

Institute for Public Policy and Business Research
The University of Kansas

U.S. AND KANSAS ECONOMIC FORECASTS
MIDYEAR UPDATE 1988

by

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Preface

The Institute for Public Policy and Business Research is pleased to present this forecast, which we generated using the Kansas Econometric Model and the Indiana University Econometric Model of the United States. This report includes an executive summary and tables 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. Robert Glass helped prepare the forecasts. 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 has been responsible for the development of the supporting ARIMA model.

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Highlights

1. National economic growth will slow in 1989 following strong growth in the balance of 1988 and the first half of next year.
2. Interest rates are expected to rise modestly in 1988 and slightly faster in 1989.
3. The inflation rate will continue to increase, to an average of 4.5 percent for the first half of 1989.
4. Nonresidential investment spending and exports will drive demand for the remainder of 1988 and on into 1989.
5. The Kansas economy will also show relatively strong growth during the balance of 1988, with some slowing down likely in 1989. However, Kansas will continue to grow at a slightly slower rate than the national average over this period.
6. Durable goods, retail trade, services, and mining will lead Kansas employment growth in 1988.
7. Unemployment rates in both Kansas and the nation will fall during 1988, and they will not increase in the first half of 1989. The Kansas unemployment rate will remain below the national average.
8. In 1988 civilian employment growth in Kansas will trail national growth by nearly 0.3 percent.
9. Personal income will grow more rapidly in both Kansas and the nation during the next 12 months, but Kansas's growth will be about 1 percent slower than the nation's. During 1988, Kansas personal income will grow 5.7 percent, and U.S. personal income will grow 6.6 percent.

The National Forecast

Real GNP will grow at a 2.5 percent annual rate for the last three quarters of 1988, leading to 3.1 percent growth for the year. During the first half of 1989, GNP growth will jump to 3.2 percent. The national economy will not sustain this rapid growth, however, as higher interest rates resulting from the Federal Reserve's tightening of the money supply begin to be felt. Overall, the national economy will grow slightly more slowly in 1989 than in 1988, at about 2.9 percent.

GNP growth will continue to be driven by growth in nonresidential investment spending and exports for the remainder of 1988 and the early part of 1989. Behind the growth in nonresidential investment is the fact that businesses are facing capacity constraints. While the economy has grown, their investment in plant and equipment has remained constant. Following two years of no real growth in nonresidential investment spending, firms will increase their real investment spending 7.3 percent (annual rate) during the last three quarters of 1988. Along with the 21 percent (annual rate) increase in the first quarter, this will produce an 11.6 percent increase for the year. Higher interest rates and the added capacity resulting from 1988 investment will slow nonresidential investment spending growth to 8.4 percent (annual rate) during the first half of 1989.

To better explain this strong area of economic growth, nonresidential fixed investment can be separated into two components: structures and equipment. Producers' real purchases of durable equipment will grow 15.3 percent in 1988, but investment in structures will only increase 2.2 percent. A large proportion of equipment expenditures will be for computers, a trend that continues from last year when computer networking technology

became accessible to most businesses. But businesses' shift in investment priorities from buildings to equipment is also part of a longer term trend. While real investment spending will have grown nearly 37 percent between 1982 and 1988, real spending on equipment will have grown 67 percent, and spending on structures will have dropped 11 percent. Seventy-five cents of every dollar of firms' fixed investment in 1988 will go for equipment compared with 61 cents in 1982.

In contrast to nonresidential spending, residential spending will be one of the weakest components of aggregate demand in 1988. Constrained mainly by the increase in interest rates following the Federal Reserve's exercise of monetary restraint, real residential investment will decline 2.9 percent (annual rate) over the last three quarters of 1988. This will lead to a 3.3 percent decline for 1988 following no growth during 1987. Residential investment will improve slightly over the first half of 1989, growing 1.3 percent (annual rate).

The other major driving component of aggregate demand will be exports. A continuing but modest decline of the dollar will help real exports grow 12.6 percent, a \$53.8 billion increase over 1987. But real imports will rise 8.1 percent (\$45.5 million) this year. The net effect will be an \$8.2 billion decrease in the real U.S. trade deficit in 1988.

In spite of an increase in the growth of disposable income, consumer spending will continue to grow as slowly in 1988 as it did in 1987. Real growth in consumption demand will be 1.9 percent again this year. Although buyers appear to have recovered completely from the October 1988 stock market crash, high levels of consumer debt will act as a brake on spending. The strongest component of consumption growth will be services, which will

grow 3.3 percent in real terms, followed by durable goods with a 2.3 percent increase. Real demand for nondurable goods will decline slightly. During the first half of 1989, real consumption spending will increase 2.8 percent (annual rate), driven mainly by a 4.8 percent increase in consumer spending on durables.

This year purchases by all levels of government will increase 1.4 percent in real dollars compared with 2.3 percent in 1987. Real federal government purchases will decline 0.1 percent, while state and local government purchases will increase 2.5 percent. In current dollars federal government expenditures will grow 2.8 percent in 1988. Since government receipts are expected to grow 7.3 percent, we forecast a modest reduction (\$6.4 billion) in the federal government's budget deficit in 1988.

The Federal Reserve Board's exercise of monetary restraint will cause interest rates to increase through the end of 1988 and early 1989.

- * The interest rate on three-month Treasury bills is expected to average 6.7 percent during the last half of 1988 and 6.9 percent during the first half of 1989. The rate was 6 percent during the first half of 1988.
- * The average prime lending rate is likely to be 9 percent during the rest of the year and 9.3 percent during the first half of 1989. The first half of this year it was 8.7 percent.
- * Moody's AAA bond rate could average 10.1 percent during the last half of 1988 and 10.4 percent during the first half of 1989, as compared with 9.7 percent in the first half of 1988.

Forecasted employment growth reflects the forecasted growth in economic output. Private non-farm establishment employment will grow 3.3 percent in

1988, compared with 2.5 percent in 1987. Civilian employment will grow 2.5 percent in 1988 compared with 2.6 percent in 1987. The less than 2 percent growth in the civilian labor force for 1988 means that the unemployment rate will decline to 5.4 percent in 1988, compared with 6.1 percent in 1987. These trends will continue during the first half of 1989, with growth in civilian employment (2.3 percent annual rate) exceeding growth in the labor force (1.9 percent annual rate) and the unemployment rate falling to 5.1 percent.

An unemployment rate near 5 percent, coupled with a capacity utilization rate of nearly 83 percent, undoubtedly means some inflationary pressures as a result of tightness in the labor market. In spite of the Federal Reserve Board's attempt to contain inflation by exercising monetary restraint, there will be some upward movement in prices. This movement is forecasted to be modest, in part because of the Federal Reserve Board's actions and in part because some growth in labor productivity will have an offsetting effect on the high level of capacity utilization and low unemployment rates. The forecasted rate of inflation, as measured by the rate of change of the consumer price index, is 3.9 percent for 1988 and 4.4 percent for 1989, compared with 3.7 percent in 1987.

The forecasted economic growth is also reflected in personal income. For 1988 and 1989, we predict personal income in current dollars will grow 6.6 percent, compared with 6.0 percent in 1987. In real terms, personal income will grow 3 percent in 1988, compared with 2 percent in 1987. Real disposable personal income will grow 2.9 percent in 1988, compared with 1.2 percent in 1987.

Our U.S. forecast, summarized in Table 1, is based on the Indiana

University Econometric Model of the United States. To arrive at the preceding forecast, we have imposed the following major assumptions on that model:

1. The Federal Reserve will continue to monitor inflation closely. It will set a target growth range for M2 of between 3 and 7 percent, and the actual rate of growth of M2 will be just over 5 percent.
2. The main outlines of the December 1987 budget accord between Congress and the Administration will survive in tact. Whoever wins the 1988 elections will continue to exercise some fiscal restraint and to reallocate some resources from defense to nondefense spending.
3. Economic growth in the other OECD countries will average 2.5 percent in 1988 and will slow to 1.3 percent in 1989.¹
4. OPEC will continue to have difficulty enforcing lower production targets. As a result, world oil prices will decline 9.3 percent in 1988 and rise 5 percent in 1989.

Table 1
The National Forecast--Summary

| | 1986 | 1987 | 1988 | 1989 | 1st Half* |
|--------------------------|---------|---------|---------|---------|-----------|
| Real GNP (in billions) | 3,713.4 | 3,821.1 | 3,937.8 | 4,024.4 | |
| Growth Rate | 2.9 | 2.9 | 3.1 | 3.2 | |
| Rate of Inflation | 3.4 | 3.7 | 3.9 | 4.5 | |
| Civilian | | | | | |
| Employment (in millions) | 109.8 | 112.6 | 115.4 | 117.5 | |
| Growth Rate | 2.3 | 2.6 | 2.5 | 2.3 | |
| Unemployment Rate | 6.9 | 6.1 | 5.4 | 5.1 | |
| 3-Month T-bill Rate | 6.0 | 5.8 | 6.4 | 6.9 | |
| Real Disposable Income | | | | | |
| (in billions) | 2,645.5 | 2,672.2 | 2,754.0 | 1,286.3 | |
| Growth Rate | 4.1 | 1.2 | 2.9 | 2.6 | |

*Annual rates.

¹Organization 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, United Kingdom, and the United States.

The Kansas Forecast

The Kansas forecast, summarized in Table 2, is based on the Institute's Kansas Econometric Model and on the national forecast given above.

Table 2
The Kansas Forecast--Summary

| | 1986 | 1987 | 1988 | 1989 1st Half* |
|---|----------|----------|----------|----------------|
| Total Employment (in thousands) | 1,169.0 | 1,205.0 | 1,232.6 | 1,251.1 |
| Growth rate | -0.8 | 3.1 | 2.3 | 1.5 |
| Wage & Salary Employment (in thousands) | 984.8 | 999.6 | 1,019.4 | 1,034.0 |
| Growth rate | 1.8 | 1.5 | 2.0 | 1.5 |
| Unemployment Rate | 5.4 | 4.9 | 4.7 | 4.7 |
| Nominal Personal Income (in millions) | 3,5631.0 | 3,7021.0 | 3,9117.0 | 4,0750.0 |
| Growth rate | 5.2 | 3.9 | 5.7 | 5.8 |
| Real Personal Income (in millions of 82\$) | 3,1213.0 | 3,1151.0 | 3,1767.0 | 3,2162.0 |
| Growth Rate | 3.0 | -0.2 | 2.0 | 1.9 |

*Annual rates.

