

News

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MULTIFACTOR PRODUCTIVITY MEASURES, 1990

Private Business, Private Nonfarm Business, and Manufacturing

The Bureau of Labor Statistics of the U.S. Department of Labor today reported multifactor productivity measures--output per unit of combined labor and capital--for 1990. Multifactor productivity changed from 1989 to 1990 at the following percentage rates:

	<u>1989-90</u>
Private business	-0.8
Private nonfarm business	-1.0
Manufacturing	1.5

Multifactor productivity in private business and private nonfarm business posted its second consecutive annual decline in 1990, and the declines were larger than in 1989. In manufacturing, multifactor productivity increased in 1990 for the eighth consecutive year. While the gain was larger than in 1989, productivity growth was slower than the gains made during the 1983-88 period. The 1990 annual changes are summarized in table A; further detail and historical measures are shown in tables 1 through 12. (See notes on revisions on page 6.)

The change in multifactor productivity reflects the difference between the change in output (production of goods and services) and the change in labor and capital inputs engaged in the production of the output. Multifactor productivity does not measure the specific contributions of labor, capital, or any other factor of production. Instead, it reflects the joint effects of many factors, including new technology, economies of scale, change in the composition of labor input, managerial skill, and change in the organization of production.

Table A. Productivity indexes and related measures Percent change from 1989 to 1990			
Item	Private business 1/	Private nonfarm business 1/	Manu- facturing
Productivity:			
Output per hour of all persons.....	-0.4	-0.5	2.5
Output per unit of capital services..	-2.0	-2.1	-1.1
Multifactor productivity 2/.....	-0.8	-1.0	1.5
Output.....	0.2	0.2	0.4
Inputs:			
Hours of all persons.....	0.6	0.7	-2.0
Capital services.....	2.2	2.3	1.5
Combined units of labor and capital input 3/.....	1.1	1.2	-1.0
Capital services per hour of all persons (capital-labor ratio)....	1.6	1.6	3.7

1/ Excludes government enterprises.

2/ Output per unit of combined labor and capital input.

3/ Hours of all persons combined with capital service input index, weighted by labor's and capital's shares of nominal output.

Measures of both quarterly and annual labor productivity, or output per hour, are published by the Bureau of Labor Statistics each quarter. The percent change in labor productivity indicates the portion of the change in output that cannot be accounted for by the change in labor inputs. In contrast, the percent change in multifactor productivity indicates the portion of the change in output that cannot be accounted for by the change in combined inputs of labor and capital.

Private business sector

Multifactor productivity in private business decreased 0.8 percent in 1990, following a 0.4 percent decline in 1989 (table 4). Consecutive declines in productivity last occurred in 1979 and 1980. The productivity decline was the result of a 0.2 percent increase in output and a 1.1 percent increase in combined inputs of capital and labor. Both output and combined inputs posted their smallest gains since 1982. The 0.6 percent increase in hours at work is also the smallest gain since 1982, while capital services increased 2.2 percent or about the same rate as in 1988 and 1989. The capital services from land increased at a faster pace than in 1989, but equipment, structures, rental residential capital, and inventories grew more slowly than in 1989 (table 10). The sharp decline in the growth rate of hours led to the first increase in the ratio of capital services to hours at work since 1986.

Labor productivity declined 0.4 percent in 1990, the same rate as in 1989. Capital productivity (the ratio of output to capital services) declined 2.0 percent in 1990, following a decline of 0.4 percent in 1989.

Private nonfarm business

Multifactor productivity in private nonfarm business declined 1.0 percent (table 5), following a 0.6 percent decline in 1989. Output gains were minimal, 0.2 percent, while combined inputs of hours and capital services increased 1.2 percent. Separately, the growth rate of hours at work fell to 0.7 percent, about a quarter of its 1989 rate, and capital services grew 2.3 percent, only slightly slower than in 1989. Each form of capital grew more slowly than 1989, but the capital services from equipment continue to post the fastest rate of increase (table 11). The capital-labor ratio increased 1.6 percent.

Labor productivity declined 0.5 percent in this sector in 1990 as growth in output (0.2 percent) failed to keep pace with the increase in hours at work (0.7 percent) for the second consecutive year. Capital productivity declined 2.1 percent in 1990, the largest decline since 1982.

Manufacturing

Only in manufacturing did multifactor productivity increase in 1990. While the gain of 1.5 percent was larger than in 1989, this gain was still below the rapid advances of the 1983-88 period (table 6). In recent years, manufacturing has consistently recorded stronger multifactor productivity gains than both the private business and private nonfarm business sectors. Since 1982, multifactor productivity in manufacturing has grown nearly 4 percent per year; in private business and private nonfarm business, annual gains have averaged less than 1.5 percent.

As in the larger sectors, output in manufacturing grew at a slow rate, 0.4 percent. Combined inputs of hours and capital services fell 1.0 percent, the first decline since 1986. The decline in combined inputs stems entirely from a sharp drop in hours. Capital services continued to post gains similar to those in recent years. The growth rates of equipment, structures, and land increased in 1990, and only inventories grew more slowly in 1990 compared with 1989 (table 12). A 2.0 percent decline in hours combined with a 1.5 percent gain in capital services led to a 3.7 percent increase in the capital-labor ratio--the largest gain since 1982.

Labor productivity increased for the 10th consecutive year. The 2.5 percent gain was larger than the 1989 rate, but the gain was generally smaller than gains in the 1980s. Capital productivity fell 1.1 percent in 1990.

Long-term trends

Labor productivity growth (output per hour) differs from multifactor productivity (output per unit of combined capital and labor) in its treatment of capital. Since labor productivity measures do not explicitly account for the effects of capital on output growth, changes in capital intensity (the capital-labor ratio) influence labor productivity growth. However, multifactor productivity (MFP) treats capital as an explicit factor of production and changes in capital intensity do not affect measures of MFP. Long-term labor productivity growth can be viewed as the sum of two components: Multifactor productivity growth and the contribution of increased capital intensity.

From 1948 to 1990, labor productivity grew at an annual rate of 2.2 percent in private business, 1.8 percent in private nonfarm business, and 2.8 percent in manufacturing (table B). Of the 2.8 percent trend growth rate in labor productivity in manufacturing, 2.0 percent may be attributed to increases in multifactor productivity and 0.8 percent to the contribution of capital intensity. The latter equals the change in the capital-labor ratio multiplied by capital's share of total output; historically, capital's share has been less than one-third of total costs.

The widely discussed post-1973 productivity slowdown is apparent from the data in table B. From 1948 to 1973, multifactor productivity grew at an annual rate of 2.0 percent in private business and 1.6 percent in private nonfarm business. These rates, combined with the growth rates in the contribution of capital intensity, resulted in labor productivity growth rates of 3.0 percent and 2.5 percent, respectively, in private business and private nonfarm business.

During the period 1973 to 1979, gains in multifactor productivity slowed to only 0.2 percent per year in private business. At the same time, the average annual contribution of capital intensity decreased to 0.6 percent. Labor productivity, therefore, increased only 0.8 percent per year from 1973 to 1979. A similar slowdown occurred in private nonfarm business during the 1973-79 period.

