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The National Outlook

The State Outlook

The Outlook for the National Economy in 1990

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As we predicted last year, the national economy in 1989 experienced positive real growth in GNP but at substantially slower rates than between 1987 and 1988. Specifically, we expect 1989 to have a real growth in GNP on a year-over-year basis of approximately 2.8%. The relatively strong sectors are business investment, especially for equipment, and exports. However, even these sectors in 1989 grew more slowly than in the previous year.

Our general outlook for 1990 is for continuing positive real growth in GNP, but at an even slower rate than for 1989. Specifically, we expect real GNP to grow at a 2% average annual rate. We do not see 1990 as being a year of recession. However, we do expect the fourth quarter of 1989 and the first quarter of 1990 to be especially weak, with real growth at annual rates of less than 1%. The leading growth sectors of the economy in 1990 are expected to be business investment for capital equipment, exports, and state and local government spending. But in the first two cases we expect growth rates to be significantly less than in 1989. The modest increase in the growth rate for state and local government spending is due to increases in spending on infrastructure, partly due to Hurricane Hugo and the earthquake in San Francisco, and increases in spending for social programs and education.

Personal consumption spending (PCS), which has been a strongly growing sector of the economy since the end of the recession in 1982, is expected to grow at only a 2% annual rate. With PCS comprising approximately 65% of GNP, it is virtually inevitable that slow growth in consumption means modest growth in overall real GNP. The consumption sector is likely to be weak because of modest increases in both disposable personal income and employment, and a decline in interest earnings because of our predicted decrease in interest rates between 1989 and 1990.

Total car sales are expected to reach only 9.7 million units in 1990, down from the 10 million-plus levels of the last few years. Imports, however, are expected to be constant, whereas sales from foreign transplants are forecasted to rise significantly. The Big Three, therefore, will experience the full brunt of the decline.

We expect no major changes in the value of the dollar between 1989 and 1990. At best, there may be continued

Figure 1
Annual Growth in Real GNP

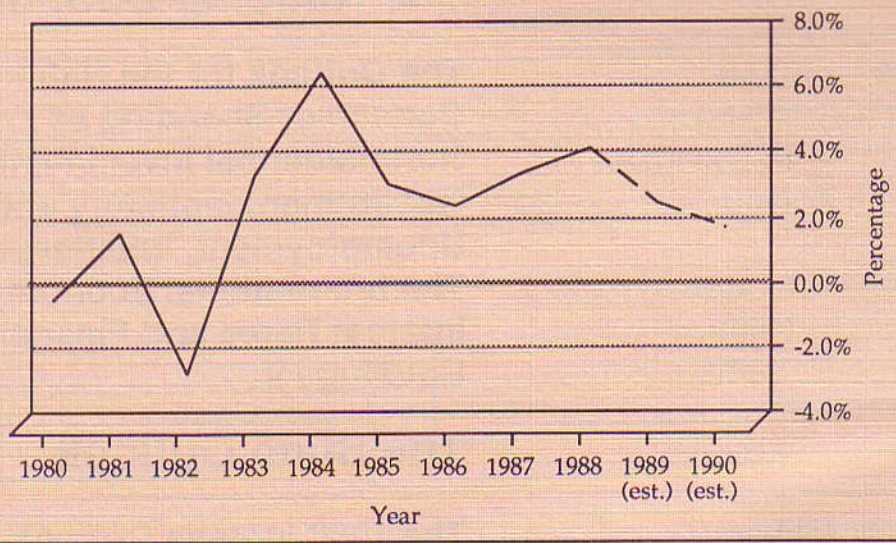
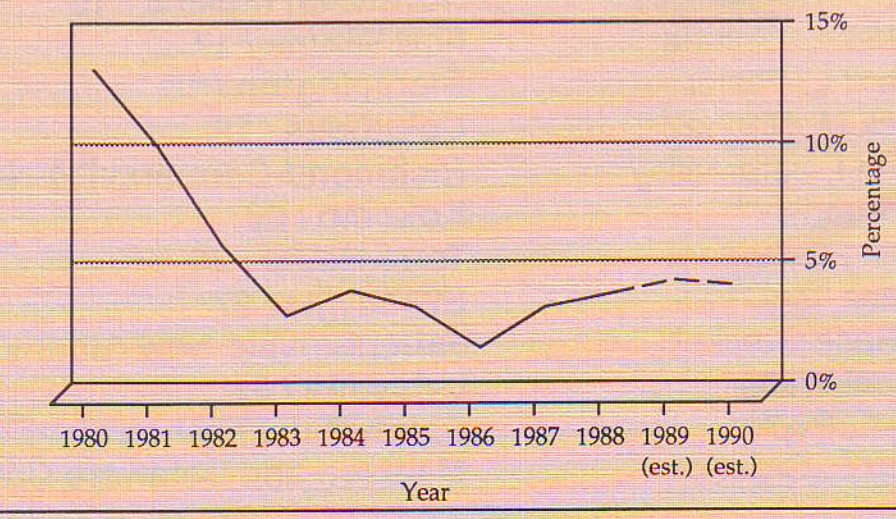


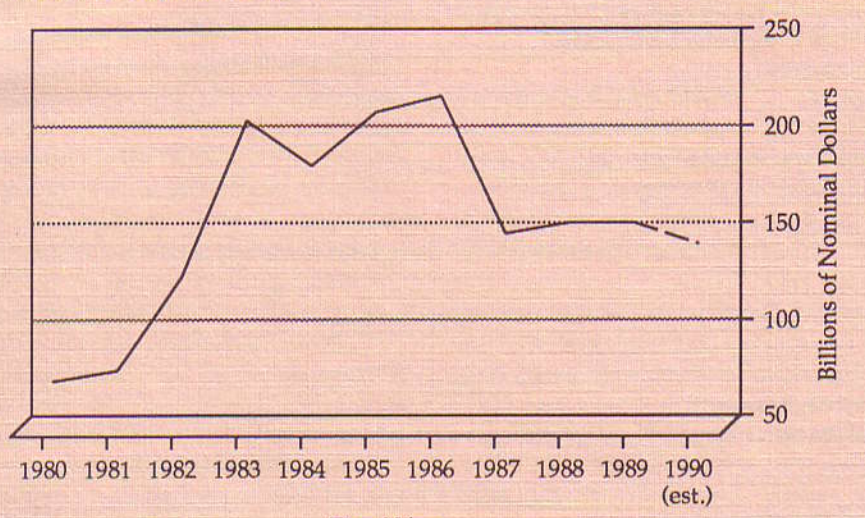
Figure 2
Annual Change in CPI



appreciation of the dollar next year from current levels. Consistent with this exchange rate movement, we expect no significant improvement in our trade balance.

