Risk management in procurement – new challenges or new opportunities?

Strategic commodity risk management survey 2010-2011
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Survey background
This survey was conducted in 2010/2011 with 169 respondents. The survey is a collaboration between:

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Supporting purchasing institutes

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ADACI in Italy
AERCE in Spain
BMÖ in Austria
Centrale Paris – Achats & Supply Chain in France
DILF in Denmark
NIMA in Norway
HALPIM in Hungary
NEVI in the Netherlands
SILF in Sweden
ZNS in Slovenia
ÖPVZ in Austria
Risk management in procurement – new challenges or new opportunities?

Survey 2011

Executive summary

This Whitepaper is being written as oil prices close in on the level of $110-120 per barrel; the UN Food & Agriculture Organisation’s Food Commodity Price Index breaks through to its highest ever level; and with copper and iron ore at all-time highs. Many had hoped that a benign benefit of recession would be a slowing down in the commodities super cycle of sharply rising prices. Alas, not so. For companies exposed to commodities or commodity driven products strategic commodity risk management is therefore of huge importance.

The aim of the survey is to uncover current practice within strategic commodity risk management in European companies. We all know there is a big difference between companies procurement maturity levels – this survey shows that the differences within strategic commodity risk management are extreme.

Key findings

1. 45% of companies have no commodity risk strategy in purchasing on how to address their total spend.

2. Risk management is characterised by sub-optimisation – 69% have commodity risk co-ordinated by purchasing and 65% currency risk by finance. Only approximately 30% have an integrated approach.

3. Only on 56% of the spend there is a deep understanding of cost drivers behind major categories.

4. 50% of the respondents have a strategy for dealing with risk on energy – 50% have no strategy.

5. 50% of the companies do quantify the bottom line effect of price fluctuation on essential commodities. 50% of companies do not do this. 30% have no systematic cost driver analysis and 40% only do it yearly, or less frequently.

6. 70% of the respondents don’t have defined procedures for execution of hedging via financial markets.

7. Renegotiation is taking place with fixed frequency driven by contract expiry date and not based on a dynamic commodity market analysis. Timing really matters. Yet 76% have a fixed approach, rather than flexing it to reflect commodity market dynamics.

8. Prime sources of commodity price forecasts are the suppliers. 78% list suppliers as prime source!

9. 46% of the companies have no intention of developing a commodity risk strategy. If you are one of these companies, we would suggest that the last one out turns off the lights.

10. There seems to be a harsh selection race going on between those companies who take commodity risk management seriously and those who don’t. We know from several case studies that the difference in financial performance between laggards and best in class is in the range of 50-75% measured as bottom line impact. There is no other area in a typical manufacturing company where the ROI is as high as in the strategic commodity risk management area. But of course you need to insert coins to hit jackpot! We recommend you rather do that today than tomorrow!

Enjoy the reading of this whitepaper – we guarantee you a very high ROI if you actually act on the recommendations on page 28-31.
Survey demography and reference model
The distribution of the size of the respondent companies is shown in figure 1. The company-size is divided into three groups: 35% small, 40% medium-sized and 25% large companies.

A total of 17 countries have participated in this survey. The origin distribution of the respondents is illustrated in figure 2.

As seen from figure 2, the most respondents originate from Denmark and the Netherlands. The top 4 countries (Denmark, Netherlands, Austria and France) account for 77% of respondents providing the survey with a well-diversified origin fundament.

Those who have completed the questionnaire are primarily manufacturing companies – which are shown in figure 3.
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Figure 4 shows that a 40/60 ratio between direct and non-direct spend is the profile among most respondents.

From figure 4 it can be concluded that, Direct (BOM goods) covers 40% of spend and indirect categories cover 60% of the respondent companies spend. There are large deviations in spend on direct vs. indirect but many companies tend to share the 40/60 distribution. The total spend covered by this survey is €226 bn.

