



Simply Treasury

WHITE PAPER

FOCUS

**CORRELATED CURRENCY AND
COMMODITY RISK MANAGEMENT**

—

HOW TO OPTIMIZE IT SIMPLY?

SPOTLIGHT

VOICES OF THE INDUSTRY

DESPITE TECHNOLOGY EVOLUTION, THERE ARE STILL PAIN POINTS IN TREASURY

“The management of the risk of fluctuating commodity prices should be integrated into the broader framework of treasury management, as its volatility, hedging methods and financial or accounting approach and patterns are intimately linked. In our opinion, it is a mistake to manage these two essential risks separately (especially since the start of the war in Ukraine and the COVID crisis)”.

Marco Pescarolo, FERRERO

AUTOMATION TO PREVENT RISKS

“Even though a commodity specialist may not be a treasurer, treasury department is best placed to oversee the management of this particular risk, which has become crucial to remain competitive and profitable due to the volatility of the environment”.

Fabrizio DICEMBRE, Finegan

DIGITAL POWERS OF SIGNATURE TO GAIN TIME

“Commodity risk management is far from simple. Entrusting it to specialists seems sound. However, who better than a treasurer equipped with the right tools to manage this type of risk? And if there are no dedicated tool, time to consider new emerging solutions”.

François Masquelier, EACT

François Masquelier

Chairman of Luxembourg Treasury Association, ATEL and Vice-Chairman of EACT



©360Crossmedia

INTRODUCTION

Maintaining banking relationships requires the exchange of documents



Market risk, one of the most important for treasurers. Commodity price risk is consistently a top concern for treasury and risk management officers (according to last year's European surveys

- see EACT annual survey or PwC global survey). We always think about FX when we see “market risks”. However, it covers many other risks as Interest Rates and Commodities. But, as treasurers are already managing FX and interest rate risk, arguments can be made for adding commodity price exposure to the fold. It is even more accurate when IT applications now enable to manage both in a same solution. We can notice that eventually, treasury is increasingly becoming more involved or even responsible for managing commodity exposures. Treasurers are well fit for commodity hedging programs. Nevertheless, treasury risk managers who have not previously handled commodity hedging will need to be educated or to get knowledges and basis on certain areas. A treasurer needs to understand perfectly which commodity derivative will best match the underlying risk being hedged. Treasurers also must be equipped in tools to (fair) value the hedging instruments and register underlying risks to apply hedge accounting. Furthermore, it is important to fully understand the different reference prices for

commodities and why prices vary. With commodities, we must nonetheless keep in mind the storage and transportation issues, which can or is physical. It is rather different and more complicated compared to electronically managed OTC derivatives. This part of commodity management must be handled by logistic and operations (when the delivery is included into the product – which is not always the case). Another important problem is the potential absence of financial hedging instruments and indices for the commodity risk you want to hedge. Therefore, treasurers must find the closest commodity and best correlated to the commodity risk they want to protect (e.g., Brent for jet fuel or, price of natural gas to be used in a product in Chicago is likely to be based on the NGI Chicago Citygate natural gas price rather than the NYMEX Henry Hub price). Although sometimes the hedging instrument is not perfectly correlated, it should be partly correlated to mitigate risks. And while both price indices which normally closely correlate over time, a local disruption in one market can always arise in a large spike in price with very little movement in the other market. This is a major difference as locational variances are not observed in currency prices.

INFOGRAPHICS

FOCUS

RISK MANAGEMENT IS #5 PRIORITY FOR TREASURERS

Risk Management (incl. FX and commodity risks) is ranked

#5th

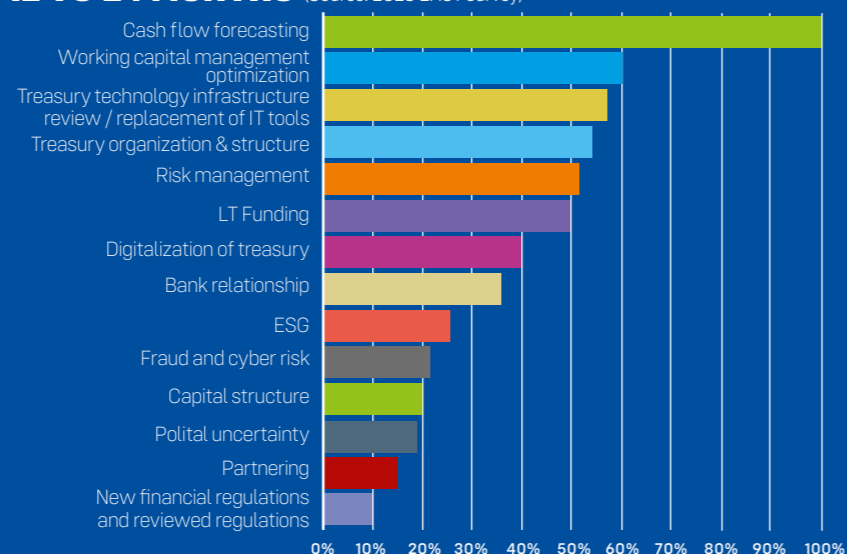
It reflects the current situation of CFOs & Treasurers in a fast-changing environment.

