Institute for Public Policy and Business Research The University of Kansas

U.S. AND KANSAS ECONOMIC FORECASTS FOR 1994

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

February 1994

Report No. 213

Preface

The Institute for Public Policy and Business Research is pleased to present its 1994 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 1994, and an appendix with detailed quarter by quarter forecasts for each sector.

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

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Executive Summary

The National Economy

The U.S. economy in 1994 is expected to continue along the steady growth path that it has followed over the last two years. Following the recession in the early nineties, real GDP grew 2.6 percent in 1992 and 2.9 percent in 1993, and is expected to grow 2.7 percent in 1994. These growth rates compare quite favorably with the average growth rate exhibited over the last two decades, and should probably be interpreted as a sign of a reasonably healthy economy, although not a booming one.

The main sources of the recent strength of the economy have been consumer spending, business investment in equipment, and residential construction, and these are expected to continue to be the main sources of growth again in 1994. The strength in consumer spending has been especially surprising since it has not been supported by strong personal income growth; this can partly be explained by increased consumer borrowing related to a partial return of consumers' confidence in the economy. The strongest segment of consumer spending is spending on durable goods. Rebounding from its cyclical low during the recession, real spending on consumers' durable goods grew 7 percent in 1992 and 7.3 percent in 1993, and such spending is expected to increase a further 6.7 percent in 1994. Real consumer spending on non-durable goods and services, which did not fall off as precipitously during the recession, have grown more slowly than spending on durable goods over the past two years, and are expected to grow 2.1 percent and 2.7 percent, respectively, in 1994.

Like consumers' purchases of durable goods, business spending on new equipment tends to be quite volatile over the business cycle. Real business spending on new equipment grew 6.8 percent in 1992 and 16.2 percent in 1993, and is expected to continue to be strong, growing 11.7 percent in 1994. In contrast, real business spending on structures has declined over the past several years, and is expected to grow only 3.2 percent in 1994. Export growth is expected to provide little impetus to aggregate demand, as the economies of many of our trading partners continue to under perform the U.S. At the same time, strong growth in consumer spending and business spending on new equipment are expected to contribute to substantial growth in imports, and so the trade deficit is expected to worsen during 1994. Growth in business inventories is expected to be modest at best, as firms streamline their inventory procedures. Although government spending will offer little or no stimulus to the national economy in 1994, residential investment spending is expected to continue the strong growth that it showed in 1992 and 1993.

Employment growth, which has been slowed by an unusual number of permanent layoffs over the past several years, is expected to continue to be modest in 1994, with the unemployment rate remaining near or below its 1993 level of 6.8 percent. Much of the employment growth that has occurred has taken place in lower paying jobs, partly accounting for the slow growth in personal income in 1993. Some recent

Table 1 The National Forecast--Summary 1990 1991 1992 1993 1994 Real GDP (billions) 4877.5 4821.0 4922.6 5132.7 5269.0 Growth Rate .8 -1.22.1 2.9 2.7 Rate of Inflation 5.4 4.2 3.0 2.9 3.0 Civilian Employment (millions) 117.9 116.9 117.6 119.3 122.5 Growth Rate .5 -.9 2.7 .6 1.5 Unemployment Rate 5.5 6.8 7.4 6.8 6.7 3-Month T-Bill Rate 7.5 5.4 3.5 3.0 3.2 Nominal Personal Income (billions) 4664.2 4828.3 5058.1 5387.6 5685.1 Growth Rate 6.5 3.5 4.8 4.7 5.5

signs such as the high level of the average number of hours worked per week, suggest that the employment picture may be changing, however, and more permanent hiring in better paying jobs may characterize 1994.

Inflation, which has been very modest over the last two years, should remain at a moderate level, although it may increase slightly in 1994. Medical care will be the most inflationary sector of the economy as it has been in most recent years, although its 4 to 5 percent rate of increase over the forecast period will be significantly lower than the rates of increase in this sector in recent years. In spite of the very quiet news on the inflation front, the Fed appears to remain concerned about potential inflation, and there will probably be some upward pressure on short-term interest rates as a result. The prime rate should remain steady, as stronger bank balance sheets make more funds available for lending. Long-run rates should continue to fall slightly as concerns about long-run inflationary pressures continue to recede.

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

- 1. In the past, we have stated our assumptions about monetary policy in terms of the growth rate of the M2 measure of the money stock. However, M2 is not a very good indicator of the policy being pursued by the Fed, because of its well known instability over the business cycle; in fact this instability has caused the Fed to essentially abandon the use of monetary growth targets as a policy instrument. Probably the best indicator of the posture of monetary policy is the Federal funds rate. We expect that the Federal Funds rate is about as low as it will get, and that there will be some modest increases in the Federal funds rate in 1994, as the Fed tightens slightly. The M2 measure of the money supply grows 4.2 percent in 1994 in our model.
- 2. We expect that real Federal defense spending will continue to fall, declining 3.4 percent in 1994. Total real Federal spending will decrease 2 percent in 1994. Budget deficit reduction will be accomplished through some increased taxes, as well as spending cuts. The spending cuts will come about through tighter spending ceilings as well as lower medical inflation. In the long-run, details of health care will determine the size of the budget deficit. Real state and local government spending will increase at a modest 1.5 percent annual rate over the forecast period. There is upward pressure on state and local government spending from higher school enrollments, but increased health care costs and generally weakened state financial positions will hold down the growth in state and local government spending. In addition, most of the spending on flood relief is from the Federal government, so there will be little effect on state and local government spending from that source.
- 3. The foreign exchange value of the dollar² will increase 1.6 percent in 1994. In spite of the expected stability in the value of the dollar, U.S. real exports are expected to grow only 3.4 percent in 1994. This modest growth in exports is due to the relatively weak economic position of many of our trading partners; although U.S. economic performance appears mediocre, the rest of the world is still in recession. For example, German GDP is expected to decline about 2 percent in 1993, and remain flat in 1994, while in France, GDP is expected to decline about 0.5 percent in 1993 and remain flat in 1994. In the longer run, export growth probably depends on increasing exports to Latin America. Latin America and Southeast Asia are the two fastest growing markets for exports, but Japan has most of the export market in Southeast Asia.
- 4. Imported oil prices are expected to remain relatively stable, increasing at a 1 percent annual rate over the forecast period.

The Kansas Economy

In 1993 the Kansas economy somewhat abruptly lost the relative immunity from permanent layoffs that it enjoyed during and just after the national recession. In fact, as a result of significant job losses in the durable goods manufacturing sector, especially in the transportation equipment and related subsectors, the Kansas economy slowed somewhat in 1993. Although 1994 looks as though it will be a somewhat better year, it appears that some of the dampening of the Kansas economy that occurred in 1993 will linger into 1994. The Kansas forecast is summarized in Table 2, below.

The 1993 slowdown in the Kansas economy is most pronounced in the areas of employment and personal income growth. Although the number of jobs, as measured by nonfarm wage and salary employment, grew 1.8 percent in 1993, just as it did in 1992, the number of Kansans employed essentially remained static. Much of the job growth was offset by a decline in the number of self-employed Kansans, and an increase in the number of part-time jobs relative to the total number of jobs in the state. The lack of growth in the number of Kansans employed in 1993 is reflected in the increase in the unemployment rate for the year, which increased from 4.2 percent in 1992 to 4.8 percent in 1993. The 1994 forecast is for the number of Kansans employed to grow in 1994, at a rate of 1.5 percent, bringing a very slight decline in the unemployment rate to 4.7 percent.

The reduction in employment in the durable goods manufacturing sector should taper off significantly in 1994, as the rate of job reduction in the transportation equipment subsector falls from 9.5 percent to 2.4 percent. Strength in employment growth should be observed in the service sector, where the number of jobs is expected to increase 4.1 percent, and the construction sector, where the number of jobs is expected to increase for the third consecutive year. Non-durable goods manufacturing is expected to be solid, with employment growth of 1.5 percent in 1994, led by 2.1 percent employment growth in printing and publishing.

Personal income will also grow faster in 1994, at a rate of 5 percent per year compared to 4 percent in 1993. The most important factor in increased personal income growth will be stronger growth in wages and salaries, which are expected to increase 4.3 percent in 1994, compared to 3.5 percent in 1993. Corrected for inflation, the improvement in personal income growth for 1994 looks even better. Real personal income, less the very volatile farm proprietors' income, is expected to grow 2.6 percent in 1994, compared to 2.4 percent in 1992 and 1.8 percent in 1993.

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Introduction

The U.S. economy will most likely continue on a course of moderate growth in 1994. Although the period since the 1990-1991 recession has been characterized by rates of growth that are completely consistent with average growth rates in the 1970's and 1980's, the burst of above average growth that usually characterizes a brief period of recovery has been conspicuously absent. Instead, the economy seems to have moved from a recession into a normal expansion that can be expected to continue.

The current expansion gets its strength from investment in equipment by firms, residential investment spending, and a growth rate of consumer spending that is surprisingly high given the weak growth of personal income. Personal income growth has been slowed by the fact that firms are continuing to streamline their work forces, and the fact that much of the job growth that is occurring is in jobs with lower than average wage jobs. Little support for the expansion is coming from export growth, which is low because much of the rest of the world is still in recession, and government purchases of goods and services, which is slowed by the Federal concern with its budget deficit and the weakened budget positions of state and local governments.

Inflation should remain moderate in 1994, although it will be slightly higher than in 1993 due to some increases in food prices at the end of 1993 and the beginning of 1994 due to the flooding in the summer of 1993, and increasing gasoline prices at the end of 1993. The slight upward pressure on prices, plus the fact that the current real Federal funds rate is about zero, will cause the Fed to tighten slightly, and short-run interest rates will increase gradually in 1994. The prime rate should remain steady, as the strengthened balance sheets of banks make them more eager to lend, while long-run rates should fall slightly along with receding concerns about long-run inflation.

The Kansas economy exhibited slower growth in 1993 than it did in 1992. Partly because it avoided the rash of layoffs that hit the national economy before and during the recession, the Kansas economy substantially outperformed the national economy during the 1990-1992 period. However, layoffs in aircraft manufacturing in 1993 contributed to a slowdown in employment and personal income growth for the year, with a resulting increase in the unemployment rate. However, improved income growth can be expected for 1994, along with a leveling off of the unemployment rate.

The National Outlook

The national forecast presented below is based on the following major assumptions¹:

1. In the past, we have stated our assumptions about monetary policy in terms of the growth rate of the M2 measure of the money stock. However, M2 is not a very good indicator of the policy being pursued by the Fed, because of its well known instability over the business cycle; in fact this instability has caused the Fed to essentially abandon the use of monetary growth targets as a policy

instrument. Probably the best indicator of the posture of monetary policy is the Federal funds rate. We expect that the Federal Funds rate is about as low as it will get, and that there will be some modest increases in the Federal funds rate in 1994, as the Fed tightens slightly. The M2 measure of the money supply grows 4.2 percent in 1994 in our model.

