



Commentary

Education And Economic Recovery

Hal Raveché 31 January 2009



Barack Obama's short-term stimulus package lacks an effective strategy to remedy the fundamental flaw in the U.S. economy today: the disappearance of well-paying manufacturing jobs and the health care and retirement benefits that come with them.

For their part, universities need to jump start our manufacturing base. They need to be challenged to develop incentives and rewards for faculty so that innovation becomes a core academic value along with teaching and research.

At the moment, chasing and winning scholarly awards, while prized among the members of the academe, does too little to bring products to market and put people in jobs.

A service-based economy that can stand and prosper by itself is pure fiction. Our economy will remain fragile if it is driven in large part by the latest Wall Street deals and "jobs" that consist of selling each other insurance and steaming lattes or painting nails and flipping burgers.

It would be that way because the rest of the world took the job producing the goods we used to make, and, over time, the manufacturing jobs that created them. In many ways, we just gave them away by taking the easy route to cost reduction.

Countries throughout Europe and Asia all have learned how to grow and keep high-tech manufacturing jobs home, even while still outsourcing commodity manufacturing. The examples are Germany, Switzerland and Sweden; in the Asian nations of Japan, Singapore, Korea and Taiwan. All these nations, our competitors, have kept at least 20% of their gross domestic product in manufacturing--more than a third better than the U.S.

Americans let these jobs drift overseas, abetted by narrowly focused economic policies in Washington and misplaced faith in the prophesies of futurists touting the service sector.

The Obama administration has a marvelous opportunity to double the percentage of U.S. GDP in manufacturing from 12.7% to 25%. The U.S. trade deficit could then be truly balanced, not just propped up by the false and fleeting apparition of a weakened dollar.

The key is a national commitment that stretches from the way we teach things in our schools to the way we make them and bring them to market.

It will take a comprehensive approach to resolve the core issues that have weakened manufacturing: onerous government policies and insufficient research, the strength of the workforce and further partnerships between universities and industry.

The U.S. economy is plagued by government regulation that dwarfs the burden shouldered by our competitors. Onerous policies such as Sarbanes-Oxley, for which U.S. firms spent \$6 billion in 2007 in compliance, were ushered in quickly and have proven to be ineffective, failing to protect the public from the implosion of companies such as GM, Ford, Lehman, AIG and Merrill Lynch.

These laws need to be rewritten to be more supportive of business growth while protecting the public from their excesses. Sadly, U.S. firms spent \$29 billion in 2007 for governance, risk management and compliance, up 8.7% from 2006. Imagine if part of this sum could have been spent on plant modernization and research and development.

To stimulate manufacturing, we must also address burdensome product-liability litigation and obsolete accounting practices. All American products, from household goods to manufacturing equipment, have their prices artificially inflated by the cost of product-liability protections, a kind of tax that serves no one but trial lawyers.

Accounting rules are just as punishing. Today a firm must deduct its entire research and development investment from its earnings, thus prompting Wall Street analysts to issue negative outlooks and discouraging CEOs and boards of directors from making those very investments. Our Asian and European investors do not face as many obstacles.

At its most basic level, though, the strength of our manufacturing workforce rests on our educational system, and America's continues to be plagued by mediocrity. The 2008 Global Competitiveness Report reveals that U.S. is 48th--behind our Asian and European competitors--in math and science education from kindergarten through 12th grade. Even in higher education, U.S. enrollment is only sixth in the world and enrollment levels lag behind those in Korea and Taiwan.

For one thing, math and science teachers in our middle and high schools need to be better trained in the subjects they teach. While it's a responsibility at the state and local levels, the federal government can and should provide standards and matching funds to promote teacher training and effective partnerships with university engineering, science and math departments. This would ensure that teachers are up-to-date about the way today's students should be learning math and science.

Beyond the secondary-school level, we need funds to nurture research partnerships between business and our nation's research universities that are focused on advancing manufacturing through innovation in fields like design, materials, energy utilization or distribution mechanisms. The intellectual property would be jointly owned but assigned to the companies for their exclusive worldwide use.

In the U.S., however, most universities do not place great emphasis on engineering for the sake of manufacturing excellence. Research institutions are prone to follow the glamorous and popular trends and, in exchange, they have lost sight of more practical matters.

If correctly overseen, motivated and executed, a renewed manufacturing sector would create increased wages or new jobs as well as increased tax revenues for beleaguered national, state and local governments.

Along with relaxed policies, education-driven research ventures would allow U.S. manufacturing firms to become more profitable. They could then more easily pay their employees higher wages and provide them with health benefits.

Unemployed and under-employed Americans would have more options than places like Wal-Mart, Target or McDonald's, which typically do not offer comprehensive benefits. This, in turn, would heighten pressures on state and federal agencies to provide those benefits.

Rebuilding our manufacturing sector is inextricably linked to our nation's educational priorities. The universities that contribute the most to America's economic future will be those whose faculties are focused not on receiving medals in Stockholm, but on teaching their students how to turn an idea into a patent, a patent into a product and those products into profits.

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