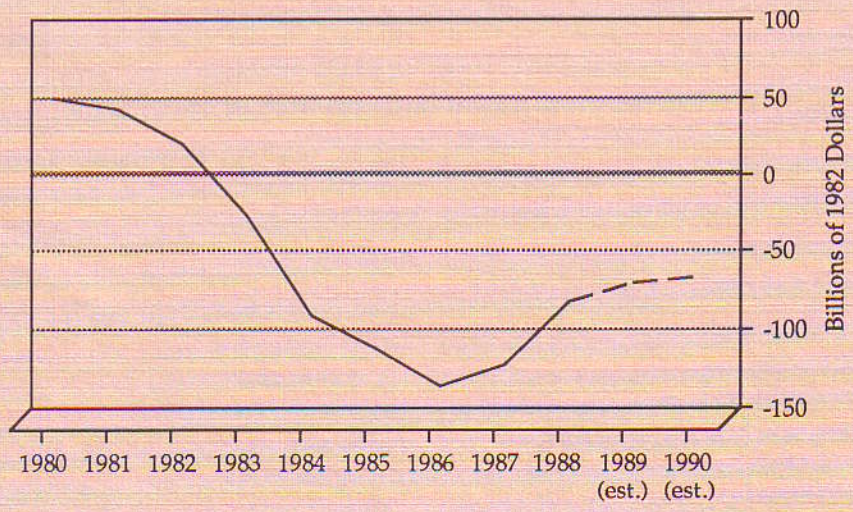
In the real estate area, we think it is important to distinguish among commercial office and retail space, plant expansion, and housing starts. The commercial market is likely to remain overbuilt in 1990, and we expect another down year for that market segment.

Figure 3
Federal Budget Deficit



(Includes both on-budget and off-budget items)

Figure 4
Real Net Exports



Plant expansion should continue at about 1989's rate, but it should be constrained by overcapacity in some industries, especially automobiles and related industries and those adversely affected by increased foreign competition caused by dollar appreciation. Housing starts should remain near their current levels, although the multifamily market is likely to remain weak. Housing prices are expected to increase but at less than the overall inflation rate. On the brighter side, housing may get a boost if mortgage rates break the psychological 10% barrier, as we predict (though by a narrow margin).

In the policy area, we think that any major change in tax policy at the federal level is unlikely, with the possible exception of a capital gains tax cut. Even if such a cut occurred, it would be unlikely to take effect until well into 1990 and would have little impact on the year's economic performance.

Fiscal policy, we believe, will have no active role in the macroeconomic arena, but the same cannot be said for monetary policy. Monetary authorities are focusing on three major variables: growth of the economy, inflation, and the value of the dollar. We expect that monetary policy in 1990 will be tight, with inflation and financing the current account deficit the Fed's primary concerns. However, if the economy deteriorates more than we are predicting, the Fed may loosen monetary policy significantly, expanding on a trend that began last summer.

We expect modest increases in the unemployment rate (to an annual average of 5.6%), but inflation should be at or below the rates for 1989. Interest rates should trend lower, with the yield curve resuming its more normal positive shape. The stock market in 1990 will be flat or up only slightly.

Figures 1 to 4 trace the path of four key economic variables through the decade. Our national forecast is sum-

marized in **Table 1**, and details about the components are described in the following reports.

Consumer Spending

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Consumer spending has been a major contributor to the seven-year expansion we have enjoyed since the end of 1982. From the last quarter of 1982 through the last quarter of 1988, the average growth rate of real consumer spending has been a robust 3.9%. However, as can be seen from **Table 2**, consumer spending slowed from the last quarter of 1988 through the second quarter of 1989 before rebounding in the third quarter. Is the third quarter performance a sign of faster growth in the future or an aberration? In our view, the rapid growth in the third quarter was primarily due to special factors that are unlikely to be repeated.

Constant dollar spending on durable goods increased in the third quarter of 1989 at a spectacular 15% annual rate. Virtually all of this increase was accounted for by the increase in consumer spending on automobiles and auto parts. Almost all of the increase in real consumer spending on nondurable goods, from the end of 1988 through the third quarter of 1989, has been concentrated in spending for clothing and shoes. This category of spending contains significant quantities of imports, and stable import prices—a result of the strengthening of the dollar through much of 1989—contributed to the increase in spending. The growth in consumer spending for services has been concentrated in medical care and other services, whereas real spending for household operation was actually lower in the third quarter of 1989 than it was a year earlier.

Table 1
GNP and its Components

	1988 ($ bil. 1982)	*% Change from Previous Year[1] 1989 (est.)*	*1990 (pred.)*
GNP	4024	2.9	2.0
Personal Consumption Expenditures	2598	2.8	2.0
Gross Private Domestic Investment	716	1.6	1.9
Nonresidential Fixed	494	3.9	4.5
Residential Fixed	194	-2.7	-1.6
Change in Business Inventories	28	26.0	20.0
Net Exports	-75	-63.0	-60.0
Exports	530	10.5	5.8
Imports	605	7.3	4.8
Federal Government Spending	329	2.9	0.6
State and Local Spending	456	2.6	2.6

1. Except for Change in Business Inventories and Net Exports, both of which are in billions of 1982 dollars.

Table 2
Selected Variables
(Percentage Change Annual Rate, except where noted)

	4Q 1988	*1Q 1989*	*2Q 1989*	*3Q 1989*
Real Consumption Expenditures	3.0	2.0	1.9	5.8
Durables	9.9	-1.1	5.5	15.0
Nondurables	0.7	1.3	-2.3	4.0
Services	2.6	3.6	3.8	4.2
Real Disposable Personal Income	4.3	6.6	0.8	4.8
Saving Rate (percent)	4.6	5.6	5.4	5.1

Table 3
Forecast—Real Consumption Expenditures (billions of 1982 dollars)

	4Q 1989	*1Q 1990*	*2Q 1990*	*3Q 1990*	*4Q 1990*
Total Real Consumption	2694	2710	2725	2740	2755
Percent Change (AR)	0.4	2.4	2.2	2.2	2.2

A consumer's disposable personal income is basically either spent—and hence part of consumption expenditures—or saved. Thus, personal consumption expenditures depend upon the size of disposable personal income

and on the saving rate, which is the ratio of saving to disposable personal income. Table 2 shows the recent growth in disposable personal income and the recent levels of the saving rate. To understand the likely path of consumption spending in 1990, we need to estimate future growth in disposable personal income and the level of the saving rate.

Table 2 shows that despite a weak performance in the second quarter of 1989, real disposable personal income grew by 4.1% from the third quarter of 1988 through the third quarter of 1989. Why was income growth so strong? First, employment grew by about three million jobs over that period, raising wages and salaries. Second, interest rates rose through early 1989 and remained at fairly high levels, which caused interest income to rise by more than 16% over the same period. Looking ahead to 1990, employment gains are slowing and interest rates are gradually declining, so disposable personal income will likely grow more slowly during 1990 than during the first three quarters of 1989. In addition, the twin disasters of Hurricane Hugo and the California earthquake will depress income in the fourth quarter, particularly income from rents. Our estimate is that real disposable personal income will increase by less than 2% from the fourth quarter of 1989 to the fourth quarter of 1990.

Table 2 indicates that the saving rate has been declining since a peak in the first quarter of 1989. With interest rates declining into 1990, at least moderately, some further decline in the saving rate is likely. This means that real consumption expenditures will grow somewhat more rapidly than real disposable personal income.

Table 3 shows real consumption is projected to be weak in the fourth quarter of 1989, primarily because of weak auto sales after the incentive programs of the third quarter. Spending rebounds in the first quarter of 1990 and averages 1.9% from the third quarter of 1989 (the last quarter for which data are available) to the end of 1990.

