Centrus

Modern Finance

Commodity Hedging Strategies

White paper

An Introduction

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This is the first in a series of articles where we will explore various hedging strategies across the primary market risks faced by companies today.

A key point to understand in relation to hedging is that if you have an exposure to risk (commodity price, interest rate, foreign exchange, inflation or otherwise), doing nothing about the risk is in effect doing something – it is deciding to take the risk and allow your performance to be impacted by its variability.

In this blog we look specifically at commodity risk and a basic vanilla hedging strategy.

> " Some large shipping companies saw their fuel costs increase by 13% in 2017"

What is the Risk?

Commodity risk refers to the uncertainty of future market values and the impact on future cash flows, caused by fluctuations in the price of commodities. Commodity prices can be quite volatile due in part to their supply demand dynamics along with being frequently impacted by geo-political risk. Identification of the commodity risks a company is exposed to and how these impact future cash flows is an important starting point in the process. Depending on the functional currency of your company, there can also be a significant impact due to FX rate movements. For example, if you are Euro entity and you do not hedge your fuel costs, you will have exposure to both your underlying benchmark price movement (likely Dollar denominated) and any EUR/USD movements over the period. Some large shipping companies saw their fuel costs increase by 13% in 2017 due predominantly to increases in fuel costs/ bunker price.

To illustrate the impact on commodity price movements to both revenue and profitability see the table below which summarises:

Figure 1: Commodity price movements

Price Movement	Producer	Consumer	Purchasing	Balance Sheet
↑	Increased revenue leading to greater profitability	Increased cost which will reduce cash flow availability and potentially ultimately profitability	With a rise in commodity price consumer purchasing power diminishes	As the price rises so too will net realisable value of assets at year end
↓	Decreased revenue leading to lower profitability	Reduced cost increasing cash flow and potentially ultimately profitability	A decrease in prices increase purchasing power	With downward price movement, net realisable value of assets will reduce

Why Hedge?

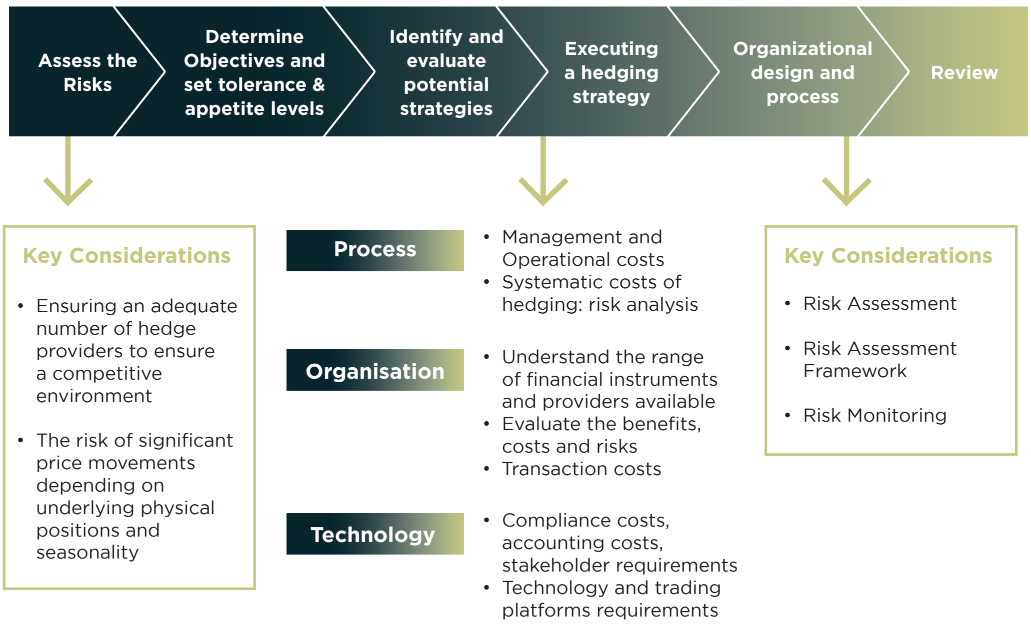
Implementing an appropriate commodity hedging strategy can help provide more budget certainty, help manage liquidity and result in a smoother cost profile and limit operational risks. Again, not hedging when you have an known risk is a decision in itself and the potential impact should not be underestimated.

How can I hedge the risk?

When looking at hedging it is essential to have a robust approach to your hedging strategy that has the right level of oversight and the relevant approval procedure. The below outlines the high-level approach to implementing a suitable hedging strategy:

