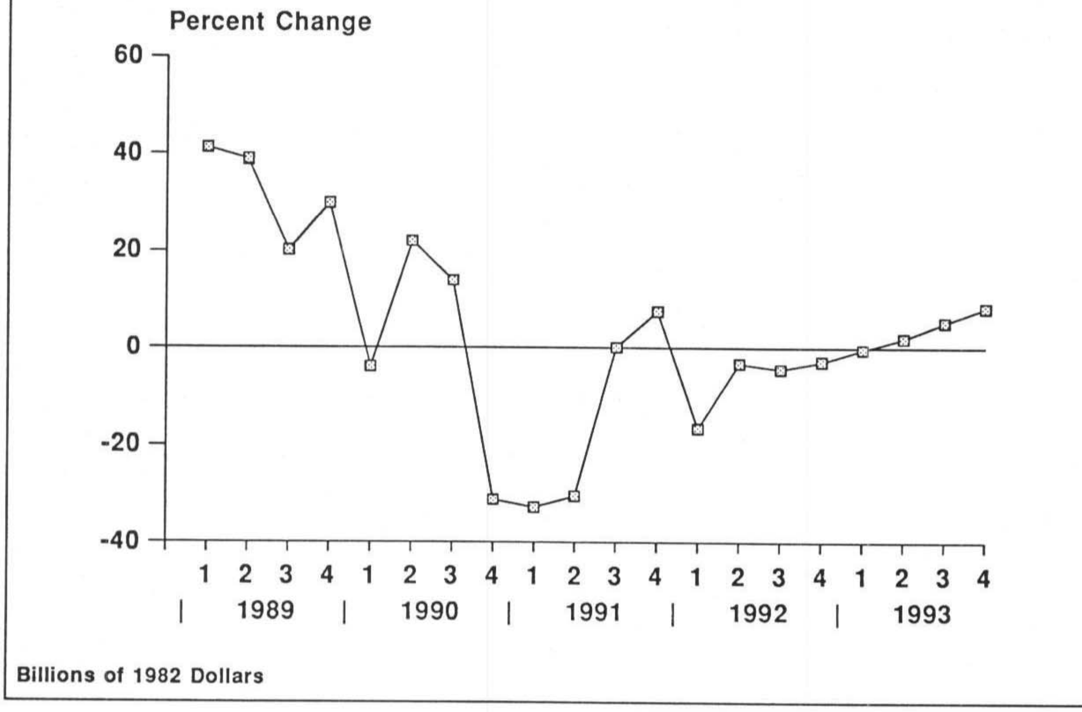
One segment of aggregate demand that is not expected to offer any direct stimulus to the economy over the coming years is government purchases of goods and services. Perhaps surprisingly, Federal government purchases of goods and services, adjusted for inflation, have not increased over the last several years. Small decreases in 1988 and 1989, coupled with small increases in 1990 and 1991, left real federal purchases of goods and services at $384.9 billion in 1991, exactly the same as they were in 1987. On the other hand, the increases in real state and local government spending over the same four years have averaged 2.2 percent. Thus, on average, all of the increases in real aggregate demand through government spending over the past four years have come through increases in state and local government spending.

In 1992 and 1993, this relationship between Federal and state and local purchases is expected to continue, but neither is expected to grow as fast as in the previous four years. Large declines in Federal defense purchases (-6.6 percent in 1992 and -5.7 percent in 1993) will cause total Federal purchases of goods and services to decline 4.1 percent in 1992 and 2.9 percent in 1993. On the other hand, state and local government purchases are expected to increase only about 1.2 percent per year. Thus, total real government purchases of goods and services will decline slightly in both 1992 and 1993, providing no direct stimulus to the recovery.

On the receipts side of the fiscal picture, however, there should be some indirect stimulus to the recovery. Although unadjusted for inflation, Federal purchases of goods and services are expected to decline, other Federal outlays, especially transfer payments and grants to state and local governments will grow significantly. In addition, nominal federal personal taxes are expected to decline slightly, partially offsetting increases in corporate profits taxes and indirect business taxes. Thus, the government's budget deficit will increase substantially, from $201.6 billion in 1991 to $300.1 billion in 1993. Although this increased deficit is probably bad news for the economy in the long run, reducing current investment and long-run productivity, it should induce added spending in the short-run and add some impetus to the recovery.

Figure 5 illustrates an extremely important aspect of the recent history of the economy, as well as of the forecast for the near future. A substantial part of the reduction in output in the last quarter of 1990 and the first quarter of 1991 was caused by the large reduction in inventories by firms. In each of those quarters firms reduced their inventories by more than $30 billion at annual rates. Since output in those quarters declined by $48 billion and $31 billion, nearly all of the reduction in output can be attributed to firms cutting back their inventories. Although inventory cutting by firms during a recession is not unusual behavior, these numbers illustrate the central role that inventory decisions by firms play in an economic downturn.

Figure 5
Changes in Business Inventories

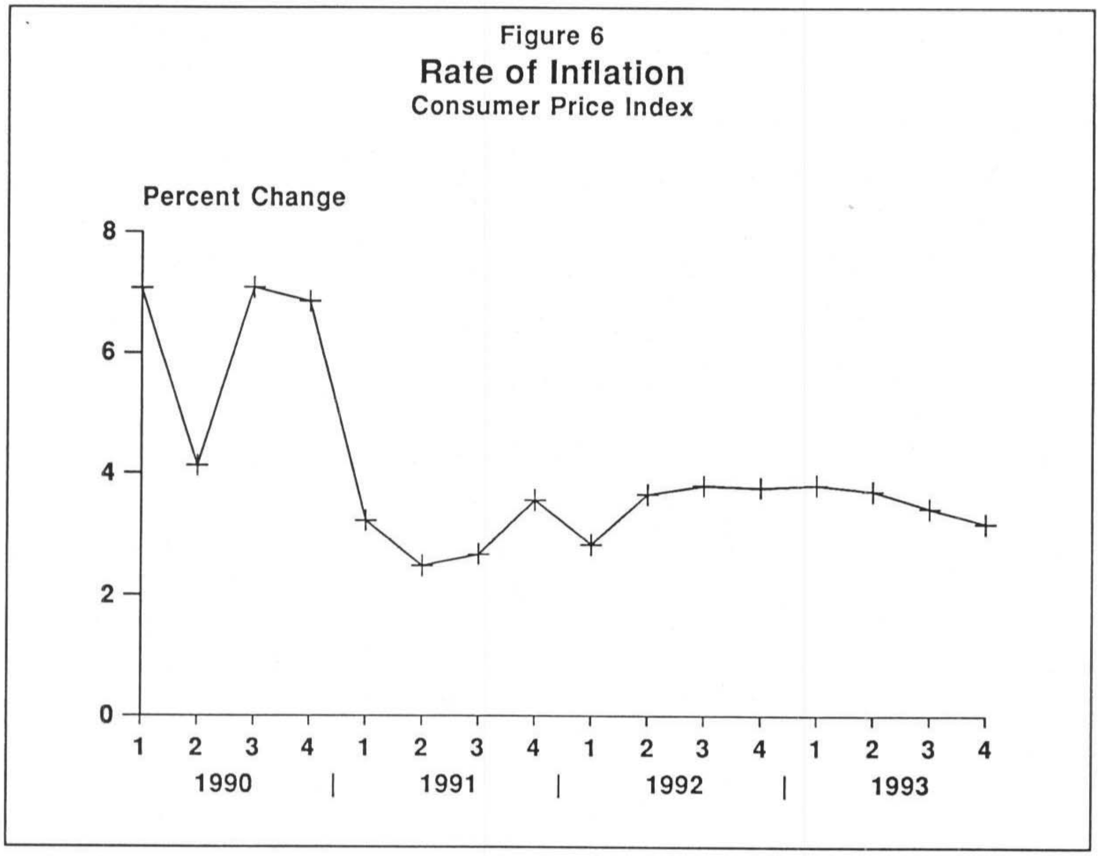


Firm behavior related to inventories is equally important from the point of view of the recovery; during the four quarters beginning in the second quarter of 1991 and ending with the first quarter of 1992, firms added to inventories only in the second quarter of 1991, and then at the relatively low rate of $7.6 billion. Even more significantly, inventories fell by over $30 billion during the second quarter of 1991 and fell again by $16.6 billion in the first quarter of this year. Thus, during the first four quarters of what has been viewed as a recovery, business inventories have declined at an average annual rate of $9.6 billion. Obviously, firms have not rushed to replenish their inventory stocks in the expectation of rapid increases in demand, and in the usual macroeconomic fashion these expectations have been in part self-fulfilling.

Our forecast for changes in business inventories through the end of 1993 is for increases in business inventories to play almost no role in the recovery of the economy during the period. As Figure 5 illustrates, we expect business inventories to decline slightly through the end of 1992, and then to increase slightly in 1993; at this point it does not seem likely that the recovery will be lifted by a big boost in business inventories generated by confidence about the short-term future.

Another aspect of firm behavior that directly affects aggregate demand is fixed investment in structures and equipment. Beginning with the last quarter of 1990 real spending on new plant and equipment declined for 5 consecutive quarters, so that by the end of 1991 the level of such spending was nearly 10 percent less than it was just before the recession began. The forecast is for real spending on new plant and equipment to grow at about a 5 percent annual rate during the second half of 1992 and throughout 1993. Although this provides a more encouraging picture of firms' expectations about the future of the economy than the forecast for changes in business inventories, it is important to note that this forecast for investment spending predicts that the level of such spending in 1993 will still be slightly below the level of such spending in 1989. Thus the forecast is for very cautious behavior on the part of firms through the end of 1993.

