

Institute for Public Policy and Business Research
The University of Kansas

U.S. AND KANSAS ECONOMIC FORECASTS FOR 1990
MIDYEAR UPDATE

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Funding for the Kansas Economic Modeling Program at the Institute is provided by the state of Kansas.

July 18, 1990

Report No. 178

Preface

The Institute for Public Policy and Business Research is pleased to present this midyear update of its 1990 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 1990, and an appendix with detailed quarter by quarter forecasts for each sector.

The forecast and this report were prepared by Professor Norman Clifford, 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.

Executive Summary

The National Economy

National economic growth will be slower in 1990 than it has been for the past 5 years; real gross national product will grow only 2.3 percent. Although much of the slow growth this year can be attributed to a weak 1.1 percent rate of growth during the first quarter, the economy will remain somewhat sluggish during the rest of the year, growing at only a 2.6 percent annual rate over that period.

The major strength of the economy will continue to be found in the export sector, with real export growth above 9 percent for the year. The consumption sector, on the other hand, will provide much less of a buffer for the economy than it has in recent years, as real consumption spending will grow only 2.0 percent this year. The slowdown in the growth of consumer spending this year is directly attributable to a slowdown in the growth of real disposable income, which will grow only 2.1 percent this year compared to 4.1 percent in 1989. The strongest consumption growth will continue to be in the service sector, where real spending will increase 3.5 percent. Spending on durable goods will also be strong, increasing 2.8 percent, in spite of a 1.5 percent decrease in spending on new cars. Consumer spending on non-durable goods will be weak, decreasing 0.6 percent in real terms.

One benefit of weaker consumer spending growth will be a reduction in the rate of growth of imports, which will grow only 4.7 percent. Thus, the U.S. economy should see a reduction in its trade deficit from \$53 billion to \$28 billion, measured in the national income and products accounts basis.

Business investment spending will grow 3.8 percent, slightly faster than in 1989, due to a 5.3 percent increase in spending on structures. Spending on structures decreased 1.8 percent in 1989. Growth of government purchases of goods and services, at 1.4 percent, will be only about half of what it was in 1989, due to a 1.8 percent decline in federal government spending that will be brought about by a 2.2 percent decline in defense purchases. The federal government's total outlays, however, will increase significantly due to a 9.7 percent increase in transfer payments and an 8.5 percent increase in interest

payments. Total federal receipts will not keep pace with the increase in total outlays due to a decrease in corporate tax collections; thus, the government's budget deficit will increase from \$149 billion in 1989 to \$162 billion in 1990.

Table 1
The National Forecast--Summary

	1986	1987	1988	1989	1990
Real GNP (billions)	3717.9	3853.7	4024.4	4144.1	4238.7
Growth Rate	2.7	3.7	4.4	3.0	2.3
Rate of Inflation	1.9	3.7	4.1	4.8	6.2
Civilian Employment (millions)	109.7	112.5	115.1	117.4	118.6
Growth Rate	2.3	2.6	2.3	2.0	1.0
Unemployment Rate	6.9	6.1	5.4	5.2	5.3
3-Month T-Bill Rate	6.0	5.8	6.7	8.1	8.0
Nominal Personal Income (billions)	3526.2	3777.6	4064.5	4427.3	4768.1
Growth Rate	6.0	7.1	7.6	8.9	7.7

Slower growth of the national economy will not immediately dissipate inflationary pressures. Inflation, as measured by the rate of increase of the consumer price index, will increase from 4.8 percent in 1989 to 6.2 percent in 1990, although reduced price increases will be seen in the second half of the year. Among the goods and services with the fastest price increases this year will be medical care, food and beverages, and apparel.

The Fed will take a middle road in 1990, increasing the rate of growth of the money supply in order to avoid a recession, but moderating the rate of increase so as not to fuel inflation. As a result interest rates will remain at about the same level as last year, although they will increase slightly throughout the year.

Personal income will also grow more slowly in 1990 than it did in 1989. Interestingly, both 1989's 8.9 percent growth in personal income and 1990's forecasts 7.7 percent increase in personal income are greater than the increase in nominal GNP in the corresponding years, due to corporations' decisions to increase dividend payments even though corporate profits were falling.

Total employment by place of work will increase 2.6 percent in 1990 compared to 2.8 percent in 1989. Total civilian employment will increase only 1.0 percent this year compared to 2.0 percent last year. The national unemployment rate will increase from 5.2 percent in 1989 to 5.4 percent in 1990.

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 major assumptions were imposed on that model:

1. The Federal Reserve Board will keep money supply growth (measured as the rate of change of M2) at about 6.0 percent during 1990. M2 growth was 6.3 percent during the first quarter of the year, and it will grow about 5.5 percent during the last three quarters of the year. This growth rate represents an attempt by the Fed to tread a narrow corridor between resisting new inflationary pressures and avoiding a downturn in an economy in which output growth will be very weak during the second half of the year.

2. On the fiscal side, corporate profits tax receipts will be lower than expected by the administration, and the budget deficit will increase. Real defense spending will decline at a 5 percent annual rate. There will be no major changes in other spending or transfer payments.

3. Real economic growth in the OECD countries, our major trading partners, will average 3.5 percent. The rate of inflation for these countries will average 5.2 percent. No adjustments were made to account for developments in Eastern Europe.

4. Oil prices will stabilize soon and then begin to rise at a 4 percent annual rate.

5. The exchange rate of the dollar, after falling at a 16 percent annual rate during the first quarter of 1990, will fall slightly throughout the rest of the year, dropping 5.8 percent for the year.

The Kansas Economy

The Kansas forecast is summarized in Table 2, below. It is based on the national forecast and the Kansas Econometric Model.

The Kansas Economy will also exhibit slower growth in 1990. Total nonfarm wage and salary employment will increase only 1.8 percent this year, compared to 3.1 percent in 1989. Total Kansas employment is forecasted to increase 1.4 percent. The unemployment rate will increase from 4.0 percent in 1989 to 4.1 percent in 1990.

Three sectors will contribute most of the Kansas employment growth in 1990. Half of the growth in employment will be accounted for by a 3.8 percent growth in employment in services. Another fourth of the increase in Kansas employment will be accounted for by a 2.0 percent growth in employment in wholesale and retail trade. Finally, construction employment will partly rebound from two declining years with an 8.7 percent increase.

Employment in nondurable goods manufacturing (3.0 percent), finance insurance and real estate (2.1 percent) and transportation and public utilities (1.9 percent) will also grow at above the average rate of employment growth for the year. Employment in durable goods manufacturing (-1.4 percent), mining (1.6 percent), and government (-0.9 percent) will grow at below the average rate of employment growth for the year.

Kansas personal income will grow 8.3 percent in 1990 compared to 3.5 percent in 1989. This big increase in personal income growth is almost entirely accounted for, however, by a big rebound in farm proprietor's income, which fell from \$1.2 billion in 1988 to \$0.2 billion in 1989. The forecast is for Kansas farm income to be about 0.9 billion in 1990. Kansas personal income net of farm proprietor's income is expected to increase 6.6 percent in 1990 compare to 6.3 percent in 1989. Kansas personal income net of farm proprietor's income and adjusted for inflation is expected to increase 1.0 percent in 1990, compared to 1.9 percent in 1989.

Table 2
The Kansas Forecast--Summary

	1986	1987	1988	1989	1990
Civilian Labor Force (thousands)	1236.0	1268.0	1282.0	1285.0	1303.8
Growth Rate	-0.2	2.6	1.1	0.2	1.5
Total Employment (thousands)	1169.0	1205.0	1221.0	1233.0	1249.8
Growth Rate	-0.6	3.1	1.3	1.0	1.4
Wage and Salary Employment (thousands)	984.7	1005.0	1035.4	1067.5	1086.3
Growth Rate	1.7	2.1	3.0	3.1	1.8
Unemployment Rate	5.4	5.0	4.7	4.0	4.1
Nominal Personal Income (thousands)	35595.8	37334.5	39279.8	40657.5	44047.0
	5.3	4.9	5.2	3.5	8.3

Introduction

In 1990 the national economy will record its slowest rate of growth in 6 years. After two very weak quarters--1989:IV and 1990:I--the economy will gain some overall strength, but growth will still be slow in relation to growth in the previous 5 years. The fastest growing sector of the economy during the year will be exports, due to a lower exchange rate of the dollar and strong economic growth among our major trading partners. Consumer spending, which has been a strength of the economy during the last two years, will soften in 1990 and is expected to be especially weak during the second half of the year, providing very little cushion for shocks that the economy may receive during that period. For the year, growth in consumption of services and durable goods will be relatively strong, but consumer spending on nondurable goods will actually decline slightly. Slower consumer spending growth and the weaker dollar will slow the rate of imports and improve the trade deficit considerably.

Although business spending on equipment will grow more slowly this year than last, the rate of growth of business spending on structures will increase; therefore, nonresidential fixed investment spending will grow at about the same rate as last year. Residential investment will grow slightly after falling last year. The decline of federal government purchases due to a substantial decrease in defense spending, and an increase in state and local government purchases will result in slight growth of total government purchases. Substantial increases in transfer and interest payments will cause total federal expenditures to grow more than total federal receipts, which will be constrained by falling corporate profits tax receipts; the federal deficit will therefore worsen this year.

Inflation will be higher in 1990 as inflationary pressures peak during the early part of the year, although lower wholesale price increases and weaker consumer spending will reduce inflation during the second half of 1990. Prices will increase most rapidly for medical care, services, food and beverages, and apparel; housing and transportation price increases will be moderate. Interest rates will be about the same on average for the year as they were in 1989; however, interest rates fell gradually in 1989, hitting their

lowest levels at the end of the year. They are expected to rise gradually during 1990 and reach their highs for the year in the fourth quarter. Because of higher inflation, real returns will be lower this year than last on average.

Personal income will grow more slowly than last year. Because corporations continue to increase dividends in spite of falling corporate profits and since transfer payments will increase due to the sluggishness of the economy, personal income will grow more than GNP, as it did in 1989; however, personal income adjusted for inflation will grow only half as much this year as it did in 1989. The slower personal income growth is one cause of the weakness in consumer spending that is forecasted for the last half of the year. Slower employment growth in 1990 will result in an increase in the national unemployment rate.

Kansas, too, will experience slower growth this year than last. The rate of increase in the number of jobs in Kansas will be only about half of what it was in the last two years and almost all of the growth will come from three sectors: construction, trade, and services. The civilian labor force will grow slightly more rapidly than employment, resulting in a small increase in the Kansas unemployment rate in 1990.

Kansas personal income will jump significantly in 1990, due to a big increase in farm income following the severely depressed year for the Kansas farm economy in 1989. Personal income net of farm proprietors' income will grow at about the same rate as it did in 1989, but adjusted for inflation it will grow only about half as fast as it did that year.

These are the qualitative features of the national and Kansas forecasts developed at the Institute for Public Policy and Business Research and presented below.¹

The national and state forecasts are generated from the following assumptions:

1. The Federal Reserve Board will keep money supply growth (measured as the rate of change of M2) at about 6.0 percent during 1990. M2 growth was 6.3 percent during the first quarter of the year, and it will grow about 5.5 percent during the last three quarters of the year. This growth rate represents an attempt by the Fed to tread a narrow corridor between resisting new inflationary pressures and avoiding a downturn in an economy in which output growth will be very weak during the second half of the year.

2. On the fiscal side, corporate profits tax receipts will be lower than expected by the administration, and the budget deficit will increase. Real defense spending will decline at a 5 percent annual rate. There will be no major changes in other spending or transfer payments.

3. Real economic growth in the OECD² countries, our major trading partners, will average 3.5 percent. The rate of inflation for these countries will average 5.2 percent. No adjustments were made to account for developments in Eastern Europe.

4. Oil prices will stabilize soon and then begin to rise at a 4 percent annual rate.

5. The exchange rate of the dollar,³ after falling at a 16 percent annual rate during the first quarter of 1990, will fall slightly throughout the rest of the year, dropping 5.8 percent for the year.

