The Rise and Decline of American Productivity

written by Jack Lifton | October 26, 2026

Can a nation that has learned to reward wealth ownership more generously than the creation of industrial productive capacity ever again become the world's leading manufacturing economy? I believe that this is one of the most important economic questions facing the United States today. It is also a question that cannot be answered simply by examining stock market valuations, technological achievements, or even the growth of gross domestic product. To understand what happened to the American economy, we must first understand what made it so extraordinarily successful in the generation following the Second World War, and then examine how the economic system that produced that success gradually transformed into one that increasingly rewards financial wealth rather than industrial production.

I believe the period between 1945 and the early 1970s saw one of the greatest sustained improvements in the material standard of living for a large national population in modern economic history. This is not simply nostalgia for an earlier America. The economic statistics are remarkable. According to the U.S. Bureau of Economic Analysis, real American GDP grew at an average annual rate of 4.0% between 1947 and 1973, while real GDP per capita increased by 2.5% annually. At that rate, real output per person would approximately double in 28 years. The comparison with more recent economic performance is striking. Between 2007 and 2023, real American GDP increased at an average annual rate of only 1.8%, while real GDP per capita increased by 1.2%.

These figures matter not merely because the American economy grew rapidly. The increase in economic output was accompanied by an extraordinary transformation in the material lives of ordinary Americans. Rising real wages, expanding household consumption, widespread automobile ownership, suburban housing construction, household electrification, and greater access to education and healthcare changed the expectations of an entire generation. The United States became not merely the world's wealthiest nation but the principal architect, financier, and industrial supplier of an unprecedented expansion of global economic activity.

Other nations, notably Japan, South Korea, and later China, experienced even faster growth during specific periods of industrial development. But the American achievement was extraordinary because it occurred in an already large and technologically advanced industrial economy. It was not simply a relatively poor nation rapidly catching up with wealthier competitors. It was the sustained expansion of an economy that already led the industrial world.

The conventional explanation of this achievement often emphasizes the technological revolution that followed the enormous scientific and engineering expenditures of the Second World War. I do not dispute the importance of those developments. Indeed, I began my own industrial career in 1962, when wartime and postwar scientific advances were being commercialized and transforming electronics, materials science, and manufacturing. But I believe technology has received more credit for the American economic miracle than is justified if we fail to consider the industrial and international economic system that made its commercial application possible.

My thesis is that postwar American prosperity rested on American industry's enormous productive capacity, the availability of

capital for industrial investment, and the reconstruction of international trade under American leadership. Technology was essential to productivity, but expanding industrial production and international markets created the economic environment in which technological innovation could translate into rising living standards.

The productivity statistics support this distinction. An analysis by the Congressional Research Service, using Bureau of Labor Statistics data, found that output per labor hour in the American nonfarm business sector increased at an average annual rate of approximately 2.8% between 1947 and 1973. Between 1973 and 1995, the corresponding rate fell to approximately 1.4%. In other words, the rate of labor productivity improvement in the American economy was cut by about half.

This difference is economically enormous. An economy increasing its productivity by 2.8% annually will approximately double its output per labor hour in 25 years. At 1.4%, the same improvement requires approximately 50 years. These differences are not small in statistical terms. They represent fundamentally different rates at which a society can increase its capacity to produce goods and services, raise real incomes, and improve material living standards.

Productivity underpins sustained economic growth because it determines how much economic value an economy can produce from a given combination of labor, capital, energy, natural resources, and technical knowledge. Economists commonly measure labor productivity as output per hour worked, but the underlying concept is much broader. An economy becomes more productive when it learns to produce more useful goods and services with the resources available to it. Improvements in machinery, manufacturing processes, transportation, organization, education, and technical knowledge all contribute to this

result. Rising productivity enables higher real wages, greater consumption, more investment, and improvements in the material standard of living.

Productivity growth is not the same as GDP growth, which also reflects changes in employment, population, and hours worked. Nor does an increase in productivity guarantee that its benefits will be distributed equally. Nevertheless, over the long term, sustained productivity growth is indispensable to sustained increases in real income per person. A nation cannot permanently raise its material standard of living simply by increasing the prices of its financial assets or transferring existing wealth from one group to another. Financial transactions may redistribute claims on economic output, but they do not necessarily increase the economy’s capacity to produce that output.

