

By Robert Pollin



# ECONOMIC PROSPECTS

## *Industrial Policy and the Revival of U.S. Manufacturing*

AT A FORUM LAST MAY IN DETROIT ON THE ECONOMIC DISASTER NOW FACING the United States auto companies, and the Midwest manufacturing sector more generally, somebody asked me a pointed and important question: Why doesn't the U.S. have an industrial policy? The premise motivating the question was straightforward. The revival of manufacturing in the U.S. will entail a wave of

innovations that raise competitiveness, expand job opportunities, and advance the construction of a clean energy economy. To pull this off successfully will require a clustering of large-scale public policy initiatives that could, as a combination, fairly be described as industrial policies.

Yet I think my answer at the forum surprised people. I said that the U.S. does already practice industrial policy right now, and has done so for a long time. But the problem is that industrial policy in the U.S. operates primarily through the Pentagon. In fact, this answer was only half-right. Military-based industrial policy has indeed been a major force shaping the development trajectory of U.S. capitalism for at least a century. It has produced epoch-defining technical breakthroughs, including

jet aviation, the computer, and the Internet. It has also produced an unending stream of pork-barrel opportunities and scandals. But industrial policies in the U.S. also extend beyond the Pentagon, frequently operating without a clear sense of purpose, sometimes even at cross-purposes.

So a better answer to have given at the Detroit forum would have been that, in fact, the U.S. operates with a variety of industrial policies—in fact, too many. If we are going to successfully confront the crisis of U.S. manufacturing, what we really need are measures that are more carefully designed, focused, and executed. This will entail building from the major successes that have been achieved, as well as gaining greater understanding of and power over the forces that produce failures.

## WHAT IS INDUSTRIAL POLICY?

**A**LTHOUGH THERE ARE OTHER WAYS THE term can be used, industrial policy is often associated closely with the concept of a “developmental state.” As one key element within a developmental state, industrial policy generally focuses on promoting research and development (R&D), moving the technical innovations emerging from R&D investments into commercial use, and raising productivity and competitiveness by getting businesses to adopt these innovations as rapidly as possible.

### *Industrial policy in the U.S. operates primarily through the Pentagon.*

But we need to clarify this broad idea further. This is because, with industrial policy as a tool of a developmental state, a range of policy instruments and targets can be put into play. These could include R&D subsidies for government, university, or private-business research centers. It could also include preferential tax treatment, credit opportunities, or direct subsidies for specific sectors of the economy, different regions, or even individual business firms. Some types of business regulations—such as auto fuel-efficiency standards, or financial regulations aimed at channeling credit to preferred sectors, or activities at subsidized rates—could also be seen as industrial policy interventions.

## HOW INDUSTRIAL POLICY OPERATES IN THE U.S.

**A**N IMPORTANT FEATURE OF MUCH OF the U.S. experience with industrial policies has been that these policies have been frequently implemented for purposes other than to promote technology, productivity, competitiveness, and jobs. Since World War II,

motivations behind the use of industrial policies have included:

1. *Bailing Out the U.S. Auto Industry.* In 2008 and 2009, General Motors (GM) and Chrysler received \$65 billion in loans from the federal government. The loans were provided both by the then-outgoing Bush administration in December 2008, as well as the newly installed Obama administration in March 2009. This action was taken after both automakers had testified before Congress that, without major federal assistance, they would be forced into bankruptcy. These bailouts had an important precedent in the 1979 government bailout of Chrysler. In this prior case, the federal government provided \$1.5 billion worth of loan guarantees (equivalent to about \$3.5 billion in 2009 dollars), as well as “voluntary” quotas on foreign cars being imported into U.S. markets.

One can make a reasonable case for both bailouts on the grounds that, in 1979 as well as in 2009, the collapse of GM and Chrysler would have caused massive unemployment and more general economic hardship, especially in the Midwest. But when the tools of industrial policy are cobbled together amid a crisis, we cannot expect the results to be stellar, beyond preventing the firms from shutting down outright. The 2009 GM bailout, for example, imposed devastating concessions on autoworkers, including the elimination of twenty-one thousand union jobs, while the United Auto Workers itself had to accept GM stock of uncertain value to replace \$10 billion in guaranteed health care funds.

2. *States and Municipalities Competing to Attract Businesses.* Over the past four decades, states and municipalities in the U.S. have competed among themselves, sometimes intensively, to attract businesses to locate with them. The main weapon in this competition has been various types of tax incentives. Foreign auto companies have been among the most favored recipients of such support, including,

just since 2006: Kia Motors receiving a reported \$400 million from West Point, Georgia; Honda receiving \$141 million from Greensburg, Indiana; Toyota getting \$300 million from Blue Springs, Mississippi; and Volkswagen obtaining \$577 million from Chattanooga, Tennessee. These efforts have achieved some success in their primary aim of attracting businesses to their locations. But they have done so almost entirely on a zero-sum basis—that is, by reducing job creation in neighboring states and localities that have not offered the same incentives.