Nonresidential Investment

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Nonresidential investment (NRI) is the sum of business fixed investment (BFI) and changes in business inventories. This component of GNP was a major contributor to strong growth in the years after the end of the 1982 recession. Since then, BFI growth has slowed considerably. Nevertheless, as of the third quarter of 1989, NRI commands the same share of GNP as it did in 1985—about 12.5%. This implies that the slowdown in growth of NRI is reflective of the general slowdown of the entire U.S. economy.

It now appears that NRI will grow by a little less than the 6% we predicted last spring. Consistent with the general sluggishness we are forecasting for GNP in 1990, we expect NRI to grow by no more than 4% in 1990. This projection relies on three separate forecasts:

1. Producers' durable equipment will continue strong real growth, at a rate of about 5-7%.

2. Spending on structures will be level with, if not lower than, the average for 1989.

3. Inventory will continue to accumulate by about $15-25 billion annually.

Several recent events shape this view of moderate but slower growth in NRI. First, managers' expectations are heavily influenced by a general acknowledgement that the overall economy will slow significantly next year; thus their mood is cautious. This is reflected in a recent Department of Commerce survey, which found that firms were planning to increase their capital expenditures by only 3% for the latter half of 1989.

Second, corporate profits, and hence liquidity, have suffered lately, and the prospects for big reversals are not great. In fact, the auto industry, battered again by import competition, has recently announced a cut in its production plans by some 15% in the final quarter of 1989. If it continues to fight importers for market share through discounts, rebates, and other promotion devices, then prospects of a major turnaround in profits, liquidity, and investment look slim.

Third, the latest reductions in the manufacturing capacity utilization show less pressure to build and expand than at this time last year. Backlogs of factory orders have also been falling recently, underscoring the reduced pressures of firms to expand in the near future. In fact, orders of capital goods outside the defense sector fell in both August and September. The primary metals industry (including steel) was hit very hard.

Fourth, high vacancy rates in office buildings will limit office construction next year, while reluctance on the part of oil companies to expand production at today's market prices will continue to retard gas and oil exploration.

Finally, monetary and fiscal policies do not bode well for NRI. The federal government has not convinced managers that they are capable of legislating better business conditions. In fact, many firms face more uncertainty because of the government's inability to

complete the budget on time, stick with a single tax code for more than one year, decide what to do about the capital gains tax, and determine who is going to shoulder the costs of financing the savings & loan bailout and promised expenditure increases for child care, the war on drugs, environmental cleanup, and health benefits.

Firms are no doubt appreciative of the longer-run benefits that price stability will bring. Nevertheless, they must deal with an uncertain short-term business environment until Alan Greenspan attains more credibility. In the meantime, tight money implies high interest rates, an inflated value of the dollar, and the possibility of a recession in 1990. None of this suggests that managers will be confidently expanding NRI by very much in the near future.

The good news is that we are not forecasting a recession, and we do not believe there will be a major breakdown in NRI. The U.S. economy seems to have been caught in a sort of economic purgatory over the last four years. When the economy grows rapidly, interest and inflation rates rise and quickly cool off spending. When the economy starts to slow, interest and inflation rates fall and revive spending. Since the second quarter of 1985, for example, GNP has varied from a low annualized quarterly growth rate of -1.8% to a high of 6.6%. The average growth rate of GNP over those 17 quarters was 3.5%.

This apparent automatic stabilization may be connected to sanguine longer-term prospects for continued economic expansion. Though current forecasts are for a slowdown, we don't think firms will pull back their investment plans very much because of this expected future stability. On the bullish side is the idea that if U.S. inflation remains under control, the Fed will not have to tighten significantly, interest rates will not rise further, and the dollar may begin a modest decline. Should this view be correct, our forecast of NRI to grow in 1990 by about 4% would not be overly optimistic.

Government Monetary and Fiscal Policy, Unemployment, Inflation, and Interest Rates

George Wilson

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Fiscal policy does not exist in the sense that tax and expenditure changes will be oriented toward stabilizing the economy next year. Rather, it will be single-mindedly linked to making the nominal deficit appear to conform to a battered and discredited Gramm-Rudman-Hollings goal by various financial stratagems having no real significance whatsoever. GRH has not been called a "sham" and a "failure" for nothing. Certainly the 1990 fiscal year target of $100 billion will not be met, given the 1989 deficit of $155.2 billion and the president's opposition to any tax increases. What the deficit will really be is hard to determine, because much depends upon fiscal machinations designed to reduce it. These could take many forms, all of which are largely irrelevant to real economic activity. Because the actual size of the officially declared deficit at the end of fiscal 1990 makes no difference, there is little point in presenting an estimate. However, should anyone be interested, I would guess that it would be between $130 and $140 billion, based on increased receipts of 7% (about the expected growth of nominal GNP) and outlays rising between 4-5% during 1990. Since the deficit is "supposed to be," at most, $110 billion, the GRH target will be raised again. "Fiscal follies" indeed!

More important, government GNP purchases (in 1982 dollars) should increase slightly in calendar year 1990. National defense outlays (NIPA basis) should decline by some 2%, while non-defense expenditures should rise by about 10%, so federal government purchases of goods and services would total about $340 billion in 1990. State and local expenditures are expected to continue their fairly steady rise of about 3% over 1989 and total some $485 billion. The government sector as a whole will therefore account for about 19.5% of GNP in 1990, almost precisely the same as in 1988 and 1989—indeed, the average ratio for the entire decade. So much for fiscal revolution!

As the only real stabilization game in town, the Fed will watch closely to see that the actual growth of the economy does not stray far from the path we have outlined. This implies a relatively easy monetary policy through the first quarter of 1990, with only modest restraint thereafter. After all, with growth for the year as a whole expected to average barely 2%, the Fed will not want to be seen as pushing the economy into a recession. Nor will it have to pursue an exceptionally tight monetary policy. With real growth well below conservatively estimated growth capacity of 2.5-3% per year (I would put it even higher), the likelihood of demand-pull inflation is pretty remote, especially with a fair amount of excess capacity still with us. It should not be hard for the Fed to pursue a policy that keeps inflation moderate and real output growth positive.

If real GNP reaches $4,228 billion in 1990, and if real output per employed

person grows by an expected though meager 1%, this implies a level of employment averaging 119 million during 1990. With the civilian labor force in 1990 of 126 million, this implies an average unemployment rate of about 5.5%, slightly higher than 1989's 5.3%. This is still within the range that most observers view as full employment, or the "natural" rate of unemployment.

As noted above, inflationary pressures appear to be weak for the foreseeable future. Nor is there evidence of a strong upward thrust in recent months. In fact, the GNP deflator dropped to a low 2.9% during the third quarter of 1989 from 4.6% in the second quarter. Other inflation indicators, though higher in 1989 than 1988, are not rising at alarming rates. It should therefore be possible to maintain inflation rates at levels slightly below—or with some luck, substantially below—those prevailing in 1989.

With inflation held in check due either to deficiency of aggregate demand or Fed policies, inflation expectations should be sharply lower. This suggests that nominal and possibly real interest rates will fall below levels generally prevailing in late 1989. With very slow GNP growth anticipated in the next quarter or two, it is likely that the Fed will provide enough slack to allow interest rates to fall even further. Besides, this will help reduce the exchange value of the dollar, which should assist the current account imbalance as well as the overall economy.

