

## Working Capital - Seeing a Broader Picture

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*How should companies address working capital management following global changes in the economy and in industry structures?*

The current financial crisis has highlighted the critical importance of working capital. However, for many companies, working capital management is still viewed as a purely operational issue, concerned with collection efficiency, inventory management and the payables process, as opposed to being a core part of corporate strategy.

However, the economic environment in many industries has changed enormously since the time when a company was 'only' buying raw materials, manufacturing and selling goods.

In 1991, Richard Coase received a Nobel Prize in economics for a theory of the firm, based mainly on the concept of transaction cost - i.e. the overriding reason for a firm's existence is because there are costs of putting together different market participants, costs that might be lower within a single firm structure than in the broader market. With this realisation, supply chain management and co-operation become much more important, with better technology and information facilitating the change. In fact, many industries have developed a model where original equipment manufacturers (OEMs) have become 'platform companies'. The concept of a platform company was defined by research firm GaveKal in 2005 as a company that: "Produces nowhere but sells everywhere...Platform companies know where the clients are and what they want and where the producers are. Platform companies then simply organise the ordering by the clients and the delivery by the producers (and the placing of their logo on the product just before delivery)."

Modern technology applied to supply chain collaboration arguably makes it possible for many companies to operate without significant negative operational consequences. However, the last time the system came under stress, even well-run, hi-tech companies suffered massive inventory write-downs, due to the 'bullwhip' effect, caused by information distortion in the supply chain.

However, with the financial crisis and the resulting changes taking place in the wider economy, there is a strong likelihood of reversal in this trend because:

1. Transaction costs are going up substantially.
2. The cost of credit has gone up and, even more importantly, its availability has been reduced.
3. The ability to mitigate credit risk has been affected by both the withdrawal of credit insurance and the increased difficulty in obtaining traditional financial products such as bank guarantees and letters of credit. A company with a high degree of consolidation in either sourcing or distribution, which is often the best arrangement from an operational point of view, represents a high concentration in terms of both credit and operational risk. While the platform company model should provide substantial risk mitigation, the reality is that often most of its business partners would not have enough capital to absorb a material shock.

In practice, in many industries, we can see companies that look good based upon their stand-alone financials may be almost fully dependant on a few players on the supply side, such as contract manufacturers, as well as on the distribution side. Even supposedly diversified companies can have massive exposure to companies operating under very similar business models with expected high default correlation.

### **Outsourcing financing?**

In fact, consciously or unconsciously, platform companies have outsourced their own financing up and down the chain.

This even happens at macro level. Asian manufacturers were indirectly funding their US channel / consumption through lending by their governments to the US government. In 2004, Grant's Interest Rate Observer described this as: "an unholy partnership with its Asian creditors. They would produce; we would consume...the US and its lenders have entered into the biggest vendor-financing scheme in the history of borrowing and lending".

In traditional cases (i.e. direct selling to a large number of diversified customers) the receivables side of working capital would often entail the lowest relative risk of the three components. This is providing there is a prudent credit policy, a low concentration at company or industry level and no major operational issues, such as product quality. If payment terms are relatively short, say, 30 days and the average default rate in the whole economy goes up to 12% per annum (the worst-case scenario), bad debt only represents around 1% of total sales.

With a reasonable credit policy, including the ability and willingness to withdraw supply before any bankruptcy occurs, any such losses are likely to be substantially lower.

However, this risk increases significantly if there is a high company or industry concentration within receivables. For example, if one customer represents 50% of a supplier's sales, the customer's bankruptcy may even lead to the bankruptcy of the supplier due to an immediate loss of the receivable, probably a similar level of loss on any customer-specific unsold inventory, and 50% drop in sales and margins overall unless a suitable replacement or replacements can be found quickly. In addition, industry or regional concentration could well lead to a high correlation between defaults, and an abnormally high default rate compared to the broader economy.

