

**ECONOMIST  
IMPACT**

# **Trade In Transition: navigating the tides of uncertainty**

**Global Report**



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# Making trade flow — and the world move



**Sultan Ahmed  
bin Sulayem**  
Group Chairman  
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In a time of uncertainty, one thing is certain: global trade will adapt. However, careful preparation and planning are essential to navigate the challenges facing international trade. This was highlighted by the pandemic, which provided one central lesson: readiness for disruptions makes a difference, and those who are well-prepared are likely to fare better.

How to meet the needs of today's consumers is clear: build reliability and resilience into supply chains to ensure uninterrupted supply.

The resilience of supply chains is being tested like never before, amidst geopolitical pressures and rising costs due to high inflation. Even without these external influences, supply-chain disruptions are inevitable. The key to managing them is always to remain flexible, adaptable and solutions-driven. To this end, data and analysis are imperative: by helping to understand demand, they make the logistics industry proactive rather than reactive.

In today's world, and with an eye on the future, better information is central to deeper global connections. While posing new challenges, the advent of advanced technologies gives prospects for an improved future for everyone.

Amidst these developments, I am delighted to introduce the fourth edition of **Trade in Transition**, an Economist Impact programme supported by leading global logistics business DP World. Building on our previous work, this edition provides insights into the world of global trade and supply chains, capturing the thoughts of those procuring and moving goods across international markets.

For 2024, technology is the primary source of optimism among executives. A third are optimistic about the efficiency gains technology will bring to their supply chains, a nine-percentage-point increase from the previous year. In particular, I note with interest that 98% of executives have embraced AI to revolutionise at least one facet of their supply chain. In addition, more than a third of companies consider the increased use of digital tools for improved inventory management to be the most efficacious strategy to reduce overall trade and supply chain costs.

The time is ripe to implement advanced technologies and to push for collaboration to overcome trade friction, protectionism and fragmentation into trade blocs. However, let us not forget our greatest asset: our people. As we continue to upskill and recruit specialists in new fields, we enhance the industry's efficiency for decades to come.

I hope this latest edition brings new insights into the dynamics of global trade and supply chains at a time when change is more rapid than ever.

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# About this research

Trade in Transition, a research programme led by Economist Impact and supported by DP World, is dedicated to understanding private-sector sentiment and untangling key trends in global trade and supply chains. It aims to enable businesses to navigate the complexities of the global economy, make informed decisions, and adapt their strategies to the ever-evolving economic landscape.

In this fourth edition of the programme, we investigate 'new globalisation': a new era in global trade and supply chains, defined by heightened geopolitical risk, climate change urgencies, and technological advancements. These forces are reconfiguring the global trading system and supply-chain organisation, shifting the focus from efficiency gains to strategic resilience and adaptability.

Our research is based on a global survey of 3,500 senior executives, designed to capture their trade and supply chain practices, as well as their sentiments for the year ahead. The survey targets leaders across a diverse range of industries and from all global regions (North America, Europe, Asia Pacific, the Middle East, Africa, and South America).

Alongside our survey, we conducted quantitative trade analysis that leverages the Global Trade Analysis Project (GTAP) to model three hypothetical scenarios for the global economy under heightened geopolitical risk. In particular, we consider the effects of 'geo-economic fragmentation', exploring potential outcomes in a global economy divided into hypothetical trading blocs: 'Western', 'Neutral', and 'Eastern' (see appendix I and II for more). The scenarios we model hypothesise the impact of increased tariffs, trade barriers in high-tech goods, and the ramifications of a complete trade 'decoupling' between major geopolitical blocs.