In conclusion, we should perhaps not lament the lack of fiscal policy. It seems the economy won't need it. Monetary policy will likely suffice if we are satisfied with 2% real growth, 1% productivity increase, and 5.5% unemployment. Yet the single-minded attempts to lower the deficit do real harm to the economy. Much publicly provided infrastructure is in a state of considerable disrepair. The drug, pollution, education, health care, and AIDS problems require far more resources and attention than even President Bush imagines. The reconstruction following Hurricane Hugo and the earthquake in California, to say nothing of the savings & loan fiasco, also require more than token federal assistance. These should not be held hostage to a sham or a vision of balancing the budget solely through expenditure reduction. To be sure, the federal government cannot do it all, nor can the problems be successfully tackled by "merely" throwing money at them. But somewhere between offering condolences or exhortations on the one hand and providing funding on the other is a set of needed government outlays and initiatives that should not be squelched because of unrealistic budget policies and priorities.

The International Economy

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The United States is in its seventh year of economic expansion following the recession of 1980-82. The present business-cycle expansion exceeds the average length of recoveries in the postwar period by four and one-half years.

In last year's forecast of the international economy, we pointed out that the United States was going through an export boom, an important reason for the sustained recovery. Exports of goods and services measured in 1982 dollars have increased almost twice as fast as imports of goods and services since the end of 1986. As a consequence, net exports of goods and services have risen from -$130 billion in 1986 to a projected -$63 billion in 1989. This improvement has occurred despite a year during which the dollar, for the most part, has appreciated vis-à-vis other currencies. The reason lies with output growth rates being higher abroad than in the United States. In fact, output growth in Japan, Germany, France, the United Kingdom, Italy, and Canada—six of the seven countries defining the so-called G7 group—will average almost 4% in 1989 versus a projected 2.6% in the United States. Exports and imports of goods and services are sensitive to changes in real income, with U.S. imports being more sensitive to changes in U.S. real income than exports to changes in foreign real income. Consequently, a slowdown of U.S. economic growth, accompanied by a rise in foreign economic growth, has a more than proportional effect on the U.S. trade balance.

The U.S. current-account deficit improved slightly, from $127 billion in 1988 to $123 billion (SAAR) during the first half of 1989. The slow adjustment of the current-account imbalance reflects the reversal of net interest payments. As we have pointed out in previous issues, the U.S. has pursued economic policies—namely, budgetary policies—that have made this country spend in excess of what it produces. In contrast, Germany and Japan—the two largest current-account surplus countries—have pursued policies that have restrained spending relative to home production. The United States, in addition, has enjoyed higher real rates of interest than the rest of the world. This has resulted in large net capital inflows, and consequently, in large current-account deficits. These imbalances have made the U.S. into a net debtor, and Germany and Japan into net creditors. The implication is that the U.S. incurs

higher income payments on foreign-owned assets in the U.S. than income receipts on U.S. assets abroad, whereas the opposite is true for Germany and Japan. These net interest flows make the correction of current-account imbalances much slower than the correction of trade imbalances.

The appreciation of the U.S. dollar in 1989 was the result of monetary policy in the U.S. being tight in relation to monetary policy abroad. At the same time, the U.S. monetary authorities have intervened in the foreign exchange markets to stabilize the value of the dollar. The Federal Reserve and the Treasury reported foreign currency holdings valued at $34 billion at the end of July 1989; in June 1988 the foreign currency holdings were $11 billion. It follows that our monetary authorities have made net purchases of $23 billion from June 1988 to July 1989. These purchases were fully sterilized in the sense that the Fed has sold $1 worth of domestic bonds for every $1 of foreign bonds purchased. In other words, the official interventions in the foreign exchange have had no consequence on U.S. monetary aggregates. Why has the Fed pursued these interventions? The traditional explanation is that interventions stabilize exchange rates. With full sterilization, however, stabilization must be interpreted as reducing variability in the short run and not altering the fundamental course of the exchange rate. Hence we are left with the following alternative interpretations of the interventions: The Fed was either betting against its own disinflation strategy, or was willing to incur expected losses in its portfolio of foreign-currency assets to reduce the short-term variability of the exchange rate.

Table
1990 International Forecast

	1989	*1990*
Exports in $billion 1982, NIA	586	620
Imports in $billion 1982, NIA	649	680
Net exports in $billion 1982, NIA	-63	-60
Current account, current dollars (billions)	-115	-120
Dollar/yen, appreciation		5%
Dollar/German mark, depreciation		5%
Effective exchange rate, appreciation		3%

Projections for 1990

The basic policy assumption is that the Fed will continue its present policy stance. In "global" terms, this means that expected inflation rates in the United States will be falling relative to expected inflation rates abroad, especially in Germany and Japan. Consequently, real rates of return on dollar-denominated assets will be higher than on foreign-currency assets, and the dollar will tend to appreciate in the exchange markets. Current and prospective trade and current-account deficits, on the other hand, point to an additional depreciation of the U.S. dollar. The appreciating force is likely to dominate the depreciating force, with negative consequences on real net exports. The higher growth rate of real income abroad will offset the negative consequences of the exchange rate. On balance, we see a slight improvement in real net exports and a slight deterioration in the current-account deficit in 1990.

Forecasts are fraught with risks, especially those concerning international variables. One such risk involves the elections that will be held in both Germany and Japan before the end of 1990. If current governing coalitions were to be defeated, the U.S. dollar would strengthen further, in turn influencing capital and current accounts. Another risk is associated with the unknown size of industrial restructuring taking place in Europe. Such restructuring implies a great deal of investment as well as mergers. To the extent that Japan and the United States are very keen in participating in this process, long-term capital would flow to Europe to "lock in" the gains before Europe may turn trade restrictive. A third risk comes from the large size of the external debt of LDC countries. If existing stabilization programs in Latin and South America were to fail, the U.S. trade and current-account deficits would be additionally affected. Despite these shocks, it is fair to say that the United States has very little choice but to continue to welcome foreign capital and become used to seeing its companies taken over by foreign owners.

Our forecast is summarized in the Table above.

Interest Rates and Financial Markets

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Given the weakening nature of the U.S. economy and the instability of the nation's stock and bond markets, interest

rates are likely to trend downward somewhat in 1990. The primary cause of the decline, especially at the short end of the maturity spectrum, will be the Federal Reserve's efforts at monetary ease. The primary purpose of the Fed's increasing the money supply will be to shore up the relatively slow growth of the U.S. economy, especially in interest-sensitive areas such as autos, housing, other consumer durable goods, and business capital spending. Inflation worries and the foreign trade deficit will likely have lower priorities in Fed policy.

The effect of the Fed's efforts are likely to be felt differently in different parts of the debt maturity structure, however, because of the continued large supply of long-term bonds expected to come to market in 1990. The result should be a drop in long-term rates of only about 75 basis points (three-quarters of a percentage point), whereas short-term rates are likely to drop 125 or more basis points. This will change the shape of the yield curve from an essentially flat shape at about 8% for Treasury securities in late 1989 to a somewhat upward sloping curve.