Following the national trend, the Kansas economy will grow modestly during the rest of 1988 and will continue to grow, although at a slower rate, during the first half of 1989. Non-farm wage and salary employment will grow at an annual rate of 1.8 percent in the last three quarters of 1988, resulting in 2 percent growth for the year. During the first two quarters of 1989, non-farm wage and salary employment will continue to grow, although at a slightly lower 1.5 percent annual rate. Total Kansas employment (which includes estimates of farm employment) will grow 2.1 percent (annual rate) for the last three quarters of 1988, leading to 2.3 percent growth for the year. Total Kansas employment will grow at a 1.5

percent annual rate during the first two quarters of 1989. Kansas employment will grow faster than the labor force this year, reducing the 1988 unemployment rate to 4.7 percent. Unemployment was 4.9 percent in 1987.

As Table 3 shows, the strongest employment sectors will be durable goods, retail trade, services, and mining. Durable goods employment will grow 3.4 percent in 1988, but growth will slow to a 1.5 percent annual rate in the first half of 1989 as a result of leveling off of growth in the transportation equipment sector. Last year durable goods employment decreased by 0.2 percent. Among the durable goods manufacturing industries, growth will be stronger in primary metals, fabricated metals, machinery, including electrical machinery, and transportation equipment.

During the rest of this year and the first half of next year, retail employment growth will be stronger than it was last year. Last year it grew 1.5 percent, this year it will grow 3.3 percent, and it will grow 1.2 percent (annual rate) during the first half of 1989.

Employment in mining will continue its first quarter recovery during the rest of this year. Last year it fell 6.3 percent, and this year it will grow 5.6 percent. The strength in mining employment is due to a comeback in oil and gas employment, which will grow 6.7 percent this year in response to steady increases in U.S. prices.

Employment in services will grow 3.4 percent in 1988, compared with 3.6 percent in 1987.

Other sectors where employment will be growing, although more slowly than the ones mentioned above, are nondurable goods, wholesale trade, and finance, insurance, and real estate. Employment in nondurable goods manufacturing will grow at an annual rate of 1.8 percent during the last

three quarters of 1988 and 1.9 percent for the year, compared with 0.6 percent in 1987.

The strongest components of nondurable goods manufacturing will be apparel (7.4 percent in 1988) and food and kindred products (3.2 percent in 1988). Employment in wholesale trade will grow at a 1.6 percent annual rate for the last three quarters of 1988 and 2 percent for the year, compared with 1.3 percent in 1987. Employment in finance, insurance, and real estate will grow at 1.9 percent annual rate in the last three quarters of 1988 and 2 percent for the year, compared with 3.1 percent in 1987. Employment in government and transportation and utilities will show very little growth in 1988 and the early part of 1989. Employment in transportation and utilities will grow at only a 0.4 percent annual rate for the last three quarters of 1988, which will mean only 0.1 percent for the year. Employment in transportation and utilities declined 1.9 percent last year. Federal government employment in Kansas will decline 0.9 percent this year, compared with a 1.6 percent decrease in 1987. State and local government employment will grow only 0.6 percent this year; last year it grew at 2.5 percent. Total government employment in Kansas will increase by 0.5 percent in 1988.

Growth in employment in Kansas will be accompanied by modest growth in personal income. Personal income in current dollars will grow 6 percent (annual rate) during the last three quarters of 1988 and 5.7 percent for the year, compared with 3.9 percent in 1987. In the United States, personal income will increase 6.6 percent this year.

Adjusting for inflation,² Kansas personal income will grow 1.9 percent in 1988 compared with 3 percent growth in the United States. In 1987, Kansas

² We used the personal consumption deflator for the United States.

real personal income decreased 0.2 percent. The annual rate during the last three quarters of 1988 will be 2.3 for Kansas.

Table 3
Kansas Employment by Sector
(in thousands)*

| | 1986 | 1987 | 1988 | 1989 1st half |
|---------------------|-------|-------|-------|---------------|
| Mining | 12.2 | 11.5 | 12.1 | 12.2 |
| Growth Rate | | - 5.7 | 5.2 | 0.8 |
| Construction | 43.9 | 44.5 | 42.2 | 40.6 |
| Growth Rate | | 1.3 | - 5.1 | - 3.8 |
| Nondurables | 73.1 | 73.5 | 74.9 | 75.9 |
| Growth Rate | | 0.5 | 1.9 | 1.3 |
| Durables | 102.6 | 102.4 | 105.9 | 106.7 |
| Growth Rate | | - 0.2 | 3.4 | 0.8 |
| Transportation | 62.7 | 61.4 | 61.5 | 61.5 |
| Growth Rate | | - 2.1 | 0.2 | 0.0 |
| Wholesale Trade | 67.1 | 68.0 | 69.3 | 69.4 |
| Growth Rate | | 1.3 | 1.9 | 0.1 |
| Retail Trade | 180.7 | 183.4 | 189.4 | 189.3 |
| Growth Rate | | 1.5 | 3.3 | - 0.1 |
| FIRE | 54.7 | 56.4 | 57.5 | 57.8 |
| Growth Rate | | 3.1 | 2.0 | 0.5 |
| Services | 193.7 | 200.8 | 207.6 | 210.8 |
| Growth Rate | | 3.7 | 3.4 | 1.5 |
| Federal Govt. | 27.7 | 27.3 | 27.1 | 27.0 |
| Growth Rate | | - 1.4 | - 0.7 | - 0.4 |
| State & Local Govt. | 166.4 | 170.5 | 171.6 | 177.4 |
| Growth Rate | | 2.5 | 0.6 | 3.4 |

*Difference between growth rates here and in the Appendix are due to rounding. Figures for 1989 have been annualized.

APPENDIX

| Institute for Public Policy and Business Research, University of Kansas | | | | | | | 1988-Kansas Forecast | 20JUL88 | 1 | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|-----------------|-----------------|-----------------|------|
| KANSAS EMPLOYMENT (Not Seasonally Adjusted) | | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 |
| KS EMP: Civilian Labor Force Percent Change From One Year Ago | 1274.93 3.03 | 1276.43 2.31 | 1268.23 2.41 | 1304.23 2.04 | 1302.80 2.19 | 1296.64 1.58 | 1284.73 1.30 | 1325.48 1.63 | 1267.00 2.51 | 1292.98 2.05 | |
| KS EMP: Employed Percent Change From One Year Ago | 1219.03 3.90 | 1219.60 3.14 | 1200.23 3.08 | 1249.28 2.66 | 1242.13 1.89 | 1238.91 1.58 | 1222.14 1.83 | 1263.78 1.16 | 1204.99 3.08 | 1232.64 2.29 | |
| KS EMP: Unemployed Percent Change From One Year Ago | 55.90 -12.88 | 56.83 -12.74 | 67.93 -8.28 | 54.95 -10.26 | 60.67 8.53 | 57.73 1.58 | 62.59 7.86 | 61.70 12.27 | 62.01 -7.45 | 60.32 -2.72 | |
| KS EMP: Unemployment Rate | 4.37 | 4.47 | 5.37 | 4.21 | 4.66 | 4.45 | 4.87 | 4.65 | 4.91 | 4.67 | |
| KS EMP: Dif. Bet. Est. and HH Survey Percent Change From One Year Ago | 149.63 23.83 | 145.10 15.43 | 146.90 9.93 | 159.14 8.40 | 154.39 3.18 | 153.28 5.64 | 155.09 5.57 | 160.47 0.84 | 143.79 18.59 | 153.43 6.70 | |
| KS EMP: Farm Percent Change From One Year Ago | 72.50 -2.25 | 55.10 -2.19 | 49.83 -2.22 | 66.19 -2.32 | 71.30 -1.66 | 53.25 -3.37 | 48.74 -2.20 | 64.57 -2.45 | 61.58 -2.25 | 60.14 -2.34 | |
| KS EMP: Total Non-farm Wage & Salary Percent Change From One Year Ago | 996.90 1.90 | 1019.40 1.89 | 1003.50 2.42 | 1023.95 2.15 | 1016.45 1.96 | 1032.38 1.27 | 1018.32 1.48 | 1038.74 1.44 | 999.62 1.51 | 1019.07 1.95 | |
| KS EMP: Mining Percent Change From One Year Ago | 11.73 2.62 | 12.07 12.07 | 11.63 7.38 | 12.02 7.01 | 12.44 5.98 | 12.33 2.15 | 12.01 3.21 | 12.32 2.45 | 11.47 -6.33 | 12.10 5.56 | |

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

| | | | Kansas | 1988-Kansas Forecast | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 |
|--|---------------|----------------|----------------|----------------------|----------------|----------------|---------------|---------------|----------------|----------------|------|------|
| | | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 | |
| KS EMP: Oil & Gas Extraction Percent Change From One Year Ago | 10.17 2.69 | 10.63 14.75 | 10.30 9.57 | 10.52 8.43 | 10.90 7.20 | 10.87 2.19 | 10.70 3.84 | 10.82 2.88 | 9.97 -6.99 | 10.65 6.72 | | |
| KS EMP: Mining Residual Percent Change From One Year Ago | 1.57 2.17 | 1.43 -4.44 | 1.33 -6.98 | 1.50 -1.99 | 1.54 -1.90 | 1.46 1.91 | 1.31 -1.69 | 1.49 -0.55 | 1.49 -1.65 | 1.46 -2.23 | | |
| KS EMP: Construction Percent Change From One Year Ago | 47.70 1.78 | 45.10 -1.10 | 36.83 -7.99 | 43.38 -3.52 | 45.66 -4.29 | 42.90 -4.88 | 37.24 1.09 | 43.85 1.08 | 44.45 1.31 | 42.19 -5.08 | | |
| KS EMP: Non-durable Goods Percent Change From One Year Ago | 74.03 1.00 | 74.10 2.25 | 73.80 2.50 | 75.16 1.93 | 75.48 1.95 | 75.14 1.41 | 75.27 1.99 | 76.60 1.92 | 73.47 0.56 | 74.89 1.94 | | |
| KS EMP: Food & Kindred Percent Change From One Year Ago | 28.10 1.57 | 28.53 3.13 | 28.20 3.05 | 28.75 3.53 | 29.27 4.16 | 29.15 2.16 | 28.63 1.52 | 29.19 1.54 | 27.94 1.18 | 28.84 3.22 | | |
| KS EMP: Apparel Percent Change From One Year Ago | 3.67 7.84 | 3.73 15.46 | 3.70 24.72 | 3.72 10.53 | 3.71 1.18 | 3.62 -3.00 | 3.53 -4.67 | 3.57 -4.08 | 3.43 3.00 | 3.69 7.42 | | |
| KS EMP: Printing & Publishing Percent Change From One Year Ago | 18.80 0.00 | 18.50 -0.18 | 18.67 -0.36 | 19.06 0.47 | 18.71 -0.46 | 18.83 1.81 | 19.65 5.27 | 20.02 5.07 | 18.75 -0.57 | 18.82 0.36 | | |
| KS EMP: Chemicals & Allied Prod. Percent Change From One Year Ago | 7.70 -6.85 | 7.77 -5.67 | 7.70 -4.94 | 7.80 -5.31 | 7.80 1.28 | 7.66 -1.33 | 7.65 -0.69 | 7.75 -0.65 | 7.95 -2.55 | 7.74 -2.65 | | |
| KS EMP: Petroleum & Coal Percent Change From One Year Ago | 3.03 -4.21 | 3.00 0.00 | 3.00 0.30 | 3.04 -0.18 | 3.03 -3.15 | 2.91 -6.65 | 2.80 -6.87 | 2.83 -6.87 | 3.02 -0.55 | 2.99 -0.75 | | |
| KS EMP: Non-durable Goods Residual Percent Change From One Year Ago | 12.73 6.11 | 12.57 6.50 | 12.53 5.92 | 12.80 3.47 | 12.96 1.79 | 12.97 3.20 | 13.01 3.82 | 13.24 3.46 | 12.38 2.63 | 12.81 3.55 | | |