The credit risk of customers is insurable, at least in theory. Having a credit insurance policy will smooth the impact of defaults, even more so where there are any industry or regional concentrations, as outlined above. Even though the availability of cover has been reduced, on

a highly diversified portfolio, both by industry and geography, it is still manageable - overall reduction of cover will rarely exceed 10%. If there are losses, the insurance premiums will go up in the longer term, but the short-term effect is mitigated. However, especially in current market conditions, obtaining insurance on a very highly concentrated portfolio of buyers is likely to be more difficult and expensive compared with more diversified sales. On a highly concentrated portfolio, therefore, the effect of the withdrawal of cover is likely to be correspondingly more dramatic.

A delay in payments from customers, as distinct from outright non-payment, represents a more serious situation. Firstly, there are immediate cash flow implications, which are very significant at a time of reduced credit/financing availability. Secondly, if tolerated, this means a substantially higher exposure to particular names, which, again might be especially important in concentrated, uninsured exposures, where such cases most frequently occur.

The core issue is where such longer payment times are not caused by customer internal issues, such as a customer trying to improve their own working capital, but by the supplier itself. This could be caused by quality problems, contractual disputes or slow or unreliable logistics. This normally means the risk is not insurable, as insurance normally just covers the credit risk of the buying customer, such as bankruptcy or inability to pay - it does not cover non-payment due to contractual dispute. It also means that the risk is not financeable, or not financeable at an affordable rate. It may also indicate significant communication and operational breakdown within the selling organisation.

#### **Maintaining A/P**

The accounts payable (A/P) element is an extremely important part of a company's financing, and technically often the easiest to lose, rather like an overdraft. The withdrawal of cover by suppliers could potentially trigger an almost instantaneous bankruptcy, even for a relatively healthy company. In the banking industry, the equivalent would be a run on a bank - suppliers are in some ways the equivalent of depositors, but without deposit protection schemes. Historically, academic studies showed that trade credit increases during periods of monetary contraction as suppliers help their customers when other credit is not available. However, with around 35% of European companies using credit insurance, the decision to cancel a limit is often made by the insurer rather than the supplier. Technically, a supplier would normally be under no obligation to withdraw credit if there were no overdue insured receivables - new supply deliveries would just go uninsured. But in practice, most suppliers would choose not to extend credit if their insurer withdrew cover. In fact, some suppliers do not even have the infrastructure to make credit decisions, as they effectively outsource the whole process to the insurer. The withdrawal of cover has triggered a number of high-profile distressed cases. If longer terms were based on available financing, such as factoring, invoice discounting and securitisation and this financing is subsequently withdrawn, suppliers may well have a strong incentive to reduce terms, but this is less of an issue, given that only some 5% of total receivables is financed by these methods.

Many credit analysts seem to ignore a company's vulnerability to supplier credit, broadly assuming working capital to be constant in their models. Recent events, particularly with withdrawal of credit insurance cover for certain retailers, shows this risk should never be ignored.

#### **Working Capital - Measures Beyond General Operational Efficiency**

In addition to general operational measures (collection practices, dispute resolution, inventory controls, better forecasting accuracy, to name a few), we believe the following measures should be considered:

- Use of financing tools, where allowed and efficient.
- Redesigning the supply chain in distribution, manufacturing and service companies.
- Changing the product mix.
- Changing the business model.

#### **Use of financing tools**

The receivables book (especially in a low-dispute environment, where it is possible to obtain confirmation of contractual performance before the due date), combined with credit insurance, where available, may allow a company to finance itself in respect of these assets, often at rates below anything else available at the market. This option may be especially valuable in two situations:

1. A highly concentrated portfolio with several high-quality, investment grade buyers, preferably with the ability to obtain confirmation of goods acceptance (either on its own, normally easy to do on high value shipments, or through the supply chain financing programme of the buyer).
2. A highly diversified portfolio, which can be enhanced through credit insurance or over-collateralisation.