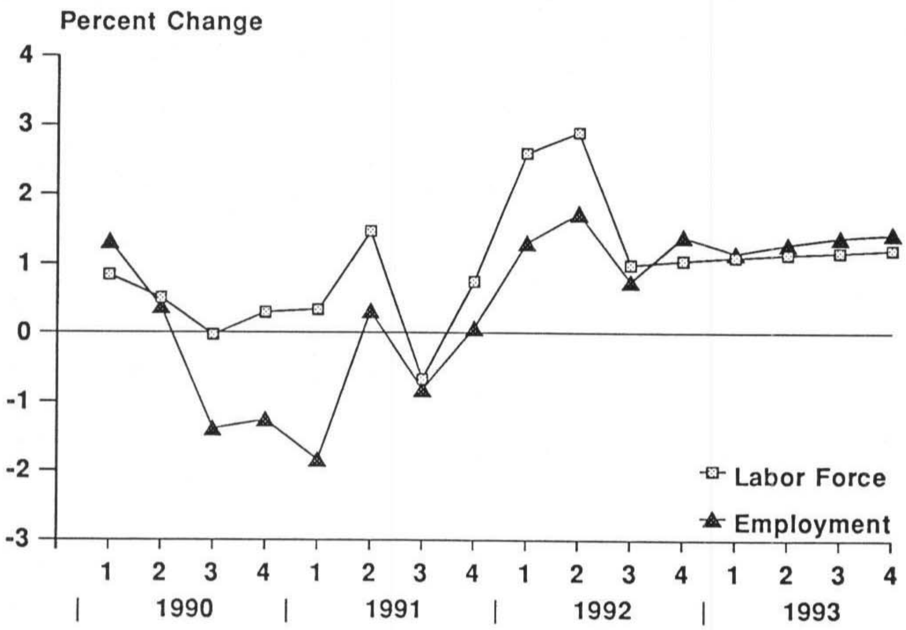
As one would expect, associated with a forecast of slow growth in real output and slow growth of the money supply, is a forecast of only moderate price increases. Figure 6 illustrates the recent history and the forecast for the rate of inflation as measured by the change in the Consumer Price Index for Urban consumers. As the figure shows, inflationary pressures dissipated fairly quickly with the onset of the recession. The rate of inflation, which was 5.4 percent for all of 1990 is expected to be 3.3 percent in 1992 and 3.7 percent in 1993. Food price increases are expected to be especially moderate, with an expected increase of 1.8 percent in 1992 and 2.4 percent in 1993, as are increases in transportation costs at 1.8 percent and 3.2 percent respectively. Housing costs are expected to go up at a faster than average rate, 3.4 percent in 1992 and 4.0 percent in 1993, while the largest price increases will be in the costs of



medical care at 7.4 percent and 5.9 percent for 1992 and 1993, respectively. Even these above average increases in the costs of medical care, however, are well below the increases that were recorded in 1990 (9.1 percent) and 1991 (8.7 percent). In fact, the 5.9 percent increase in medical care cost forecasted for 1993 would be a smaller increase than any in the period form 1983 to 1991.

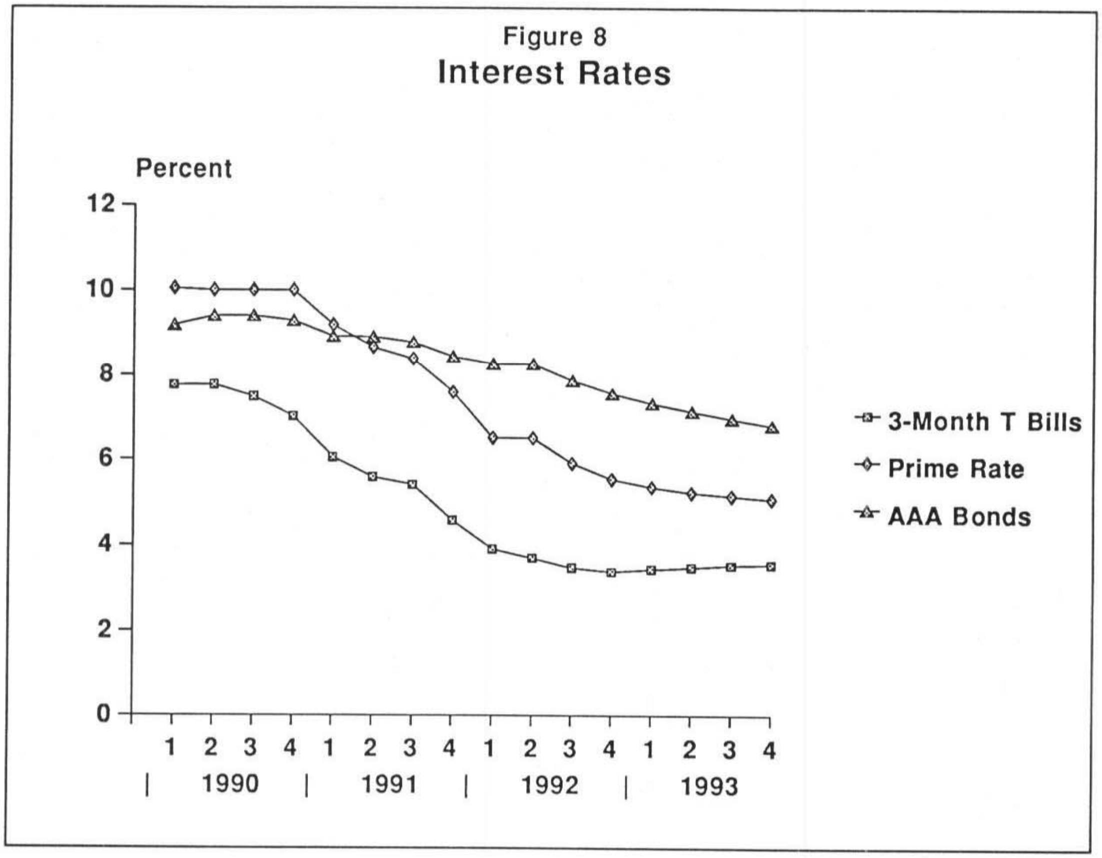
Figure 7 recalls the discussion of Okun's law in the introduction. From the third quarter of 1990 through the first quarter of 1991, the rate of growth of the labor force exceeded the rate of growth of employment, and the unemployment rate increased throughout the period. This is another illustration of the fact that although output declined in only two quarters during that time, the economy was sluggish for a much longer period. As the graph illustrated, this trend is expected to continue until the end of 1992, with the unemployment rate reaching 7.6 percent in the third quarter. Perhaps an even more important

Figure 7
Growth of U.S. Employment
and Labor Force



feature of the forecast, however, is that even in 1993, economic growth will only be strong enough for the rate of growth of employment to barely exceed the rate of growth of the labor force. With these forecasted growth rates, there would be a hardly perceptible decline in the unemployment rate to 7.3 percent by the end of that year.

Several interesting features of the forecast are illustrated in Figure 8. First, short-term rates are expected to remain nearly level over the forecast period, perhaps increasing just slightly in 1993. This reflects two aspects of the forecast: that it is expected that the Fed has already done most of what it is going to do encourage the recovery, and that the Fed will not see any reason to worry about inflation over the forecast period. Second, long-run rates, as represented by the Moody's AAA bond rate, are expected to decline somewhat. This suggests that we will see a lessening of long-run inflationary pressures. In fact



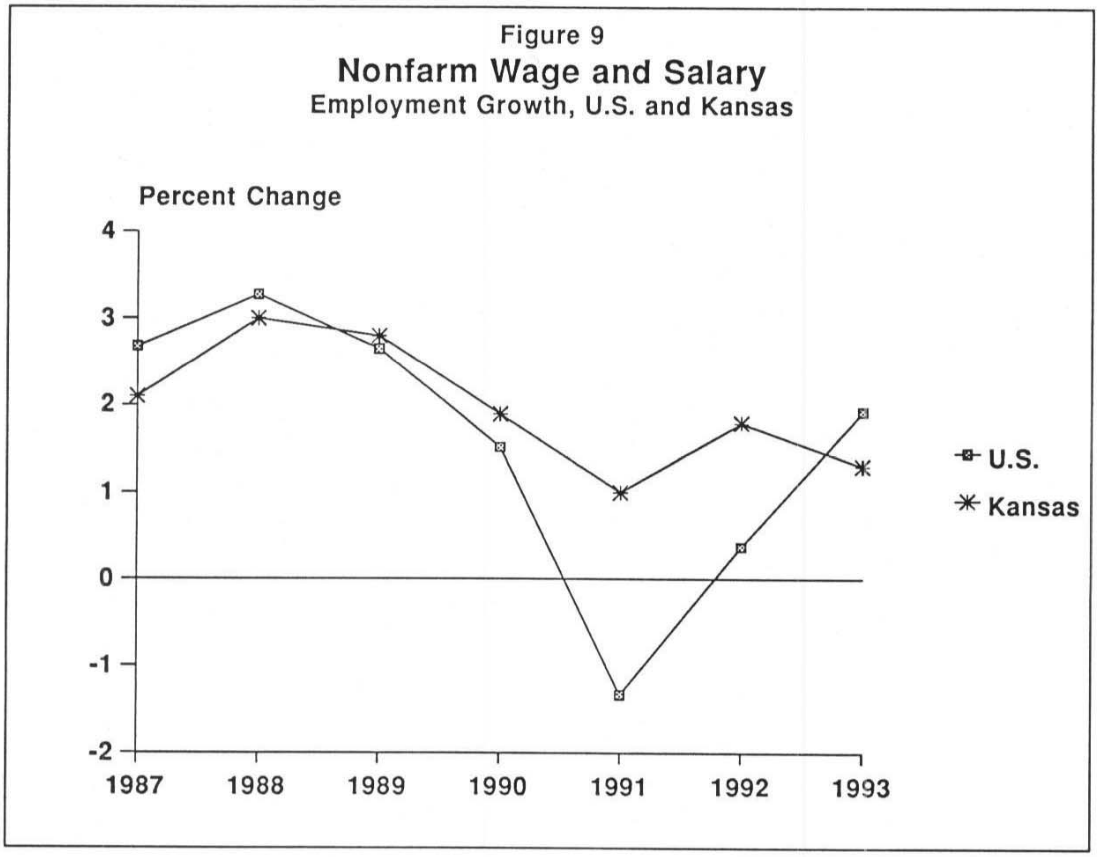
the differential between the three month Treasury Bill rate and Moody's AAA bond rate is expected to decline from 4.4 percentage points in the first quarter of 1991 to 3.2 percentage points by the end of 1992.

As was noted in the introduction, the Fed's attempts at expansionary monetary policy through lowering the short-term interest rates have not been reflected in a corresponding growth in the money supply. Other things being equal, when the Fed reduces interest rates the money supply will expand accordingly. However, this result depends upon several factors, including individuals keeping the same ratio of deposits to cash, and banks keeping the same ratio of reserves to deposits. It appears that since the recession, the cash to deposit ration has risen, possibly because individuals have been reducing their credit card debt, where interest rates are relatively very high. In addition, it appears that banks have been more cautious about making loans in recent quarters, thus increasing their excess reserves. As a result, the money supply has grown much more slowly than one would have expected given the somewhat dramatic fall in short-term interest rates. Thus, one could reasonably argue that the Fed's monetary policy since the recession has been much less expansionary than it appears from looking only at the decline in interest rates, and that this rather modest expansionary policy by the Fed has been one reason for the slowness of the recovery.

