

TOPICAL INSIGHTS

Impact of Russia–
Ukraine conflict

24 February 2022

Russia recognised Ukraine's rebel-controlled regions as independent and ordered in troops to the regions

Current status of the Russia-Ukraine conflict



- ▶ Since November 2021, Russia has been deploying troops along its border with Ukraine, thereby reigniting the threat of a possible invasion of the latter
- ▶ On 21 February 2022, the situation escalated when Russia declared Ukraine's 2 eastern regions backed by separatists as independent and ordered troops into the regions, inviting strong reactions from western countries, including first round of sanctions
 - Multiple countries, including the US, EU and UK, announced sanctions on Russia's state-owned banks (VEB and Promsvyazbank), while Germany halted the Nord Stream 2 pipeline authorisation
- ▶ On 23 February 2022, Ukraine declared a 30-day state emergency and asked its citizens in Russia to flee; the emergency can be extended for 30 more days if the conflict continues along the Ukraine's eastern border
- ▶ On 24 February 2022, Russia launches military operations in Ukraine and targets the country's military infrastructure

A brief history of the conflict

1990

Since the collapse of the Soviet Union in 1990, 14 European countries – including former Soviet countries such as Estonia, Latvia and Lithuania – have joined NATO

2014

Russia annexed Ukraine's Crimean Peninsula after the latter's pro-Russia President Viktor Yanukovich was driven out of power by mass protests against his decision to decline an association agreement with the EU

2015





A peace deal – the Minsk-2 Agreement – was brokered by France and Germany to help end large-scale battles, implement an immediate and comprehensive ceasefire, and restore Ukrainian border control

2021

In June 2021, Ukrainian President Volodymyr Zelensky openly talked about joining NATO after the troop build-up along its border with Russia in April 2021

The conflict will likely disrupt the supply of key raw materials, leading to knock-on effects across sectors

>2,100 US-based firms and 1,200 European firms have at least one tier-1 supplier in Russia; the number increases drastically to 190,000 and 109,000, respectively, in case of tier-3 suppliers, indicating significant exposure of global firms' supply chains in the Russia-Ukraine region

 Industrials	 Consumer goods	 Life sciences	 Others
<p>Energy: Rising oil and gas prices across the globe due to high dependence on imports from Russia</p> <p>Manufacturing of energy-intensive products, such as petrochemicals, likely to be impacted</p>	<p>Agro commodities: Supply of major grains – wheat and corn – likely to be impacted, increasing prices of bread and other goods</p> <p>Can lead to food crisis in major importing regions – Middle East and North Africa</p>	<p>Pharma products: Russia and Ukraine – major markets for top generic drugs exporters, such as India</p> <p>Indian pharma stocks tumbled as revenues are likely to get hit</p>	<p>IT and ITeS: Increasing cyber attacks on Ukraine's IT systems and possible emigration of Ukrainians amidst the conflict, likely to cripple the IT industry</p>
<p>Metals: Supply disruption and price hikes of key metals – aluminium, nickel, platinum and copper</p> <p>Input costs for downstream industries, such as automobiles and construction, to increase</p>	<p>Packaged foods: Possible effect seen on packaged food companies relying on region's grain supply</p> <p>Will likely squeeze companies' margins in the short term</p>	<p>Medical devices: Disruption in the supply of metals, plastics and semiconductors chips to impact production of medical devices</p> <p>Germany to be most impacted, being the key hub for devices</p>	<p>Logistics: Increase in fuel cost, shortage of workers and disruption in Black Sea ports likely to impact logistics movement in the region, further exacerbating the stress on supply chain</p>
<p>Gases: Supply of inert gases, such as neon, concentrated in Ukraine</p> <p>Will likely disrupt semiconductor manufacturing, leading to knock-on effects across sectors</p>	<p>Liquor: Breweries to face high input costs, as barley prices are already up ~63%Y-o-Y</p> <p>Will likely slow down recovery from the COVID-19 pandemic</p>	<p>Clinical trials: Ukraine – an emerging destination for clinical trials (~392 currently active trials)</p> <p>Instability in the region could disrupt clinical trials activity</p>	<p>Labour: Ukraine and other eastern European countries – major outsourcing hubs for western Europe</p> <p>Conflict can result in acute labour shortages in the region</p>

