

## Bloomberg News

### America's Dirty War Against Manufacturing (Part 3): Carl Pope

Jan. 20 (Bloomberg) -- "I am told I cannot talk about industrial policy in polite American company," Dow Chemical Co. Chief Executive Officer Andrew Liveris told a business audience last March. "I'm not sure why, since the world's two strongest economies, Germany and Japan, both have such policies."

Liveris has just published a book, "Make It in America," the theme of which is that we can, and must, return manufacturing to American shores. The key insight, he said, is this: "Companies cannot compete with countries. Only countries can compete with countries."

Liveris is part of an emerging consensus that includes New Economy business gurus such as former Intel Corp. CEO Andy Grove, whose essay on the need to rejuvenate manufacturing, "How America Can Create Jobs" is a seminal document. The gospel is infiltrating Silicon Valley, where investors such as Vinod Khosla and his former partners at Kleiner Perkins Caufield & Byers are believers. It has been embraced by the American labor movement, including AFL-CIO President Richard Trumka, United Steelworkers President Leo Gerard, Teamsters' head Jimmy Hoffa and former Service Employees International Union President Andy Stern.

Liveris's analysis is bolstered by former General Motors Co. Vice Chairman Bob Lutz, Honeywell International Inc. CEO David Cote and ArcelorMittal's U.S. CEO Michael Rippey. A growing number of public officials, such as former Pennsylvania Governor Ed Rendell, have come to see manufacturing as the key to economic revival and jobs. Remarkably, there is a fair amount of agreement among this group on the policies necessary to achieve that.

So why isn't it happening?

### Partisan Shots

Ideology, for one. A national industrial policy is anathema to many conservatives. When solar-panel maker Solyndra LLC went bankrupt after receiving \$535 million in federal loan guarantees, opponents of industrial policy eagerly cooked the failure into a "scandal." The attack was not only a partisan shot against the Obama administration, which had signed off on the loans. It was intended to preempt and disqualify federal support for manufacturing in the future.

Although conservatives condemn the notion of a national manufacturing policy, they embrace similar policies on the state level. Daimler AG's Mercedes-Benz, Hyundai Motor Co. and Bayerische Motoren Werke AG have all been courted by Southern states dangling tax breaks and industrial policies. Governor Rick Perry's manufacturing-friendly policies in Texas served as the core of his appeal to Republican primary voters. And at the close of the Wall Street Journal conference where Liveris was criticized for his embrace of industrial policy, then-Governor Haley Barbour boasted for an hour of the robustness of Mississippi's industrial policy. Yet the same participants who had lambasted Liveris posed no objections to Barbour.

Why do we have such a difficult time recognizing that, as Liveris puts it, individual companies (or states) cannot compete effectively with nations such as China, India or Germany?

There are at least two reasons. First, for the Tea Party and its financial backers, like the Koch brothers, weakening the federal government is ideologically more important than strengthening the national economy; if a unified, competitive national economy requires a strong, powerful federal government, the trade-off is not worth it to them. Second, the political leaders who shape federal economic policy are responsive to the sectors that have mastered lobbying -- oil, agribusiness, finance and drug companies. Manufacturing for decades has been left to take care of itself.

### Fantasy Economy

Yet the notion of a strong economy without strong manufacturing is a fantasy. "We cannot remain the world's engine of innovation without manufacturing activity," the president's National Science Board reported this month. The number of high-tech manufacturing jobs in the U.S. declined 28 percent between 2000 and 2010, according to the report. It attributed the "erosion" of U.S. leadership in part to investment in education and research by Asian governments.

Other sectors can't replace the employment and wages of manufacturing. Commodity production no longer generates enough employment -- automation in agriculture and mining has gone too far. Wyoming produces 40 percent of the U.S.'s coal with about 7,000 miners. "Knowledge work" pays well, but draws on a narrow population: How many lawyers and bankers do we need? Facebook Inc. is a remarkable innovator, but it employs only about 3,000 people to serve a customer base of more than 800 million. Personal services, such as restaurants and retail, pay poorly and rely on income streams from other sectors to pay at all.

Henry Ford paid his workers \$5 an hour so they could afford to buy his cars. But they also patronized the grocers and carpenters of Detroit. We spent the last two decades paying our grocers and carpenters with cheap second mortgages -- a strategy bound to collapse.