- 2. We expect that real Federal defense spending will continue to fall, declining 3.4 percent in 1994. Total real Federal spending will decrease 2 percent in 1994. Budget deficit reduction will be accomplished through some increased taxes, as well as spending cuts. The spending cuts will come about through tighter spending ceilings as well as lower medical inflation. In the long-run, details of health care will determine the size of the budget deficit. Real state and local government spending will increase at a modest 1.5 percent annual rate over the forecast period. There is upward pressure on state and local government spending from higher school enrollments, but increased health care costs and generally weakened state financial positions will hold down the growth in state and local government spending. In addition, most of the spending on flood relief is from the Federal government, so there will be little effect on state and local government spending from that source.
- 3. The foreign exchange value of the dollar² will increase 1.6 percent in 1994. In spite of the expected stability in the value of the dollar, U.S. real exports are expected to grow only 3.4 percent in 1994. This modest growth in exports is due to the relatively weak economic position of many of our trading partners; although U.S. economic performance appears mediocre, the rest of the world is still in recession. For example, German GDP is expected to decline about 2 percent in 1993, and remain flat in 1994, while in France, GDP is expected to decline about 0.5 percent in 1993 and remain flat in 1994. In the longer run, export growth probably depends on increasing exports to Latin America. Latin America and Southeast Asia are the two fastest growing markets for exports, but Japan has most of the export market in Southeast Asia.
- 4. Imported oil prices are expected to remain relatively stable, increasing at a 1 percent annual rate over the forecast period.

The performance of the U.S. economy in the period since the most recent recession has been baffling and disappointing to many people. The most striking feature of the period has been the absence of a burst of very rapid growth that would ordinarily be characterized as a recovery. Instead, the economy appears to have moved directly from a recession to an expansion with growth rates that are moderate enough to be sustainable over a longer period. Although during the 1950's and 1960's the real output of the U.S. economy seemed capable of growing steadily at a 3.5 percent annual rate, there is nothing about its performance since then that suggests that the economy is capable of sustained growth at such rates. In fact, if we look at the average growth rates of the national economy since 1968 over the terms of presidential administrations, we see that the highest growth rate over an administration was the 2.6 percent annual average during the Carter administration, while the lowest was the 1.8 percent annual average during the Bush administration. Thus, it is hard to see how one could argue for a sustainable long run average rate of growth outside of the 2 to 2.5 percent range over the last two decades. With that in mind, the 2.6 percent growth rate of GDP in 1992, 2.9 percent in 1993 and 2.7 percent in 1994 look satisfactory. Thus,

the really unusual feature of U.S. economic performance since the recession has been the fact that there was no burst of economic growth immediately after the recession that in previous recoveries at least partly made up for output losses during the recessions.

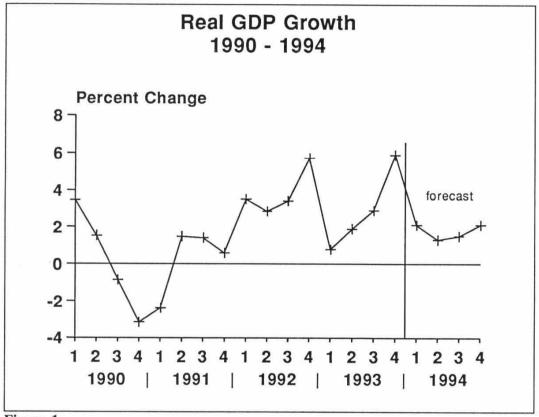


Figure 1

Our quarter by quarter forecast of real GDP growth for the economy is illustrated in Figure 1. As that figure clearly shows, only during the fourth quarter of 1992 and again in the fourth quarter of 1993 has the national economy shown the kind of above average growth rates associated with a recovery from a recession. We can also see that the economy was surpisingly strong during the second half of 1993, with real GDP growing 2.9 percent during the third quarter, in spite of the fact that the floods during that quarter probably had a somewhat depressing effect on output. As we will see below, the main sources of GDP growth have been, and will continue to be in the near future, consumer spending, business investment in equipment, and residential construction.

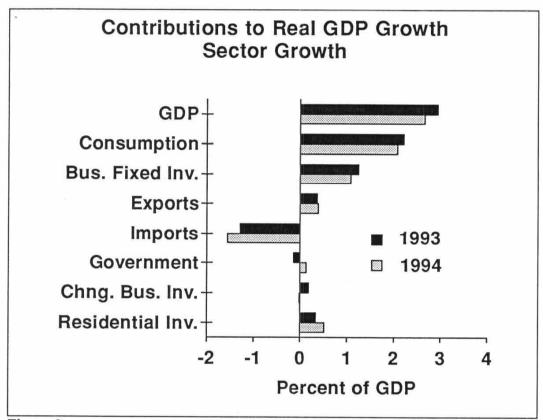


Figure 2

The contributions of the major sectors of the economy to forecasted GDP growth are shown in Figure 2. In the figure, the length of each bar represents the rate at which GDP would grow if the particular subsector were to grow at its forecasted rate, and all other sectors remained constant. As the figure shows, most of the forecasted growth in real output comes from growth in consumer spending. Since consumer spending is such a large fraction of GDP (about two-thirds) it is not surprising that its growth counts so heavily in the overall growth of output. What is surprising, however, is the fact that consumer spending has been as strong as it has been, given the slow growth of personal income. Part of the reason is that consumer borrowing has been making a modest comeback. Although consumer confidence has been up and down since the recession, it appears that, at least for the time being, consumer confidence has returned somewhat.

The strongest area of consumer spending is consumer spending on durable goods. As usual, durable goods spending was weak during the recession, leveling off in 1990 and declining 3.7 percent in 1991, as consumers postponed purchases. However, real spending on consumer durables grew 7 percent in 1992

and 7.3 percent in 1993, and is predicted to grow 6.7 percent in 1994. Thus, consumer spending on durable goods was one area in which the economy exhibited the kinds of growth rates usually associated with a recovery. One of the biggest and most volatile parts of consumer spending on durable goods is new auto sales. Real spending on new autos began to decline well before the beginning of the recession, declining 3.1 percent in 1989, 4.6 percent in 1990, and then plunged another 20.6 percent in 1991. The big recovery in new car sales occurred in 1992, with real purchases increasing 7.2 percent. For 1993, real spending on new autos is only expected to increase 0.9 percent, due to a big decline in purchases during the first quarter. For 1994, growth is expected to be somewhat better at 3.2 percent. Even at the forecasted level for 1994, the real dollar value of new car purchases is expected to be at only about 80 percent of the 1988 level.

Beyond 1994, the prospects for large rates of growth in consumer purchases of autos are probably slim. In general, cars are lasting longer, there are currently more cars in operation than there are licensed drivers, and the number of new drivers coming on the scene in the next few years will be relatively small, as evidenced by the low birth rates of the late 1970's. On the brighter side, the shift in tastes away from the sedan and toward the so-called sport utility vehicle (which is classified as a light truck) should be taken as a good sign for domestic manufacturers, since, although domestic manufacturers account for less than two-thirds of domestic car sales, they account for over 90 percent of the domestic light truck market.

The other two major areas of consumer spending, nondurable goods and services, have tended to be more stable over the business cycle than consumer spending on durable goods. Spending on nondurable goods fell only 1.2 percent in 1991, and real consumer spending on services actually grew in 1991, although at a relatively low 0.9 percent annual rate. Consumer spending on nondurable goods grew 2.4 percent in 1993 and is expected to grow 2.1 percent in 1994, while real consumer spending on services grew 2.8 percent in 1993 and is expected to grow 2.7 percent in 1994.

A second area of strength for the economy that appears in Figure 2 is business spending on equipment. Like consumer spending on durable goods, investment in equipment by firms tends to be very volatile over the business cycle. In fact, real business spending on new equipment fell 3.4 percent in 1991, then grew 6.8 percent in 1992 and 16.2 percent in 1993. It is expected to grow 11.7 percent in 1994. Almost all of the recent and forecasted growth in real business spending on equipment is spending on computers; spending on other types of equipment has been essentially flat. This fact presents a problem with the interpretation of the large increases in real spending, because unlike the case with almost any other real spending category, the price deflator for computing equipment has been falling. The reason for the declining deflator is that it attempts to take account of quality changes, and the cost of a unit of

computing power continues to decrease. Thus, real spending on computers is growing faster than nominal spending, and this effect is so predominant that real spending on all equipment by businesses is growing slightly faster than nominal (current dollar) spending. Thus, the stimulus to aggregate demand from the real rates of increase in spending on business equipment may well be having a smaller effect on aggregate demand than we might otherwise expect.

The other area of capital expenditures by business, real spending on new structures, declined 10.8 percent in 1991 and 6.0 percent in 1992 and grew just 0,5 percent in 1993. The forecast is for such spending to grow 3.2 percent in 1994. The big drag on nonresidential construction is in the area of commercial office space. The U.S. greatly over built commercial office space during the 1980's, to the extent that in 1992 the office vacancy rate was greater than 20 percent. It seems reasonable to conclude that commercial office construction is dead for the near future. Activity in nonresidential construction will be confined to the areas of industrial structures and other commercial structures (retail and warehousing facilities), with the latter area seeing the most rapid growth.

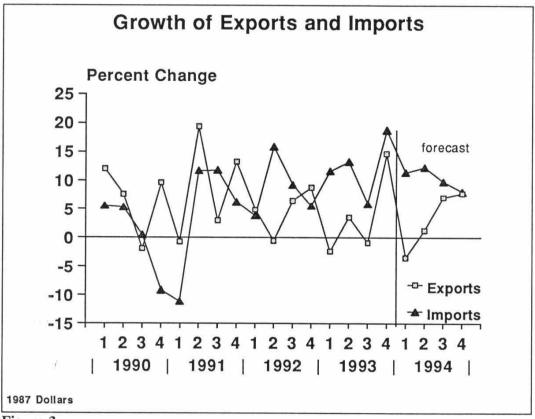


Figure 3

Figure 3 shows our forecast for the growth rates of imports and exports. The forecasted growth rates for exports reflect the dreary economic conditions that exist in many of our trading partners. The growth rate of imports reflects the fact that consumer spending is expected to continue growing in spite of low rates of income growth. As the graph illustrates, the trade gap should continue to widen through the end of 1994. The behavior of the trade gap beyond 1994 will depend partly on the rates of recovery of the economies of the rest of the world.