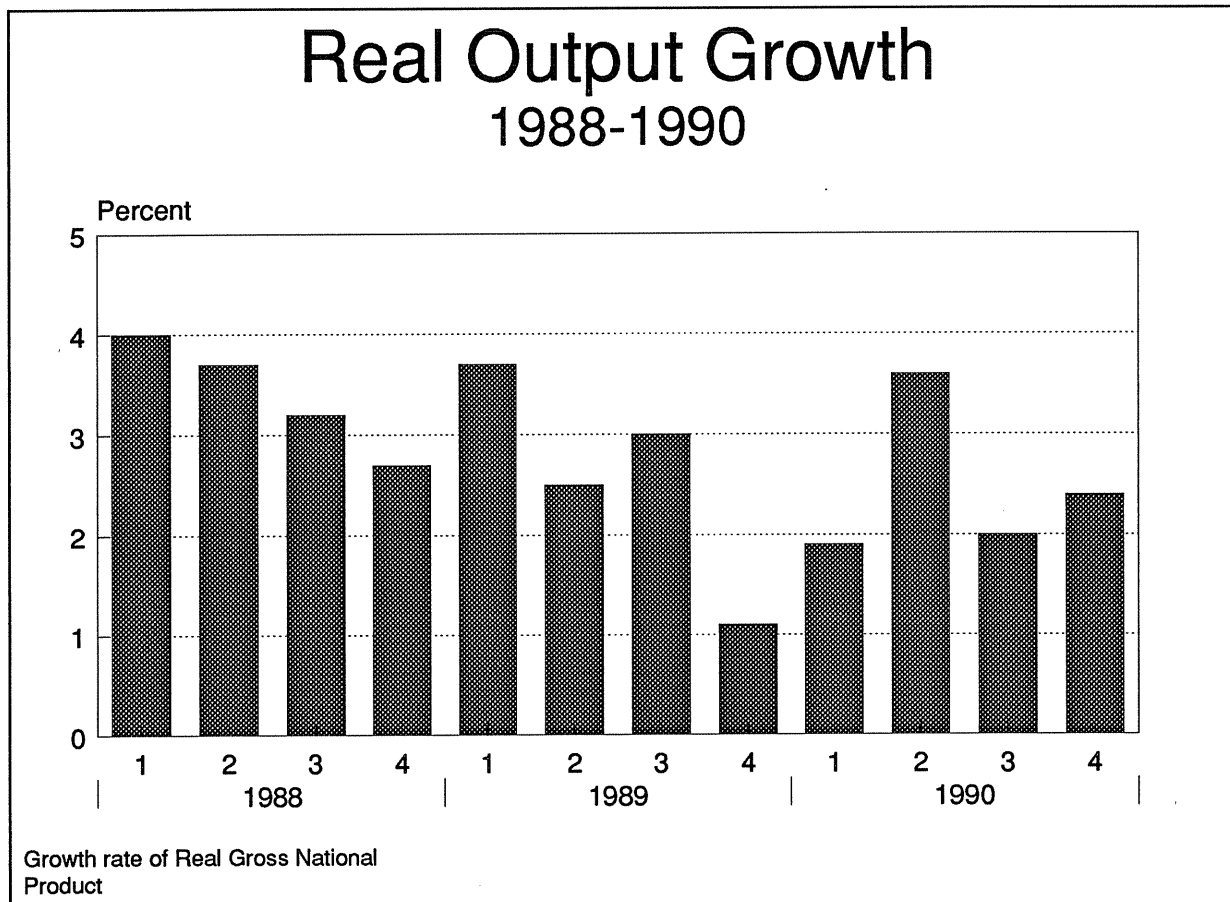


Figure 1

National economic growth will be slower in 1990 than it has been for the past 5 years: the forecast is for real gross national product to grow 2.3 percent this year. During the period 1985-1989 the average rate of growth of real GNP was 3.4 percent, with 1986 being the only year during that period when real output grew less than 3 percent (2 percent). However, as the quarterly breakdown of the forecast in Figure 1 shows, the big dip in economic growth took place during the fourth quarter of 1989 and the first quarter of this year, when GNP growth averaged only 1.2 percent. The average growth rate of forecasted real GNP for the last three quarters of the year is 2.6 percent which, while not robust, shows signs of some strength returning to the economy.

The major strength of the economy in 1990 will be export growth. Figure 2 shows the growth of

Real Export Growth 1984-1990

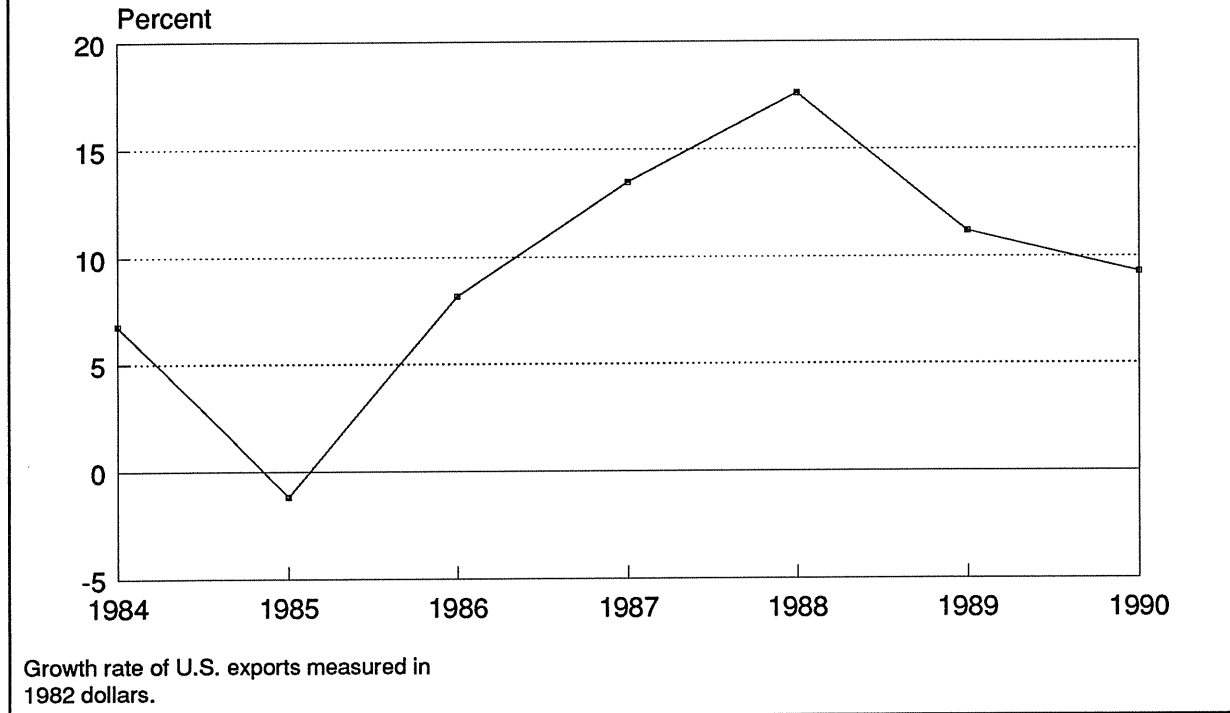


Figure 2

real U.S. exports from 1984 through 1990. Although the forecasted 9.3 percent rate of growth of exports for 1990 is not as high as the rate of export growth for the previous four years, it will still be the fastest growing major sector of the economy this year, due to a lower exchange rate of the dollar against the currencies of most of our major trading partners, whose own economic growth is strong.

During 1990, the consumption sector of the economy will be just strong enough so that it will not be a brake on the economy. The forecasted rate of growth of real consumption expenditure in 1990 is 2.0 percent--down from 2.7 percent in 1989 and 3.4 percent in 1988--owing to a smaller rate of growth of real disposable income; real disposable income will grow 2.1 percent this year compared to 4.1 percent last year. As Figure 3 shows, one disturbing feature of the forecast of disposable income and consumption spending is that growth in these two areas will weaken during the second half of the year, causing the

Income and Consumption Growth 1988-1990

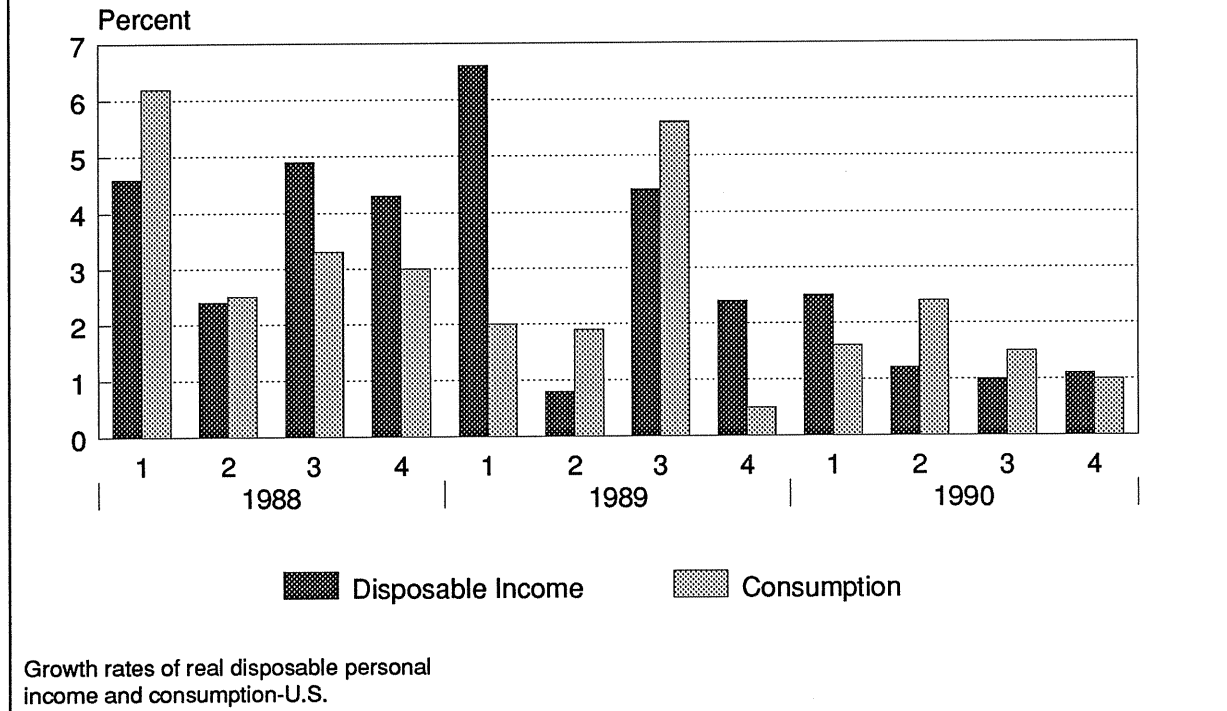


Figure 3

economy to be in a vulnerable position during that period, since growth in consumer spending will provide very little buffer for shocks to other areas of the economy.

The strongest consumption growth will occur in the services sector, where real consumer spending will increase 3.5 percent and account for about five-sixths of the growth in consumer spending. Real consumer spending on durable goods will also be strong in 1990, growing 2.8 percent. Consumer spending on motor vehicles and parts will increase 1.4 percent, despite a 1.5 percent drop in sales of new automobiles, while consumer spending on furniture and household equipment will be the strongest area of spending on durable goods, growing 4.6 percent. Real consumer spending on nondurable goods will decrease by 0.6 percent in 1990, and expenditures in food (-1.0 percent), gasoline and oil (-2.4 percent), and fuel oil and coal (-13.4 percent) will all decline during the year. Consumer expenditures on clothing

will increase 1.2 percent.

One of the effects of the slower growth of consumer spending in 1990, reinforced by a weakening of the dollar, will be a reduced rate of growth of imports. Real U.S. imports will grow only 4.7 percent this year, compared to 6.1 percent in 1989 and an average 8.2 percent annual growth during the years

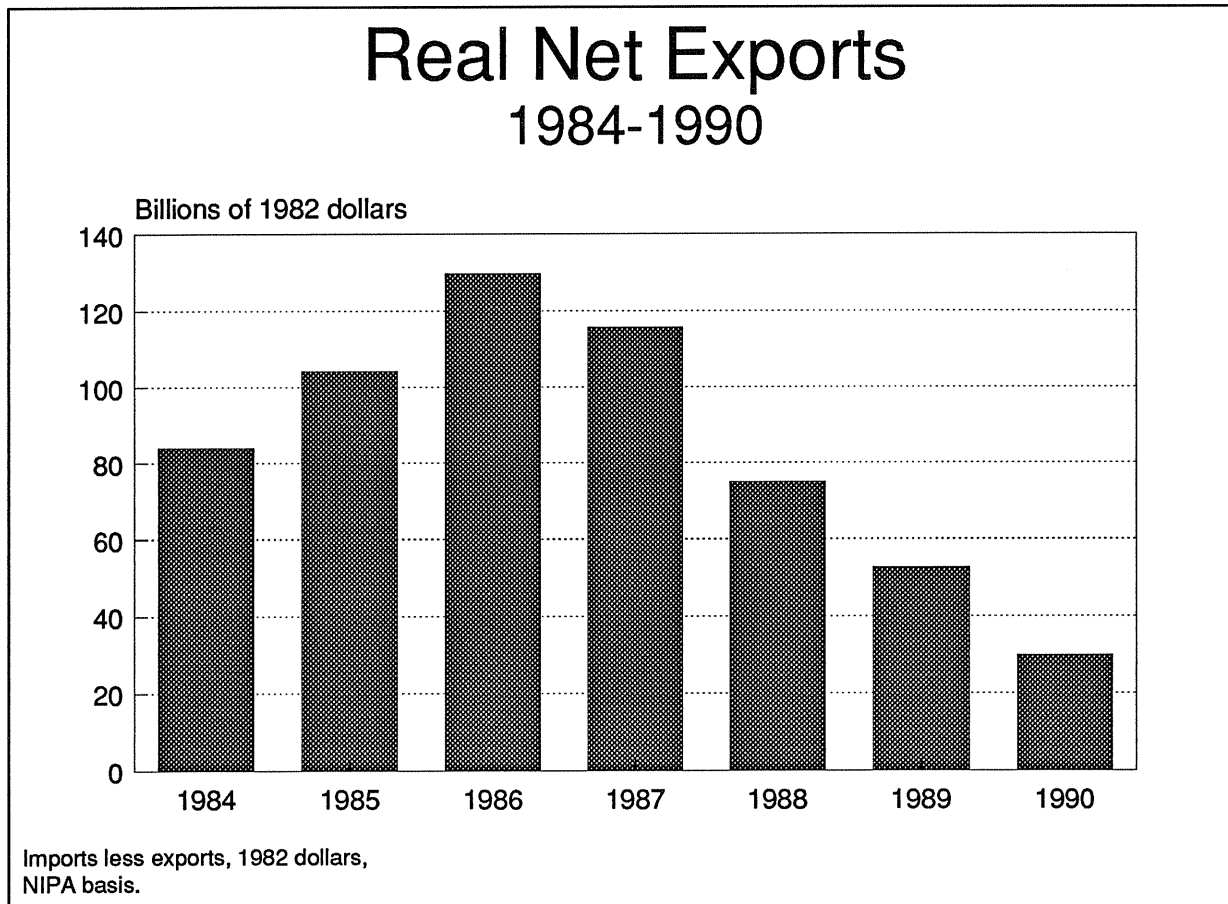


Figure 4

1984 to 1989. With exports growing about 4.5 percentage points faster than imports in 1990, there will be a significant improvement in the U.S. balance of trade for the fourth consecutive year. The forecasted trade deficit using the national income and product accounts basis is expected to fall from \$53 billion in 1989 to \$28 billion; Figure 4 shows that measure of the trade deficit from 1984 to 1990.