The findings from our survey and the results from our quantitative trade analysis were supplemented by an interview programme with trade experts and senior executives from various regions and industries. We would like to thank the following experts for their time and insights:

- **Leila Afas**, director, global public policy, Toyota
- **Allen Asiimwe**, chief of programmes, TradeMark Africa
- **Bertrand Conqueret**, chief procurement officer, Henkel
- **Dmitry Grozoubinski**, founder, ExplainTrade and executive director, Geneva Trade Platform
- **Stephen Lewis**, trading and risk management, Redshaw Advisors
- **Pamela Mar**, managing director of the Digital Standards Initiative, the International Chamber of Commerce
- **Anderson Martins**, head of supply chain, Nestle Philippines
- **Alan McKinnon**, professor of logistics, Kuehne Logistics University
- **Mauricio Mesquita**, principle economic adviser, Inter-America Development Bank
- **Lucas Netto**, head of supply chain, Magotteaux
- **Suleiman Pallak**, general manager sales & commercial operations, General Motors Africa & Middle East
- **William Reinsch**, Scholl Chair in International Business, Center for Strategic and International Studies
- **Yuri Unno**, director, trade and supply chain, Toyota

The report was produced by a team of researchers at Economist Impact, including:

- **John Ferguson**, project director
- **Melanie Noronha**, project adviser
- **Oliver Sawbridge**, project manager
- **Gabriele Bowen**, senior analyst
- **Eddie Milev**, analyst

# Executive summary

The key findings of this report are:

- 1. Executives still favour diversification, but another wave of supply-chain reconfiguration is underway as companies opt for fewer supplier partnerships.** In 2022, 47% of executives favoured diversification as the primary supply-chain strategy. While this dropped slightly to 45% in 2023, it remained the most common response. However, a significant shift emerged as 26% of companies opted

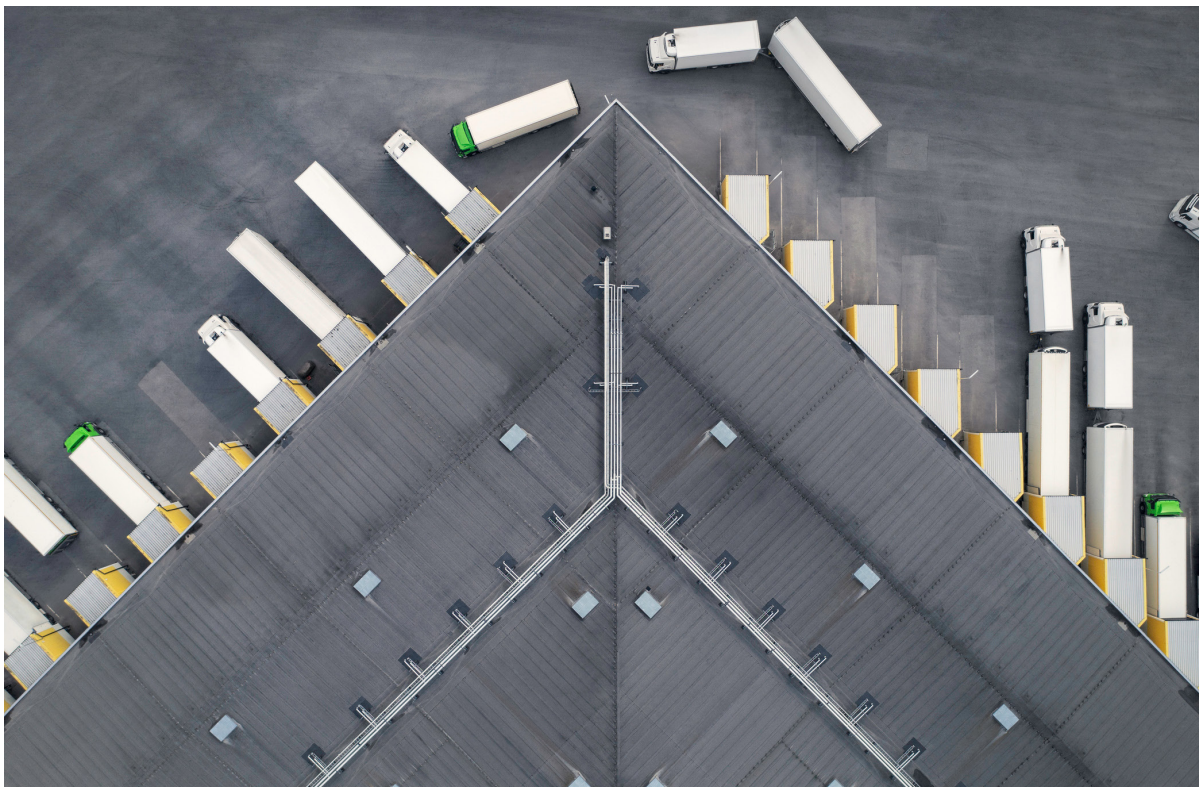
to work with fewer suppliers, up by 16 percentage points from the previous year. On the face of it, this is counterintuitive. On the one hand, as more companies set up redundant capabilities in the form of dual supply chains, the diversification of suppliers increases. While on the other hand, businesses that are focused more on capacity building are favouring working with fewer suppliers. This trend towards streamlined supplier engagement was consistent across regions and sectors, reflecting a structural evolution in supply-chain practices. Enhancing supplier relationships can be crucial for resilience, enabling risk-sharing, resource access and increased productivity. Furthermore, reducing suppliers may help streamline operations to align better with changing regulations, like the EU's Carbon Border Adjustment Mechanism. Meanwhile, diversification or establishing dual supply chains would allow companies to service different markets with distinct regulatory landscapes more effectively. This transformation underscores the growing significance of strategic supply-chain decisions in today's business environment.



