

The Meaning of VW

The German auto industry's woes are a tip-off that German industry is unprepared for the future.

BY WOLFGANG MÜNCHAU

In July, the Greek crisis dominated the news in Europe. Then came the Volkswagen crisis in August, and the Greek crisis suddenly disappeared. And then came the refugee crisis, which fused into a Merkel crisis. At that point, the Volkswagen crisis disappeared from consciousness.

But it may well be the most important of the three—at least in terms of its longer-term economic impact. The reason is the company's strategic position in Germany's political-industrial complex. For a country the size of Germany, with eighty million inhabitants and a gross domestic product of close to €3 trillion, the fate of any single company should not matter, however large it may be. Germany is not Finland. Volkswagen is not Nokia. But the answer is not that simple. There are a number of complex interdependencies, between the role of the car industry within the economy, between the position of Volkswagen within the car industry, and the role of the diesel technology for Volkswagen. The danger is not the potential demise of a world-famous company. This is about the death of the single most important value chain in the German economy.

To see this, let us first take a look at the company and the events that led up to the crisis. This is what we know so far. Volkswagen and other producers of diesel engine cars have realized for a number of years that they will find it increasingly hard to meet the tough U.S. and European emission standards. We know that both the German government and the

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Continued from page 11

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from the emission fraud. That would leave the company largely intact, with some bruises, and a notably lower budget for investments. This would, from the point of view of Volkswagen, be the best-case scenario, but as I explain below even that scenario is not good at all.

If the total damages reach twice that level, Volkswagen would have to start making divestments of various peripheral companies, such as the Man/Scania truck business, or the Bentley, Bugatti, and Lamborghini luxury brands. But if it gets more expensive than that, there is no way Volkswagen could stem the funding out of its own resources. It cannot really sell the companies of its core network—Audi, Skoda, and Seat—because they are all closely knit together, and use the same manufacturing platforms and just-in-time distribution networks. Once total damages reach \$100 billion or more, the company may have to file for bankruptcy, or beg for a bailout.

The size of the damages will be determined entirely in the United States. The friendly neighborhood regulator, the various agencies that deal with cars and environmental standards in Europe, lack the political clout, independence, and determination to crack down on a car company like Volkswagen. The legal system also favors the corporation. Germany has no concept of a corporate criminal law. Nor does German civil law have a concept of punitive damages. Surely, Volkswagen will have to take back

and repair the offending cars. The owners might get some compensation for the bother, but nothing punitive that would push Volkswagen over the brink. Only U.S. civil courts would be able to do that.

If Volkswagen were forced to pay damages that exceeded the value of the assets it could liquidize, I would expect the federal German government and the state of Lower Saxony to bail out the company. Each have a stake of 20 percent, so this could be disguised as a simple capital increase. Such a bailout would constitute a contravention of European law, but I cannot see the European Commission bearing down on Germany on an issue of overwhelming national interest.

But what then? And here is where all the scenarios are coming together. In the end, for the broader macroeconomic assessment, it does not matter what fines Volkswagen has to pay, or whether the company gets bailed out or not. What matters is that the diesel-based strategy on which Volkswagen and large parts of the European car industry have bet the house is no longer sustainable on environmental and marketing grounds. A letter from the European Commission environment agency has even gone so far as to state that diesel cars are the main reasons why European countries cannot hit their emission targets.

What we now have to factor in are the dynamics of German politics and the shifting preference of German car buyers. After ten years in office, Chancellor Angela Merkel's popularity has fallen because of her welcoming stance towards refugees. I see no acute threat to her position, but her political room for maneuver is weakening. A bailout of Volkswagen might happen, and might even be popular. But the German public will want the government to clean up the diesel technology—which is hard to do economically. The German government can help Volkswagen and other car companies make up for years of misguided investments in the wrong technologies. But they would all suddenly find themselves in competition with a new breed of companies, such as Google, which have a lot more know-how about electrical cars than traditional German carmakers.

The industry will thus enter a period of decline—albeit from a very high level. The official statistics underestimate the true size of the industry, because they do not include the massive amounts of purchases from outside the industry that were earmarked for the industry specifically. Volkswagen buys paints and plastics from a chemical company, and steel from a steel company. I saw one laborious study (ftp://ftp.zew.de/pub/zew-docs/gutachten/AutomobEndBericht_final.pdf), conducted about ten years ago by the Mannheim Centre for European Economic Research for the economics ministry, that meticulously calculated the inputs and outputs of various

industries. According to those results, the German car industry accounted for 7.7 percent of the value-added of the entire Germany economy, including the indirect effects. The next European country was Sweden with 4 percent, and most countries were in the 2 percent to 3 percent range. Even South Korea, another notorious auto economy, is only dependent on its car industry to the tune of 5 percent of value-added. The list is quite impressive in the way it shows Germany's outlier nature.

Because it is quite cumbersome to produce such a list, I have not seen any updated versions. Given that the German car industry has benefitted massively from the labor and welfare reform changes of the last decade, I would expect the share of value-added to be at least as high today. We should also keep in mind that it was one of Volkswagen's former directors, Peter Hartz, who wrote the labor reforms for then-Chancellor Gerhard Schröder.