Figure 2: High-Level hedging strategy

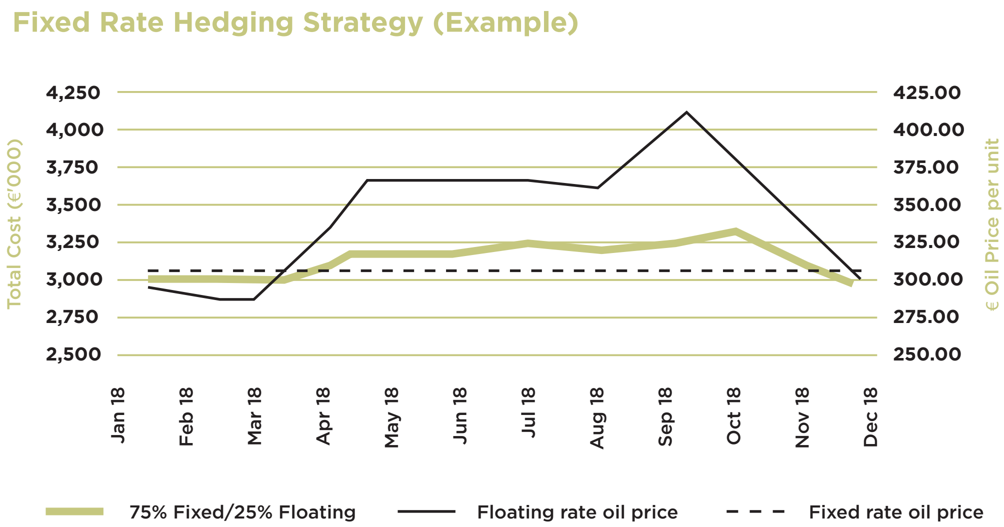
Centrus supports clients with the selection and implementation of optimal hedging strategies



Consumers across many industries including air, marine, rail and road transport use fixed rate swaps to hedge their price risk by fixing or locking in their fuel costs. Sellers of commodities will also often use fixed rate swap strategies both for inventories and price risk management.

To illustrate how a straight forward hedging strategy can work from a consumer of that commodity's perspective let us take the example of a shipping company who wishes to hedge 75% of their bunker consumption over the coming year. Say the company consumes 120,000 Metric Tonnes (MT) of fuel oil and they would like to hedge their price risk on 90,000 MTs over the 12-month period (from Jan 18 to Dec 18) – allocated evenly. The shipping company can do this by entering into a fixed rate swap on the benchmark (e.g. 3.5% Fuel Oil Rotterdam) for 7,500 MT per month at e.g. €305 per metric tonne. Let's have a look at how that would play out for the shipping company over a 12-month period:

Figure 3:
Fixed Rate Hedging Strategy



> " Through using a simple fixed rate swap strategy, the shipping company in this example has reduced overall fuel costs"

As you can see from the below table and graph, if the shipping company had passively accepted the price risk over the 12-month period they would have had significantly higher (€2.7m) and less predictable costs. Through using a simple fixed rate swap strategy, the shipping company in this example has reduced overall fuel costs, proactively managed their price risk and stabilised their ability to forecast costs. It is important to note that if the price had moved the opposite direction over the period there would have been a missed opportunity for cost saving on the hedged portion of fuel costs – this is the cost of implementing an effective hedging strategy which mitigates price risk and stabilises the cost line.

From an accounting perspective it will be important to be in a position to obtain hedge accounting on the trades to reduce any Mark-to-Market volatility on the P&L. In later blogs we will explore a variety of hedging strategies depending on risk appetite and business requirements.

If you would like to discuss your hedging needs across any asset class (Interest Rate, Commodity, Foreign Exchange, Inflation etc.) do not hesitate to get in touch with us. Centrus provide independent advice on hedging strategies and support through every stage of the process from assessing risk and developing an appropriate hedging strategy through to execution and accounting impact post implementation.

Figure 4: Example of fuel price & costs under the different scenarios in 2018

Description	Ccy	31/01/18	28/02/18	31/03/18	30/04/18	31/05/18	30/06/18	31/07/18	31/08/18	30/09/18	31/10/18	30/11/18	31/12/18	Total
Floating Rate Oil price	€/MT	294	285	283	306	356	357	365	359	369	409	350	292	4,027
Fixed Rate Oil Price	€/MT	305	305	305	305	305	305	305	305	305	305	305	305	3,660
100% Floating	€'000	2,935	2,853	2,834	3,064	3,562	3,574	3,652	3,588	3,694	4,093	3,499	2,923	40,272
75% Fixed /25% Floating	€'000	3,021	3,001	2,996	3,054	3,178	3,181	3,200	3,184	3,211	3,311	3,162	3,018	37,518
Net Saving	€'000	86	148	162	11	384	393	451	403	483	782	337	95	2,754

Contacts

For further advice on this area please contact:

Mark Taheny
mark.taheny@
centrusadvisors.com
+353 (0) 87 217 2734

Dara Kavanagh
dara.kavanagh@
centrusadvisors.com
+353 (0) 87 189 9818

Jason Murphy
jason.murphy@
centrusadvisors.com
+353 (0) 86 045 2724

About Centrus

Centrus is an independent financial services group that believes in a better way of doing business. We specialise in corporate finance, analytics and investment management and are united by a culture that values imagination, energy and purpose.

We believe this can unlock significant value for our clients and their communities. Above all, we're working towards a more modern financial landscape. It is a simpler and more responsible way of doing business by delivering real money and tangible benefits to the real economy.

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DUBLIN

We Work Iveagh Court
Block D, Harcourt Rd
Dublin 2, D02 VH94
Republic of Ireland

+353 (1) 653 9639
dublin@centrusadvisors.com

LONDON

10 Queen Street Place
London
EC4R 1BE
United Kingdom

+44 (0) 203 846 5670
london@centrusadvisors.com

centrusfinancial.com

Data is sourced from various sources including Bloomberg, Markit and Centrus Datasheet.