Impact on key commodity groups (1/6)

Commodity prices are expected to spike in the short term due to possible supply disruptions

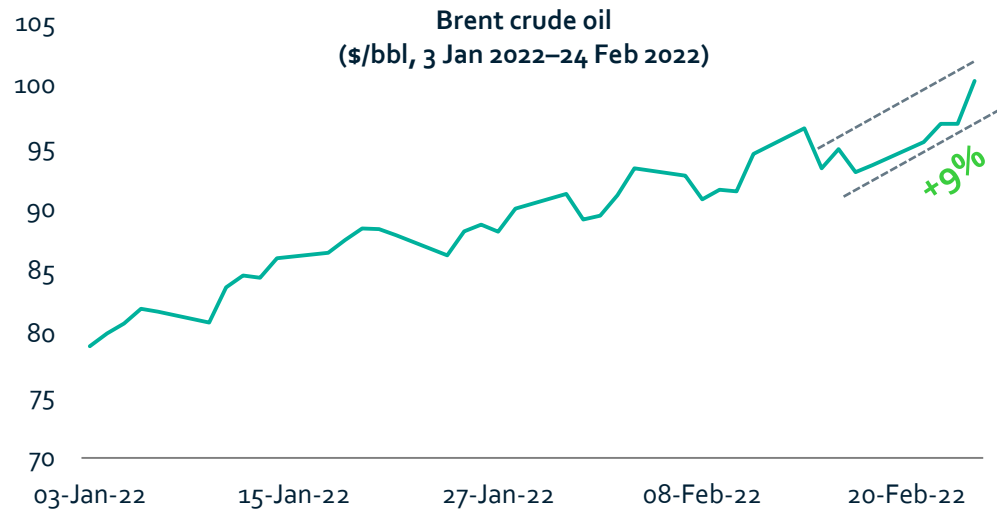
Commodity scenario analysis: Estimating the learnings from the past events

- ▶ Though price rises are imminent in light of Russia's military operations in Ukraine, the magnitude of the rise remains ambiguous
- ▶ Leveraging monthly and daily price data over the last 2 decades, we analysed the dynamic impact of previous conflicts (such as the Ukraine–Russia conflict in 2014) on commodity prices to estimate the likely impact on prices in the following scenarios:
 - Scenario 1: Russia takes military action against Ukraine
 - Scenario 2: De-escalation of the situation within 1 month

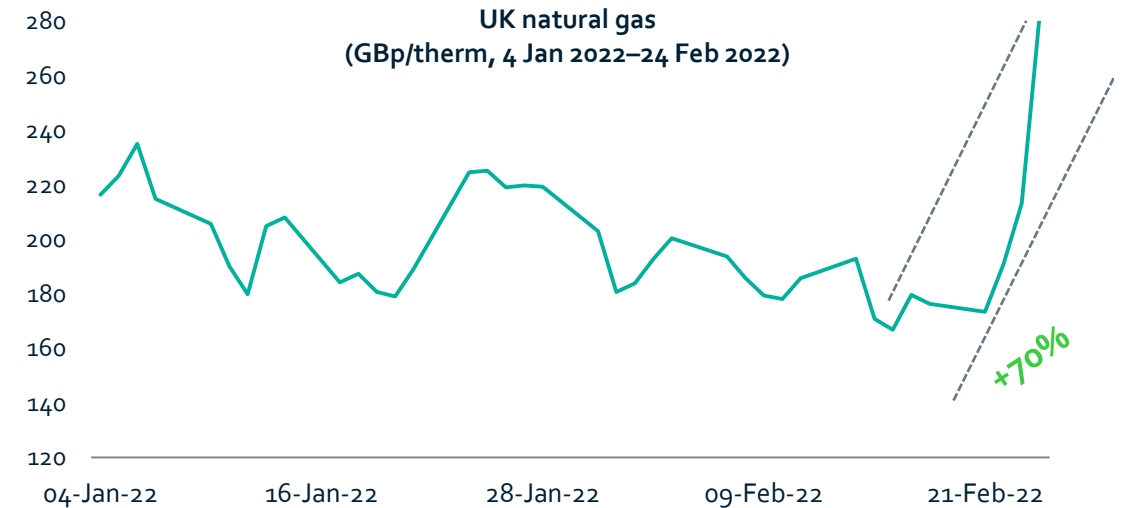
Disclaimer: *Although The Smart Cube has used its best efforts to provide accurate and reliable information, The Smart Cube does not warrant any liabilities arising out of any judgement or action taken based on the above recommendations*