Volkswagen, the German economy, and the political apparatus are all part of a linked chain: Volkswagen is the biggest car company in Germany. The car industry is the single biggest industry in Germany. And the entire industry, minus the luxury producers, bet their future on the diesel technology, and did so with the help and support of the government, which set a low fuel tax for diesel. The cartel worked for a long time. The government also helped the industry by cushioning the impact of European regulation and emission standards, making sure that the industry would pass the test. While elsewhere in the world manufacturers explored alternative technologies, like the Toyota's famous hybrid Prius, the German industry was

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convinced that it could survive on diesel alone—that it was just a matter of time, and adjustment (and software) for the diesel cars to meet even the most stringent standards, such as those in California.

Now look at this from a macro level. While the German car industry fooled itself into a false sense of security, the industry as a whole failed to invest in the future. Notably, they failed to invest in electric cars because they were part of the wrong cartel. The German government didn't supply the necessary infrastructure. You find more electrical charging stations in places like Mayfair, London,

than in any German city. It was not that an electric car was relatively uneconomical in Germany. It was essentially unusable. As the diesel cartel is breaking down, the positive discrimination against electrical cars can no longer be sustained. And as people hear about the true emissions of the cars they bought, they will ponder buying electric cars as alternatives.

The main macroeconomic effect will come through this channel: the buyers. Volkswagen buyers are people who keep their cars ten years or more. Over that period, it is far from clear that they will be able to recoup the higher cost of diesel engine production with a lower cost of subsidized fuel, when that subsidy is becoming increasingly hard to defend.

The German motor industry will not completely disappear, but it will not play the same role it was able to play when it ran the diesel cartel. German car engineers are highly skilled, but also highly specialized. When the market shifts from diesel to electric, the necessary skill sets shift from the mechanical engineer to the electrical engineer. Germany has some excellent people in this area as well, but not necessarily in the specific subsectors.

Volkswagen is now facing an impossible dilemma. To cope with this serious challenge, the company should really set aside the billions to invest in the new technologies. But in order to prepare for the damages that lie ahead, the company is now forced to do the opposite, and cut back on investment. This is not an environment in which Volkswagen will catch up with the likes of the Google car, and the more traditional type electric cars. And unlike Volkswagen, Google has been stepping up investments. If this incident hadn't happened, Volkswagen might have chosen to procure the new technology through acquisition. But now it is lacking the funds. More likely, Volkswagen would have continued to push the same diesel technology under the old management.

There are a number of scenarios in which the specific Volkswagen drama can end, but the broader macroeconomic point is the same. Germany and its car industry have failed to invest. And this is part of a broader German economic story. German GDP growth is supported primarily by the growth of net exports, and more recently through a pick-up in private demand—a strange side effect of a one-off fall in the rate of inflation. What is really shocking about the German economy over the last few years is the low rate of both private and public sector investment. I am not talking about motorway repairs, but a failure to invest in the next generation of technology. Everybody, public and private sector alike, overestimated their ability to run a cartel, underestimated the cost of a miscalculation, and failed to produce a plan B in case plan A didn't work out. ◆

European Commission also knew about discrepancies between measured results and actual emissions for at least two years. We also know that Bosch, the automotive supplier, warned Volkswagen as long ago as 2007 not to abuse its engine management software to circumvent emission tests. In other words, Bosch must have realized the abuse potential at least eight years ago.

From then onwards, the picture gets murkier. We know that a number of Volkswagen engineers manipulated the software so it would automatically rev down the engine when it detected an emissions test. It sounds like the cleverest exam-cheating device ever invented. And we know that they got found out—in the United States, of course. Discovery could never have happened in Europe, where the industry and those who regulate it form a close-knit community.

There is a lot we do not know yet. Most importantly, we do not yet know how many engineers were involved. The more people who are found have been involved, the more it will be possible for those seeking compensation to argue that this was a fraud committed by the company, not by individuals. On the other hand, if the fault is found to have been caused by a “rogue engineer,” the car industry equivalent of a rogue trader, the liability consequences may be very different. This is also why the company re-

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acts angrily to any news reports suggesting that the number of people involved could be much larger than what it has admitted. The current management of Volkswagen knows that the company would face existential risks if their now-ousted predecessors had been fully aware of what was happening.

The issue is currently under investigation—an internal investigation—so the result is hardly going to be surprising. Nor will it be legally relevant for any court. There is potential for information to be swept under the carpet, and I doubt very much that U.S. investigators, for



Part of the Volkswagen factory in Wolfsburg, Germany, its largest worldwide.

example, will have full independent access to all levels at the company.

While we do not know the number of people involved, we are still in a position to make some educated guesses because of the way the car industry works. A rogue trader in a bank works either alone or with a single accomplice. This is not possible in a car company. Most of the board members of Volkswagen are engineers. They are car geeks. I actually mean this as compliment. Many of those sitting on the boards of international banks do not have a clue what is happening on the trading floors. But car executives know their company, they know their industry, and they know their cars. New components go through lengthy approval cycles, as does software. The idea that a rogue engineer would bang in some secret code—for the benefit of the company but not for his own personal benefit—is completely absurd. The working assumption has to be that this must be a corporate fraud. To many of those who participated, it may not have appeared as a fraud precisely everybody in the department knew, including the boss, and his boss. But that does not change the nature of what happened.

The nature of the fraud also reveals quite a lot about the strengths and weaknesses of the German car industry. Germany is not, nor has it ever been, at the forefront of global information technology. But German engineers are supremely skilled at integrating information technology into their mechanical widgets—from GPS systems tightly

Continued on page 60

Continued from page 11

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