Table B. Compound annual rates of growth in output per hour of all persons, the contribution of capital intensity, and multifactor productivity, by major sector, 1948 to 1990

Measure	1948- 1990	1948- 1973	1973- 1979	1979- 1990
<u>Private business</u> 1/				
Output per hour of all persons	2.2	3.0	0.8	1.2
Contribution of capital intensity 2/	0.9	1.1	0.6	0.5
Multifactor productivity 3/	1.4	2.0	0.2	0.6
<u>Private nonfarm business</u> 1/				
Output per hour of all persons	1.8	2.5	0.6	1.0
Contribution of capital intensity 2/	0.8	0.9	0.6	0.5
Multifactor productivity 3/	1.1	1.6	0.0	0.4
<u>Manufacturing</u>				
Output per hour of all persons	2.8	2.9	1.4	3.1
Contribution of capital intensity 2/	0.8	0.8	1.0	0.7
Multifactor productivity 3/	2.0	2.1	0.5	2.4

1/ Excludes government enterprises.

2/ Change in capital services per hour times capital's share of current dollar output.

3/ Output per unit of combined labor and capital input.

The sum of multifactor productivity and the contribution of capital intensity may not equal labor productivity due to rounding.

Source: Tables 4-6.

Multifactor productivity in manufacturing grew at an annual rate of 2.1 percent from 1948 to 1973. This growth rate fell to 0.5 percent during the years 1973 to 1979. However, the contribution of capital intensity did not fall as it did in the two larger business sectors and instead increased slightly to 1.0 percent per year. This small increase in the contribution of capital intensity dampened the decline in labor productivity growth in manufacturing compared to the two larger sectors.

In the latest period, 1979 to 1990, multifactor productivity in manufacturing increased 2.4 percent per year, and labor productivity rose 3.1 percent per year. These results exceeded the growth rates of the 1948-73 period. On the other hand, multifactor productivity grew only 0.6 percent per year in private business and 0.4 percent per year in private nonfarm business during this period. These growth rates represent an increase from the 1973-79 rates but are still well below the pre-1973 rates.

Note: The Bureau of Economic Analysis (BEA) of the Department of Commerce has recently published measures of current and constant dollar gross product originating by industry for 1989 and revised measures for 1987 and 1988. The measures of output, inputs, and productivity for manufacturing from 1987 to 1989 have been revised based on these new data. At this time, 1990 gross product originating data for manufacturing output have not been issued. Preliminary measures of real manufacturing output are based on the Federal Reserve Board's monthly indexes of industrial production for durable and nondurable manufacturing for 1990. Current dollar manufacturing output is estimated for 1990 by assuming that employee compensation is a constant share of output.

Measures of hours of all persons at the major sector level have been revised to reflect the June 1990 benchmark of the BLS Current Employment Statistics survey of establishments to the March 1990 unemployment insurance data.

At this time, the 1990 Hours at Work survey has not been completed by BLS. This survey is used to convert hours paid to hours at work. The 1989 ratios of hours worked to hours paid for each industry are applied to the 1990 hours paid data to produce preliminary estimates of the 1990 hours at work of all persons.

Measures for 1990 proprietors' income also have not been issued by the U.S. Department of Commerce. Preliminary measures are based on the hours of proprietors and hourly earnings of employees in 1990.

The Bureau of Economic Analysis has revised measures of the real value of farm land. Most revisions affect data after 1979, but all data for Alaska and Hawaii were revised. As a result, measures of capital services have been revised.

Summary of Methods

The following note describes the major data sources and the procedures used in deriving BLS multifactor productivity indexes. More detailed information on the methods, limitations, and data sources is provided in BLS Bulletin 2178, "Trends in Multifactor Productivity, 1948-81."

The multifactor productivity indexes are derived by dividing an output index by an input index which is a weighted average of the hours at work of all persons and capital services. The output indexes are computed from measures of constant dollar gross domestic product, derived from the national income and product accounts (NIPA) developed by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce.

The capital input series measures the services derived from the stock of physical assets. The assets included are fixed business equipment, structures, inventories, and land. Structures include nonresidential structures and residential capital which is rented out by profit-making firms or persons. Financial assets are excluded as are owner-occupied residential structures. The aggregate capital measures are obtained by weighting the capital stocks for each asset type within each industry using the respective rental prices. Rental prices are the sum of the real rate of return to all assets within the industry and the rate of depreciation of the specific asset, adjusted for the effect of taxes. Data on physical assets and the gross product originating by industry used in measuring the rental prices are obtained from the BEA.

The labor and capital components of the input indexes are combined with weights which represent each component's share of total costs. Total costs are defined as the value of output (gross product originating) less a portion of indirect business taxes. Most indirect taxes such as excise taxes are excluded from costs. However, property and motor vehicle taxes remain in total costs. The index uses changing weights where the share in each year is averaged with the preceding year's share.

Data are presented for the private business, private nonfarm business, and manufacturing sectors. The private business sector, which accounts for about 80 percent of the gross national product, includes all activities in the economy with the exception of general government, government enterprises, the rest-of-the-world sector, owner-occupied housing, nonprofit institutions, private household employees, and the statistical discrepancy in computing the NIPA. The private nonfarm business sector also excludes farms but includes agricultural services.

These multifactor productivity measures describe the relationship between output in real terms and the labor time and capital services involved in its production. They do not measure the specific contributions of labor, capital, or any other factor of production. Rather, they reflect the joint effects of many factors, including new technology, economies of scale, change in the composition of labor input (as measured by education and experience), managerial skill, and change in the organization of production.

Table 1. Private business sector: Productivity and related measures, 1948-90 [1]