Business investment spending, like consumer spending, will grow only slightly faster than the

economy as a whole; its 3.8 percent growth in 1990 will be slightly greater than in 1988 when a large part of the 4.4 percent growth of the national economy was due to the 8.4 percent rate of growth in business investment spending. Unlike 1989, when all of the growth in business investment was due to growth in spending on equipment (spending on structures actually declined by 1.8 percent), 1990 growth in business investment spending will be balanced, with spending on equipment growing 3.3 percent and spending on structures growing 5.2 percent. Residential investment spending, on the other hand, will grow only 1.0 percent, after declining 2.9 percent last year.

The final major category of spending on gross national product--government purchases of goods and services--will grow only 1.4 percent, following a 2.7 percent rate of growth in 1989, due to a 1.8 percent decline in total federal government purchases which grew 2.5 percent in 1989. This decline will largely be due to a second straight year of substantial decreases in defense spending. Real defense spending fell 1.9 percent in 1989 and will fall another 2.2 percent this year, while nondefense purchases will fall a modest 0.3 percent after growing nearly 20 percent last year. State and local government purchases will grow 3.7 percent, up from 1989's 2.9 percent growth.

The federal government's budget deficit will increase in 1990, as increases in expenditures, due to a 9.7 percent increase in transfer payments and an 8.5 percent increase in interest payments, will not be fully covered by the increase in receipts. Total federal government receipts will increase 6.0 percent as personal tax collections increase 6.9 percent, but corporate profits tax collections will decrease 5.5 percent. The federal government's budget deficit will grow from \$149 billion in calendar year 1989 to \$162 billion in calendar year 1990.

In spite of slower economic growth, the effects of strong inflationary pressures will continue to be felt. By any of the three price measures that we forecast--Gross National Product, consumption spending, and the consumer price index--inflation will be higher in 1990 than it was in 1989. The rate of inflation as measured by the change in the implicit GNP deflator will be 4.4 percent, compared to 4.1

percent in 1989; as measured by the implicit deflator for consumption spending it will be 5.4 percent, compared to 4.4 percent in 1989; and as measured by the consumer price index for all urban consumers it will be 6.2 percent, compared to 4.8 percent in 1989. The consumer price index increase will be above 8 percent at annual rates in each of the first two quarters of this year; the rate of increase will slow somewhat during the last half of the year, as lower wholesale price increases and weaker consumer spending reduce inflationary pressures.

Among the fastest growing areas of consumer prices will be medical care (8.8 percent), services other than entertainment (7.7 percent) food and beverages (7.4 percent), and apparel and upkeep (6.5 percent). Smaller than average price increases will be seen in the cost of housing (5.5 percent) with the cost of shelter increasing 5.6 percent, fuel and utilities prices increasing 3.3 percent, and the cost of household furnishings and operations increasing 2.1 percent. Transportation costs will also increase less than average at 5.3 percent, in spite of a 7.3 percent increase in the price of motor fuel; new car prices will increase 4.0 percent. Entertainment prices will increase 5.1 percent.

On the one hand, continuing evidence of inflationary pressures will cause the Fed to continue its commitment to monetary restraint; on the other hand, the lack of strength in the economy, especially the weakness in consumer spending during the latter half of the year, means that the Fed will be reluctant to apply the brakes to the economy. We expect the M2 measure of the money supply to average 6.0 percent growth for the year, slightly less than the average over the last three quarters. Although this is significantly faster than last year's 3.7 percent M2 growth, interest rates in 1990 will be very close to their 1989 levels as increased inflation works to keep nominal interest rates high; for example the three-month treasury bill rate will average 8.0 percent for the year, compared to 8.1 percent during 1989. If we define the real interest rate to be the nominal interest rate less the rate of inflation, we find that the real interest rate on three-month treasury bills averaged about 3.9 percent in 1989 and is forecasted to average only 1.8 percent in 1990; therefore, the increased rate of money growth will work to bring down real, but not nominal,

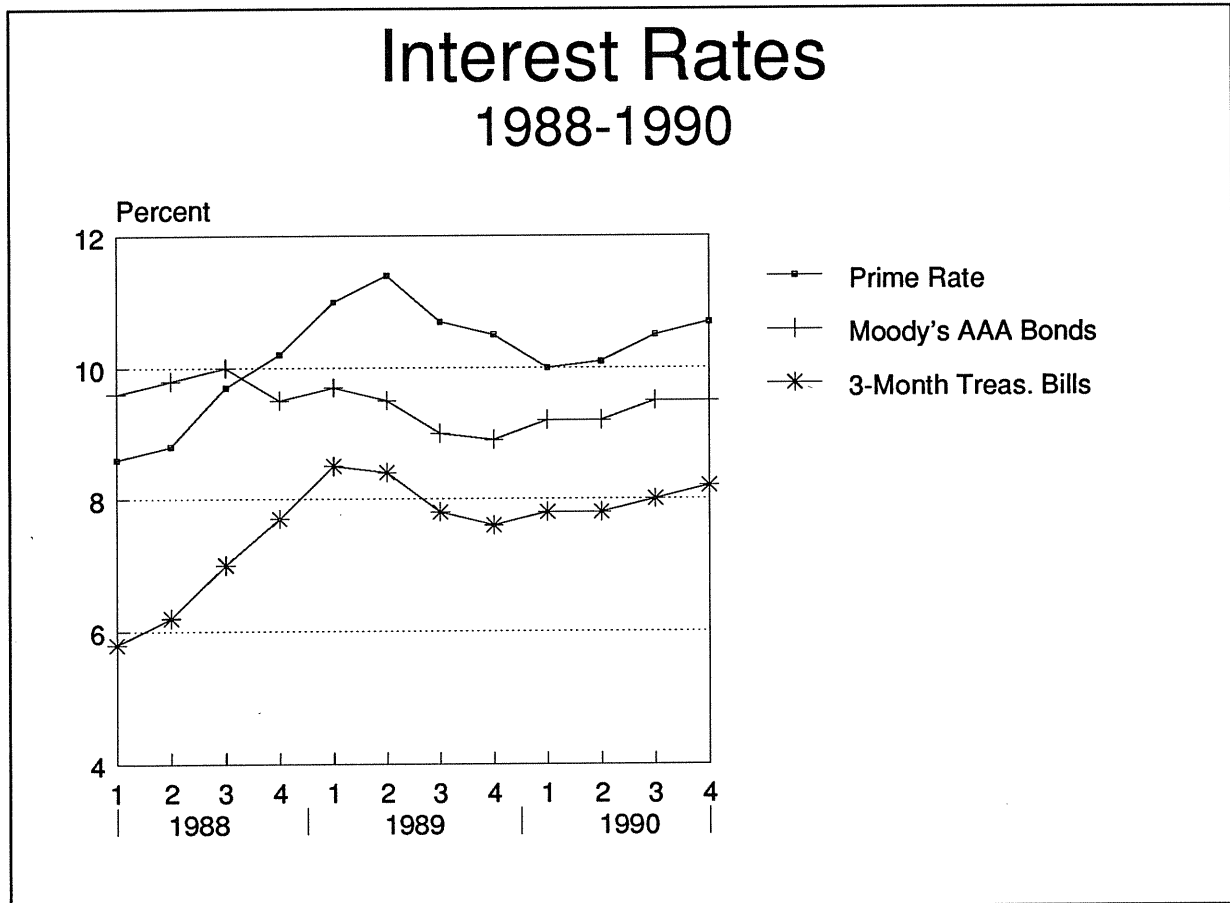


Figure 5

rates. Figure 5 indicates that the treasury bill rate declined throughout 1989, to a low of 7.6 percent in the fourth quarter, and the forecast is for that rate to increase throughout 1990, ending the year at 8.2 percent, about 0.6 percentage points higher than it ended 1989. As Figure 5 also indicates, the prime rate will also increase during 1990: it will average 10.3 percent for the year, compared to 10.9 percent in 1989. Moody's AAA bond rate will average 9.4 percent, compared to 9.3 percent in 1989.

Given the forecast of sluggish output growth for 1990, it is not surprising that the forecast for personal income growth is for a significant reduction in the rate of growth. Personal income in current dollars will grow 7.7 percent in 1990 compared to 8.9 percent in 1989; given the expected increase in the rate of inflation in 1990, however, the contrast is more severe if we compare real personal income growth. Using the implicit deflator for the consumption sector of GNP to deflate the personal income figures, we

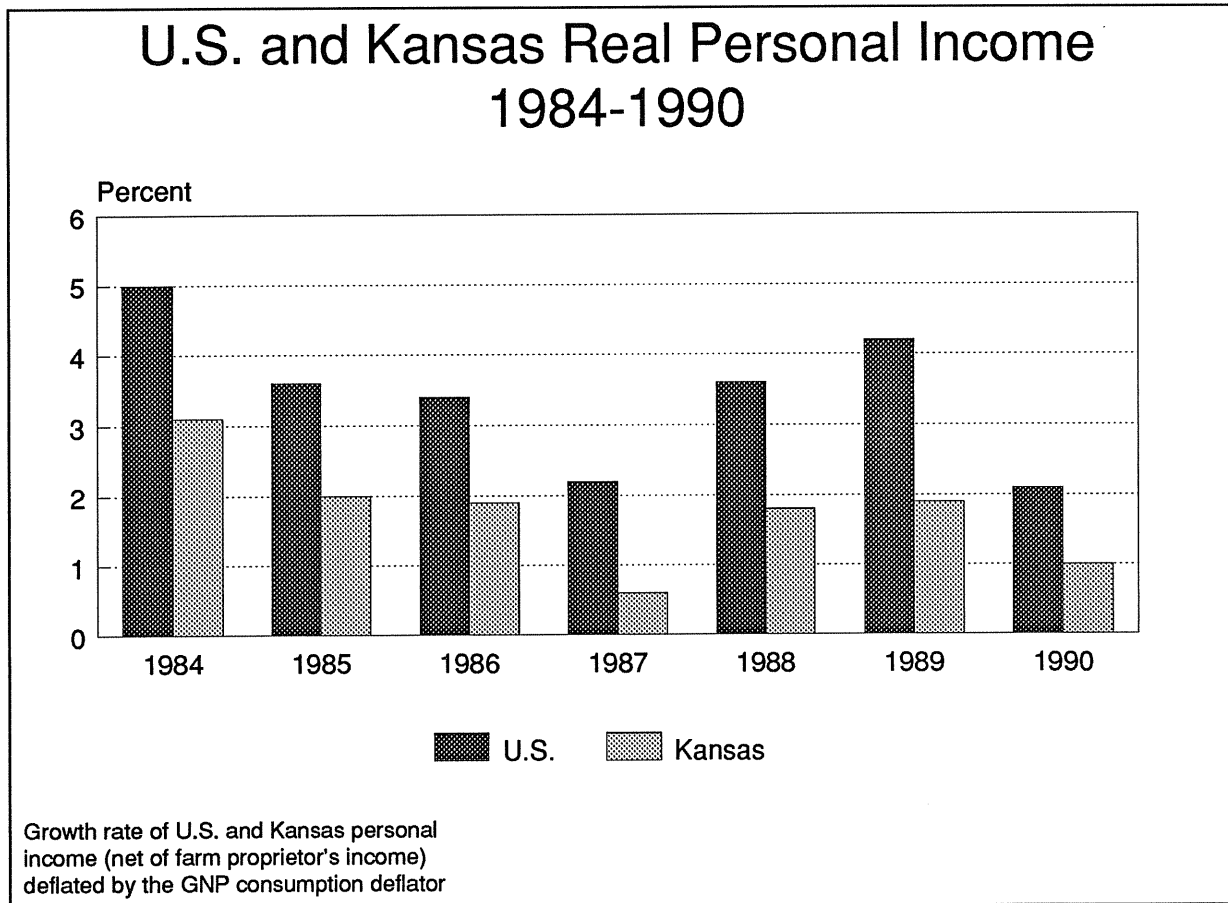


Figure 6

find that real personal income grew 4.4 percent in 1989 compared to a forecasted growth of only 2.1 percent in 1990. Real personal disposable income, the income measure that is most directly related to consumer spending, is expected to grow 2.1 percent in 1990, compared to 4.1 percent in 1989.