Another sign of the weakness of the recovery is personal income growth. In 1991 in the U.S. personal income grew only 3.3 percent and after tax income adjusted for inflation actually declined slightly. A meager 2.5 percent increase in wage and salary disbursements, coupled with a 0.4 percent decline in interest income and negative rental income accounted for most of the slow growth in personal income. For 1992, personal income is expected to grow at a slightly more respectable 4.4 percent rate, as wage and salary growth increases to 3.7 percent. Interest income, however, is expected to fall a further 5.2 percent, as a result of lower interest rates. After tax income adjusted for inflation will grow 1.9 percent in 1992, giving a boost to consumer spending. Personal income is expected to grow 5.0 percent in 1993, as wages and salaries grow 5.2 percent in a strengthening economy; income growth will be held back somewhat by a third straight year of dealing interest income (-2.2 percent) as interest rates remain low.

The Kansas Economy

The performance of the Kansas economy during the rest of 1992 and 1993 is expected to be somewhat stronger than the performance of the U.S. economy. Thus, for example, as Figure 9 illustrates, nonfarm wage and salary employment[6] is expected to grow 1.8 percent in Kansas in 1992, compared with only 0.4 percent growth for this category of employment for all of the U.S. For 1993, such employment is expected to grow 1.3 percent in Kansas and 1.9 percent nationally, as job growth finally begins to take hold nationally. As the figure also shows, Kansas job growth in Kansas matched that of the U.S, in 1988 through 1990, and even managed a significant 1.0 percent increase in 1991, while the number of nonfarm



wage and salary jobs in the nation as a whole was declining 1.3 percent. Given Kansas' superior performance during the recession, the Kansas forecast of job growth that at least matches the U.S. over the next two years should be interpreted as a prediction that the Kansas economy will continue to be somewhat stronger than the U.S. economy over the near future.

As Figure 10 illustrates, the interpretation becomes somewhat less clear if we look at a comparison of personal income growth in Kansas and the U.S. Kansas personal income growth has essentially matched U.S. personal income growth since 1988, even including the recession year of 1991, and is expected to continue to match U.S. personal income growth in 1992 and 1993. However, since Kansas personal income growth seriously lagged U.S. personal income growth in the early 1980's, even

Table 3
Kansas Employment Growth Breakdown

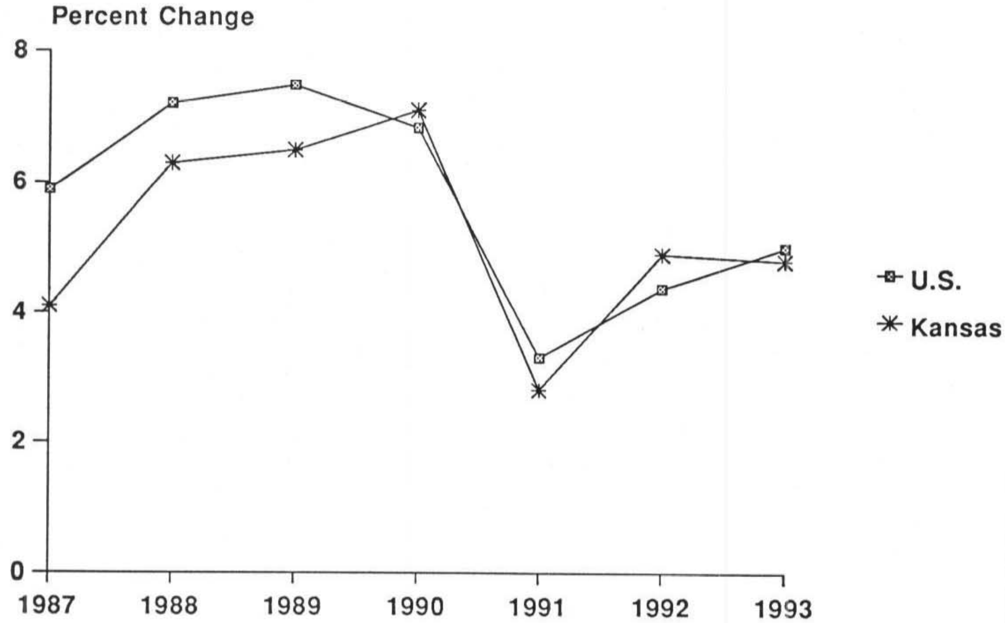
	1991	1992	1993
Mining	-1.3	-2.1	0.4
Construction	0.4	10.3	1.0
Durable Goods Manufacturing	-1.4	-1.6	-0.1
Nondurable Goods Manufacturing	-0.0	1.4	1.1
Transportation and Utilities	-2.3	-0.5	0.8
Wholesale Trade	0.1	0.3	0.1
Retail Trade	0.8	1.3	1.9
Finance, Insurance and Real Estate	0.4	-0.3	-0.8
Services	2.8	4.0	5.0
State and Local Government	2.8	2.1	-1.6
Federal Government	-1.8	1.4	-1.0
Farm	-0.2	-4.6	-0.7

a forecast of matching U.S. performance means that the state's economy appears to have made a significant turn around from those earlier years.

A breakdown of the Kansas employment forecast is shown in Table 3. Employment in the mining industries, mostly oil and gas extraction, is expected to decline slightly in 1992, as it did in 1991, and to hold steady in 1993, as oil prices remain fairly stable over the period. Construction employment is expected to follow its modest 0.4 percent increase of 1991 with a 10.3 percent increase in 1992. However, because of large decreases in construction employment 1988 and 1989, the expected 1992 growth starts from a relatively small base, and therefore even a 10.3 percent increase will put 1992 construction employment at about the same level that it was in 1987.

One area of employment that is not expected to fare especially well over the next two years is employment in durable goods producing industries. Employment in these industries is expected decline

Figure 10
Personal Income Growth
U.S. and Kansas



1.6 percent in 1992 and remain essentially flat in 1993, due to poor performances in the fabricated metals (8.5 percent decline) and machinery (including electrical) areas (4.3 percent decline) as well as an essentially flat performance in the important transportation equipment sector. Employment in nondurable goods producing industries is expected to perform somewhat better than in the durable goods area, growing 1.4 percent in 1992 and 1.2 percent in 1993. Growth in this area will be helped by moderate growth in the printing and publishing subsector (2.4 percent 1992 and 1.5 percent in 1993), while employment in the chemicals and allied products subsector is expected to decline 4.6 percent in both years.

Transportation and utilities employment is expected to decrease 0.5 percent in 1992, with almost all of this decrease due to a 4.0 percent decrease in railroad employment, which has been decreasing steadily in recent years. The 1993 increase in transportation and public utilities employment will occur in spite of a further 5.5 percent decrease in railroad employment, and is aided by a predicted 1.5 percent increase in employment in trucking and warehousing. The 1.3 and 1.9 percent increases in retail trade employment reflect in part the forecast of renewed strength of the state economy. The slight downturn forecasted for employment in finance, insurance, and real estate is due to a forecast of 3.2 and 3.4 percent declines in banking employment in 1992 and 1993 respectively, reflecting continuing restructuring and tightening within the industry. The 4 to 5 percent increases forecasted for employment in the service industry reflect the forecast of continued economic recovery as well as the strong growth trend in this area over the past decade; even during the 1991 recession year, employment in services grew 2.8 percent in Kansas. The declines in Federal government employment are a result of the forecast of decreased Federal government spending, while the modest growth in state and local government employment in 1992 is expected to be partly offset in 1993 by a slight decline in employment in this area.

Table 4
Kansas Personal Income Growth Breakdown

	1991	1992	1993
Personal Income - Nominal	2.8	4.9	4.8
Wages and Salaries	4.0	4.7	4.8
Nonfarm Proprietors' Income	4.9	7.3	3.7
Farm Proprietors' Income	-34.8	13.4	12.4
Dividends Interest and Rent	-0.6	-2.7	0.3
Personal Contributions for Social Insurance	7.7	5.4	6.2
Transfer Payments	9.8	12.1	8.9
Other Labor Income	8.2	5.5	4.9

Table 4 shows the breakdown in the personal income forecast for Kansas. Wages and salaries are expected to grow somewhat faster in 1992 and 1993 than they did in 1991. Dividend interest and rent income is expected to decline in 1992 and hold steady in 1993; this is mostly due to the decline in interest income that results from the recent drop in interest rates and the forecast of more or less stable rates throughout the remainder of 1992 and 1993. Farm proprietor's income is expected to grow more than 10 percent in both 1992 and 1993, recovering much of the ground lost with the 35 percent drop in 1991, but will still not have returned to its 1990 level by 1993.

Conclusion

The recent recession was much more severe than the two quarters of declining output would suggest. The effect of the recession and slow recovery on output was as more severe than in all but one of the recessions since 1959. Surprisingly, the effect on employment was not as severe as the effect on output, leading to a possibly less severe recession, but also a more modest recovery. In addition, a monetary policy that turned out to be less expansionary than the Fed intended, has also contributed to the slowness of the recovery. The U.S. economy will continue to grow through 1992 and 1993, but at rates that are usually associated more with periods of lackluster performance than with recovery from a recession.

The Kansas economy outperformed the national economy during the recent recession, and will at least equal U.S. economic performance over the next two years. Thus, Kansas should remain in an improved position relative to the national economy.

Notes

1. Bullard, James B., "How Weak is the Current Economy?", *National Economic Trends*, The Federal Reserve Bank of St. Louis, March, 1992.

2. Arthur M. Okun, "Potential GNP: Its Measurement and Significance," reprinted in Okun's *The Political Economy of Prosperity* (Washington, D.C.: Brookings Institution, 1970) pp. 132-145.

3. This assumes that the recession had no effect on the size of the labor force. This is a rather strong assumption. It is easy to imagine that a recession could cause a reduction in the size of the labor force, for example by causing students to decide to stay in school longer if their employment prospects look less bright. This would mean that our calculation would underestimate the employment effects of a recession.

4. 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.

