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Personal and Ethical Investment

VW is in the mire.
Is the European economy stuck too?
Would an ethical investment analysis have steered you clear?

There are important potential spill-over problems for investors from this debacle.

- **The auto industry is a key part of the European economy and many other industries are directly affected by the health of this industry. Is there a broader economic impact?**
- **VW is a very large company with a lot of debt – is there a potential systemic risk from VW going bust?**
- **Is this a win or a loss for Environmental, Social and Governance (ESG) analysis?**

Summary

- The risk to the European economy from a significant loss of market share by VW is tangible. If it transpires that other European manufacturers have been up to the same game then there is a very real threat to the fragile European recovery.
- VW does not appear to be going bust but it is likely to take years to recover.
- ESG analysis of the European auto sector would have given off some useful signals that might well have steered investors away from VW.

Is there a macro-economic risk to European recovery from this incident?

- The EU car industry produces about 13 million passenger cars a year, of which VW produce about 4.5 million.
- The broader auto industry directly employs 2 million people and indirectly supports about 12 million jobs.
- The auto industry accounts for about 7% of European GDP.
- VW passenger car sales represent 0.3% of European GDP.
- As the number of jobs supported by the auto industry is far greater than the number directly employed in it we could extrapolate the total contribution to GDP of VW passenger cars to something in the region of 1.8% of GDP.
- Therefore, a serious reduction in passenger car sales at VW (if lost to overseas competitors) presents a tangible risk to a tentative European economic recovery where economic growth is running at about only 1.2%. A 20% fall in sales at VW could have knock on effects of a fall in GDP of perhaps 0.4%.
- If the problem is present across other manufacturers, then the implication could be a significant slow-down in economic growth.

Is VW going bust and does this represent a systemic risk to financial markets?

Let's look at the potential scale of the impact on VW of the current problem. There are a lot of figures being thrown about for the potential cost to VW Group. They vary from about $6bn to $36bn but could be higher still.

Let's tighten this range up and break down the potential costs:

- In the US, the maximum fine is $37,500 per vehicle. There seems little reason for the US to be lenient, so on half a million cars that could be $18bn.
- There are half a million US car owners who have been sold a pup. These people will want to be compensated. Their cars are illegal and will have, perhaps, little or no residual value. It seems possible that VW will have to compensate the owners in some substantial way. Perhaps a full refund? Let's call that $20,000 each, which gets us to another $10bn.
- VW could be open to fines for corporate criminality. Difficult to put a number on that.
- VW are likely to suffer a substantial decline in sales in the US. VW passenger car sales revenue in the US is about $5bn. Operating margins are thin so the loss in profit might be less than $0.5bn but it seems likely that there will other losses associated so let's call it $1bn.
- VW Group has a number of other brands selling in the US including Audi, Bentley, and Porsche, not to mention the truck division. They also have a car production facility in the US which might or might not be affected. We will leave these out for now as they do not seem to be directly affected.
- There are a further 10.5 million vehicles outside the US that may require some form of recall and redress. Toyota's recall of 9 million vehicles in 2009/10 was reputed to have cost Toyota about $5bn. This was the costliest recall ever, but extrapolated to 10.5 million cars gives us a figure of about $6bn for VW. That's still only $570 per car which seems rather conservative to me but we will stick with that figure.

Tot it all up and we come to $35bn (EUR31bn) before any fines are levied outside the US and with only a fairly modest cost assumption for the non-US vehicle recall so this could be quite a bit higher in the end.

Is the situation in Europe the same as the US? Not really. The US NOx emissions limits vary from state to state but are generally more stringent than in Europe, so claims that the non-US vehicles are compliant in Europe might be true. Not only are the pass marks different between the US and Europe, but so are the tests. These differences will account for some variation in compliance between US and EU. So for the purposes of this brief analysis, it may be safer to assume that European car buyers and regulators have not been misled to the same extent as in the US. It is also worth noting that there are very legitimate reasons for 'real world' engine behaviour to differ from 'on-test' behaviour.

On the basis of these figures the potential fines would equate to about four years of operating profit, or more depending on the level of fines outside the US.

Could VW go bust? This is very unlikely. VW Group has total assets approaching EUR374bn though VW Group does already have very substantial borrowings. Fines of this scale would wipe out about a third of the Groups equity. This could cause VW significant problems depending on existing loan covenants though it would not on the face of it threaten VWs existence – perhaps just the shareholders' investments. VW shares are currently 30% down from their pre-crisis level so would appear to reflect this scale of reduction in equity. So if VW is not going bust there would not seem to be a systemic risk stemming from default on its bonds (VW has EUR140bn in financial liabilities and a further EUR138bn of other liabilities).

Would an ESG analysis have steered investors away from VW before the crisis broke?

I have written before about the three main strands of 'ethical' investing and their differing characteristics: Environmental, Social and Governance. This event transcends all three in monumental scale, but would ESG analysis have helped to avoid investment exposure to VW? Research using data provided by Bloomberg in 2013 placed VW/Audi/Porsche notably below Mercedes (owned by Daimler) and BMW but other global car manufacturers such as Ford, Toyota, Nissan fared worse on a general ESG scoring basis. From a global perspective, an ESG analysis would have made VW look fairly average. If you were taking a narrower pan-European view, this ESG scoring might have steered one away from VW towards BMW or Daimler.

If one had looked at the subject from the point of view of which firm was developing the most compliant cars, then BMW would probably have stood out as the cleaner manufacturer. The International Council on Clean Transportation (ICCT) that contributed towards the investigation into VW are quoted in Barclays' research highlighting the relative cleanliness of BMWs cars: *'According to a review by the ICCT last year, VW is not the only manufacturer that produces vehicles compliant with current diesel emissions standards but not with real life testing scenarios...BMW ...was the only manufacturer that was compliant throughout. (Source: Barclays)*

Barclays further says: *'This supports our thesis that BMW has spent the last few years investing the necessary money to obtain technologies that will propel it ahead in the race to achieve future emissions standards'.*

As I for one was not contemplating investing client's funds in any auto-manufacturer, I cannot honestly say which company an ESG analysis would or would not have directed me to, but I think that the above comments would have helped to inform a choice of investment. As it happens, both BMW and Daimler shares have performed significantly better than VW, even before the current crisis broke.

Sources: Volkswagen AG, Barclays research, European Automobile Manufacturers Association, ICCT, Morningstar.

If you are interested in learning more about integrating environmental, social and governance criteria into investment portfolios call Chris Redman on 01795 858 308.

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