It is interesting to note that personal income will grow more rapidly than GNP in 1990, just as it did in 1989. The 8.9 percent growth rate in 1989 was about 1.7 percentage points more than the growth rate of nominal GNP; in 1990 the growth rate of personal income will be about 1.0 percentage points greater than the 6.8 percent rate of growth in nominal GNP. Most of the difference in both years can be explained by falling corporate profits coupled with growing dividend payments. Corporate profits fell 8.3 percent in 1989 and are forecasted to fall another 6.1 percent in 1990; personal dividend income grew 10.1 percent in 1989 and is expected to grow 8.0 percent this year. Since corporate profits are included in

calculating GNP and personal dividend income is included in calculating personal income, personal income is seen to grow more quickly than GNP in the two years. A second reason for faster personal income growth in 1990 is that as the economy slows down transfer income grows: the forecast calls for a 9.7 percent increase in transfer payments, which also adds to the discrepancy between output growth and personal income growth. Figure 6 shows the growth path of U.S. and Kansas personal income growth, net of farm proprietors' income and adjusted for inflation.

The weaker economy in 1990 will also be reflected in a softening of labor markets. Total nonfarm establishment employment will increase 2.6 percent in 1990, compared to 2.8 percent in 1989; employment growth will be greatest during the first half of the year, slowing somewhat in the third and

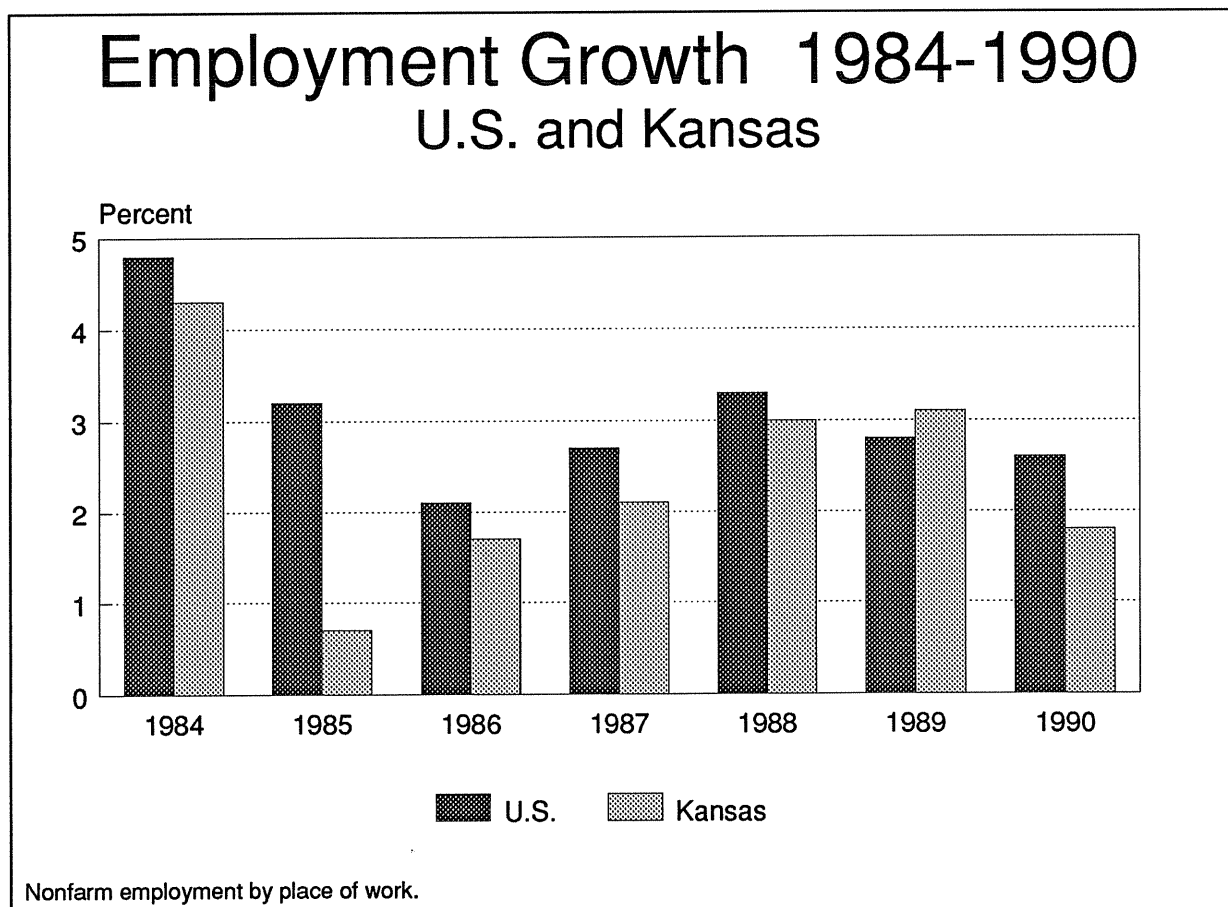


Figure 7

fourth quarters. Total civilian employment will grow only 1.0 percent this year, compared to 2.0 percent last year, but since the civilian labor force will grow 1.2 percent this year, the unemployment rate will increase from 5.2 percent in 1989 to 5.4 percent in 1990. Private nonfarm wage rates are expected to increase 5.4 percent, slightly less than the 1989 increase of 5.8 percent. Figure 7 shows U.S. and Kansas nonfarm wage and salary employment growth.

The Kansas Economy

The Kansas economy will also grow more slowly in 1990 than it did in 1989. Total nonfarm wage and salary employment, which we believe that we forecast more accurately than total employment,⁴ will grow 1.8 percent this year compared to roughly 3.0 percent per year during the last two years. The total number of Kansans employed is expected to increase 1.4 percent, roughly the same rate of increase as in the past two years, but well below the 3.1 percent increase in 1987. The civilian labor force is expected to grow 1.5 percent this year; as a result, the unemployment rate will increase slightly, from 4.0 percent to 4.1 percent.

Most of the growth in Kansas employment will come from three sectors: construction, trade, and services. Construction employment is expected to grow 8.7 percent from its depressed 1989 level; despite this impressive rebound, however, construction employment will still be 3.1 percent below its 1987 level. Employment in wholesale and retail trade will grow 2.0 percent, accounting for more than one-fourth of the growth in Kansas employment, while employment in services will increase 3.8 percent, accounting for nearly half of the total growth in Kansas employment.

Among other sectors of the Kansas economy that will show employment growth during the year are nondurable goods, F.I.R.E. (finance, insurance, and real estate), and transportation and public utilities. Employment in nondurable goods is expected to grow 3.0 percent after growing only 1.0 percent last year; most of this growth will come from employment growth in food and kindred products (3.1 percent) and printing and publishing (4.1 percent). Employment in F.I.R.E. will grow 2.1 percent, compared to 0.7 percent in 1989. Employment in transportation and utilities will grow 1.9 percent compared to 3.0 percent in 1989; a 5.3 percent decrease in railroad employment will be more than offset by a 4.6 percent increase in employment in trucking and warehousing.

Among the weaker sectors of the Kansas economy in terms of 1990 employment growth will be durable goods, mining, and government. Employment in durable goods manufacturing is expected to

decrease 1.4 percent during 1990, with much of the decrease coming from an expected 3.6 percent decrease in employment in the manufacture of transportation equipment and a 2.5 percent decrease in employment in fabricated metals; these employment reductions will be partly offset by a 2.1 percent increase in employment in the manufacture of machinery. Mining employment will increase a modest 1.6 percent, as the outlook for the oil and gas industry continues to be uncertain. State and local government employment will fall slightly (1.0 percent) following a 3.6 percent increase in 1989, while federal government employment in Kansas will fall 1.1 percent, after increasing 0.9 percent last year. Table 3 shows the forecasted growth rates in employment for several major Kansas sectors.

Table 3
Kansas Employment Growth

	1988	1989	1990
Mining	-8.1	-10.0	1.6
Construction	-8.2	-2.7	8.6
Durable goods manufacturing	3.8	2.2	-1.5
Nondurable goods manufacturing	2.1	1.0	3.0
Transportation and Utilitites	2.3	3.0	1.9
Wholesale trade	2.3	0.7	2.0
Retail trade	4.1	3.2	1.9
Finance insurance and real estate	1.7	0.7	2.0
Services	6.2	7.4	3.8
Federal government	4.0	0.9	-1.1
State and local government	2.5	3.6	-1.0
Farm	1.6	3.1	7.3

Kansas personal income in current dollars is expected to grow 8.3 percent in 1990, substantially faster than the meager 3.5 percent rate of growth in 1989. Adjusted for inflation, the 1990 rate of growth becomes 2.8 percent, compared to a decrease of 0.9 percent in 1989. This contrast between 1990 and the previous year, however, is not so much a reflection of an improved state of health for the overall Kansas economy, but rather a reflection of a rebound of farm personal income from its drastic fall in 1989. In nominal terms, farm income fell from \$1.2 billion in 1988 to just over \$0.2 billion in 1989 and is expected

to increase to just over \$0.9 billion in 1990. If we look at personal income net of farm proprietors' income, we find that the expected increase in current dollars is 6.6 percent, compared to 6.3 percent in 1989; if we go further and adjust for inflation, we find that nonfarm personal income is expected to grow only 1.0 percent in 1990, compared to 1.9 percent in 1989. Figure 6 shows Kansas and U.S. nonfarm personal income growth adjusted for inflation.

Conclusion

Although the forecast for the national and Kansas economies calls for curtailed growth in 1990, we do not expect a recession this year. National economic growth depends upon continued healthy export growth, as well as reasonably strong growth in business expenditures on plant and equipment, but weaker growth of consumer spending during the second half of the year will put the economy in a somewhat vulnerable position, for there will be a very small buffer zone to absorb negative shocks to either exports or business investment spending. The Federal Reserve Board's cautious approach in the face of continuing inflationary pressures will also contribute to slow growth during the second half of the year. As to the state, any shock that would cause the national economy to falter would be transmitted to a Kansas economy that is also growing slowly; on the other hand, the Kansas economy will be buoyed by a rebound in farm income during 1989. Although a severe downturn is not our choice as the most likely scenario, there is some possibility that such a downturn could occur.

Notes

1. The forecasts for the national economy are produced by the Econometric Model of the United States developed using assumptions generated at the Institute. This model was developed at the Center for Econometric Model Research at the University of Indiana. 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 at the University of Kansas.

2. Organization for Economic Cooperation and Development. Member nations are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Holland, Iceland, Ireland, Italy, Japan, Luxembourg, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

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

4. Total nonfarm wage and salary employment is a measure of jobs in Kansas firms; total employment is a measure of the number of Kansas residents who are employed. The latter measure is constructed from the former by estimating the adjustments needed to correct for people who are self-employed, for people who hold more than one job, and for those who live in Kansas and work out of state as well as those who live out of state and work in Kansas. For this reason, we feel that the measure of total jobs in Kansas is more accurate than the measure of total number of Kansans employed, and that we can forecast the total number of jobs better than we can forecast the number employed.