Perhaps the most important development in the U.S. debt market in 1989 was the weakening of the high yield or "junk" bond market, in which negative total returns (price declines in excess of coupon income) occurred in recent months. Should the economy weaken further, high coupon bonds of companies with large debt loads are likely to be further downgraded in credit quality, pushing their yields higher and prices (and total returns) lower. The "flight to quality" that is likely to be accentuated by such a development will result in larger yield spreads between high yield and investment grade bonds and may exacerbate the downward trend in interest rates on high grade debt, especially U.S. Treasuries. Legislative proposals in Congress to raise the price of corporate leveraged buyouts (LBOs) and curtail the deductibility of deep-discount, deferred-interest-payment high yield debt used in LBO "mezzanine" financing may have a significant negative impact on corporate deal-making and restructuring activity. This would diminish part of the reduction in supply of common stocks that the equity markets have experienced in recent years.

In terms of the U.S. stock market in 1990, the outlook is for a relatively flat market and a return not much in excess of the return on investment grade long-term debt. A combination of factors lead to this conclusion. They are led by a relatively weak corporate profit picture in which expenses are expected to outgrow revenues, primarily because unit labor costs net of productivity gains are expected to outpace price increases. In addition, investor perceptions of stock market risks have been heightened again with the high volatility in stock prices in October of this year following the extreme drop just two years prior. The volatility-limiting "circuit breakers" recently initiated in the stock and stock derivative markets may help alleviate these risk perceptions. Additional negative factors influencing U.S. stocks will be an increase in competition for funds from the likely increase in interest rates abroad due to foreign monetary restraint, the diminishing of the reduction of the supply of U.S. equities due to the cutback in LBO activity referred to earlier, and the likely moderate reduction in institutional demand for equities.

Selectivity in choosing stocks will likely be important, and investors will be wise to avoid companies with excessive debt loads or becoming involved in debt-related deal-making activities, because the risks in these situations will be heightened significantly.

On the other hand, there are some stock market positives that at least partially offset these negatives. One is the only slight overvaluation of stocks relative to their fundamentals in most equity valuation models as compared with a 20%-plus overvaluation prior to the 1987 market fall. Key to this favorable valuation factor are:

1. A price/earnings ratio for stocks that is close to their modern historical norm of approximately 13;
2. The fact that long-term interest rates are expected to decline moderately; and
3. The expectation of dividend growth in excess of 10% in 1990. As a result, the stock market as a whole should produce relatively favorable dividend yields and small price appreciation leading to total return in the 10-13% range, modest compared to either recent annual stock returns or to risks traditionally borne in the stock market.

Nevertheless, the typical investor with a long-term time horizon cannot afford to neglect a sizeable commitment to equity investment. Therefore, the average investor should continue to invest approximately 45-50% in stocks, another 40-45% in long-term bonds (on which total returns should approach 9-10%), and about 10% in money market securities.

Housing

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The movement in mortgage interest rates should parallel that of interest rates in general. Rates for both fixed-rate and adjustable-rate mortgages have been declining during the latter part of 1989, and are expected to con-

tinue to fall slightly during 1990 as a consequence of a weakening economy, with most of the decline coming early in the year. The average mortgage rate for the year should be 9.5-9.75%. But just how much mortgage rates, and interest rates in general, fall will depend on how much the economy slows down and on how much the Fed relaxes its restraints on monetary growth in an effort to stimulate the economy. The gap between fixed-rate and adjustable-rate mortgages has narrowed considerably over the past year. The spread should stay under 2% because of investor expectations of lower long-term interest rates, and because lenders have grown wary of the effects on loan quality of offering adjustables at initial rates significantly lower than prevailing mortgage rates.

At the time of this forecast, aggregate housing starts for 1989 are running at a seasonally adjusted annual rate of about 1.4 million units, the lowest level in about seven years. The trend during 1989 has been slightly downward. Starts of single-family housing, which has been the strongest component of housing construction, declined mainly because of a decline in housing affordability (discussed below). Two countervailing forces are expected to exert an influence on new construction in 1990. First, the slowing economy should dampen the demand for housing and thus reduce the number of housing starts. On the other hand, the decrease in mortgage rates should stimulate housing construction. The net result should be that housing starts in 1990 should be close to where they are at the present time—that is, around 1.4 million units for the year. The slight decline in mortgage rates should just about offset the effects of a slowing economy. In the past few years, housing in the Midwest has been slightly stronger than in the country as a whole (in terms of year-to-year changes), reflecting renewed strength in the manufacturing sector. But the relatively strong performance of the regional housing market probably will not continue in 1990. The forecasted slowdown in the automotive and durable goods sectors of the economy, which are disproportionately located in the Midwest, should adversely affect housing starts in the region in 1990.

Nationally, the median price of existing homes has increased in each of the first six months of 1989. The median price increased 4.1% from January through June 1989. The median price of new homes nationally has exhibited a seesaw pattern, rising then falling then rising. In Indiana, the median price of existing homes statewide increased 8.2% from January through June 1989. However, the median price of an existing home was virtually unchanged in Indiana from the end of June 1988 to the end of June 1989 because the price of existing homes fell during the second half of 1988. For 1990, housing prices should increase slightly, about one-half of the inflation rate, or about 2%. At the time of this forecast, it is still too early to predict what effects Hurricane Hugo and the October earthquake in San Francisco will have on the price of building materials, and therefore on the cost of construction in 1990.

"Housing starts in 1990 should be close to where they are at the present time—that is, around 1.4 million units for the year."

For the first two quarters of 1989, housing affordability has been dropping, both nationally and for the state of Indiana, as mortgage rates and housing prices have risen. Nationally, the National Association of Realtors' housing affordability index fell to 98 at the end of July. The national housing affordability index had not been below 100 since 1985. Of the four regions of the country, only the Midwest (at 129) was above 100. (At 100, the median household earns enough income to qualify for the median-priced house under standard underwriting requirements with 80% financing.) In Indiana, the housing affordability index fell from 172 in January 1989 to 149 in June 1989. However, housing affordability in the Midwest, and especially in Indiana, remain very high relative to the rest of the country, due to a much lower median home price. At the end of June 1989, the median price of an existing home nationally was $93,400; in Indiana the median price was $57,900.

The construction of multifamily housing has declined substantially since 1985, reflecting the adverse impact of tax reform legislation on incentives to invest in multifamily housing. At the end of the third quarter of 1989, the percentage of total housing starts represented by multifamily housing units was slightly over one-fourth of all housing units, the lowest percentage of the decade. This indicates that the trend of declining investment in multifamily housing that has characterized most of this decade has continued into 1989. However, the decline in multifamily construction is now beginning to create a shortage of rental property in some areas of the country. In 1990, the demand for apartments should put upward pressure on rental rates. Nationally, rental rates should increase at about the same rate as inflation, which should stimulate new construction. With the exception of the possible lowering of the tax rate on capital gains, no tax legislation favorable to multifamily housing appears likely in 1990. Passage of favorable capital gains legislation in 1990 should stimulate investment in multifamily housing.

