Strong U.S. Economic Growth Ahead Provides Solid Support for Agriculturally Based Industrial Products

Strong growth is occurring in 1994. Inflation is expected to be low. The Federal Reserve Board put upward pressure on interest rates, but most interest-sensitive sectors, including housing and furniture that rely on forest products, should be profitable and grow during 1994. Petroleum prices are likely to rise this year, giving some support for agriculturally based fuels and lubricants.

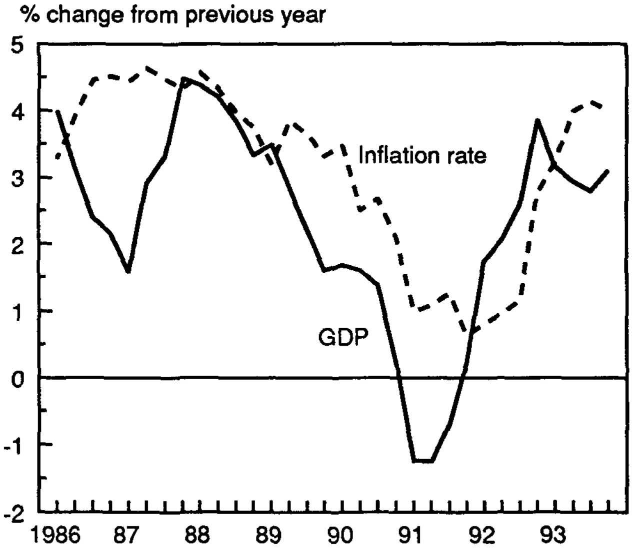
The consensus of private forecasters is that the U.S. Gross Domestic Product (GDP) will grow 3.6 percent in 1994 (figure 4). Consumer price inflation is expected to be 2.8 percent. The Federal Reserve Board (Fed) put upward pressure on short-term interest rates to restrain future growth in demand that would spark higher inflation. Banks reacted with the first increases in the prime rate in 6 years. Long-term rates rose and then fell, but are still above early 1994 levels.

Economic Growth Is Strong Across Sectors

In the third quarter of 1993, growth was almost 3 percent and would have likely been 3.5 to 4 percent if not for rain-related losses in the Midwest. Growth, however, was very strong in the fourth quarter. Oil prices fell and short- and long-term interest rates were at or near record lows. Moreover, bank, consumer, small business, and corporate balance sheets were extraordinarily healthy. Banks were ready and able to lend. The booming stock market made the cost of issuing new equity very inexpensive, which, together with strong corporate profits, boosted purchases of new factories and equipment.

Figure 4

Real GDP Growth Accelerates, but Inflation Is Forecast To Rise Slightly



Individuals were willing and able to borrow for new and previously owned houses, as well as cars to replace their aged vehicles. People also needed to furnish their newly purchased houses. As a result, the 7.0-percent growth in furniture shipments during fourth-quarter 1993 set a 10-year record. Consumer spending on durable goods, housing, and cars and business spending on equipment all grew at annualized rates of almost 20 percent in the fourth quarter. The real trade deficit even narrowed, an historically unprecedented happening this far along in a recovery.

GDP growth in first-quarter 1994 was 3.0 percent, higher than expected by most private forecasters. Growth was led by spending on business equipment and consumer durables, which grew 16.1 and 10.2 percent. Residential investment posted a 7.6-percent gain. Except for spending on business structures, which fell 20.1 percent, every major interest-sensitive component of GDP rose faster than aggregate GDP. The other large drags on growth were a 3.6-percent decline in government spending and a 14.7-percent increase in imports.

Consumers and businesses are borrowing and spending more compared to a year ago. Financial intermediaries, such as banks, have increased lending and underwriting stock issues. That is why the strength of fourth-quarter 1993 did not fizzle in the first quarter of this year, despite a very high initial growth rate, a major earthquake, and bad weather.