^{a,b,c} Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

| | Institute for Public Policy and Business Research, University of Kansas | 1988-Kansas Forecast | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1989Q3 | 20JUL88 | 3 |
|--|---|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|------|
| | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1989Q3 | 1987 | 1988 |
| KS EMP: Durable Goods Percent Change From One Year Ago | 103.07 0.23 | 103.90 1.46 | 104.60 4.11 | 105.80 3.46 | 105.86 2.71 | 107.15 3.13 | 106.34 1.66 | 107.12 1.25 | 102.42 -0.17 | 105.85 3.35 | |
| KS EMP: Stone Glass Clay Percent Change From One Year Ago | 6.53 -4.85 | 6.10 -8.04 | 5.67 -10.05 | 6.06 -4.86 | 6.26 -4.20 | 6.21 1.73 | 5.99 5.65 | 6.35 4.90 | 6.32 -5.36 | 6.05 -4.39 | |
| KS EMP: Primary Metals Percent Change From One Year Ago | 2.87 -3.37 | 2.90 -2.25 | 2.90 1.16 | 2.98 4.03 | 3.03 5.53 | 3.09 6.48 | 3.14 8.15 | 3.21 7.49 | 2.87 -3.63 | 3.00 4.31 | |
| KS EMP: Fabricated Metals Percent Change From One Year Ago | 11.27 0.30 | 11.27 3.36 | 11.37 7.23 | 11.60 5.82 | 11.76 4.40 | 11.75 4.29 | 11.60 2.08 | 11.85 2.09 | 11.02 -0.30 | 11.62 5.41 | |
| KS EMP: Machinery, Incl. Electrical Percent Change From One Year Ago | 27.63 2.22 | 27.87 4.11 | 28.40 5.84 | 28.39 3.76 | 28.34 2.57 | 28.54 2.43 | 28.82 1.48 | 28.81 1.47 | 27.42 0.70 | 28.42 3.63 | |
| KS EMP: Transportation Equipment Percent Change From One Year Ago | 44.97 -0.52 | 45.80 0.37 | 46.30 4.67 | 46.35 3.00 | 45.96 2.22 | 47.24 3.14 | 46.76 0.99 | 46.35 0.00 | 45.00 -0.31 | 46.46 3.25 | |
| KS EMP: Durable Goods Residual Percent Change From One Year Ago | 9.80 2.80 | 9.97 4.91 | 9.97 3.46 | 10.41 7.35 | 10.50 7.18 | 10.32 3.57 | 10.03 0.65 | 10.55 1.32 | 9.78 2.89 | 10.30 5.38 | |
| KS EMP: Transportation & Utilities Percent Change From One Year Ago | 61.57 -1.49 | 61.73 -2.06 | 60.40 -0.71 | 61.68 0.07 | 61.97 0.66 | 62.00 0.43 | 60.93 0.88 | 62.12 0.72 | 61.44 -1.94 | 61.51 0.12 | |
| KS EMP: Railroads Percent Change From One Year Ago | 9.23 -9.77 | 8.90 -10.10 | 8.90 -5.32 | 8.86 -5.05 | 8.86 -4.00 | 8.70 -2.23 | 8.38 -5.88 | 8.34 -5.88 | 9.22 -9.93 | 8.83 -4.17 | |
| KS EMP: Trucking & Warehousing Percent Change From One Year Ago | 22.17 1.84 | 22.17 0.00 | 21.40 1.74 | 22.37 1.67 | 22.82 2.95 | 22.73 2.56 | 21.98 2.70 | 23.01 2.86 | 21.84 1.47 | 22.33 2.24 | |

^{a, b, c} Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

| | | | Kansas | 1988-Kansas Forecast | 1988Q1 | 1988Q2 | 1987 | 1988 |
|---------|--|----------------|----------------|----------------------|----------------|----------------|----------------|----------------|
| | | | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 |
| KS EMP: | Electric Gas & Sanitary Serv Percent Change From One Year Ago | 11.67 0.29 | 11.60 0.00 | 11.57 0.29 | 11.71 0.70 | 11.87 1.73 | 11.64 0.35 | 11.61 0.41 |
| KS EMP: | Transportation Residual Percent Change From One Year Ago | 18.50 -1.94 | 19.07 -1.55 | 18.53 -1.77 | 18.73 0.36 | 18.42 -0.43 | 18.92 -0.75 | 18.96 2.30 |
| KS EMP: | Wholesale Trade Percent Change From One Year Ago | 68.87 1.52 | 68.87 2.48 | 68.53 3.11 | 69.72 2.74 | 70.11 1.81 | 68.99 0.18 | 68.84 0.45 |
| KS EMP: | Retail Trade Percent Change From One Year Ago | 184.17 1.25 | 189.11 1.89 | 185.13 3.95 | 188.91 3.68 | 190.29 3.32 | 193.33 2.23 | 187.28 1.14 |
| KS EMP: | Gen. Merchandise Stores Percent Change From One Year Ago | 25.13 5.90 | 28.20 9.30 | 27.90 15.45 | 27.44 11.55 | 27.49 9.37 | 29.28 3.82 | 26.97 -3.32 |
| KS EMP: | Food Stores Percent Change From One Year Ago | 27.20 2.00 | 27.57 1.72 | 27.53 3.77 | 27.69 3.70 | 27.91 2.60 | 28.28 2.58 | 27.89 1.30 |
| KS EMP: | Auto. Dealers & Gas Stations Percent Change From One Year Ago | 23.37 1.45 | 23.30 1.60 | 23.30 3.10 | 23.73 2.89 | 23.80 1.87 | 23.52 0.96 | 23.14 -0.70 |
| KS EMP: | Apparel & Accessory Stores Percent Change From One Year Ago | 9.07 1.49 | 9.67 1.75 | 9.13 0.74 | 9.05 -1.24 | 9.15 0.91 | 9.76 0.97 | 9.15 0.18 |
| KS EMP: | Retail Trade Residual Percent Change From One Year Ago | 99.40 -0.13 | 100.37 0.10 | 97.27 1.60 | 101.00 2.37 | 101.94 2.55 | 102.49 2.11 | 100.13 2.94 |
| KS EMP: | Finance, Insurance, R.E. Percent Change From One Year Ago | 57.10 2.64 | 56.40 2.42 | 56.50 2.11 | 57.70 1.88 | 58.30 2.11 | 57.44 1.84 | 57.13 1.11 |

^a, ^b, ^c, ^d
 Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research
 and operationalized through the Kansas Econometric Model.

| | | | Kansas | 1988-Kansas Forecast | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 | |
|--|--|----------------|----------------|----------------------|----------------|-----------------|----------------|----------------|----------------|----------------|------|------|--|
| | Institute for Public Policy and Business Research, University of | | | | | | | | | | | | |
| 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1989Q3 | 1989Q4 | 1989Q1 | 1987 | 1988 | |
| KS EMP: Banking Percent Change From One Year Ago | 16.37 -1.01 | 16.23 -0.61 | 16.10 -1.63 | 16.13 -1.42 | 16.18 -1.14 | 15.93 -1.89 | 15.86 -1.51 | 15.87 -1.62 | 16.33 -0.56 | 16.09 -1.52 | | | |
| KS EMP: Insurance Percent Change From One Year Ago | 10.97 -0.90 | 10.73 -2.13 | 10.80 -0.61 | 10.83 -1.24 | 10.81 -1.41 | 10.65 -0.78 | 10.49 -2.85 | 10.51 -2.97 | 10.88 -0.91 | 10.77 -1.01 | | | |
| KS EMP: F.I.R.E. Residual Percent Change From One Year Ago | 29.77 6.18 | 29.43 6.00 | 29.60 5.34 | 30.73 4.89 | 31.31 5.19 | 30.86 4.86 | 30.78 3.98 | 31.98 4.07 | 29.15 6.97 | 30.63 5.07 | | | |
| KS EMP: Services Percent Change From One Year Ago | 201.73 3.51 | 203.73 3.73 | 204.07 3.87 | 208.54 3.68 | 208.78 3.50 | 208.95 2.56 | 208.36 2.10 | 213.25 2.25 | 200.77 3.63 | 207.59 3.40 | | | |
| KS EMP: Hotels & Lodging Percent Change From One Year Ago | 9.57 0.35 | 9.17 -0.36 | 9.13 2.24 | 9.82 5.21 | 10.18 6.43 | 9.88 7.82 | 9.47 3.68 | 10.17 3.58 | 9.25 -0.09 | 9.75 5.46 | | | |
| KS EMP: Personal Services Percent Change From One Year Ago | 11.00 0.61 | 11.53 3.59 | 11.60 1.46 | 11.40 -1.71 | 11.15 1.34 | 11.33 -1.76 | 12.08 4.11 | 11.84 3.84 | 11.39 1.86 | 11.37 -0.19 | | | |
| KS EMP: Services Residual Percent Change From One Year Ago | 181.17 3.86 | 183.03 3.96 | 183.33 4.11 | 187.32 3.95 | 187.46 3.47 | 187.73 2.57 | 186.81 1.90 | 191.24 2.09 | 180.12 3.94 | 186.46 3.52 | | | |
| KS EMP: Federal Gov. Percent Change From One Year Ago | 27.20 -2.16 | 27.07 -1.93 | 26.67 -3.03 | 27.28 -0.45 | 27.28 0.31 | 26.99 -0.30 | 26.69 0.07 | 27.29 0.05 | 27.29 -1.62 | 27.05 -0.87 | | | |
| KS EMP: State & Local Gov. Percent Change From One Year Ago | 159.73 4.22 | 177.33 1.72 | 175.33 2.10 | 173.74 0.24 | 160.28 0.34 | 177.17 -0.09 | 178.24 1.66 | 176.53 1.61 | 170.53 2.49 | 171.63 0.64 | | | |