**Reference model**

This commodity risk survey is built around our reference model, which covers key dimensions of commodity risk management within purchasing. This reference model is depicted in figure 5.
Risk management direction setting
3. Risk management direction setting

Many companies have a risk and/or commodity risk strategy, however spend of more than €80 bn has no directional setting when it comes to commodity risk.

Figure 6 shows that an average of 38% of the respondents has developed a risk strategy, and that the larger corporations are further developed in this field than the small and medium size corporations.

Further, figure 7 shows that an average of 55% of the respondents has a commodity risk strategy in the purchasing department and that all three groups show roughly equal responses to this question.

From figure 6 and 7 it can be concluded that 31% of the respondents have neither a companywide risk strategy nor a commodity risk strategy in purchasing. 24% has both. 45% of the respondents have no commodity risk strategy in purchasing on how to address their total spend of more than €80 bn, which is depicted in the red box in figure 7.

The companywide risk strategies reflect the traditional focus areas such as budget accuracy, which is shown by figure 8.

The major focus of the companywide risk management strategy is based on figure 8 to:

- Minimise budget deviations
- Increase probability of strategy realisation
- Secure income stability

Almost all respondents who have a companywide risk strategy incorporate these focus areas in their risk management strategy.
Figure 9 however shows that the purchasing department is focusing on “beating” the market. What can be concluded and drawn from this is that the risk appetite within the companies differs and needs to be aligned.

The major focus of the commodity risk strategy in the purchasing department is based on figure 9 to:

- Save cost
- Limit commodity price increases
- ‘Beat the commodity market’

The focus area in the purchasing risk strategy is much more aggressive than that of the company wide risk strategy, and we see a need to align focus on whether companies want to ‘beat the commodity market’ or have accurate and predictable financial figures.

Figure 10 shows that commodity risk is primarily handled in the purchasing department and 41% of respondents work cross-functionally with commodity risk management.

Based on figure 10 it is found that 69% of the respondents have commodity risk management coordinated in the purchasing department:

- 52% is handled at a department level
- 25% is individually handled by the category manager

The 25% is considered too high a number. The individual can take actions that he/she finds necessary to reduce risk on the specific commodity without considering how this will affect the risk of the whole department or company. An individual’s action to hedge risk could lead to an increased overall risk for the depart-
3. Risk management direction setting

Figure 11. Who manages the currency risk management in your company?

Moreover, 20% of the respondents have the financial department managing the commodity risk and further analysis shows that 41% has commodity risk management shared between several departments.

The currency risk is, however found to be primarily handled by the finance department and 34% of respondents work cross-functionally with currency risk management. This is found in Figure 11.

65% of the respondents have the finance department managing currency risk, whereas 24% of the respondents have purchasing managing currency risk. Further analysis shows that 34% of the respondents share currency risk management between several departments. The results from the above figures are that:

- Commodity risks are managed in purchasing
- Currency risks are managed in finance

It is of great importance that the commodity risk and currency risk are better coordinated at a corporate level as the development in the commodity markets are closely linked to the development in the currency markets. Therefore, to create a corporate level view of the overall risk management of the company, there is a need to use both commodity and currency data. The previous strategy analysis shows increasing tasks for the purchasing department, however, the purchasing department seems understaffed which is depicted in figure 12.

From figure 12 it is found that the spend handled by employees for sourcing, analysis, etc. in the purchasing department:
Some people
act on market gossip and gut feelings

Wise people
act on facts

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The online Commodity Risk Portal
- Commodity Market Analyses including Price Trend Forecasts
- VaR - Risk Management Engine
- Supplier Input Cost Tracker
- Training and Consultancy

Customer references
3. Risk management direction setting

- Average €168 m is handled by one FTE
- Low is €1.25 m handled by one FTE
- High is €529 m handled by one FTE

Potential exists because respondents have limited understanding of cost drivers behind major categories which is the conclusion from figure 13.

