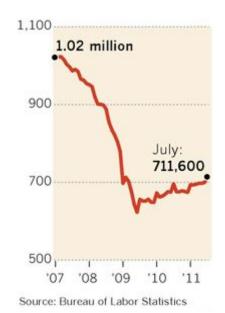
# THE AUTO INDUSTRY AND AMERICA'S FUTURE

I wanted to point to four different discussions as a way to situate a larger discussion of where the auto industry is at:

- This LAT story on how the auto rebound is driving what little recovery we're having in the US
- NYT Magazine asking "Does America Need Manufacturing?" as it reviews the new battery plants in Michigan
- This debate between Kevin Drum and Matt Yglesias on gas tax
- The appointment of Alan Krueger to lead Obama's Council of Economic Advisors

The automotive industry is driving the recovery (such as it is)

As the LAT argues-most compellingly with this graphic-the rebound in auto manufacturing in this country is one of the best pieces of news in our economy today.



It actually points to both automotive sales—with dealers doing good business—and an increase in

manufacturing in this country. Those are two different things.

The story points to a GM dealer with stores in three states talking about his business.

"I have been adding dozens of employees for sales and sales support," said Mike Bowsher, who owns Chevrolet and Buick dealerships in Atlanta; Nashville, Tenn.; and Orlando, Fla. "The economy is crazy, but our retail business is still growing and getting better."

There are likely a couple of things going on. First, remember that GM and Chrysler closed a lot of dealers during their restructuring. I've long argued that was a necessary step because American brand dealers were cannibalizing each others' sales. We would expect those that remain—like Bowsher's dealers—to be doing better as a result. And US brands (including Ford) also did well during the post-earthquake period when Toyota and Honda had shortages due.

But then there's the manufacturing side, where LAT notes a number of manufacturers are expanding here.

And it's not just the Big Three American manufacturers that are thriving. Nissan, VW and other foreign-based firms are expanding in the United States, putting billions of dollars into building and refurbishing plants. Start-ups Tesla Motors in Palo Alto, Fisker Automotive in Anaheim and Coda Automotive in L.A. are hiring and spending hundreds of millions of dollars designing and launching electric and hybrid vehicles.

We've got an entire new segment-electric vehicles-expanding into viable production runs at the same time as we're seeing transplants open new factories. Transplants are coming here, in part, to minimize the disruption of volatility in currency exchange. But I would expect it to become easier to justify opening plants in this country now that the Japanese earthquake showed the fragility of existing supply chains. Also note that US wages are more competitive internationally.

If only our country had done something meaningful to bring down the costs corporations pay on health care, we'd probably see a lot more manufacturing opening here.

And while I'm skeptical of David Shulman's claim that the automotive turnaround will singlehandedly keep us out of a double dip—after all, the beleaguered middle class drives the volume in car sales...

The health of the U.S. economy is so dependent on autos that economists such as UCLA's David Shulman are watching car sales to assess whether the nation's recovery will accelerate or stall.

"If you see a 13-million-unit sales rate in the fourth quarter, that would help a lot," said Shulman, senior economist at the UCLA Anderson Forecast. "It would be very hard to see how the U.S. would go into recession with cars selling at that rate."

I do think it fair to assess the role of the automotive industry in what little recovery we've got.

## Battery factories driving the manufacturing industry

Which brings us to this excellent article from yesterday's NYT Magazine. It tells the story I wish Obama had told when he visited Johnson Controls a few weeks back: the Administration's investments in battery factories in the stimulus bill are coming on-line and they offer perhaps the single best piece of good news in the economy.

It talks about how the US fell behind in this and other critical manufacturing segments.

The semiconductor industry, for example, led to the LED-lighting and solar-panel industries, both of which are mostly based in Asia now. "The battery is another

fascinating example," [Harvard Professor Gary] Pisano told me. "The center of gravity is Asia. But why?" If you go back to the 1960s, he says, the American consumerelectronics companies decided they were better off in Japan, and then Korea, where costs were lower. "And then you have to ask: Who had the incentives to make batteries smaller or more powerful or last longer? Not the car industry. The consumer-electronics industry did." This explains why the U.S. is now playing catch-up with lithium-ion batteries. It also underscores the vulnerability of an economy with a shrinking manufacturing sector. "When one industry moves," Pisano says, "there can be other industries in the future that follow it that you couldn't even anticipate."

It talks about how we're having to do what developing countries have always done to catch up: copycat existing technology (even though, as is the case here, our superior research universities led the development of the technology).

Its battery technology was developed at M.I.T., and for the last several years, the company had been making its lithium-ion cells in factories in Korea and China. When I asked Jason Forcier, the head of A123's automotive division, why the company went to Asia to make its products, Forcier said he had no choice. "That's where the supply base was," he said. "That's where the know-how was — it was nonexistent in the U.S."