Therefore, we are not surprised to see **Cash-Flow Forecasting as number one priority.**

Of course, it includes FX and commodity risks. We also know that the **working capital optimization** (number 2 priority) can be explained by need for additional funding and it is the prime source a company should play on. **The financial supply chain has been disrupted** several times over last years, for several unexpected reasons. **It may impact production and inventory of commodities.**

Eventually, the **IT systems replacement and digital transformation** are also highly ranked (i.e., number 3 & number 7). Typically, **risk management, still highly manual requires automation for getting efficiency and enhancing internal controls.**

TREASURERS MAJOR PRIORITIES OVER THE NEXT 12 TO 24 MONTHS (Source: 2023 EACT survey)



“ **Applied to Risk Management, CFOs need to centralize management of risks, to get access to real-time dashboard and reports, to easily revalue and stress-test portfolios, to manage more dynamically FX and other financial risks. For achieving these objectives, they need to recourse to API's, fintech's and automation solution in the cloud.** ”

François Masquelier, Chair of EACT

TOP 3

OF GREATEST INTEREST YOUR TREASURY OVER THE NEXT 12 TO 24 MONTHS (Source: 2023 EACT survey)

1. Centralisation & standardisation
2. Real time reporting and dashboarding
3. Real time liquidity

IDENTIFYING FINANCIAL RISKS

Geopolitical, economic, health and demographic events have a direct impact on financial markets, and consequently on SME's. The international financial environment is subject to strong variations on the foreign exchange and commodities markets. It is difficult for companies to anticipate these erratic movements which directly impact their sales, purchases and therefore their gross margins, whilst these margins are under high pressure given a fierce competition. Experience shows that major currencies fluctuate up or down by about 10% per year. While we see even greater volatility in commodity prices, their volatility averages around 30% over a 90-day horizon. For example, Brent crude oil can vary by 300% in 1 year, Nickel varied in recent past by 60% in 6 months, CO2 is also fluctuating over time up to 70% + and we could continue a long list of volatile underlying assets. It is therefore important to identify the financial risks that can strongly influence the company's results. We should not underestimate the correlation between currency risks and commodity risks. They are intimately linked. For example, oil is linked to the US dollar (USD), iron ore to the Australian dollar (AUD), gold to the Indian rupee (INR), agricultural raw materials to the Canadian dollar (CAD), etc... Correlation is a fact treasurers or CFOs must contemplate and analyze. The currency and/or commodity risks are important because of their magnitude and high probability of occurrence. These risks affect the value and profitability of companies, whether they are financial, industrial, or commercial.

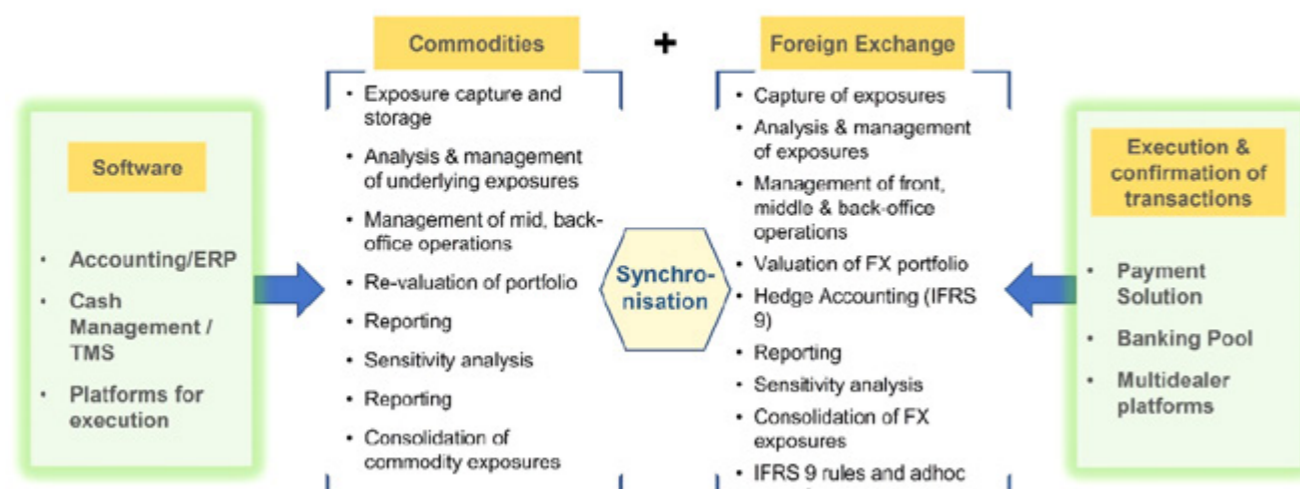
KNOWING YOUR EXPOSURE (KYE)