Indexes 1982=100

Year	Productivity			Output [3]	Inputs			Capital per hour of all persons
	Output per hour of all persons	Output per unit of capital	Multifactor productivity [2]		Hours of all persons [4]	Capital Services [5]	Combined units of labor and capital inputs[6]	
1948	44.8	132.9	63.1	35.8	80.0	27.0	56.8	33.7
1949	45.2	126.4	62.3	34.9	77.3	27.6	56.0	35.7
1950	49.1	132.6	66.9	38.3	78.1	28.9	57.3	37.0
1951	51.2	134.1	69.0	41.1	80.2	30.7	59.6	38.2
1952	52.9	133.5	70.4	42.4	80.1	31.8	60.2	39.7
1953	55.0	135.6	72.6	44.4	80.8	32.8	61.2	40.5
1954	55.8	130.1	72.5	43.6	78.1	33.5	60.2	42.9
1955	57.6	134.1	74.8	46.7	81.0	34.8	62.4	42.9
1956	58.4	132.4	75.2	48.0	82.2	36.3	63.9	44.1
1957	60.0	129.3	76.0	48.6	80.9	37.6	63.9	46.4
1958	61.8	124.2	76.5	47.6	77.1	38.3	62.2	49.7
1959	64.0	130.2	79.6	51.2	80.0	39.3	64.3	49.2
1960	65.1	128.5	80.2	52.1	80.0	40.5	65.0	50.6
1961	67.5	128.1	82.1	53.1	78.7	41.5	64.7	52.7
1962	70.0	130.6	84.7	55.9	79.9	42.8	66.0	53.6
1963	72.9	132.0	87.4	58.5	80.3	44.3	67.0	55.2
1964	76.2	134.9	90.7	62.1	81.5	46.1	68.5	56.5
1965	78.5	136.6	92.9	66.0	84.1	48.3	71.1	57.5
1966	80.8	135.6	94.5	69.5	86.0	51.2	73.5	59.6
1967	83.3	131.8	95.5	71.3	85.7	54.1	74.7	63.2
1968	85.9	131.6	97.5	74.5	86.8	56.7	76.5	65.2
1969	86.1	128.9	97.1	76.6	88.9	59.4	78.9	66.8
1970	87.0	122.2	96.2	75.8	87.2	62.1	78.8	71.2
1971	89.8	121.0	98.2	78.0	86.8	64.4	79.4	74.2
1972	92.6	123.9	101.0	83.0	89.6	66.9	82.1	74.7
1973	94.8	125.1	103.0	88.0	92.8	70.4	85.5	75.8
1974	93.1	116.9	99.6	86.4	92.8	73.9	86.7	79.6
1975	95.0	110.6	99.4	84.5	88.9	76.4	85.0	85.9
1976	97.8	114.0	102.4	89.5	91.5	78.5	87.4	85.8
1977	99.7	116.9	104.5	94.8	95.1	81.1	90.7	85.3
1978	100.6	118.9	105.7	100.3	99.7	84.3	94.9	84.6
1979	99.4	116.2	104.1	102.3	102.9	88.0	98.2	85.5
1980	99.2	109.3	102.1	101.0	101.9	92.5	99.0	90.7
1981	100.6	106.9	102.5	103.2	102.6	96.6	100.7	94.1
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	102.4	101.8	102.3	104.3	101.8	102.4	102.0	100.6
1984	105.1	106.8	105.6	113.2	107.7	106.0	107.1	98.5
1985	107.3	107.2	107.3	118.0	109.9	110.1	110.0	100.1
1986	109.8	106.5	108.8	121.6	110.7	114.2	111.8	103.1
1987	111.1	108.0	110.1	126.7	114.1	117.4	115.1	102.9
1988	113.6	110.9	112.8	133.5	117.5	120.4	118.4	102.4
1989	113.2	110.5	112.4	136.3	120.4	123.3	121.3	102.5
1990	112.8	108.4	111.4	136.6	121.0	126.0	122.6	104.1

See footnotes following table 6.

Source: Bureau of Labor Statistics

Table 2. Private nonfarm business sector: Productivity and related measures, 1948-90 [1]

Indexes 1982=100

Year	Productivity			Output [3]	Inputs			Capital per hour of all persons
	Output per hour of all persons	Output per unit of capital	Multifactor productivity [2]		Hours of all persons [4]	Capital Services [5]	Combined units of labor and capital inputs[6]	
1948	51.9	140.0	70.3	35.2	67.9	25.2	50.1	37.1
1949	52.8	133.8	70.0	34.4	65.1	25.7	49.2	39.5
1950	56.3	140.5	74.2	37.8	67.1	26.9	51.0	40.1
1951	58.1	142.6	76.1	40.8	70.2	28.6	53.6	40.7
1952	59.5	141.8	77.2	42.1	70.8	29.7	54.5	41.9
1953	60.8	143.9	78.7	44.1	72.5	30.6	56.0	42.3
1954	61.7	137.8	78.5	43.2	70.0	31.4	55.0	44.8
1955	63.6	142.0	80.9	46.3	72.9	32.6	57.3	44.8
1956	64.0	140.0	80.9	47.8	74.7	34.1	59.1	45.7
1957	65.2	136.7	81.3	48.4	74.2	35.4	59.5	47.7
1958	66.8	131.0	81.6	47.4	71.0	36.2	58.1	51.0
1959	69.0	137.4	84.7	51.1	74.0	37.2	60.3	50.2
1960	69.8	135.1	84.8	51.9	74.4	38.4	61.2	51.6
1961	72.0	134.4	86.6	52.9	73.5	39.4	61.1	53.6
1962	74.4	137.0	89.1	55.9	75.1	40.8	62.7	54.3
1963	77.2	138.4	91.6	58.5	75.8	42.3	63.9	55.8
1964	80.2	141.4	94.7	62.2	77.6	44.0	65.7	56.7
1965	82.3	142.9	96.7	66.2	80.5	46.3	68.5	57.6
1966	84.0	142.0	97.9	69.9	83.2	49.2	71.4	59.2
1967	86.2	137.4	98.6	71.7	83.1	52.1	72.7	62.7
1968	88.8	137.2	100.6	75.1	84.5	54.7	74.6	64.7
1969	88.6	134.0	99.7	77.1	87.0	57.5	77.3	66.1
1970	89.1	126.6	98.5	76.2	85.5	60.2	77.4	70.4
1971	91.8	125.1	100.2	78.3	85.3	62.6	78.1	73.4
1972	94.6	127.9	103.0	83.4	88.2	65.2	80.9	73.9
1973	96.6	128.9	104.9	88.6	91.7	68.7	84.5	75.0
1974	94.8	120.0	101.4	86.9	91.7	72.4	85.7	79.0
1975	96.6	113.0	101.0	84.8	87.8	75.0	84.0	85.5
1976	99.3	116.6	103.9	90.0	90.7	77.2	86.7	85.2
1977	100.9	119.3	105.8	95.4	94.5	80.0	90.1	84.6
1978	101.8	121.2	107.0	101.1	99.3	83.4	94.5	84.0
1979	100.2	117.5	104.9	102.9	102.7	87.6	98.2	85.3
1980	99.9	110.5	102.8	101.7	101.8	92.0	98.9	90.4
1981	100.8	107.3	102.7	103.4	102.6	96.3	100.7	93.9
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	103.0	102.4	102.8	105.0	101.9	102.6	102.1	100.6
1984	105.2	107.0	105.7	113.8	108.2	106.4	107.6	98.4
1985	106.7	106.5	106.6	118.3	110.9	111.0	110.9	100.1
1986	108.9	105.7	107.9	121.8	111.8	115.2	112.8	103.0
1987	110.0	107.0	109.1	127.0	115.5	118.7	116.4	102.7
1988	112.7	110.0	111.9	134.3	119.1	122.0	120.0	102.4
1989	112.1	109.3	111.3	137.0	122.2	125.4	123.1	102.6
1990	111.5	107.0	110.1	137.2	123.1	128.3	124.6	104.2

See footnotes following table 6.