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

| | | | Kansas | 1988-Kansas Forecast | | | 20JUL88 | 6 |
|--|----------------|----------------|----------------|----------------------|----------------|----------------|----------------|----------------|
| HOURS AND WAGES (Not Seasonally Adjusted) | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q2 | 1987 1988 |
| KS HRS/WK: Food & Kindred Products Percent Change From One Year Ago | 43.17 -1.07 | 41.20 1.81 | 39.80 -7.80 | 40.88 -7.17 | 41.80 -3.17 | 41.12 -0.20 | 41.51 1.54 | 42.89 1.70 |
| KS HRS/WK: Apparel&Other Fin. Prod. Percent Change From One Year Ago | 38.60 7.22 | 38.40 6.77 | 39.67 10.80 | 39.01 3.29 | 38.47 -0.33 | 37.87 -1.39 | 37.23 -6.15 | 37.64 -4.50 |
| KS HRS/WK: Pet. Refining & Rel. Ind. Percent Change From One Year Ago | 42.87 -0.46 | 44.43 3.17 | 44.07 7.39 | 43.81 4.73 | 43.34 1.10 | 42.91 -3.43 | 42.21 -4.21 | 42.54 0.20 |
| KS HRS/WK: Fabricated Metal Products Percent Change From One Year Ago | 37.40 1.54 | 39.17 8.60 | 39.13 10.03 | 39.23 9.68 | 38.86 3.89 | 38.58 -1.50 | 37.56 -4.01 | 36.97 -3.29 |
| KS HRS/WK: Machinery, Incl. Elec. Percent Change From One Year Ago | 40.87 2.59 | 42.13 1.77 | 42.83 2.07 | 41.90 0.80 | 40.60 -0.65 | 41.32 -1.92 | 40.85 -4.64 | 40.52 -3.31 |
| KS HRS/WK: Transportation Equipment Percent Change From One Year Ago | 40.70 5.71 | 41.00 -1.13 | 40.83 2.77 | 40.50 -0.49 | 40.19 -1.25 | 41.38 0.92 | 40.18 -1.61 | 40.53 -0.83 |
| KS WAGE/HR: Food & Kindred Products Percent Change From One Year Ago | 8.84 -0.97 | 8.82 0.49 | 8.85 0.68 | 8.91 0.97 | 9.02 2.02 | 9.10 3.14 | 9.21 4.11 | 9.28 4.08 |
| KS WAGE/HR: Apparel&Other Fin. Prod. Percent Change From One Year Ago | 5.27 3.20 | 5.21 -2.62 | 5.25 -1.38 | 5.28 0.28 | 5.36 1.59 | 5.42 3.98 | 5.49 4.42 | 5.52 4.52 |
| KS WAGE/HR: Pet. Refining & Rel. Ind. Percent Change From One Year Ago | 13.50 4.62 | 13.56 3.28 | 13.62 1.26 | 13.73 2.99 | 13.79 2.12 | 13.94 2.80 | 14.15 3.88 | 14.31 4.25 |
| KS WAGE/HR: Fabricated Metal Product Percent Change From One Year Ago | 8.06 0.96 | 8.06 0.04 | 8.08 -0.82 | 8.13 0.64 | 8.21 1.85 | 8.30 3.02 | 8.36 3.50 | 8.45 4.02 |
| KS WAGE/HR: Machinery, Incl. Elec. Percent Change From One Year Ago | 9.46 2.42 | 9.56 -0.03 | 9.63 0.77 | 9.69 2.22 | 9.83 3.84 | 9.93 3.82 | 9.99 3.79 | 10.08 3.99 |
| KS WAGE/HR: Transportation Equipment Percent Change From One Year Ago | 11.83 4.69 | 11.76 -1.56 | 11.79 -2.91 | 11.80 -0.86 | 11.96 1.07 | 12.22 3.95 | 12.23 3.75 | 11.91 4.51 |

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

| | | | | | Kansas | 1988-Kansas Forecast | | | |
|--|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|------------------|------------------|
| | | | | | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 |
| WAGE BILLS (Seasonally Adjusted) | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 |
| KS WG BILL: Total Wages & Salaries Percent Change From One Year Ago | 19653.00 3.95 | 19940.00 2.96 | 20107.37 4.84 | 20421.68 4.64 | 20695.77 5.31 | 20968.78 5.16 | 21123.26 5.05 | 21513.37 5.35 | 19572.50 3.40 |
| KS WG BILL: Farm Wages & Salaries Percent Change From One Year Ago | 170.00 3.66 | 172.00 3.61 | 174.34 5.02 | 176.19 5.50 | 178.20 4.82 | 179.66 4.45 | 181.74 4.24 | 183.43 4.11 | 168.75 2.90 |
| KS WG BILL: Ag. Ser., Forest. and Fish. Percent Change From One Year Ago | 66.00 3.13 | 69.00 7.81 | 69.56 2.30 | 70.15 9.61 | 70.76 7.21 | 71.39 3.47 | 72.05 3.58 | 72.74 3.69 | 66.75 4.71 |
| KS WG BILL: Mining Percent Change From One Year Ago | 265.00 9.05 | 268.00 16.02 | 269.26 12.66 | 274.67 6.88 | 279.91 5.63 | 283.91 5.94 | 285.63 6.08 | 290.83 5.88 | 257.25 -6.71 |
| KS WG BILL: Construction Percent Change From One Year Ago | 955.00 3.24 | 991.00 0.30 | 895.11 -9.59 | 959.42 -1.09 | 983.62 3.00 | 970.55 -2.06 | 937.72 4.76 | 1007.41 5.00 | 976.50 4.66 |
| KS WG BILL: Durable Goods Percent Change From One Year Ago | 2622.00 0.42 | 2609.00 -8.84 | 2705.20 7.65 | 2722.73 1.25 | 2740.89 4.53 | 2817.95 8.01 | 2794.37 3.30 | 2843.75 4.44 | 2608.25 -1.52 |
| KS WG BILL: Nondurable Goods Percent Change From One Year Ago | 1615.00 2.34 | 1683.00 7.61 | 1659.25 4.62 | 1681.86 4.72 | 1718.80 6.43 | 1758.16 4.47 | 1790.12 7.89 | 1823.29 8.41 | 1622.50 3.96 |
| | | | | | | | | | 1704.52 5.06 |
| | | | | | | | | | 20JUL88 7 |

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

| | | | Kansas | 1988-Kansas Forecast | | | | |
|--|-----------------|-----------------|-----------------|----------------------|-----------------|-----------------|-----------------|-----------------|
| | | | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 |
| | | | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 |
| KS WG BILL: Trans. & Public Utilities Percent Change From One Year Ago | 1770.00 4.80 | 1779.00 2.60 | 1787.93 5.42 | 1810.52 4.96 | 1831.61 3.48 | 1861.27 4.62 | 1876.24 4.94 | 1899.44 4.91 |
| KS WG BILL: Wholesale Trade Percent Change From One Year Ago | 1543.00 1.58 | 1588.00 5.24 | 1599.55 3.66 | 1626.07 4.24 | 1642.93 6.48 | 1654.03 4.16 | 1673.43 4.62 | 1702.37 4.69 |
| KS EMP: Retail Trade Percent Change From One Year Ago | 184.17 1.25 | 189.10 1.89 | 185.13 3.95 | 188.92 3.69 | 190.28 3.32 | 193.33 2.24 | 187.28 1.16 | 191.27 1.24 |
| KS WG BILL: Finance, Insurance, & R.E Percent Change From One Year Ago | 1264.00 8.22 | 1275.00 7.14 | 1303.01 7.16 | 1338.89 8.59 | 1369.06 8.31 | 1378.52 8.12 | 1397.84 7.28 | 1437.32 7.35 |
| KS WG BILL: Services Percent Change From One Year Ago | 3289.00 7.06 | 3372.00 8.04 | 3457.75 8.87 | 3525.01 9.92 | 3590.53 9.17 | 3638.08 7.89 | 3701.85 7.06 | 3784.36 7.36 |
| KS WG BILL: Govt. & Govt. Enterprises Percent Change From One Year Ago | 4153.00 3.90 | 4167.00 3.04 | 4206.30 2.97 | 4241.09 3.24 | 4276.00 2.96 | 4326.37 3.82 | 4369.84 3.89 | 4408.67 3.95 |
| | | | | | | | | 20JUL88 8 |
| | | | | | | | | 1987 1988 |