At the end of the Second World War, the United States occupied an economic position unlike any other major industrial nation. Enemy bombing and invasion had not devastated its factories, transportation systems, utilities, or industrial infrastructure. Instead, American manufacturing capacity expanded enormously during the war. The United States possessed an extraordinary combination of industrial machinery, skilled labor, engineering expertise, financial capital, abundant natural resources, and organizational experience. It had learned to manufacture enormous quantities of sophisticated equipment under the most demanding circumstances imaginable.

Meanwhile, much of continental Europe, Japan, and significant portions of Asia had suffered catastrophic destruction. Industrial plants, railways, ports, electrical generating facilities, housing, and commercial institutions had been damaged or destroyed. The Soviet Union had also suffered immense devastation, but the emerging political division between East

and West largely excluded it and its sphere of influence from the American-directed reconstruction of the international economy.

The United States was therefore uniquely positioned to finance and supply much of the industrial world’s reconstruction. The Marshall Plan is the best-known example of American postwar assistance, but the broader process included direct financial aid, private investment, international lending, technology transfer, industrial machinery, and access to American markets. The Bretton Woods monetary arrangements, the International Monetary Fund, the World Bank, and the General Agreement on Tariffs and Trade established important elements of a new international economic order intended to facilitate investment, stabilize financial relationships, and expand international commerce.

This laid the foundation for modern economic globalization, although the term was not commonly used at the time. The United States was not simply helping its allies and former enemies rebuild their economies. It organized a trading system in which recovering foreign industrial production would create expanding opportunities for American capital, manufacturers, and consumers. The American economy was sufficiently productive and financially powerful to support other nations’ reconstruction while also benefiting from the growth of the international markets that reconstruction created.

The process was mutually reinforcing. American industry supplied machinery, transportation equipment, chemicals, electrical systems, agricultural products, and a wide range of manufactured goods to economies rebuilding their productive capacity. As those economies recovered, they became increasingly able to buy goods, attract investment, and participate in international trade. Their growing industrial capabilities eventually made

them competitors of American manufacturers, but they also helped expand the global economy.

I believe the reconstruction of international trade was a fundamental condition that enabled the American postwar economic miracle. However, it was not the only source of American growth. Domestic consumption, suburban housing construction, highway and other infrastructure development, the expansion of higher education, and the diffusion of existing industrial technologies all played major roles. Indeed, the American domestic market was so large that domestic demand accounted for much of the country's economic expansion. Globalization mattered not simply because Americans exported more goods. Reconstructing international commerce created a larger, more integrated economic system in which investment, specialization, competition, and industrial productivity could increase together.

This distinction is important because the relationship between productivity and international trade is often misunderstood. Trade does not create prosperity merely because goods cross national borders. It contributes to prosperity when it lets productive enterprises expand their markets, obtain materials and equipment more efficiently, specialize in activities where they have competitive advantages, and invest in technologies that improve efficiency. The benefits of trade depend on the participating economies' productive capabilities and how the resulting gains are distributed. Postwar globalization particularly benefited the United States because America entered that system as the world's dominant industrial producer.

The role of technology in this transformation deserves careful examination. The Second World War required scientific and engineering research on a scale that would have been difficult to justify under ordinary commercial conditions. Military

necessity, rather than an immediate expectation of profit, supported enormous expenditures on radar, electronics, communications, aviation, nuclear physics, materials science, and computing. The resulting technical knowledge became one of the foundations of the technological revolution that followed.

Yet scientific discovery is not the same thing as industrial productivity. The invention of a transistor does not, by itself, create an electronics industry. Discovering a new material does not create the industrial capability to manufacture it in commercial quantities. Designing a computer does not automatically create the factories, components, software, infrastructure, and customers needed to make computing economically transformative. These developments require capital investment, process engineering, manufacturing expertise, trained personnel, reliable suppliers, and markets that can support production.

The great American achievement of the postwar period was therefore not simply creating new technologies. It was the ability to incorporate both new and existing technologies into an extraordinarily productive industrial system. Mechanization, electrification, improved machine tools, standardized components, industrial chemistry, more efficient transportation, and better production organization all increased output per worker. Many of these improvements were evolutionary rather than revolutionary. Their economic importance came from their widespread application throughout the manufacturing economy.

I have spent much of my industrial career observing the difference between a laboratory achievement and a commercially successful manufacturing process. The distinction is fundamental. A process that works once in a laboratory does not necessarily operate continuously in a factory. A product that can be manufactured in small quantities is not necessarily

economical to produce at the quantities industrial customers demand. Commercial success requires reproducibility, acceptable quality, adequate throughput, competitive operating costs, and sufficient demand to sustain production. The same principles apply to the productivity of an entire national economy.

