Commodity risk management

Navigating through turbulent markets

Managing commodity economics and exposures protecting company financials and decreasing vulnerability

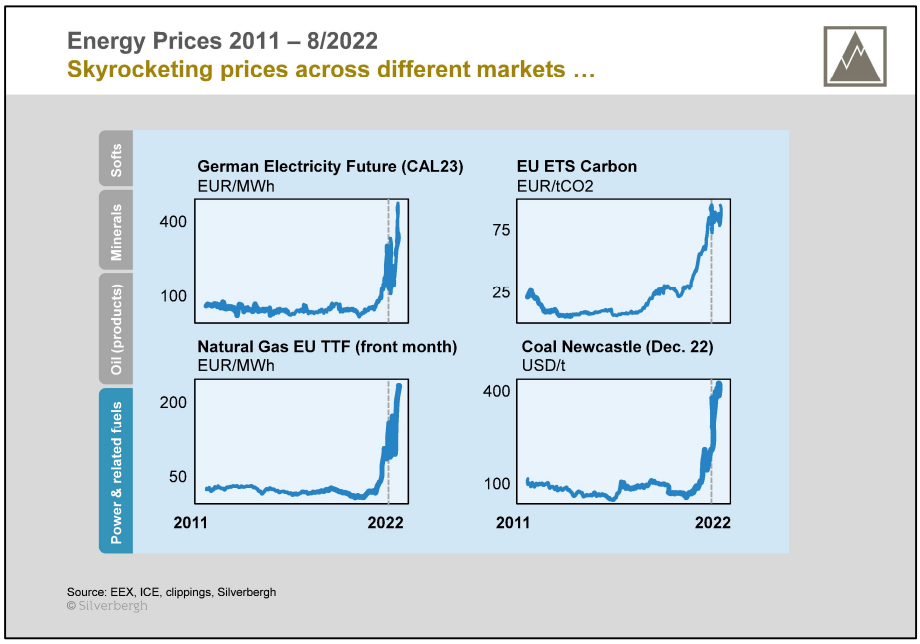
The war in the Ukraine has caused turmoil not only in energy markets but also in broader commodity markets. As such not only companies' financials are at stake, structural risk exposures and vulnerabilities have surfaced.

Silverbergh Partners

What to expect … A new normal …

In February 2022 the war in the Ukraine started adding another element of political risk[1] to the value management agenda. As part of the conflict, Russia has limited gas shipments to Europe. Oil as well as oil product shipments get relocated to non-European destinations. This changes supply-demand economics. Therefore, energy prices have exploded.

For years energy experts have warned that as energy systems and supply are being transformed, a certain level of diversification of primary energy supplies and generation technologies should be maintained. These considerations have not been adequately recognised in energy policy frameworks.



However, a scenario in which Russian gas supplies would terminate did not really exist. Throughout the cold war, Russian gas, oil and coal shipments have been stable and reliable since the early 1970s. There has never been any indication that at some stage energy shipments might be politicised.

Favourable prices for piped gas shipments vs. LNG landed prices were also too tempting to turn a blind eye on energy diversification. A public debate about the need to diversify which started in Germany in the early 2000s ceased.

On the contrary, countries like Spain and the Baltics have been diversifying their gas supplies also driven by a different risk assessment compared to central European countries.

Signs of pre-war constraints in the European energy system – gas and electricity – have passed very much unnoticed by the broader public. As such, it is unlikely that especially energy commodity markets will soon return to a pre-crisis status quo.

Will there be a new normal and how might it look like?

It can be expected that energy prices will plateau on a higher level medium-term given decreasing global investments into energy supply in the last seven years after

[1] See also Silverbergh Partners: Coming to grips with political risk; SP-Insights, 2/2017

peaking at USD 1.9 Trillion p.a. in 2014.[2] In this environment, operational and politically induced supply shocks add to price volatility. This again will require to assign more economic capital for interacting with wholesale/trading markets.

Potential shocks in the energy system have been anticipated for years by some companies in their risk inventories and through stress tests. Even these companies are challenged managing the consequences of loopy commodity markets today.

Companies which are not as well prepared are now confronted with previously unknown risk exposures and a limited set of mitigation options. Therefore, they face additional hurdles to navigate through crisis.

After updating financial exposures and initiating potential mitigation actions, much more fundamental business model and portfolio questions might enter the agenda.