Identifying risks is an essential, but not sufficient, prerequisite for any risk management. There are 4 main sources of financial risks we can distinguish: (1) Those arising from industrial and commercial operations, commonly known as industrial and commercial risks; (2) those directly linked to the functioning of financial markets and their operations; (3) those inherent to operational techniques and operators; and (4) those attributable to the management mode. The last thing to tolerate would be to lose money due to financial market fluctuations, without reacting. to the Canadian dollar (CAD), etc... Correlation is a fact treasurers or CFOs must contemplate and analyze. The currency and/or commodity risks are important because of their magnitude and high probability of occurrence. These risks affect the value and profitability of companies, whether they are financial, industrial, or commercial.

HOW TO APPROACH HEDGING OF FX RISK?

An economic approach, hedging operations (forward transactions, vanilla options) aim to protect the company against random market fluctuations that could penalize its results or reduce the value of its assets. It allows to compensate or reduce potential losses that the company could suffer on the spot market, on the day of the purchase or sale of its real asset. In this approach, the objective is to protect the asset from possible exchange rate fluctuations. The company does not seek to make a gain but to protect its margin. It is the main objective of any treasurer. When the hedging transaction is settled, the company will pay or receive the price guaranteed by the hedging instrument. If market conditions are unfavorable at the time of settlement, the company will be satisfied with its hedge. On the other hand, if market conditions are favorable, the company will have missed out on a profit (i.e., opportunity gain). But and it is essential, no one could have known or guessed the price levels at the outset. The company wants always to cover its operating margin to the management mode. The last thing to tolerate would be to lose money due to financial market fluctuations, without reacting. to the Canadian dollar (CAD), etc... Correlation is a fact treasurers or CFOs must contemplate and analyze. The currency and/or commodity risks are important because of their magnitude and high probability of occurrence. These risks affect the value and profitability of companies, whether they are financial, industrial, or commercial.

COMMODITY (AND RELATED FX TRANSACTIONS) MANAGEMENT



EVOLVING AND EFFECTIVE METHODOLOGY

Why setting up a dynamic hedging strategy? What are the objectives pursued? There are multiple and complementary. The company may try to cover the totality of the position to be managed, to systematically protect the target price, the reference price, the worst-case price, or its budget price. It may try to keep enough flexibility to take advantage of favorable evolutions or to absorb the risks on the amounts to be managed. Under these conditions, building a strategy within the framework of dynamic management means combining different available hedging instruments to meet the criteria mentioned above. The choice of the instruments and their respective weight in the strategy will condition the quality and the efficiency of this necessary dynamic management.

THEREFORE, HOW TO ACHIEVE IT?

The simplest strategy consists in combining forward transactions with what we could call "stop-losses". These are predetermined parity levels which, if reached, should trigger forward transactions. For example, let's imagine a strategy as followed: 30% of the position to be hedged sold forward at market conditions, i.e., 1.20 EUR/USD; 70% of the position kept open but protected by the following stop losses; 20% to be sold forward if the price reaches 1.18 EUR/USD; 25% to be sold forward if the price reaches 1.16 EUR/USD.

HOW TO ASSESS COMMODITY RISKS THE BEST?

1. Identification of commodity contracts with direct and correlated risks (close link with procurement / purchase department / operations) and interface with the Commodity Hedging Management tool (i.e., CHM).
2. Quantification of expected commodity purchase volumes.
3. Simulation of volatility of commodity pricing.
4. Calculation of projected commodity exposure.
5. Definition of strategies to manage or mitigate the exposure (based on internal policies and risk appetite – which must be aligned to FX policy).
6. Integration of contracts with collective commodity exposure.
7. Assessment of the aggregate impact.
8. With a proper assessment, you can enter in ad hoc hedging instrument strategies.