The extraordinary expansion of American productivity began to slow in the early 1970s. This marked a genuine change in the economy’s trajectory, although it did not mean American productivity stopped increasing. Productivity growth later recovered in some periods, notably with the spread of information technology in the 1990s and early 2000s. The longer-term problem was not the disappearance of American productivity, but the changing relationship between productivity, industrial investment, employment, and the distribution of economic rewards.

Several developments contributed to this transformation. The recovery of German and Japanese industry created formidable competition for American manufacturers. Rising energy prices, inflation, shifts in international monetary arrangements, and growing competition from newly industrializing economies further pressured American businesses. The United States could no longer assume that its manufacturers would dominate international markets simply because they possessed the greatest industrial capacity. The economic circumstances that had favored America so overwhelmingly in 1945 were gradually disappearing.

American corporations responded to these pressures in ways that increasingly changed the national economy. Financial performance, shareholder returns, and capital management became increasingly important measures of corporate success. Long-term investment in manufacturing capacity, technical personnel, and industrial infrastructure had to compete with financial strategies that could generate more immediate returns. This

financialized corporate culture developed gradually and reflected changes in capital markets, corporate governance, taxation, trade policy, management incentives, and the international organization of production.

There is nothing inherently wrong with financial markets or the pursuit of profitable investment. Capital markets are essential to developing productive enterprises, and investors must be compensated for assuming risk. The problem arises when the financial system rewards asset ownership and manipulation more generously, or more predictably, than it rewards the creation and maintenance of industrial productive capacity. When that happens, the interests of individual corporations and investors may increasingly diverge from the nation’s long-term industrial interests.

The globalization that originally supported American industrial expansion gradually evolved into a system that encouraged companies to relocate manufacturing to lower-cost jurisdictions. American companies found they could retain control of product design, intellectual property, marketing, distribution, and customer relationships while shifting substantial manufacturing to foreign suppliers. This arrangement could improve corporate profitability and lower consumer prices. It could also let American businesses focus on activities where they had considerable competitive advantages.

But what was financially rational for an individual corporation was not necessarily beneficial to the long-term industrial capabilities of the United States. The cumulative consequences of these decisions were far more serious than closing individual factories.

Manufacturing is not simply the final assembly of a product. It is an interconnected system of materials suppliers, equipment

manufacturers, process engineers, skilled workers, research institutions, maintenance organizations, transportation networks, and customers. When a substantial portion of production moves abroad, many supporting activities eventually follow. Suppliers relocate to remain close to their customers. Engineers develop their expertise where production actually occurs. Equipment manufacturers focus on the needs of the industries that buy their products. Technical knowledge accumulates through repeated manufacturing experience.

The disappearance of an individual factory may be immediately visible, but the gradual loss of the industrial ecosystem surrounding that factory is much less apparent. Once these capabilities disappear, reconstructing them requires far more than building a replacement facility and installing new machinery. It requires the rebuilding of supplier relationships, technical expertise, manufacturing experience, and customer confidence. These are industrial assets you cannot simply buy on demand.

It is also necessary to distinguish between the decline of manufacturing employment and the decline of manufacturing output. American manufacturing continues to produce enormous economic value, and technological improvements have allowed many industries to increase production with fewer workers. A reduction in manufacturing employment does not necessarily indicate a corresponding reduction in productivity or industrial output. Indeed, producing more with fewer labor hours is a fundamental measure of increased labor productivity.

The more serious question is whether the United States retains the full industrial capacity required to manufacture the products on which its economy and national security depend. An economy may remain highly productive in the industries it continues to operate while becoming increasingly dependent upon

foreign suppliers for other essential products and materials. It may retain advanced research institutions, sophisticated design capabilities, and profitable technology companies while losing the ability to manufacture particular classes of machinery, components, chemicals, or materials at competitive scale.

I believe this distinction is too often missing from discussions of American industrial decline. The United States has not stopped being a major manufacturing nation. It has, however, allowed important portions of its industrial supply chains to migrate abroad, often without adequately considering the strategic and economic consequences.

International statistics show the scale of the resulting transformation. According to the United Nations Industrial Development Organization, China's share of global manufacturing value added increased from approximately 3.0% in 1990 to 31.8% in 2023. By comparison, the United States accounted for about 15.0% of global manufacturing value added in 2023. Japan accounted for 6.6%, Germany for 4.6%, India for 3.2%, and South Korea for 3.0%.