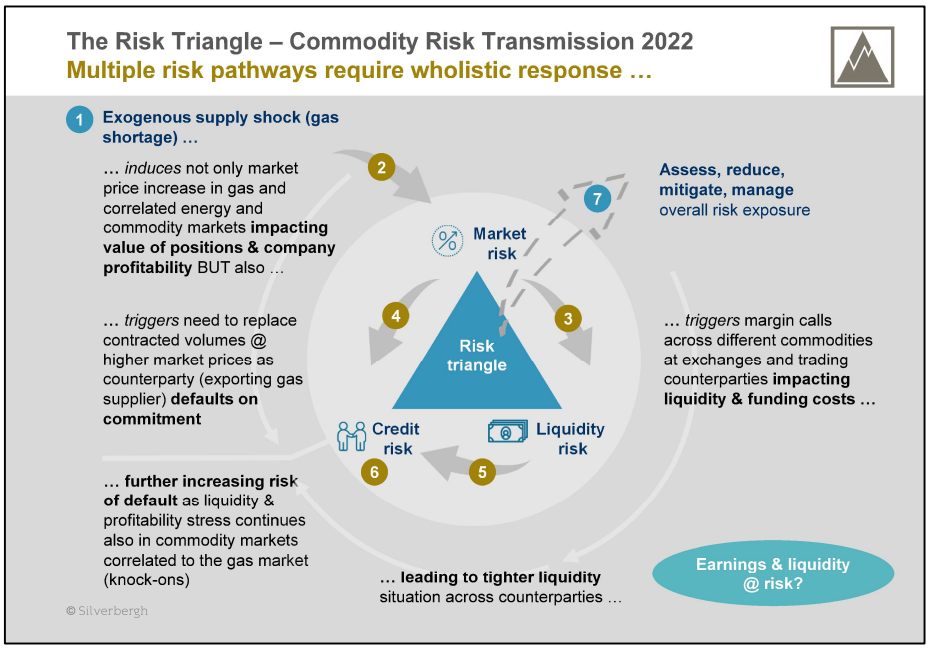
Risk transmission mechanism

What is at stake? Estimates of margin calls in European energy markets (without government intervention – prices or liquidity support) are estimated at USD 1.5 Trillion.[3]

How are companies affected?

The risk triangle provides insights how risk impacts into company financials.

First of all, there is an exogenous gas supply shock, a massive contraction of gas supply with impact on all European countries.



Second, the gas supply shock manifests as **market risk** not only in the gas market but also in related commodity markets through spill-over effects e.g.

- **Power generation** – conversion economics (marginal producer in merit order)
- **Oil/ oil products & coal** – fuel switching
- **Softs** (and food production) – fossil fuel substitution (correlated with energy markets) and input factor (FMCG sector)

The value of existing positions is changing, and earnings get under pressure with rising cost positions.

Third, market risk translates into **liquidity risk** if margin loans of counterparties – exchanges and wholesale/ trading counterparties – move beyond a predefined threshold. This affects the counterparties credit process. Either more collateral is provided or the exposure with the counterparty is reduced by liquidating of positions with the counterparty.

Fourth, market risk also translates into **credit (counterparty) risk** if a supplier defaults on his commitment. In case of defaulting supply, replacement supplies need to be sourced from the market at higher costs.

Fifth, liquidity stress adds to financial instability.

Sixth, financial instability layers on additional **credit (counterparty) risk**. It might be analysed whether this is associated with concentration risk (e.g. other contractual relationships with the counterparty; increasing 'Probability of Default (PoD)' and 'Exposure at Default (EaD)'.

Seventh, wholistic and potentially migrating exposures should be understood to reduce, mitigate and manage the overall risk exposure.

[2] IEA: World Energy Investment 2017; IEA: World Energy Investment 2022

[3] Bloomberg: Equinor Warns of $1.5 Trillion Margin Calls: Energy Update, 6 September 2022

Adjusting risk management systems

For each risk type – market, liquidity and credit risk – a specific response is required to update risk assessments and to mitigate and manage the risks.

Across all risk types a broader response is also required. An updated risk assessment and stress testing informs immediate recovery activities with the aim to limit and mitigate risk exposure and to protect company financials.

Once the basis for a more elaborate risk dicussion on top management level has been established, it is key to update the risk appetite statement of the company defining the amount of risk and the type of exposures the company is comfortable to carry.

Recent events might demand amendments to the companies' risk taking behavior in order to maintain the companies financial resilience and to align with shareholder expectations.

Some companies have layered on risk which they have not even been aware of and which surfaced in the last few months. In some cases even companies' integrity has been at question and production activities have been terminated.[4]

Considerations
… and calibration of risk management systems

Risks	Specific	Overall
Market risk	**Financially** ▪ **Update market price assumption** & models (recognise decoupling & volatility changes) – Review/ update correlations – Update FX cross rates (lead currencies USD, CHF, EUR, GBP, …) – … ▪ **Review and amend hedging approach** (physical & financial instruments) **Physical** ▪ **Review & reduce commodity consumption** (and therefore exposure) ▪ **Consider alternative fuels** e.g. fuel switching and assess switching ability (softs: recipes; process industries & construction: alternative materials) ▪ **Evaluate investments** into (renewable) energy generation & supply infrastructure and contracts ▪ **Relocate production** into markets with more favourable commodity markets ▪ **Adjust portfolio** to correct for businesses which are no longer viable	▪ **Review & amend risk appetite** and risk bearing capabilities ▪ **Review and update stress scenarios** ▪ **Assess exposure** ▪ **Update limit structure** ▪ **Identify immediate recovery options** across all risk types
Liquidity risk	▪ **Price liquidity consumption** for wholesale/trading purposes (internally as part of performance dialogue) ▪ **Identify liquidity pools** e.g. internally or with banks	
Credit risk	▪ **Price credit risk** ▪ **Update collateral management**	

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Evolving value management agenda

Going forward, risk assessments and risk appetite updates might also inform potential structural portfolio amendments beyond immedate tactical measures.

Especially process industries are currently reviewing their European manufacturing footprint and might consider to re-locate operations overseas.

Are all businesses still viable in today`s envinronment? What would need to change and what would one need to believe in order to continue European operations and businesses which are currently challenged.

Outlook

The war in the Ukraine causing energy prices to surge meets an economic environment which can be characterised by an increasing level of uncertainty.

Supply chain restrictions remain, geopolitical conflicts firm up globally, critical infrastructure is increasingly targeted and exposed to vulnerabilities. High energy prices contribute to economic downturn and increasing producer and consumer prices. Fiscal stability is challenged by massive government bail out programs leading to debates how to share burdens among European Union member countries.

Just updating commodity risk assessments and company positioning might fall short of the perspective which needs to be established even though some markets are correctiing already after the supply shock. The broader economic environment affecting also commodity markets should be anticipated.

This enables companies to protect their financial performance and to increase their resilience as they enter into exposures and make structural changes to their business portfolio.

[4] The Economist: How to deal with Europe's energy crisis, 8 September 2022