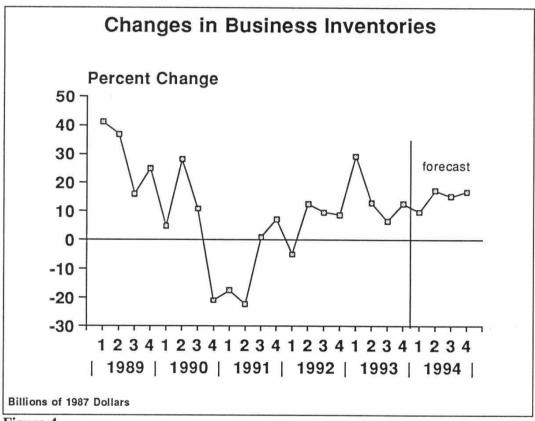
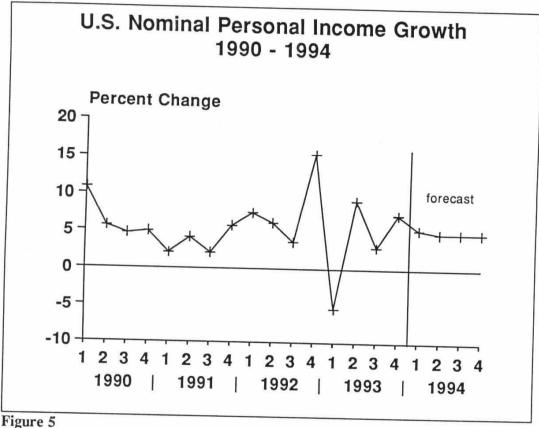


Figure 4

Figure 4 illustrates the forecasted changes in firms' inventories, a category of expenditure that is obviously quite volatile over the business cycle. Although changes in inventory behavior don't cause recessions, they do occur in response to changes in the level of economic activity. One especially interesting feature of Figure 4 is the fact that, although firms behaved characteristically by selling out of inventories during the recession, the rate at which they replenished those inventories in the early recovery period seems to be much lower than would have been expected from observing firms' behavior following earlier recessions. This may reflect, in part, a simultaneous move by firms to introduce efficient inventory

management systems that require lower average levels of inventory stocks.



Government spending, which has at least not hindered the recovery from past recessions, has been a drag on the economy during the current recovery, and will appear to continue to offer little or no stimulus to aggregate demand. On the other hand, real residential investment spending, which declined for five consecutive years beginning in 1987, reaching its nadir with a 12.8 percent decline in 1991, should continue a period of growth that began with 16.8 percent growth in 1992 and 8.7 percent growth in 1993. Real residential investment spending is expected to increase 12.4 percent in 1994. Most of the strength in residential investment is in single family housing. Demographics provide part of the reason for this, as the large numbers of baby boomers grow into their thirties and move into single family housing to raise families. Multi-family housing, on the other hand, will probably remain weak, as over building in the 1980's and the slow growth of the twenty to thirty and over sixty age cohorts combine to provide very little demand for new multi-family housing. Over the longer run, demographics suggest that residential construction will cool off. In the 1970's the number of households grew at a rate of 1.6 percent per year,

and 1.9 million new housing units were constructed, During the eighties, the number of new households grew 1.3 percent per year, and 1.6 million new housing units were constructed. During the 1990's the expected rate of growth of households is about 1.1 percent, leading to the construction of only about 1.3 million housing units.

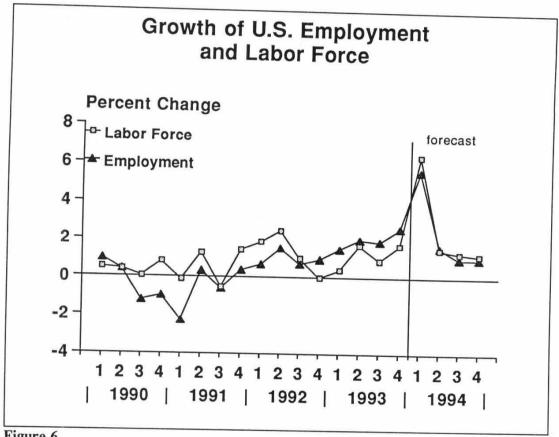


Figure 6

Given the rather small increases in personal income since the recession shown in Figure 5, personal consumption expenditures have been surprisingly strong. Even in the first quarter of 1993, when a 5.4 percent decline in personal income (due to a 14.8 percent decline in wage and salary disbursements) led to a 7.8 percent decline in the real disposable personal income of consumers, real personal consumption expenditures still grew 0.8 percent. Since the recession, and throughout our forecast period, wages and salaries are growing slower than personal income, whereas real consumption expenditures are growing faster than real personal income. As a result, the personal savings rate, which was above 6 percent in the mid 1980s, and 5.3 percent in 1992, fell to 4.3 percent in 1993 and is expected to fall to 3.6 percent in 1994. Thus, the consumer appears to be making about as big a contribution to aggregate demand as

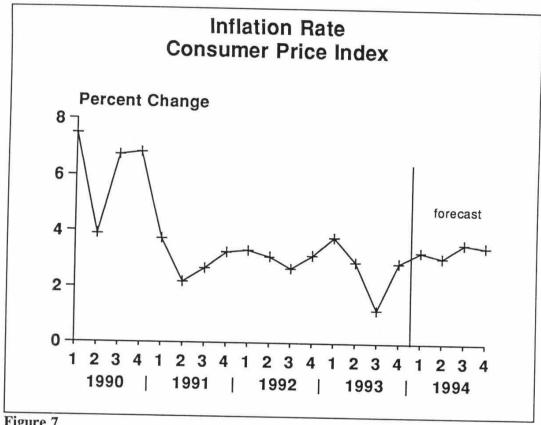


Figure 7

One reason for the slow growth of personal income since the recession has been the behavior of employment during the period. Even as far back as the period before the recession, there was an unusually high number of permanent layoffs, which undoubtedly contributed to the drop in consumer confidence and reduced consumer spending that was one of the factors that led to the recession. The pattern of firms laying off workers has continued up to the present, and is expected to continue into the near future. Layoffs hit the aerospace, computer and retail industries especially hard in 1993, and have recently been felt in communications, chemicals, and transportation. Furthermore, although there has been job growth since the end of the recession in March of 1991, almost all of that growth has been concentrated in four areas, temporary workers, health services, restaurants, and social services. These areas represent only about 18 percent of total nonfarm employment in the U.S., and have an average hourly wage of only \$8.74 per hour, compared to \$10.16 per hour for service jobs in general, and \$10.84 for the entire nonfarm sector. Manufacturing employment, on the other hand, has not grown at all; on the contrary, it has been drifting

downward for the past four and a half years. Thus, although employment has been growing since the recession, the changing composition of employment has meant that wages and salaries have increased slowly, and have been a drag on personal income growth. There is some hope, however, that the pace of the movement towards lower paying jobs may slow soon; job losses in factories are beginning get smaller, and work weeks and overtime are at all time highs, so it may be that the economy will begin to add some permanent factory jobs in the near future. The forecast for labor force and employment growth is shown in Figure 6. Although our prediction is for employment to grow throughout the forecast period, it will barely exceed the growth of the labor force, and thus we expect that the unemployment rate will remain essentially unchanged in 1994, at 6.7 percent compared to 6.8 percent in 1993.

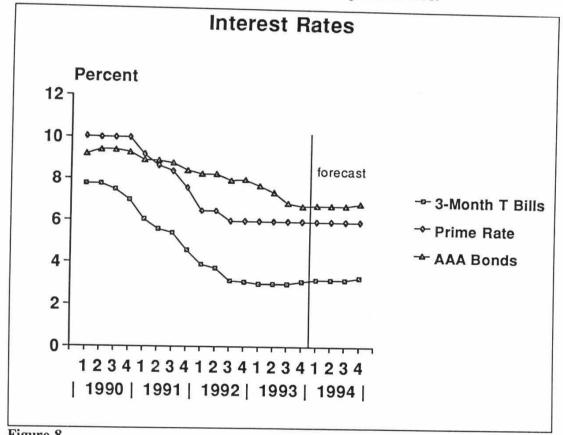


Figure 8

As Figure 7 shows, our forecast is for a slight increase in the rate of inflation in 1994. The flooding during the third quarter of 1993 will be responsible for some increases in food prices during the last quarter of the year and the first quarter of 1994. An expected jump in motor fuel prices during the fourth quarter of 1993 will also add an upward push to prices as 1994 begins. Medical care costs, on the other

hand, should be in the 4 to 5 percent range throughout the forecast period, which is three to four percentage points below the rates of inflation of these costs in recent years. Although the upward trend in prices in our forecast is very modest, it is still probably great enough to cause the Fed to react, although in a measured fashion.

Our interest rate forecast is shown in Figure 8. The slight increase in the short-run three-month Treasury Bill rate in 1994 indicates a slight tightening in the Fed's monetary policy. The upward pressure on prices expected at the end of 1993 and the beginning of 1994, although small, will probably be sufficient to activate a response by the Fed, especially given the fact that the real Federal Funds rate (the Federal Funds rate minus the rate of inflation) is currently about zero percent. In spite of the tightening by the Fed, the prime rate is expected to remain steady during 1994, as the balance sheets of banks on average become stronger, and more funds become available for lending. Long-run rates should also continue to fall slightly, as concerns about longer-run inflationary pressures remain in the background.

Kansas Forecast

While the U.S. economy has experienced unusually high numbers of permanent layoffs immediately before, during and after the recession, the Kansas economy was surprisingly free of such layoffs during most of the same period. Thus, Kansas job growth significantly exceeded job growth in the U.S. during the 1990-1992 period; Kansas nonfarm wage and salary employment³ grew 2.3, 0.6, and 1.8 percent in those three years, compared to 1.4, -1.1, and 0.2 percent for the nation as a whole. Beginning around the end of 1992 and continuing throughout 1993, however, Kansas lost some of its immunity to the epidemic of layoffs, particularly in the area of aircraft manufacturing. As a result, the Kansas economy slowed somewhat during 1993, and although 1994 looks to be somewhat better, some effects of the slowdown in 1993 will linger throughout the year.

The slowdown in of the Kansas economy in 1993 is not obvious from looking at the growth in nonfarm jobs. The data indicate that the number of nonfarm jobs in Kansas grew about 1.8 percent in 1993, which compares favorably with the 1.8 percent increase in nonfarm jobs in 1992. However, the data also indicate that the number of Kansans employed hardly grew in 1993 (0.1 percent). In order to interpret the difference in these two grwoth rates, we need to consider the three major adjustments that are made in going from the number of nonfarm jobs in Kansas to the number of Kansans employed. The first is an adjustment for the fact that, especially in the case of part time jobs, a single individual may hold more than one job. The second is an adjustment for jobs in Kansas that are held by residents of other states, and Kansas residents who hold jobs in other states. The third is the adjustment for the fact that the

category of nonfarm jobs includes neither self-employment nor farm jobs. Although some of the difference between the growth rate of jobs and employment can be explained by a decline in farm employment, especially in the third quarter of the year, this adjustment can explain only a relatively small part of the discrepancy. Furthermore, it is hard to see how changes in the pattern of residence could account for much of the difference. Thus, it appears that most of the difference between the growth rate of jobs in Kansas and the growth rate of Kansans employed must be due a decrease in self-employment and a relative increase in the number of part-time jobs. This is partly born out by the fact that 25 percent of the increase in jobs in Kansas in 1993 was in the retail trade sector, which has a very high percentage of part-time employment.