Repatriating a high-tech manufacturing plant to the United States is not simply a matter of hiring the local talent. It requires good-old foreign know-how. "We call it 'copy exact,' " Forcier said. "We bought a company in Korea that had the technology around this type of battery and had developed the manufacturing process there. We basically brought that here, copied it exactly and scaled it up." A123 also brought a team of six Korean engineers to help transfer the technology to the U.S. and sent a team of Americans to Korea to learn.

And it talks about the stakes of this industry.

In 2009, the U.S. made less than 2 percent of the world's lithium-ion batteries. By 2015, the Department of Energy projects that, thanks mostly to the government's recent largess, the United States will have the capacity to produce 40 percent of them. Whichever country figures out how to lead in the production of lithium-ion batteries will be well positioned to capture "a large piece of the world's future economic prosperity," says Arun Majumdar, the head of the Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E). The batteries, he stressed, are essential to the future of the global-transportation business and to a variety of clean-energy industries.

#### [snip]

"If vehicle electrification really does take off, as many, many people think it will, and we're not part of it, then we could lose our leadership of the global automobile industry." Which would be catastrophic. By some estimates, as much as 20 percent of all manufacturing jobs are directly or indirectly related to the automobile industry. Bloom points out that the United States is not the only country betting on batteries; a number of Asian countries have done so as well.

On both sides of the world, the fundamental appeal of expanding manufacturing is jobs. It is a curiosity of modern life that information companies can create extraordinary social disruptions and vast shareholder wealth but relatively few jobs. Facebook has about 2,000 employees worldwide. Google has about 29,000. Even in its new, slimmed-down state, General Motors, a decidedly less valuable company, has about 200,000 employees. What's more, that number represents only a fraction of the people behind the production of a G.M. car. "When you're manufacturing anything, even if the work is done by robots and machines, there's an incredible value chain involved," Susan Hockfield, the president of M.I.T., says. "Manufacturing is simply this huge engine of job creation."

Finally, the article cites skeptics that this investment will pay off.

Menahem Anderman, a California-based consultant, says that transforming 10 percent of the world's automobiles into either plug-in hybrids or electric vehicles by 2020 is a pipe dream. His projection is for less than 2 percent. U.S.-based factories, he says, are at a disadvantage. The U.S. industry, he told me, "was not ready to take in \$2 billion from the government and spend it wisely. And so now we will build a lot of plants, and we will create overcapacity, and a lot of the companies will fail." He has no ideological objection to federal support, he adds, "but the status of the technology and the market were incompatible with the desire of the government to create manufacturing jobs." For pure electric vehicles in particular, which will likely need an expensive battery replacement within 10 years, Anderman still sees the dilemma Patil faced at Ford in the '90s, when he questioned whether consumers would pay \$10,000 more for an inferior car. As Anderman puts it: "Has there ever been, in the modern history of capitalist countries, a new product for which the mainstream customer paid more for less?"

Now, the article leaves out a few pieces of this story that I believe are key.

In the long run, the bailout of GM will play a key role in whether electric vehicles take off in this country or not. That's because you need a certain amount of investment in the

infrastructure-plug in stations-before electric vehicles can become widely viable. Had the only players here been Nissan and Fisker, you would have had cities and utility companies raising the same questions battery manufacturers were: a question about market and long-term commitment that would justify investing funds into that infrastructure. But the fact that GM has been leading a lot of these negotiations (it has been talking to cities and utilities for years), the fact that it didn't drop the Volt program even as it went through bankruptcy, and the fact that the US government was a partial owner of GM as it conducted these discussions made it a lot easier to kick start investment in infrastructure.

Then there's my concern that KORUS will counteract our efforts here. I will explain this in greater depth at some point, but the terms of KORUS make it more likely, IMO, that South Korea will become the center of electric vehicle production because (as the article points out) it already leads in the battery realm and that is the key component.

Finally, the article doesn't look at policy choices the federal government makes that can affect the viability of this market. Obama has pushed manufacturers to agree to increased CAFE standards which, to some degree will require a sustained commitment to this technology.

But there's something more it could do.

#### The impact of gas taxes on automotive choice

Which brings me to this debate between Kevin Drum and Matt Yglesias.

Drum started by arguing that—if a bunch of assumptions about the tie between oil prices and recessions are correct—then peak oil will constrain growth.

If this model is accurate—and if the ceiling on global oil production really is around 90 mbd and can be expanded only slowly—it means that every time the global economy starts to reach even moderate growth rates, demand for oil will quickly bump up against supply constraints, prices will spike, and we'll be thrown back into recession

Yglesias responded by advocating using the gas tax to make it possible to invest elsewhere.

But instead of raising the flat per gallon fee, would could [sic] change it to a percentage tax like a regular sales tax. That way, an increase in the price of oil would lead to an increase in the price of gasoline which would lead to an increase in the gas tax. On its own, that would make the situation even worse. But the increase in tax revenue could be used to offset something else. For example, the payroll tax could be set to fall automatically any time high oil prices led to "extra" gas tax revenue. That way oil price spikes would generate an automatic subsidy to production and employment.