Energy

Brent crude oil



Natural gas



Commodity ¹	Impact of the conflict	Current prices (24 Feb 2022)	Expected price movement ² Vs. current prices	
			Scenario 1 : Military action	Scenario 2: De-escalation ³
Crude oil	<ul style="list-style-type: none"> Possible crude oil supply disruptions Russia is the 2nd largest oil producer 	\$100.3/bbl.	5–8% ↑	10–15% ↓
Natural gas	<ul style="list-style-type: none"> Gas supply to Europe likely to be impacted Russia accounts for ~40% of European gas supply 	GBp 285.0/therm	18–28% ↑	15–25% ↓

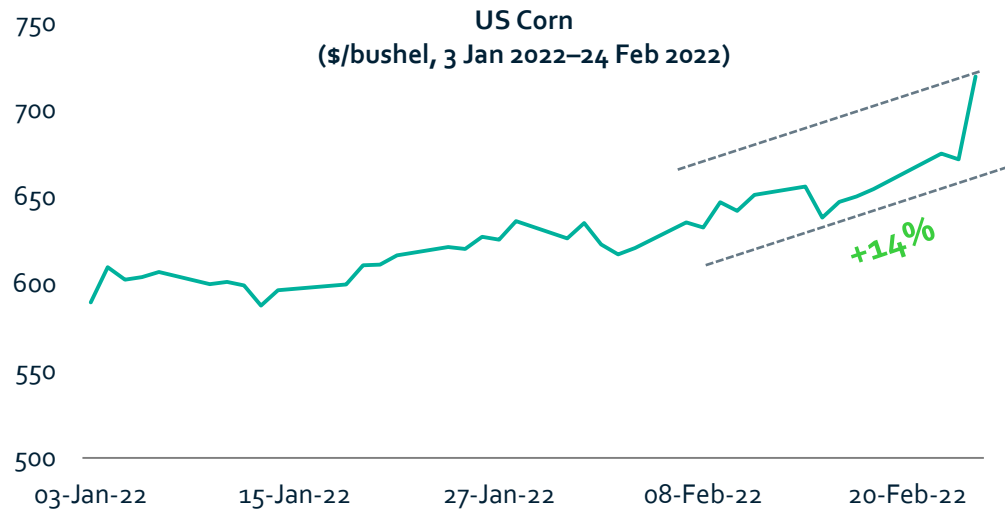
1) Leveraging monthly and daily price data over the last 2 decades, TSC analysed the dynamic impact of previous conflicts (such as the Ukraine–Russia conflict in 2014) on commodity prices to estimate the likely impact

2) Expected price movement for Mar–May 2022 vs. Feb 2022

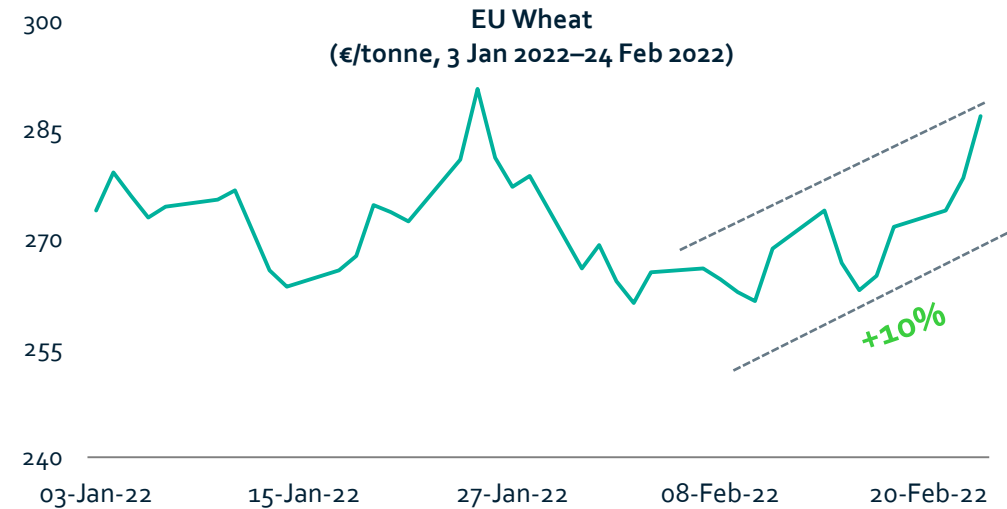
3) Refers to de-escalation of situation within 1 month of military action