The respondents’ insights to the cost drivers of the suppliers are focused on:

- Direct spend
- Packaging
- Logistics
- Energy

Respondents have limited insights into other categories which account for 44% of total spend. And among those companies with poor or no insight it equals more than €45 bn. Therefore, further cost driver understanding is believed to realise significant potentials.

Further potential exist as figure 14 shows that when respondents have knowledge about category cost drivers only 53% use it for fact based negotiations and only 19% use it to change current risk exposure!

From figure 14 it is found than knowledge about category cost drivers is used for:

- Fact based negotiations (53%)
- Change of risk exposure (19%)
- Making an overview of risk exposure (53%)
- Input to a future contract strategy (57%)

It seems that cost driver information is often used for analysis (making an overview of risk exposure and input to a future contract strategy). This suggests that vital information more often is used for value creating activities (e.g. limit risks or reduce costs).
Risk analyses
There seems to be a classic focus on supply, supplier and commodity risks. Currency and energy risks are surprisingly not in focus which is illustrated in figure 15.

The focuses for procurement risk are found to be the classic and expected ones:

- Supply risks – 79% of respondents
- Supplier risks – 79% of respondents
- Commodity risks – 70% of respondents

Currency and energy risks are considered high on probability and impact. However, only half of the respondents focus on these risks. From figure 16, there is good correlation between estimated impact/probability and focus. The immediate conclusion to the results shown in figure 15 is that companies are found to do the right thing.

Considering the significant link between many categories and commodity fluctuation, respondents have a surprisingly limited focus on managing commodity risks, even on key categories – which is found from figure 16.

The questions concerning the companies spend are divided into the following categories:

- CAPEX (machines, buildings, etc.)
- Direct (steel-, plastics-, electronic-based spend, etc.)
- Packaging (metal-, glass-, paper based spend, etc.)
- Energy (oil, gas, electricity, etc.)
- Facility (cleaning, Insurance, etc.)
- IT & telecommunication (software, hardware, telecommunication, etc.)
- Capital costs (creditors, debitors)
4. Risk analyses

Figure 16. In which of the following categories do you work actively with risk management with the purpose of managing the commodity exposure, such as identification, evaluation, response, etc.?

- Logistics (transport, warehouse, etc.)
- Marketing (printing, commercials, market-research, etc.)
- MRO (maintenance, spare parts, indirect materials, etc.)
- Personnel (recruitment, training, clothing, etc.)
- Professional services (audit, consulting, travel, etc.)

Figure 16 shows that direct, energy, logistics and packaging are considered the most risky spend-categories. 75% of the respondent companies work actively with managing their risk management in direct purchasing. However, only 49% of the companies work actively with risk management in their energy purchasing despite the fact that this category is considered to be one of the most risky. 32% of the companies work actively with managing their logistics and packaging risk, which also are considered to be categories connected with the highest risk. Thus, the greater majority of the companies has and is considering that these important and risky categories can have a significant effect on the bottom line and that there is a great probability of heavy fluctuations in the commodities markets. However they have not yet begun working actively with managing their risk. Among the other spend-categories less than 1/5 of the respondent companies do not work actively with risk management.

The category focus for active risk management is:

- Direct – 75% of respondents
- Energy – 49% of respondents
- Logistics and packaging – 32% of respondents

Though energy is a major category, more than 50% does not focus on managing commodity risk on energy. Also logistics and packaging focus seem too low
4. Risk analyses

Considering the huge commodity dependency.

Figure 17 shows that the bottom line consequences of fluctuations in the commodity markets are only quantified in 50% of the respondent companies.

50% of the companies have quantified their exposure of fluctuations in the commodity markets and their impact on the bottom line – the other half has done nothing.

Further analysis shows that an amount of more than €93 bn is the amount of spend not accounted for. The impact on the bottom line of a 10% decrease or increase in commodities is therefore unknown. Note that those who have not quantified commodity risks are both small, medium and large size companies.