APPENDIX

GNP AS EXPENDITURE - 1982 DOLLARS

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Gross National Product Percent Change From Last Qtr (AR)	4106.8 3.7	4132.5 2.5	4162.9 3.0	4174.1 1.1	4193.4 1.9	4231.0 3.6	4252.4 2.0	4278.1 2.4	4144.1 3.0	4238.7 2.3
US: Personal Consumption Expend. Percent Change From Last Qtr (AR)	2641.0 2.0	2653.7 1.9	2690.1 5.6	2693.7 0.5	2704.3 1.6	2720.2 2.4	2730.2 1.5	2737.1 1.0	2669.6 2.7	2723.0 2.0
US: Per. Con. Exp.-Durables Percent Change From Last Qtr (AR)	419.3 -1.1	424.9 5.5	436.4 11.3	420.3 -14.0	434.4 14.1	435.7 1.2	438.7 2.8	440.1 1.3	425.2 2.8	437.2 2.8
US: PCE-Nondurables Percent Change From Last Qtr (AR)	915.0 1.3	909.7 -2.3	920.8 5.0	921.1 0.1	913.2 -3.4	912.6 -0.3	910.9 -0.7	909.2 -0.7	916.6 1.3	911.5 -0.6
US: PCE-Services Percent Change From Last Qtr (AR)	1306.7 3.6	1319.0 3.8	1332.9 4.3	1352.2 5.9	1356.7 1.3	1372.0 4.6	1380.6 2.5	1387.7 2.1	1327.7 3.7	1374.3 3.5
US: Fixed Nonresidential Invest. Percent Change From Last Qtr (AR)	501.0 6.9	511.4 8.6	517.9 5.2	510.8 -5.4	520.4 7.7	524.8 3.4	531.4 5.1	541.8 8.0	510.3 3.3	529.6 3.8
US: Producers Durable Equipment Percent Change From Last Qtr (AR)	379.9 9.6	393.2 14.8	397.6 4.6	390.6 -6.9	397.4 7.1	400.2 2.8	404.7 4.6	411.2 6.6	390.3 5.0	403.4 3.3
US: Investment in Structures Percent Change From Last Qtr (AR)	121.1 -1.0	118.1 -9.5	120.4 8.0	120.3 -0.3	123.1 9.6	124.6 5.1	126.7 6.8	130.6 12.8	120.0 -1.8	126.3 5.2
US: Residential Investment Percent Change From Last Qtr (AR)	195.6 -5.0	189.3 -12.3	184.8 -9.2	184.3 -1.1	188.6 9.7	190.7 4.5	191.1 0.9	191.3 0.3	188.5 -2.9	190.4 1.0

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.

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Change in Bus. Inventories	24.5	19.1	21.9	22.2	-3.6	7.8	7.2	12.1	21.9	5.8
US: Change in Farm Inventories	7.6	-0.5	5.6	4.2	5.1	0.0	0.0	0.0	4.2	1.3
US: Change in Nonfarm Inv.	16.9	19.5	16.2	18.0	-7.8	7.8	7.2	12.1	17.7	4.8
US: Net Exports	-55.0	-51.2	-57.1	-47.2	-33.6	-30.1	-25.5	-21.7	-52.6	-27.7
US: Total Exports Percent Change From Last Qtr (AR)	569.7 14.0	587.5 13.1	593.1 3.9	606.6 9.4	625.1 12.8	638.6 8.9	651.1 8.0	661.9 6.8	589.2 11.2	644.2 9.3
US: Total Imports Percent Change From Last Qtr (AR)	624.6 -0.4	638.7 9.3	650.2 7.4	653.8 2.2	658.7 3.0	668.7 6.2	676.5 4.8	683.6 4.2	641.8 6.1	671.9 4.7
US: Total Government Purchases Percent Change From Last Qtr (AR)	799.7 -3.3	810.3 5.4	805.3 -2.4	810.4 2.6	817.3 3.4	817.6 0.1	817.9 0.2	817.7 -0.1	806.4 2.7	817.6 1.4
US: Fed. Govt. Purchases Percent Change From Last Qtr (AR)	335.5 -9.4	343.6 10.0	336.1 -8.4	333.3 -3.3	335.2 2.3	332.2 -3.6	329.8 -2.8	327.6 -2.6	337.1 2.5	331.2 -1.8
US: Fed. Defense Purchases Percent Change From Last Qtr (AR)	254.4 -10.6	255.8 2.2	260.1 6.9	255.7 -6.6	255.9 0.3	252.1 -5.9	249.0 -4.8	246.1 -4.5	256.5 -1.9	250.8 -2.2
US: Fed. Nondefense Purchases Percent Change From Last Qtr (AR)	81.1 -5.7	87.8 37.4	76.0 -43.9	77.7 9.3	79.4 9.0	80.1 3.6	80.8 3.5	81.5 3.5	80.6 19.7	80.5 -0.2
US: State and Local Govt. Purch. Percent Change From Last Qtr (AR)	464.2 1.5	466.7 2.2	469.2 2.2	477.0 6.8	482.1 4.3	485.4 2.8	488.2 2.3	490.0 1.5	469.3 2.9	486.4 3.7

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.

GNP AS EXPENDITURE - CURRENT DOLLARS

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Gross National Product	5113.1	5201.7	5281.0	5340.2	5433.1	5545.9	5640.5	5744.5	5234.0	5591.0
Percent Change From Last Qtr (AR)	7.9	7.1	6.2	4.6	7.1	8.6	7.0	7.6	7.2	6.8
US: Personal Consumption Expend.	3381.4	3444.1	3508.1	3550.6	3629.4	3696.3	3764.3	3831.0	3471.1	3730.2
Percent Change From Last Qtr (AR)	7.1	7.6	7.6	4.9	9.2	7.6	7.6	7.3	7.3	7.5
US: Per. Con. Exp.-Durables	466.4	471.0	486.1	469.5	489.9	494.7	501.7	506.6	473.2	498.2
Percent Change From Last Qtr (AR)	-0.9	4.0	13.5	-13.0	18.5	4.0	5.7	4.0	4.0	5.3
US: PCE-Nondurables	1098.3	1121.5	1131.4	1142.4	1168.2	1188.5	1208.2	1226.9	1123.4	1197.9
Percent Change From Last Qtr (AR)	7.6	8.7	3.6	3.9	9.3	7.1	6.8	6.3	6.8	6.6
US: PCE-Services	1816.7	1851.7	1890.6	1938.7	1971.2	2013.0	2054.4	2097.4	1874.4	2034.0
Percent Change From Last Qtr (AR)	8.9	7.9	8.7	10.6	6.9	8.8	8.5	8.7	8.5	8.5
US: Fixed Nonresidential Invest.	503.1	512.5	519.6	511.4	526.1	534.1	544.2	558.8	511.6	540.8
Percent Change From Last Qtr (AR)	6.0	7.7	5.7	-6.2	12.0	6.2	7.8	11.1	5.0	5.7
US: Producers Durable Equipment	358.5	370.1	373.4	365.0	374.8	379.7	386.0	394.1	366.7	383.6
Percent Change From Last Qtr (AR)	6.0	13.6	3.6	-8.7	11.2	5.4	6.7	8.7	5.7	4.6
US: Investment in Structures	144.7	142.4	146.2	146.4	151.3	154.4	158.2	164.7	144.9	157.1
Percent Change From Last Qtr (AR)	6.3	-6.2	11.1	0.5	14.1	8.4	10.4	17.2	3.2	8.4
US: Residential Investment	238.8	235.1	232.1	232.6	238.5	242.3	244.5	246.8	234.7	243.0
Percent Change From Last Qtr (AR)	0.7	-6.1	-5.0	0.9	10.5	6.5	3.7	3.9	0.9	3.6

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.

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Change in Bus. Inventories	27.7	27.4	27.4	26.1	-11.7	9.6	9.2	15.4	27.2	5.6
US: Change in Farm Inventories	8.6	3.8	7.5	-0.3	5.4	0.0	0.0	0.0	4.9	1.3
US: Change in Nonfarm Inv.	19.1	23.6	19.8	26.4	-16.1	9.6	9.2	15.4	22.2	4.5
US: Net Exports	-54.0	-50.6	-45.1	-38.8	-32.0	-33.6	-35.3	-36.6	-47.1	-34.4
US: Total Exports Percent Change From Last Qtr (AR)	605.6 19.1	626.1 14.2	628.5 1.5	643.5 9.9	664.7 13.8	677.1 7.7	690.5 8.2	702.9 7.4	625.9 14.3	683.8 9.2
US: Total Imports Percent Change From Last Qtr (AR)	659.6 5.7	676.6 10.7	673.6 -1.8	682.3 5.3	696.6 8.7	710.6 8.3	725.8 8.8	739.5 7.8	673.0 8.3	718.1 6.7
US: Total Government Purchases Percent Change From Last Qtr (AR)	1016.0 1.8	1033.2 6.9	1038.9 2.2	1058.3 7.7	1082.9 9.6	1097.2 5.4	1113.7 6.1	1129.2 5.7	1036.6 7.0	1105.7 6.7
US: Fed. Govt. Purchases Percent Change From Last Qtr (AR)	399.0 -7.1	406.0 7.2	402.7 -3.2	405.1 2.4	413.7 8.8	413.4 -0.3	415.3 1.9	417.3 1.9	403.2 5.8	414.9 2.9
US: Fed. Defense Purchases Percent Change From Last Qtr (AR)	298.7 -2.4	301.3 3.5	307.8 8.9	300.9 -8.7	308.6 10.6	306.6 -2.6	306.6 0.1	306.2 -0.6	302.2 1.4	307.0 1.6
US: Fed. Nondefense Purchases Percent Change From Last Qtr (AR)	100.4 -19.2	104.7 18.3	94.9 -32.5	104.2 45.3	105.1 3.5	106.8 6.5	108.6 7.2	111.1 9.3	101.0 21.3	107.9 6.8
US: State and Local Govt. Purch. Percent Change From Last Qtr (AR)	617.0 8.2	627.2 6.8	636.2 5.9	653.2 11.1	669.2 10.2	683.9 9.1	698.4 8.8	711.9 8.0	633.4 7.8	690.8 9.1

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, MNP, NAT. INCOME & PERS. INCOME
1989Q1

	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Gross National Product Percent Change From Last Qtr (AR)	5113.1 7.9	5201.7 7.1	5281.0 6.2	5340.2 4.6	5433.1 7.1	5545.9 8.6	5744.5 7.6	5234.0 7.2	5591.0 6.8
US: Cap. Cons. Allow. with Adj. Percent Change From Last Qtr (AR)	533.0 7.0	541.0 6.1	565.2 19.1	570.1 3.5	562.1 -5.5	570.9 6.4	590.1 6.9	552.3 7.6	575.8 4.3
US: Cap. Cons. Allow w/o Adj. Percent Change From Last Qtr (AR)	532.7 1.1	533.7 0.8	544.7 8.5	545.4 0.5	536.6 -6.3	545.5 6.8	564.7 7.3	539.1 2.4	550.4 2.1
US: Cap. Cons. Adjustment, Total	-0.3	-7.3	-20.5	-24.7	-25.4	-25.4	-25.4	-13.2	-25.4
US: Net National Product Percent Change From Last Qtr (AR)	4580.1 8.0	4660.8 7.2	4715.7 4.8	4770.1 4.7	4871.0 8.7	4975.0 8.8	5154.5 7.7	4681.7 7.2	5015.2 7.1
US: Indirect Business Taxes Percent Change From Last Qtr (AR)	407.7 5.1	413.4 5.7	421.5 8.1	425.2 3.6	434.1 8.6	444.0 9.4	466.3 10.2	417.0 6.0	449.9 7.9
US: Business Transfer Payments Percent Change From Last Qtr (AR)	30.8 9.6	31.5 9.4	32.2 9.2	32.9 9.0	33.6 8.8	34.4 9.3	35.9 8.9	31.9 9.6	34.7 9.0
US: Statistical Discrepancy	-24.1	-18.3	-25.5	-29.8	0.0	0.0	0.0	-24.4	0.0
US: Sub. Less Cur. Sur.-Gov. E. Percent Change From Last Qtr (AR)	19.5 -16.5	15.5 -60.1	-0.3 -100.0	2.2 289104.9	9.3 31833.1	3.5 -98.0	3.3 -11.3	9.2 -50.0	4.9 -47.2
US: National Income Percent Change From Last Qtr (AR)	4185.2 8.9	4249.6 6.3	4287.3 3.6	4344.0 5.4	4438.3 9.0	4500.1 5.7	4655.6 7.4	4266.5 7.4	4541.9 6.5

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.

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Corp. Prof. w. IVA + CCADJ	316.3	307.8	295.2	285.9	289.7	281.6	278.8	281.9	301.3	283.0
Percent Change From Last Qtr (AR)	-25.3	-10.3	-15.4	-12.0	5.4	-10.7	-4.0	4.6	-8.3	-6.1
US: Net Interest	436.1	458.4	471.5	477.2	480.4	483.6	487.3	492.3	460.8	485.9
Percent Change From Last Qtr (AR)	21.1	22.1	11.9	4.9	2.7	2.7	3.0	4.2	17.3	5.4
US: Cont. to Soc. Ins.-Total	469.7	476.4	482.0	488.7	505.1	513.3	521.7	530.3	479.2	517.6
Percent Change From Last Qtr (AR)	13.4	5.8	4.8	5.7	14.1	6.7	6.7	6.8	7.8	8.0
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	585.6	595.3	604.2	616.8	638.9	654.1	665.4	677.7	600.5	659.0
Percent Change From Last Qtr (AR)	16.5	6.8	6.1	8.6	15.1	9.9	7.1	7.6	8.1	9.7
US: Personal Interest Income	629.0	655.1	667.8	677.7	685.2	692.9	701.3	710.9	657.4	697.6
Percent Change From Last Qtr (AR)	21.9	17.7	8.0	6.1	4.5	4.6	4.9	5.6	15.1	6.1
US: Personal Dividend Income	109.4	111.4	113.2	115.7	118.0	120.3	122.5	124.8	112.4	121.4
Percent Change From Last Qtr (AR)	11.8	7.5	6.6	9.1	8.2	7.9	7.7	7.7	10.1	8.0
US: Personal Income	4317.8	4400.3	4455.9	4535.3	4638.8	4723.5	4809.8	4900.2	4427.3	4768.1
Percent Change From Last Qtr (AR)	13.3	7.9	5.2	7.3	9.4	7.5	7.5	7.7	8.9	7.7

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.