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

6. 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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APPENDIX

NATIONAL TABLES Page

GNP as Expenditure -- 1982 Dollars.......... A1

GNP as Expenditure -- Current Dollars.......... A3

Relation of GNP, NNP, National Income & Personal Income.......... A5

Disposition of Personal Income -- Current Dollars.......... A7

National Income -- Current Dollars.......... A9

Price Deflators.......... A11

Employment.......... A12

Financial and Government Budget Deficit.......... A13

KANSAS TABLES

Employment.......... A14

Hours and Wages.......... A19

Wage Bills.......... A20

Personal Income.......... A22

GNP AS EXPENDITURE - 1982 DOLLARS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Gross Domestic Product	4900.9	4940.4	4963.0	4991.0	5017.6	5048.5	5080.8	5112.2	4948.9	5064.7
Percent Change From Last Qtr (AR)	2.7	3.3	1.8	2.3	2.1	2.5	2.6	2.5	2.1	2.3
US: Personal Consumption Expend.	3311.3	3325.6	3339.9	3355.3	3368.6	3385.7	3404.8	3425.2	3333.0	3396.1
Percent Change From Last Qtr (AR)	5.0	1.7	1.7	1.9	1.6	2.0	2.3	2.4	2.3	1.9
US: Per. Con. Exp.-Durables	427.7	430.0	431.6	433.5	434.8	436.8	439.1	441.6	430.7	438.1
Percent Change From Last Qtr (AR)	15.9	2.2	1.5	1.7	1.2	1.8	2.1	2.3	4.4	1.7
US: PCE-Nondurables	1049.2	1050.5	1052.2	1054.5	1056.1	1059.3	1063.3	1067.7	1051.6	1061.6
Percent Change From Last Qtr (AR)	5.3	0.5	0.7	0.9	0.6	1.2	1.5	1.7	0.8	0.9
US: PCE-Services	1834.4	1845.1	1856.0	1867.4	1877.7	1889.6	1902.4	1915.9	1850.7	1896.4
Percent Change From Last Qtr (AR)	2.5	2.4	2.4	2.5	2.2	2.6	2.7	2.9	2.6	2.5
US: Fixed Nonresidential Invest.	509.5	511.1	516.5	523.9	531.1	538.3	544.6	549.4	515.2	540.8
Percent Change From Last Qtr (AR)	3.1	1.3	4.2	5.9	5.6	5.5	4.8	3.5	0.6	5.0
US: Producers Durable Equipment	363.3	368.0	374.3	381.1	387.1	392.2	396.7	400.2	371.7	394.1
Percent Change From Last Qtr (AR)	3.6	5.3	6.9	7.5	6.5	5.4	4.6	3.6	3.7	6.0
US: Investment in Structures	146.3	143.1	142.2	142.8	144.0	146.0	147.9	149.2	143.6	146.8
Percent Change From Last Qtr (AR)	2.5	-8.5	-2.5	1.6	3.3	5.9	5.4	3.3	-6.8	2.2
US: Residential Investment	186.8	193.3	197.5	201.4	205.7	209.2	212.5	215.4	194.7	210.7
Percent Change From Last Qtr (AR)	11.7	14.7	8.9	8.2	8.8	7.1	6.4	5.6	11.1	8.2

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.

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Change in Bus. Inventories	-16.6	-3.3	-4.5	-2.9	-0.4	2.0	5.3	8.3	-6.8	3.8
US: Change in Farm Inventories	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
US: Change in Nonfarm Inv.	-16.3	-3.3	-4.5	-2.9	-0.4	2.0	5.3	8.3	-6.8	3.8
US: Net Exports	-20.1	-18.3	-16.6	-15.0	-13.6	-11.5	-9.8	-8.1	-17.5	-10.8
Percent Change From Last Qtr (AR)	-20.7	-31.6	-31.6	-33.4	-32.8	-48.1	-47.8	-54.3	-16.0	-38.6
US: Total Exports	561.4	563.9	568.1	573.6	579.3	586.3	593.5	600.7	566.7	590.0
Percent Change From Last Qtr (AR)	2.5	1.8	3.0	4.0	4.0	5.0	5.0	5.0	5.4	4.1
US: Total Imports	581.5	582.1	584.7	588.7	592.9	597.9	603.3	608.8	584.2	600.7
Percent Change From Last Qtr (AR)	1.5	0.4	1.8	2.7	2.9	3.4	3.7	3.7	4.6	2.8
US: Total Government Purchases	930.0	931.9	930.4	928.3	926.3	924.8	923.3	922.0	930.2	924.1
Percent Change From Last Qtr (AR)	2.9	0.8	-0.7	-0.9	-0.9	-0.6	-0.6	-0.6	-0.7	-0.7
US: Fed. Govt. Purchases	371.7	371.2	369.2	366.3	363.3	360.3	357.4	353.9	369.6	358.7
Percent Change From Last Qtr (AR)	1.1	-0.5	-2.1	-3.2	-3.2	-3.2	-3.3	-3.8	-4.0	-2.9
US: Fed. Defense Purchases	266.4	265.0	262.0	258.0	254.0	250.0	246.0	242.0	262.8	248.0
Percent Change From Last Qtr (AR)	-3.4	-2.1	-4.5	-6.0	-6.1	-6.2	-6.2	-6.3	-6.6	-5.6
US: Fed. Nondefense Purchases	105.3	106.2	107.2	108.3	109.3	110.3	111.4	111.9	106.8	110.7
Percent Change From Last Qtr (AR)	13.6	3.5	3.9	3.9	3.9	3.8	3.8	1.9	3.1	3.7
US: State and Local Govt. Purch.	558.3	560.7	561.2	562.1	563.0	564.5	566.0	568.1	560.6	565.4
Percent Change From Last Qtr (AR)	4.1	1.7	0.3	0.6	0.6	1.1	1.1	1.5	1.5	0.9

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.

Institute for Public Policy and Business Research, University of Kansas 1992-1993 US Forecast 08JUL92 A3

GNP AS EXPENDITURE - CURRENT DOLLARS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Gross Domestic Product	5820.6	5905.2	5971.5	6044.4	6117.8	6195.6	6270.7	6340.9	5935.4	6231.3
Percent Change From Last Qtr (AR)	5.8	5.9	4.6	5.0	4.9	5.2	4.9	4.6	4.6	5.0
US: Personal Consumption Expend.	4020.6	4068.3	4119.8	4173.3	4225.2	4281.2	4336.8	4391.6	4095.5	4308.7
Percent Change From Last Qtr (AR)	8.0	4.8	5.2	5.3	5.1	5.4	5.3	5.1	5.3	5.2
US: Per. Con. Exp.-Durables	465.7	470.6	474.2	478.0	481.4	485.4	489.5	493.6	472.1	487.5
Percent Change From Last Qtr (AR)	17.5	4.2	3.1	3.3	2.9	3.4	3.4	3.4	6.0	3.3
US: PCE-Nondurables	1272.7	1282.2	1291.3	1301.0	1310.3	1321.3	1332.2	1342.7	1286.8	1326.6
Percent Change From Last Qtr (AR)	7.1	3.0	2.9	3.0	2.9	3.4	3.3	3.2	2.8	3.1
US: PCE-Services	2282.1	2315.6	2354.3	2394.3	2433.5	2474.5	2515.1	2555.2	2336.6	2494.6
Percent Change From Last Qtr (AR)	6.7	6.0	6.9	7.0	6.7	6.9	6.7	6.5	6.6	6.8
US: Fixed Nonresidential Invest.	541.7	542.0	546.8	553.9	561.0	568.1	573.8	577.4	546.1	570.1
Percent Change From Last Qtr (AR)	2.0	0.2	3.5	5.3	5.2	5.2	4.1	2.5	-0.7	4.4
US: Producers Durable Equipment	375.9	379.8	385.4	391.7	397.3	401.8	405.3	407.7	383.2	403.0
Percent Change From Last Qtr (AR)	2.3	4.3	6.0	6.7	5.8	4.7	3.5	2.3	2.0	5.2
US: Investment in Structures	165.8	162.2	161.3	162.1	163.7	166.3	168.5	169.7	162.9	167.0
Percent Change From Last Qtr (AR)	1.5	-8.4	-2.1	2.0	3.9	6.4	5.4	3.0	-6.7	2.6
US: Residential Investment	208.5	217.1	223.3	229.2	235.7	241.3	246.5	251.0	219.5	243.6
Percent Change From Last Qtr (AR)	11.3	17.6	11.8	11.0	11.8	9.9	8.8	7.5	12.5	11.0

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.

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Change in Bus. Inventories	-21.8	-3.3	-4.7	-2.8	0.4	3.5	7.7	11.6	-8.2	5.8
US: Change in Farm Inventories	-2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	0.0
US: Change in Nonfarm Inv.	-18.9	-3.3	-4.7	-2.8	0.4	3.5	7.7	11.6	-7.4	5.8
US: Net Exports	-24.2	-20.6	-18.0	-15.4	-12.7	-9.4	-7.0	-5.2	-19.6	-8.6
Percent Change From Last Qtr (AR)	-64.7	-47.1	-41.6	-46.3	-54.2	-70.6	-68.9	-70.4	-36.2	-56.3
US: Total Exports	617.7	624.2	632.8	643.0	653.7	666.0	677.8	689.2	629.4	671.7
Percent Change From Last Qtr (AR)	3.4	4.3	5.6	6.6	6.8	7.7	7.3	6.9	6.4	6.7
US: Total Imports	641.9	644.9	650.8	658.5	666.4	675.3	684.8	694.4	649.0	680.2
Percent Change From Last Qtr (AR)	-1.2	1.9	3.7	4.8	4.9	5.5	5.7	5.7	4.4	4.8
US: Total Government Purchases	1095.9	1101.6	1104.4	1106.3	1108.4	1111.0	1113.0	1114.5	1102.1	1111.7
Percent Change From Last Qtr (AR)	6.2	2.1	1.0	0.7	0.8	0.9	0.7	0.6	1.3	0.9
US: Fed. Govt. Purchases	440.6	442.3	443.3	442.9	442.7	442.3	441.5	439.7	442.3	441.5
Percent Change From Last Qtr (AR)	8.2	1.5	1.0	-0.4	-0.2	-0.3	-0.7	-1.7	-0.6	-0.2
US: Fed. Defense Purchases	313.7	313.3	311.8	309.0	306.2	303.3	300.1	296.5	311.9	301.5
Percent Change From Last Qtr (AR)	3.5	-0.6	-1.8	-3.6	-3.5	-3.7	-4.2	-4.6	-3.6	-3.3
US: Fed. Nondefense Purchases	127.0	129.0	131.5	133.9	136.5	139.0	141.4	143.1	130.4	140.0
Percent Change From Last Qtr (AR)	21.4	6.4	8.0	7.6	7.8	7.6	7.2	4.9	7.2	7.4
US: State and Local Govt. Purch.	655.3	659.4	661.1	663.4	665.7	668.6	671.5	674.8	659.8	670.2
Percent Change From Last Qtr (AR)	4.9	2.5	1.1	1.4	1.4	1.8	1.7	2.0	2.7	1.6