2. **Higher transport costs remain a sticking point for exporters.** In 2024, transport costs are predicted to be the leading obstacle for firms aiming to increase exports, as highlighted by 24% of respondents, akin to past years. Despite shipping rates having fallen from their 2021/22 peak and an expected surge in cargo ship availability poised to further lower costs, the looming rise in oil prices due to production cuts threatens to counter these gains. Compounding this, a 2022 report identified a global shortage of over 2.5m truck drivers, exacerbating supply-chain strains. Furthermore, last-mile delivery, constituting a substantial portion of shipping and overall supply-chain expenses (53% and 41%, respectively), is becoming even more critical with the uptick in online sales. Navigating these challenges—fluctuating costs, logistical deficits and changing consumer behaviour—remains an essential facet of contemporary trade and commerce.
3. **Executive optimism starkly contrasts high levels of uncertainty.** Executives' optimism contrasts with broader trade projections, signalling uncertainty for trade and supply chains in the upcoming year. Their positivity stems from various factors, notably the enthusiasm generated by new technologies designed to enhance supply-chain efficiency and visibility, cited by 34%—a nine percentage point increase from the previous year. Additionally, 30% of executives attribute their optimism to improved economic stability and growth, marking a seven percentage point increase from 2022. The anticipation is that easing supply-chain dislocation will lead to lower inflation across most markets in 2024. This, coupled with the end of monetary policy tightening, suggests light at the end of the tunnel. But, this discovery underscores the multifaceted nature of trade and supply chains, emphasising the need for

executives to stay vigilant and responsive to market and sector-specific dynamics.

4. **AI has become an indispensable tool for 98% of executives, revolutionising at least one aspect of their supply-chain operations.** In response to concerns over escalating supply-chain costs, 34% of companies are banking on AI to curtail overall trade expenses. Studies indicate that adeptly incorporating AI into supply-chain management has empowered pioneers to reduce logistics costs, slash inventory levels and elevate service levels. Furthermore, AI is anticipated to bolster supply-chain planning and minimise disruptions, solidifying its pivotal role in reshaping the future of efficient and resilient supply-chain operations.
5. **Just-in-time supply chains lie idle, yet the still favoured just-in-case models are being refined as companies strive to strike the right balance between building resilience and managing costs.** In 2023, companies maintained 9.0 weeks of inventories, compared to 10.1 in 2022 and 8.9 in 2021. This signals a slight recalibration in 2023, likely due to the capital intensity behind higher inventories. Notably, 34% of executives are using digital tools to improve inventory management, the top strategy for cutting supply-chain costs. Additionally, 35% have employed AI to optimise inventory levels, emphasising the rising reliance on technological solutions. With companies losing around US\$1.8trn annually due to inventory issues, efficient inventory management is crucial. Solving these issues could potentially lead to a significant 10.3% increase in sales, showcasing the direct impact of streamlined inventory on business growth. Yet, this needs to be balanced against business resilience strategies as another black swan event could further impede businesses with significantly reduced inventories.



