The Innovation Delusion

In the United States, innovation has become almost synonymous with economic competitiveness. Even more remarkable, we often hear that our economic salvation can only be through innovation. We hear that because of low Asian wages we must innovate because we cannot really compete in anything else. Inventive Americans will do the R&D and let the rest of the world, usually China, do the dull work of actually making things. Or we'll do programming design but let the rest of the world, usually India, do low-level programming. This is a totally mistaken belief and one that, if accepted, will consign this nation to second- or third-class status.

The latest offender to advance this line of thought is Thomas Friedman, who has prominently displayed this familiar and entirely incorrect line of thought in the New York Times. Unfortunately, this idea is one that is widely accepted without careful thought about either its truthfulness or its consequences.

Truth and Consequences

Cheap labor abroad is cited as the incurable handicap that explains why the United States cannot compete. But cheap labor doesn't explain the fact that Japan and Germany, both high-wage countries, are successful in the automobile industry. Nor does it explain how semiconductors, a model of a high investment, low-labor content industry, are mainly made in Asia. The premise that the inescapable burden of competing against low wages means failure is simply not correct.

Perhaps even more disturbing than the lack of truthfulness is the fact that we are not addressing the consequences of not competing. There are some inescapable truths about any economic good, be it a manufactured good or a service: (1) you either produce it in your own country, (2) you trade something you do produce for it, (3) you do without it, or (4) you import it and promise to pay later.
We are moving steadily away from producing what we need in this country. We are also moving away from producing on a scale that enables us to trade for what we do need. Rather than do without, we are increasingly importing things with a promise to pay later. This cannot go on. When our trading partners, especially China, no longer want to loan us hundreds of billions of dollars a year to be paid later, we will have little productive capacity left and we will be a poor nation.

Friedman is only the latest to assume that we can avoid this fate by emphasizing designs, ideas, and R&D and trading them for the items we need. This is an attractive idea; we often hear about innovation parks and university research centers and often their work is both exciting and good.

But the chasm-sized flaw in this otherwise alluring proposition is scale. Balancing trade on ideas and R&D simply cannot be done. The most elementary analysis shows that the scale is entirely wrong. As one who spent many years as the head of research of a large corporation, I know how much R&D matters; I also know how small it is. Eight percent is a very large percent of revenue to spend on R&D. Even in manufacturing, which is relatively R&D intensive, 4 to 5 percent is typical. It is really wrong to think that you can scale up R&D to be big enough so we can trade it for the huge quantity of things we need but don't make in this country.

A Strange and Unworkable Strategy

Ignoring the issue of scale, Tom Friedman goes on to quote authoritative Chinese sources who say that by the end of the decade China will be dominating global production of the whole range of power equipment. To Friedman's approving eye this just means that China is going to make clean power technologies cheaper for itself and everyone else. Friedman says that Chinese experts believe it will all happen faster and more effectively if China and America work together with the United States specializing in energy research and innovation, at which, he asserts, China is still weak, while China will specialize in mass production.

It is probably true that all this will happen faster with the specialization Friedman describes, but where will we be at the end of that process? China will be making power equipment cheaply, but the chasm is still there, so what will we have to trade for it? Power equipment will be cheap in China, but if we adopt this approach it may well be unaffordable in the United States.

Meanwhile the Chinese wisely welcome our nascent innovations and turn them into products. They are building plants, making things manufacturable, and adding them to their growing GDP. Friedman's article contains an excellent example of this. He describes a U.S. developer with a new approach to solar-thermal power, whose proposal to the U.S. government asking for small scale support was easily outbid by a Chinese offer that was far larger and was aimed at much larger scale plants.

Specializing in R&D, but sending its fruits on to others is a strange and completely unworkable strategy for a nation.

Other Issues
Thinking of innovation as a standalone activity without production has other major flaws. First, our global corporations, understanding that innovation and production are in fact closely tied, are rapidly moving not only production but also R&D overseas. Intel's CEO made this very clear when he said that the goal of Intel's new plant in China is to support a transition from "manufactured in China" to "innovated in China".

In addition, the standalone innovation approach leaves most Americans entirely out. After all, only a very small portion of Americans are engaged in R&D. At a recent meeting I heard "The only thing that matters is innovative and passionate people." These people do matter, but they are very far from being the only ones. This attitude misses the point that it was all our people, working in many different work settings, that made this country prosper. And all of them will all be needed in any viable future for our country.

**What We Must Do - The Role of Trade**

We need successful industries and we need to innovate within them to keep them thriving. However, when your trading partner is thinking about GDP rather than profit, and has adopted mercantilist tactics, subsidizing industries, and mispricing its currency, while loaning you the money to buy the underpriced goods, this may simply not be possible.

The ability to compete in a world that is half-mercantilist, half-free is inescapably tied to effective trade policy. Our present policy is to beg. We ask countries like China to stop the subsidies and currency mispricings because they are creating a one-way flow of underpriced goods; goods that are destroying jobs on a large scale in many of the most productive sectors of our economy. But why should they stop? It's working for them.

We must move to balanced trade. With balanced trade every dollar of imports is matched by a dollar of exports of goods or services produced here in the U.S.A. We are fortunate that there are in fact ways to balance trade. One very attractive way is to adopt some version of Warren Buffet's Import Certificates plan, which Buffet has described in a remarkably insightful *Fortune* article.

We should act now to balance trade. We should not continue to beg while jobs disappear and our productive ability erodes.

**What We Must Do - Motivating our Companies**

Today our companies are motivated to take innovations abroad, produce there and import the goods into the United States. Increasingly we can expect services also to go overseas. We must produce here in the U.S.A., to employ the people of this country, and we must keep their activities effective by a steady stream of innovations in design and production. While other countries roll out a welcome mat of tax breaks and subsidies for our companies because their common sense tells them that their people being employed in productive work is the road to being a rich country, we provide no incentive for U.S. companies to produce here.
We cannot continue to have our corporations, faithful only to the interests of their shareholders, engage in a one-way flow of jobs, technology, and innovation out of the country. We need to realize that with globalization the interests of our country and of our global corporations have diverged. We can realign the interests of corporations with those of our country by rewarding companies that are productive here. And that can be done in ways that are consistent with our history and with the limited capabilities of our government.

**Conclusion**

Specializing in innovation is an attractive idea, but a misleading one; an idea that blinds us to what we really need to do.

We need to do more than produce exciting new ideas; we must also be able to compete in large productive industries. This requires us to both balance trade and to motivate our corporations not only to innovate, but also to produce in this country. While this is hard to do, it can be done. Specializing in innovation, though often recommended, is in fact a delusion, an alluring path that in reality will lead us straight downhill.


###