

January 13, 1984

## THE MYTH OF AMERICA'S DECLINING MANUFACTURING SECTOR

### INTRODUCTION

Advocates of national industrial policy, to varying degrees, call for extraordinary government intervention in the economy. Just look at the major industrial policy proposals: increased government spending in virtually every area, protectionism, legislatively enacted worker representation in management, greater governmental control over the allocation of credit, plant-closing laws, and various national economic planning schemes.<sup>1</sup>

One of the prime "justifications" for these renewed pleas to expand government intervention turns out to be a myth--that the manufacturing sector of the economy, long a major source of jobs and products, is experiencing a precipitous decline. Greater governmental control over resource allocation is needed, so it is said, to cope with this major transition from an industrial to a service-oriented economy. Yet these claims appear to be based largely on spotty evidence and personal impressions. A closer look at the post-World War II growth of the U.S. manufacturing sector reveals that, contrary to the dire warnings of industrial policy enthusiasts, the sector is not declining, but is continuing to evolve along its historical path. The fundamental premise behind many industrial policy proposals, in other words, turns out to be a myth.

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<sup>1</sup> For an overview of the issues see Richard B. McKenzie, "National Industrial Policy: An Overview of the Debate," Heritage Foundation Backgroundder No. 275, July 12, 1983.

## IS MANUFACTURING IN DECLINE?

The message offered by industrial policy proponents is often aimed at middle-class parents. It is that unless they acquiesce to an expanded welfare state their children, upon growing up, will find no middle-class standard of living awaiting them. As journalist Robert Kuttner recently warned:

There is a good deal of evidence that job opportunities in the United States are polarizing, and that, as a result, the country's future as a middle class society is in jeopardy. What the decline of the middle class would mean to the country can only be guessed at, but it presumably would be unwelcome to the millions of parents who hope that their children can move up the economic ladder; to American business, which needs a middle class to consume products; and to everyone who is concerned about fairness and social harmony. As the economy shifts away from its traditional manufacturing base to high technology and service industries, the share of jobs providing a middle class standard of living is shrinking. An industrial economy employs large numbers of relatively well-paid production workers. A service economy, however, employs legions of key-punchers, salesclerks, waiters, secretaries, and cashiers, and the wages of these jobs tend to be comparatively low.<sup>2</sup>

Barry Bluestone of Boston University and Bennett Harrison of MIT, in their book The Deindustrialization of America,<sup>3</sup> echo this gloomy theme:

The pattern of wages in the old, mill-based economy looked just like a normal bell curve. It had a few highly-paid jobs at the top, a few low-wage jobs at the bottom, and plenty of jobs in the middle. But in the new services economy the middle is missing.

And Harvard lawyer Robert B. Reich warns that because of the alleged dismantling of the manufacturing sector "...a growing portion of America's work force is...locked into deadend employment."<sup>4</sup> The U.S. is becoming, says Reich, a nation of dishwashers, janitors, and fastfood workers.

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<sup>2</sup> Robert Kuttner, "The Declining Middle," Atlantic Monthly, July 1983, p. 60. Kuttner's "solution" to this "problem" is the enactment of laws to promote unionization and increased numbers of public employees in federal, state, and local bureaucracies.

<sup>3</sup> Barry Bluestone and Bennett Harrison, The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industries (New York: Basic Books, 1982).

<sup>4</sup> Robert B. Reich, The Next American Frontier (New York: Times Books, 1983), p. 202.

### Manufacturing Output

These pronouncements are always made with much confidence, but it is difficult to see why. The data do not show at all that the manufacturing sector is in a state of precipitous decline, as the industrial policy advocates maintain. Table 1 lists U.S. Department of Commerce production indexes for manufacturing and other industries from 1960 to 1982.<sup>5</sup> As the table indicates, industrial production has risen steadily over the past several decades, with minor reductions during periods of recession, such as in 1980. Looking back even further, the index of industrial production increased from 45 in 1950 to 59 in 1955. Given the increase to 151 in 1981, this means that there has been about a threefold increase in the past three decades. The manufacture of durable goods exhibits the same pattern of steady growth in every category, from metals to "miscellaneous."

The one thing missing from the "decline of the manufacturing sector," therefore, is any evidence of a decline. It might have been expected that the rate of growth of industrial production would decline during the past decade--as it did--in light of the vastly expanded costs of regulation and the inflation of the 1970s. The latter increased the effective rates of corporate taxation and contributed to reduced savings. But this is quite different from the bottom dropping out of the manufacturing sector. In fact, the index of industrial production grew by 24 percent from 1975 to 1980, which is greater than the 21.6 percent average five-year growth from 1950 to 1980. The five-year period (1970-1975) showed only a 9 percent growth rate, but overall the past decade has not indicated a general trend toward decline.

