

Supply Chain Risk – A Global Automotive Industry Viewpoint

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Introduction

For some years, the automotive industry has focused on creating just-in-time supply lines in order to drive costs down and reduce the working capital locked in the chain. Although this has created many benefits, it has also exposed companies to the potential of being held to ransom by sub-suppliers. This increased risk is heightened where a manufacturer single-sources a component from a financially weak supplier who then becomes subject to insolvency.

The commercial intentions of an office holder in any insolvency proceeding are similar across Europe, whatever the jurisdiction or process. The office holder will seek to exploit a customer's dependence on key components by demanding:

- An immediate cash payment to fund ongoing working capital requirements; and
- Some form of indemnity to cover any ongoing trading losses; and/or
- Increased prices to ensure profitability and enhance the potential value of the business.

The issue for the customer is that if he does not meet these requests then the company will cease supply, and production of a sub-assembly and ultimately a vehicle will stop. In essence, he is being held to ransom and has little option other than to accept the position and accede to the office holder's demands.

There have been a number of high-profile instances of manufacturers being challenged in this way by office holders, such as the Administrative Receivers of Transtec and UPF Thomson. In Transtec, the Administrative Receivers demanded price increases from Ford, which they resisted. Ford took the matter through the English Courts but judgment favoured the Administrative Receivers. This set a precedent, in certain circumstances, to enable office holders to use commercial advantage. Creditors of insolvent companies may argue that it is the duty of the office holder to use this advantage if it will enhance eventual realizations, although there may be no absolute obligation on a British office holder to do so, depending upon the nature of the appointment.

Until fairly recently this had been mainly a British phenomenon, but there have been substantial numbers of insolvencies of smaller companies with turnover in the range of EUR 15m to EUR 80m. This has been especially prevalent in Europe and in particular Germany and France. The instances of business failures is increasing and in reaction a number of Original Equipment Manufacturers (OEMs) and Tier 1 suppliers have set up insolvency teams to manage failures as they occur.

So what are the industry dynamics behind these failures?

The position of the automotive manufacturers (the OEMs)

Excess capacity combined with falling volumes is a major issue for all OEMs exposed to Western markets. The OEMs are seeking to take cost, volume risk and cash requirement out of the production and design processes. These are then being passed down the supply chain to the Tier 1 suppliers, who apply the same principles to Tier 2 suppliers etc.

Costs

- Suppliers are increasingly relocated in lower-cost countries in Eastern Europe and the Far East. This is especially the case for commodity components and/or those requiring high levels of labour or energy, which is expensive in the West. Such suppliers may be purely local or a JV with an existing global supplier. It is understood that at least one of the OEMs has now relocated over 50% of its suppliers to such low-cost countries.
- OEMs expect annual price reductions which usually are in the range of 4% to 8%. The expectation is that the supplier will find efficiencies in production. However, in the majority of cases, efficiencies are actually much lower and at least some of the reduction will be at the expense of the gross margin.
- It is very common for platforms to be shared across a number of models and sometimes between OEMs.

The effect of this is to reduce design and production costs over a higher volume. However, it also has the effect of reducing the number of suppliers, which increases the OEM's dependency on fewer suppliers.

- Most OEMs are engaged in electronic procurement, seeking to source global commodities based on the cheapest price available. In addition, it is not unusual to engage in on-line reverse auctions for both commodities and some items of plant and equipment. The effect of reverse auctions for the OEM is to achieve the lowest price possible on the day. For the supplier it reduces margins with the risk that if they are not successful then they will fall out of the supply chain.

Volume risk

- OEMs are increasingly outsourcing initial design work to the Tier 1 suppliers, who accept both responsibility and risk. The OEM will set out the initial design concept but the majority of the work will be carried out by external engineers. For component design, the OEM may stipulate that payment for design work will only be forthcoming if the component is accepted for production.
- Production is being outsourced to component suppliers who are responsible for the manufacture of large sub-assemblies which are delivered to the OEM within 48 hours of being used on the production line. The component supplier has to invest in production facilities, plant and machinery, and tooling, but he carries the risks of delays, lower production volumes and the early cancellation of model lines. The component supplier will also attract substantial penalties for any delays in deliveries. A poor track record can significantly affect the status and rating of that supplier.

Taking cash out

- The adoption of just-in-time principles has reduced the necessity for the OEM to hold stocks, reducing total working capital requirements. However, this has created increased reliance on suppliers to perform to very tight timescales.
- Two developments which are currently being considered by the OEMs are:
 - Pay-when-used principles. If enacted, this would result in suppliers only being paid when a component is actually used in production. Under current technology this is already possible.
 - Build-to-order, where a customer order is placed straight onto the production line for delivery within four to six weeks. The reduction in production lead times will require much lower

stock holdings within the OEM and the retail network, but it will create issues for the supplier in production planning and ordering.

The implications for the suppliers

It is the Tier 1 suppliers who have accepted the majority of the cost, volume and cash risks which were traditionally borne by the OEM. Together with the OEM they suffer the greatest impact when a supplier ceases production, but at the same time the Tier 1 suppliers are at risk of damages if they fail to maintain volumes into the OEMs' factories.

The implications for suppliers of the OEM's demands include:

Costs

- To be a successful commodity supplier, the company has to be the cheapest globally. Some suppliers have re-engineered their businesses to become technological innovators where margins are more robust, in order to create differentiation from the commodity approach.
- In reaction to the pressure to supply all an OEM's global facilities at the lowest costs, suppliers have had to invest substantial permanent funds and temporary working capital in overseas locations. At times this can stretch management teams who have to deal with increasingly complex operational and financial structures. Suppliers who do not invest are at risk of losing existing and future contracts.
- There are opportunities to pass price reductions down to sub-suppliers or not accept cost increases. A good recent example is where Tier 1 suppliers struggled to pass on the well-known increase in the global price of steel. However, to do so creates the risk of creating weakness in the supply chain. Efficiencies alone are not usually sufficient to absorb all demands for price reductions, which mean that if requests for reductions are not resisted, gross margins will be reduced. Sub-suppliers can get into a downward spiral of reducing profits (or increasing losses), inability to invest to take cost out, and worsening working capital, all of which will lead to failure.