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	5820.6	5905.2	5971.5	6044.4	6117.8	6195.6	6270.7	6340.9	5935.4	6231.3
Percent Change From Last Qtr (AR)	5.8	5.9	4.6	5.0	4.9	5.2	4.9	4.6	4.6	5.0
US: Cap. Cons. Allow. with Adj.	625.2	628.7	632.4	636.4	640.8	645.5	649.8	654.0	630.7	647.5
Percent Change From Last Qtr (AR)	-4.7	2.3	2.4	2.5	2.8	2.9	2.8	2.6	1.2	2.7
US: Cap. Cons. Allow w/o Adj.	586.8	590.9	595.1	599.6	604.5	609.7	614.5	619.2	593.1	612.0
Percent Change From Last Qtr (AR)	6.4	2.8	2.9	3.0	3.4	3.4	3.3	3.1	5.5	3.2
US: Cap. Cons. Adjustment, Total	-38.4	-37.8	-37.3	-36.8	-36.3	-35.8	-35.3	-34.8	-37.6	-35.5
Percent Change From Last Qtr (AR)	-76.1	-6.1	-5.2	-5.3	-5.3	-5.4	-5.5	-5.5	-38.0	-5.4
US: Net National Product	5215.4	5296.8	5360.7	5431.0	5501.3	5575.8	5647.9	5715.2	5326.0	5610.0
Percent Change From Last Qtr (AR)	7.8	6.4	4.9	5.3	5.3	5.5	5.3	4.9	5.2	5.3
US: Indirect Business Taxes	487.9	495.1	502.2	509.5	515.3	520.8	526.3	531.7	498.7	523.5
Percent Change From Last Qtr (AR)	4.7	6.0	5.8	6.0	4.6	4.3	4.3	4.2	5.9	5.0
US: Business Transfer Payments	33.7	33.8	34.2	34.6	34.8	35.1	35.5	35.8	34.1	35.3
Percent Change From Last Qtr (AR)	11.4	1.4	4.4	4.5	3.3	3.6	3.7	3.8	9.1	3.7
US: Statistical Discrepency	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
US: Sub. less Cur. Sur.-Gov. E.	3.0	5.5	6.4	8.3	8.8	9.3	9.7	9.8	5.8	9.4
Percent Change From Last Qtr (AR)	-85.9	1029.7	83.3	182.9	26.4	24.7	18.3	4.2	866.7	62.1
US: National Income	4662.6	4739.2	4796.5	4861.0	4925.7	4995.0	5061.6	5123.3	4764.8	5026.4
Percent Change From Last Qtr (AR)	6.6	6.7	4.9	5.5	5.4	5.7	5.4	5.0	4.9	5.5

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.

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Corp. Prof. w. IVA + CCADJ	355.4	404.0	408.2	417.5	436.0	459.3	480.2	497.3	396.3	468.2
Percent Change From Last Qtr (AR)	60.8	66.9	4.3	9.4	19.0	23.1	19.5	15.0	29.1	18.2
US: Net Interest	453.1	446.0	440.5	435.5	430.8	426.2	421.7	417.4	443.8	424.0
Percent Change From Last Qtr (AR)	-11.0	-6.1	-4.9	-4.4	-4.3	-4.2	-4.1	-4.1	-7.6	-4.5
US: Cont. to Soc. Ins.-Total	540.8	545.0	552.3	559.7	570.0	576.4	583.0	589.6	549.4	579.8
Percent Change From Last Qtr (AR)	7.2	3.1	5.5	5.5	7.5	4.6	4.6	4.6	4.2	5.5
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	798.6	819.9	837.3	855.0	874.3	893.9	913.0	931.8	827.7	903.2
Percent Change From Last Qtr (AR)	23.5	11.1	8.8	8.7	9.3	9.3	8.8	8.5	12.9	9.1
US: Personal Interest Income	688.8	682.7	677.9	674.2	670.9	667.7	664.5	661.5	680.9	666.1
Percent Change From Last Qtr (AR)	-9.2	-3.5	-2.7	-2.2	-1.9	-1.9	-1.9	-1.8	-5.2	-2.2
US: Personal Dividend Income	129.4	132.0	134.6	137.3	140.2	143.2	146.5	149.8	133.3	144.9
Percent Change From Last Qtr (AR)	0.0	8.2	8.2	8.3	8.6	9.1	9.3	9.5	3.7	8.7
US: Personal Income	4958.9	5007.6	5074.5	5144.3	5204.1	5268.1	5331.2	5393.0	5046.3	5299.1
Percent Change From Last Qtr (AR)	5.3	4.0	5.5	5.6	4.7	5.0	4.9	4.7	4.4	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	4958.9	5007.6	5074.5	5144.3	5204.1	5268.1	5331.2	5393.0	5046.3	5299.1
Percent Change From Last Qtr (AR)	5.3	4.0	5.5	5.6	4.7	5.0	4.9	4.7	4.4	5.0
US: Wage and Salary Disburse.	2863.0	2886.4	2929.8	2973.3	3008.4	3044.6	3081.5	3118.7	2913.2	3063.3
Percent Change From Last Qtr (AR)	3.4	3.3	6.1	6.1	4.8	4.9	4.9	4.9	3.7	5.2
US: Other Labor Income	301.1	303.4	307.8	312.2	315.8	319.4	323.2	326.9	306.2	321.3
Percent Change From Last Qtr (AR)	5.6	3.1	5.9	5.9	4.6	4.7	4.7	4.7	5.3	5.0
US: Total Proprietors Inc.	403.6	413.5	418.5	424.8	429.8	435.1	440.3	444.7	415.1	437.5
Percent Change From Last Qtr (AR)	12.4	10.2	4.9	6.2	4.8	5.1	4.8	4.1	9.3	5.4
US: Farm Proprietors Inc.	36.4	39.4	41.0	43.4	44.5	45.5	46.5	47.1	40.0	45.9
Percent Change From Last Qtr (AR)	3.4	36.7	17.4	26.4	10.0	9.4	8.6	5.5	14.0	14.6
US: Nonfarm Proprietors Inc.	367.2	374.1	377.5	381.4	385.3	389.6	393.8	397.7	375.0	391.6
Percent Change From Last Qtr (AR)	13.3	7.8	3.7	4.2	4.2	4.6	4.4	4.0	8.9	4.4
US: Rental Income of Persons	-9.3	-12.0	-10.0	-8.0	-6.0	-4.0	-3.0	-3.0	-9.8	-4.0
Percent Change From Last Qtr (AR)	-74.6	177.2	-51.8	-59.0	-68.4	-80.2	-68.4	0.0	-22.8	-59.3
US: Personal Interest Income	688.8	682.7	677.9	674.2	670.9	667.7	664.5	661.5	680.9	666.1
Percent Change From Last Qtr (AR)	-9.2	-3.5	-2.7	-2.2	-1.9	-1.9	-1.9	-1.8	-5.2	-2.2
US: Personal Dividend Income	129.4	132.0	134.6	137.3	140.2	143.2	146.5	149.8	133.3	144.9
Percent Change From Last Qtr (AR)	0.0	8.2	8.2	8.3	8.6	9.1	9.3	9.5	3.7	8.7
US: Total Transfer Payments	827.4	848.8	866.6	884.7	904.2	924.1	943.6	962.7	856.9	933.7
Percent Change From Last Qtr (AR)	23.2	10.8	8.6	8.6	9.1	9.1	8.7	8.4	12.8	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.

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Tot. Pers. Tax + Nontax Pay	611.1	610.5	625.7	641.5	666.5	679.4	688.0	696.5	622.2	682.6
Percent Change From Last Qtr (AR)	-4.6	-0.4	10.3	10.5	16.5	8.0	5.2	5.0	1.0	9.7
US: Disposable Personal Income	4347.8	4397.1	4448.8	4502.8	4537.6	4588.6	4643.1	4696.5	4424.1	4616.5
Percent Change From Last Qtr (AR)	6.8	4.6	4.8	4.9	3.1	4.6	4.8	4.7	4.9	4.3
US: Personal Consumption Expend.	4020.6	4068.3	4119.8	4173.3	4225.2	4281.2	4336.8	4391.6	4095.5	4308.7
Percent Change From Last Qtr (AR)	8.0	4.8	5.2	5.3	5.1	5.4	5.3	5.1	5.3	5.2
US: Int. Paid by Cons. to Bus.	106.7	106.0	105.2	104.6	104.1	103.4	102.6	101.9	105.6	103.0
Percent Change From Last Qtr (AR)	1.5	-2.8	-2.6	-2.3	-2.2	-2.6	-3.0	-2.9	-1.1	-2.5
US: Pers. Trans. Pay. to For.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Percent Change From Last Qtr (AR)	70.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0
US: Personal Saving	216.5	218.8	219.8	220.8	204.4	200.1	199.7	199.1	219.0	200.8
Percent Change From Last Qtr (AR)	-11.8	4.3	1.8	1.9	-26.6	-8.2	-0.7	-1.2	-0.2	-8.3
US: Disposable Personal Income	3580.9	3594.3	3606.5	3620.1	3617.6	3628.7	3645.2	3663.0	3600.5	3638.6
Percent Change From Last Qtr (AR)	3.8	1.5	1.4	1.5	-0.3	1.2	1.8	2.0	1.9	1.1
US: YSAV as a Percent of YPD	5.0	5.0	4.9	4.9	4.5	4.4	4.3	4.2	5.0	4.4

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.

NATIONAL INCOME - CURRENT DOLLARS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: National Income	4662.6	4739.2	4796.5	4861.0	4925.7	4995.0	5061.6	5123.3	4764.8	5026.4
Percent Change From Last Qtr (AR)	6.6	6.7	4.9	5.5	5.4	5.7	5.4	5.0	4.9	5.5
US: Wages and Salaries	2863.0	2886.4	2929.8	2973.3	3008.4	3044.6	3081.5	3118.7	2913.2	3063.3
Percent Change From Last Qtr (AR)	3.4	3.3	6.1	6.1	4.8	4.9	4.9	4.9	3.7	5.2
US: W. and S.-Govt. + Govt. Ent.	552.4	557.3	561.7	566.3	570.7	575.8	580.8	586.6	559.4	578.5
Percent Change From Last Qtr (AR)	6.2	3.6	3.2	3.3	3.1	3.6	3.6	4.0	3.5	3.4
US: W. and S.-Other	2310.6	2329.2	2368.1	2407.0	2437.6	2468.8	2500.6	2532.2	2353.7	2484.8
Percent Change From Last Qtr (AR)	2.7	3.3	6.9	6.7	5.2	5.2	5.3	5.1	3.8	5.6
US: Supplements to w. and s.	596.8	601.3	609.5	617.8	626.7	633.8	640.9	648.2	606.4	637.4
Percent Change From Last Qtr (AR)	6.0	3.0	5.6	5.6	5.9	4.6	4.6	4.6	4.5	5.1
US: Emp. Cont. to Soc. Ins.	295.7	297.9	301.7	305.6	310.9	314.3	317.8	321.2	300.2	316.1
Percent Change From Last Qtr (AR)	6.5	3.0	5.2	5.2	7.2	4.4	4.4	4.4	3.7	5.3
US: Other Labor Income	301.1	303.4	307.8	312.2	315.8	319.4	323.2	326.9	306.2	321.3
Percent Change From Last Qtr (AR)	5.6	3.1	5.9	5.9	4.6	4.7	4.7	4.7	5.3	5.0
US: Total Proprietors Inc.	403.6	413.5	418.5	424.8	429.8	435.1	440.3	444.7	415.1	437.5
Percent Change From Last Qtr (AR)	12.4	10.2	4.9	6.2	4.8	5.1	4.8	4.1	9.3	5.4
US: Farm Proprietors Inc.	36.4	39.4	41.0	43.4	44.5	45.5	46.5	47.1	40.0	45.9
Percent Change From Last Qtr (AR)	3.4	36.7	17.4	26.4	10.0	9.4	8.6	5.5	14.0	14.6
US: Nonfarm Proprietors Inc.	367.2	374.1	377.5	381.4	385.3	389.6	393.8	397.7	375.0	391.6
Percent Change From Last Qtr (AR)	13.3	7.8	3.7	4.2	4.2	4.6	4.4	4.0	8.9	4.4