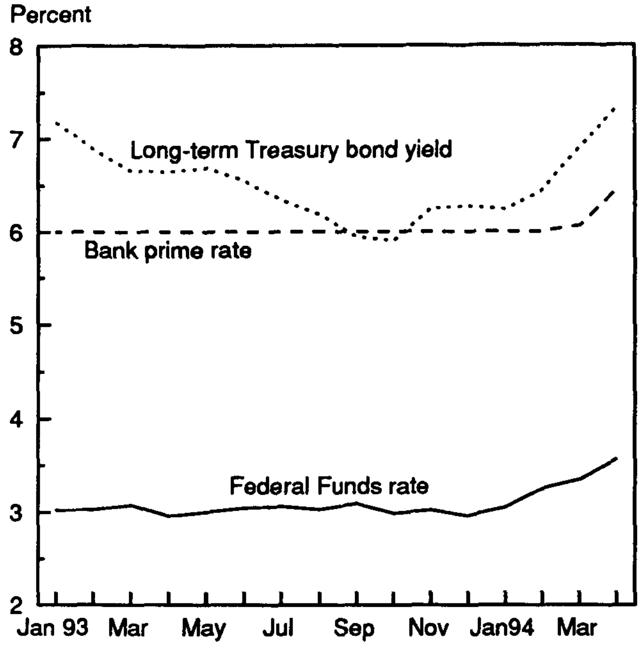
Interest Rates Begin To Move Up

The low interest rates engineered by the Fed beginning over 5 years ago allowed solid improvement in the balance sheets of financial institutions, corporations, small businesses, farmers, and consumers. For example, home mortgage refinancing gave many consumers a substantial boost in spending power (after out-of-pocket expenses).

In early 1994, the Fed decided that since the economy was on a solid recovery path, it was time to institute a neutral monetary policy to prevent a resurgence of inflation. As a result, in February, March, and April, the Federal Funds rate (the rate at which banks borrow from one another) was raised (figure 5). The prime borrowing rate at the end

Figure 5

Fed Lifts Federal Funds Rate



of April was 6.75 percent, up from 6.0 percent in early 1994.

Some analysts expect the Fed to push up interest rates again later this year. Because of these interest rate hikes, most analysts expect GDP growth to be slower than it would have been otherwise in the last quarter of 1994. It is likely that consumer durables and business investment will still grow at substantial rates (up to and exceeding 10 percent) for 1994 as a whole. Home sales are likely to fluctuate more from quarter to quarter than other interest-sensitive sectors, but will wind up higher in 1994 than in 1993--up around 8 to 10 percent.

Overall GDP growth for 1994 of 3.6 percent will give a lift to many agricultural processors selling to the industrial sector. Unemployment is expected to average 6.4 percent, down from March's 6.5 percent. Some analysts had called for a very strong first-half of 1994, followed by GDP growth below 2 percent in the last half of the year. However, the moderate results of the first quarter lower the probability of such a sharp slowdown, even in the presence of additional increases in the Federal Funds rate.

Oil Prices To Move Up

Energy is an important input in most industrial processes. In general, increases in petroleum prices will stimulate demand for agricultural materials used for lubricants, feedstocks, or energy sources. For the rest of 1994, most analysts expect higher petroleum prices. However, the increases will be from very low levels. A late-November meeting of the Organization of Petroleum Exporting Countries (OPEC) failed to come up with an operational quota. Crude oil prices on the New York Mercantile Exchange (NYMEX) fell below $14 per barrel in the first quarter of 1994.

Large producers were more in accord at OPEC's spring meeting. A forecast by the U.S. Department of Energy's Energy Information Administration (EIA) calls for the cost of imported crude to average $15 per barrel for the first half of 1994, rising to $16 in the last quarter, and averaging $15.39 for the year. Private analysts, having more current information, now expect crude prices to rise about $2 per barrel above the current NYMEX spot price of $18 by the end of 1994. Long-term projections by EIA have oil prices rising to $20 per barrel in 1987 dollars by the year 2005.

