THE SOLUTION TO THIS AND THE NEXT ECONOMIC CRISIS

I long meant to do a piece looking at how the Japanese earthquake exposed the problems with our current supply chain. Matt Stoller has taken what happened after the earthquake as an opportunity to reflect on the possibility of systemic failure because our supply chain has been concentrated and outsourced.

> In the last few years, economists have spent a lot of time and energy thinking about bank runs. A bank run happens when depositors think a bank is weak and scramble to get their money out before it collapses. "Tight coupling" of financial institutions, like when banks are overly dependent on each other, can create a cascading series of problems for the system itself.
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> Worryingly, there's been very little consideration of how systemic collapses can happen in another, perhaps more dangerous realm—the industrial supply system that keeps us in everything from medicine to food to cars to, yes, videotape. In 2004, for instance, England closed one single factory, which caused the United States to lose half of its flu vaccine supply.
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> Barry Lynn of the New America Foundation has been studying industrial supply shocks since 1999, when he noticed that global computer chip production was concentrated in Taiwan. After a severe earthquake in that country, the global computer industry nearly shut down, crashing the stocks of large computer makers. This level of concentration of the production of key components in a

> globalized economy is a new phenomenon. Lynn's work points to the highly dangerous side of globalization, the flip side of a hyper-efficient global supply chain. When one link in that chain is broken, there is no fallback.
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> Lynn has continued to study industrial supply shocks and says, "What I have found most interesting recently is the apparent role supply chain shocks played in triggering a synchronized slowdown of industrial economies in April—production down (in USA, China, Europe, Southeast Asia), jobs down, demand down, GDP numbers down—due almost entirely to the loss of a single factory that makes microcontroller chips for cars."
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> Today, the problem manifests as shortages of videotape or auto parts, but the global supply chain is so tangled and fragile that next time it could be electronics, weaponry, or even food or medicine. As Lynn noted in an interview with Dylan Ratigan, China controls 100 percent of the national supply of ascorbic acid, which is a basic food preservative. Leading oncologists are already warning that we are experiencing severe shortages of generic yet pivotal cancer drugs, because there's no incentive for corporations to make them.

The company Lynn mentions whose chip factories (there were actually 7 originally) went down with the earthquake, Renasas, did a remarkable job both restoring production and sustaining what supply it could.

But it's telling that a company with just 40% of the market could threaten such a central industry.

Of course, it's not just in auto manufacturing where chip production has been a critical issue.

I've bitched before about the concern that "counterfeit" chips have left our military toys susceptible to failure. Or, dispensing with the secrecy, the possibility that specially-engineered chips may have backdoors that hackers are exploiting.

Look at the way our defense establishment proposes dealing with that issue.

> In 2010, the US military had a problem. It had bought over 59,000 microchips destined for installation in everything from missile defense systems to gadgets that tell friend from foe. The chips turned out to be counterfeits from China, but it could have been even worse. Instead of crappy Chinese fakes being put into Navy weapons systems, the chips could have been hacked, able to shut off a missile in the event of war or lie around just waiting to malfunction.
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> The US has been worried about its foreign-sourced chips in its supply chain for a while now. In a 2005 report, the Defense Science Board warned that the shift towards greater foreign circuit production posed the risk that "trojan horse" circuits could be unknowingly installed in critical military systems. Foreign adversaries could modify chips to fizzle out early, the report said, or add secret back doors that would place a kill switch in military systems.
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> [snip]
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> The Defense Science Board warned in its report that "trust cannot be added to integrated circuits after fabrication." IARPA disagrees. The agency is looking for ways to check out chips once they've been made, asking for ideas on how the US can verify that its foreign chips

> haven't been hacked in the production process.
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> Keep your suggestions original, though. IARPA's sister-shop, DARPA, has already done some work on chip verification. DARPA's TRUST program uses advanced imaging and X-rays to search for deviations from chips' designs. Its IRIS program aims to check out chips when the US doesn't have the full designs to compare them to.
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> One way IARPA would like to make chips from foreign foundries safe is by splitting up the manufacturing process. Under this scenario, the front-end-of-line (FEOL) stage of manufacturing would take place at offshore foundries, while the back-end-of-line processing would finish up at a more secure US facility.

That is, either because we no longer have the capacity (true in part) or our capacity has lost the technological edge (true in part), rather than just mandate that chips going into war toys be built in the US, IARPA proposes a two-step manufacture process to ensure our chips are not counterfeit or hacked. We'll just do the finishing touches to the chips, IARPA suggests, not build the chip from start to finish.

Is it so unreasonable to instead suggest that chip manufacture is something our country needs to invest in, both to ensure the diversity of the supply chain globally but also to provide supplies to the Military Industrial Complex?

Apparently, that is paradigmatically unthinkable.

At least in DC.

Meanwhile, the Alliance for American Manufacturing has a poll out that shows the US is as close to unanimous as you can get that it needs to invest more in manufacturing. Some of the results:

- 90% have a favorable view of American manufacturing companies – up 22 points from 2010.
- 97% have a favorable view of U.S.-made goods – up 5 points from 2010.
- 94% of voters say creating manufacturing jobs is either "one of the most important" things government can do or "very important."
- 90% support Buy American policies "to ensure that taxpayer funded government projects use only U.S.-made goods and supplies wherever possible."
- 95% favor keeping "America's trade laws strong and strictly enforced to provide a level playing field for our workers and businesses."

Now, even polls on Medicare and Social Security—for which there is overwhelming support—poll closer to 70%. That says either this poll is skewed, or that the one thing Americans agree upon is that we need to start making things in this country again.

That may not bode well for Obama's reelection, given that after this debt ceiling gets resolved, he and the Republicans are going to try to rush through three trade deals.

On the economy, generally, there's a surprising disjunction between what the country believes and what DC espouses. But on jobs and manufacturing, the split is even more stark (well, except for exceptions like Jared

Bernstein, who is incredulous at the direction this is heading).

I realize that the government—Obama and the Republicans—have created their own crisis that makes the debt an issue of national importance. But even while they do that, they're ignoring equally looming threats. And, at the same time, the concerns of 90% of the country.