As always, the terms of the deal are critically important, in particular the exact circumstances of lender recourse, deal triggers and credit line consumption (i.e. if the lender marks such a facility against the seller's credit line, it will not be available for other needs.) This would not be an issue where such credit lines are readily available, but when financing is scarce, one needs to ensure this is an optimal use. Using receivables financing and effectively selling the terms to buyers can be a very profitable business, but it requires a careful analysis of what could happen if you change terms assuming financing will be available, only for it to be restricted or withdrawn at a later date.

Similarly, a company with a good credit standing and sufficient credit facilities can offer financing to its own suppliers through a supply-chain financing programme. This could have multiple benefits including margin. An early payment discount (EPD) could significantly exceed the cost of the programme and lowers the potential risk of supplier default as the supplier's own working capital would be healthier. However, if a supplier's credit is wholly or largely based on financing tools, either arranged directly by the supplier, in typical factoring, or obtained indirectly through the buyer that it is short term funding with various triggers. The potential risks of this arrangement need to be carefully analysed and understood.

The other interesting aspect of a new supply chain structure is the ability to select the best point of financing in the chain. For example, many leveraged buyout (LBO) companies may not raise additional debt or sell assets with receivables included above a certain covenant threshold without asking for a waiver, which is usually a complicated and expensive process. However, their distributors or suppliers are not subject to similar restrictions. For example, where an LBO company sells to a distributor on 60-day terms, and the distributor in turn has 30 days' inventory and 30 days' receivables from customers (i.e. the distributor has a zero-day cash-conversion cycle). If the distributor is able to arrange independent finance for all of its receivables, it can pay the LBO company in 30 days, although it would need to pass on the cost of such financing back to the LBO company, perhaps via a discount received for early payment. The net effect is a leveraged company effectively with secured financing (through working capital) of half of its receivable book, without any priority issues or covenant breaches. This is one way to provide what is effectively debtor in possession (DIP) financing without formally [leveraging] the company.

In fact, an efficiently-financed distributor - who acts as the intermediary - may be a solution for a supply chain problem where the supplier is unable to implement its own receivables financing programme, including participation in the buyer's SCF programmes, because of covenants or other reasons, while the buyer is unable to pay earlier.

**Redesigning the supply chain in distribution, manufacturing or service companies.**

If we consider one of the core functions of a supply chain to be the outsourcing of financing, we need to select partners who are efficient at this. For most CEOs, the design of the distribution structure is viewed as a marketing question, based solely on the ability to sell product. This could subsequently become a challenge for the credit and collections departments, as to whether they can collect anything and, if so, when. In one of my previous roles, changing most of the distribution structure in a particular region, in a joint project between sales and finance, led not only to a significant reduction of risk and better cash flows, it also led to an a sizeable increase in sales and customer satisfaction. In particular, the shape of the distribution structure should be a function of the ability to finance. If a company has either its own funds or the ability to put together an effective receivables finance program, it would be better with direct sales, as this leads to substantially lower concentrations, better risk management and better access to finance. If, however, a company does not itself have access to competitively-priced financing, then having in the chain a large and well-financed distributor - and one not constrained by covenants and therefore able to finance its receivables portfolio as and when it wishes - may be a more efficient way to outsource financing (see example above).

On the supplier's side, the ability to extend terms to a private equity-owned or a distressed company is often more a function of risk appetite than cash flow. As credit insurance is used by 35% of European companies, it is critical to map insurance coverage for current and prospective suppliers, in order to understand the impact of a potential withdrawal. It also helps distinguish between suppliers who rely solely on insurance and those who follow their own independent assessment. The company will need to ensure good communication and information flow with both. In addition, it is vitally important to analyse and monitor the performance risk of suppliers. This includes, but is not limited to, their credit risk. Even if supplier goes into administration or other insolvency regime, it might not necessarily be in creditor's best interest to stop supply. For example, if a particular subsidiary would be better sold as a going concern, it is likely that supply would continue. But there might be other risks that could outweigh credit risk, for example if contractual penalties are lower than the cost of continuing supply.