### The Service Economy

Another common theme among industrial policy proponents is that the supposed decline of the manufacturing sector is being paralleled by an expansion of the "service economy." The U.S. is rapidly becoming a service-oriented economy, it is said, but these service jobs are largely "dead end." Again, this claim is pure fiction. Table 2 compares manufacturing and service output (in constant 1972 dollars) as a percentage of GNP in selected years from 1950 to 1981. It can be seen that the manufacturing sector provided almost the same proportion of GNP in 1981 (24 percent) that it did in 1950 (25 percent), with only minor variations year by year. Yet service output as a percentage of GNP increased by only two percentage points, to 13 percent, over a period of 31 years.

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<sup>5</sup> The data were obtained from U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States (Washington, D.C.: U.S. Government Printing Office, 1982-83).



Table 1  
Industrial Production Indexes, By Industry: 1960-1982

| Major Industry Group         | 1960 | 1965 | 1970 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982<br>Jan-<br>May |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------|
| Industrial Production        | 66   | 90   | 108  | 120  | 130  | 129  | 118  | 131  | 138  | 146  | 153  | 147  | 151  | 140                 |
| Manufacturing                | 65   | 90   | 106  | 119  | 130  | 129  | 116  | 130  | 138  | 147  | 154  | 147  | 150  | 138                 |
| Durable goods                | 63   | 89   | 102  | 114  | 127  | 126  | 109  | 122  | 130  | 140  | 146  | 137  | 141  | 127                 |
| Primary metals               | 72   | 102  | 107  | 112  | 127  | 123  | 96   | 110  | 111  | 120  | 121  | 102  | 108  | 86                  |
| Fabricated metal products    | 71   | 91   | 102  | 112  | 125  | 124  | 110  | 124  | 131  | 142  | 149  | 134  | 136  | 119                 |
| Electrical machinery         | 52   | 82   | 108  | 122  | 143  | 144  | 117  | 135  | 145  | 159  | 175  | 173  | 178  | 170                 |
| Nonelectrical machinery      | 57   | 85   | 104  | 116  | 134  | 140  | 125  | 135  | 144  | 154  | 164  | 163  | 171  | 155                 |
| Transportation equipment     | 65   | 95   | 90   | 108  | 118  | 109  | 97   | 111  | 122  | 133  | 135  | 117  | 116  | 106                 |
| Instruments                  | 58   | 83   | 112  | 120  | 138  | 144  | 132  | 147  | 156  | 167  | 175  | 171  | 170  | 161                 |
| Clay, glass, stone products  | 79   | 98   | 106  | 121  | 134  | 133  | 118  | 136  | 146  | 157  | 164  | 148  | 148  | 125                 |
| Lumber and products          | 75   | 96   | 106  | 121  | 126  | 116  | 108  | 123  | 131  | 136  | 137  | 119  | 119  | 104                 |
| Furniture and fixtures       | 72   | 95   | 108  | 131  | 144  | 138  | 118  | 137  | 145  | 156  | 162  | 150  | 157  | 150                 |
| Miscellaneous                | 71   | 94   | 111  | 127  | 138  | 138  | 128  | 145  | 149  | 151  | 154  | 148  | 155  | 141                 |
| Nondurable goods             | 69   | 91   | 112  | 127  | 134  | 135  | 126  | 142  | 151  | 157  | 164  | 161  | 165  | 154                 |
| Textile mill products        | 69   | 93   | 112  | 133  | 143  | 133  | 122  | 135  | 134  | 138  | 145  | 139  | 136  | 123                 |
| Apparel products             | 82   | 97   | 101  | 109  | 117  | 114  | 108  | 126  | 134  | 134  | 134  | 127  | 120  | (NA)                |
| Leather and products         | 90   | 98   | 90   | 88   | 83   | 78   | 77   | 77   | 74   | 74   | 72   | 70   | 69   | 64                  |
| Paper and products           | 68   | 92   | 115  | 129  | 137  | 135  | 116  | 133  | 138  | 145  | 151  | 151  | 155  | 153                 |
| Printing and publishing      | 71   | 88   | 107  | 113  | 118  | 118  | 113  | 123  | 128  | 132  | 137  | 140  | 144  | 137                 |
| Chemicals and products       | 56   | 88   | 120  | 144  | 155  | 159  | 147  | 171  | 186  | 197  | 212  | 207  | 216  | 196                 |
| Petroleum products           | 77   | 92   | 113  | 122  | 129  | 125  | 124  | 134  | 143  | 145  | 144  | 133  | 130  | 118                 |
| Rubber and plastics products | 52   | 86   | 132  | 172  | 184  | 195  | 167  | 200  | 232  | 254  | 272  | 256  | 274  | 255                 |
| Foods                        | 79   | 92   | 109  | 117  | 121  | 124  | 123  | 133  | 139  | 143  | 148  | 150  | 152  | 140                 |
| Tobacco products             | 91   | 100  | 102  | 106  | 112  | 110  | 112  | 117  | 113  | 118  | 118  | 120  | 122  | 121                 |
| Mining                       | 80   | 93   | 112  | 113  | 115  | 115  | 113  | 114  | 118  | 124  | 126  | 133  | 142  | 137                 |
| Utilities                    | 63   | 89   | 125  | 139  | 145  | 144  | 146  | 152  | 157  | 161  | 166  | 168  | 169  | 171                 |
| Energy <sup>1</sup>          | 70   | 89   | 117  | 125  | 128  | 126  | 126  | 129  | 133  | 135  | 138  | 138  | 137  | 138                 |