The slowdown in the Kansas economy in 1993 is much more obvious when we look at two other indicators of Kansas economic performance, the unemployment rate and the rate of growth of personal income. Although the growth of the Kansas labor force in 1993 appeared to be unusually low, only about 0.8 percent, the small decline in the number of Kansans employed led to an increase in the unemployment rate, from 4.2 percent in 1992 to 4.8 percent in 1993. Similarly, the rate of personal income growth in 1993 was only about 4.5 percent, compared to 7.8 percent in 1992.

Our forecast for 1994 looks a little better than 1993. Although the forecasted growth of the number of jobs in Kansas is the same, at 1.8 percent, in 1994 compared to 1993, it appears that the number of Kansans employed will grow 1.5 percent, indicating both a relative slowdown in the increase of part-time employment and a reduction in the rate of decrease in self-employment. Since the labor force is forecasted to grow at 1.3 percent in 1994, there will be a small decline in the unemployment rate in 1994, to 4.7 percent. Similarly, personal income is expected to increase 5.0 percent in 1994, a half percentage point greater than the increase in 1993.

Table 1 shows the breakdown by industrial sector of the forecasted growth of Kansas nonfarm wage and salary employment. Probably the most notable feature of the table is the continuing decline in the number of jobs in durable goods manufacturing. The large decline of 3.2 percent in 1993 is due to a 9.5 percent decrease in employment in transportation equipment manufacturing, mostly due to layoffs in aircraft manufacturing. Although the drop in employment in transportation equipment is expected to be much smaller in 1994, 2.4 percent, there will still be a small decline in employment in durable goods manufacturing. The increase in the number of service jobs in 1993, although above the average for all sectors at 2.8 percent, is still below the average rates of growth of service jobs in recent years. The forecast is for service employment growth of 4.1 percent in 1994, which is more in line with the recent growth in that sector. Construction employment should continue its upward trend for the third year in

Table 3 Kansas Employment Growth Breakdown

| | 1992 | 1993 | 1994 |
|------------------------------------|------|------|------|
| Mining | -8.1 | -7.6 | 1.8 |
| Construction | 6.7 | 3.4 | 3.7 |
| Durable Goods Manufacturing | -2.0 | -3.2 | -0.5 |
| Nondurable Goods Manufacturing | 0.0 | 1.2 | 1.5 |
| Transportation and Utilities | -0.7 | 1.2 | 1.5 |
| Wholesale Trade | 0.8 | 1.8 | 0.9 |
| Retail Trade | 1.3 | 2.5 | 1.2 |
| Finance, Insurance and Real Estate | -0.8 | 0.7 | 0.1 |
| Services | 4.2 | 2.8 | 4.1 |
| State and Local Government | 3.4 | 3.5 | 1.7 |
| Federal Government | 2.0 | -1.6 | -2.1 |
| Farm | -3.8 | -4.3 | -1.1 |

1994. Farm employment is expected to continue its mild downward trend, caused by productivity increases. The forecasted 1.5 percent increase in employment in nondurable goods manufacturing will be led by a 2.1 percent increase in employment in printing and publishing, which continues to be a solid subsector of nondurable goods manufacturing in Kansas.

The breakdown of the forecast for Kansas personal income is shown in Table 2. The salient feature of that table is the growth rate of wages and salaries. Although the growth rate of wages and salaries is about one percentage point below the growth rate of personal income in both 1992 and 1993, there is a

Table 4 Kansas Personal Income Growth Breakdown

| | 1992 | 1993 | 1994 |
|---|-------|------|------|
| Personal Income - Nominal | 7.0 | 4.5 | 5.0 |
| | | | |
| Wages and Salaries | 5.4 | 3.5 | 4.3 |
| Nonfarm Proprietors' Income | 9.7 | 5.8 | 6.4 |
| Farm Proprietors' Income | 126.1 | 4.5 | 0.9 |
| Dividends Interest and Rent | -1.3 | 3.8 | 2.6 |
| Personal Contributions for Social Insurance | 5.9 | 5.0 | 4.0 |
| Social Histirance | 3.9 | 5.9 | 4.8 |
| Transfer Payments | 11.1 | 6.9 | 8.4 |
| Other Labor Income | 6.4 | 8.5 | 8.9 |

significant difference between the two years. That is because, as one can easily see from looking at Table 2, the most volatile component of personal income in Kansas is farm proprietors' income. In fact, the 126 percent increase in farm proprietors' income in 1992 had a significant effect on the growth rate of personal income in that year. To see how much of an effect, we can calculate the rate of growth of personal income without farm proprietors' income in 1992 and 1993. If we do so, we find that the rest of personal income grew 5.9 percent in 1992 and 4.5 percent in 1993. Thus, if we omit farm proprietors income, we find that wage and salary growth led personal income growth in 1992, while it is expected to be a drag on personal income growth in 1993. The reasons for this change are not hard to find. First, as we noted above, a significant amount of employment growth in 1993 is in the retail trade sector, an area that has a high percentage of part-time workers receiving relatively low wages. Second, the durable goods manufacturing area, with its relatively high paying jobs, lost employment in 1993, much of it in the transportation equipment subsector, which is a high wage subsector even within durable goods manufacturing. For instance, the average hourly wage in transportation equipment manufacturing is about

\$16.00 per hour, compared to about \$10.90 per hour in machinery manufacturing and \$9.80 per hour in fabricated metals manufacturing. It is not surprising that wages and salaries are rising slowly in this situation.

For 1994, again, things look a bit better, with wages and salaries increasing 4.3 percent compared to a 5.0 percent increase in personal income and a 5.1 percent increase in personal income without farm proprietors' income. Real personal income also grew very slowly in 1993 compared to 1992. Here too, if we remove farm proprietors' income, the discrepancy becomes less pronounced. Real personal income less farm proprietors' income grew 2.4 percent in 1992, and 1.8 percent in 1993 and is expected to grow 2.6 percent in 1994. Once again, 1994 looks to be a better year than 1993.

Conclusion

The recession of 1990-1991 was somewhat unusual in that it appears to have been caused less by mistakes in monetary policy and more by reductions in consumer confidence fueled by an unusually high level of permanent layoffs in the period preceding the recession. The period since the recession has also been unusual in that, although the economy has expanded, there has been a conspicuous absence of the short period of well above average growth that is usually called a recovery. There appear to be several reasons for this phenomenon. First, the layoffs and streamlining of firms that began before the recession have continued to some extent during and after the recession. Thus, employment growth has been slow to recover, and the employment growth that has been seen has been in relatively lower-paying jobs, including the addition of temporary workers. As a result, wage and salary growth has been slow enough to be a drag on personal income growth. Thus, even though consumers have been spending a larger fraction of their disposable incomes, the growth of consumer spending has been much smaller than in previous recovery periods. The second reason for the low rate of growth during the recovery is the fact that the U.S. economy is further along in the business cycle than most of our trading partners, many of whom are still in a recession, so that the rate of growth of U.S. exports has been and will continue to be slow. The third reason for the slow rate of growth during the recovery is the fact that the Federal government has been taking its budget deficit more seriously, and thus the rate of government spending on goods and services has been constrained.

On the positive side, business spending on plant and equipment has been strong, as has been residential construction. These areas, along with the fact that consumer spending has at least been strong relative to the rate of growth of personal income, has kept U.S. output growth since the recession near its long-run average, and this level of economic performance is about what we should expect over the near future.

The Kansas economy avoided the direct effects of the recession because the permanent layoffs and consequent loss of income and confidence that played a prominent role in the national recession were largely absent in Kansas. Thus, employment and income grew substantially faster in Kansas during the 1990-1992 period than they did in the U.S. as a whole. In 1993, however, the phenomenon of layoffs caught up with Kansas, particularly in the area of aircraft manufacturing. Thus, 1993 was a year in which the performance of the Kansas economy, measured by employment and income growth, slightly under performed the national economy. However, it appears that most of the effects were felt in 1993, and that 1994 will be a somewhat better year, with the unemployment rate leveling off, and personal income growth increasing.

Footnotes

- 1. The forecasts for the national economy are produced by the Econometric Model of the United States developed at the Center for Econometric Model Research at the University of Indiana, using assumptions generated at the Institute. The directors of the CEMR are R. Jeffery Green and Morton J. Marcus. The Kansas forecasts are produced by the Kansas Econometric Model, which is a product of the Institute for Public Policy and Business Research.
 - 2. Trade weighted average of the dollar's exchange rate.
- 3. Employment refers to total number of Kansas residents employed in civilian (including nonmilitary government) jobs. Nonfarm wage and salary employment refers to total nonfarm civilian (including nonmilitary government) jobs in Kansas. Thus, to go from nonfarm wage and salary employment to employment, one must correct for farm employment, Kansans who have more than one job, Kansans who work out of state, and non-Kansas residents who work in Kansas.

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Appendix

| Forecast | |
|------------|--|
| Sn | |
| 1993-1994 | |
| of Kansas | |
| University | |
| Research, | |
| Business | |
| and | |
| Policy | |
| Public | |
| for | |
| Institute | |

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| GNP AS EXPENDITURE - 1982 DOLLARS | | | | | | | | | | |
|---|--------|---------------|--------|------------|--------|--------------|--------|--------|--------|--------|
| | 199301 | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 1993 | 1994 |
| US: Gross Domestic Product Percent Change From Last Qtr (AR) | 5078.2 | 5102.1 | 5138.3 | 5212.1 | 5239.5 | 5256.5 | 5276.5 | 5303.4 | 5132.7 | 5269.0 |
| US: Personal Consumption Expend. Percent Change From Last Qtr (AR) | 3403.8 | 3432.7 | 3469.6 | 3503.9 | 3534.9 | 3550.4 | 3567.5 | 3585.3 | 3452.5 | 3559.5 |
| US: Per. Con. ExpDurables Percent Change From Last Qtr (AR) | 471.9 | 484.2 | 493.1 | 509.9 | 517.9 | 521.1 | 524.2 | 527.1 | 489.8 | 522.6 |
| US: PCE-Nondurables Percent Change From Last Qtr (AR) | 1076.0 | 1083.1 | 1093.0 | 1100.1 | 1107.5 | 1109.6 | 1112.5 | 1115.5 | 1088.0 | 1111.3 |
| US: PCE-Services Percent Change From Last Qtr (AR) | 1855.9 | 1865.4 | 1883.5 | 1893.9 | 3.3 | 1919.7 | 1930.9 | 1942.7 | 1874.7 | 1925.7 |
| US: Fixed Nonresidential Invest. Percent Change From Last Qtr (AR) | 562.3 | 584.3 | 594.8 | 623.8 | 633.3 | 643.1 | 652.7 | 660.7 | 591.3 | 4.7.4 |
| US: Producers Durable Equipment Percent Change From Last Qtr (AR) | 414.1 | 433.2 19.8 | 443.6 | 468.7 24.6 | 478.1 | 487.1 7.8 | 496.0 | 503.7 | 439.9 | 491.2 |
| US: Investment in Structures Percent Change From Last Qtr (AR) | 148.2 | 151.1 | 151.2 | 155.1 | 155.2 | 156.0 | 156.7 | 157.0 | 151.4 | 156.2 |
| US: Residential Investment Percent Change From Last Qtr (AR) | 211.4 | 206.2 | 212.1 | 227.2 | 236.5 | 240.3 | 242.3 | 244.0 | 214.2 | 240.8 |