Olivier Lechevalier
CEO of Defthedge

INTERVIEW

“Market risk is one of the most important for treasurers. Commodity price risk is consistently a top concern for treasury and risk management officers, according to last year’s European survey” says Olivier Lechevalier, CEO of Defthedge.



WHAT SMES NEED?

- Pieces of information about markets and economic overviews
- Revaluation tools (upon demand).
- Data storage of commodity hedging instruments, and related FX hedges.
- Technical and financial support when they don't have dedicated treasurer.
- Ad hoc financial and accounting reporting.
- Interfacing of the commodity risk solution to the ERP and other IT solutions.
- A global better understanding and monitoring of commodity risks.

First, now that we have identified the risks, are there any SaaS solutions that could simplify the life of treasurers or better yet CFOs of SMEs without a dedicated treasurer? Aren't there enough FX/Commodity solutions for everyone?

There are many solutions available for managing financial risks, and especially foreign exchange risks. These are more or less expensive, easy to deploy and more or less simple for a company to use. At present, only Defthedge is as easy to implement as Excel, and reasonably priced too. As far as commodity risk management is concerned, this is a risk that is more difficult to monitor, control and manage on a day-to-day basis. That's why we created this innovative solution, to democratize risk management and make it available to CFOs, treasurers and buyers in a collaborative tool.

But beyond an FX and commodity management tool, aren't CFOs looking for a decision support tool, which is often missing?

Indeed, financial managers are looking for tools to manage financial risks. In general, they lack the ability to value simple or complex hedging instruments live or on closing rates, to display the relationship between orders, invoices, and settlements, to match these last elements to the hedge, to obtain clear

reporting for the various company functions dedicated to accounting, consolidation, treasury and general management. Finally, there is generally a lack of real financial risk experts to support customers in implementing the tool. We propose a solution to these initial shortcomings.

Often, we have seen CFOs of medium-sized companies manage their commodity risks on spreadsheets? Is this still acceptable? What would be the risks of managing these risks in XL?

It's amazing to see companies tracking their risks in an Excel spreadsheet. We regularly see Excel spreadsheets managing close to a billion dollars' worth of risks. Data entry and copying errors are common.

The main risks are as follows:

- Calculation errors: there is always an error within a sheet on a calculation or formula, and few people reread or check their formulas regularly, as well as the data used.
- Impossible to share the file within the team, Excel is a complex one-person tool. It's usually an internal, unsecured creation containing sensitive data.
- In general, an average of 3 tables needs to be created to make a decision, and it is generally difficult to reproduce them identically, which can raise questions of reliability.



It's amazing to see companies tracking their risks in an Excel spreadsheet. We regularly see Excel spreadsheets managing close to a billion dollars worth of risks.



- Manual adjustments before a meeting or board meeting are frequent, so there's bound to be a bias in the information presented.
- It's difficult to maintain these spreadsheets after a manager has left, changed jobs, or changed mission.

It also seems to us that revaluation, accounting and financial reporting and dashboard view are also elements that CFOs are missing. What do you think about this?

Indeed, it's important to have a dashboard, a cockpit, to steer your risk and make the right decisions about financial risks. Obviously, depending on the size of the company's structure, the needs will differ. For example, the risk manager, CFO, or treasurer will have a particular appetite for controls, performance measurement, calculating accounting exchange rate differences and matching hedges to underlying assets. Finally, it is necessary for groups to control the valuation of simple or extremely complex hedging instruments.

Does it seem reasonable to you to manage currency and commodity risk separately?

This is a very good and divisive question! First, it's important to understand (in general) that currencies are managed by the finance team and raw materials are

managed by buyers. I've often noticed that these two teams find it difficult to work together on a day-to-day basis within the same company. This makes it more difficult to manage and control these risks. It is necessarily reasonable and strongly recommended to manage these two risks jointly. The value of raw materials is often inversely related to the value of the currency in which they are quoted. For example, if raw materials are quoted in dollars, when the value of the dollar rises against other currencies, raw materials become more expensive for international buyers, which can reduce demand and thus drive down raw material prices. Conversely, if the value of the dollar falls, raw materials can become cheaper for international buyers, increasing demand and potentially commodity prices. However, it is important to note that while this inverse relationship may often exist, it is not always present and can be influenced by a multitude of other economic and market factors. So, it's obvious to manage these two risks in concert to control and protect a company's management performance, sales, and margins. Good news, there are solutions, and we can help.