<sup>1</sup>Production of energy is represented by output energy, such as crude oil, natural gas, and coal mining, and by the conversion of primary energy to other energy forms for final consumption. [1967 = 100. Based on 1967 Standard Industrial Classification Manual. See also Historical Statistics, Colonial Times to 1970, series P 13 and P 18-39]

Source: Board of Governors of the Federal Reserve System, Federal Reserve Bulletin, monthly.

Table 2  
 Manufacturing and Service Output (In Constant 1972 Dollars)  
 As Percentage of GNP: Selected Years, 1950-1981

| Sector        | 1950 | 55 | 60 | 65 | 70 | 75 | 77 | 78 | 79 | 80 | 81 |
|---------------|------|----|----|----|----|----|----|----|----|----|----|
| Manufacturing | 25%  | 25 | 23 | 25 | 24 | 24 | 25 | 18 | 25 | 24 | 24 |
| Services      | 11%  | 10 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 | 13 |

Source: Calculated from U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the U.S. (Washington, D.C.: U.S. Government Printing Office, 1982-1983).

### Manufacturing Employment

A further claim made by industrial policy proponents is that employment in the manufacturing sector has fallen sharply, forcing large numbers of workers into "dead-end" jobs in the service sector or onto welfare. Robert Kuttner, in particular, uses this picture of impending despair to make a case for preferential legislative treatment of labor unions and increased numbers of jobs in government bureaucracies. Yet this claim, too, is false. The data show a rise, not a decline, in manufacturing employment over the past several decades--from 16.7 million workers employed in 1960 to 20.7 million in 1970, and 21.8 million in 1981.<sup>6</sup> If data on manufacturing employment during the 1981-1982 recession are singled out and compared to employment, say, one year or so before the recession, then of course a reduction can be detected, but that is no indication of a general trend.

In sum, the claim that there is currently a large shift from the traditional manufacturing base to the service industries is a myth. A further distortion of the truth appears in statements made about the types of jobs resulting from this nonexistent shift in the composition of the economy. The game is played as follows. To exaggerate the notion of "dead-end labor," emphasis is placed on the absolute number of openings in such service jobs as janitors, salesclerks, and nurses' aides.<sup>7</sup> But if there are already large numbers of such jobs--as there are--a relatively large increase will simply reflect the overall growth of the economy and not a major shift. An additional 100,000 secretarial jobs is not extraordinary, for instance, if there are already, say, 2 million such jobs. On the other hand, it is often claimed that "high-tech" jobs are the wave of the future by relying on the high percentage changes in these job categories. It is then pointed out that, since only a fraction of all high-tech jobs are

<sup>6</sup> Ibid.

<sup>7</sup> Both Kuttner and Reich, among others, engage in these delusions. See Robert Samuelson, "Swing to High-Tech Jobs Appears to be Modest," Washington Post, June 28, 1983, p. D-14.

well paying (engineers, computer programmers, etc.) the workforce is becoming "further polarized." But if 1 million (in a workforce of 102 million) high-tech jobs are added to a relatively small base of, say, 1 million, then the percentage change will of course be large, but will represent no major shift in the economy. As Robert Samuelson concluded after examining Labor Department data, the actual rearrangement of jobs in the economy is modest.