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

| | | | | Kansas | 1988-Kansas Forecast | | | | | |
|---|-------------------|-------------------|-------------------|------------------|----------------------|-------------------|------------------|------------------|-------------------|------------------|
| | | | | | | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 |
| PERSONAL INCOME (Seasonally Adjusted) | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 |
| KS PERS INC: Total Personal Income Percent Change From One Year Ago | 36630.00 2.60 | 38335.00 4.14 | 38190.78 4.62 | 38823.16 6.02 | 39369.90 7.48 | 40084.08 4.56 | 40371.36 5.71 | 41129.50 5.94 | 37021.25 3.86 | 39116.98 5.66 |
| KS PERS INC: Real Personal Income Percent Change From One Year Ago | 30662.98 -1.65 | 31765.83 -0.56 | 31463.82 0.74 | 31671.69 2.36 | 31829.49 3.80 | 32105.79 1.07 | 32022.97 1.78 | 32301.50 1.99 | 31151.22 -0.15 | 31767.70 1.98 |
| KS PERS INC: Farm Proprietors Income Percent Change From One Year Ago | 782.00 -41.25 | 1843.00 -2.90 | 1332.74 -13.23 | 1371.54 18.54 | 1337.01 70.97 | 1484.98 -19.43 | 1335.40 0.20 | 1403.30 2.32 | 1329.50 -1.94 | 1381.57 3.92 |
| KS PERS INC: Non-farm Proprietors Inc Percent Change From One Year Ago | 3200.00 9.44 | 3273.00 8.95 | 3316.71 7.37 | 3365.68 7.15 | 3415.24 6.73 | 3471.00 6.05 | 3526.10 6.31 | 3581.85 6.42 | 3175.75 9.48 | 3392.16 6.81 |
| KS PERS INC: Dividends Interest & Ren Percent Change From One Year Ago | 6748.00 3.58 | 6996.00 7.47 | 7087.34 7.91 | 7222.55 9.02 | 7352.94 8.96 | 7480.44 6.92 | 7598.25 7.21 | 7720.22 6.89 | 6734.25 3.37 | 7285.82 8.19 |
| KS PERS INC: Adj. For Residence Percent Change From One Year Ago | 808.00 4.12 | 842.00 13.32 | 852.14 2.67 | 855.91 8.07 | 861.38 6.61 | 870.79 3.42 | 880.43 3.32 | 889.41 3.91 | 818.00 7.56 | 860.05 5.14 |
| KS PERS INC: Pers. Cont. For Soc. Ins Percent Change From One Year Ago | 1578.00 4.30 | 1600.00 3.56 | 1718.10 11.42 | 1745.25 11.02 | 1773.41 12.38 | 1802.94 12.68 | 1844.84 7.38 | 1875.84 7.48 | 1573.00 3.67 | 1759.93 11.88 |
| KS PERS INC: Transfer Payments Percent Change From One Year Ago | 5110.00 4.22 | 5123.00 4.02 | 5276.25 5.95 | 5370.42 6.43 | 5495.15 7.54 | 5598.73 9.29 | 5710.89 8.24 | 5824.20 8.45 | 5064.75 4.47 | 5435.14 7.31 |
| KS PERS INC: Other Labor Income Percent Change From One Year Ago | 1905.00 2.47 | 1916.00 0.21 | 1936.34 3.94 | 1960.64 2.60 | 1985.81 4.24 | 2012.31 5.03 | 2041.87 5.45 | 2072.98 5.73 | 1898.75 2.32 | 1973.78 3.95 |

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

*) End of File.

| | | | Kansas | 1988 US Forecast | | 20JUL88 | 10 |
|---|-----------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|
| GNP AS EXPENDITURE - 1982 DOLLARS (Seasonally Adjusted) | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1989Q1 | 1989Q2 |
| US: Gross National Product Percent Change From Last Qtr (AR) | 3835.90 4.35 | 3880.80 4.76 | 3902.60 2.27 | 3924.85 2.30 | 3948.21 2.40 | 3975.66 2.81 | 4009.26 3.42 |
| US: Personal Consumption Expend. Percent Change From Last Qtr (AR) | 2520.74 5.45 | 2504.64 -2.53 | 2528.17 3.81 | 2534.92 1.07 | 2550.62 2.50 | 2567.42 2.66 | 2585.02 2.77 |
| US: Per. Con. Exp.-Durables Percent Change From Last Qtr (AR) | 406.88 24.25 | 384.49 -20.26 | 396.21 12.77 | 394.84 -1.38 | 396.94 2.14 | 400.69 3.84 | 405.42 4.80 |
| US: PCE-Nondurables Percent Change From Last Qtr (AR) | 875.73 -1.50 | 874.55 -0.54 | 874.22 -0.15 | 874.24 0.01 | 877.54 1.52 | 881.54 1.84 | 885.99 2.04 |
| US: PCE-Services Percent Change From Last Qtr (AR) | 1238.13 5.01 | 1245.60 2.44 | 1257.74 3.96 | 1265.86 2.61 | 1276.15 3.29 | 1285.20 2.87 | 1293.62 2.65 |
| US: Fixed Nonresidential Invest. Percent Change From Last Qtr (AR) | 463.80 25.84 | 465.60 1.56 | 488.30 20.97 | 495.05 5.65 | 503.85 7.30 | 514.81 8.99 | 528.48 11.05 |
| US: Producers Durable Equipment Percent Change From Last Qtr (AR) | 336.63 26.36 | 335.77 -1.02 | 360.25 32.52 | 367.72 8.56 | 377.01 10.49 | 388.19 12.39 | 401.78 14.75 |
| US: Investment in Structures Percent Change From Last Qtr (AR) | 127.20 24.64 | 129.83 8.55 | 128.08 -5.31 | 127.33 -2.31 | 126.84 -1.52 | 126.63 -0.68 | 126.70 0.24 |
| US: Residential Investment Percent Change From Last Qtr (AR) | 193.50 -6.54 | 197.00 7.43 | 192.20 -9.40 | 190.65 -3.19 | 188.52 -4.38 | 188.00 -1.10 | 188.48 1.03 |

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.

| | | | Kansas | 1988 US Forecast | 1988Q4 | 1988Q1 | 1988Q2 | 1988Q3 | | 20JUL88 | 11 |
|--|-----------------|-------------------|------------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|------|
| 1987Q3 | 1987Q4 | | | | | | | | 1987 | 1987 | 1988 |
| US: Change in Bus. Inventories Percent Change From Last Qtr (AR) | 24.60 -84.17 | 60.50 3558.31 | 57.90 -16.11 | 51.83 -35.77 | 41.76 -57.87 | -37.61 -34.25 | 37.90 3.20 | 39.00 12.13 | 42.92 211.62 | 47.28 10.13 | |
| US: Change in Farm Inventories | 12.50 | 9.00 | 19.60 | 10.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.37 | 8.65 |
| US: Change in Nonfarm Inv. Percent Change From Last Qtr (AR) | 12.10 -91.93 | 51.50 32716.14 | 38.30 -69.41 | 41.83 42.34 | 36.76 -40.37 | 37.61 9.50 | 37.90 3.20 | 39.00 12.13 | 32.55 111.71 | 38.63 18.66 | |
| US: Net Exports | -138.40 | -135.80 | -132.20 | -127.03 | -125.49 | -124.34 | -123.09 | -122.35 | -135.52 | -127.27 | |
| US: Total Exports Percent Change From Last Qtr (AR) | 437.10 23.66 | 453.50 15.87 | 464.60 10.16 | 474.80 9.07 | 484.64 8.55 | 493.96 7.92 | 502.70 7.27 | 510.83 6.63 | 425.72 12.80 | 479.50 12.63 | |
| US: Total Imports Percent Change From Last Qtr (AR) | 575.60 22.43 | 589.30 9.87 | 596.80 5.19 | 601.83 3.41 | 610.13 5.63 | 618.31 5.47 | 625.79 4.93 | 633.18 4.81 | 561.27 7.28 | 606.77 8.10 | |
| US: Total Government Purchases Percent Change From Last Qtr (AR) | 771.70 2.63 | 788.90 9.22 | 768.30 -10.04 | 779.42 5.92 | 788.94 4.98 | 792.16 1.64 | 792.47 0.16 | 793.49 0.51 | 771.72 2.28 | 782.21 1.36 | |
| US: Fed. Govt. Purchases Percent Change From Last Qtr (AR) | 336.30 4.52 | 347.60 14.13 | 325.30 -23.30 | 334.00 11.13 | 341.00 8.65 | 341.70 0.82 | 339.50 -2.55 | 338.00 -1.76 | 335.95 1.05 | 335.50 -0.13 | |
| US: Fed. Defense Purchases Percent Change From Last Qtr (AR) | 268.30 7.49 | 267.70 -0.89 | 261.80 -8.53 | 264.00 3.40 | 266.00 3.06 | 264.60 -2.09 | 262.00 -3.87 | 260.00 -3.02 | 264.22 5.42 | 264.10 -0.05 | |
| US: Fed. Nondefense Purchases Percent Change From Last Qtr (AR) | 67.90 -6.77 | 80.00 92.70 | 63.50 -60.31 | 70.00 47.67 | 75.00 31.78 | 77.10 11.68 | 77.50 2.09 | 78.00 2.61 | 71.72 -12.29 | 71.40 -0.45 | |
| US: State and Local Govt. Purch. Percent Change From Last Qtr (AR) | 435.40 1.20 | 441.30 5.53 | 442.90 1.46 | 445.42 2.30 | 447.94 2.28 | 450.46 2.27 | 452.97 2.25 | 455.49 2.24 | 435.77 3.25 | 446.68 2.50 | |

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 | 1988 US Forecast | 1989Q1 | 1988Q4 | 1988Q3 | 1988Q2 | 1988Q1 | 1987Q3 | 1987Q4 | 1987Q3 | 1987Q4 | 20JUL88 | 12 |
|---|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------|------|
| GNP AS EXPENDITURE - CURRENT DOLLARS (Seasonally Adjusted) | | | | | | | | | | | | |
| US: Gross National Product Percent Change From Last Qtr (AR) | 4524.00 7.29 | 4607.40 7.58 | 4660.90 4.73 | 4724.94 5.61 | 4794.58 6.03 | 4867.11 6.19 | 4949.98 6.99 | 5032.42 6.83 | 4488.55 5.99 | 4761.88 6.09 | 1987 | 1988 |
| US: Personal Consumption Expend. Percent Change From Last Qtr (AR) | 3011.31 9.51 | 3022.59 1.51 | 3068.70 6.24 | 3107.35 5.13 | 3154.92 6.27 | 3205.38 6.55 | 3258.98 6.86 | 3314.51 6.99 | 2967.84 6.00 | 3134.09 5.60 | | |
| US: Per. Con. Exp.-Durables Percent Change From Last Qtr (AR) | 436.78 30.05 | 413.00 -20.07 | 425.74 12.93 | 425.77 0.02 | 429.04 3.11 | 434.31 5.01 | 440.79 6.10 | 447.34 6.08 | 413.73 2.81 | 428.71 3.62 | | |
| US: PCE-Nondurables Percent Change From Last Qtr (AR) | 986.39 1.76 | 993.07 2.74 | 993.94 0.35 | 1002.37 3.43 | 1014.39 4.88 | 1028.12 5.52 | 1043.30 6.04 | 1058.98 6.15 | 982.87 4.63 | 1009.71 2.73 | | |
| US: PCE-Services Percent Change From Last Qtr (AR) | 1588.14 9.48 | 1616.52 7.34 | 1649.02 8.29 | 1679.21 7.53 | 1711.50 7.91 | 1742.95 7.56 | 1774.89 7.53 | 1808.19 7.72 | 1571.24 7.76 | 1695.67 7.92 | | |
| US: Fixed Nonresidential Invest. Percent Change From Last Qtr (AR) | 456.60 21.84 | 459.60 2.65 | 477.20 16.22 | 481.76 3.88 | 488.24 5.49 | 496.98 7.36 | 508.43 9.54 | 515.61 5.76 | 443.40 1.48 | 486.05 9.62 | | |
| US: Producers Durable Equipment Percent Change From Last Qtr (AR) | 319.46 20.59 | 318.54 -1.15 | 336.75 24.91 | 340.32 4.30 | 345.59 6.34 | 352.85 8.68 | 362.55 11.45 | 367.44 5.51 | 309.25 3.25 | 343.88 11.20 | | |
| US: Investment in Structures Percent Change From Last Qtr (AR) | 137.15 24.88 | 141.08 11.96 | 140.40 -1.91 | 141.44 3.01 | 142.65 3.47 | 144.13 4.21 | 145.89 4.97 | 148.16 6.38 | 134.16 -2.36 | 142.16 5.96 | | |
| US: Residential Investment Percent Change From Last Qtr (AR) | 227.90 0.35 | 231.20 5.92 | 227.80 -5.75 | 228.27 0.83 | 227.87 -0.71 | 229.68 3.21 | 232.92 5.76 | 236.60 6.49 | 228.05 4.47 | 228.40 0.16 | | |