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	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: Rental Income of Persons	-9.3	-12.0	-10.0	-8.0	-6.0	-4.0	-3.0	-3.0	-9.8	-4.0
Percent Change From Last Qtr (AR)	-74.6	177.2	-51.8	-59.0	-68.4	-80.2	-68.4	0.0	-22.8	-59.3
US: Corp. Prof. w. IVA + CCADJ	355.4	404.0	408.2	417.5	436.0	459.3	480.2	497.3	396.3	468.2
Percent Change From Last Qtr (AR)	60.8	66.9	4.3	9.4	19.0	23.1	19.5	15.0	29.1	18.2
US: Net Interest	453.1	446.0	440.5	435.5	430.8	426.2	421.7	417.4	443.8	424.0
Percent Change From Last Qtr (AR)	-11.0	-6.1	-4.9	-4.4	-4.3	-4.2	-4.1	-4.1	-7.6	-4.5
US: Corp. Prof. before Taxe	348.8	397.7	404.7	415.1	435.0	458.5	478.5	494.8	391.5	466.7
Percent Change From Last Qtr (AR)	48.3	68.9	7.2	10.7	20.6	23.5	18.6	14.3	25.3	19.2
US: Profits Tax Liability	137.6	152.0	153.7	156.4	162.0	168.7	174.3	178.8	149.9	171.0
Percent Change From Last Qtr (AR)	40.4	49.0	4.5	7.3	15.1	17.6	14.1	10.7	20.4	14.0
US: Corp. Prof. after Taxes	211.2	245.6	251.0	258.7	273.0	289.8	304.2	315.9	241.6	295.7
Percent Change From Last Qtr (AR)	53.6	83.0	9.0	12.8	24.0	27.1	21.4	16.4	28.6	22.4
US: Dividends-Total	138.6	141.2	143.8	146.5	149.4	152.4	155.7	159.0	142.5	154.1
Percent Change From Last Qtr (AR)	0.3	7.6	7.6	7.7	8.1	8.5	8.8	8.9	3.4	8.2
US: Undistribured Corp. Prof.	72.6	104.5	107.2	112.2	123.6	137.4	148.5	156.9	99.1	141.6
Percent Change From Last Qtr (AR)	304.3	329.0	10.8	19.9	47.5	52.6	36.6	24.5	97.5	42.9
US: Inventory Valuation Adj.	-4.0	-4.7	-7.8	-9.2	-10.9	-11.5	-10.9	-10.4	-6.4	-10.9
Percent Change From Last Qtr (AR)	106522.2	90.9	640.4	101.4	93.1	24.4	-18.1	-17.5	-305.6	70.3
US: Corp. Cap. Cons. Adj.	10.6	11.0	11.3	11.6	12.0	12.3	12.6	12.9	11.1	12.4
Percent Change From Last Qtr (AR)	441928.3	15.6	12.2	11.8	11.5	11.2	10.9	10.6	-228.0	11.7
US: Net Interest	453.1	446.0	440.5	435.5	430.8	426.2	421.7	417.4	443.8	424.0
Percent Change From Last Qtr (AR)	-11.0	-6.1	-4.9	-4.4	-4.3	-4.2	-4.1	-4.1	-7.6	-4.5

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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	1.5	1.5	1.5	1.4	1.5
Percent Change From Last Qtr (AR)	2.8	3.7	3.8	3.8	3.8	3.7	3.4	3.2	3.3	3.7
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)	2.9	2.6	2.7	2.6	2.7	2.6	2.3	2.0	2.5	2.6
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)	2.9	3.0	3.4	3.4	3.4	3.3	3.0	2.7	3.0	3.3
US: Implicit Deflator - IOIL	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Percent Change From Last Qtr (AR)	-49.4	6.6	1.0	1.0	1.0	1.0	1.0	1.0	-15.1	1.3

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
US: Civilian Labor Force	126.3	127.2	127.5	127.9	128.2	128.6	128.9	129.3	127.2	128.8
Percent Change From Last Qtr (AR)	2.6	2.9	1.0	1.1	1.1	1.1	1.2	1.2	1.5	1.2
US: Civilian Employment	117.2	117.7	117.9	118.3	118.6	119.0	119.4	119.9	117.8	119.2
Percent Change From Last Qtr (AR)	1.3	1.7	0.7	1.4	1.2	1.3	1.4	1.4	0.8	1.3
US: Unemployment	9.1	9.5	9.6	9.6	9.6	9.5	9.5	9.5	9.5	9.5
Percent Change From Last Qtr (AR)	21.1	18.8	3.9	-3.1	0.3	-0.7	-1.4	-1.7	12.1	0.6
US: Unemployment Rate-Total	7.2	7.5	7.6	7.5	7.5	7.4	7.4	7.3	7.4	7.4
US: Tot. Nonfarm Empl.	108.1	108.3	108.9	109.5	110.0	110.5	111.1	111.6	108.7	110.8
Percent Change From Last Qtr (AR)	-0.2	0.6	2.2	2.2	1.9	1.9	2.0	2.0	0.4	1.9
US: Total Govt. Empl.	18.5	18.6	18.6	18.6	18.6	18.7	18.8	18.8	18.6	18.7
Percent Change From Last Qtr (AR)	1.0	1.9	0.5	0.6	0.7	1.1	1.1	1.6	1.0	0.9
US: Fed. Govt. Empl.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Percent Change From Last Qtr (AR)	0.3	-0.5	0.0	-1.3	-0.7	-0.7	-0.7	-0.7	0.4	-0.7
US: S & L Govt. Empl.	15.5	15.6	15.6	15.6	15.7	15.7	15.8	15.9	15.6	15.8
Percent Change From Last Qtr (AR)	1.2	2.3	0.6	1.0	1.0	1.5	1.5	2.0	1.1	1.2
US: Output Per Namhour-Pr. Nonag.	22.7	22.9	22.8	22.7	22.8	22.8	22.8	22.9	22.8	22.8
Percent Change From Last Qtr (AR)	2.5	3.7	-1.3	-0.8	0.5	0.7	0.7	0.6	1.4	0.3

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.

FINANCIAL AND GOVERNMENT BUDGET DEFECIT

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
US: M1 Money Supply	926.8	940.2	952.1	963.9	973.3	982.8	992.0	1001.1	945.7	987.3
Percent Change From Last Qtr (AR)	17.5	5.9	5.2	5.0	4.0	3.9	3.8	3.7	9.9	4.4
US: M2 Money Supply	3465.8	3470.0	3508.4	3551.5	3599.3	3652.1	3705.7	3760.1	3498.9	3679.3
Percent Change From Last Qtr (AR)	4.4	0.5	4.5	5.0	5.5	6.0	6.0	6.0	2.8	5.2
US: 3-Month T-Bill Rate	3.9	3.7	3.5	3.4	3.4	3.5	3.5	3.6	3.6	3.5
Percent Change From Last Qtr (AR)	-47.0	-19.8	-23.1	-9.2	6.4	5.7	4.8	3.2	-33.2	-3.2
US: Prime Rate Charged By Banks	6.5	6.5	5.9	5.5	5.4	5.2	5.1	5.1	6.1	5.2
Percent Change From Last Qtr (AR)	-46.4	0.0	-31.6	-22.9	-12.6	-9.0	-6.4	-4.9	-27.8	-14.9
US: Moodys AAA Corp. Bond Rate	8.3	8.3	7.9	7.6	7.3	7.1	7.0	6.8	8.0	7.1
Percent Change From Last Qtr (AR)	-7.7	0.1	-17.9	-15.1	-11.4	-10.4	-9.5	-8.8	-8.7	-11.7
US: Federal Govt. Surplus	-284.4	-303.2	-309.2	-303.4	-284.8	-281.2	-282.5	-282.1	-300.1	-282.6
Percent Change From Last Qtr (AR)	87.3	29.2	8.2	-7.3	-22.3	-4.9	1.8	-0.6	48.8	-5.8

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	1306.9	1333.1	1332.9	1323.2	1320.8	1348.1	1348.0	1338.3	1324.1	1338.8
Percent Change From One Year Ago	1.8	2.7	2.3	2.1	1.1	1.1	1.1	1.1	2.2	1.1
KS EMP: Employed	1254.1	1282.5	1280.7	1269.4	1262.2	1293.7	1294.6	1282.5	1271.7	1283.3
Percent Change From One Year Ago	2.9	3.3	2.6	2.1	0.6	0.9	1.1	1.0	2.7	0.9
KS EMP: Unemployed	52.9	50.7	52.2	53.8	58.6	54.4	53.4	55.8	52.4	55.5
Percent Change From One Year Ago	-18.6	-10.9	-3.5	3.4	10.9	7.4	2.2	3.7	-8.1	6.0
KS EMP: Unemployment Rate	4.0	3.8	3.9	4.1	4.4	4.0	4.0	4.2	4.0	4.2
Percent Change From One Year Ago	-20.4	-13.0	-5.2	0.9	10.0	6.2	1.0	2.6	-10.1	4.9
KS EMP: Adj. for Res. & Self Emp.	106.1	104.8	111.2	94.4	104.0	101.8	108.2	91.4	104.1	101.4
Percent Change From One Year Ago	10.3	27.4	18.7	18.1	-1.9	-2.8	-2.7	-3.2	18.3	-2.7
KS EMP: Farm	46.8	54.7	61.0	47.1	43.9	57.1	61.2	45.9	52.4	52.0
Percent Change From One Year Ago	-6.1	-6.3	-0.6	-6.3	-6.3	4.4	0.3	-2.6	-4.6	-0.7
KS EMP: Total Non-farm Wage & Salary	1101.2	1122.9	1108.5	1127.9	1114.3	1134.7	1125.3	1145.2	1115.1	1129.9
Percent Change From One Year Ago	2.7	2.0	1.4	1.3	1.2	1.1	1.5	1.5	1.8	1.3
KS EMP: Mining	9.3	9.5	9.9	9.7	9.4	9.6	9.9	9.7	9.6	9.7
Percent Change From One Year Ago	-6.7	-3.2	0.7	1.0	0.7	0.9	0.1	-0.0	-2.1	0.4