DISPOSITION OF PERSONAL INCOME - CURRENT DOLLARS		1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Personal Income		4317.8	4400.3	4455.9	4535.3	4638.8	4723.5	4809.8	4900.2	4427.3	4768.1
Percent Change From Last Qtr (AR)		13.3	7.9	5.2	7.3	9.4	7.5	7.5	7.7	8.9	7.7
US: Wage and Salary Disburse.		2560.7	2608.8	2654.7	2700.1	2745.5	2797.0	2850.1	2905.0	2631.1	2824.4
Percent Change From Last Qtr (AR)		9.2	7.7	7.2	7.0	6.9	7.7	7.8	7.9	8.3	7.3
US: Other Labor Income		241.3	246.0	250.7	255.3	261.5	267.5	273.3	279.2	248.3	270.4
Percent Change From Last Qtr (AR)		8.4	8.0	7.9	7.5	10.1	9.4	9.1	8.8	8.5	8.9
US: Total Proprietors Inc.		359.3	355.5	343.3	350.3	374.6	380.0	389.6	398.5	352.1	385.7
Percent Change From Last Qtr (AR)		43.5	-4.2	-13.0	8.4	30.8	5.9	10.5	9.4	7.4	9.5
US: Farm Proprietors Inc.		59.0	51.3	36.1	38.5	51.9	48.2	49.4	50.3	46.2	50.0
Percent Change From Last Qtr (AR)		1055.6	-42.8	-75.5	29.4	230.2	-25.4	10.0	7.4	16.2	8.1
US: Nonfarm Proprietors Inc.		300.3	304.2	307.2	311.8	322.7	331.8	340.2	348.2	305.9	335.7
Percent Change From Last Qtr (AR)		5.5	5.3	4.0	6.1	14.7	11.8	10.6	9.8	6.2	9.8
US: Rental Income of Persons		11.8	9.8	5.4	4.8	8.1	7.7	7.2	6.9	7.9	7.5
Percent Change From Last Qtr (AR)		-71.1	-52.4	-90.8	-37.6	710.9	-20.1	-19.7	-19.5	-49.2	-6.1
US: Personal Interest Income		629.0	655.1	667.8	677.7	685.2	692.9	701.3	710.9	657.4	697.6
Percent Change From Last Qtr (AR)		21.9	17.7	8.0	6.1	4.5	4.6	4.9	5.6	15.1	6.1
US: Personal Dividend Income		109.4	111.4	113.2	115.7	118.0	120.3	122.5	124.8	112.4	121.4
Percent Change From Last Qtr (AR)		11.8	7.5	6.6	9.1	8.2	7.9	7.7	7.7	10.1	8.0
US: Total Transfer Payments		616.4	626.8	636.4	649.7	672.5	688.4	700.5	713.5	632.3	693.7
Percent Change From Last Qtr (AR)		16.1	6.9	6.3	8.6	14.8	9.8	7.2	7.7	8.1	9.7

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.

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Tot. Pers. Tax + Nontax Pay Percent Change From Last Qtr (AR)	628.3 22.0	652.6 16.4	649.1 -2.1	664.1 9.6	672.3 5.0	696.0 14.9	712.6 9.8	729.3 9.7	648.5 10.5	702.6 8.3
US: Disposable Personal Income Percent Change From Last Qtr (AR)	3689.5 11.9	3747.7 6.5	3806.8 6.5	3871.3 7.0	3966.5 10.2	4027.5 6.3	4097.2 7.1	4170.9 7.4	3778.8 8.7	4065.5 7.6
US: Personal Consumption Expend. Percent Change From Last Qtr (AR)	3381.4 7.1	3444.1 7.6	3508.1 7.6	3550.6 4.9	3629.4 9.2	3696.3 7.6	3764.3 7.6	3831.0 7.3	3471.1 7.3	3730.2 7.5
US: Int. Paid by Cons. to Bus. Percent Change From Last Qtr (AR)	100.1 8.4	101.5 5.7	102.0 2.0	103.1 4.4	104.4 5.1	106.1 6.8	107.8 6.5	109.4 6.2	101.7 5.7	107.0 5.2
US: Pers. Trans. Pay. to For. Percent Change From Last Qtr (AR)	2.2 79.8	1.4 -83.6	1.6 70.6	1.5 -22.8	1.9 157.4	1.9 0.0	1.9 0.0	1.9 0.0	1.7 -9.5	1.9 13.4
US: Personal Saving Percent Change From Last Qtr (AR)	205.7 151.1	200.7 -9.4	195.1 -10.7	216.0 50.2	231.5 31.9	223.2 -13.6	223.2 0.1	228.6 10.0	204.4 41.2	226.6 10.9
US: Disposable Personal Income Percent Change From Last Qtr (AR)	2881.7 6.6	2887.6 0.8	2919.2 4.4	2936.9 2.4	2955.4 2.5	2964.3 1.2	2971.5 1.0	2979.9 1.1	2906.3 4.1	2967.8 2.1
US: YSAV as a Percent of YPD	5.6	5.4	5.1	5.6	5.8	5.5	5.4	5.5	5.4	5.6

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.

NATIONAL INCOME - CURRENT DOLLARS

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: National Income	4185.2	4249.6	4287.3	4344.0	4438.3	4500.1	4573.5	4655.6	4266.5	4541.9
Percent Change From Last Qtr (AR)	8.9	6.3	3.6	5.4	9.0	5.7	6.7	7.4	7.4	6.5
US: Wages and Salaries	2560.7	2608.8	2654.7	2700.1	2745.5	2797.0	2850.1	2905.0	2631.1	2824.4
Percent Change From Last Qtr (AR)	9.2	7.7	7.2	7.0	6.9	7.7	7.8	7.9	8.3	7.3
US: W. and S.-Govt. + Govt. Ent.	466.9	473.5	480.2	487.0	496.9	501.5	506.9	512.3	476.9	504.4
Percent Change From Last Qtr (AR)	9.6	5.8	5.8	5.8	8.4	3.8	4.3	4.3	6.8	5.8
US: W. and S.-Other	2093.8	2135.3	2174.5	2213.1	2248.6	2295.5	2343.2	2392.7	2154.2	2320.0
Percent Change From Last Qtr (AR)	9.1	8.2	7.5	7.3	6.6	8.6	8.6	8.7	8.7	7.7
US: Supplements to w. and s.	501.0	509.4	517.2	525.8	540.0	550.2	560.5	571.0	513.3	555.4
Percent Change From Last Qtr (AR)	7.5	6.9	6.3	6.8	11.2	7.7	7.7	7.7	7.3	8.2
US: Emp. Cont. to Soc. Ins.	259.7	263.4	266.6	270.4	278.5	282.7	287.1	291.8	265.0	285.0
Percent Change From Last Qtr (AR)	6.6	5.8	4.9	5.8	12.5	6.2	6.4	6.7	6.1	7.6
US: Other Labor Income	241.3	246.0	250.7	255.3	261.5	267.5	273.3	279.2	248.3	270.4
Percent Change From Last Qtr (AR)	8.4	8.0	7.9	7.5	10.1	9.4	9.1	8.8	8.5	8.9
US: Total Proprietors Inc.	359.3	355.5	343.3	350.3	374.6	380.0	389.6	398.5	352.1	385.7
Percent Change From Last Qtr (AR)	43.5	-4.2	-13.0	8.4	30.8	5.9	10.5	9.4	7.4	9.5
US: Farm Proprietors Inc.	59.0	51.3	36.1	38.5	51.9	48.2	49.4	50.3	46.2	50.0
Percent Change From Last Qtr (AR)	1055.6	-42.8	-75.5	29.4	230.2	-25.4	10.0	7.4	16.2	8.1
US: Nonfarm Proprietors Inc.	300.3	304.2	307.2	311.8	322.7	331.8	340.2	348.2	305.9	335.7
Percent Change From Last Qtr (AR)	5.5	5.3	4.0	6.1	14.7	11.8	10.6	9.8	6.2	9.8

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	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Rental Income of Persons Percent Change From Last Qtr (AR)	11.8 -71.1	9.8 -52.4	5.4 -90.8	4.8 -37.6	8.1 710.9	7.7 -20.1	7.2 -19.7	6.9 -19.5	7.9 -49.2	7.5 -6.1
US: Corp. Prof. w. IVA + CCADJ Percent Change From Last Qtr (AR)	316.3 -25.3	307.8 -10.3	295.2 -15.4	285.9 -12.0	289.7 5.4	281.6 -10.7	278.8 -4.0	281.9 4.6	301.3 -8.3	283.0 -6.1
US: Net Interest Percent Change From Last Qtr (AR)	436.1 21.1	458.4 22.1	471.5 11.9	477.2 4.9	480.4 2.7	483.6 2.7	487.3 3.0	492.3 4.2	460.8 17.3	485.9 5.4
US: Corp. Prof. before Tax Percent Change From Last Qtr (AR)	318.0 -1.0	296.0 -24.9	275.0 -25.5	273.7 -1.9	283.3 14.8	275.3 -10.9	275.2 -0.0	279.4 6.2	290.7 -5.3	278.3 -4.3
US: Profits Tax Liability Percent Change From Last Qtr (AR)	144.4 3.4	134.9 -23.8	122.6 -31.8	116.9 -17.3	124.8 29.9	121.8 -9.1	120.7 -3.6	120.5 -0.8	129.7 -6.0	122.0 -6.0
US: Corp. Prof. after Taxes Percent Change From Last Qtr (AR)	173.6 -4.5	161.1 -25.8	152.4 -19.9	156.7 11.8	158.5 4.7	153.4 -12.2	154.5 2.9	158.9 11.9	161.0 -4.7	156.3 -2.9
US: Dividends-Total Percent Change From Last Qtr (AR)	118.5 12.0	120.9 8.4	123.3 8.2	125.6 7.7	128.1 8.2	130.7 8.4	133.3 8.3	136.1 8.4	122.1 10.6	132.1 8.2
US: Undistributed Corp. Prof. Percent Change From Last Qtr (AR)	55.1 -30.7	40.2 -71.7	29.1 -72.5	31.1 30.5	30.4 -8.7	22.7 -68.9	21.2 -24.6	22.8 35.7	38.9 -33.5	24.3 -37.5
US: Inventory Valuation Adj.	-38.3	-20.5	-6.3	-9.7	-11.1	-8.3	-9.1	-8.8	-18.7	-9.3
US: Corp. Cap. Cons. Adj.	36.6	32.3	26.5	21.9	17.5	14.7	12.6	11.3	29.3	14.0
US: Net Interest Percent Change From Last Qtr (AR)	436.1 21.1	458.4 22.1	471.5 11.9	477.2 4.9	480.4 2.7	483.6 2.7	487.3 3.0	492.3 4.2	460.8 17.3	485.9 5.4

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.