The degree to which working capital affects supply chain redesign can differ from company to company, with availability and cost of working capital and risk tolerance being key considerations.

Figure 1: Distribution Example 1

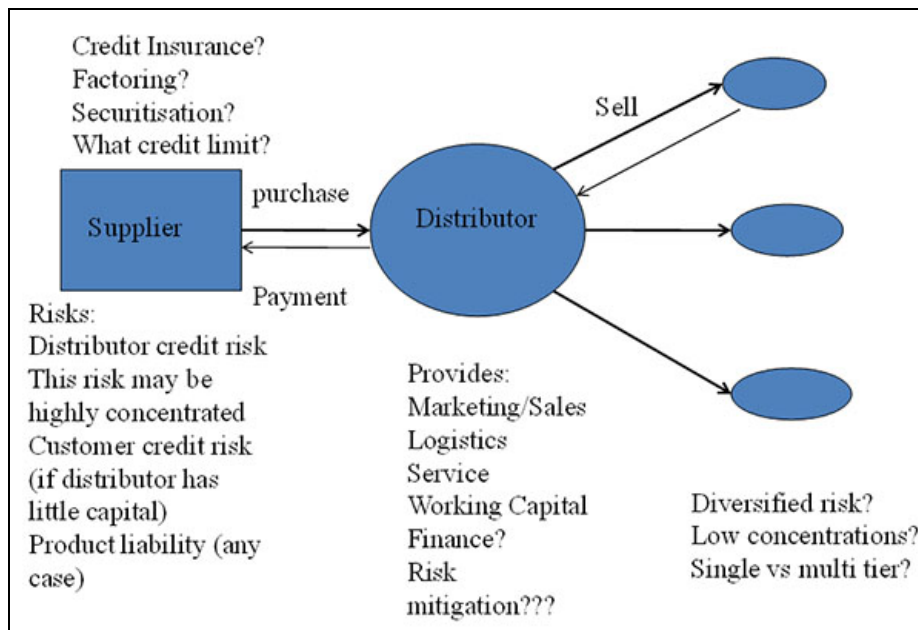
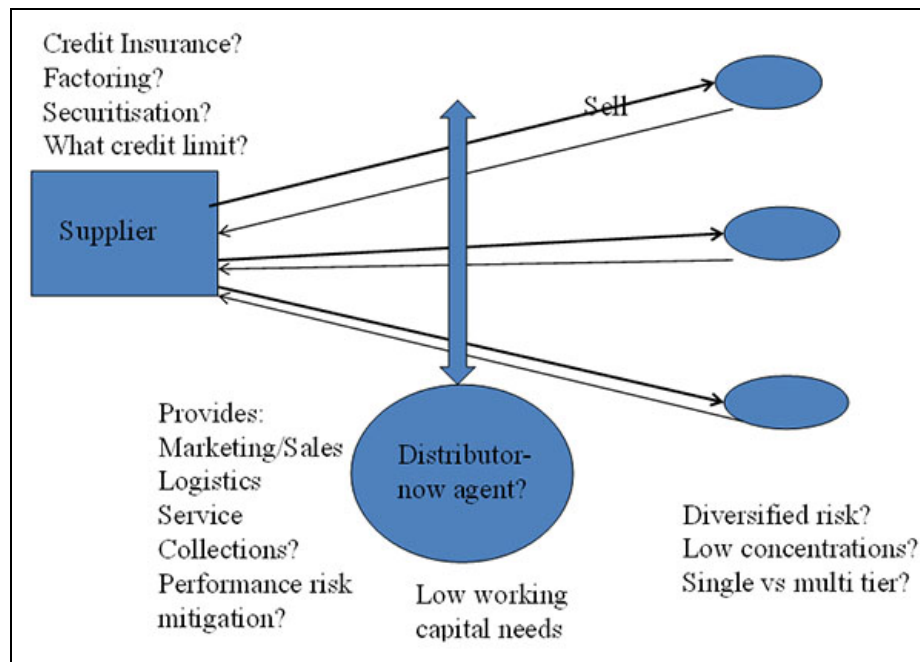