Expected Effects of Growth in Buildings, Housing, and Furniture Cut Across Economy in 1994

The consensus has industrial production growing 4 percent in 1994. As the recovery continues, construction and related activity is expected to grow even more strongly. Specifically, commercial building, residential housing, and the furniture sector are forecast to grow rapidly. These sectors are large users of agricultural materials, particularly forest products.

An ERS sector-level simulation model was used to estimate the changes in these sectors in 1994 and the resulting impacts on the rest of the domestic economy. The results of expected changes in gross private domestic investment in commercial buildings, residential housing, and furniture consumption are measured in terms of total output and GDP. GDP represents the value added in production: it is the value of total industrial output less the cost of intermediate inputs, which are the products of one industry used by another. Total output and GDP for the economy are the sum of each industry's total output and GDP.

Furniture production will increase 8 percent or $17.2 billion (in constant 1987 dollars) in 1994 to meet new consumption demands; investment in buildings will increase 7.2 percent or $8 billion; and investment in residential structures will increase 9.7 percent or $20 billion (table 1).

The bottom half of table 1 indicates the economic activity resulting from this level of investment and consumption. These changes alone will generate an increase in the economy's total output of over $222.5 billion in current dollars and almost $98 billion of GDP. As would be expected, construction GDP increased considerably, over $7.2 billion. The first category, farm and agricultural services, also shows large increases in both output and GDP. Horticultural services, forestry, and landscaping are included in this category. These industries, with their strong links to housing, have long been valuable markets for nonfood agricultural commodities. From nursery stock to bedding plants, this activity stimulates demand for established products. It also encourages demand for new products, ranging from kenaf seeding mats, included in the farm and agricultural services category, to concrete-release agents and biolubricants used in construction and related equipment, which are products of the corn and oil mills category.

Total GDP in 1994 related to the increase in investment and consumption is $1.25 trillion, 18 percent of the $6.77 trillion forecast for 1994 U.S. GDP. The manufacturing sectors--furniture, lumber and wood, plastics and rubber, petroleum refining, corn and oil mills, textiles, and leather--benefited the most. Service sectors and mining also generate high levels of output and GDP. Within the mining sectors are those quarrying activities associated with cement mixing and gravel, so this link is not surprising.

The simulation model used in this analysis has 1982 as its base year, reflecting a cost structure and sectoral composition of a decade ago. These estimates may not capture the full extent of more recent uses of agricultural materials. However, many agricultural materials have replaced other materials in existing activities, rather than in entirely new products. Therefore, these results suggest the size of the potential markets in which agricultural materials may be able to penetrate with new and improved materials. [David Torgerson and William Edmondson (202) 219-0782]

Table 1--1994 economic activity related to expected totals and increases in furniture consumption, investment in commercial buildings, and investment in residential housing

Sector	Consumption and investment	
	Total 1994	Change 1993-94
	Billion 1987 dollars	
Furniture	234	17.2
Buildings	118	8.0
Housing	227	20.0

Sector	Economic activity			
	Total 1994		Change 1993-94	
	Output	GDP	Output	GDP
	Million 1994 dollars			
Farm and agricultural services	127,400	47,598	9,957	3,713
Construction	181,089	92,097	14,243	7,225
Furniture	43,457	19,758	3,381	1,527
Lumber and wood	73,466	23,885	5,941	1,942
Plastics and rubber	99,754	36,884	7,699	2,837
Petroleum refining	78,680	11,403	6,168	895
Corn and oil mills	39,095	6,613	3,097	506
Textiles	64,318	12,771	4,807	960
Leather	15,757	3,195	1,296	263
Other manufacturing	1,083,543	379,329	84,101	29,357
Services and mining	837,108	481,432	64,791	37,395
Trade and transportation	221,085	141,848	17,065	10,947
Total	2,864,753	1,256,814	222,548	97,566