PRICE DEFLATORS

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: CPI-All items Percent Change From Last Qtr (AR)	1.2 5.4	1.2 6.0	1.2 2.8	1.3 4.0	1.3 8.1	1.3 8.1	1.3 6.4	1.4 6.6	1.2 4.8	1.3 6.2
US: Implicit Deflator - GNP Percent Change From Last Qtr (AR)	1.2 4.0	1.3 4.5	1.3 3.2	1.3 3.4	1.3 5.2	1.3 4.7	1.3 4.9	1.3 5.0	1.3 4.1	1.3 4.4
US: Implicit Deflator - C Percent Change From Last Qtr (AR)	1.3 4.9	1.3 5.6	1.3 1.9	1.3 4.4	1.3 7.5	1.4 5.0	1.4 6.1	1.4 6.2	1.3 4.4	1.4 5.4
US: Implicit Deflator - IOIL Percent Change From Last Qtr (AR)	0.5 113.1	0.6 100.2	0.5 -30.7	0.6 22.9	0.6 56.3	0.6 -18.2	0.6 3.4	0.6 2.9	0.5 19.3	0.6 12.1

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

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: Civilian Labor Force Percent Change From Last Qtr (AR)	123.2 2.5	123.8 1.8	124.0 0.9	124.4 1.2	124.6 0.7	125.1 1.6	125.6 1.4	126.0 1.4	123.8 1.8	125.3 1.2
US: Civilian Employment Percent Change From Last Qtr (AR)	116.9 3.0	117.4 1.7	117.5 0.6	117.8 1.0	118.2 1.2	118.4 0.6	118.8 1.4	119.2 1.4	117.4 2.0	118.6 1.0
US: Unemployment Percent Change From Last Qtr (AR)	6.3 -5.1	6.4 4.5	6.5 6.2	6.6 3.8	6.4 -6.7	6.8 21.9	6.8 0.8	6.8 2.0	6.4 -2.3	6.7 4.0
US: Unemployment Rate-Total	5.1	5.2	5.2	5.3	5.2	5.4	5.4	5.4	5.2	5.3
US: Tot. Nonfarm Empl. Percent Change From Last Qtr (AR)	107.7 3.3	108.3 2.5	108.9 2.1	109.4 1.8	110.2 2.9	111.0 3.1	111.8 2.7	112.5 2.6	108.6 2.8	111.4 2.6
US: Total Govt. Empl. Percent Change From Last Qtr (AR)	17.6 1.5	17.7 2.3	17.8 2.9	17.8 0.9	18.0 3.7	17.9 -1.4	17.9 -0.4	17.9 -0.4	17.7 2.0	17.9 1.2
US: Fed. Govt. Empl. Percent Change From Last Qtr (AR)	3.0 -0.3	3.0 1.5	3.0 0.8	3.0 -2.4	3.0 5.6	3.0 -5.9	3.0 -1.3	3.0 -1.3	3.0 0.6	3.0 -0.3
US: S & L Govt. Empl. Percent Change From Last Qtr (AR)	14.6 1.9	14.7 2.5	14.8 3.4	14.9 1.6	15.0 3.3	15.0 -0.5	15.0 -0.3	14.9 -0.3	14.7 2.4	15.0 1.5
US: Output Per Manhour-Pr. Nonag. Percent Change From Last Qtr (AR)	19.0 1.0	19.1 0.5	19.1 0.8	19.1 -0.4	19.1 -0.4	19.1 1.5	19.1 -0.1	19.1 0.4	19.1 0.4	19.1 0.2

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.

FINANCIAL AND GOVERNMENT BUDGET DEFECIT	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
US: M1 Money Supply Percent Change From Last Qtr (AR)	786.0 -0.1	777.3 -4.3	780.8 1.8	790.8 5.2	800.2 4.8	809.0 4.5	818.0 4.5	826.9 4.4	783.7 1.0	813.5 3.8
US: M2 Money Supply Percent Change From Last Qtr (AR)	3079.6 2.3	3092.1 1.6	3145.7 7.1	3200.7 7.2	3250.3 6.4	3295.2 5.6	3340.0 5.5	3386.4 5.7	3129.5 3.7	3318.0 6.0
US: 3-Month T-Bill Rate	8.5	8.4	7.8	7.6	7.8	7.8	8.0	8.2	8.1	8.0
US: Prime Rate Charged By Banks	11.0	11.4	10.7	10.5	10.0	10.1	10.5	10.7	10.9	10.3
US: Moodys AAA Corp. Bond Rate	9.7	9.5	9.0	8.9	9.2	9.5	9.5	9.5	9.3	9.4
US: Federal Govt. Surplus	-147.5	-145.4	-144.7	-156.5	-170.9	-160.9	-159.6	-158.0	-148.5	-162.3

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

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS EMP: Civilian Labor Force Percent Change From One Year Ago	1263.5 -0.2	1298.3 -0.1	1298.3 1.0	1279.9 0.2	1285.4 1.7	1316.6 1.4	1313.1 1.1	1300.2 1.6	1285.0 -0.2	1303.8 1.5
KS EMP: Employed Percent Change From One Year Ago	1206.0 0.4	1245.9 0.9	1248.8 1.8	1231.3 0.8	1231.9 2.1	1263.8 1.4	1256.3 0.6	1247.3 1.3	1233.0 1.0	1249.8 1.4
KS EMP: Unemployed Percent Change From One Year Ago	57.6 -12.1	52.4 -18.1	49.6 -16.1	48.5 -12.6	53.6 -6.9	52.8 0.9	56.8 14.6	52.9 9.0	52.0 -14.7	54.0 3.9
KS EMP: Unemployment Rate	4.5	4.0	3.8	3.8	4.2	4.0	4.3	4.1	4.0	4.1
KS EMP: Adj. for Res. & Self Emp. Percent Change From One Year Ago	114.3 -16.9	111.9 -15.6	113.8 -13.7	83.3 -23.7	94.3 -17.5	100.7 -10.0	103.6 -9.0	98.8 18.7	105.8 -17.2	99.4 -6.1
KS EMP: Farm Percent Change From One Year Ago	48.9 -2.9	60.6 -3.0	67.9 5.9	61.4 12.5	60.7 24.3	71.7 18.2	72.1 6.3	52.0 -15.2	59.7 3.1	64.1 7.4
KS EMP: Total Non-farm Wage & Salary Percent Change From One Year Ago	1042.8 3.0	1073.4 3.2	1067.1 3.5	1086.7 2.7	1076.8 3.3	1091.4 1.7	1080.6 1.3	1096.5 0.9	1067.5 3.1	1086.3 1.8
KS EMP: Mining Percent Change From One Year Ago	9.2 -13.7	9.4 -12.7	9.5 -8.1	9.3 -5.1	9.4 1.8	9.5 0.5	9.7 2.3	9.5 1.7	9.4 -10.0	9.5 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.

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS EMP: Oil & Gas Extraction Percent Change From One Year Ago	8.1 -13.5	8.1 -12.6	8.2 -7.9	8.1 -4.0	8.2 0.8	8.1 -0.1	8.3 2.0	8.2 1.2	8.1 -9.6	8.2 1.0
KS EMP: Mining Residual Percent Change From One Year Ago	1.1 -15.4	1.3 -13.3	1.3 -9.1	1.3 -11.6	1.2 9.1	1.4 4.6	1.4 4.7	1.3 4.6	1.2 -12.3	1.3 5.6
KS EMP: Construction Percent Change From One Year Ago	35.0 -4.6	41.1 -6.2	43.8 -1.9	42.0 1.9	38.7 10.5	45.3 10.2	47.4 8.1	44.6 6.2	40.5 -2.7	44.0 8.7
KS EMP: Non-durable Goods Percent Change From One Year Ago	75.0 0.9	76.5 2.1	75.5 0.8	75.6 0.2	76.8 2.4	78.2 2.3	78.6 4.0	78.2 3.4	75.6 1.0	77.9 3.0
KS EMP: Food & Kindred Percent Change From One Year Ago	26.9 0.4	26.8 1.3	26.7 -0.1	27.0 -3.0	27.0 0.5	27.5 2.8	28.1 5.0	28.0 3.9	26.8 -0.4	27.7 3.0
KS EMP: Apparel Percent Change From One Year Ago	3.3 -13.9	3.5 -10.2	3.7 -3.5	3.6 -0.9	3.7 11.1	3.7 5.0	3.7 1.2	3.6 0.1	3.5 -7.2	3.7 4.2
KS EMP: Printing & Publishing Percent Change From One Year Ago	19.5 -2.7	20.3 1.0	19.8 1.4	19.8 2.6	20.7 6.0	21.0 3.2	20.5 3.5	20.6 3.9	19.9 0.5	20.7 4.1
KS EMP: Chemicals & Allied Prod. Percent Change From One Year Ago	7.9 0.9	7.9 0.9	7.8 0.4	7.8 0.4	7.7 -2.5	7.7 -2.1	7.7 -0.5	7.6 -2.6	7.8 0.6	7.7 -2.0
KS EMP: Petroleum & Coal Percent Change From One Year Ago	11.8 5.4	12.0 5.0	11.7 0.6	11.5 -1.4	11.9 1.4	12.3 2.5	12.4 6.1	12.2 6.6	11.7 2.3	12.2 4.1
KS EMP: Non-durables Residual Percent Change From One Year Ago	5.7 21.4	5.9 16.3	5.8 8.1	5.9 11.9	5.8 2.4	6.0 0.4	6.1 4.9	6.1 3.5	5.8 14.2	6.0 2.8

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	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS EMP: Durable Goods Percent Change From One Year Ago	108.3 3.0	108.9 2.2	109.5 2.1	109.3 1.4	107.4 -0.8	107.5 -1.3	107.0 -2.2	108.0 -1.2	109.0 2.2	107.5 -1.4
KS EMP: Stone Glass Clay Percent Change From One Year Ago	6.0 1.1	6.4 4.3	6.6 6.4	6.3 -0.5	6.1 1.1	6.4 0.3	6.5 -1.5	6.4 2.3	6.3 2.8	6.4 0.5
KS EMP: Primary Metals Percent Change From One Year Ago	3.0 0.0	3.0 -5.3	3.1 -6.1	3.1 -5.1	3.1 2.2	3.1 3.1	3.1 0.6	3.1 -0.1	3.0 -4.2	3.1 1.4
KS EMP: Fabricated Metals Percent Change From One Year Ago	11.4 3.0	11.4 0.6	10.8 -5.3	10.5 -7.6	10.7 -5.6	10.8 -5.0	10.8 0.1	10.6 0.8	11.0 -2.4	10.7 -2.5
KS EMP: Machinery, Incl. Electrical Percent Change From One Year Ago	28.1 -1.1	28.5 -0.7	28.7 -0.5	28.8 0.3	29.0 3.3	29.0 2.0	29.1 1.2	29.3 1.8	28.5 -0.5	29.1 2.1
KS EMP: Transportation Equipment Percent Change From One Year Ago	49.3 6.1	49.1 4.8	49.8 6.3	50.4 5.9	48.6 -1.5	47.7 -2.8	47.0 -5.8	48.2 -4.4	49.6 5.8	47.9 -3.6
KS EMP: Durables Residual Percent Change From One Year Ago	10.5 1.9	10.6 1.3	10.4 -1.6	10.2 -3.5	10.0 -5.1	10.5 -1.3	10.6 1.3	10.4 1.4	10.4 -0.5	10.4 -0.9
KS EMP: Transportation & Utilities Percent Change From One Year Ago	65.0 3.0	66.1 3.3	66.3 3.1	66.5 2.6	66.0 1.6	67.3 1.8	67.7 2.2	67.8 1.9	66.0 3.0	67.2 1.9
KS EMP: Railroads Percent Change From One Year Ago	8.7 -2.6	8.8 -2.9	8.5 -5.9	8.4 -7.0	8.2 -6.1	8.2 -7.3	8.2 -3.6	8.1 -4.0	8.6 -4.6	8.2 -5.3
KS EMP: Trucking & Warehousing Percent Change From One Year Ago	22.2 0.3	23.0 0.9	23.2 1.2	23.3 4.0	23.0 3.5	24.1 4.7	24.5 5.8	24.4 4.4	22.9 1.6	24.0 4.6

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	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS EMP: Electric Gas & Sanitary Serv Percent Change From One Year Ago	12.6 4.1	12.6 3.6	12.8 4.1	12.7 3.0	12.6 0.0	12.8 1.3	13.0 1.2	12.7 0.0	12.7 3.7	12.8 0.6
KS EMP: Trans. & Utilities Residual Percent Change From One Year Ago	21.4 7.7	21.7 8.7	21.8 8.6	22.1 5.1	22.3 3.9	22.3 2.7	22.0 1.1	22.6 2.6	21.8 7.5	22.3 2.6
KS EMP: Wholesale Trade Percent Change From One Year Ago	68.3 1.2	69.9 0.8	69.7 0.3	69.6 0.6	70.0 2.6	71.3 1.9	71.5 2.6	70.2 0.9	69.4 0.7	70.8 2.0
KS EMP: Retail Trade Percent Change From One Year Ago	190.9 2.9	197.1 3.1	199.7 3.4	202.8 3.2	197.4 3.4	201.0 2.0	202.2 1.3	205.2 1.2	197.6 3.2	201.5 1.9
KS EMP: Gen. Merchandise Stores Percent Change From One Year Ago	26.8 2.6	27.2 3.8	27.9 7.0	30.1 8.7	28.2 5.3	27.8 2.3	27.8 -0.4	29.6 -1.7	28.0 5.6	28.4 1.3
KS EMP: Food Stores Percent Change From One Year Ago	27.9 4.2	28.2 5.6	28.4 3.0	28.9 1.5	28.6 2.5	28.7 1.9	29.0 1.8	29.4 1.7	28.3 3.6	28.9 2.0
KS EMP: Auto. Dealers & Gas Stations Percent Change From One Year Ago	24.2 2.4	24.6 -0.5	24.5 -2.6	24.4 -0.7	24.1 -0.6	24.5 -0.5	24.5 -0.1	24.2 -0.8	24.4 -0.4	24.3 -0.5
KS EMP: Apparel & Accessory Stores Percent Change From One Year Ago	11.0 0.3	11.2 2.4	11.4 2.1	12.2 6.1	11.3 3.0	11.3 0.2	11.3 -0.9	11.9 -2.2	11.5 2.8	11.5 -0.0
KS EMP: Retail Trade Residual Percent Change From One Year Ago	101.1 3.1	106.0 3.1	107.3 4.1	107.3 2.9	105.3 4.2	108.8 2.6	109.6 2.1	110.2 2.7	105.4 3.3	108.4 2.9
KS EMP: Finance, Insurance, R.E. Percent Change From One Year Ago	57.3 0.7	58.2 0.3	58.6 0.5	58.5 1.3	58.9 2.7	59.7 2.6	59.9 2.2	58.9 0.7	58.1 0.7	59.3 2.1

