Energy, Utilities & Resources NewsFlash

February 2023 / No. 72

Indonesia Energy, Utilities & Resources NewsFlash

Special Edition - Performance Evaluation for the Risk Management Desk
P1

To discuss further, please contact:

Peyush Dixit
peyush.dixit@pwc.com

or your usual PwC EU&R contact.

Special Edition - Performance Evaluation for the Risk Management Desk

In this special edition of our EU&R Newsflash, Peyush Dixit, PwC Strategy& Advisor and Sukrit Vijayakar, Energy Industry Veteran, discuss the challenges for the Risk Management function in these times of volatile commodity prices.

Introduction

The financial equivalent of Newton's second law would include volume.

Volatility is the paradise for traders, hell for investors, and an existential question for the hedgers. It's true the Price Risk Management Desk of any commodity trading organisation exists because there is volatility. However, they are always the ones to be frowned upon a high volatility scenario, irrespective of their performance. Any (notional) profits made by the Desk because of the Risk Management (RM) activity imply that the organisation has not had a particularly great year due to market conditions, hence why there's usually no rewards. On the other hand, any losses made by the RM Desk represent a cash outflow, which is visible, compared to the enhanced profits on the unhedged portion. Further, this raises questions as to why the hedging was done in the first place and often casts aspersions on their existence.

The events of the past few months have reminded us of the fate of Metallgesellschaft, a company which folded despite engaging in what was acknowledged as a sound approach to the management of the risk it faced. While the concept of scaling up hedges as prices go up is sound in theory, it arguably needs to be tempered in practice, with a call on the probable movement of the markets.

In this paper we propose a methodology to rightly evaluate the performance of the RM Desk.

Executive Summary

The raison d'etre of the RM Desk of any organisation is to 'lock in' a margin, cash flow, interest rate etc.

pwc

A practical facet of RM however, is that any blow out in prices results in an organisation having to make cash pay-outs, either in the form of settlements, or in the form of margin calls. Several RM Desk Heads have probably lost their jobs in this process. This is bad, not only for the Managers but also for the organisations, who may be losing out on good Managers due to truly unmanageable market conditions.

The paper proposes a method of evaluating the performance of the RM desk using the methodology below.

1. Develop an overall hedging policy with recommended hedge levels at various hedge points
2. Leave some portion of the hedging at each level to the 'discretion' of the RM desk
3. Define Stop loss and possibly even take profit on such positions so that their efforts could get due credit.

The benefits of this methodology would suggest that 'active' RM will provide organisations with a much better way to manage price Risk.

A paper like this however, wouldn't be complete without sharing some of the challenges involved in implementing a program like this.

Our conclusion would be that, if the challenges can be overcome and they are not very difficult to overcome per se, organisations would benefit in many ways by putting in place such a system.

Framework for Evaluating Performance Management

Risk Management Execution Structure

Best practices in Hedging suggest a construct of:

- Specifying a minimum level of hedge cover (say 20%)
- Specifying a maximum level of hedge cover (say 80%)
- Defining how the extent of cover increases from minimum to maximum

The way any organisation scales up may be either linear, or ballooned out, even a humped structure for the incremental hedging.

There is always a conflict between what is defined as a 'passive' RM strategy which mechanically lays on hedges as defined by a hedging structure and what seems to be 'obvious' from the moves of the market. When the obvious turns out to be correct, there are plenty of red faces around.

We suggest the following methodology be adopted:

What is proposed is that some of the hedging at each hedging point is left to the discretion of the desk and the profit or loss on this discretionary position is what will determine its performance.

By way of example, let us assume that the organisation has a strategy to increase its hedge cover by 10% at a particular hedge point. The RM Desk will mandatorily have to hedge some of this cover.

For argument's sake let us define the mandatory hedge as 50% of the hedge cover required at that point. The balance is left to the discretion of the Desk.

Any profit on such positions accrues to the Desk. Likewise, any losses to these positions (i.e. the mandatory hedge shows a profit) is debited to the Desk.

‘Stop Loss’ on Positions

The ‘stop loss’ of such positions is essentially set at the previous hedge point. The rationale for this is that at the previous hedge point we would not have added this position.

‘Take Profit’ on Positions

There are many possible approaches to defining ‘take profits’. Other than an actual take profit situation i.e. where you lay on the hedge, there are other possible treatments. We will discuss a few of them below.

One possible treatment is to treat the breach of the next level as a take profit for the position and make that portion of the hedge mandatory at that stage. This will ensure that RM still continue in a structured manner. It will also ensure that there is an automatic limit on the maximum position that can be taken by the RM Desk. However, when there appears to be a dramatic rise in levels, this could prove detrimental to the organisation.

Another way of approaching it is to move the stop loss to cost and go on increasing the trailing stop loss levels. While this has the advantage of improving returns to the organisation it also has the disadvantage of making such decisions speculative rather than purely RM based.

An intermediate approach could be to take profit at the second higher hedge level. Or indeed at any higher hedge level.

Points to Note

It is important to note that none of the levels given in the examples stated above are sacrosanct i.e.

- We need not have a minimum hedge of 20% and a maximum hedge of 80%. However, it is important to set a minimum and maximum level of hedge
- It is not necessary to leave 50% of the hedgeable position to the discretion of the RM Desk. However, it is important to give the Desk a significant level of discretion (depending on the absolute value of the exposure) to have a meaningful evaluation of position
- It is also important that the RM Desk takes positions. Leaving the entire discretionary position completely unhedged or closing out the entire position would reek of failure to manage
- We are of the opinion that the stop ‘loss levels’ suggested by us have such a compelling rationale that these should be implemented
- ‘Take profit’ levels can be defined by each organisation as suits its profile. We would, however, recommend instituting trailing stops at each hedge level

Benefits to the Organisation of an Evaluation Process

a. **Improves the profitability of the organisation**
   Previously, hedging rules suggested the implementation of a ‘Passive’ RM process, where hedges were laid on more or less automatically. In today’s market’s of high volatility, following such rules in a passive manner could prove costly to the organisation.

b. Evaluate the associates on the Risk Management Desk
Without such a system in place, it is difficult to evaluate the skills of the RM Desk.