Source: Bureau of Labor Statistics

Table 3. Manufacturing sector: Productivity and related measures, 1948-90 [1]

Indexes 1982=100

Year	Productivity			Output [3]	Inputs			Capital per hour of all persons
	Output per hour of all persons	Output per unit of capital	Multifactor productivity [2]		Hours of all persons [4]	Capital Services [5]	Combined units of labor and capital inputs[6]	
1948	43.6	145.4	59.6	38.7	88.9	26.6	65.0	30.0
1949	45.3	136.8	60.3	36.7	81.0	26.8	60.9	33.1
1950	47.8	151.4	64.5	41.9	87.5	27.6	64.9	31.6
1951	49.8	153.1	66.6	46.9	94.2	30.6	70.4	32.5
1952	50.8	149.9	67.1	48.5	95.4	32.3	72.2	33.9
1953	51.9	154.5	68.7	52.0	100.3	33.7	75.7	33.6
1954	52.6	142.5	67.9	48.2	91.7	33.8	70.9	36.9
1955	55.1	151.7	71.5	53.3	96.7	35.1	74.5	36.3
1956	54.8	144.9	70.3	53.7	98.1	37.1	76.4	37.8
1957	56.0	140.4	70.8	54.0	96.5	38.5	76.3	39.9
1958	55.6	127.5	68.7	49.3	88.6	38.6	71.7	43.6
1959	58.1	140.0	72.8	54.9	94.5	39.2	75.4	41.5
1960	58.4	136.6	72.6	55.0	94.2	40.3	75.8	42.8
1961	60.1	134.9	73.9	55.1	91.7	40.9	74.6	44.6
1962	62.6	141.7	77.1	59.8	95.5	42.2	77.5	44.2
1963	66.9	148.3	82.0	64.5	96.4	43.5	78.7	45.1
1964	70.2	153.7	85.6	69.1	98.5	45.0	80.7	45.7
1965	72.1	157.9	88.0	75.2	104.3	47.6	85.4	45.6
1966	73.0	156.8	88.6	80.9	110.9	51.6	91.4	46.5
1967	73.1	144.2	86.6	80.7	110.4	56.0	93.2	50.7
1968	75.8	143.9	88.8	84.8	112.0	59.0	95.5	52.7
1969	77.0	140.9	89.3	87.2	113.3	61.9	97.6	54.6
1970	77.2	128.0	87.5	82.3	106.5	64.3	94.1	60.3
1971	81.4	127.1	90.8	83.7	102.8	65.9	92.1	64.1
1972	84.8	135.1	95.1	91.1	107.5	67.5	95.8	62.8
1973	89.4	143.4	100.5	100.9	112.9	70.4	100.5	62.3
1974	87.1	130.1	96.2	96.1	110.3	73.9	99.9	67.0
1975	89.4	115.5	95.2	88.9	99.5	77.0	93.4	77.4
1976	93.6	122.9	100.1	97.5	104.2	79.3	97.4	76.1
1977	96.5	127.5	103.4	104.7	108.6	82.2	101.3	75.7
1978	96.8	128.1	103.8	109.5	113.1	85.5	105.5	75.6
1979	97.3	125.6	103.6	112.2	115.3	89.3	108.3	77.5
1980	96.6	113.4	100.5	106.2	109.9	93.6	105.7	85.2
1981	97.9	109.6	100.6	106.9	109.3	97.6	106.2	89.3
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	105.0	105.7	105.2	106.2	101.2	100.5	101.0	99.4
1984	110.0	115.7	111.4	118.6	107.8	102.5	106.4	95.1
1985	114.8	117.2	115.4	122.8	107.0	104.8	106.4	98.0
1986	120.0	118.9	119.7	126.6	105.4	106.5	105.7	101.0
1987	126.4	124.9	126.0	134.3	106.2	107.5	106.6	101.2
1988	132.1	132.9	132.4	144.6	109.4	108.8	109.2	99.4
1989	133.3	132.8	133.2	146.4	109.8	110.3	109.9	100.4
1990	136.6	131.3	135.1	147.0	107.6	112.0	108.8	104.1

See footnotes following table 6.

Source: Bureau of Labor Statistics

Table 4. Private business sector: Productivity and related measures, 1949-90 [1]

Percent Change								
Year	Productivity			Output [3]	Inputs			Capital per hour of all persons
	Output per hour of all persons	Output per unit of capital	Multifactor productivity [2]		Hours of all persons [4]	Capital Services [5]	Combined units of labor and capital inputs[6]	
1949	0.9	-4.8	-1.2	-2.6	-3.4	2.4	-1.4	6.0
1950	8.8	4.9	7.4	9.9	1.0	4.7	2.3	3.7
1951	4.3	1.2	3.2	7.2	2.8	6.0	3.9	3.1
1952	3.4	-0.5	2.1	3.2	-0.1	3.7	1.1	3.9
1953	3.8	1.6	3.1	4.7	0.9	3.1	1.6	2.2
1954	1.5	-4.0	-0.2	-1.9	-3.4	2.3	-1.7	5.8
1955	3.2	3.1	3.1	7.0	3.7	3.8	3.8	0.1
1956	1.4	-1.3	0.5	2.9	1.5	4.3	2.4	2.8
1957	2.7	-2.3	1.1	1.1	-1.6	3.5	0.0	5.2
1958	2.9	-4.0	0.7	-2.0	-4.8	2.1	-2.7	7.2
1959	3.6	4.8	4.0	7.6	3.8	2.6	3.4	-1.2
1960	1.7	-1.3	0.8	1.8	0.0	3.1	1.0	3.0
1961	3.7	-0.4	2.4	2.0	-1.7	2.3	-0.4	4.1
1962	3.7	2.0	3.2	5.3	1.6	3.3	2.1	1.7
1963	4.1	1.1	3.2	4.6	0.5	3.5	1.4	3.0
1964	4.5	2.1	3.7	6.1	1.5	3.9	2.3	2.3
1965	3.1	1.3	2.5	6.3	3.1	5.0	3.7	1.8
1966	2.9	-0.7	1.7	5.2	2.3	6.0	3.5	3.6
1967	3.0	-2.8	1.1	2.7	-0.3	5.6	1.5	6.0
1968	3.1	-0.2	2.1	4.5	1.4	4.7	2.4	3.3
1969	0.3	-2.1	-0.4	2.7	2.4	4.9	3.2	2.5
1970	1.0	-5.2	-0.9	-1.0	-1.9	4.4	-0.1	6.5
1971	3.3	-0.9	2.0	2.8	-0.5	3.8	0.8	4.3
1972	3.0	2.4	2.9	6.4	3.3	3.9	3.5	0.6
1973	2.4	0.9	2.0	6.1	3.6	5.1	4.0	1.5
1974	-1.9	-6.6	-3.3	-1.9	0.0	5.0	1.5	5.0
1975	2.1	-5.4	-0.2	-2.2	-4.2	3.4	-2.0	8.0
1976	3.0	3.1	3.0	5.9	2.9	2.7	2.8	-0.2
1977	1.9	2.5	2.1	5.9	3.9	3.3	3.7	-0.6
1978	0.9	1.7	1.2	5.8	4.9	4.0	4.6	-0.8
1979	-1.2	-2.3	-1.5	2.0	3.2	4.3	3.5	1.2
1980	-0.2	-6.0	-2.0	-1.2	-1.0	5.1	0.8	6.1
1981	1.5	-2.2	0.4	2.2	0.7	4.5	1.8	3.7
1982	-0.6	-6.4	-2.4	-3.1	-2.5	3.5	-0.7	6.2
1983	2.4	1.8	2.3	4.3	1.8	2.4	2.0	0.6
1984	2.6	4.8	3.3	8.5	5.8	3.5	5.1	-2.1
1985	2.1	0.4	1.6	4.3	2.1	3.8	2.6	1.7
1986	2.3	-0.6	1.4	3.1	0.7	3.7	1.6	3.0
1987	1.1	1.4	1.2	4.2	3.1	2.8	3.0	-0.2
1988	2.3	2.7	2.4	5.3	3.0	2.5	2.8	-0.4
1989	-0.4	-0.4	-0.4	2.1	2.5	2.5	2.5	0.0
1990	-0.4	-2.0	-0.8	0.2	0.6	2.2	1.1	1.6

See footnotes following table 6.