Figure 18 shows that more than 30% of the respondent companies have not made and does not make systematic cost driver analysis. Further, more than 40% make the update on the break-down on a yearly basis or even more rarely. Considering the volatility in the commodity markets this update frequency seems too seldom as this indicates that behaviour is based on old figures and not fact based.

Figure 19 and Figure 20 show that there is only sporadic analysis and low update frequency of the size of spend that can be attributed to commodities:

Forecasting commodity prices are widely used and seem – surprisingly – to be based on structured analysis, which figure 20 and figure 21 show.

80% of the respondents consider structured commodity forecasts on market development, which is considered very positive.

Figure 21 shows that these commodity price forecasts are primarily based on:

- Fundamental analysis
- Macroeconomic analysis

We find it positive that indexation and projections based on current prices are not found widely used.
Risk actions
Figure 22 shows that tools for risk mitigation actions are primarily fixed price and indexed contracts with suppliers.

Risk mitigation actions are primarily fixed price and indexed contracts with suppliers. Further, more than 40% of the larger respondent companies hedge via financial markets - smaller companies rarely hedge via financial markets. 24% hedges by building inventory.

To our surprise figure 23 and figure 24 show that only about 20% of the respondents have procedures defined for hedging via financial markets and contractual hedging.

26% has defined procedures for hedging via financial markets, whereas 17% has defined procedures for contractual hedging. Large companies have a higher proportion of defined procedures for hedging, but the majority of the companies do not have any procedures for execution of hedging or do not know whether they have one.
Taking a closer look at the financial hedging procedures, we see a substantial use of several levers, which is seen in figure 25.

The procedures for hedging via financial markets cover:

- Limitation of the minimal part of spend that should be hedged
- Limitation of the maximal part of spend that can be hedged
- Maximum time frame
- Applicable financial instruments (options, warrant, futures, forwards, etc.)

Primarily smaller companies limit the minimal amount of spend that should be hedged. This is probably due to the fact that they cannot carry the risk themselves.

The majority of customer and supplier contracts have a balanced structure when it comes to commodity risks. However, based on the levels of coordination and analysis it seems to be pure luck as illustrated in figure 26.

The majority of those companies who primarily have fixed price agreements with customers also have fixed price agreements with suppliers. Thus the contract structure is well-balanced and hence a limited risk. 21% does not have a balanced contract structure and is therefore significantly exposed to commodity risks.

From figure 27, companies are found to use cost drivers index for index-based price agreements, which is the right thing to do.

It is great to find that companies primarily use price indices for cost drivers in index-based prices agreements. It is often seen that consumer price indices are used (however, not in this survey). The reason not to use consumer price index is that they do not correspond to actual price developments or at best they change too late.
Turning to direct spend, renegotiation is found from figure 29 to take place with fixed frequency and is not based on commodity analysis.

50% of the respondent companies renegotiate their direct spend categories at regular intervals pending on the supplier agreement. We recommend that renegotiation is based on commodity market analysis, however only 24% is found to use this method from figure 28! Moreover, the size of direct spend relative to total spend does not seem to influence the renegotiation timing.

The same tendency goes for energy spend. Figure 29 shows that renegotiation is taking place with fixed frequency and is not based on a commodity analysis.

46% of the respondent companies renegotiate their energy spend categories at regular intervals pending the supplier agreement. We recommend that renegotiation is based on commodity analysis, however only 22% is found to use this method on energy costs based in figure 29. The size of energy spend relative to total spend seems to call for more correct handling of energy spend – that is renegotiation based on analysis.

Further analysis shows the same tendency on all spend categories (as seen on direct and energy spend).