**6. The fragmentation of trade and supply chains would have significant negative short-term impacts on global GDP.**

In a hypothetical scenario, disruptions in high-tech trade between a US-led Western bloc and a China-led Eastern bloc are projected to cause a short-term global GDP decline of 0.9%. The impact falls heavily on China's economy, which is forecast to decrease by 1.9%, while the US and other Western bloc countries are set to decline by 0.9% and 0.8%, respectively. If a 15 percentage point tariff increase on all traded industrial goods occurs, global GDP is expected to contract by 0.7%. This change would disproportionately affect politically aligned blocs: China's economy would suffer a substantial 4.5% decline, the rest of the Eastern bloc by 1.3%, while the US and neutral countries would experience marginal benefits, growing by 0.2% and 0.7%, respectively, due to trade diversion.

**7. In the face of geopolitical shocks, 'friendshoring' and the creation of parallel supply chains emerge as the go-to strategies for business resilience.**

Geopolitical shocks continually disrupt global trade, driving the restructuring of supply chains to centre stage. Our own analysis on fragmentation predicts that bloc

restructuring with increased trade barriers could decrease global GDP significantly. This underscores the critical need to balance economic factors (like cost and quality) and non-economic concerns (such as security and resilience) in supply chains. In response to geopolitical events, 36% of respondents prioritised 'friendshoring' while 32% were creating dual supply chains--such as the 'China+1' strategy. These strategies aim to boost resilience but might raise costs for businesses juggling multiple supply chains. Achieving this balance is pivotal in navigating the changing global trade landscape.

**8. Executive decisions have made delivery times the top priority in supply-chain management in the last year, overshadowing all other factors.**

Almost a quarter (24%) of executives highlighted achieving a faster time to market as the key outcome in their company's supply-chain approach in the past year. Surprisingly, only 8% reported experiencing a slower time to market, indicating a clear priority in this domain. This urgency stems from consumer expectations for swift order fulfilment, compelling businesses to reduce lead times to enhance customer satisfaction and potentially bolster

retention. Shorter delivery times not only please customers but also streamline supply-chain operations by reducing the need for high inventory levels that tie up working capital. Additionally, they offer increased flexibility in planning and forecasting demand, enabling better adaptability to market conditions and shifts in consumer preferences.

- 9. In 2024, businesses will continue to pursue growth—expanding within existing markets remains vital, yet the shift towards new export markets is gaining momentum.** Primary growth drivers for business exports are split, with 26% of surveyed companies expanding into new markets (a six percentage point rise from 2022) and 24% focusing on existing market expansion (a one percentage point reduction from 2022). This reveals a delicate balance: pursuing growth while bolstering resilience through wider market engagement. Diversifying export markets is vital for resilience, helping to mitigate the impact of economic downturns or geopolitical crises in specific markets. Five surveyed sectors (consumer goods, energy and natural resources, health and pharmaceuticals, industrial, and logistics and distribution) prioritise new market expansion, while one emphasises existing markets (food and beverage). Moreover, executives highlight that global import growth is predominantly fuelled by demand, which over a quarter of survey respondents cited. Recent data, like the upturn in South Korean exports—considered a barometer of global demand—underlines the pivotal role of demand in driving imports.

- 10. Business executives must craft strategies with a harmonised, all-encompassing approach while remaining attentive to regional and sectoral peculiarities, and their internal frameworks.** Businesses are grappling with a multitude of challenges—macroeconomic uncertainty, geopolitical shifts, technological advancements, and the looming spectre of climate change. They navigate these via pivotal strategies, such as single sourcing, supply-chain bifurcation and reducing lead times. With this complexity, having a clear strategy before adjusting the supply chain becomes paramount. Our survey reveals that not all supply-chain alterations proceeded as intended: 24% witnessed a faster time to market, yet 8% encountered a slower pace; 21% experienced reduced transport costs, yet 13% faced heightened expenses; 18% had lower administrative costs yet for 11% these costs increased; and 16% noted a decrease in supplier sourcing expenses, while 11% saw an increase. Reactivity to events could yield unintended consequences, necessitating a nuanced consideration of regional disparities, sector-specific needs, and internal management systems. Embracing diverse approaches is the new norm, but customising strategies to account for unique business demands is crucial for successful supply-chain adaptations.