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| | 199301 | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 1993 | 1994 |
|--|--------|----------------|--------|--------|--------|--------|--------|--------|-------|--------|
| US: Change in Bus. Inventories | 29.3 | 13.0 | 6.5 | 12.7 | 2.6 | 17.2 | 15.2 | 16.8 | 15.4 | 17. 7 |
| US: Change in Farm Inventories | 0.0 | -4.1 | -12.9 | -6.7 | 0.4- | 0.0 | 0.0 | 0.0 | -5.9 | 1.0 |
| US: Change in Nonfarm Inv. | 29.3 | 17.1 | 19.4 | 19.4 | 13.7 | 17.2 | 15.2 | 16.8 | 21.3 | 15.7 |
| US: Net Exports Percent Change From Last Qtr (AR) | -59.9 | -75.2 148.4 | -86.3 | -95.6 | -120.5 | -139.4 | -146.5 | -149.9 | -79.3 | -139.0 |
| US: Total Exports Percent Change From Last Qtr (AR) | 588.0 | 593.2 | 591.9 | 612.5 | 607.1 | 609.0 | 619.5 | 631.2 | 596.4 | 616.7 |
| US: Total Imports Percent Change From Last Qtr (AR) | 647.9 | 13.3 | 678.2 | 708.1 | 727.5 | 748.4 | 766.0 | 781.1 | 675.7 | 755.7 |
| US: Total Government Purchases Percent Change From Last Qtr (AR) | 931.3 | 941.1 | 941.7 | 940.1 | 945.6 | 944.8 | 945.3 | 946.5 | 938.5 | 945.6 |
| US: Fed. Govt. Purchases Percent Change From Last Qtr (AR) | 357.6 | 359.4 | 353.7 | 349.8 | 352.3 | 348.6 | 346.2 | 344.4 | 355.1 | 347.9 |
| US: Fed. Defense Purchases Percent Change From Last Qtr (AR) | 246.0 | 246.4 | 240.1 | 238.2 | 236.5 | 235.4 | 233.7 | 232.2 | 242.7 | 234.5 |
| US: Fed. Nondefense Purchases Percent Change From Last Qtr (AR) | -3.2 | 113.0 | 113.7 | 111.6 | 115.8 | 113.2 | 112.5 | 112.2 | 112.4 | 113.4 |
| US: State and Local Govt. Purch. 573.7 Percent Change From Last Qtr (AR) 0.3 | 573.7 | 581.6 | 588.0 | 590.4 | 593.3 | 596.2 | 599.1 | 602.1 | 583.4 | 597.7 |
| Service Concrete State State All | | | | 9 | | | | | | |

| A3 | 1994 | 4.9 | 4635.4 | 580.4 | 1402.2 | 2652.8 | 672.5 | 482.5 | 190.0 | 292.1 |
|--|--------|---|---|--|--|---|---|--|---|--|
| 25FEB94 | 1993 | 6374.0 | 4390.7 | 537.7 | 1350.2 | 2502.7 | 622.9 | 444.3 | 3.5 | 252.3 |
| | 199404 | 6791.3 | 4720.7 | 588.3 | 1419.0 | 2713.4 | 682.5 | 3.4 | 192.9 | 298.9 |
| | 199403 | 6715.3 | 4662.4 | 583.1 | 1407.6 | 2671.7 | 676.8 | 485.6 | 191.2 | 294.8 |
| ast | 199402 | 6644.8 | 4603.5 | 577.5 | 1395.6 | 2630.4 | 668.9 | 480.0 | 188.9 | 290.3 |
| US Forecast | 199401 | 6590.2 | 4555.1 | 572.6 | 1386.8 | 2595.8 | 661.6 | 474.7 | 186.9 | 284.3 |
| 1993-1994 | 199304 | 6510.8 | 4487.4 | 561.9 | 1368.4 | 2557.2 | 653.0 | 467.8 | 185.2 | 271.1 35.4 |
| of Kansas | 199303 | 6395.9 | 4419.1 5.5 | 541.9 8.0 | 1352.4 | 2524.8 | 624.9 | 445.8 | 3.4 | 251.3 |
| niversity | 199302 | 6327.6 | 4359.9 | 531.6 | 1344.8 | 2483.4 | 619.1 | 19.7 | 177.6 | 241.9 |
| Research, University of | 199301 | 6261.6 | 3.8 | 515.3 | 1335.3 | 2445.5 | 10.9 | 422.2 | 3.1 | 5.2 |
| Institute for Public Policy and Business F GNP AS EXPENDITURE - CURRENT DOLLARS | | US: Gross Domestic Product Percent Change_From Last Qtr (AR) | US: Personal Consumption Expend. Percent Change From Last Qtr (AR) | US: Per. Con. ExpDurables Percent Change From Last Qtr (AR) | US: PCE-Nondurables Percent Change From Last Qtr (AR) | US: PCE-Services Percent Change From Last Qtr (AR) | US: Fixed Nonresidential Invest. Percent Change From Last Qtr (AR) | US: Producers Durable Equipment Percent Change From Last Qtr (AR) | US: Investment in Structures Percent Change From Last Qtr (AR) | US: Residential Investment Percent Change From Last Qtr (AR) |

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| 7001 | 20.3 | -1.3 | 21.6 | -120.1 | 690.3 | 810.3 | 1185.2 | 444.3 | 300.1 | 144.2 | 741.0 | |
|--------|--------------------------------|-------|----------------------------|--|--|--|---|---|---|--|--|--|
| 1993 | 16.8 | -6.3 | 23.1 | -65.7 | 660.1 | 725.8 | 1157.1 | 443.4 | 303.6 | 139.8 | 713.7 | |
| 199404 | 23.2 | 0.0 | 23.2 | -128.2 | 713.0 | 841.2 | 1194.3 | 444.0 | 300.1 | 143.9 | 750.3 | |
| 199403 | 21.0 | 0.0 | 21.0 | -127.2 | 695.3 | 822.5 | 1187.6 | 443.5 | 300.1 | 143.4 | 744.1 | |
| 199492 | 23.4 | 0.0 | 23.4 | -122.3 | 678.9 | 801.2 | 1.181.1 | 443.5 | 300.1 | 143.4 | 3.1 | |
| 199401 | 13.8 | -5.0 | 18.8 | -102.7 | 673.8 | 776.5 | 1178.0 | 446.0 | 300.1 | 145.9 | 732.0 | |
| 199304 | 11.7 | -8.2 | 19.9 | -77.7 | 675.8 | 753.5 | 1165.3 | 439.7 | 300.0 | 139.7 | 725.6 | |
| 199303 | 7.7 | -14.9 | 22.6 | -71.9 | 653.2 | 725.1 | 1164.8 | 443.6 | 301.9 | 141.7 | 721.2 5.8 | |
| 199302 | 13.1 | -3.7 | 16.8 | -65.1 | 660.0 | 725.0 | 1158.6 | 4.7.5 | 307.6 | 140.0 | 8.3 | |
| 199301 | 34.6 | 1.5 | 33.0 | 140.1 | 651.3 | 3.6 | 1139.7 | 442.7 | 304.8 | 137.9 | 3.3 | |
| | US: Change in Bus. Inventories | | US: Change in Nonfarm Inv. | US: Net Exports Percent Change From Last Qtr (AR) | US: Total Exports Percent Change From Last Qtr (AR) | US: Total Imports Percent Change From Last Qtr (AR) | US: Total Government Purchases Percent Change From Last Qtr (AR) | US: Fed. Govt. Purchases Percent Change From Last Qtr (AR) | US: Fed. Defense Purchases Percent Change From Last Qtr (AR) | US: Fed. Nondefense Purchases Percent Change From Last Qtr (AR) | US: State and Local Govt, Purch. Percent Change From Last Qtr (AR) | US forecasts were generated using sometime |

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| 1007 | 4.9 | 707.1 | 672.1 | -35.0 | 5984.6 | 567.6 | 29.8 | 13.3 | 4.7 | 5378.4 |
|--------|---|--|--|---|---|--|---|-----------------------------|--|--|
| 1993 | 6374.0 | 671.2 | 629.9 | -41.2 | 5706.0 | 530.5 | 28.0 | 18.3 | 7.2 | 5136.3 |
| 199404 | 6791.3 | 724.5 | 682.3 | -42.2 | 6073.0 | 579.8 | 30.4 | 13.3 | 3.6 | 5453.3 |
| 199403 | 6715.3 | 712.8 | 670.6 | -42.2 | 6008.8 | 571.6 | 30.0 | 13.3 | 4.4 | 5398.5 |
| 199402 | 6644.8 | 700.9 | 658.7 | -42.2 9736.3 | 5950.2 | 563.6 | 29.6 | 13.3 | 5.2 | 5349.1 |
| 199401 | 6590.2 | 690.3 | 676.9 28.0 | -13.4 | 5906.4 | 555.6 | 29.3 | 13.3 | 5.5 | 5312.7 |
| 199304 | 6510.8 | 678.7 | 636.4 | -42.2 | 5838.5 | 547.9 | 28.8 | 13.3 | 1561.2 | 5259.2 9.3 |
| 199303 | 6395.9 | 10.3 | 636.3 | -43.4 | 5722.6 | 532.4 | 28.4 | 13.3 | -5.3 | 5143.2 |
| 199302 | 6327.6 | 663.3 | 624.8 | -38.4 | 5663.9 | 526.2 8.5 | 27.8 | 12.0 | 6.1 | 5104.0 |
| 199301 | 6261.6 | 663.2 | 622.3 | 6.07- | 5598.8 | 515.6 | | | 17.1 2332.3 | 5038.9 |
| | US: Gross Domestic Product Percent Change From Last Qtr (AR) | US: Cap. Cons. Allow. with Adj. Percent Change From Last Qtr (AR) | US: Cap. Cons. Allow w/o Adj. Percent Change From Last Qtr (AR) | US: Cap. Cons. Adjustment, Total Percent Change From Last Qtr (AR) | US: Net National Product Percent Change From Last Qtr (AR) | US: Indirect Business Taxes Percent Change From Last Qtr (AR) | US: Business Transfer Payments Percent Change From Last Qtr (AR) | US: Statistical Discrepency | US: Sub. less Cur. SurGov. E. Percent Change From Last Qtr (AR) | US: National Income Percent Change From Last Qtr (AR) |