The most valuable effort in category management at portfolio-level is the ability to source the different categories under the most favourable market conditions. The price level differences in commodity markets and commodity driven markets often make out a difference in the area of 50-100% price difference – not even the world’s best sourcing process can make this kind of impact on your spend. Timing in the specific category as well as timing at portfolio level combined with the appropriate contract strategy is what makes the difference. It goes without saying that if the expiry date is the prime tricker for entering the market, paramount opportunities are missed.
Supporting methods, tools and systems
Finance and sales only participate in meetings regarding commodity prices in about 25% of the respondent companies which is found from figure 30.

From figure 31, only 55% of the respondent companies are found to arrange cross-functional meetings about commodity price risk. At those meetings purchasing department and top management are most often the participants. This is seen in figure 31.

It is found alarming that finance and sales only participate in respectively 50% and 39% of the meetings that are actually held regarding commodity prices risk.

Suppliers and research institutes are the major providers of commodity price forecasts for the respondent companies. This is seen in figure 32.

The results from the questionnaire in figure 32 are: 78% gets commodity price forecasts from research suppliers → this is quite understandable but not good as suppliers interests can conflict with the interests of the company.

69% gets commodity price forecasts from research institutes → this is a positive signal as research institutes are often the most objective sources available, which reduces the risk of receiving biased information regarding price forecasts.

52% gets commodity price forecasts from news media → The information from news media is often fragmented and event driven tending to focus too much on individual and often random events.

42% gets commodity price forecasts from banks → one should be careful about using price forecasts from banks, as banks are not always completely objective and have their own interest and positions in the market.

24% gets commodity price forecasts from customers → Customers seldom have the big picture of what’s going on 2-3 levels further upstream in the supply chain – there are exceptions – but they are rare.
Commodity risk management is extremely critical to business success, however, apart from a limited elite group, there are only limited efforts to focus on the area in the companies questioned and analysed in this survey. Over the last 5-6 years we have seen abnormal commodity price fluctuations and it seems as this tendency is increasing if we evaluate the current market situation. This survey shows that the task of managing commodity risk lies with purchasing. This survey also shows that 45% of purchasing departments do not have a commodity risk strategy. Therefore we find it disturbing that 46% of those companies who do not have a commodity risk management strategy do not intend to develop one. This is shown in figure 33.

Volatility is high. However, the main survey conclusion is that commodity risk management is hot in the leading companies, but there are a larger proportion of the companies that have not had the wake-up call yet. It is timely for the top management team to review how the company can develop a more disciplined and skilled approach to price risk.

Where to start depends on your current position – here are our recommendations:

1. Laggard steps to success
   - Immediately begin to collaborate with finance and top management on building the business case of risk management and establish a baseline for your current risk exposure within commodities and currencies based on the VaR – value at risk methodology.
   - Develop a plan sponsored and funded by top management to close the gap. The plan should include:
     - Quantitative risk measurements based on VaR
     - Desired risk profile based on risk capacity and risk appetite
     - Risk mitigation strategies including risk responses
     - Governance, procedures, processes and policies
     - Reporting, controlling and compliance procedures
     - Automated off limit monitoring and alert system

2. Industry average steps to success
   - Immediately begin to collaborate with finance and start measuring (and reporting) regularly on commodity and currency risks at category and portfolio level – Start to quantify risk based on VaR – value
Compass
– The web-based comprehensive competence assessment system

Compass is a comprehensive competency assessment solution for procurement. Individuals assess their competencies against ideal role profiles, these assessments are compared with managers views, gaps against the ideal profile are identified and prioritised, and personal development plans produced.

Each organisation is unique, with its own challenges, structure, objectives, job specification and strategic initiatives. We work with our clients to customise our competency framework to fully match with their specific needs. The on-line competency assessment is carried out through a mixture of self-assessment and interviews.

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Compass procurement competency assessment structure

There is a significant amount of depth to the Future Purchasing competency framework. This structure is built into the Compass tool, but can be modified to suit specific client requirements.
The accountability for commodity price risk management lies squarely with procurement, but it must be integrated with the currency responsibility of finance. The two are inter-dependent, with currency fluctuations having a huge impact on commodity prices.