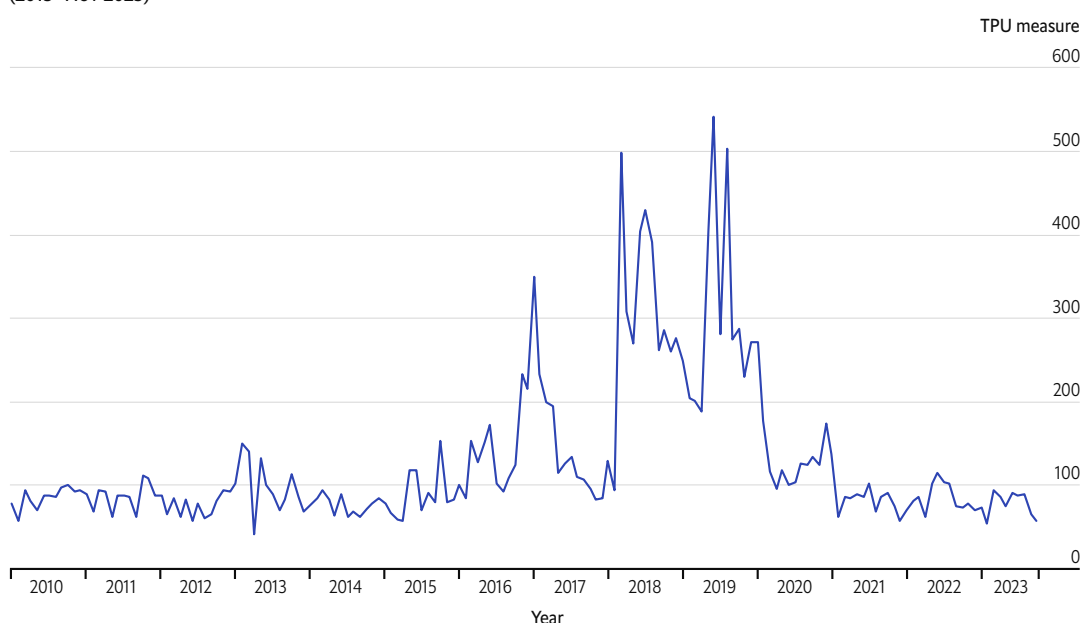
# The state of global trade in the era of ‘new globalisation’

The global trading system, which predominantly focused on efficiency gains, is undergoing a transformation. The world has entered a new era of globalisation, defined by the convergence of three pivotal forces: heightened geopolitical risk, the urgent realities of climate change and significant advancements in technologies. As this new era unfolds, supply chains and trade networks remain in transition, presenting businesses with complex challenges as well as new opportunities.

Geopolitical shocks continue to have a widespread impact on global trade, with the risk of armed conflict and trade wars remaining high. The US and China are finding themselves in intense economic competition, spurred by a wave of protectionist policies and trade regulations, which, in an attempt to redirect supply chains, are re-configuring global trade networks. The war in Ukraine has illustrated the significant bearing of geopolitics on global trade. It led to heightened trade restrictions

## Figure 1: Trade Policy Uncertainty Index

TPU measure of the frequency of joint occurrences of trade policy and uncertainty terms across major newspapers (2015- Nov 2023)



Source: Trade Policy Uncertainty Index



and a reconfiguration of Europe's energy market, and that of global commodities. It propagated supply-chain reconfigurations and further aggravated the macroeconomic landscape. The more recent war between Israel and Hamas has reaffirmed the significance of geopolitics, creating great instability in a region that is central to global supply networks. It becomes clear that the era of 'new globalisation' demands a strategic recalibration, whereby supply chains must now be as resilient to geopolitical tensions as they are cost-efficient.