If the trades laid on by them make money, it is at the cost of the refining business therefore, is the implementation of rule-based hedging rather than any skills on the part of the Desk.

On the other hand, if the Desk loses money, the tendency would be to blame the RM Desk for following the mandate.

c. Prevent unnecessary personnel attrition
If the losses are heavy, Risk Managers have been known to lose their jobs under such circumstances.

This is bad, not only for those who lose their jobs but also for the organisations who would end up letting good associates go for merely following mandates.

Challenges Associated with the Implementation of the Evaluation Process

The first challenge in implementing such a system is one of determination in the creation of a position.

When does one determine that an exposure is hedgeable? The first time such levels are crossed intra-day? The first time the levels are crossed at the settle? A two day close? We need to remember that settles are essentially a 'fair value' estimate. Actual bids / offers may be as high as 50 cents away from the close.

These parameters need to be set by the RM Committee. Essentially, the Mid Office would need to be involved in this exercise as well.

One way of possibly doing this is possibly having the Front Office notify the Mid Office of markets crossing mandate levels along with some evidence to that effect. The Mid Office then acknowledges it and the position is put in place. Nevertheless, this will also require some Mid Office/Back Office monitoring, since reporting would be at the discretion of the Front Office.

Another way of doing it would be looking at a value of 'Fair Value – X' for sell hedges or 'Fair Value + Y' for buy hedges on a settled basis.

Secondly, any management of 'hypothetical positions' requires additional complexity in the ETRM/reporting system.

Conclusions

The broad conclusions on the benefits of implementing such a system, particularly underscored by the events of the last 6 months may be summarised as follows:

- Most RM Strategies are put in place to prevent Desks from taking a 'call on the markets' so to speak.
- However, especially in the light of the history of the past several months, there appears to be a screaming need to take some call on the market.
- We are of the opinion that, as long as such calls are limited and can be measured, the organisation would benefit from taking such calls.

Your PwC Indonesia Contacts:

Assurance

Sacha Winzenried
sacha.winzenried@pwc.com

Daniel Kohar
daniel.kohar@pwc.com

Dedy Lesmana
dedy.lesmana@pwc.com

Elvia Afkar
elvia.afkar@pwc.com

Firman Sababalat
firman.sababalat@pwc.com

Heryanto Wong
heryanto.wong@pwc.com

Irwan Lau
irwan.lau@pwc.com

Toto Harsono
toto.harsono@pwc.com

Yanto Kamarudin
yanto.kamarudin@pwc.com

Yusron Fauzan
yusron.fauzan@pwc.com

Aditya Warman
aditya.warman@pwc.com

Andi Harun
andi.harun@pwc.com

Dodi Putra
putra.dodi@pwc.com

Feliex Taner
feliex.taner@pwc.com

Lanny Then
lanny.then@pwc.com

Lukman Chandra
lukman.chandra@pwc.com

Tax

Alexander Lukito
alexander.lukito@pwc.com

Antonius Sanyojaya
antonius.sanyojaya@pwc.com

Gadis Nurhidayah
gadis.nurhidayah@pwc.com

Peter Hohtoulas
peter.hohtoulas@pwc.com

Suyanti Halim
suyanti.halim@pwc.com

Tim Watson
tim.robert.watson@pwc.com

Turino Suyatman
turino.suyatman@pwc.com

Omar Abdulkadir
omar.abdulkadir@pwc.com

Otto Sumaryoto
otto.sumaryoto@pwc.com

Raemon Utama
raemon.utama@pwc.com

Tjen She Siung
Tjen.she.siung@pwc.com

Advisory

Agung Wiryawan
agung.wiryawan@pwc.com

Joshua R. Wahyudi
joshua.r.wahyudi@pwc.com

Julian Smith
smith.julian@pwc.com

Michael Goenawan
michael.goenawan@pwc.com

Mirza Diran
mirza.diran@pwc.com

Hafidsyah Mochtar
hafidsyah.mochtar@pwc.com

Consulting

Pieter van de Mheen
pieter.van.de.mheen@pwc.com

Peyush Dixit
peyush.dixit@pwc.com

Widita Sardjono
widita.sardjono@pwc.com

Paul van der Aa
paul.vanderaa@pwc.com

Yandi Irawan
yandi.irawan@pwc.com

Legal

Danar Sunartoputra
danar.sunartoputra@pwc.com

Indra Allen
indra.allen@pwc.com

Melli Darsa
melli.darsa@pwc.com

Puji Atma
puji.atma@pwc.com

www.pwc.com/id

PwC Indonesia

@PwC_Indonesia

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PwC Indonesia, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

The documents, or information obtained from PwC, must not be made available or copied, in whole or in part, to any other persons/parties without our prior written permission which we may, at our discretion, grant, withhold or grant subject to conditions (including conditions as to legal responsibility or absence thereof).

PwC Indonesia is comprised of KAP Tanudiredja, Wibisana, Rintis & Rekan, PT PricewaterhouseCoopers Indonesia Advisory, PT Prima Wahana Caraka, PT PricewaterhouseCoopers Consulting Indonesia, and PwC Legal Indonesia, each of which is a separate legal entity and all of which together constitute the Indonesian member firm of the PwC global network, which is collectively referred to as PwC Indonesia.

© 2023 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see http://www.pwc.com/structure for further details.

pwc