Adopt online access to updated market data and analysis so that the function 24/7 is on top of the situation in regards to the volatile commodity markets – monthly or quarterly reports are insufficient with the current level of volatility. Apply innovative analytical tools.

at risk methodology. There is often unclear governance and confused roles between finance and procurement in their leadership responsibilities. The accountability for commodity price risk management lies squarely with procurement, but it must be integrated with the currency responsibility of finance. The two are inter-dependent, with currency fluctuations having a huge impact on commodity prices. This calls for much closer co-operation, with regular reviews of volatile markets being essential. As a minimum there should be a monthly review cycle and a bi-annual commodity operating plan. Also, because many companies are now focused at sub-category management, they may have an inadequate cross-category perspective. That has to be addressed. One option is to build centres of excellence, commodity by commodity.

- Develop a desired risk profile including risk limits.
- Develop and implement risk mitigation strategies and actions – The main board, corporate risk management groups, the finance function and procurement leadership team should be extremely focused on this, if the VaR is unacceptably high. Unfortunately many companies have no idea how to calculate this, and there is often a complete absence of focus, direction and action planning.
- Establish governance regarding, processes, policies and procedures regarding risk management.
- Establish a plan to drive regular, formal and informal communications between procurement, finance and other key stakeholders.
- Integrate the risk management aspect into your category management, contract strategies and supplier management concepts and processes.
- Establish automatic past performance monitoring on contracting and hedging decisions benchmarked against the market and alternatives.
- Conduct formal competence assessment in the area of strategic commodity risk management and financial risk management.
- Build up capability within the procurement function in the area of commodity risk management financial risk management through training and recruitment activities.
- Adopt online access to updated market data and analysis so that the function 24/7 is on top of the situation in regards to the volatile commodity markets – monthly or quarterly reports are insufficient with the current level of volatility. Apply innovative analytical tools. There can be a huge return on investment from using much stronger analytics. Far too many companies have limited understanding of the cost drivers behind major commodities. Decision-making needs to be fact-based, and draw on fundamental and business cycle analysis (proper analysis of the macro drivers of supply and demand); technical analysis and contract timing (interpreting early market signals and relative strength indicators warning of forthcoming rises or
falls in price); online access to price data feeds; dynamic contract strategy (e.g. fixed vs. floating pricing); and the full range of hedging strategies and financial instruments.

3. Best-in-class steps to success

- Establish automated simulation capability in order to support decisions on hedging programs.
- Establish automated monitoring and alerts on off-limit risks.
- Mitigate risk and manage supplier risk management performance by implementing an enterprise-wide supplier risk management program and work more collaboratively with key suppliers to mitigate risk on tier 1+2 level.
- Expand the risk management approach to category/product cost driver level for finished and semi-finished products.
- Build up capability in the area of integrative approaches in contracting strategy to balance the triangle of category strategy/supplier strategy/risk sharing strategy.
- Start to work with risk issues with your most important suppliers in the same way you do it in the case of cost, quality etc. It must be built in to your supplier-selection processes as well as your supplier performance management cycle. Risk is the mother of cost – the risk dialogue is more important than the dialogue regarding 2-5% cost improvement year on year.
- Staff categories strategically in order to ensure the best fit between the category strategy and the personality of the category manager.
- Investigate possibilities of derivatives for non hedgeable commodities/products e.g. plastics/oil.

In today’s economic climate, competitive advantage is no longer only tied to time-to-market, process efficiency and cost control. Risk management has come to the fore as both a protective posture and potential weapon. Companies that are able to quantify and foresee potential commodity and currency risks, establish coherent policy and mitigation plans, and share information with all key stakeholders, will without doubt achieve significantly higher overall performance. /
Imagine you could measure and report on your commodity/currency net portfolio risk – and everything is being automatically updated 24/7

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