Amidst geopolitical currents, climate change, the second factor driving the age of new globalisation, introduces a series of imperatives to sustainable global trade that continue to shape the broader evolution of global trade and supply chains. This factor will be explored in a dedicated article as part of the Trade in Transition programme.<sup>1</sup>

Technological innovation, the third factor defining the age of new globalisation, stands out as a driver of change within the global trading system. The development of ever-more-capable AI, the adoption of greater automation and robotics, and advancements in areas like

blockchain and 3D printing are providing the means to reconfigure, optimise and decarbonise supply chains. These advancements offer a beacon of adaptability, promising to mitigate some of the challenges posed by geopolitical tensions and macroeconomic pressures, and address concerns related to climate change.

A macroeconomic environment, still facing the repercussions of the Covid pandemic and the war in Ukraine, adds another layer of complexity to the challenges that businesses face. Nonetheless, the World Trade Organisation (WTO) projects an optimistic outlook for 2024, anticipating a rebound in merchandise trade volume with a growth rate of 3.3%.<sup>2</sup> This expected increase in trade volumes is set to outpace forecasted global GDP growth of 2.5%, signalling a positive shift in global trade dynamics.<sup>3</sup> Echoing the WTO's outlook, the Economist Intelligence Unit (EIU) underscores the volatility of the current trade environment. Following a period of reduced growth in 2023—where the export volume of goods and services increased by a modest 0.7%—the EIU projects a rebound in 2024, with a growth rate of 2.3% in the export volume of goods and services.<sup>4</sup>

### High business optimism meets the realities of trade limitations

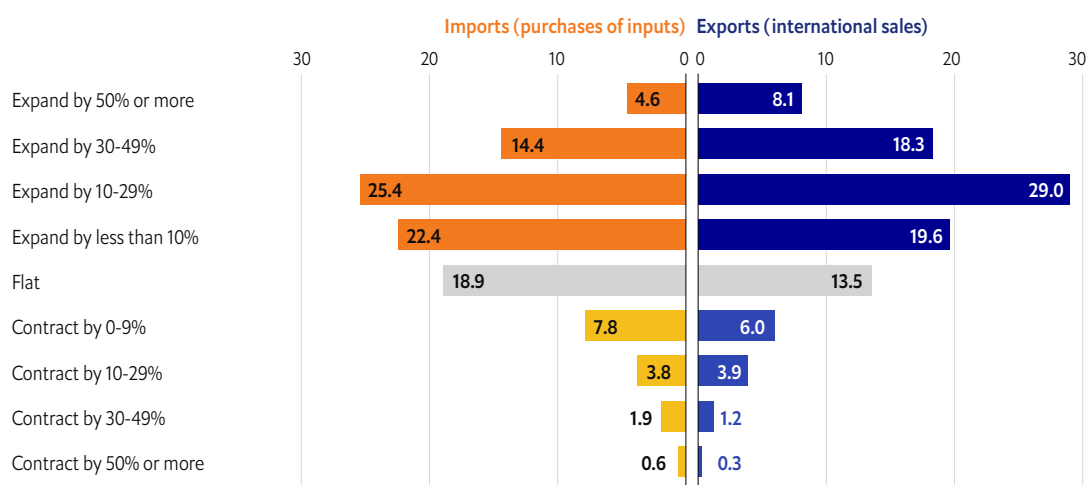
In contrast to the more reserved outlooks by the WTO and the EIU, the executives surveyed as part of our Trade in Transition research programme exhibit a markedly more optimistic outlook for 2024. In particular, firms expect their overall 2024 exports to grow by roughly a quarter and their imports by roughly a fifth. In fact, 75% of business executives expect some expansion in their firms' exports, while a smaller yet still substantial 67% are looking at an increase in import volumes (see Figure 2). These positive business outlooks echo studies on the attitudes of CEOs, who often exhibit a propensity for risk-taking and constructive optimism.<sup>5</sup> Nonetheless, our findings reveal the readiness of businesses to capitalise on new opportunities and navigate the complexities of a changing economic climate.