Source: Bureau of Labor Statistics

Table 5. Private nonfarm business sector: Productivity and related measures, 1949-90 [1]

Percent Change

Year	Productivity			Output [3]	Inputs			Capital per hour of all persons
	Output per hour of all persons	Output per unit of capital	Multifactor productivity [2]		Hours of all persons [4]	Capital Services [5]	Combined units of labor and capital inputs[6]	
1949	1.7	-4.4	-0.4	-2.3	-4.0	2.1	-1.9	6.4
1950	6.6	5.0	6.1	9.9	3.1	4.7	3.6	1.6
1951	3.1	1.5	2.6	7.8	4.6	6.2	5.1	1.6
1952	2.4	-0.6	1.4	3.2	0.8	3.8	1.8	3.0
1953	2.2	1.4	2.0	4.7	2.4	3.3	2.7	0.8
1954	1.5	-4.3	-0.3	-2.0	-3.4	2.3	-1.7	6.0
1955	3.0	3.1	3.0	7.2	4.1	4.1	4.1	0.0
1956	0.6	-1.4	0.0	3.1	2.5	4.6	3.2	2.1
1957	1.9	-2.3	0.6	1.3	-0.6	3.7	0.7	4.4
1958	2.4	4.2	0.3	-2.1	-4.4	2.2	-2.4	6.9
1959	3.3	4.9	3.8	7.8	4.3	2.8	3.8	-1.5
1960	1.1	-1.7	0.2	1.6	0.5	3.3	1.4	2.8
1961	3.3	-0.5	2.1	2.0	-1.2	2.5	-0.1	3.8
1962	3.3	1.9	2.9	5.5	2.1	3.5	2.5	1.3
1963	3.7	1.0	2.8	4.7	1.0	3.7	1.9	2.7
1964	3.9	2.2	3.4	6.3	2.3	4.0	2.9	1.7
1965	2.6	1.1	2.1	6.4	3.7	5.2	4.2	1.5
1966	2.1	-0.7	1.2	5.6	3.4	6.3	4.3	2.8
1967	2.6	-3.2	0.7	2.5	-0.1	5.9	1.8	6.0
1968	3.0	-0.2	2.0	4.7	1.6	4.9	2.6	3.2
1969	-0.3	-2.4	-0.9	2.7	3.0	5.2	3.6	2.2
1970	0.6	-5.5	-1.2	-1.1	-1.7	4.7	0.1	6.4
1971	3.0	-1.2	1.8	2.7	-0.3	3.9	0.9	4.3
1972	3.0	2.3	2.8	6.5	3.4	4.1	3.6	0.7
1973	2.2	0.7	1.8	6.2	3.9	5.4	4.4	1.4
1974	-1.9	-6.9	-3.3	-1.9	0.0	5.4	1.5	5.3
1975	1.9	-5.8	-0.3	-2.4	-4.3	3.6	-2.1	8.3
1976	2.7	3.1	2.8	6.1	3.3	2.9	3.2	-0.4
1977	1.7	2.3	1.9	5.9	4.2	3.5	4.0	-0.7
1978	0.9	1.6	1.1	6.0	5.1	4.3	4.8	-0.7
1979	-1.5	-3.0	-2.0	1.8	3.4	5.0	3.9	1.6
1980	-0.4	-6.0	-2.0	-1.2	-0.9	5.0	0.8	6.0
1981	1.0	-2.8	-0.1	1.7	0.7	4.7	1.9	3.9
1982	-0.8	-6.8	-2.6	-3.3	-2.5	3.8	-0.7	6.5
1983	3.0	2.4	2.8	5.0	1.9	2.6	2.1	0.6
1984	2.1	4.4	2.8	8.4	6.1	3.8	5.4	-2.2
1985	1.4	-0.4	0.8	3.9	2.5	4.3	3.1	1.8
1986	2.1	-0.8	1.2	3.0	0.9	3.8	1.7	2.9
1987	1.0	1.3	1.1	4.3	3.3	3.0	3.2	-0.3
1988	2.5	2.8	2.6	5.7	3.1	2.8	3.1	-0.3
1989	-0.5	-0.7	-0.6	2.0	2.6	2.7	2.6	0.1
1990	-0.5	-2.1	-1.0	0.2	0.7	2.3	1.2	1.6

See footnotes following table 6.

Source: Bureau of Labor Statistics

Table 6. Manufacturing sector: Productivity and related measures, 1949-90 [1]