Corn



Wheat



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			Scenario 1 : Military action	Scenario 2: De-escalation ³
Corn	<ul style="list-style-type: none"> ▶ Ukraine and Russia collectively are top exporters of corn and wheat 	\$718.9/bushel	10–18% ↑	7–10% ↓
Wheat	<ul style="list-style-type: none"> ▶ Russia is the world’s biggest exporter of all 3 major groups of fertilizers; disruption could push up input cost 	€287.0/tonne	12–20% ↑	10–15% ↓

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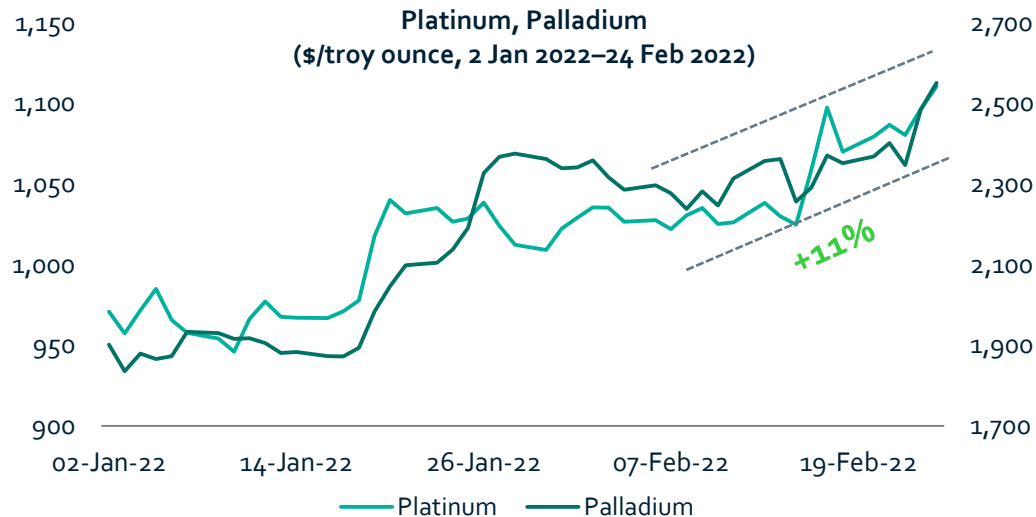
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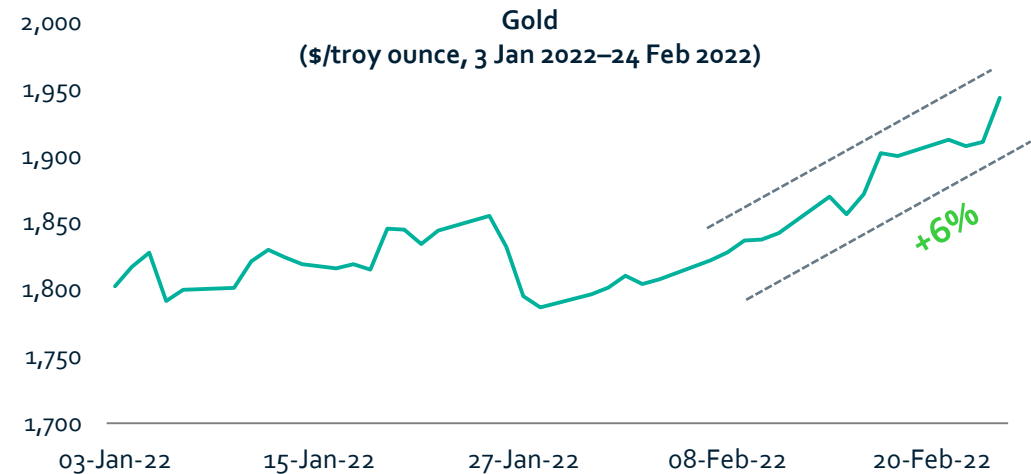
Source: Publicly available data