These figures deserve careful consideration. In 1990, China was still a relatively minor participant in global manufacturing by value added. By 2023, it accounted for nearly one-third of the world's manufacturing output by this measure. Its manufacturing sector was more than twice as large as the American manufacturing sector in the global total. The United States remained the world's second-largest manufacturer, but the industrial balance had shifted dramatically.

These statistics do not necessarily mean American manufacturing output declined by the same proportion. A nation's share of world production can decrease even as its own production rises if other countries expand faster. That is precisely why the

figures must be interpreted carefully. They show, beyond reasonable dispute, that the center of global manufacturing has shifted toward Asia, particularly China.

China understood something that the American financial establishment increasingly neglected. Industrial manufacturing is not merely one economic activity among many. It underpins national economic power, technological capability, employment, and security. Beginning with the economic reforms of the late 1970s, China systematically expanded its manufacturing capacity, invested in infrastructure, developed technical education, and integrated itself into international markets. Foreign capital, imported technology, and access to Western consumers accelerated this development, but China's long-term objective was not simply to provide inexpensive labor for foreign corporations. It was to build a comprehensive industrial economy.

The contrast with the United States is striking. While American corporations increasingly evaluated manufacturing in terms of short-term costs and returns on capital, China pursued industrial capability as a national objective. Chinese policy was not always efficient, producing overcapacity, debt, waste, and substantial economic distortions. Nevertheless, China built enormous productive capacity across industries ranging from steel and chemicals to electronics, transportation equipment, batteries, and critical mineral processing. In many of these sectors, the scale of Chinese production and the depth of its supplier networks have become competitive advantages that cannot be reproduced merely by constructing a new factory somewhere else.

More recent manufacturing statistics suggest this divergence has not yet ended. UNIDO's 2025 report on world manufacturing production recorded annual manufacturing production growth of about 6.8% in China, compared with about 1.0% in the United

States. These are annual production growth rates, not productivity growth rates, and a single year’s results should not be mistaken for a permanent trend. Nevertheless, they are consistent with the continued expansion of Chinese industrial production at a substantially faster rate than in the United States.

China’s industrial success was not simply the result of low wages. Low labor costs initially boosted competitiveness, but more enduring advantages came from investment in infrastructure, manufacturing equipment, technical education, supply chains, and accumulated industrial experience. Productivity increased as workers became more skilled, machinery became more efficient, production volumes rose, and suppliers learned to meet increasingly demanding specifications. The Chinese industrial economy developed these capabilities through decades of continuous manufacturing activity.

A key difference exists between becoming wealthy through owning productive assets and becoming wealthy by producing goods and services. Both can contribute to national prosperity, and neither is inherently superior in every circumstance. But a nation that increasingly relies on financial claims on production elsewhere may discover that its wealth does not provide the industrial independence it once assumed. Owning intellectual property does not guarantee control over the factories that manufacture the products embodying that property. Nor does the ability to buy a material on international markets guarantee it will remain available during a political or military crisis.

The critical minerals, metals, and materials industries provide perhaps the clearest illustration of this transformation. China did not establish its dominant position in rare earth processing and permanent magnets simply because it possessed mineral

deposits. It invested for decades in chemical separation, refining, metal production, alloying, magnet manufacturing, equipment, and the technical personnel required to operate these processes commercially. It developed the industrial capability to transform mineral resources into qualified materials that manufacturers could purchase in predictable quantities, at competitive prices, and to reproducible specifications.

The United States, meanwhile, increasingly treated mineral extraction as a functioning industrial supply chain. It is not. A mineral deposit has no strategic industrial value until an economically sustainable system can convert its contents into products customers actually need. This requires investment in processing, metallurgy, manufacturing, and customer qualification. It also requires sufficient demand to support those operations over time. The Chinese understood that industrial value is added at every stage of transforming raw material into a finished product. American investors too often focused on the presumed value of raw materials while overlooking the economics of the industrial processes needed to make them useful.

The same problem appears throughout the industrial economy. A country may have abundant mineral resources but lack the processing facilities to turn them into usable materials. It may possess sophisticated engineering expertise but depend upon foreign suppliers for specialized components. It may design advanced electronic products while relying upon manufacturing systems located thousands of miles away. The economic value of an industrial supply chain lies not simply in its individual components but in their ability to function together efficiently and reliably.