Volume risk

- To stay within the supply chain, suppliers have to invest in R&D facilities for engineering as well as facilities to produce complex sub-assemblies. It is important that suppliers have access to substantial financial facilities to fund these activities. To mitigate risk it is important to be selective with the projects that are taken on. It can take up to four

years of production to recover any initial investment.

Taking cash out

- To be successful, suppliers also need to adopt just-in-time principles and look for opportunities to take cost out of their processes using lean principles. Build-to-order and pay-when-paid processes will create further pressures on the financial viability of the sector. Tier 1 suppliers will seek to pass these pressures down the supply chain but this will increase their own risk if it is not done with an assessment of the impact on their own suppliers.

Recognition of risk

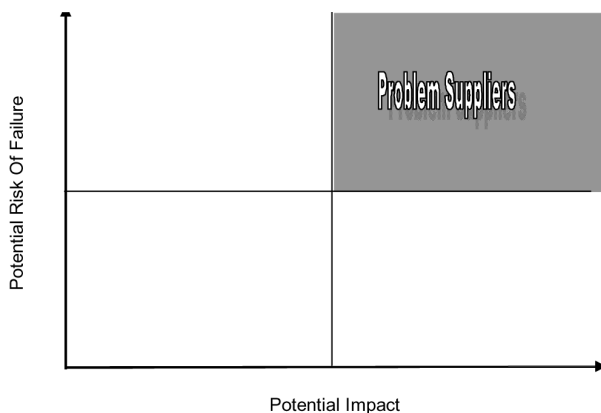
The OEMs, and the Tier 1 component suppliers, have created an industry where price, design, and volume risks have flowed down the supply chain. At the same time, the capital requirements of those in the supply chain are increasing. The strategies adopted over the past few years have created a large number of financially challenged suppliers, especially in the Tier 2 segment.

The OEMs and Tier 1 suppliers are starting to react to the number of failures by setting up insolvency teams. Unless properly resourced, they tend to be reactive to crisis rather than instrumental in managing the suppliers showing classic early warning signs.

There are four phases which a manufacturer needs to consider:

Phase 1

Creation of a risk and impact matrix:



Most manufacturers already have a good assessment of the potential impact of a supplier on their business. Outside advisors can add value by providing the manufacturer with an objective assessment of risk.

Phase 2

Having identified those suppliers who represent both a high risk of failure with a high impact ('problem suppliers'), the manufacturer needs to set up a process to mitigate the risk. This may involve exiting the supplier, dual sourcing or seeking ways to help the supplier to improve their business performance.

Phase 3

A continuous process is required, on a regular basis, to identify problem suppliers. Lessons in risk management techniques can be learnt from other industries such as banking or the insurance market.

Phase 4

Where the purchasing team identify a problem supplier, then a more detailed assessment and action plan needs to be made.

By adopting robust risk management processes, an organization can ensure that:

- It mitigates the potential for an unexpected failure within the supply chain;
- Contingency plans are ready if a supplier does fail;
- Continuity is ensured within the supply chain;
- The total costs, in terms of cash and management time in dealing with problem suppliers, are reduced; and
- The confidence of financial and equity stakeholders is improved.

An example of an unplanned failure: Peguform

Peguform was a major Tier 1 supplier in Germany, manufacturing bumpers and interior elements for a number of German OEMs. It was highly successful, profitable and cash generative.

The business was acquired by US-based Venture Group using leveraged financing. To meet the resulting capital and interest payments, funds were repatriated from the German operation to the US. The Group found it increasingly difficult to meet payments to the bondholders and in Germany the operating company started to delay payments to suppliers.

In May 2002 credit insurers to Peguform's supplier base refused to provide any further cover and management filed for insolvency due to illiquidity, as required by German law.

The Insolvency Administrator contacted the OEMs and threatened to cease production. The OEMs had become the bank of last resort and had no option other than to accede to the Administrator's demands. The result was that they:

- Injected circa EUR 100m by way of a loan;
- Accepted price increases;

- Guaranteed leasing contracts in excess of EUR 100m;
- Underwrote trading losses.

Although the OEMs recovered the majority of their advances when the business was sold, it still proved to be a costly exercise for them in terms of cash and management resources. The importance of Peguform in the OEM's supply chains was such that their on-going support was vital and this in turn enhanced the marketability of the business.

If Peguform had been subject to a risk review, the nature of the highly leveraged transaction, the requirements of the bondholders and the delay in payments to suppliers would all have acted as early warning indicators of the impending crisis. This may have provided the OEMs with sufficient time to prepare their contingency plans so that the Administrator's commercial leverage in the eventual insolvency was reduced. Given sufficient notice, the business failure may not have been an issue at all.

Conclusion

We have seen how the requirements of the OEMs have impacted on the stability of the supply chain and the potential consequences for both the OEM and the Tier 1 suppliers when a sub-supplier fails. The automotive supply chain has become a risk industry where failures within the Tier 2 sector have become commonplace.

The OEMs and Tier 1 suppliers are investing substantial cash and management resources in managing problem suppliers when they fail. Many have yet to implement the risk management procedures which we see in other industries. We believe that the increasing level of insolvencies will eventually place this issue close to the top of the agenda of the manufacturers. How soon this will happen and how they will react we have yet to see.