Precious metals

Platinum and Palladium



Gold



Commodity ¹	Impact of the conflict	Current prices (24 Feb 2022)	Expected price movement ² Vs. current prices	
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Platinum	<ul style="list-style-type: none"> Russia is a key player in the mining of palladium (45%) and platinum (15%) Possible international trade sanctions by the EU and the US on Russia may disrupt exports of metals 	\$1,100.3/troy ounce	10–12% ↑	5–7% ↓
Palladium		\$2,550/troy ounce	12–18% ↑	8–10% ↓
Gold	<ul style="list-style-type: none"> Demand for gold as a safe asset class could rise 	\$1,943.5/troy ounce	8–15% ↑	5–10% ↓

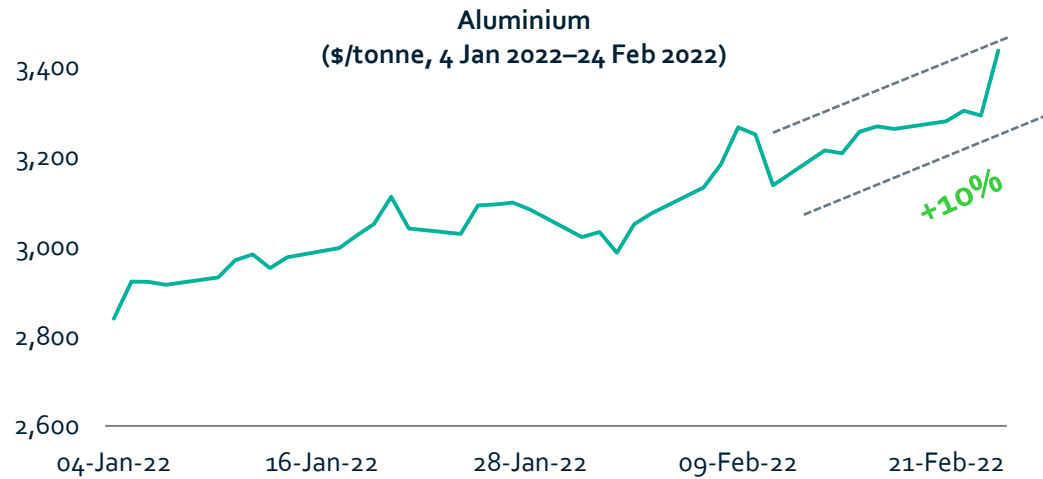
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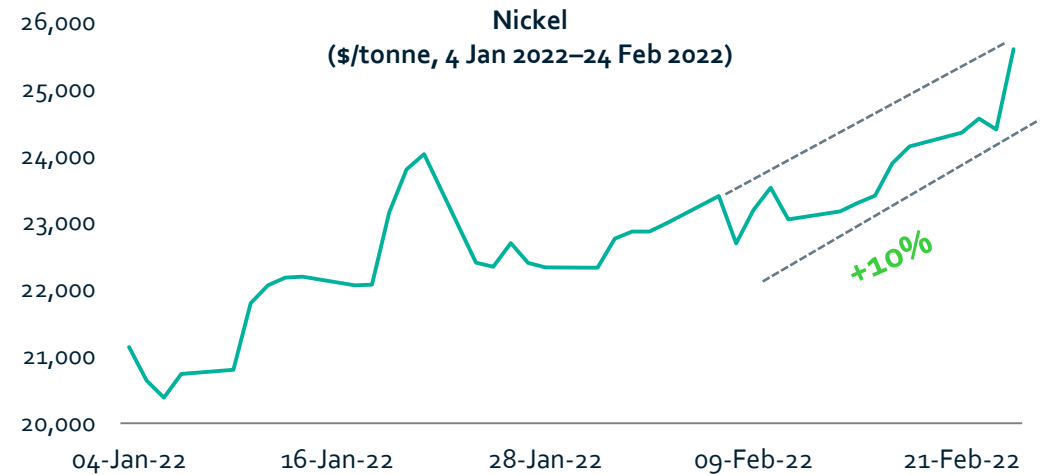
Source: Publicly available data