Figure 2: Distribution Example 2



### Changing the product mix

Not every company monitors even basic profitability by individual product line, and even fewer appear to monitor working capital implications. While the precise extent may be industry-specific, it is generally recognised that particular parts of the product mix place a large drag on working capital. This can be caused, for example, by longer production times, by associated services to the customer, such as installation, system integration, training, complicated customer logistics, consolidation issues (i.e. you can only bill when all components of the order are in place), by the need to pre-pay the supplier, etc. These product lines may or may not be essential and/or highly profitable - in which case a detailed structural analyses could help to re-define the business. With working capital becoming a scarcer resource, the design of appropriate monitoring and evaluation systems, including implied costs, risk scoring, etc. to link working capital to product mix decisions, should be a high financial priority for many companies.

### Changing the business model

Finally, the business needs to review its business model. The classical model is capital-intensive: you buy materials, thereby creating A/P, store/process these materials, creating inventory, and then sell the end product, creating accounts receivable (A/R). This model, however, may not be optimal from either a risk and or a cost standpoint. One alternative would be to move to a service-based model, where business is redefined as providing a service, rather than purely buying or selling. In the case of a distribution company, this would be a move to a commissionaire/agent structure, where the company is selling goods on behalf of a supplier for a fee, handling marketing, logistics, collections, etc. as necessary, but never taking legal title to the underlying products.

In the case of a manufacturing company, it could move to a type of contract manufacturing structure, where the company receives components from a customer and processes them for a fee. Many individuals do this when ordering a suit or a dress, for example, bringing the material and paying for a service. It is also used widely in the commodities sector - one example would be tolling contracts in aluminium industry. Strangely, so far it has been less used in the electronics industry, where a majority of contract manufacturing is done on a buy-sell model (even when OEMs are procuring components for contract manufacturers). Obviously, a change of model requires consideration of both legal aspects, such as the European Agents Directive and tax aspects, which are beneficial in some jurisdictions, if correctly structured. In general, however, this structure reflects current supply chain design, and is also substantially more economical on working capital and significantly reduces risk throughout the chain.

### Vertical Integration

Ultimately, many companies are faced with the whole of their supply chain (upwards or downwards) becoming exceptionally high risk, involving high concentration, large switching costs and the inability to mitigate these risks. In such cases, vertical integration is likely to be the most sensible strategy, especially where other companies involved in the chain are available at low valuations. From a working capital perspective, such acquisitions may even be cash-flow positive, particularly where a distributor cannot finance its own receivables. This may be because of the high degree of its performance risk, meaning most banks would be unwilling to offer credit facilities, but once it is acquired it may be financed by the acquirer. Arguably, the best option would be for its receivables just to be dropped into the acquirer's financing/insurance programmes.

Similarly, one needs to look at the relative cost of vertical acquisition for a company's own suppliers. If a supplier's credit risk is high, if the cost of switching to another supplier is high, and if the supplier's weak credit drives costs up, as its own suppliers in turn do not want to

give it credit. If other financing is very expensive if at all available, and if the acquisition cost is lower than the switching cost, especially if instant savings can be achieved on the cost of financing, then vertical integration seems to be the most viable strategy.

## Conclusion

Fundamental structural changes in the economy and industry structure, combined with the credit crunch, require a broader view of working capital. While 'stand-alone' operational improvements and the use of basic financing tools are important, companies increasingly need to link working capital management with corporate strategy. This should include the design of the distribution/supply chain, adjusting product mix or changing the business model if necessary, or even vertical integration. Working capital strength has always been a good indicator of operational strength. Now, it is also becoming both indicator and driver for strategic decisions such as product mix, design of distribution and supply chain, business model and vertical integration decisions. Working capital experts in both corporates and banks will have an important place at the table when such decisions are made, but in order to do this efficiently they need to understand the broader picture.

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