3. *National Defense.* Unlike with the auto industry bailouts and state-level tax-break competitions, national defense-related industrial policies have produced spectacular successes. Commercial-level uses of jet aviation, computers, and the Internet—all transformational technologies that define the U.S. and all other modern economies—were products of industrial policies directed and financed by the Pentagon.

### **DOES INDUSTRIAL POLICY HAVE TO RUN THROUGH THE PENTAGON TO SUCCEED?**

**T**HE KEY FACTOR WITH PENTAGON-centered industrial policy is the combination—on a massive scale and over a sustained time period—of R&D investment spending, plus the maintaining of a guaranteed market through procurements. This idea is the main theme in the important recent book by the late Professor Vernon Ruttan, *Is War Necessary for Economic Growth?: Military Procurement and Technology Development*. Ruttan emphasizes that R&D alone would not have brought new technologies to the point of commercial success. It was also necessary that, over the course of decades, the military provided a guaranteed market for new technologies. This enabled the technologies to incubate

over time without having to prematurely face the test of the market.

In principle, this combination could be replicated under some auspices other than the Pentagon. An obvious priority here would be to build manufacturing capacity around clean energy technologies, including green buses and rail cars, as well as automobiles. Investments in these areas could be the basis for a revival of a transformed U.S. auto industry.

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A program to dramatically improve public bus services throughout the country well illustrates the broader possibilities and approach. Let's say, for example, the federal government commits to doubling the number of buses now operating throughout the country, and requires that all the new buses operate at high energy efficiency levels. Such a program could produce major environmental and social benefits: even at current fuel-efficiency standards, transporting people via public transportation, as opposed to private cars, produces a net reduction in carbon emissions of about 45 percent per passenger mile, while the average costs for passengers of public transportation are about half those of people traveling by car. Meanwhile, the government orders for clean-energy buses would establish a guaranteed market for manufacturers. Some of these orders could be filled by the current suppliers, all of whom now operate in the U.S. The rest could be supplied by U.S. auto firms, including GM and Chrysler, assuming these companies see the opportunities open to them through converting part of their unprofitable auto manufacturing operations into a newly-expanding market for clean-energy buses.

Similar programs could be advanced for public investments in public rail transportation as well as renewable energy projects, such as developing the offshore wind energy potential of the Great Lakes region. The major question is whether the government can justify the combination of large-scale R&D spending and procurement that would be necessary for such initiatives to succeed. The only basis on which this can occur is in terms of some standard of broadly-shared social welfare. The issue of developing an effective set of industrial policies around an agenda of clean energy, transportation, and manufacturing at this point becomes political. For example, can a strong enough political movement be mounted to mobilize the government's capacities to build widely accessible public transportation systems and large-scale wind farms in a manner similar to what it has already accomplished so spectacularly through the Pentagon?

Not surprisingly, reaching that level of political influence poses numerous challenges of its own. To begin with, few people outside of elite policymaking circles in the U.S. appreciate the extent to which the federal government has been successful in conducting industrial policies. Instead, as Professor Fred Block argues, U.S. industrial policies have operated as what he terms a "hidden developmental state," under the umbrella of the Pentagon's national security agenda, not as an open public policy effort to advance technical innovation, productivity, competitiveness, and jobs.

Conducting industrial policies in the U.S. in this way has meant that the military has exercised disproportionate influence over what

passes as legitimate aims of such policies. And precisely because Pentagon-based industrial policies have been sheltered from the normal standards of public review, an adequate system of carrots and sticks has never emerged to regulate the private businesses that benefit most directly from these policies through contracts and subsidies. The egregious non-competitive, gold-plated, cost-plus contracts handed out to weapons suppliers are the most well-known examples of this broader problem.

*[The U.S. needs to] design industrial policies to advance clean energy, a reconfigured transportation system, a renewed manufacturing sector, and a revived Detroit.*

Here, then, is the overarching challenge in trying to design industrial policies to advance clean energy, a reconfigured transportation system, a renewed manufacturing sector, and, yes, a revived Detroit. As a technical matter, the federal government has the capacity today to dramatically expand the markets for clean public transportation and renewable energy systems, just as the Pentagon spent forty years nurturing the Internet. But we lack the experience and political will to advance this agenda outside of the Pentagon. The question is whether we can build such capacities over time.