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| | 199301 | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 1993 | 1994 |
|---|--------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|
| US: Corp. Prof. W. IVA + CCADJ Percent Change From Last Qtr (AR) | 432.1 | 458.1 | 468.5 | 491.7 | 493.3 | 475.7 | 474.6 | 477.6 | 462.6 | 480.3 |
| US: Net Interest Percent Change From Last Qtr (AR) | 450.1 | 443.2 | 444.6 | 448.2 | 452.5 | 4.754 | 462.4 | 467.5 | 446.5 | 459.9 |
| US: Cont. to Soc. InsTotal Percent Change From Last Qtr (AR) | 568.9 | 585.9 | 590.5 | 596.0 | 608.4 | 613.5 | 519.1 | 624.8 | 585.3 | 616.4 |
| Wage Accruals less Disburs. | 80.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 | 0.0 |
| US: Govt. Trans. to PersTotal Percent Change From Last Qtr (AR) | 873.0 8.5 | 883.7 | 896.4 | 905.6 | 934.5 | 951.5 | 971.8 | 991.9 | 889.7 | 962.4 |
| US: Personal Interest Income Percent Change From Last Qtr (AR) | 695.4 | 693.1 | 1.5 | 699.2 | 703.5 | 708.1 | 713.0 | 717.5 | 695.9 | 710.5 |
| US: Personal Dividend Income Percent Change From Last Qtr (AR) | 157.0 | 157.8 | 159.0 | 159.4 | 162.4 | 165.4 | 168.4 | 171.4 | 158.3 | 166.9 |
| US: Personal Income Percent Change From Last Qtr (AR) | 5254.7 | 5373.2 9.3 | 5412.7 | 5509.8 | 5583.0 | 5650.3 | 5718.9 | 5787.9 | 5387.6 | 5685.1 |

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| 7001 7001 700 | 23 | 3080.4 | 350.7 | .2 442.1 469.0 .8 6.7 6.1 | 45.0 | 397.1 | 13.0 | 695.9 7 | | 158.3 | 158.3 | 158.3 |
|---------------|--|--|---|---|--|---|---|---|---|----------------------|----------------------|-----------------------------|
| 199403 199404 | | 3247.5 3279.0 3.9 3.9 | | 470.7 475.2 3.4 3.8 | | 424.6 429.7 4.6 4.9 | | 713.0 717.5 2.8 2.6 | | 168.4 171. 7.5 7. | 8.4 171.4 7.5 7.4 | • |
| 199402 19 | 5650.3 57 | 3216.7 32 3.3 | 378.4 3 | 466.8 4 | 47.0 | | 18.2 1 2864.2 | 708.1 71 | | 7.7 | | |
| 199401 | 5583.0 | 3190.9 | 371.6 | 463.2 | 47.5 | 415.8 | 7.8 | 703.5 | 162.4 | 7.6 | 7.6 | 7.6 |
| 199304 | 5509.8 | 3149.2 | 362.9 | 462.4 | 52.4 | 410.1 | 17.9 | 699.2 | 159.4 | 1.0 | 1.0 | 1.0 |
| 199303 | 5412.7 | 3115.4 | 354.7 | 422.5 | 24.8 | 397.6 | 13.7 | 1.5 | 159.0 | 3.1 | 3.1 | 3.1 |
| 199302 | 5373.2 | 3082.7 | 346.6 | 439.4 | 47.0 | 392.4 | 12.7 | 693.1 | 157.8 | 7.1 | 7.7 | 905.5 |
| 199301 | 5254.7 | 2974.3 | 338.5 | 444.1 | 55.7 87.5 | 388.4 | 7.5 | 695.4 | 157.0 | 15.7 | 7 708 | 894.4 |
| | US: Personal Income Percent Change From Last Qtr (AR) | US: Wage and Salary Disburse, Percent Change From Last Qtr (AR) | US: Other Labor Income Percent Change From Last Qtr (AR) | US: Total Proprietors Inc. Percent Change From Last Gtr (AR) | US: Farm Proprietors Inc. Percent Change From Last Qtr (AR) | US: Nonfarm Proprietors Inc. Percent Change From Last Qtr (AR) | US: Rental Income of Persons Percent Change From Last Qtr (AR) | US: Personal Interest Income Percent Change From Last Qtr (AR) | US: Personal Dividend Income Percent Change From Last Otr (AD) | | | US: Total Transfer Payments |

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| 1994 | 744.9 | 4940.2 | 4635.4 | 116.5 | 11.4 | 176.9 -7.1 | 3793.7 | 3.6 |
|--------|--|---|---|---|--|--|---|------------------------------|
| 1993 | 5.7 | 4706.0 | 4390.7 | 114.0 | 11.1 | 190.4 | 3700.5 | 4.1 |
| 199404 | 757.9 | 5030.1 | 4720.7 | 116.1 | 11.4 | 181.8 | 3820.1 | 3.6 |
| 199403 | 750.2 | 4968.8 | 4662.4 | 116.6 | 11.4 | 178.4 | 3801.9 | 3.6 |
| 199402 | 745.5 | 6.4064 | 4603.5 | 116.6 | 11.4 | 173.4 | 3782.6 | 3.5 |
| 199401 | 726.1 | 4857.0 | 4555.1 | 116.7 | 11.4 | 173.8 | 3770.1 | 3.6 |
| 199304 | 699.1 | 4810.7 | 4487.4 | 116.7 | 11.4 | 195.2 | 3756.4 | 4.1 |
| 199303 | 689.0 | 4723.7 | 4419.1 | 114.1 | 10.8 | 179.7 | 3708.7 | 3.8 |
| 199302 | 681.0 | 4692.2 | 4359.9 | 112.7 | 11.0 | 208.7 | 3694.4 | 7.7 |
| 199301 | 657.1 | 4597.5 | 4296.2 | 112.5 | 11.0 | 177.9 | 3642.6 | 3.9 |
| | US: Tot. Pers. Tax + Nontax Pay Percent Change From Last Qtr (AR) | US: Disposable Personal Income Percent Change From Last Qtr (AR) | US: Personal Consumption Expend. Percent Change From Last Qtr (AR) | US: Int. Paid by Cons. to Bus. Percent Change From Last Qtr (AR) | US: Pers. Trans. Pay. to For. Percent Change From Last Qtr (AR) | US: Personal Saving Percent Change From Last Qtr (AR) | US: Disposable Personal Income Percent Change From Last Qtr (AR) | US: YSAV as a Percent of YPD |

| A9 | 1994 | 5378.4 | 3233.5 | 608.3 | 2625.3 | 719.8 | 337.6 | 382.2 | 469.0 | 46.5 | 422.5 |
|--|--------|--|---|---|--|---|--|---|---|--|---|
| 25FEB94 | 1993 | 5136.3 | 3100.4 | 589.7 | 2510.7 | 671.8 | 321.0 | 350.7 | 442.1 | 45.0 | 397.1 |
| | 199404 | 5453.3 | 3279.0 | 614.9 | 2664.1 | 735.0 | 342.0 | 393.1 | 475.2 | 45.5 | 429.7 |
| | 199403 | 5398.5 | 3247.5 | 610.5 | 2637.1 | 724.7 | 338.9 | 385.7 | 470.7 | 46.2 | 424.6 |
| st | 199402 | 5349.1 | 3216.7 | 606.0 | 2610.6 | 714.4 | 336.0 | 378.4 | 466.8 | 47.0 | 419.8 |
| US Forecast | 199401 | 5312.7 | 3190.9 | 601.6 | 2589.3 | 705.0 | 333.4 | 371.6 | 463.2 | 47.5 | 415.8 |
| 1993-1994 | 199304 | 5259.2 | 3149.2 | 595.5 | 2553.7 | 8.8 | 326.8 | 362.9 | 462.4 | 52.4 1893.1 | 410.1 |
| of Kansas | 199303 | 5143.2 | 3115.4 | 592.8 | 2522.6 | 678.5 | 323.8 | 354.7 | 422.5 | 24.8 | 397.6 |
| iversity o | 199302 | 5104.0 | 3082.7 | 586.3 | 2496.3 | 668.0 | 321.4 | 346.6 | 439.4 | 47.0 | 392.4 |
| Research, Ur | 199301 | 5038.9 | 3054.3 | 584.1 | 2470.2 | 650.7 | 312.2 | 338.5 | 444.1 | 55.7 87.5 | 388.4 |
| Institute for Public Policy and Business Research, University of NATIONAL INCOME - CURRENT DOLLARS | | US: National Income Percent Change_From Last Qtr (AR) | US: Wages and Salaries Percent Change From Last Qtr (AR) | US: W. and SGovt. + Govt. Ent. Percent Change From Last Qtr (AR) | US: W. and SOther Percent Change From Last Qtr (AR) | US: Supplements to w. and s. Percent Change From Last Qtr (AR) | US: Emp. Cont. to Soc. Ins. Percent Change From Last Otr (AR) | US: Other Labor Income Percent Change From Last Qtr (AR) | US: Total Proprietors Inc. Percent Change From Last Qtr (AR) | US: Farm Proprietors Inc. Percent Change From Last Qtr (AR) | US: Nonfarm Proprietors Inc. Percent Change From Last Qtr (AR) |

| A10 | 1994 | 15.9 | 480.3 | 459.9 | 466.2 | 180.7 | 285.5 | 178.5 | 107.1 | -11.3 | 25.4 | 459.9 |
|---|--------|---|---|---|--|--|--|--|--|---|--|---|
| 25FEB94 | 1993 | 13.0 | 462.6 | 446.5 | 446.1 12.8 | 171.3 | 274.8 | 169.0 | 105.8 | -7.8 46.7 | 24.3 | 446.5 |
| | 199404 | 19.0 | 477.6 | 467.5 | 467.3 | 182.6 | 284.7 | 183.3 | 101.4 | -12.6 | 22.9 | 467.5 |
| | 199403 | 18.6 | 474.6 | 462.4 | 464.5 | 180.6 | 283.8 | 180.1 | 103.8 | -12.9 | 23.1 | 462.4 |
| ist | 199402 | 18.2 | 475.7 | 4.754 | 461.8 | 178.7 | 283.1 | 176.9 7.6 | 106.2 -31.6 | -9.3 | 23.2 | 4.754 |
| US Forecast | 199401 | 7.8 | 493.3 | 452.5 | 471.2 | 180.7 | 290.5 | 173.7 | 116.8 | -10.5 | 32.6 262.0 | 452.5 |
| 1993-1994 | 199304 | 17.9 | 491.7 | 448.2 | 475.3 | 181.5 | 293.8 | 170.4 | 123.4 | -7.2 268638.6 | 23.6 | 448.2 |
| of Kansas | 199393 | 13.7 | 468.5 | 444.6 | 443.8 | 169.5 | 274.3 | 169.7 | 104.6 | 1.0 | 23.8 | 444.6 |
| niversity o | 199302 | 12.7 | 458.1 | 443.2 | 445.6 | 173.3 | 272.3 | 168.5 | 103.9 | -12.2 | 24.7 | 443.2 |
| Research, Ur | 199301 | 7.5 152487.9 | 432.1 | 450.1 | 419.8 | 160.9 | 258.9 | 167.5 | 91.4 | -12.7 | 25.1 | 450.1 |
| Institute for Public Policy and Business Research, University of Kansas | | US: Rental Income of Persons Percent Change From Last Qtr (AR) | US: Corp. Prof. w. IVA + CCADJ Percent Change From Last Qtr (AR) | US: Net Interest Percent Change From Last Qtr (AR) | US: Corp. Prof. before Taxe Percent Change From Last Qtr (AR) | US: Profits Tax Liability Percent Change From Last Qtr (AR) | US: Corp. Prof. after Taxes Percent Change From Last Qtr (AR) | US: Dividends-Total Percent Change From Last Qtr (AR) | US: Undistribured Corp. Prof. Percent Change From Last Qtr (AR) | US: Inventory Valuation Adj. Percent Change From Last Gtr (AR) | US: Corp. Cap. Cons. Adj. Percent Change From Last Gtr (AR) | US: Net Interest Percent Change From Last Qtr (AR) |