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.

| | Institute for Public Policy and Business Research, University of Kansas | | | | 1988 US Forecast | 1989Q1 | 1989Q2 | 1989Q3 | 1988Q4 | 1988Q3 | 1988Q2 | 1987 | 20JUL88 | 13 | |
|-----------------------------------|---|----------|---------|---------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | | | | | | | | | | | |
| US: Change in Bus. Inventories | 22.90 | 69.40 | 57.00 | 53.99 | 45.36 | 42.13 | 44.38 | 47.83 | 46.05 | 49.62 | 192.85 | 192.85 | 1987 | 1988 | |
| Percent Change From Last Qtr (AR) | -89.57 | 8335.21 | -54.49 | -19.48 | -50.19 | -25.59 | 23.20 | 34.82 | 34.82 | 34.82 | 34.82 | 34.82 | 34.82 | 34.82 | 34.82 |
| US: Change in Farm Inventories | 11.70 | 12.00 | 19.30 | 10.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| US: Change in Nonfarm Inv. | 11.10 | 57.50 | 37.70 | 43.99 | 40.36 | 42.13 | 44.38 | 47.83 | 47.83 | 47.83 | 36.15 | 41.05 | 41.05 | 41.05 | 41.05 |
| Percent Change From Last Qtr (AR) | -97.27 | 71907.79 | -81.52 | 85.45 | -29.17 | 18.72 | 23.20 | 34.82 | 34.82 | 34.82 | 115.18 | 115.18 | 115.18 | 115.18 | 115.18 |
| US: Net Exports | -123.70 | -124.30 | -115.40 | -111.28 | -109.94 | -109.51 | -109.82 | -110.85 | -110.85 | -110.85 | -119.65 | -119.65 | -119.65 | -119.65 | -119.65 |
| US: Total Exports | 439.20 | 458.10 | 470.60 | 487.06 | 502.60 | 517.38 | 531.27 | 544.58 | 544.58 | 544.58 | 427.77 | 427.77 | 427.77 | 427.77 | 427.77 |
| Percent Change From Last Qtr (AR) | 23.65 | 18.36 | 11.37 | 14.75 | 13.38 | 12.29 | 11.18 | 10.40 | 10.40 | 10.40 | 13.72 | 13.72 | 13.72 | 13.72 | 13.72 |
| US: Total Imports | 562.90 | 582.40 | 586.00 | 598.34 | 612.54 | 626.89 | 641.09 | 655.43 | 655.43 | 655.43 | 547.40 | 547.40 | 547.40 | 547.40 | 547.40 |
| Percent Change From Last Qtr (AR) | 22.73 | 14.59 | 2.50 | 8.70 | 9.83 | 9.71 | 9.37 | 9.25 | 9.25 | 9.25 | 13.65 | 13.65 | 13.65 | 13.65 | 13.65 |
| US: Total Government Purchases | 929.00 | 948.80 | 945.60 | 964.84 | 988.13 | 1002.46 | 1015.09 | 1028.73 | 1028.73 | 1028.73 | 922.77 | 922.77 | 922.77 | 922.77 | 922.77 |
| Percent Change From Last Qtr (AR) | 5.29 | 8.80 | -1.34 | 8.39 | 10.01 | 5.93 | 5.14 | 5.49 | 5.49 | 5.49 | 6.10 | 6.10 | 6.10 | 6.10 | 6.10 |
| US: Fed. Govt. Purchases | 382.10 | 388.90 | 376.80 | 384.86 | 397.25 | 400.34 | 401.16 | 402.54 | 402.54 | 402.54 | 379.37 | 379.37 | 379.37 | 379.37 | 379.37 |
| Percent Change From Last Qtr (AR) | 2.66 | 7.31 | -11.88 | 8.83 | 13.52 | 3.15 | 0.82 | 1.38 | 1.38 | 1.38 | 3.59 | 3.59 | 3.59 | 3.59 | 3.59 |
| US: Fed. Defense Purchases | 299.00 | 299.80 | 297.70 | 299.89 | 303.53 | 303.18 | 301.78 | 301.08 | 301.08 | 301.08 | 295.20 | 295.20 | 295.20 | 295.20 | 295.20 |
| Percent Change From Last Qtr (AR) | 6.25 | 1.07 | -2.77 | 2.97 | 4.95 | -0.46 | -1.84 | -0.92 | -0.92 | -0.92 | 6.24 | 6.24 | 6.24 | 6.24 | 6.24 |
| US: Fed. Nondfense Purchases | 83.00 | 89.20 | 79.10 | 84.97 | 93.72 | 97.16 | 99.39 | 101.46 | 101.46 | 101.46 | 84.17 | 84.17 | 84.17 | 84.17 | 84.17 |
| Percent Change From Last Qtr (AR) | -9.51 | 33.40 | -38.16 | 33.14 | 48.04 | 15.48 | 9.49 | 8.60 | 8.60 | 8.60 | -4.75 | -4.75 | -4.75 | -4.75 | -4.75 |
| US: State and Local Govt. Purch. | 546.90 | 559.90 | 568.90 | 579.98 | 590.87 | 602.12 | 613.92 | 626.20 | 626.20 | 626.20 | 543.42 | 543.42 | 543.42 | 543.42 | 543.42 |
| Percent Change From Last Qtr (AR) | 7.10 | 9.85 | 6.59 | 8.02 | 7.73 | 7.83 | 8.08 | 8.24 | 8.24 | 8.24 | 7.74 | 7.74 | 7.74 | 7.74 | 7.74 |

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.

| | | | Kansas | 1988 US Forecast | | 20JUL88 | 14 |
|--|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|
| Institute for Public Policy and Business Research, University of Kansas | | | | | | | |
| RELATION OF GNP, NNP, NAT. INC. & PERS. INC. (Seasonally Adjusted) | | | | | | | |
| 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1987 1988 |
| US: Gross National Product Percent Change From Last Qtr (AR) | 4524.00 7.29 | 4607.40 7.58 | 4660.90 4.73 | 4724.94 5.61 | 4794.58 6.03 | 4867.11 6.19 | 4488.55 5.99 |
| US: Cap. Cons. Allow. with Adj. Percent Change From Last Qtr (AR) | 483.00 5.48 | 486.90 3.27 | 492.90 5.02 | 499.61 5.56 | 507.28 6.28 | 515.29 6.47 | 524.24 7.13 |
| US: Cap. Cons. Allow w/o Adj. Percent Change From Last Qtr (AR) | 456.90 5.90 | 457.70 0.70 | 466.70 8.10 | 473.11 5.61 | 480.78 6.64 | 488.79 6.83 | 497.74 7.53 |
| US: Cap. Cons. Adjustment, Total | 26.10 | 29.20 | 26.20 | 26.50 | 26.50 | 26.50 | 26.50 |
| US: Net National Product Percent Change From Last Qtr (AR) | 4040.90 7.50 | 4120.50 8.12 | 4168.00 4.69 | 4225.16 5.60 | 4287.14 6.00 | 4351.65 6.16 | 4425.55 6.97 |
| US: Indirect Business Taxes Percent Change From Last Qtr (AR) | 371.80 7.43 | 375.90 4.48 | 381.30 5.87 | 389.86 9.28 | 398.51 9.18 | 407.25 9.07 | 416.20 9.08 |
| US: Business Transfer Payments Percent Change From Last Qtr (AR) | 23.30 3.51 | 23.60 5.25 | 23.80 3.43 | 24.10 5.15 | 24.39 4.89 | 24.69 5.00 | 25.01 5.33 |
| US: Statistical Discrepancy | -10.90 | -2.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| US: Sub. less Cur. Sur.-Gov. E. | 2.30 | 20.40 | 9.50 | 10.27 | 5.73 | 13.99 | 8.86 |
| US: National Income Percent Change From Last Qtr (AR) | 3659.00 7.52 | 3743.50 9.56 | 3772.40 3.12 | 3821.47 5.31 | 3869.97 5.17 | 3933.70 6.75 | 4055.94 6.19 |

* 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

| | | | Kansas | 1988 US Forecast | | | 20JUL88 | 15 |
|--|-----------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|
| US: Corp. Prof. w. IVA + CCAJ Percent Change From Last Qtr (AR) | 314.90 26.72 | 313.00 -2.39 | 295.90 -20.13 | 291.27 -6.11 | 285.95 -7.10 | 292.75 9.86 | 290.71 -2.76 | 291.28 0.78 |
| US: Net Interest Percent Change From Last Qtr (AR) | 340.60 11.98 | 353.30 15.77 | 356.20 3.32 | 361.37 5.93 | 367.05 6.44 | 373.12 6.78 | 379.32 6.82 | 386.00 7.23 |
| US: Cont. to Soc. Ins.-Total Percent Change From Last Qtr (AR) | 396.60 5.96 | 403.70 7.36 | 430.00 28.72 | 436.51 6.20 | 443.12 6.19 | 449.98 6.34 | 459.46 8.70 | 466.62 6.38 |
| US: Wage Accruals less Disburs. | 0.30 | -0.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| US: Govt. Trans. to Pers.-Total Percent Change From Last Qtr (AR) | 522.50 3.20 | 527.80 4.12 | 545.20 13.85 | 555.33 7.64 | 568.59 9.89 | 579.50 7.90 | 591.30 8.40 | 603.21 8.30 |
| US: Personal Interest Income Percent Change From Last Qtr (AR) | 520.00 11.27 | 538.80 15.26 | 545.80 5.30 | 555.52 7.31 | 565.63 7.48 | 575.83 7.41 | 585.89 7.17 | 596.32 7.32 |
| US: Personal Dividend Income Percent Change From Last Qtr (AR) | 88.70 11.60 | 90.50 8.37 | 92.10 7.26 | 93.47 6.07 | 94.69 5.34 | 96.17 6.42 | 97.43 5.31 | 98.70 5.32 |
| US: Personal Income Percent Change From Last Qtr (AR) | 3761.00 5.77 | 3854.40 10.31 | 3897.20 4.52 | 3960.74 6.68 | 4027.15 6.88 | 4094.03 6.81 | 4163.32 6.94 | 4235.61 7.13 |