...[T]he changes don't indicate a drifting either toward lower-skilled or high-skilled jobs. Growth and shrinkage are crudely offsetting in both high-paying and low-paying categories. To see the shifts as triggering the collapse of middle-class society...requires a large leap in logic.<sup>8</sup>

EMPLOYMENT AND PRODUCTIVITY

One thing the data do reveal is that employment in the manufacturing sector, although rising, appears to be rising more slowly than output. This implies that productivity has risen, so fewer workers are needed to produce a given level of manufactured goods. Industrial policy advocates have used this observation (in a typically exaggerated way) to reiterate the hoary, Luddite notion that productivity growth produces unemployment--precisely the opposite of what historically is true.<sup>9</sup> Technological change will increase employment and income, just as it always has. Examples go as far back as Adam Smith's Wealth of Nations and the famous story of the pin factory. A single worker without machinery, noted Smith, "could scarce, perhaps, with his utmost industry, make one pin a day," but with the introduction of machinery, he could make nearly 5,000 pins per day.

The Luddite view was that this should have created massive (close to 99 percent) unemployment in the industry, but it did not. The greatly reduced price of pins expanded their existing use, and new uses were invented. Moreover, the increased real incomes of the users of pins enabled them to purchase more of other things, stimulating production and employment in those areas, including the production of pin-making machines. This is how technological change enhances economic growth and employment in the economy--a process ignored by the "neo-Luddites."

This basic economic truth was also ignored over a century ago when the economy was shifting from a predominantly agrarian to an industrial base. The sharp decline in the percentage of

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<sup>8</sup> Ibid.

<sup>9</sup> The Luddites were a group of British textile workers in the early 19th Century who opposed the introduction of machinery by destroying the machines. They issued proclamations in the name of the mythical King Ludd of Sherwood Forest and thus became known as Luddites.



the labor force employed in the agricultural sector did not create massive unemployment or the disappearance of middle-class society; job opportunities expanded and technological advances in agriculture enabled America to produce more food with fewer workers. Other workers were able to pursue more lucrative occupations in the new industries. Fortunately, most modern economists understand that technological change is perhaps the main determinant of economic growth. Robert M. Solow of MIT estimated that it probably accounts for as much as 80 to 90 percent of economic growth in the United States.<sup>10</sup> Several other studies support this estimate.<sup>11</sup>

In sum, the distorted arguments of some industrial policy enthusiasts stem from their reliance on a static view of the world--one that fails to recognize how technology and automation alter relative prices and incomes and generate economic growth and change. There may be transitional problems, such as temporary unemployment due to technological change, but the overall beneficial effect has always occurred. And there already exist efforts to ease the plight of the temporarily unemployed. But the massive new federal programs proposed by industrial policy proponents can only slow or eliminate the underlying changes that bring about economic advancement. Government control over the allocation of capital, and plant-closing laws, for example, would delay or frustrate the type of changes that must be made in a growing economy. They would inevitably be used to protect politically powerful businesses, unions, and regions from the rigors of competition and the forces of change.

Americans are rapidly adapting to the changing conditions of a healthy modern economy, but this point is misunderstood or ignored by industrial policy advocates. Barry Bluestone, for example, talks of 38 million jobs that were "destroyed" in the 1970s. Since there were not nearly 38 million unemployed people in the 1970s, however, it is clear that this statistic reveals simply that about 38 million Americans changed their jobs as the economy continued to evolve and grow. Some industries grew; others did not. Some businesses succeeded; others failed. Jobs have not been "destroyed." Indeed, there are more people working now than ever before. As Nobel Laureate Friedrich Hayek has stated, the benefits received from competitive markets and economic growth

...are the results of such changes, and will be maintained only if the changes are allowed to continue. But every change of this kind will hurt some organized

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<sup>10</sup> Robert M. Solow, "Technological Change and the Aggregate Production Function," Review of Economics and Statistics, August 1957, pp. 312-320.

<sup>11</sup> For a survey of these analyses, see Morton Kamien and Nancy Schwartz, Market Structure and Innovation (Cambridge, England: Cambridge University Press, 1981).

interests; and the preservation of the market order will therefore depend on those interests not being able to prevent what they dislike. All the time it is thus the interest of most that some be placed under the necessity of doing something they dislike (such as changing jobs...), and this general interest will be satisfied only if the principle is recognized that each has to submit to changes when circumstances...determine that he is the one who is placed under such a necessity.<sup>12</sup>

Thus, since many of the proposed industrial policies (particularly plant-closing laws and government credit allocation) inhibit change, they only hinder, not help, economic growth and job creation.