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.

| Policy and Business Research, University of Kansas 1993-1994 US Forecast |
|--|
| 199301 |
| 1.4 |
| 1.2 |
| 3.0 |
| 1.0 |

3.0

1994

A11

1.3

1.3

9.0

| EMPLOYMENT | 199301 | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 1993 | 1994 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| US: Civilian Labor Force Percent Change From Last Qtr (AR) | 127.4 | 127.9 | 128.2 | 128.7 | 130.7 | 131.2 | 131.6 | 132.0 | 128.0 | 131.4 |
| US: Civilian Employment Percent Change From Last Qtr (AR) | | 119.0 | 119.5 | 120.3 | 122.0 | 122.4 | 122.7 | 123.0 | 119.3 | 122.5 |
| US: Unemployment Percent Change From Last Qtr (AR) | 9.0 | 8.9 | 8.6 | 8.4 | 8.8 | 8.8 | 8.9 | 9.0 | 8.7 | 8.9 |
| US: Unemployment Rate-Total | | 6.9 | 7.9 | 6.5 | 2.9 | 6.7 | 6.7 | 8.9 | 8.9 | 2.9 |
| US: Tot. Nonfarm Empl. Percent Change From Last Qtr (AR) | | 110.0 | 110.4 | 110.9 | 111.3 | 111.7 | 112.0 | 112.4 | 110.2 | 111.8 |
| US: Total Govt. Empl. Percent Change From Last Qtr (AR) | 18.8 | 18.8 | 18.9 | 18.9 | 19.0 | 19.1 | 19.2 | 19.3 | 18.8 | 1.61 |
| US: Fed. Govt. Empl. Percent Change From Last Qtr (AR) | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 |
| US: S & L Govt. Empl. Percent Change From Last Qtr (AR) | 15.8 | 15.9 | 16.0 | 16.0 | 16.1 | 16.2 | 16.3 | 16.4 | 15.9 | 16.3 |
| US: Output Per Namhour-Pr. Nonag. Percent Change From Last Qtr (AR) | 23.4 | 23.3 | 23.4 | 3.9 | 23.5 | 23.6 | 23.6 | 1.0 | 23.4 | 23.6 |

| Institute for Public Policy and Business Research, University of Kansas | Research, Ur | niversity o | f Kansas | 1993-1994 | US Forecast | ıst | | | 25FEB94 |
|---|--------------|-------------|---------------|-----------|-------------|--------|--------|--------|---------|
| FINANCIAL AND GOVERNMENT BUDGET DEFECIT | 199301 | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 1993 |
| US: M1 Money Supply Percent Change From Last Qtr (AR) | 1033.8 | 1061.1 | 1095.4 | 1124.5 | 1147.2 | 1168.0 | 1189.1 | 1210.4 | 1078.7 |
| US: M2 Money Supply Percent Change From Last Qtr (AR) | 3477.2 | 3495.6 | 3521.8 3.0 | 3543.3 | 3584.3 | 3627.9 | 3677.4 | 3732.6 | 3509.5 |
| US: 3-Month T-Bill Rate Percent Change From Last Qtr (AR) | 3.0 | 3.0 | 3.0 | 3.1 | 3.2 | 3.2 | 3.2 | 3.3 | 3.0 |
| US: Prime Rate Charged By Banks Percent Change From Last Qtr (AR) | 0.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| US: Moodys AAA Corp. Bond Rate Percent Change From Last Qtr (AR) | 7.7 | 7.4 | 6.9 | 6.8 | 6.8 | 6.8 | 6.8 | 6.9 | 7.2 |
| US: Federal Govt. Surplus Percent Change From Last Qtr (AR) | -263.5 | -222.6 | -212.7 | -205.5 | -199.7 | -188.0 | -195.8 | -196.4 | -226.1 |

1178.7

A13

3655.6

3.2

6.0

6.8

-195.0 -13.8

| Institute for Public Policy and Business Research, University of Kansas | esearch, Ur | iversity (| of Kansas | 1993-1994 | Kansas Forecast | precast | | | 25FEB94 | A14 |
|--|-------------|------------|-----------|-----------|-----------------|---------|--------|--------|---------|--------|
| EMPLOYMENT | | | | | | | | | | |
| | 199301 | 199302 | 199303 | 199394 | 199401 | 199402 | 199403 | 199404 | 1993 | 1994 |
| KS EMP: Civilian Labor Force Percent Change_from One Year Ago | 1326.5 | 1353.1 | 1343.1 | 1337.3 | 1344.1 | 1369.1 | 1363.0 | 1355.6 | 1340.0 | 1358.0 |
| KS EMP: Employed Percent Change From One Year Ago | 1261.7 | 1282.9 | 1279.6 | 1277.3 | 1273.3 | 1301.7 | 1305.9 | 1298.0 | 1275.4 | 1294.7 |
| KS EMP: Unemployed Percent Change From One Year Ago | 64.9 | 70.2 | 63.4 | 60.0 | 70.8 | 4.79 | 57.1 | 57.7 | 64.6 | 63.2 |
| KS EMP: Unemployment Rate Percent Change From One Year Ago | 14.8 | 5.2 | 11.9 | 4.5 | 5.3 | 4.9 | 4.2 | 4.3 | 4.8 | -3.3 |
| KS EMP: Adj. for Res. & Self Emp. Percent Change From One Year Ago | 95.2 | 84.7 | 100.3 | 81.1 | 96.5 | 86.2 | 95.8 | 80.4 | 90.3 | 89.7 |
| KS EMP: Farm Percent Change From One Year Ago | 48.7 | 56.7 | 51.8 | 44.9 | 42.1 | 55.0 | 58.7 | 44.0 | 50.5 | 49.9 |
| KS EMP: Total Non-farm Wage & Salary Percent Change From One Year Ago | 1117.8 | 1141.6 | 1127.6 | 1151.3 | 1134.7 | 1160.5 | 1151.5 | 1173.6 | 1134.6 | 1155.1 |
| KS EMP: Mining Percent Change From One Year Ago | 8.3 | 8.4 | 8.3 | 8.4 | 8.2 | 8.5 | 8.7 | 8.6 | 8.3 | 1.8 |

| Institute for Public Policy and Business | Business Research, University of Kansas | iversity of | f Kansas | 1993-1994 | Kansas Forecast | recast | | | 25 FEB94 | A15 |
|--|---|-------------|----------|-----------|-----------------|--------|--------|--------|----------|------|
| | 199301 | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 1993 | 1994 |
| KS EMP: Oil & Gas Extraction Percent Change From One Year Ago | 7.2 | 7.2 | 7.1 | 7.2 | 7.2 | 7.3 | 7.5 | 7.5 | 7.2 | 7.4 |
| KS EMP: Mining Residual Percent Change From One Year Ago | : ; | 1.2 | 1.2 | 1.2 | 1.0 | 1.2 | 1.2 | 1.1 | 1.2 | 1.1 |
| KS EMP: Construction Percent Change From One Year Ago | 40.7 | 46.7 | 49.1 | 47.8 | 42.2 | 49.2 | 51.2 | 48.5 | 46.1 | 47.8 |
| KS EMP: Non-durable Goods Percent Change From One Year Ago | 76.5 | 77.4 | 78.0 | 77.3 | 77.5 | 78.8 | 79.0 | 78.6 | 77.3 | 78.5 |
| KS EMP: Food & Kindred Percent Change From One Year Ago | 27.5 | 27.9 | 28.0 | 27.7 | 27.3 | 27.8 | 28.3 | 28.4 | 27.8 | 28.0 |
| KS EMP: Apparel Percent Change From One Year Ago | 3.7 | 3.7 | 3.9 | 4.0 | 3.8 | 3.8 | 3.7 | 3.6 | 3.8 | 3.7 |
| KS EMP: Printing & Publishing Percent Change From One Year Ago | 20.5 | 20.7 | 20.5 | 20.2 | 20.9 | 21.2 | 20.8 | 20.7 | 20.5 | 20.9 |
| KS EMP: Chemicals & Allied Prod. Percent Change From One Year Ago | 6.9 | 6.8 | 6.8 | 6.6 | 6.6 | 6.6 | 6.6 | 6.4 | 6.8 | 3.5 |
| KS EMP: Petroleum & Coal Percent Change From One Year Ago | 12.4 | 12.7 | 12.8 | 12.9 | 12.9 | 13.3 | 13.4 | 13.2 | 12.7 | 13.2 |
| KS EMP: Non-durables Residual Percent Change From One Year Ago | 5.6 | 3.0 | 5.9 | 5.9 | 6.0 | 6.1 | 5.3 | 5.8 | 5.8 | 6.2 |

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 |
|---|
| 199302 |
| 102.4 102.4 |
| |
| 5.4 5.8 |
| |
| 3.1 3. |
| 8.1 |
| 9.2 9.2 |
| |
| 28.6 29.2 |
| |
| 45.7 44.3 |
| |
| 10.4 10.8 |
| |
| 64.6 65.7 |
| |
| 6.5 6.7 |
| |
| 22.5 23.6 |
| |