This is why I have become increasingly skeptical of the proposition that the United States can restore its former

industrial position simply by subsidizing domestic mining, imposing tariffs, or announcing ambitious manufacturing projects. Government assistance may be necessary in industries where strategic considerations justify investment that private capital will not initially support. But financial assistance cannot repeal economic laws. A plant that cannot operate efficiently, maintain consistent product quality, secure qualified customers, and sustain sufficient throughput will not become competitive merely because its construction was subsidized.

The United States can rebuild selected industrial capabilities, particularly where its technological strengths, capital resources, domestic markets, and national security requirements justify sustained investment. No economic law prevents American companies from developing competitive manufacturing processes or establishing new industrial supply chains. But rebuilding an industry is not the same thing as recreating the comprehensive industrial supremacy that America enjoyed after the Second World War. The former is possible under the right economic conditions. The latter would require reversing decades of international industrial development and recreating historical circumstances that no longer exist.

The deeper problem is that the American economy has spent decades developing incentives that reward financial performance without necessarily rewarding the creation or preservation of domestic industrial capability. Reversing this process would require more than a change in trade policy. It would require a fundamental reconsideration of the relationship among capital investment, industrial production, corporate management, and national economic security. It would also require accepting that reconstructing manufacturing ecosystems takes time and that the necessary investments may not generate the immediate returns contemporary financial markets expect.

I do not believe that the United States can simply recreate the economic circumstances of 1945. Those circumstances were unique. America emerged from a devastating global war with an intact, enormously expanded industrial economy, while much of the rest of the industrial world needed reconstruction. No comparable opportunity exists today. China is not a devastated economy waiting to be rebuilt with American capital and equipment. It is an industrial power with capabilities, scale, and supply chains that, in many sectors, exceed those available in the United States. Japan, South Korea, Taiwan, and other Asian industrial economies have also developed manufacturing strengths that cannot be dismissed or quickly duplicated.

Nor do I believe the United States' enormous wealth, by itself, guarantees the restoration of its former industrial leadership. Wealth and productive capacity are related, but they are not identical. A nation may remain financially wealthy because it owns valuable assets, controls important technologies, possesses deep capital markets, and issues a widely accepted international currency. None of these advantages automatically provide the ability to manufacture the machinery, materials, and products a modern industrial economy depends on.

The United States remains a major industrial producer and a world leader in many fields of research, technology, finance, and advanced manufacturing. It would be foolish to suggest that American industry has disappeared or that American economic decline is inevitable. But it would be equally foolish to confuse financial wealth and technological innovation with comprehensive industrial supremacy. The postwar American economy possessed all three. The contemporary American economy increasingly relies upon the first two while importing a growing range of the products and materials that the third once supplied.

My concern is that we are witnessing not merely a change in nations' relative economic standing but the end of the particular form of globalization the United States created after the Second World War. That system originally expanded under the leadership of the world's dominant industrial producer. Later, it encouraged transferring productive capacity to economies willing to make manufacturing a central national priority. China became the greatest beneficiary of this transformation, while the United States increasingly became the financier, consumer, and technological designer of goods manufactured elsewhere.

The irony is extraordinary. The globalization that helped create the greatest period of broadly shared American prosperity also provided the framework within which American industry eventually surrendered much of its manufacturing advantage. This outcome was not inevitable. It reflected choices governments, corporations, investors, and consumers made over many decades. But those choices have consequences, and economic history does not offer nations the opportunity to reverse them merely because they have become inconvenient.

I believe that the United States will remain one of the world's wealthiest and most influential nations for the foreseeable future. I am much less confident that it can recover its former position as the dominant industrial economy. Indeed, I suspect the center of industrial economic power has shifted decisively toward Asia, and the United States may ultimately become the wealthiest of the major non-Asian economies rather than the world's unquestioned industrial leader.

If that is the future, it will not be because Americans have forgotten how to invent things. It will be because we have allowed ourselves to believe that invention, financial engineering, and intellectual property ownership can permanently substitute for the difficult, expensive, and continuous business

of manufacturing.

The lesson of the postwar American economic miracle is not that technology alone creates prosperity, nor that international trade inevitably benefits every nation equally. It is that productivity, supported by capital investment, industrial capability, and access to expanding markets, is the foundation of sustained economic growth. Technology boosts productivity, but an industrial system must apply it by converting knowledge into goods and services.

A nation cannot indefinitely consume the products of an industrial civilization while neglecting the industrial capabilities that civilization depends on.

The United States once understood this better than any other nation. China understands it today.

The question is whether America can relearn that lesson before the remaining opportunities to rebuild its industrial economy disappear.