TAKE AWAYS

- NO ONE CAN DENY THAT WE ARE LIVING THROUGH TURBULENT ECONOMIC TIMES, WHICH ARE **INCREASINGLY COMPLEX AND VOLATILE**. IN THIS CONTEXT, WE MUST PAY SPECIAL ATTENTION TO COMMODITY RISK, WHATEVER IT MAY BE.
- **COMMODITY MANAGEMENT IS INSEPARABLE FROM THE MANAGEMENT OF THE RELATED CURRENCY RISK**. MANAGING ONE SEPARATELY FROM THE OTHER WOULD BE AN ADDITIONAL RISK, WHICH IS NOT NECESSARY IN THESE TIMES.
- TO HAVE AN EFFICIENT, CENTRALIZED, AND DYNAMIC MANAGEMENT, A SPECIFIC SOLUTION IS REQUIRED, WHICH TREASURY MANAGEMENT SYSTEMS ONLY PARTIALLY COVER OR NOT AT ALL. BUT THERE ARE SUCH SOLUTIONS THAT CAN BE ADDED TO OTHER **EXISTING SOLUTIONS AND INTERFACED THROUGH API'S**.
- MAKING A GOOD DECISION IS ONE THING, BUT EXECUTING IT WELL IS ANOTHER. IF YOU HAVE OPTED FOR A DECISION SUPPORT TOOL, AN EXECUTION SUPPORT TOOL (E.G., KANTOX, OR OTHER) CAN BE CONSIDERED TO ACHIEVE OPTIMAL MANAGEMENT.
- **DATA SHOULD BE CONSOLIDATED IN A SINGLE TOOL**, WITH EASY AND QUICK DATA RETRIEVAL CAPABILITY, TO PRODUCE AD HOC REPORTS AND DASHBOARDS.
- MANAGING RAW MATERIALS CAN BE COMPLICATED. **A SIMPLE SPREADSHEET IS NOT A ROBUST OR ADVISABLE SOLUTION**.
- YOU NEED TO CONSIDER AN ABSORPTION CUSHION TO MANAGE THE VAGARIES OF PRODUCTION AND SALES MANAGEMENT. MANAGING RAW MATERIAL INVENTORIES IS A TRICKY BUSINESS. ONE MUST BE CAREFUL NOT TO BE OVER-COVERED IN A WORLD WHERE ANYTHING CAN HAPPEN QUICKLY.
- IT IS NOT UP TO THE TREASURER TO DECIDE THE AMOUNT, BUT TO MAKE SURE THAT IT IS WELL HEDGED AND THAT OPERATING MARGINS ARE PRESERVED.
- AUTOMATING THE MANAGEMENT OF RAW MATERIALS WILL **FREE UP USEFUL TIME FOR MORE ANALYSIS AND ANTICIPATION**, SO CRUELLY NEEDED IN TIMES OF CRISIS. IT IS ALSO NECESSARY TO BE ABLE TO "BENCHMARK" ONE'S MANAGEMENT AGAINST A PREDETERMINED REFERENCE.
- IT IS A CONTINUOUS MANAGEMENT, AN **ON-GOING AND DYNAMIC PROCESS THAT REQUIRES COMPETENCE, APPROPRIATE TOOLS**, AND KNOW-HOW. WE MUST CONSTANTLY ADAPT TO THE MARKET'S CHANGES.

CONCLUSIONS

"DESPITE TREASURY MANAGEMENT SYSTEM TECHNOLOGICAL EVOLUTION OVER LAST YEARS, THERE ARE STILL PAIN POINTS IN THE MARKET AND COMMODITY RISKS MANAGEMENT TREASURERS MUST ADDRESS"

(FRANÇOIS MASQUELIER, CHAIRMAN OF EACT)

Commodity management is a complicated mission. It is a double management (i.e., commodity + FX risk versus USD) that makes it even more delicate. Managing one without the other seems to be a bad idea. But managing without an adapted and "best-in-class" IT tool seems risky. It is even less advisable as there are cheap and efficient solutions, with an easy and quick implementation. Why deprive yourself of being efficient? The spreadsheet, the preferred tool of commodity managers, should be banished as it carries the risk of manipulation and calculation errors. Robust, reliable, and complete tools are needed to capture all operations to re-evaluate them and manage them financially and accountably. In a context of hyper-volatility, more than ever, the company must hedge but also to manage properly and efficiently its raw material risk and the related USD risk. Fortunately, this challenge is easy to meet if you know how to find the right tool.



Simply Treasury

Francois Masquelier

Phone +352621278094

Email francois@simplytreasury.com

Address Résidence Soho NY (4A52)

1 rue de Chiny

L-1334 Luxembourg