Percent Change								
Year	Productivity			Output [3]	Inputs			Capital per hour of all persons
	Output per hour of all persons	Output per unit of capital	Multifactor productivity [2]		Hours of all persons [4]	Capital Services [5]	Combined units of labor and capital inputs[6]	
1949	4.1	-5.9	1.1	-5.2	-8.9	0.8	-6.2	10.6
1950	5.5	10.7	7.0	14.0	8.0	3.0	6.5	-4.7
1951	4.0	1.1	3.1	12.0	7.7	10.7	8.6	2.8
1952	2.1	-2.1	0.9	3.4	1.3	5.7	2.5	4.3
1953	2.1	3.0	2.4	7.3	5.1	4.1	4.8	-0.9
1954	1.3	-7.8	-1.2	-7.4	-8.6	0.5	-6.3	9.9
1955	4.8	6.5	5.2	10.5	5.5	3.8	5.0	-1.6
1956	-0.6	-4.5	-1.7	0.9	1.4	5.6	2.6	4.1
1957	2.2	-3.1	0.8	0.6	-1.6	3.7	-0.2	5.4
1958	-0.7	9.2	-3.0	-8.8	-8.2	0.4	-6.1	9.3
1959	4.5	9.7	5.9	11.4	6.6	1.5	5.2	-4.8
1960	0.5	-2.4	-0.3	0.2	-0.3	2.7	0.5	3.0
1961	2.9	-1.3	1.8	0.2	-2.6	1.5	-1.6	4.2
1962	4.2	5.1	4.4	8.5	4.2	3.3	3.9	-0.8
1963	6.9	4.7	6.3	7.9	1.0	3.1	1.6	2.1
1964	4.8	3.6	4.5	7.1	2.2	3.3	2.5	1.2
1965	2.7	2.8	2.7	8.7	5.9	5.8	5.9	0.0
1966	1.2	-0.7	0.7	7.7	6.4	8.4	7.0	1.9
1967	0.2	-8.0	-2.2	-0.3	-0.5	8.4	2.0	9.0
1968	3.6	-0.3	2.5	5.1	1.5	5.4	2.5	3.9
1969	1.6	-2.1	0.6	2.8	1.2	5.0	2.2	3.7
1970	0.3	-9.1	-2.1	-5.6	-5.9	3.8	-3.6	10.4
1971	5.4	-0.7	3.9	1.7	-3.5	2.4	-2.1	6.2
1972	4.1	6.3	4.7	8.9	4.6	2.4	4.0	-2.0
1973	5.5	6.2	5.6	10.7	5.0	4.3	4.8	-0.7
1974	-2.5	-9.3	-4.2	-4.8	-2.3	5.0	-0.5	7.5
1975	2.5	-11.2	-1.1	-7.5	-9.8	4.2	-6.5	15.5
1976	4.7	6.4	5.2	9.7	4.8	3.1	4.3	-1.6
1977	3.1	3.7	3.3	7.4	4.1	3.6	4.0	-0.6
1978	0.3	0.5	0.4	4.5	4.2	4.0	4.1	-0.2
1979	0.5	-2.0	-0.2	2.5	2.0	4.5	2.7	2.5
1980	-0.7	-9.7	-3.0	-5.4	-4.7	4.8	-2.4	9.9
1981	1.3	-3.4	0.1	0.7	-0.6	4.2	0.5	4.9
1982	2.2	-8.8	-0.6	-6.5	-8.5	2.5	-5.9	12.0
1983	5.0	5.7	5.2	6.2	1.2	0.5	1.0	-0.6
1984	4.7	9.5	5.9	11.6	6.6	1.9	5.3	-4.3
1985	4.4	1.3	3.5	3.6	-0.8	2.3	0.0	3.1
1986	4.6	1.5	3.7	3.1	-1.4	1.6	-0.6	3.1
1987	5.3	5.0	5.2	6.1	0.7	1.0	0.8	0.3
1988	4.5	6.4	5.1	7.7	3.0	1.2	2.5	-1.8
1989	0.9	-0.1	0.6	1.3	0.4	1.4	0.6	1.0
1990	2.5	-1.1	1.5	0.4	-2.0	1.5	-1.0	3.7

See footnotes following table 6.

Source: Bureau of Labor Statistics

Footnotes, Tables 1-6

Source: Output data are from the Bureau of Economic Analysis (BEA), U.S. Department of Commerce, and the Federal Reserve Board. Compensation and hours data are from the Bureau of Labor Statistics, U.S. Department of Labor, and BEA. Capital measures are based on data supplied by BEA and the U.S. Department of Agriculture.

- (1) The private business sector includes all of Gross National Product except the output of general government, government enterprises, non-profit institutions, and the rest-of-the-world sector, the rental value of owner-occupied real estate, the output of paid employees of private households and the statistical discrepancy in computing the national income and product accounts. The private nonfarm business sector also excludes farms but includes agricultural services.
- (2) Output per unit of combined labor and capital inputs.
- (3) Gross Domestic Product originating in the sector, in constant dollars.
- (4) Hours at work of all persons including employees, proprietors, and unpaid family workers engaged in the sector.
- (5) A measure of the flow of capital services used in the sector.
- (6) Hours at work of all persons combined with capital input, using labor's and capital's shares of costs as weights.

Table 7. Private business sector: Real capital inputs, 1948-90

Indexes 1982 = 100

Year	All Assets	Equip- ment	Structures	Rental Residential Capital	Inventories	Land
1948	27.0	16.1	31.1	39.2	30.5	42.1
1949	27.6	17.7	31.5	39.5	29.6	42.9
1950	28.9	19.3	32.1	40.0	32.1	43.7
1951	30.7	21.0	32.8	40.4	36.7	44.5
1952	31.8	22.3	33.8	40.8	38.3	45.4
1953	32.8	23.6	34.7	41.1	39.3	46.5
1954	33.5	24.7	35.9	41.5	38.4	47.7
1955	34.8	26.0	37.2	41.9	40.6	48.9
1956	36.3	27.5	38.8	42.4	42.6	50.3
1957	37.6	28.8	40.8	42.8	42.8	51.9
1958	38.3	29.6	42.5	43.4	41.6	53.4
1959	39.3	30.2	44.0	44.3	42.6	54.7
1960	40.5	31.0	45.6	45.2	44.7	55.5
1961	41.5	31.8	47.4	46.2	44.4	56.5
1962	42.8	32.7	49.0	47.5	46.5	57.9
1963	44.3	33.9	50.8	49.2	48.4	59.5
1964	46.1	35.4	52.7	51.2	50.2	61.1
1965	48.3	37.5	55.0	53.2	53.4	62.9
1966	51.2	40.3	57.9	54.9	58.0	64.9
1967	54.1	43.2	60.8	56.5	62.6	66.9
1968	56.7	45.8	63.6	58.3	65.5	68.7
1969	59.4	48.7	66.4	60.7	68.6	70.6
1970	62.1	51.6	69.2	63.1	70.8	72.5
1971	64.4	54.0	71.7	65.7	72.5	74.2
1972	66.9	56.8	74.0	68.8	74.2	75.8
1973	70.4	60.8	76.4	72.1	78.4	77.9
1974	73.9	65.2	79.1	74.4	83.2	80.0
1975	76.4	68.8	81.4	75.7	83.8	82.0
1976	78.5	71.6	83.2	76.9	85.3	83.4
1977	81.1	75.5	85.0	78.4	88.9	84.8
1978	84.3	80.6	87.0	80.5	93.3	86.0
1979	88.0	86.3	89.5	84.8	97.4	85.6
1980	92.5	91.7	92.5	90.6	98.9	91.6
1981	96.6	96.3	96.3	95.6	100.1	96.4
1982	100.0	100.0	100.0	100.0	100.0	100.0
1983	102.4	103.3	102.7	102.5	97.6	102.9
1984	106.0	107.8	105.2	105.2	103.1	106.0
1985	110.1	113.8	108.0	109.6	106.7	107.7
1986	114.2	119.9	110.6	112.8	109.1	112.0
1987	117.4	125.2	112.4	115.4	110.5	114.8
1988	120.4	130.4	113.8	117.6	113.1	115.9
1989	123.3	135.6	115.5	119.5	115.3	116.7
1990	126.0	140.2	117.2	121.4	116.3	117.9