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: Oil & Gas Extraction	8.0	8.1	8.4	8.3	8.2	8.2	8.4	8.4	8.2	8.3
Percent Change From One Year Ago	-8.0	-3.4	1.3	1.3	2.1	0.9	0.4	0.1	-2.3	0.8
KS EMP: Mining Residual	1.3	1.4	1.5	1.4	1.2	1.4	1.4	1.4	1.4	1.4
Percent Change From One Year Ago	2.6	-2.1	-2.3	-1.0	-7.6	0.6	-1.4	-0.9	-0.8	-2.2
KS EMP: Construction	41.5	46.7	48.9	46.5	40.8	47.6	49.8	47.2	45.9	46.4
Percent Change From One Year Ago	16.7	9.9	9.2	6.7	-1.6	1.9	1.9	1.5	10.3	1.0
KS EMP: Non-durable Goods	77.1	77.8	78.0	77.5	77.6	78.8	78.9	78.3	77.6	78.4
Percent Change From One Year Ago	1.5	1.1	1.7	1.4	0.6	1.3	1.2	1.1	1.4	1.1
KS EMP: Food & Kindred	27.4	27.5	28.1	28.2	27.8	28.4	29.0	29.0	27.8	28.6
Percent Change From One Year Ago	1.9	-0.3	1.7	1.8	1.6	3.4	3.3	3.2	1.3	2.9
KS EMP: Apparel	3.3	3.5	3.4	3.3	3.2	3.2	3.1	3.1	3.4	3.1
Percent Change From One Year Ago	2.0	2.8	-1.4	-1.2	-5.5	-9.7	-8.3	-7.2	0.5	-7.7
KS EMP: Printing & Publishing	21.3	21.6	21.1	21.0	21.8	22.0	21.4	21.2	21.3	21.6
Percent Change From One Year Ago	1.9	2.4	2.4	3.0	2.2	1.8	1.2	0.8	2.4	1.5
KS EMP: Chemicals & Allied Prod.	7.4	7.2	7.2	7.0	6.9	6.9	6.9	6.7	7.2	6.9
Percent Change From One Year Ago	-3.1	-4.4	-4.6	-6.5	-6.3	-4.1	-4.0	-3.9	-4.6	-4.6
KS EMP: Petroleum & Coal	12.0	12.2	12.2	11.9	11.8	12.0	12.1	11.8	12.1	11.9
Percent Change From One Year Ago	2.3	2.2	2.1	0.0	-1.9	-1.1	-1.2	-1.2	1.7	-1.4
KS EMP: Non-durables Residual	5.7	5.8	6.0	6.0	6.1	6.3	6.4	6.5	5.9	6.3
Percent Change From One Year Ago	3.0	7.3	9.2	8.6	8.1	8.0	7.7	7.5	7.0	7.8

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	106.1	105.6	105.2	106.2	105.5	105.8	105.3	106.0	105.7	105.6
Percent Change From One Year Ago	-0.7	-1.7	-2.5	-1.5	-0.6	0.2	0.1	-0.1	-1.6	-0.1
KS EMP: Stone Glass Clay	5.8	6.2	6.3	6.1	5.8	6.1	6.1	6.0	6.1	6.0
Percent Change From One Year Ago	-3.3	0.2	0.6	1.1	-0.1	-3.0	-2.8	-2.6	-0.4	-2.2
KS EMP: Primary Metals	2.8	2.8	2.8	2.8	2.8	2.7	2.6	2.5	2.8	2.6
Percent Change From One Year Ago	0.0	-0.8	2.8	3.7	-1.7	-4.7	-7.8	-9.8	1.4	-6.0
KS EMP: Fabricated Metals	9.8	9.7	9.6	9.4	9.1	9.1	9.1	8.9	9.6	9.1
Percent Change From One Year Ago	-7.2	-8.0	-9.3	-9.4	-7.1	-6.0	-5.8	-5.6	-8.5	-6.1
KS EMP: Machinery, Incl. Electrical	28.0	28.0	27.5	27.2	26.9	26.2	25.6	25.1	27.7	26.0
Percent Change From One Year Ago	-4.6	-2.9	-4.9	-4.9	-3.9	-6.3	-7.0	-7.5	-4.3	-6.2
KS EMP: Transportation Equipment	49.3	48.4	48.3	50.0	50.4	50.8	50.9	52.7	49.0	51.2
Percent Change From One Year Ago	2.4	-0.8	-1.4	0.8	2.3	5.0	5.5	5.3	0.2	4.5
KS EMP: Durables Residual	10.3	10.4	10.7	10.6	10.4	10.9	11.0	10.8	10.5	10.8
Percent Change From One Year Ago	4.7	2.7	2.8	2.0	1.3	4.3	3.2	2.2	3.0	2.8
KS EMP: Transportation & Utilities	64.3	64.6	64.9	65.1	64.1	65.3	65.6	65.9	64.7	65.2
Percent Change From One Year Ago	-0.3	-0.5	-0.7	-0.6	-0.2	1.1	1.1	1.2	-0.5	0.8
KS EMP: Railroads	6.7	6.8	6.8	6.7	6.4	6.4	6.4	6.3	6.7	6.4
Percent Change From One Year Ago	-2.9	-4.4	-4.2	-4.5	-4.5	-5.8	-5.8	-5.8	-4.0	-5.5
KS EMP: Trucking & Warehousing	21.2	21.7	22.1	21.9	21.2	22.1	22.5	22.4	21.7	22.1
Percent Change From One Year Ago	-1.1	-0.0	0.8	0.7	0.3	1.8	1.9	2.0	0.1	1.5

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	12.5	12.3	12.4	12.2	12.2	12.4	12.5	12.3	12.3	12.4
Percent Change From One Year Ago	-1.1	-3.0	-2.2	-3.0	-1.9	0.9	0.9	0.9	-2.3	0.2
KS EMP: Trans. & Utilities Residual	23.9	23.8	23.6	24.3	24.3	24.4	24.2	24.9	23.9	24.5
Percent Change From One Year Ago	1.6	1.5	-0.2	0.6	1.5	2.6	2.5	2.5	0.9	2.3
KS EMP: Wholesale Trade	69.5	70.6	70.8	69.7	69.4	70.8	71.0	69.9	70.2	70.3
Percent Change From One Year Ago	2.3	-0.1	-0.3	-0.7	-0.2	0.2	0.2	0.2	0.3	0.1
KS EMP: Retail Trade	196.9	200.6	202.2	205.9	200.4	204.7	206.2	209.8	201.4	205.3
Percent Change From One Year Ago	2.3	0.9	0.8	1.2	1.7	2.0	2.0	1.9	1.3	1.9
KS EMP: Gen. Merchandise Stores	26.4	26.4	26.9	29.0	27.1	26.9	27.1	29.0	27.2	27.5
Percent Change From One Year Ago	-0.3	-0.2	1.5	4.7	2.5	2.0	0.7	-0.0	1.5	1.3
KS EMP: Food Stores	31.0	30.9	31.1	31.7	31.4	31.6	31.9	32.4	31.2	31.8
Percent Change From One Year Ago	4.6	-0.7	-0.1	1.0	1.0	2.4	2.4	2.3	1.2	2.0
KS EMP: Auto. Dealers & Gas Stations	23.1	23.1	23.3	23.2	22.9	23.5	23.7	23.5	23.2	23.4
Percent Change From One Year Ago	0.9	-0.4	-0.6	-0.6	-0.7	1.7	1.7	1.6	-0.2	1.1
KS EMP: Apparel & Accessory Stores	10.1	10.0	10.1	10.7	10.1	10.0	10.1	10.7	10.2	10.2
Percent Change From One Year Ago	-3.8	-1.9	-2.8	-1.2	0.2	-0.1	0.2	0.2	-2.4	0.1
KS EMP: Retail Trade Residual	106.3	110.2	110.7	111.4	108.9	112.6	113.4	114.1	109.6	112.3
Percent Change From One Year Ago	3.3	2.1	1.5	1.0	2.4	2.2	2.4	2.5	2.0	2.4
KS EMP: Finance, Insurance, R.E.	58.0	58.4	58.6	57.7	57.2	58.0	58.2	57.3	58.2	57.7
Percent Change From One Year Ago	0.2	-0.7	-0.1	-0.5	-1.3	-0.6	-0.7	-0.7	-0.3	-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.

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS EMP: Banking	23.4	23.3	23.3	22.8	22.6	22.5	22.5	22.0	23.2	22.4
Percent Change From One Year Ago	-3.7	-3.3	-2.9	-2.9	-3.3	-3.3	-3.4	-3.5	-3.2	-3.4
KS EMP: Insurance	13.1	13.1	13.2	13.2	13.2	13.3	13.4	13.4	13.2	13.3
Percent Change From One Year Ago	4.8	1.1	1.1	1.3	0.5	1.4	1.4	1.4	2.0	1.2
KS EMP: F.I.R.E. Residual	21.5	21.9	22.1	21.7	21.5	22.1	22.3	21.9	21.8	22.0
Percent Change From One Year Ago	2.1	1.0	2.4	1.1	-0.1	1.0	1.0	0.9	1.6	0.7
KS EMP: Services	253.0	257.8	260.2	262.3	263.3	271.3	274.1	276.2	258.3	271.2
Percent Change From One Year Ago	4.7	4.0	3.5	3.8	4.1	5.2	5.3	5.3	4.0	5.0
KS EMP: Hotels & Lodging	9.1	9.7	10.1	9.9	9.4	10.1	10.5	10.2	9.7	10.0
Percent Change From One Year Ago	0.4	-0.4	3.1	2.7	3.7	4.4	3.9	3.6	1.4	3.9
KS EMP: Personal Services	11.1	11.1	11.0	11.2	11.8	11.6	11.4	11.5	11.1	11.6
Percent Change From One Year Ago	-5.1	-1.8	-0.1	1.6	6.6	4.5	3.8	3.2	-1.4	4.5
KS EMP: Services Residual	232.8	237.0	239.1	241.3	242.1	249.5	252.2	254.4	237.6	249.6
Percent Change From One Year Ago	5.4	4.5	3.7	3.9	4.0	5.3	5.5	5.4	4.4	5.1
KS EMP: Federal Gov.	29.1	29.4	29.4	29.1	28.8	29.3	29.1	28.6	29.2	28.9
Percent Change From One Year Ago	3.2	1.4	0.6	0.4	-0.9	-0.4	-1.1	-1.7	1.4	-1.0
KS EMP: State & Local Gov.	196.4	202.1	180.4	198.0	197.8	193.7	177.1	196.2	194.3	191.2
Percent Change From One Year Ago	2.6	4.0	1.1	0.7	0.7	-4.2	-1.9	-0.9	2.1	-1.6