The 1990 Indiana Outlook

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A slower rate of growth for the national economy suggests an even slower pace in 1990 for Indiana. With national housing starts expected to be even with 1989, auto sales slightly down, and no major gains in export activity, Indiana manufacturing employment will be level or down for the year.

Although selected layoffs may be expected in the first few months of the year, more Hoosiers may be employed in manufacturing by the end of 1990 than at this time. For the year, the decline in manufacturing employment is likely to be less than 1% of all jobs in this key sector. At worst, this decline would erase the gain of 4,000 jobs made in 1989.

Nonmanufacturing employment is expected to continue its upward movement, albeit at a slower rate. In 1989 the gain approached 70,000 jobs; next year that could be cut to just over 50,000.

The unemployment rate of the state, which has hung around 4% for several months, will rise during 1990. A rapid movement toward 5.5% in the late winter can be expected, but then improved circumstances should keep the rate from rising much further as the year progresses.

Real personal income gains will be caught between sustained inflation of about 4% and nominal growth of less than 5%. Hence, the growth of real spending in Indiana should slow to less than 1% in 1990. This will not be much different from the situation faced this year in the state. Nominal retail sales have been up by 5.7% thus far in 1989, but inflation gains have absorbed about two-thirds of those advances.

Farm proprietors' income has proven much stronger in recent quarters than previously reported. Extensive data revisions show that Hoosier farmers had just one quarter of losses in recent years. After the drought-related troubles at the end of 1988, the first half of 1989 was up 29% from early 1988. Continuing strength in agriculture can be expected in 1990, since the economic issues facing the nation are unlikely to have any significant adverse impact on domestic demand; forecasting the international aspects of the market requires an ability to predict both worldwide weather patterns and the agricultural politics of more than 100 nations.

Throughout this forecast there is a timing pattern worth noting. The adverse period will be early in 1990, with improvements as the year progresses. By the end of 1990 most indicators should be equal to or better than their closing points in 1989.

Figure 1
Indiana's Share of Total Personal Income

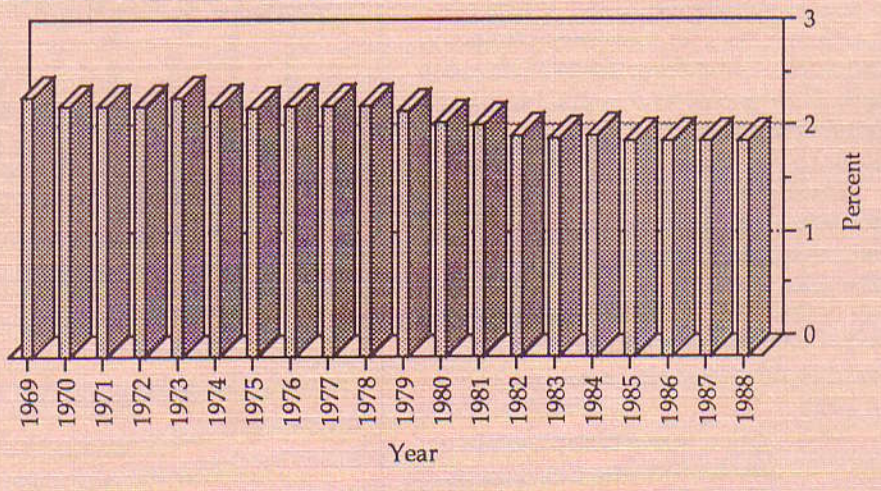
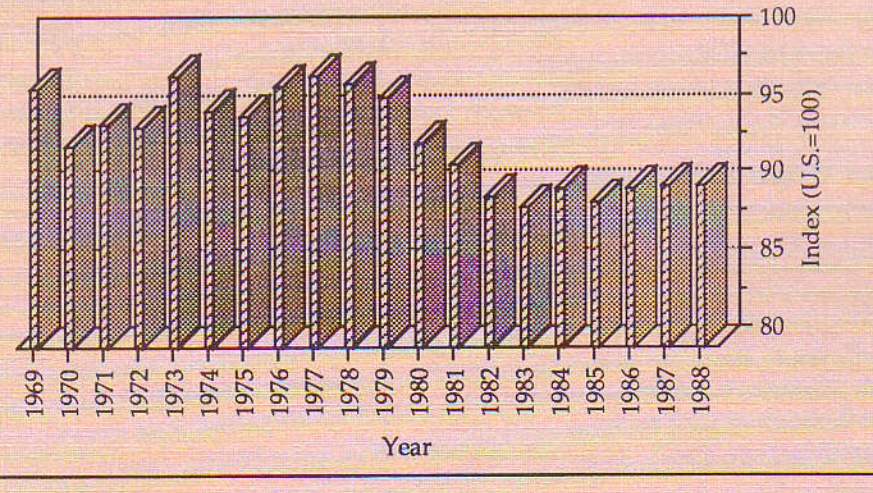


Figure 2
Indiana's Per Capita Personal Income



Changes in the Indiana Economy

The current slowdown in the national economy is affecting Indiana, but without the force of prior slowdowns and downturns. Several changes in the structure of the Indiana economy in the past decade are contributing to this reduced cyclical impact.

Although Indiana's share of U.S. personal income has continued to decline in recent years, the state seems to have stabilized at its new level (see **Figure 1**). Since 1985, Indiana has been at approximately 2.05% of the nation's personal income after falling from 2.47% in 1969. The most precipitous drop occurred during the 1979-83 recession. For the past four years, however, Indiana has kept pace with the nation's economic progress.

During this same recent period, however, per capita personal income has been rising slightly (see **Figure 2**). The state was at 96.6% of the nation's per capita level in 1969; it had fallen to 89.1% in 1983 but has shown an upward trend since then, reaching 90.5% in 1988.

This slight rise in per capita personal income has occurred because our share of the nation's population (as estimated by the U.S. Bureau of Economic Analysis) has been declining. A stable share of the nation's personal income combined with a falling share of population yields a rise in relative per capita personal income. Hence we have achieved a seemingly desirable outcome by failing to keep pace with the nation's population growth. This may be an instance where lagging behind the nation is not undesirable.

In the past decade (1978-1988), Indiana's share of all jobs in the U.S. fell from 2.45% to 2.22%. This pattern of a declining share of the nation's employment was seen in most industry groups (see **Figure 3**). We did experience relative growth in four sectors:

Figure 3
Indiana's Share of U.S. Employment
(full- and part-time)