Source: Bureau of Labor Statistics

Table 8. Private nonfarm business sector: Real capital inputs, 1948-90

Indexes 1982 = 100

Year	All Assets	Equip- ment	Structures	Rental Residential Capital	Inventories	Land
1948	25.2	15.6	30.9	38.9	29.6	30.3
1949	25.7	16.9	31.4	39.2	28.7	31.0
1950	26.9	18.4	31.8	39.7	31.2	31.8
1951	28.6	19.9	32.6	40.2	35.9	32.5
1952	29.7	21.2	33.5	40.5	37.4	33.5
1953	30.6	22.4	34.5	40.8	38.5	34.5
1954	31.4	23.6	35.6	41.2	37.4	35.7
1955	32.6	24.9	36.9	41.6	39.7	36.7
1956	34.1	26.3	38.6	42.1	41.8	38.1
1957	35.4	27.7	40.6	42.6	42.0	39.6
1958	36.2	28.6	42.3	43.2	40.6	41.0
1959	37.2	29.1	43.8	44.0	41.7	42.2
1960	38.4	30.0	45.5	44.9	43.8	43.4
1961	39.4	30.8	47.2	45.9	43.4	44.5
1962	40.8	31.8	48.9	47.3	45.5	46.0
1963	42.3	33.0	50.7	49.0	47.3	47.7
1964	44.0	34.5	52.5	51.0	49.2	49.3
1965	46.3	36.6	54.9	52.9	52.4	51.2
1966	49.2	39.4	57.9	54.7	57.0	53.5
1967	52.1	42.2	60.8	56.3	61.8	55.7
1968	54.7	44.8	63.6	58.1	64.6	57.8
1969	57.5	47.8	66.4	60.5	67.8	60.0
1970	60.2	50.6	69.3	62.9	70.0	62.3
1971	62.6	53.0	71.8	65.5	71.6	64.4
1972	65.2	55.8	74.1	68.6	73.3	66.6
1973	68.7	59.8	76.6	71.9	77.6	69.7
1974	72.4	64.2	79.2	74.3	82.4	72.7
1975	75.0	67.8	81.5	75.6	82.9	75.5
1976	77.2	70.6	83.3	76.8	84.7	77.9
1977	80.0	74.5	84.9	78.3	88.6	80.0
1978	83.4	79.7	86.9	80.4	93.3	81.8
1979	87.6	85.5	89.4	84.7	97.3	84.5
1980	92.0	91.0	92.4	90.5	99.0	89.7
1981	96.3	95.9	96.2	95.6	100.2	95.7
1982	100.0	100.0	100.0	100.0	100.0	100.0
1983	102.6	103.7	102.8	102.5	97.8	103.0
1984	106.4	108.7	105.3	105.2	103.4	106.3
1985	111.0	115.3	108.3	109.7	107.2	109.7
1986	115.2	122.2	111.0	112.9	109.8	112.2
1987	118.7	128.2	112.9	115.5	111.6	113.6
1988	122.0	134.2	114.5	117.7	114.5	114.7
1989	125.4	140.1	116.4	119.7	116.7	115.5
1990	128.3	145.3	118.3	121.6	117.6	116.1

Source: Bureau of Labor Statistics

Table 9. Manufacturing sector: Real capital inputs, 1948-90

Indexes 1982 = 100

Year	All Assets	Equip- ment	Structures	Inventories	Land
1948	26.6	21.5	33.4	29.1	30.2
1949	26.8	23.1	33.5	27.7	30.4
1950	27.6	24.0	33.5	29.3	30.3
1951	30.6	25.2	34.2	37.0	31.1
1952	32.3	26.6	35.6	39.5	32.7
1953	33.7	27.8	36.9	41.1	34.3
1954	33.8	29.0	38.1	39.1	35.7
1955	35.1	30.0	39.2	40.9	37.0
1956	37.1	31.4	41.0	44.0	39.1
1957	38.5	33.0	43.5	44.0	42.1
1958	38.6	34.0	45.1	41.5	43.9
1959	39.2	34.3	45.9	42.4	44.6
1960	40.3	34.7	46.9	44.5	45.6
1961	40.9	35.3	48.5	44.1	47.3
1962	42.2	35.9	50.1	46.6	48.3
1963	43.5	36.7	51.7	48.6	49.3
1964	45.0	37.9	53.6	50.2	50.6
1965	47.6	40.0	56.4	53.6	53.1
1966	51.6	42.9	60.9	59.0	57.5
1967	56.0	45.8	65.9	65.2	62.8
1968	59.0	48.3	70.0	68.2	67.1
1969	61.9	50.6	73.7	71.4	70.8
1970	64.3	52.8	77.0	73.1	73.9
1971	65.9	54.7	79.4	72.8	76.3
1972	67.5	56.7	81.2	73.0	78.0
1973	70.4	59.4	82.9	77.5	79.5
1974	73.9	62.9	84.9	83.4	80.9
1975	77.0	67.0	86.9	85.2	82.3
1976	79.3	70.6	88.4	86.6	83.4
1977	82.2	74.5	89.8	90.0	84.1
1978	85.5	79.3	91.3	93.2	84.9
1979	89.3	84.3	93.5	97.0	86.6
1980	93.6	89.8	95.7	100.0	92.6
1981	97.6	95.4	97.8	101.0	99.1
1982	100.0	100.0	100.0	100.0	100.0
1983	100.5	102.3	101.2	96.2	98.8
1984	102.5	104.3	102.0	100.2	97.7
1985	104.8	108.3	103.1	100.6	98.8
1986	106.5	111.9	103.9	99.5	99.6
1987	107.5	113.7	104.3	100.0	100.1
1988	108.8	115.3	104.7	101.8	100.7
1989	110.3	117.7	105.3	102.2	101.4
1990	112.0	120.3	106.4	102.5	102.3

Source: Bureau of Labor Statistics

Table 10. Private business sector: Real capital inputs, 1949-90

Percent Change

Year	All Assets	Equip- ment	Structures	Rental Residential Capital	Inventories	Land
1949	2.4	9.7	1.5	0.8	-3.0	1.8
1950	4.7	9.2	1.6	1.1	8.5	1.9
1951	6.0	8.5	2.4	1.2	14.4	1.8
1952	3.7	6.4	2.8	0.8	4.4	2.1
1953	3.1	5.5	2.9	0.8	2.7	2.4
1954	2.3	5.0	3.2	0.9	-2.4	2.7
1955	3.8	5.1	3.6	1.1	5.6	2.4
1956	4.3	5.6	4.5	1.1	5.1	2.9
1957	3.5	4.9	5.0	1.1	0.5	3.2
1958	2.1	2.7	4.1	1.4	-3.0	2.9
1959	2.6	1.9	3.6	2.0	2.5	2.4
1960	3.1	2.8	3.7	2.0	4.9	1.5
1961	2.3	2.5	3.8	2.2	-0.7	1.8
1962	3.3	2.9	3.5	2.9	4.6	2.5
1963	3.5	3.6	3.6	3.7	4.1	2.6
1964	3.9	4.4	3.7	4.0	3.8	2.8
1965	5.0	6.1	4.5	3.8	6.3	2.9
1966	6.0	7.5	5.2	3.3	8.6	3.2
1967	5.6	7.0	5.0	2.8	8.0	3.0
1968	4.7	6.1	4.5	3.2	4.6	2.8
1969	4.9	6.4	4.5	4.1	4.7	2.8
1970	4.4	5.8	4.2	4.0	3.2	2.6
1971	3.8	4.7	3.6	4.0	2.4	2.3
1972	3.9	5.2	3.2	4.8	2.4	2.2
1973	5.1	7.0	3.3	4.8	5.7	2.8
1974	5.0	7.4	3.4	3.2	6.1	2.7
1975	3.4	5.4	2.9	1.8	0.7	2.5
1976	2.7	4.2	2.3	1.5	1.8	1.7
1977	3.3	5.4	2.1	2.0	4.2	1.6
1978	4.0	6.8	2.4	2.6	5.1	1.4
1979	4.3	7.1	2.9	5.3	4.3	-0.5
1980	5.1	6.2	3.4	6.8	1.6	7.0
1981	4.5	5.0	4.0	5.6	1.2	5.3
1982	3.5	3.8	3.9	4.6	-0.1	3.8
1983	2.4	3.3	2.7	2.5	-2.4	2.9
1984	3.5	4.4	2.4	2.7	5.6	3.0
1985	3.8	5.6	2.7	4.2	3.6	1.6
1986	3.7	5.4	2.3	2.9	2.2	4.0
1987	2.8	4.4	1.6	2.3	1.2	2.5
1988	2.5	4.1	1.3	1.9	2.4	0.9
1989	2.5	4.0	1.5	1.7	1.9	0.7
1990	2.2	3.4	1.4	1.6	0.9	1.0