In a piece mostly explaining the role of peak oil on growth, Drum dismisses Yglesias' call to respond to this problem through gas taxes.

This is not something that can be tamed with gasoline taxes in the United States or anything similar. It's a global phenomenon. But it's all the more reason we should be making Manhattan Project kinds of commitments to developing alternative energy sources and reducing our economy's dependence on oil. There's plenty of lowhanging fruit in the areas of conservation and increased efficiency, and no reason to waste any more time arguing about it. At the very least, we should be doing the easy stuff.

To which Yglesias response with (IMO) a much more reasonable discussion of gas taxes.

I find this kind of breezy dismissal of higher gasoline taxes to be quite frustrating. For one thing, it's just not the case that some amazing technological breakthrough is required for people to have less gasoline-intensive lifestyles:

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The technologies deployed in France-shorter commutes, lighter cars, trains, and buses-don't require a massive R&D effort to implement. They require some investment in transit, they require a lot of changes to land use regulation, and they require people to receive a clear signal that saving money on gasoline by purchasing a lighter car and/or living closer to work is a good idea.

Meanwhile, if Congress were sitting around atop a giant pile of money, I feel certain that they could be relatively easily persuaded to disburse it on a giant alternative energy R&D effort.

To which Drum responded,

To be a little clearer, though, the point I was trying to make in bold is that our global oil constraints are driven largely by increasing demand in developing countries, so things like higher American gasoline taxes aren't likely to have a big effect on the broad dynamic caused by bumping up against limited oil supplies. Higher gas taxes would curb demand a bit in the U.S., but developing countries would just suck up the excess and we'd end up right back where we started. Beyond that, however, there's roughly zero difference between Matt and me. It's absolutely true that we could substantially reduce oil use without a technological breakthrough. It's absolutely true that this would insulate us a bit from volatile oil prices. And it's absolutely true that gasoline taxes could be used to fund lots of basic research that might produce a holy energy grail someday.

Still, until we get that technological breakthrough, it's worth keeping in mind that we probably can't insulate ourselves from global oil dynamics more than modestly.

Now, I think Yglesias' second take here is the closest to right. And I think one of the best ways to ensure our investment in battery plants pays off (along with rethinking KORUS) is a gas tax. That is the "clear signal" the government can send to consumers that they should invest in these technologies.

Back when I first test drove the Volt, the folks behind the program said one of the best things the government could do to encourage the success of the Volt—and with it now, the battery technology we've invested in—would be to raise gas taxes.

Right now, most Americans (the middle class that will have to buy cars to sustain the industry) think of car prices in terms of cost of ownership. So they're only going to buy an efficient car if that efficiency pays off in their monthly costs. But that means most buyers think of efficiency as "cheapness," which often means the cars with the best efficiency payoff (right now, compacts) are packaged to be "cheap" (as in, cheap stereo, fewer bells and whistles). This, in turn, makes it a lot harder to profit off these cars. (Cheap has to be cheap!)

The quickest way to change this calculation—the quickest way to make the majority of Americans perceive efficiency (whether it is hybrid or electric technology) as a feature valuable all by itself is if gas prices are a lot higher. And you can do that with gas taxes (though I'd do the opposite of what Yglesias has suggested, and make sure that gas prices stayed at a reliably high level, with the taxes from them going into R&D).

That, of course, is what France and the rest of Europe and most of the rest of the world already does. So it's not that gas taxes would have some future payoff—they already have a payoff in other countries in getting people to choose more efficient cars.

If we want to protect our nascent battery

industry—with the manufacturing expertise and the jobs that it might represent—we're going to need to do something to ensure that America's 310 million consumers will support it. And that's why—in spite of the fact that it's unlikely to happen—a gas tax should be a more central part of the debate.

## Obama appoints Alan Krueger to replace Austan Goolsbee

Which brings me, finally, to a tiny sign that Obama might actually be getting serious about jobs. Today he announced the nomination of Princeton economist Alan Krueger. The WSJ describes his background this way:

The work he has done in academia ranges from attempts to explain why job growth wasn't stronger during the 2000s, to findings that increases in the minimum wage don't depress employment, to a work showing that terrorists often come from middle-class—and often college-educated—backgrounds.

While at Treasury, Mr. Krueger worked on analyses of a variety of programs, including tax incentives to encourage employers to hire the employed, the "cash for clunkers" initiative to jump-start auto purchases and Build America taxable municipal bonds.

Now, I await others to weigh in on Krueger (update: Atrios weighs in here), but he has, at least, been associated with one of Obama's policies—Cash for Clunkers—that provided the auto industry a jolt when it needed it. And while Republicans could well stall his confirmation like they do most confirmations, Krueger has been confirmed in recent years.

There is good news on the economy, if you know where to look for it. But to sustain it, the Obama Administration is going to have to continue to support the sector of the economy that is significantly driving that good news, manufacturing. Let's hope as the press increasingly covers the turnaround in the auto industry, the Obama Administration will choose to leverage that success for more of the same.