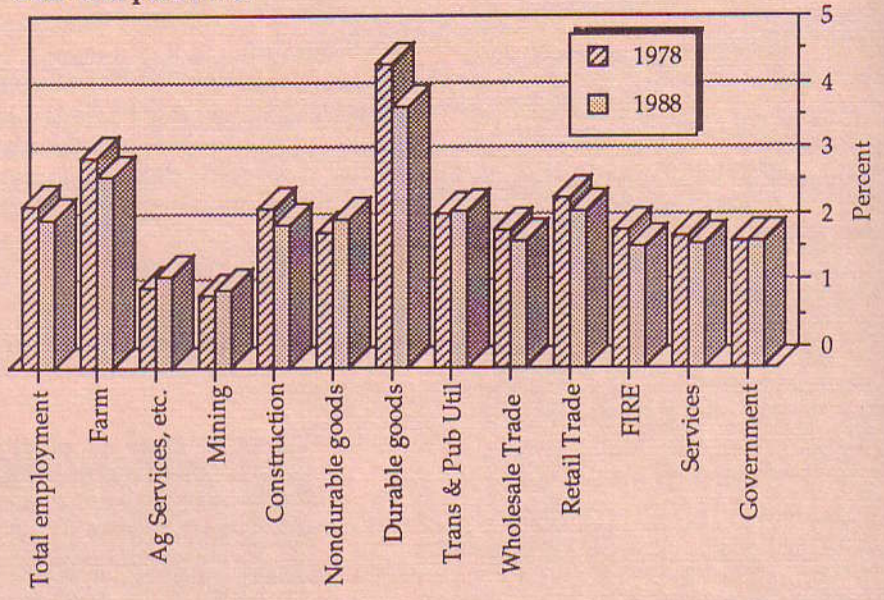
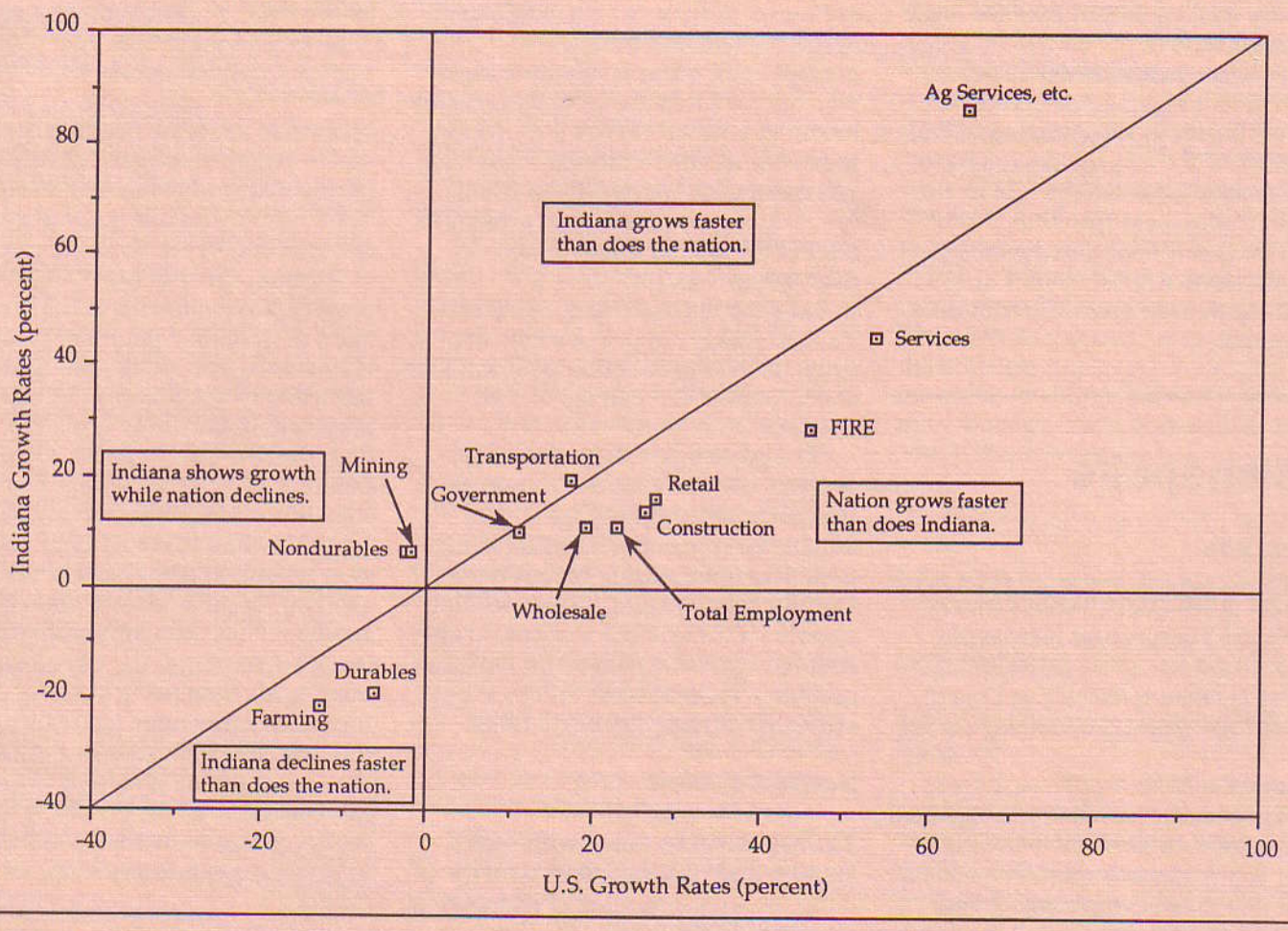


Table 1
Distribution of Employment by Industry
(percent)

	1978			1988		
	U.S.	Indiana	Difference	U.S.	Indiana	Difference
Total Employment	100	100		100	100	
Farm	3.48	4.53	1.06	2.47	3.21	0.74
Ag Serv, For., Fish.	0.75	0.38	-0.37	1.0	0.63	-0.37
Mining	0.92	0.41	-0.52	0.73	0.39	-0.35
Construction	5.19	5.06	-0.13	5.35	5.18	-0.16
Manufacturing	19.39	28.24	8.85	15.05	22.07	7.03
Nondurable goods	7.76	6.46	-1.3	6.16	6.2	0.03
Durable goods	11.63	21.78	10.15	8.88	15.88	6.99
Trans. & Pub. Util.	5.0	4.74	-0.27	4.78	5.1	0.32
Wholesale Trade	5.03	4.23	-0.81	4.88	4.22	-0.66
Retail Trade	15.97	16.71	0.75	16.57	17.52	0.95
Fin. Ins. & Real Estate	6.33	5.32	-1.01	7.53	6.17	-1.36
Services	20.97	17.1	-3.87	26.27	22.36	-3.91
Government	16.97	13.28	-3.69	15.36	13.14	-2.22
Index of dissimilarity		11.95			9.04	

Figure 4
Indiana vs. U.S. Employment Growth Rates, 1978 to 1988



Agricultural Services, Fisheries, Forestry, and Other Industries; Mining; Nondurable Goods Manufacturing; and Transportation and Public Utilities. During this period the structure of employment in the state and the nation was in transition. In 1978, it would have been necessary to shift nearly 12% of the employment in Indiana to obtain the same distribution as the U.S. enjoyed. For example, 22.8% of Indiana's workers were involved in the production of durable goods, whereas only 11.6% nationally were in that industry. This 10.2% "excess" would have to have been shifted to other "deficient" sectors if we were to have had the same distribution as the nation (see **Table 1**).

By 1988, it would have been necessary to shift only 9% of Indiana's employment to realize the national pattern. Hence, in this decade Indiana's employment pattern converged toward that of the nation. Our "excess" in durable goods fell to just 7% by 1988.

The nation's fastest growing sector was also the fastest growth sector in this state. **Figure 4** compares industries' Indiana growth rates to national growth rates. Indiana outpaced the nation in employment growth of Agricultural Services, Fisheries, Forestry, and Other Industries. But this is a small sector, accounting for less than 1% of all employment nationwide, and it is a statistical catch-all. Our lead in this area is of little practical consequence.