Base metals

Aluminium



Nickel



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Aluminium	<ul style="list-style-type: none"> Russia accounts for 6–7% of global aluminium and nickel production Possible international trade sanctions by EU and US on Russia may disrupt exports of metals Any disruptions to gas flows could also exacerbate the problems for metal producers in Europe 	\$ 3,437.0/tonne	12–17% ↑	5–7% ↓
Nickel		\$ 25,595.5/tonne	12–20% ↑	13–17% ↓

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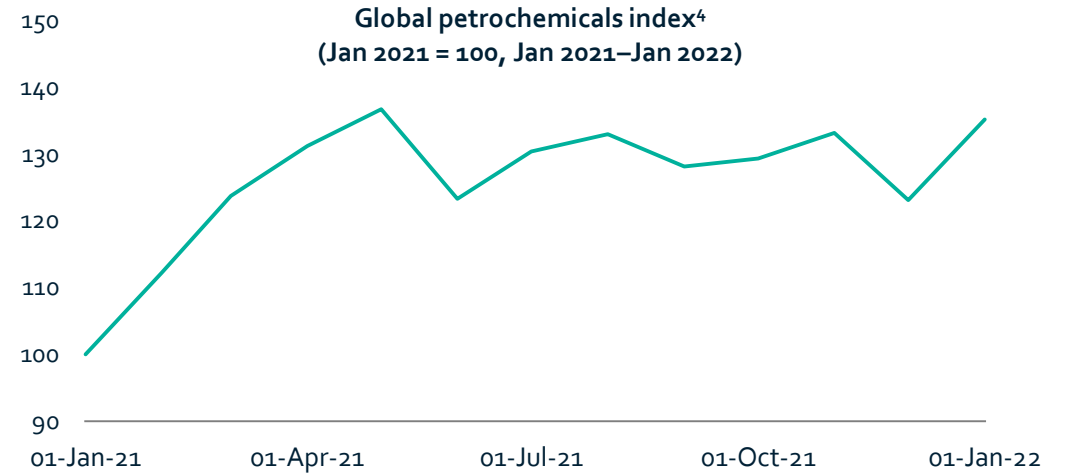


Resins and petrochemicals

Resins



Petrochemicals



Commodity ¹	Impact of the conflict	Current price index (Jan 2022)	Expected price movement ² Vs. Current prices	
			Scenario 1 : Military action	Scenario 2: De-escalation ³
HDPE, PP and PET	<ul style="list-style-type: none"> ▶ Indirect and lagged impact would be seen on resins and petrochemicals ▶ Rise in upstream (crude oil and natural gas) price may drive up the cost of production ▶ Possible logistical disruptions 	136.2	8–12% ↑	5–10% ↓
Ethylene, Propylene, Benzene		135.2	15–20% ↑	10–12% ↓

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4) Index has been calculated by taking simple average of key resins and petrochemicals prices across key regions (US, EU and APAC)

Automotive manufacturers will look for alternative raw material sources in case the disruption due to conflict becomes long-drawn



"We have contingencies in place for all scenarios, including alternative sourcing, so that we can act swiftly. We had learned lessons from our experience during the 2014 Russian-Ukrainian conflict. We ensure that we have the right level of stocks in our markets to avoid disruptions."

– Zoran Bogdanovic, CEO, Coco-Cola HBC (February 2022)



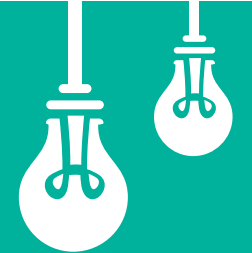
"If we cannot supply the (Kaluga plant, 115 miles from Moscow) plant, if that is the reality, we have either to transfer that production to other plants, or just limit ourselves."

– Carlos Tavares, CEO, Stellantis (February 2022)

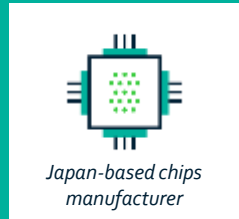


"We will be able to assess the depth of the impact only after conducting a deep analysis of the list of components obtained from the US and the possibility of replacing them with local components or those from other countries. Given that our models are deeply localised (in Russia), we do not expect a significant impact on car production in Russia."