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 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1988 US Forecast | 20JUL88 | 16 |
|---|--------------|---------------|--------------|--------------|------------------|--------------|--------------|
| DISPOSITION OF PERSONAL INCOME - CURRENT DOLLARS (Seasonally Adjusted) | | | | | | | |
| US: Personal Income 1987Q3 1987Q4 1988Q1 | 3761.00 5.77 | 3854.40 10.31 | 3897.20 4.52 | 3960.74 6.68 | 4027.15 6.88 | 4094.03 6.81 | 4235.61 6.94 |
| US: Personal Income Percent Change From Last Qtr (AR) | | | | | | | 3746.50 7.13 |
| US: Wage and Salary Disburse. Percent Change From Last Qtr (AR) | 2226.20 6.51 | 2270.20 8.14 | 2306.50 6.55 | 2344.19 6.70 | 2381.45 6.51 | 2420.06 6.65 | 2503.64 6.98 |
| US: Other Labor Income Percent Change From Last Qtr (AR) | 211.10 3.09 | 213.50 4.63 | 215.40 3.61 | 218.11 5.13 | 220.80 5.01 | 223.65 5.27 | 226.80 5.75 |
| US: Total Proprietors Inc. Percent Change From Last Qtr (AR) | 322.70 -0.49 | 342.70 27.19 | 336.70 -6.82 | 341.33 5.61 | 346.04 5.64 | 351.83 6.86 | 363.78 6.93 |
| US: Farm Proprietors Inc. Percent Change From Last Qtr (AR) | 40.60 -45.72 | 54.30 219.96 | 44.10 -56.49 | 43.97 -1.17 | 43.86 -0.99 | 44.17 2.86 | 44.70 4.86 |
| US: Nonfarm Proprietors Inc. Percent Change From Last Qtr (AR) | 282.10 9.45 | 288.40 9.24 | 292.60 5.95 | 297.36 6.67 | 302.18 6.65 | 307.66 7.46 | 313.08 7.22 |
| US: Rental Income of Persons Percent Change From Last Qtr (AR) | 17.30 -29.80 | 20.90 113.01 | 21.10 3.88 | 22.85 37.60 | 23.87 19.08 | 24.27 6.77 | 24.11 7.17 |
| US: Personal Interest Income Percent Change From Last Qtr (AR) | 520.00 11.27 | 538.80 15.26 | 545.80 5.30 | 555.52 7.31 | 565.63 7.48 | 575.83 7.41 | 585.89 7.17 |
| US: Personal Dividend Income Percent Change From Last Qtr (AR) | 88.70 11.60 | 90.50 8.37 | 92.10 7.26 | 93.47 6.07 | 94.69 5.34 | 96.17 6.42 | 97.43 5.31 |
| US: Total Transfer Payments Percent Change From Last Qtr (AR) | 545.80 3.21 | 551.40 4.17 | 569.00 13.39 | 579.43 7.54 | 592.98 9.68 | 604.19 7.78 | 616.31 8.27 |

^a 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 | | 1988 US Forecast | 1989Q1 | 1989Q2 | 1988Q3 | 1988 US Forecast | 1989Q1 | 1989Q2 | 1987 | 20JUL88 | 17 |
| 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1987 | 1988 | |
| US: Pers. Cont. to Soc. Ins. Percent Change From Last Qtr (AR) | 170.70 5.58 | 173.60 6.97 | 189.40 41.68 | 194.11 10.33 | 198.25 8.80 | 201.91 7.59 | 206.14 8.66 | 209.38 6.43 | 169.85 6.44 | 195.92 15.35 | |
| US: Tot. Pers. Tax + Nontax Pay Percent Change From Last Qtr (AR) | 565.70 -8.24 | 579.40 10.04 | 577.00 -1.65 | 603.90 19.99 | 611.28 4.98 | 622.58 7.61 | 637.75 10.10 | 649.99 7.90 | 564.80 10.26 | 603.69 6.89 | |
| US: Disposable Personal Income Percent Change From Last Qtr (AR) | 3195.30 8.53 | 3275.00 10.36 | 3320.20 5.64 | 3356.84 4.49 | 3415.88 7.22 | 3471.45 6.67 | 3525.57 6.38 | 3585.63 6.99 | 3181.70 5.28 | 3391.09 6.58 | |
| US: Personal Consumption Expend. Percent Change From Last Qtr (AR) | 3011.31 9.51 | 3022.59 1.51 | 3068.70 6.24 | 3107.35 5.13 | 3154.92 6.27 | 3205.38 6.55 | 3258.98 6.86 | 3314.51 6.99 | 2967.84 6.00 | 3134.09 5.60 | |
| US: Int. Paid by Cons. to Bus. Percent Change From Last Qtr (AR) | 93.90 5.73 | 95.40 6.54 | 97.00 6.88 | 98.89 8.00 | 100.60 7.10 | 102.31 7.00 | 104.10 7.16 | 105.81 6.74 | 93.50 3.98 | 99.70 6.63 | |
| US: Pers. Trans. Pay. to For. | 1.20 | 1.30 | 1.40 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.35 | 1.47 | |
| US: Personal Saving Percent Change From Last Qtr (AR) | 88.80 -17.59 | 155.70 845.15 | 153.10 -6.51 | 149.32 -9.51 | 159.08 28.80 | 162.49 8.88 | 161.25 -3.04 | 164.08 7.22 | 119.02 -8.85 | 156.00 31.06 | |
| US: Disposable Personal Income Percent Change From Last Qtr (AR) | 2674.70 4.49 | 2713.80 5.98 | 2735.40 3.22 | 2738.50 0.45 | 2761.63 3.42 | 2780.59 2.77 | 2796.53 2.31 | 2815.99 2.81 | 2677.15 1.21 | 2754.03 2.87 | |
| US: YSAV as a Percent of YPD Percent Change From Last Qtr (AR) | -2.80 -24.12 | 4.80 763.64 | 4.60 -15.65 | 4.45 -12.55 | 4.66 20.13 | 4.68 2.07 | 4.57 -8.86 | 4.58 0.22 | 3.75 -13.79 | 4.60 22.57 | |

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.

| | | Kansas | 1988 US Forecast | 1989Q1 | 1989Q2 | 1989Q3 | 1989Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 |
|--|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|
| NATIONAL INCOME - CURRENT DOLLARS (Seasonally Adjusted) | 1987Q3 | 1987Q4 | | | | | | | | | |
| US: National Income Percent Change From Last Qtr (AR) | 3659.00 7.52 | 3743.50 9.56 | 3772.40 3.12 | 3821.47 5.31 | 3869.97 5.17 | 3933.70 6.75 | 4055.94 6.44 | 3636.02 6.25 | 3849.38 5.87 | | |
| US: Wages and Salaries Percent Change From Last Qtr (AR) | 2226.50 6.56 | 2269.90 8.03 | 2305.50 6.61 | 2344.19 6.70 | 2381.45 6.51 | 2420.06 6.65 | 2461.21 6.98 | 2503.64 7.08 | 2212.77 5.92 | 2363.05 6.79 | |
| US: W. and S.-Govt. + Govt. Ent. Percent Change From Last Qtr (AR) | 424.50 6.26 | 430.90 6.17 | 439.10 7.83 | 445.90 6.34 | 452.18 5.75 | 458.55 5.75 | 465.00 5.75 | 471.56 5.76 | 421.42 6.74 | 448.93 6.53 | |
| US: W. and S.-Other Percent Change From Last Qtr (AR) | 1802.00 6.63 | 1839.00 8.47 | 1867.40 6.32 | 1898.29 6.78 | 1929.27 6.69 | 1961.52 6.86 | 1996.21 7.26 | 2032.09 7.38 | 1791.35 5.73 | 1914.12 6.85 | |
| US: Supplements to w. and S. Percent Change From Last Qtr (AR) | 437.00 4.71 | 443.60 6.18 | 455.90 11.56 | 460.51 4.11 | 465.66 4.55 | 471.72 5.30 | 480.12 7.32 | 487.35 6.16 | 434.80 4.57 | 463.45 6.59 | |
| US: Emp. Cont. to Soc. Ins. Percent Change From Last Qtr (AR) | 225.90 6.25 | 230.10 7.65 | 240.50 19.34 | 242.40 3.19 | 244.87 4.14 | 248.07 5.33 | 253.32 8.74 | 257.24 6.33 | 224.62 4.62 | 243.96 8.61 | |
| US: Other Labor Income Percent Change From Last Qtr (AR) | 211.10 3.09 | 213.50 4.63 | 215.40 3.61 | 218.11 5.13 | 220.80 5.01 | 223.65 5.27 | 226.80 5.75 | 230.10 5.96 | 210.20 4.54 | 219.49 4.42 | |
| US: Total Proprietors Inc. Percent Change From Last Qtr (AR) | 322.70 -0.49 | 342.70 27.19 | 336.70 -6.82 | 341.33 5.61 | 346.04 5.64 | 351.83 6.86 | 357.77 6.93 | 363.78 6.88 | 327.35 12.96 | 343.98 5.08 | |
| US: Farm Proprietors Inc. Percent Change From Last Qtr (AR) | 40.60 -45.72 | 54.30 219.96 | 44.10 -56.49 | 43.97 -1.17 | 43.86 -0.99 | 44.17 2.86 | 44.70 4.86 | 45.22 4.72 | 48.37 4.72 | 44.03 29.87 | |
| US: Nonfarm Proprietors Inc. Percent Change From Last Qtr (AR) | 282.10 9.45 | 288.40 9.24 | 292.60 5.95 | 297.36 6.67 | 302.18 6.65 | 307.66 7.46 | 313.08 7.22 | 318.56 7.19 | 279.00 10.46 | 299.95 7.51 | |
| US: Rental Income of Persons Percent Change From Last Qtr (AR) | 17.30 -29.80 | 20.90 113.01 | 21.10 3.88 | 22.85 37.60 | 23.87 19.08 | 24.27 6.77 | 24.11 -2.54 | 23.96 -2.56 | 19.27 15.07 | 23.02 19.44 | |