Source: Bureau of Labor Statistics

Table 11. Private nonfarm business sector: Real capital inputs, 1949-90

Percent Change

Year	All Assets	Equip- ment	Structures	Rental Residential Capital	Inventories	Land
1949	2.1	8.7	1.4	0.8	-3.1	2.3
1950	4.7	8.6	1.5	1.1	8.6	2.5
1951	6.2	8.4	2.4	1.2	15.0	2.5
1952	3.8	6.5	2.8	0.8	4.3	2.8
1953	3.3	5.7	2.9	0.8	2.9	3.1
1954	2.3	5.2	3.3	0.9	-2.6	3.5
1955	4.1	5.4	3.6	1.1	5.9	2.9
1956	4.6	6.0	4.6	1.2	5.5	3.6
1957	3.7	5.3	5.1	1.1	0.4	4.1
1958	2.2	3.0	4.2	1.4	-3.3	3.5
1959	2.8	2.0	3.7	2.0	2.6	3.0
1960	3.3	2.9	3.8	2.1	5.1	2.6
1961	2.5	2.8	3.8	2.2	-0.8	2.7
1962	3.5	3.1	3.6	2.9	4.7	3.4
1963	3.7	3.7	3.6	3.7	4.1	3.5
1964	4.0	4.5	3.7	4.0	4.0	3.5
1965	5.2	6.2	4.5	3.8	6.5	3.9
1966	6.3	7.6	5.3	3.4	8.8	4.4
1967	5.9	7.1	5.1	2.8	8.3	4.1
1968	4.9	6.2	4.6	3.2	4.7	3.8
1969	5.2	6.6	4.5	4.1	4.9	4.0
1970	4.7	5.9	4.3	4.0	3.2	3.8
1971	3.9	4.8	3.6	4.0	2.4	3.3
1972	4.1	5.3	3.2	4.9	2.4	3.3
1973	5.4	7.1	3.4	4.8	5.8	4.7
1974	5.4	7.5	3.4	3.2	6.3	4.4
1975	3.6	5.5	2.9	1.8	0.6	3.9
1976	2.9	4.2	2.2	1.5	2.1	3.1
1977	3.5	5.4	2.0	2.0	4.6	2.7
1978	4.3	7.0	2.3	2.7	5.3	2.2
1979	5.0	7.4	2.9	5.3	4.3	3.3
1980	5.0	6.4	3.4	6.9	1.8	6.2
1981	4.7	5.4	4.1	5.6	1.1	6.6
1982	3.8	4.2	4.0	4.6	-0.2	4.5
1983	2.6	3.7	2.8	2.5	-2.2	3.0
1984	3.8	4.8	2.5	2.7	5.7	3.2
1985	4.3	6.1	2.9	4.2	3.7	3.1
1986	3.8	5.9	2.5	2.9	2.5	2.3
1987	3.0	4.9	1.8	2.3	1.6	1.3
1988	2.8	4.6	1.4	1.9	2.6	0.9
1989	2.7	4.4	1.7	1.7	2.0	0.7
1990	2.3	3.7	1.6	1.6	0.8	0.5

Source: Bureau of Labor Statistics

Table 12. Manufacturing sector: Real capital inputs, 1949-90

Percent Change

Year	All Assets	Equip- ment	Structures	Inventories	Land
1949	0.8	7.2	0.5	-4.8	0.5
1950	3.0	4.1	-0.1	5.5	-0.3
1951	10.7	5.0	2.0	26.6	2.6
1952	5.7	5.5	4.1	6.8	5.2
1953	4.1	4.6	3.8	3.9	5.0
1954	0.5	4.0	3.1	-4.8	4.1
1955	3.8	3.8	2.9	4.6	3.4
1956	5.6	4.5	4.7	7.5	5.9
1957	3.7	5.2	6.0	0.0	7.5
1958	0.4	2.9	3.7	-5.7	4.3
1959	1.5	0.9	1.7	2.1	1.5
1960	2.7	1.3	2.4	5.0	2.4
1961	1.5	1.6	3.3	-1.0	3.6
1962	3.3	1.8	3.2	5.8	2.1
1963	3.1	2.3	3.3	4.2	2.2
1964	3.3	3.3	3.6	3.3	2.7
1965	5.8	5.4	5.4	6.8	4.9
1966	8.4	7.3	8.0	10.1	8.3
1967	8.4	6.8	8.1	10.4	9.2
1968	5.4	5.3	6.3	4.5	6.8
1969	5.0	4.9	5.2	4.8	5.5
1970	3.8	4.4	4.5	2.3	4.4
1971	2.4	3.4	3.2	-0.3	3.2
1972	2.4	3.8	2.3	0.3	2.2
1973	4.3	4.7	2.1	6.1	1.9
1974	5.0	6.0	2.4	7.6	1.9
1975	4.2	6.5	2.3	2.2	1.7
1976	3.1	5.3	1.7	1.6	1.3
1977	3.6	5.5	1.5	3.9	0.8
1978	4.0	6.4	1.7	3.6	1.0
1979	4.5	6.3	2.4	4.1	2.0
1980	4.8	6.5	2.3	3.0	6.9
1981	4.2	6.3	2.2	1.1	7.1
1982	2.5	4.9	2.2	-1.0	0.9
1983	0.5	2.3	1.2	-3.8	-1.2
1984	1.9	1.9	0.8	4.2	-1.2
1985	2.3	3.8	1.0	0.4	1.1
1986	1.6	3.3	0.8	-1.1	0.8
1987	1.0	1.6	0.4	0.5	0.5
1988	1.2	1.4	0.4	1.9	0.6
1989	1.4	2.1	0.6	0.4	0.7
1990	1.5	2.2	1.0	0.2	0.9

Source: Bureau of Labor Statistics