### BASIC INDUSTRIES

Another claim of industrial policy proponents is that during the past decade "basic industries" (primarily steel, autos, and textiles) have been in decline. Based on this proposition, it is often suggested that the entire manufacturing sector may be in structural decline--a claim already shown to be false. Moreover, a close look at the data, and some common sense, reveals two things: First, even though output and employment in steel, autos, and textiles have declined in recent years, the decline has been neither large nor rapid; and second, the overall growth of the manufacturing sector demonstrates that the industrial base is changing its composition (less steel, fewer cars), but not withering.

Employment trends from 1970 to 1981 in the steel, automobile, and textile and apparel industries are shown in Table 3. The data reveal that during the recession years of 1979-1981 employment did fall in these industries. But before the steep 1979 recession (which was followed by a very short recovery) employment levels either changed very little or increased. Furthermore, the changes that have occurred in recent years have been small and very slow to materialize. For example, from 1980 to 1981, employment in the primary metals industries fell by only 1 percent; it fell by 0.5 percent in the auto industry; by 2 percent in textiles; and by 1 percent in apparel products.

Given that other areas of the manufacturing sector are expanding, the only conclusions that can be drawn are that the manufacturing sector is evolving and growing and that there are no calamitous disruptions in the "basic" industries, other than the routine fluctuations of the business cycle. The term "basic

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<sup>12</sup> Friedrich Hayek, Law, Legislation, and Liberty, vol. 3, The Political Order of a Free People (Chicago: University of Chicago Press, 1979), p. 94.



industries" is, in fact, misleading because it implies that change in these industries is necessarily bad. Agriculture was once a "basic" industry, employing more than half of the working population, but the decline of employment there (mainly because of technological advances) made the nation better off, not worse off, for workers channeled their efforts into more productive endeavors. When certain industries are called "basic" or "essential," it is not long before there is a plea for protectionism or assistance, which does not serve the cause of economic growth. It is the process of economic change, not any particular industry, that is basic, or essential, to a healthy economy.

Table 3  
Employment in "Basic" Industries: Selected Years, 1970-1981  
(Thousands)

| Industry                          | 1970  | 1975  | 1976  | 1977  | 1978  | 1979  | 1980  | 1981  |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Primary Metals                    | 1,260 | 1,139 | 1,190 | 1,179 | 1,213 | 1,254 | 1,142 | 1,121 |
| Blast Furnace<br>and Basic Steel  | 627   | 548   | 543   | 553   | 560   | 571   | 512   | 505   |
| Iron and Steel<br>Foundaries      | 229   | 230   | 218   | 231   | 236   | 241   | 209   | 201   |
| Primary Nonferrous<br>Metals      | 72    | 66    | 84    | 65    | 70    | 73    | 71    | 70    |
| Nonferrous Rolling<br>and Drawing | 213   | 181   | 194   | 199   | 209   | 220   | 211   | 206   |
| Nonferrous Foundries              | 83    | 76    | 79    | 89    | 93    | 100   | 90    | 90    |
| Motor Vehicles                    | 799   | 792   | 851   | 938   | 997   | 990   | 789   | 784   |
| Textile Mill Products             | 975   | 868   | 966   | 914   | 900   | 885   | 848   | 823   |
| Apparel Products                  | 1,364 | 1,243 | 1,299 | 1,312 | 1,333 | 1,304 | 1,264 | 1,244 |

Source: U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the U.S. (Washington, D.C.: U.S. Government Printing Office, 1983).

## CONCLUSION

A major premise of the advocates of a "national industrial policy" is that government action is needed because of problems created by an alleged shift from a manufacturing to a service-oriented economy. Yet the evidence shows that there has been no major shift from manufacturing to service. Manufacturing output as a percentage of real GNP is approximately the same as it was thirty years ago, and service output as a percentage of total output has edged up just two percentage points--to 13 percent--in

thirty-one years. The data reveal that manufacturing employment is not in a state of sectoral decline, as some claim. In fact, it has continued to expand, even though its composition may be changing--as it always has. And technological change has continued to produce labor-saving (and cost-reducing) devices in the manufacturing sector. This has been a spur to economic growth and job creation.

The nation's industrial capacity is not declining, it is growing and changing. In order for this growth to continue, market forces must be permitted to redirect resources to their uses of highest value. Industrial policies designed to insulate politically influential groups from the forces of economic change may grant the recipients valuable benefits. But these are gained at the high cost of inflicting great harm on the rest of the economy.

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