– Roman Skolsky, Director of Communications, Nissan RBU East (February 2022)



Companies around the world are closely monitoring the situation and activating business continuity plans where necessary



"The chipmakers are not feeling any direct impact, but the companies that supply them with materials for semiconductor fabrication buy gases, including neon and palladium, from Russia and Ukraine. The availability of those materials is already tight, so any further pressure on supplies could push up prices. That in turn could knock on to higher chip prices."

– a Japanese semiconductor chips manufacturer (February 2022)



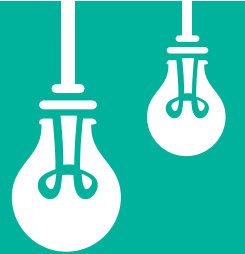
"Barley prices have escalated quite significantly and Ukraine will definitely impact global barley pricing in the short to medium term. Whether beer companies will be able to react quickly and increase prices quickly is yet to be seen, and in some cases, is determined by the government."

– Ankur Jain, CEO, Bira 91 (February 2022)



"If sanctions are aimed at Russian crude oil and oil products, it will have an impact on the oil market globally. If there were no Russian oil available, Neste would buy its crude oil in other markets. A significant part of Neste's crude oil purchases are made on so-called spot markets, meaning one load at a time, and therefore we are able to react flexibly to changes in the markets in our purchases if necessary."

– Sami Oja, Leader – Oil Products Business, Neste (February 2022)



Category managers should continuously monitor the situation as it unfolds and closely engage with suppliers to ensure business continuity

How to prevent supply chain disruptions during such geopolitical events?



Checklist for category managers

A multipronged strategy to address supply chain disruptions is the need of the hour



Evaluate alternative suppliers

Prepare to switch to or qualify alternative sources for procuring essential products and services

Conduct risk assessments of strategic suppliers to minimise supply chain disruptions



Monitor the scenario continuously

Continuously monitor the restrictions and impact on the supply chain and liaise with suppliers to ensure business continuity



Brace for cost increases

Allocate provisions in anticipation of increase in prices of fuel/utilities and certain raw materials, such as metals and agricultural commodities



Re-evaluate contracts

Consider re-evaluating existing contracts with Russian/Ukrainian suppliers and ensure the inclusion of adequate safeguards in case of an escalation in the situation

Avoid entering into long-term contracts with Russian/Ukrainian suppliers until the situation improves



Improve inventory and labour planning

Carry out detailed assessments to evaluate the required levels of inventory (particularly of critical inputs) and labour in the short–medium term

Ensure that the required inventories are in place in case of disruptions in supply from Russian/Ukrainian sources

The Smart Cube solution enables data-driven decision making for commodity volatility and price risk management

The Smart Cube’s
COMMODITY INTELLIGENCE

- ▶ Expertise-led solution offering comprehensive intelligence and robust analytics, for enablement of commodity volatility and risk management
- ▶ Advanced statistical modelling and forecasting techniques used to deliver accurate price forecasts
- ▶ Forward-looking insights, enabling better purchase planning and cross-functional risk management

Solution Framework

Category / Commodity Sourcing

Commodity Risk Management

Blending AI+HI to drive value

Supply Chain Visibility

Purchasing Efficiency

Cost Saving Opportunities

Revenue Improvement

Risk Mitigation

Business Spend Control



Smart Automation & Analytics



Proprietary Data Assets & Models



Commodity & Quant Expertise



Plug & Play Modules



Digital, Intuitive Dashboards

OUR PROPOSITION

Commercial Planning/S&OP

Finance & Budgeting



For leading businesses around the world, The Smart Cube is a trusted partner for high performing intelligence that answers critical business questions. And we work with our clients to figure out how to implement the answers, faster.

Through custom research, advanced analytics and best of breed technology, we transform data into insights – enabling smart decision-making to improve business performance at the top and bottom line. We call it:

Intelligence. Accelerated.

Our clients include a third of the companies in the FTSE and Fortune 100, primarily in the CPG, Life Sciences, Energy, Chemicals, Industrials, Financial Services, Professional Services and Retail sectors.

We serve our global client base from our offices in the UK, the USA, Switzerland, Romania and India.

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