Any attempt at a manufacturing revival should respect Andy Grove's core insight: that manufacturing is attracted to markets, and that employment is sustained by that interaction. The U.S. did not invent the original technologies of the automotive revolution; they were European. The first major American innovation, Charles Kettering's self-starter, didn't emerge until 1912. But the U.S. built the roads and created the markets on which Gottlieb Daimler's and Rudolf Diesel's engine technologies drove to scale.

It is this interaction between innovation, markets and manufacturing that drives competitiveness, growth and employment. Oliver Kuttner, who won the X-Prize for his Edison 2 ultra-light vehicle, created it in Lynchburg, Virginia. Why? Because previous nuclear plants in the town had spawned a network of small workshops, places where people knew how to invent the new widgets that Kuttner needed. Those are the skills we need to "make it in America."

### Long-Term Commitment

Markets come first. If the U.S. would commit, long-term, to replacing our outmoded coal-electricity power with energy derived from wind and solar, new clean-energy companies would flock to manufacture in America.

Applied Materials Inc. makes machinery for solar-panel factories. In 2009, the company made a proposal to the Obama administration: It would build solar factories in the U.S. if the government would set up "solar reserves" on unused federal reservations, and buy the power generated from the factories' output. The new administration couldn't, or wouldn't, commit. Applied Materials then shifted much of its focus to China, moving top engineers there to follow the market, which enjoys robust support from the Chinese government. The U.S. still has more outdated, dirty energy to replace than any other country on Earth -- a huge opportunity for clean-energy manufacturing.

To create markets, we must enforce trade agreements and insist on fair play. China has been stealing wind-turbine manufacturing by requiring 70 percent domestic content in its turbines. U.S. manufacturers like General Electric Co. make components in China solely to satisfy that demand. What is good for the Peking duck should be good for the American gander.

In addition, we need to restructure the way we finance industry. Japan's essentially 0 percent interest rates, and China's dirt-cheap state-bank loans were key ingredients in the rise of Japanese autos and now of the Chinese solar industry. In the U.S., tax and finance policies still favor nonmanufacturing sectors, and protect sluggish incumbents by cutting off capital for companies and technologies that might disrupt them. In most American states, it's still illegal for a manufacturing company to produce more clean electricity than it needs and sell the surplus -- the utilities enjoy virtual monopolies.

### Tax Help Needed

At the least, the U.S. should provide clean-energy companies with the same tax-favorable investment structures that underwrite oil and gas development. The U.S.'s Advanced Energy Manufacturing Tax Credit, which is capped at \$2.3 billion, is oversubscribed by a factor of three, revealing a hunger among clean-energy providers to manufacture in the U.S. The production tax credit for wind expires at the end of this year. On Nov. 15, the Governors' Wind Energy Coalition, a bipartisan group of two dozen governors, sent a letter to Congress urging lawmakers to extend the tax credit. The letter pointed out that when "Congress allowed the tax credit to expire in 1999, 2001, and 2003, the development of new wind installations dropped significantly, between 73 percent and 93 percent, and thousands of jobs were lost."

Even when the policies are right, the implementation may not be. The key R&D tax credit is renewed for only two years at a time, keeping manufacturers, who account for 70 percent of the U.S.'s R&D, guessing about the future.

The failure to support manufacturing has been exacerbated by a failure to make public investments at all. Total public spending on infrastructure in the U.S. has fallen steadily since the 1960s and now stands at 2.4 percent of gross domestic product. (In contrast, Europe invests 5 percent of its GDP on infrastructure, and China invests 9 percent.)

Manufacturing jobs in the U.S. transportation sector have fallen from roughly 2 million positions in January 2000 to just over 1.4 million in December 2011. The refusal of Congress to pass long-term funding for rebuilding U.S. roads, bridges and transit systems will only accelerate that decline. Meanwhile, Korea, Japan and China continue to invest in high-speed rail, advanced automotive batteries and other strategic infrastructure.

Our cultural worship of white-collar “knowledge” work has led the U.S. to underinvest in the skills and aptitudes of the hand. We have the best universities in the world, but not the best trained workforce. We applaud innovation and we hunger for jobs, but fail to understand their dependence on manufacturing, or that manufacturing itself is dependent on markets. Finance, markets, manufacturing, employment -- all thrive, or wither, depending on public policy. Manufacturing can still be revived in the U.S., but only Washington can make it happen. Only Washington.

(Carl Pope is a former chairman of the Sierra Club. The opinions expressed are his own.)