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

| A17 | 1994 | 12.2 | 24.0 | 72.3 | 209.2 | 28.2 | 32.5 | 22.9 | 10.7 | 114.9 | 58.2 |
|---|--------|--|---|---|--|---|---|--|--|---|--|
| 25FEB94 | 1993 | 12.2 | 23.4 | 71.6 | 206.6 | 28.3 | 32.1 | 22.6 | 10.5 | 113.2 | 58.2 |
| | 199404 | 12.1 | 24.4 | 71.8 | 213.7 | 29.7 | 33.0 | 23.0 | 11.2 | 116.9 | 57.8 |
| | 199403 | 12.3 | 23.7 | 73.0 | 210.2 | 27.9 | 32.5 | 23.2 | 10.6 | 116.0 | 58.7 |
| ecast | 199402 | 12.2 | 23.9 | 72.8 | 208.7 | 27.6 | 32.3 | 23.0 | 10.5 | 115.3 | 58.5 |
| Kansas Forecast | 199401 | 12.1 | 23.8 | 7.1.4 | 204.1 | 27.8 | 32.0 | 22.4 | 3.0 | 111.4 | 57.7 |
| 1993-1994 | 199304 | 12.1 | 23.9 | 71.9 | 210.1 | 29.8 | 32.4 | 22.6 | 11.2 | 114.1 | 58.2 |
| | 199303 | 12.3 | 23.2 | 72.5 | 206.3 | 28.0 | 32.0 | 22.8 | 10.4 | 113.1 | 58.5 |
| iversity o | 199302 | 12.3 | 23.2 | 72.0 | 206.7 | 27.5 | 32.0 | 22.7 | 10.2 | 114.3 | 58.1 |
| search, Un | 199301 | 12.2 | 23.4 | 70.2 | 203.5 | 27.8 | 31.9 | 22.3 | 10.3 | 111.2 | 57.8 |
| Institute for Public Policy and Business Research, University of Kansas | | KS EMP: Electric Gas & Sanitary Serv Percent Change From One Year Ago | KS EMP: Trans. & Utilities Residual Percent Change From One Year Ago | KS EMP: Wholesale Trade Percent Change From One Year Ago | KS EMP: Retail Trade Percent Change From One Year Ago | KS EMP: Gen. Merchandise Stores Percent Change From One Year Ago | KS EMP: Food Stores Percent Change From One Year Ago | KS EMP: Auto. Dealers & Gas Stations Percent Change From One Year Ago | KS EMP: Apparel & Accessory Stores Percent Change From One Year Ago | KS EMP: Retail Trade Residual Percent Change From One Year Ago | KS EMP: Finance, Insurance, R.E. Percent Change From One Year Ago |

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 |
|--|
| 199561 |
| 23.8 |
| 3.0 |
| 12.8 |
| -0.3 |
| 21.2 |
| 0.2 |
| 261.1 |
| 3.5 |
| 0.6 |
| 0.7 |
| 11.3 |
| -6.1 |
| 240.7 |
| 4.1 |
| 29.0 |
| -1.5 |
| 203.9 |
| 7.7 |

| A19 | 1994 | 43.3 | 37.9 | 41.0 | 39.1 | 41.2 | 40.6 | 10.6 | 6.3 | 13.2 | 9.8 | 10.6 | 16.5 |
|---|-----------------|--|---|--|--|---|---|---|--|--|--|--|--|
| 25FEB94 | 1993 | 44.5 | 39.3 | 40.7 | 39.2 | 42.2 | 41.3 | 10.2 | 6.3 | 12.8 | 9.7 | 3.1 | 16.0 |
| | 199404 | 42.6 | 38.0 | 41.1 | 38.8 | 41.3 | 41.2 | 10.6 | 3.2 | 13.3 | 3.0 | 10.8 | 16.8 |
| | 199403 | 43.6 | 38.0 | 41.0 | 39.0 | 40.4 | 40.3 | 10.6 | 6.4 0.4 | 13.2 | 9.8 | 10.7 | 3.2 |
| recast | 199402 | 43.4 | 37.7 | 41.3 | 39.2 | 41.2 | 40.4 | 10.5 | 6.3 | 13.2 | 9.8 | 10.6 | 16.4 |
| Kansas Forecast | 199401 | 43.7 | 37.9 | 9.04 | 39.3 | 41.7 | 40.7 | 10.5 | 6.3 | 13.0 | 9.7 | 10.5 | 16.4 |
| 1993-1994 | 199304 | 45.1 | 38.8 | 40.9 | 40.9 | 42.5 | 42.1 | 10.4 | 6.2 | 12.9 | 9.6 | 10.5 | 16.3 |
| | 199303 | 44.7 | 38.6 | 39.9 | 39.5 | 42.4 | 41.3 | 10.4 | 6.3 | 12.8 | 9.5 | 10.6 | 16.0 |
| iversity o | 199302 | 44.3 | 39.7 | 41.2 | 38.7 | 42.0 | 40.5 | 10.1 | 6.2 | 12.6 | 9.7 | 10.6 | 15.9 |
| search, Un | 199301 | 43.8 | 40.2 | 41.0 | 37.7 | 41.7 | 41.1 | 9.8 | 6.3 | 12.8 | 9.6 | 10.5 | 15.8 |
| Institute for Public Policy and Business Research, University of Kansas | HOURS AND WAGES | KS HRS/WK: Food & Kindred Products Percent Change From One Year Ago | KS HRS/WK: Apparel&Other Fin. Prod. Percent Change From One Year Ago | KS HRS/WK: Pet. Refining & Rel. Ind. Percent Change From One Year Ago | KS HRS/WK: Fabricated Metal Products Percent Change From One Year Ago | KS HRS/WK: Machinery, Incl. Elec. Percent Change From One Year Ago | KS HRS/WK: Transportation Equipment Percent Change From One Year Ago | KS WAGE/HR: Food & Kindred Products Percent Change From One Year Ago | KS WAGE/HR: Apparet&Other Fin. Prod. Percent Change From One Year Ago | KS WAGE/HR: Pet. Refining & Rel. Ind Percent Change From One Year Ago | KS WAGE/HR: Fabricated Metal Product Percent Change From One Year Ago | KS WAGE/HR: Machinery, Incl. Elec. Percent Change From One Year Ago | KS WAGE/HR: Transportation Equipment Percent Change From One Year Ago |

| Institute for Public Policy and Business Research, University of Kansas | Research, | University | of Kansas | 1993-1994 | Kansas Forecast | orecast | | | 25FEB94 | A20 |
|---|-----------|------------|-----------|-----------|-----------------|---------|---------|---------|---------|---------|
| | 199301 | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 1993 | 1994 |
| KS WG BILL: Total Wages & Salaries Percent Change From One Year Ago | 26273.0 | 27152.0 | 27495.0 | 27607.0 | 27674.5 | 28197.5 | 28536.9 | 28829.2 | 27131.8 | 28309.5 |
| KS WG BILL: Farm Wages & Salaries Percent Change From One Year Ago | 185.0 | | 188.0 | 191.0 | 194.5 | 197.6 | 200.1 | 202.2 | 187.8 | 198.6 |
| KS WG BILL: Agricultural Services Percent Change From One Year Ago | 126.0 | 137.0 | 140.0 | 146.0 | 148.6 | 151.3 | 153.9 | 156.6 | 137.3 | 152.6 |
| KS WG BILL: Mining Percent Change From One Year Ago | 228.0 | 250.0 | 257.0 | 259.0 | 263.5 | 265.9 | 270.4 | 277.0 | 248.5 | 269.2 |
| KS WG BILL: Construction Percent Change From One Year Ago | 1056.0 | 1104.0 | 1147.0 | 1165.0 | 1151.3 | 1211.8 | 1232.0 | 1220.5 | 1118.0 | 1203.9 |
| KS WG BILL: Durable Goods Percent Change From One Year Ago | 3166.0 | 3239.0 | 3355.0 | 3307.0 | 3228.6 | 3270.7 | 3316.7 | 3425.4 | 3266.8 | 3310.4 |
| KS WG BILL: Nondurable Goods Percent Change From One Year Ago | 1951.0 | 2057.0 | 2079.0 | 2059.0 | 2077.0 | 2131.5 | 2147.8 | 2145.6 | 2036.5 | 2125.5 |

| 2273.0 2329.0 2334.0 2352.8 3.3 6.0 -1.4 7.6 2070.0 2076.0 2089.0 2093.6 5.2 4.0 0.9 7.9 |
|---|
| |
| 1668.0 1697.0 1721.0 7.8 6.7 0.2 |
| 5691.0 5703.0 5807.0 8.2 5.7 5.5 |
| 5767.0 5787.0 5751.0 3.4 5.0 3.0 |

| A22 | 1994 | 53517.4 | 41096.5 | 1374.2 | 3842.4 | 9124.5 | 1059.5 | 2679.9 | 8977.9 | 3509.2 |
|---|-----------------|--|---|--|---|---|---|---|--|---|
| 25FEB94 | 1993 | 50966.5 | 40075.3 | 1362.0 | 3611.5 | 8896.3 | 1016.0 | 2558.0 | 8285.3 | 3222.3 |
| | 199404 | 54648.9 | 41503.5 | 1442.1 | 3903.7 | 9255.6 | 1075.0 | 2716.3 | 9247.7 | 3612.0 8.8 |
| recast | 199403 | 53637.3 | 41040.6 | 1079.9 | 3860.4 | 9184.4 | 1060.5 | 2691.2 | 9064.1 | 3542.3 |
| | 199402 | 53564.9 | 41309.4 | 1697.1 | 3820.1 6.8 | 9110.1 | 1056.0 | 2666.6 | 8878.3 | 3472.4 |
| Kansas Forecast | 199401 | 52218.4 | 40532.6 | 1277.5 | 3785.7 7.0 | 8,7,8 | 1046.7 | 2645.5 | 8721.5 | 3410.3 9.5 |
| 1993-1994 | 199394 | 52231.0 | 40777.0 | 1690.0 | 3738.0 | 8971.0 | 1046.0 | 2593.0 | 8453.0 | 3320.0 8.6 |
| f Kansas | 199303 | 50032.0 | 39281.8 | 50.0 | 3594.0 | 8842.0 | 1011.0 | 2587.0 | 8351.0 | 3276.0 9.8 |
| niversity o | 199302 | 51671.0 6.9 | 40682.4 | 2193.0 | 3577.0 | 8898.0 | 1017.0 | 2560.0 | 8217.0 6.8 | 3179.0 7.8 |
| search, Un | 199301 | 49932.0 | 39560.2 | 1515.0 36.0 | 3537.0 | 8874.0 | 990.0 | 2492.0 | 8120.0 | 3114.0 |
| Institute for Public Policy and Business Research, University of Kansas | PERSONAL INCOME | KS PERS INC: Total Personal Income Percent Change From One Year Ago | KS PERS INC: Real Personal Income Percent Change From One Year Ago | KS PERS INC: Farm Proprietors Income Percent Change From One Year Ago | KS PERS INC: Non-farm Proprietors Inc Percent Change From One Year Ago | KS PERS INC: Dividends Interest & Ren Percent Change From One Year Ago | KS PERS INC: Adj. For Residence Percent Change From One Year Ago | KS PERS INC: Pers. Cont. For Soc. Ins Percent Change From One Year Ago | KS PERS INC: Transfer Payments Percent Change From One Year Ago | KS PERS INC: Other Labor Income Percent Change From One Year Ago |