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.

| | | | Kansas | 1988 US Forecast | 1989Q1 | 1989Q2 | 1988Q3 | 1988Q4 | University of Kansas | 1988 | 20JUL88 | 19 |
|-----|---|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|----------------------|-----------------|-----------------|----|
| | | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 | 1988 | |
| US: | Corp. Prof. w. IVA + CCADJ Percent Change From Last Qtr (AR) | 314.90 26.72 | 313.00 -2.39 | 295.90 -20.13 | 291.27 -6.11 | 285.95 -7.10 | 292.75 9.86 | 290.71 -2.76 | 291.28 0.78 | 304.67 7.11 | 291.47 -4.33 | |
| US: | Corp. Prof. before Taxe Percent Change From Last Qtr (AR) | 284.90 26.39 | 285.60 0.99 | 265.90 -24.87 | 266.49 0.89 | 265.70 -1.18 | 274.95 14.66 | 276.03 1.59 | 279.54 5.18 | 274.05 18.19 | 268.26 -2.11 | |
| US: | Profits Tax Liability Percent Change From Last Qtr (AR) | 143.00 28.92 | 140.00 -8.13 | 130.34 -24.87 | 131.82 4.60 | 132.71 2.74 | 136.38 11.51 | 137.51 3.37 | 139.24 5.12 | 136.30 29.75 | 132.81 -2.56 | |
| US: | Corp. Prof. after Taxes Percent Change From Last Qtr (AR) | 141.90 23.89 | 145.60 10.84 | 135.56 -24.87 | 134.68 -2.57 | 132.99 -4.91 | 138.57 17.87 | 138.52 -0.14 | 140.31 5.25 | 137.75 8.59 | 135.45 -1.67 | |
| US: | Dividends-Total Percent Change From Last Qtr (AR) | 95.20 12.68 | 97.30 9.12 | 99.30 8.48 | 100.96 6.84 | 102.48 6.17 | 104.27 7.19 | 105.85 6.19 | 107.46 6.21 | 93.80 8.06 | 101.75 8.48 | |
| US: | Undistributed Corp. Prof. Percent Change From Last Qtr (AR) | 46.70 51.40 | 48.30 14.43 | 36.26 -68.25 | 33.72 -25.18 | 30.51 -32.95 | 34.30 59.62 | 32.67 -17.64 | 32.85 2.18 | 43.95 9.74 | 33.70 -23.33 | |
| US: | Inventory Valuation Adj. | -17.60 | -21.30 | -15.90 | -20.40 | -24.11 | -25.85 | -28.39 | -30.75 | -17.55 | -21.57 | |
| US: | Corp. Cap. Cons. Adj. Percent Change From Last Qtr (AR) | 47.70 -2.48 | 48.70 8.65 | 45.90 -21.09 | 45.18 -6.10 | 44.36 -7.06 | 43.66 -6.17 | 43.08 -5.26 | 42.49 -5.32 | 48.15 4.62 | 44.78 -7.00 | |
| US: | Net Interest Percent Change From Last Qtr (AR) | 340.60 11.98 | 353.30 15.77 | 356.20 3.32 | 361.37 5.93 | 367.05 6.44 | 373.12 6.78 | 379.32 6.82 | 386.00 7.23 | 337.15 3.38 | 364.43 8.09 | |

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.

| | | | | Kansas | 1988 US Forecast | | | 20JUL88 | 20 |
|--|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| PRICE DEFLATORS (Seasonally Adjusted) | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1989Q1 | 1989Q2 | 1987 |
| US: CPI-All items Percent Change From Last Qtr (AR) | 1.14 3.95 | 1.15 3.58 | 1.16 3.37 | 1.17 4.27 | 1.19 4.11 | 1.20 4.18 | 1.21 4.38 | 1.22 4.53 | 1.14 3.70 |
| US: Implicit Deflator - GNP Percent Change From Last Qtr (AR) | 1.18 2.83 | 1.19 2.67 | 1.19 2.41 | 1.20 3.25 | 1.21 3.53 | 1.22 3.27 | 1.23 3.44 | 1.25 3.68 | 1.17 2.99 |
| US: Implicit Deflator - C Percent Change From Last Qtr (AR) | 1.19 3.84 | 1.21 4.15 | 1.21 2.34 | 1.23 4.01 | 1.24 3.67 | 1.25 3.80 | 1.26 3.97 | 1.27 4.06 | 1.19 4.02 |
| US: Implicit Deflator - IOIL Percent Change From Last Qtr (AR) | 0.58 18.05 | 0.56 -14.25 | 0.49 -40.67 | 0.49 5.01 | 0.50 5.03 | 0.51 4.96 | 0.51 5.07 | 0.52 5.00 | 0.55 16.46 |
| US: Implicit Deflator - C Percent Change From Last Qtr (AR) | 0.50 18.05 | 0.56 -14.25 | 0.49 -40.67 | 0.49 5.01 | 0.50 5.03 | 0.51 4.96 | 0.51 5.07 | 0.52 5.00 | 0.55 16.46 |
| US: Implicit Deflator - GNP Percent Change From Last Qtr (AR) | 1.14 3.95 | 1.15 3.58 | 1.16 3.37 | 1.17 4.27 | 1.19 4.11 | 1.20 4.18 | 1.21 4.38 | 1.22 4.53 | 1.14 3.70 |
| US: M1 Money Supply Percent Change From Last Qtr (AR) | 745.87 0.77 | 753.27 4.03 | 760.60 3.95 | 765.74 2.73 | 770.73 2.63 | 776.54 3.05 | 780.91 2.27 | 784.53 1.87 | 743.97 11.59 |
| US: M2 Money Supply Percent Change From Last Qtr (AR) | 2869.50 2.85 | 2897.37 3.94 | 2946.87 7.01 | 2987.47 5.63 | 3027.07 5.41 | 3069.41 5.71 | 3110.13 5.41 | 3150.30 5.27 | 2861.68 6.50 |
| US: 3-Month T-Bill Rate (Not Seasonally Adjusted) | 6.03 | 6.00 | 5.76 | 6.21 | 6.64 | 6.79 | 6.82 | 6.91 | 5.83 |
| US: Prime Rate Charged By Banks (Not Seasonally Adjusted) | 8.40 | 8.87 | 8.59 | 8.75 | 8.93 | 9.11 | 9.20 | 9.32 | 8.20 |
| US: Moody's AAA Corp. Bond Rate (Not Seasonally Adjusted) | 9.76 | 10.21 | 9.56 | 9.81 | 9.97 | 10.12 | 10.33 | 10.54 | 9.38 |
| US: Federal Govt. Surplus | -135.80 | -160.20 | -142.15 | -135.94 | -148.61 | -155.96 | -143.80 | -142.33 | -151.42 |
| | | | | | | | | | -145.67 |

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.

| | | | Kansas | 1988 US Forecast | | 20JUL88 | 21 |
|---|----------------|----------------|----------------|------------------|----------------|----------------|----------------|
| EMPLOYMENT (Seasonally Adjusted) | 1987Q3 | 1987Q4 | 1988Q1 | 1988Q2 | 1988Q3 | 1988Q4 | 1988 |
| US: Civilian Labor Force Percent Change From Last Qtr (AR) | 120.05 1.44 | 120.57 1.73 | 121.14 1.92 | 121.71 1.90 | 122.28 1.89 | 122.85 1.87 | 123.44 1.91 |
| US: Civilian Employment Percent Change From Last Qtr (AR) | 112.97 2.45 | 113.57 2.16 | 114.36 2.79 | 115.10 2.62 | 115.74 2.25 | 116.46 2.52 | 117.12 2.28 |
| US: Unemployment Percent Change From Last Qtr (AR) | 7.08 -13.14 | 6.99 -5.00 | 6.78 -11.42 | 6.62 -9.58 | 6.54 -4.21 | 6.39 -9.10 | 6.31 -4.71 |
| US: Unemployment Rate-Totals | 5.90 | 5.80 | 5.60 | 5.44 | 5.35 | 5.20 | 5.11 |
| US: Tot. Nonfarm Emp]. Percent Change From Last Qtr (AR) | 102.28 2.26 | 103.29 4.03 | 104.26 3.79 | 105.10 3.25 | 105.86 2.96 | 106.62 2.87 | 107.40 2.98 |
| US: Agricultural Employment Percent Change From Last Qtr (AR) | 3.18 -6.89 | 3.21 4.13 | 3.24 3.75 | 3.24 -0.47 | 3.24 -1.51 | 3.23 -2.25 | 3.19 -2.53 |
| US: Total Govt. Emp]. Percent Change From Last Qtr (AR) | 17.04 0.11 | 17.22 4.44 | 17.31 1.97 | 17.40 2.23 | 17.48 1.67 | 17.55 1.67 | 17.62 1.67 |
| US: Fed. Govt. Emp]. Percent Change From Last Qtr (AR) | 2.95 1.60 | 2.97 3.90 | 2.98 0.23 | 3.00 3.27 | 3.00 0.00 | 3.00 0.00 | 3.00 0.00 |
| US: S & L Govt. Emp]. Percent Change From Last Qtr (AR) | 14.09 -0.20 | 14.25 4.55 | 14.33 2.33 | 14.40 2.02 | 14.48 2.01 | 14.55 2.02 | 14.62 2.01 |
| US: Tot. Priv. Nonfarm Emp]. Percent Change From Last Qtr (AR) | 99.10 2.57 | 100.08 4.03 | 101.02 3.79 | 101.86 3.37 | 102.64 3.10 | 103.41 3.03 | 104.21 3.16 |
| US: Wage Rate Per Hour-Pr. Nonag. Percent Change From Last Qtr (AR) | 9.94 4.58 | 10.04 3.82 | 10.12 3.19 | 10.21 3.98 | 10.32 4.10 | 10.43 4.26 | 10.54 4.43 |
| US: Output Per Manhour-Pr. Nonag. Percent Change From Last Qtr (AR) | 18.79 2.99 | 18.82 0.61 | 18.81 -0.21 | 18.80 -0.09 | 18.81 0.23 | 18.84 0.61 | 18.89 1.00 |

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. N=0