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

HOURS AND WAGES

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS HRS/WK: Food & Kindred Products	43.7	42.8	42.8	41.5	41.0	41.3	41.8	40.9	42.7	41.3
Percent Change From One Year Ago	4.3	3.7	1.2	-3.2	-6.2	-3.5	-2.3	-1.5	1.5	-3.4
KS HRS/WK: Apparel&Other Fin. Prod.	37.8	36.9	37.3	37.3	37.0	37.3	37.6	37.5	37.3	37.3
Percent Change From One Year Ago	9.5	8.7	6.0	1.3	-2.3	1.2	0.8	0.4	6.2	0.0
KS HRS/WK: Pet. Refining & Rel. Ind.	41.0	40.9	40.7	40.8	40.4	41.0	40.8	40.9	40.9	40.8
Percent Change From One Year Ago	9.6	5.5	7.1	5.2	-1.5	0.4	0.2	0.1	6.8	-0.2
KS HRS/WK: Fabricated Metal Products	37.8	37.4	37.5	37.5	36.7	37.2	37.4	37.4	37.5	37.2
Percent Change From One Year Ago	1.9	-3.9	-2.6	-1.0	-2.9	-0.3	-0.3	-0.4	-1.4	-1.0
KS HRS/WK: Machinery, Incl. Elec.	39.1	39.7	39.3	40.4	40.3	40.2	39.6	40.7	39.6	40.2
Percent Change From One Year Ago	-1.5	1.0	1.0	3.1	3.2	1.2	0.9	0.5	0.9	1.4
KS HRS/WK: Transportation Equipment	41.2	41.2	40.6	41.2	40.5	40.5	40.4	41.1	41.0	40.6
Percent Change From One Year Ago	1.1	-1.8	-0.4	-1.1	-1.7	-1.7	-0.5	-0.2	-0.5	-1.0
KS WAGE/HR: Food & Kindred Products	9.5	9.7	9.8	9.8	9.9	10.0	10.1	10.1	9.7	10.0
Percent Change From One Year Ago	1.1	1.6	-1.0	0.6	4.1	2.9	2.9	2.9	0.6	3.2
KS WAGE/HR: Apparel&Other Fin. Prod.	6.3	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.3	6.4
Percent Change From One Year Ago	8.9	2.6	2.6	1.8	-0.2	3.3	3.3	3.2	3.9	2.4
KS WAGE/HR: Pet. Refining & Rel. Ind	12.0	12.1	12.2	12.4	12.5	12.6	12.6	12.8	12.2	12.6
Percent Change From One Year Ago	8.6	10.3	11.8	11.2	3.8	3.6	3.4	3.4	10.5	3.6
KS WAGE/HR: Fabricated Metal Product	9.5	9.5	9.6	9.7	9.8	9.8	9.9	10.0	9.6	9.9
Percent Change From One Year Ago	6.0	6.2	6.1	4.8	3.1	3.3	3.1	3.1	5.8	3.1
KS WAGE/HR: Machinery, Incl. Elec.	10.0	10.2	10.4	10.5	10.5	10.6	10.7	10.8	10.3	10.7
Percent Change From One Year Ago	2.0	4.2	3.0	4.9	5.5	3.4	3.2	3.1	3.5	3.8
KS WAGE/HR: Transportation Equipment	14.9	14.9	15.1	15.4	15.4	15.5	15.6	15.9	15.1	15.6
Percent Change From One Year Ago	5.8	3.2	3.4	2.3	3.0	3.7	3.6	3.5	3.7	3.5

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

WAGE BILLS

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS WG BILL: Total Wages & Salaries	25115.8	25375.0	25695.4	26000.1	26198.6	26670.2	26993.5	27267.8	25546.6	26782.5
Percent Change From One Year Ago	5.0	4.6	4.2	4.9	4.3	5.1	5.1	4.9	4.7	4.8
KS WG BILL: Farm Wages & Salaries	179.2	180.6	181.7	182.5	183.8	184.9	185.8	186.6	181.0	185.3
Percent Change From One Year Ago	6.7	5.0	4.4	3.1	2.6	2.3	2.3	2.2	4.8	2.3
KS WG BILL: Agricultural Services	101.4	102.7	104.1	105.5	106.8	108.2	109.6	111.0	103.4	108.9
Percent Change From One Year Ago	1.4	0.7	5.1	5.5	5.4	5.4	5.3	5.3	3.1	5.3
KS WG BILL: Mining	252.8	253.8	259.0	262.1	262.9	265.5	268.5	270.8	256.9	266.9
Percent Change From One Year Ago	-5.0	-1.6	1.6	4.9	4.0	4.6	3.6	3.3	-0.1	3.9
KS WG BILL: Construction	1102.8	1120.0	1147.8	1141.8	1115.4	1177.2	1206.3	1194.4	1128.1	1173.3
Percent Change From One Year Ago	13.5	15.8	12.9	10.0	1.1	5.1	5.1	4.6	13.0	4.0
KS WG BILL: Durable Goods	3171.4	3180.3	3186.1	3269.9	3263.6	3302.2	3318.6	3403.4	3201.9	3321.9
Percent Change From One Year Ago	1.6	0.3	1.9	3.2	2.9	3.8	4.2	4.1	1.7	3.7
KS WG BILL: Nondurable Goods	2029.5	2035.7	2057.1	2064.1	2094.7	2140.9	2164.8	2171.2	2046.6	2142.9
Percent Change From One Year Ago	8.7	9.6	8.1	5.8	3.2	5.2	5.2	5.2	8.0	4.7

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 WG BILL: Trans. & Public Utilities	2088.6	2089.6	2115.1	2139.2	2152.4	2181.8	2201.7	2226.8	2108.1	2190.7
Percent Change From One Year Ago	0.5	1.6	0.2	4.2	3.1	4.4	4.1	4.1	1.6	3.9
KS WG BILL: Wholesale Trade	1884.7	1911.9	1929.6	1936.3	1949.4	1986.2	2003.1	2007.1	1915.6	1986.4
Percent Change From One Year Ago	3.8	1.4	2.6	2.7	3.4	3.9	3.8	3.7	2.6	3.7
KS WG BILL: Retail Trade	2448.6	2461.1	2478.5	2494.2	2508.4	2521.7	2538.9	2552.4	2470.6	2530.4
Percent Change From One Year Ago	4.1	3.1	2.4	2.4	2.4	2.5	2.4	2.3	3.0	2.4
KS WG BILL: Finance, Insurance, & R.E	1536.8	1553.1	1574.5	1578.9	1592.6	1620.5	1641.8	1644.4	1560.8	1624.8
Percent Change From One Year Ago	4.1	5.2	5.5	4.5	3.6	4.3	4.3	4.1	4.8	4.1
KS WG BILL: Services	4990.3	5104.4	5233.5	5340.7	5432.8	5603.8	5739.2	5837.7	5167.2	5653.4
Percent Change From One Year Ago	7.2	7.3	7.6	7.8	8.9	9.8	9.7	9.3	7.5	9.4
KS WG BILL: Govt. & Govt. Enterprises	5329.8	5381.6	5428.4	5484.9	5535.7	5577.3	5615.3	5662.1	5406.2	5597.6
Percent Change From One Year Ago	5.5	4.4	2.0	4.0	3.9	3.6	3.4	3.2	4.0	3.5

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PERSONAL INCOME

	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4	1992	1993
KS PERS INC: Total Personal Income	47582.2	48156.1	48385.0	49593.2	49740.6	50539.1	50888.8	51774.9	48429.1	50735.9
Percent Change From One Year Ago	5.2	4.6	5.5	4.2	4.5	4.9	5.2	4.4	4.9	4.8
KS PERS INC: Real Personal Income	39187.9	39363.9	39224.3	39871.8	39655.4	39966.4	39951.3	40380.7	39412.0	39988.5
Percent Change From One Year Ago	2.4	1.7	2.4	1.0	1.2	1.5	1.9	1.3	1.9	1.5
KS PERS INC: Farm Proprietors Income	1007.7	1104.8	801.9	1477.0	1198.0	1266.5	1047.6	1425.5	1097.9	1234.4
Percent Change From One Year Ago	39.8	-3.3	146.0	-12.3	18.9	14.6	30.6	-3.5	13.4	12.4
KS PERS INC: Non-farm Proprietors Inc	4075.0	4132.0	4165.6	4202.5	4239.9	4279.8	4318.6	4355.4	4143.8	4298.4
Percent Change From One Year Ago	9.4	8.5	6.3	5.4	4.0	3.6	3.7	3.6	7.3	3.7
KS PERS INC: Dividends Interest & Ren	8256.3	8200.0	8199.4	8208.1	8223.2	8240.4	8250.4	8253.4	8216.0	8241.9
Percent Change From One Year Ago	-3.3	-3.1	-2.4	-1.9	-0.4	0.5	0.6	0.6	-2.7	0.3
KS PERS INC: Adj. For Residence	1243.0	1262.3	1276.5	1292.7	1310.9	1329.7	1348.1	1366.4	1268.6	1338.8
Percent Change From One Year Ago	2.6	4.8	6.8	6.1	5.5	5.3	5.6	5.7	5.1	5.5
KS PERS INC: Pers. Cont. For Soc. Ins	2353.7	2372.5	2408.2	2444.3	2496.3	2527.3	2558.8	2590.6	2394.7	2543.3
Percent Change From One Year Ago	5.1	5.2	5.3	6.0	6.1	6.5	6.3	6.0	5.4	6.2
KS PERS INC: Transfer Payments	7648.4	7844.9	8007.8	8173.4	8352.7	8535.5	8713.7	8889.5	7918.6	8622.8
Percent Change From One Year Ago	10.9	12.4	12.5	12.5	9.2	8.8	8.8	8.8	12.1	8.9
KS PERS INC: Other Labor Income	2589.7	2609.6	2646.6	2683.6	2713.5	2744.3	2775.7	2807.5	2632.4	2760.3
Percent Change From One Year Ago	6.3	5.5	5.2	5.0	4.8	5.2	4.9	4.6	5.5	4.9

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