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	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS EMP: Banking Percent Change From One Year Ago	24.7 0.7	25.0 0.8	25.0 0.5	24.9 1.1	25.0 1.2	25.0 0.1	25.0 -0.1	24.6 -1.4	24.9 0.8	24.9 -0.0
KS EMP: Insurance Percent Change From One Year Ago	12.8 11.0	12.8 9.7	12.9 6.6	13.0 3.5	13.0 1.6	13.2 2.7	13.3 3.0	13.3 2.9	12.9 7.6	13.2 2.5
KS EMP: F.I.R.E. Residual Percent Change From One Year Ago	19.9 -4.9	20.4 -5.3	20.6 -3.1	20.6 0.3	20.9 5.4	21.5 5.4	21.6 4.6	21.0 1.9	20.4 -3.3	21.2 4.3
KS EMP: Services Percent Change From One Year Ago	222.2 7.2	231.3 8.1	235.6 8.0	234.8 6.2	234.8 5.7	240.6 4.0	241.5 2.5	242.2 3.2	231.0 7.4	239.8 3.8
KS EMP: Hotels & Lodging Percent Change From One Year Ago	9.0 -3.6	9.8 0.7	9.9 -0.3	9.6 -0.3	9.3 3.7	9.9 1.7	10.3 4.2	10.0 3.5	9.6 -0.9	9.9 3.3
KS EMP: Personal Services Percent Change From One Year Ago	11.7 2.9	11.0 0.3	10.8 -0.3	10.5 -4.0	11.5 -1.1	11.2 1.7	10.9 1.7	11.0 4.6	11.0 -0.2	11.2 1.7
KS EMP: Services Residual Percent Change From One Year Ago	201.6 8.0	210.5 9.0	214.9 8.9	214.7 7.0	214.0 6.2	219.4 4.3	220.2 2.5	221.2 3.1	210.4 8.2	218.7 4.0
KS EMP: Federal Gov. Percent Change From One Year Ago	29.3 2.0	29.8 1.1	29.4 -0.8	29.5 1.3	29.4 0.2	29.6 -0.7	29.2 -0.8	28.6 -3.2	29.5 0.9	29.2 -1.1
KS EMP: State & Local Gov. Percent Change From One Year Ago	182.3 2.9	185.1 4.0	169.6 5.6	188.6 2.0	187.9 3.1	181.5 -1.9	166.0 -2.1	183.2 -2.9	181.4 3.6	179.7 -1.0

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Institute for Public Policy and Business Research, University of Kansas										18JUL90	19
HOURS AND WAGES										1990Q4	1990
Kansas Forecast										1989	1990
	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990	
KS HRS/WK: Food & Kindred Products Percent Change From One Year Ago	38.7 -1.5	40.4 -0.7	41.8 1.8	40.2 -2.3	39.2 1.3	39.2 -3.0	39.7 -4.9	39.2 -2.5	40.2 -0.7	39.3 -2.3	
KS HRS/WK: Apparel&Other Fin. Prod. Percent Change From One Year Ago	36.4 -8.3	36.9 -5.1	37.7 -1.1	37.9 1.3	36.7 0.8	37.0 0.3	37.1 -1.4	37.0 -2.5	37.2 -3.4	36.9 -0.7	
KS HRS/WK: Pet. Refining & Rel. Ind. Percent Change From One Year Ago	43.8 -0.7	42.5 -4.5	39.4 -9.4	40.6 -7.1	40.0 -8.5	40.7 -4.2	40.8 3.4	40.7 0.1	41.6 -5.4	40.6 -2.5	
KS HRS/WK: Fabricated Metal Products Percent Change From One Year Ago	37.4 -4.6	37.0 -1.9	36.1 -6.4	37.5 -1.7	36.3 -2.9	36.7 -0.9	36.6 1.3	36.5 -2.8	37.0 -3.7	36.5 -1.3	
KS HRS/WK: Machinery, Incl. Elec. Percent Change From One Year Ago	41.6 -2.8	40.6 -5.6	40.8 -0.3	41.9 0.7	40.8 -1.8	40.8 0.5	40.0 -2.1	41.0 -2.2	41.2 -2.0	40.6 -1.4	
KS HRS/WK: Transportation Equipment Percent Change From One Year Ago	42.0 2.9	42.0 2.7	41.3 3.3	34.1 -18.6	40.9 -2.6	40.3 -4.0	39.8 -3.6	40.8 19.6	39.8 -2.6	40.5 1.5	
KS WAGE/HR: Food & Kindred Products Percent Change From One Year Ago	9.3 6.2	9.3 1.7	9.4 4.2	9.3 2.9	9.0 -3.5	8.8 -5.1	8.7 -7.8	8.6 -6.7	9.3 3.7	8.8 -5.8	
KS WAGE/HR: Apparel&Other Fin. Prod. Percent Change From One Year Ago	5.6 6.3	5.5 4.0	5.6 0.7	5.6 1.2	5.6 -0.2	5.6 0.2	5.6 0.0	5.6 0.6	5.6 3.0	5.6 0.2	
KS WAGE/HR: Pet. Refining & Rel. Ind. Percent Change From One Year Ago	12.2 3.8	12.1 2.3	12.1 -0.9	12.2 1.1	11.6 -4.7	11.5 -5.0	11.3 -6.5	11.2 -7.9	12.1 1.5	11.4 -6.0	
KS WAGE/HR: Fabricated Metal Product Percent Change From One Year Ago	8.6 6.1	8.6 6.2	8.6 2.1	8.7 4.4	8.7 1.0	8.8 2.0	8.9 3.4	8.9 3.0	8.6 4.7	8.8 2.4	
KS WAGE/HR: Machinery, Incl. Elec. Percent Change From One Year Ago	9.7 1.1	9.6 1.1	9.7 2.2	9.8 -0.9	9.7 0.2	9.8 1.5	9.9 1.5	9.9 1.1	9.7 0.9	9.8 1.1	
KS WAGE/HR: Transportation Equipment Percent Change From One Year Ago	13.2 12.0	12.8 6.5	13.2 5.6	13.1 1.0	13.5 2.2	13.7 7.2	14.0 5.7	14.3 9.0	13.1 6.1	13.9 6.0	

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WAGE BILLS

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS WG BILL: Total Wages & Salaries Percent Change From One Year Ago	21709.0 6.0	22065.0 4.6	22172.0 5.0	22261.0 3.8	22805.1 5.0	23210.0 5.2	23473.5 5.9	23818.3 7.0	22051.8 4.8	23326.7 5.8
KS WG BILL: Farm Wages & Salaries Percent Change From One Year Ago	154.0 -1.3	155.0 0.0	157.0 1.9	158.0 2.6	159.3 3.4	160.4 3.5	161.6 2.9	162.6 2.9	156.0 0.8	161.0 3.2
KS WG BILL: Agricultural Services Percent Change From One Year Ago	81.0 6.6	85.0 6.3	91.0 12.3	91.0 2.2	92.4 14.0	93.8 10.3	95.2 4.6	96.7 6.3	87.0 6.7	94.5 8.6
KS WG BILL: Mining Percent Change From One Year Ago	221.0 -11.6	219.0 -12.0	229.0 -4.2	228.0 4.1	243.8 10.3	245.1 11.9	250.6 9.4	254.6 11.7	224.3 -6.3	248.5 10.8
KS WG BILL: Construction Percent Change From One Year Ago	918.0 -3.2	907.0 -4.8	918.0 -3.2	941.0 0.4	961.7 4.8	1008.4 11.2	1020.5 11.2	1003.3 6.6	921.0 -2.7	998.5 8.4
KS WG BILL: Durable Goods Percent Change From One Year Ago	2912.0 6.4	3026.0 5.3	3000.0 4.6	2708.0 -7.0	2894.0 -0.6	2910.3 -3.8	2888.2 -3.7	2955.0 9.5	2911.5 2.3	2914.4 0.1
KS WG BILL: Nondurable Goods Percent Change From One Year Ago	1743.0 2.9	1769.0 3.6	1760.0 3.0	1821.0 7.8	1809.6 3.8	1813.0 2.5	1817.6 3.3	1831.9 0.6	1773.3 4.3	1818.0 2.5

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	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS WG BILL: Trans. & Public Utilities Percent Change From One Year Ago	1910.0 6.3	1957.0 5.1	1945.0 5.3	1963.0 5.4	1984.2 3.9	2012.1 2.8	2035.0 4.6	2071.2 5.5	1943.8 5.5	2025.6 4.2
KS WG BILL: Wholesale Trade Percent Change From One Year Ago	1745.0 6.9	1739.0 2.8	1758.0 4.2	1810.0 7.8	1854.7 6.3	1900.7 9.3	1925.2 9.5	1939.1 7.1	1763.0 5.4	1904.9 8.1
KS WG BILL: Retail Trade Percent Change From One Year Ago	2182.0 5.6	2193.0 3.0	2239.0 4.8	2253.0 2.8	2278.5 4.4	2292.8 4.6	2310.6 3.2	2331.1 3.5	2216.8 4.0	2303.3 3.9
KS WG BILL: Finance, Insurance, & R.E Percent Change From One Year Ago	1330.0 2.5	1371.0 1.2	1368.0 0.6	1432.0 2.7	1462.1 9.9	1480.2 8.0	1493.8 9.2	1490.9 4.1	1375.3 1.7	1481.8 7.7
KS WG BILL: Services Percent Change From One Year Ago	3895.0 10.7	3957.0 8.9	4037.0 8.9	4085.0 8.2	4222.7 8.4	4393.0 11.0	4525.9 12.1	4655.6 14.0	3993.5 9.1	4449.3 11.4
KS WG BILL: Govt. & Govt. Enterprises Percent Change From One Year Ago	4617.0 7.2	4685.0 6.3	4671.0 6.6	4771.0 5.0	4842.1 4.9	4900.1 4.6	4949.4 6.0	5016.2 5.1	4686.0 6.3	4926.9 5.1

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PERSONAL INCOME

	1989Q1	1989Q2	1989Q3	1989Q4	1990Q1	1990Q2	1990Q3	1990Q4	1989	1990
KS PERS INC: Total Personal Income	39847.0	40535.0	40251.0	41997.0	43037.6	43672.6	44157.2	45320.6	40657.5	44047.0
Percent Change From One Year Ago	4.0	2.7	3.5	3.9	8.0	7.7	9.7	7.9	3.5	8.3
KS PERS INC: Real Personal Income	31122.0	31232.5	30865.5	31861.5	32067.7	32143.4	32025.3	32379.4	31270.4	32154.0
Percent Change From One Year Ago	-0.5	-2.0	-0.7	-0.3	3.0	2.9	3.8	1.6	-0.9	2.8
KS PERS INC: Farm Proprietors Income	229.0	205.0	-440.0	860.0	920.6	812.4	731.6	1226.0	213.5	922.7
KS PERS INC: Non-farm Proprietors Inc	3163.0	3189.0	3221.0	3274.0	3374.0	3458.0	3536.3	3610.7	3211.8	3494.7
Percent Change From One Year Ago	5.6	4.6	4.9	4.0	6.7	8.4	9.8	10.3	4.8	8.8
KS PERS INC: Dividends Interest & Ren	7798.0	8020.0	8131.0	8275.0	8413.3	8511.5	8614.8	8732.4	8056.0	8568.0
Percent Change From One Year Ago	10.6	12.1	10.8	9.5	7.9	6.1	5.9	5.5	10.7	6.4
KS PERS INC: Adj. For Residence	1027.0	1034.0	1062.0	1100.0	1109.6	1118.9	1131.4	1148.2	1055.8	1127.0
Percent Change From One Year Ago	6.5	6.1	4.6	8.4	8.0	8.2	6.5	4.4	6.4	6.8
KS PERS INC: Pers. Cont. For Soc. Ins	1948.0	1978.0	1983.0	1973.0	2039.7	2074.1	2111.2	2149.9	1970.5	2093.7
Percent Change From One Year Ago	9.8	8.9	9.2	6.9	4.7	4.9	6.5	9.0	8.7	6.3
KS PERS INC: Transfer Payments	5724.0	5798.0	5869.0	5982.0	6179.3	6312.1	6408.4	6514.2	5843.3	6353.5
Percent Change From One Year Ago	6.5	7.0	7.3	8.1	8.0	8.9	9.2	8.9	7.2	8.7
KS PERS INC: Other Labor Income	2145.0	2201.0	2219.0	2218.0	2275.3	2323.6	2372.5	2420.8	2195.8	2348.1
Percent Change From One Year Ago	8.0	7.9	8.0	5.5	6.1	5.6	6.9	9.1	7.3	6.9

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