Indiana trailed in all the faster-paced industries. For example, we lagged the nation in Finance, Insurance, and Real Estate by 17 percentage points. In two declining sectors (Mining and Nondurable Goods Manufacturing), Indiana went against the national trend, adding employment while

these sectors scored losses nationally.

Durable Goods Manufacturing (our traditional strength) and Farming (our mythical leading sector) both fell faster in Indiana than in the nation. By 1988, both Services (which includes health services) and Retail Trade exceeded Durable Goods in total number of jobs and share of the employment market.

As a result of these changes in our state's employment structure, it is unlikely that a national slowdown will have the same relative impact in 1990 as did the slowdowns and downturns of the past.

Indianapolis

Robert Kirk

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Managers of Indianapolis businesses may have to sharpen their management skills in 1990, because the business climate may not be as supportive as it has been. The rates of employment and personal income growth will be slower than those of recent years. The primary reasons are slower growth at the national level, and the fact that Indianapolis is part of state and regional economies that continue to have a durable-goods orientation. **Table 1** compares Indianapolis with other economies in the proportion of total earnings (a measure of output) generated by the durable-goods sector.

Indianapolis is less durable-goods oriented than the rest of Indiana and metropolitan areas in the Great Lakes states, but more so than metropolitan U.S. Over time, for each economy the durable-goods orientation has declined.

The slowdown will be most noticeable in consumer durables, specifically autos—an industry in which Indianapolis has a concentration. The output multiplier for autos is relatively high, which means that the industry is highly linked to other industries both within Indianapolis and in the rest of the state. Therefore the impacts will be widely felt. Although excess capacity seems to exist at the industry level nationally over the next several years, auto plants in Indianapolis have made—and continue to make—large investments to upgrade their production facilities. This should reduce the chances of shutdowns.

The greater diversification of the Indianapolis economy will moderate the effects of the slowdown. For example, the convention industry brings in dollars from outside central Indiana. Patients from outside the area seeking specialized treatments available at area hospitals generate income for the local economy. Federal, state, and local governments provide stability as well.

Business Services

Business services, along with health services and retailing, have been generating the largest number of jobs during the 1980s. The business services sector includes a variety of industries, such as advertising, management consulting, public relations, leasing, building services, computer services, employment agencies, and temporary help agencies.

Firms have used temporary help because of the reduction in labor costs and increased management flexibility in response to shifts in market conditions. Employees like the increased freedom. However, there are costs, such as a greater sense of insecurity for employees, a potential for underinvestment in training, higher unemployment rates during recession, and a potential reduction in the chances that equal employment opportunity goals will be met in a two-tiered system. Union organizers find the temporary help market a more difficult environment.

While the temporary help (contingent economy) labor market has been growing, another labor market (share economy) has been developing also. In the share economy, the labor-management focus is on profit sharing, performance bargaining, job ladders, retraining, and redeployment. Although the service sector is viewed as being less cyclical than the durable-goods sector, certain industries within services, such as temporary help, are cyclical also.

Table 1
Proportion of Total Earnings Generated by Durable Goods Sector (by place of work) in Percent

	1979 (peak)	*1982 (trough)*	*1986 (recovery)*
Indianapolis	22	19	17
Rest of Indiana	36	31	29
Great Lakes (metropolitan)	29	24	22
U.S. (metropolitan)	18	15	14

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Relative Price Changes

Table 2 indicates price changes at the national level for selected items during the 1980s. If the index for an item is less than 124.6, that item's price has increased more slowly than the combined cost of all items. During the 1980s, the prices of commodities have increased less rapidly than services. Differences in rates of price change reflect a variety of factors, including differences in productivity growth, exposure to competition, response to income change (income elasticities), and means of financing. During the 1980s, households have purchased a lot of consumer electronics, furniture, and automobiles.

In terms of market demand, the number of households and the age distribution of the households are important determinants. The baby boomers have been in the home-buying years. In an urban setting this means that population has dispersed as new housing developments have been built. Reliance on the automobile to connect housing and employment locations has affected ridership for METRO bus routes, caused congestion at locations not originally designed to handle the increased traffic volumes, and heightened the issue of air quality. The increased demand for urban land has contributed to the increased cost of disposing of our garbage.

Rising health care costs have given rise to some critical financing issues for local hospitals. Rising college tuition has been increasingly financed via loans, resulting in large debts for some graduates that reduce their discretionary income following graduation.

Table 2 refers to national data. The American Chamber of Commerce Researchers Association survey shows Indianapolis to be below the national average in costs for such items as groceries, housing, and utilities. With its relatively low costs, central location, and attractive fiber optics network, Indianapolis is a desirable location for distribution and telecommunications, as evidenced by American Express, Charles Schwab, and Epson selecting Indianapolis for new facilities.

Major construction projects, such as Eli Lilly, the Circle Centre Mall, State government offices, and IUPUI, will continue in 1990. However, extended leases and rental incentives are being offered in the office market. Although the overall metropolitan housing market appears to be balanced, there are some submarkets with excess inventory. The apartment building vacancy rate is tending downward but at a slow rate.

In the longer term, population projections by age for 1990-1995 indicate a contraction for the 15-29 age group, with the largest growth occurring in the 45-54 age group. These demographic changes have implications for the demand for starter homes and furnishings. Also, the rate of labor force entry will be lower. Employers finding entry-level job seekers lacking adequate skills will be forced to offer formal remedial training. Ways will need to be developed to maximize the use of the existing labor force and provide flexibility in working arrangements to attract those not in the labor force to enter. On an optimistic note, the relative scarcity of labor will induce firms to substitute capital for labor, resulting in higher labor productivity and real earnings and less inflationary pressure. The downside is that various sectors of the economy are highly leveraged financially, resulting in a very brittle economy that could shatter if an economic shock occurred.

Table 2
Changes in Components in the Consumer Price Index (CPI), 1982-84 = 100, for August 1989.

Item	*Index*	*Relative Importance*
All Items	124.6	1.00
Commodities	116.7	0.45
Services	133.1	0.55
Appliances	88.4	
Gasoline	91.1	
Women's Apparel	109.5	
Furniture	113.6	
Men's Apparel	114.7	
New Cars	117.7	
Residential Rent	133.5	
Homeowner Costs	138.1	
Physicians' Services	151.4	
Garbage Collection	157.7	
Hospital Room	159.9	
College Tuition	161.4	

Source: CPI Detailed Report, *August 1989.*

Northwest Indiana

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The Northwest Indiana economy is becoming increasingly more immune to the national business cycle. Real gross national product has declined in 1989 to an annual growth rate of about 2.4%, down from an average rate of 4.1%. One would have expected that Northwest Indiana would have lost some of its growth momentum too. That was not the case, just as we had predicted in our 1988 forecast. Even manufacturing and steel showed modest gains of more than 1.5% in 1988. Total employment averaged an annual growth rate of 5.8%; nonmanufacturing, led by retail trade, averaged an annual growth rate of almost 6%. These figures compare with a national employment growth rate of about 3.5%.

These results are surprising and cer-