While businesses remain confident for 2024, our survey reveals that they also maintain a pragmatic approach to trade, with a clear recognition of the limitations they could face. Businesses see higher transport costs as the most significant limitation on exports, with 24% of the leaders we surveyed selecting this

as one of their top two concerns. However, recent trends indicate some potential relief: in the first three quarters of 2023, average freight rates decreased by 45%, suggesting that the burden of transport costs could be alleviating.<sup>6</sup> Indeed, transportation is a double-edged sword in the emerging trade narrative: while a larger segment of businesses grapple with high transport costs, 17% of leaders we surveyed see lower transport costs as a driver for growth. This is evidenced by a 19% decrease in average bunker prices in the first three quarters of 2023, which may reduce operational costs for shipping companies and, ultimately, for end-consumer prices as well.<sup>7</sup> These dynamics foster an environment where companies are reconsidering their logistics performance, as determined by the geographical positioning of their supply chains and their key markets. However, businesses' reconsideration of transportation networks goes beyond cost optimisation. It represents a strategic integration of economic, geopolitical and environmental considerations, positioning transportation and logistics as a cornerstone for addressing the challenges confronting contemporary businesses.<sup>8</sup>

**Figure 2: Expected change in firm's exports and imports for 2024 compared with 2023**

Question: By how much do you expect the total value of your firm's company-wide exports (international sales) and imports (purchases of inputs excluding labour) to change in 2024 compared with 2023? Percentage of respondents.



Source: Economist Impact Survey

Whilst businesses are facing choices about transportation efficiency, our survey also highlights a series of other limitations to growth. Roughly a fifth of businesses are concerned with higher tariffs or uncertainties around tariffs in key markets they export to or import from (see Figure 5). This concern, reflecting the increase in trade tensions in the era of new globalisation, adds a layer of complexity to business strategy,

by making it challenging to forecast costs and prices, and by introducing hesitancy to expand into new markets. Additionally, 22% of respondents emphasised the closely related challenge of political instability in their sourcing markets, a limitation that, in the era of new globalisation, further complicates strategic planning and decision-making.

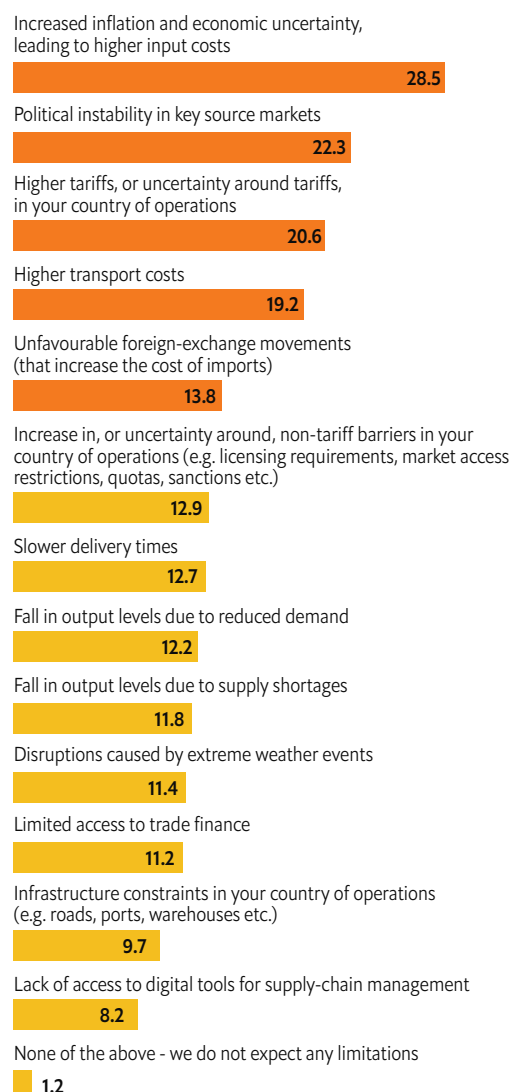
### Figure 3: Top limitations expected for increasing exports and imports in 2024

Question: What do you expect will be the top limitations your firm will face with increasing exports (international sales revenues) and imports (purchases of inputs excluding labour) in 2024? Please select the top two. Percentage of respondents

#### Exports



#### Imports



In 2024, businesses will not just be weathering the storm but actively seeking new opportunities for expansion. Our survey indicates that, despite the formidable challenges posed by the current geopolitical and economic climate, there are multiple growth drivers and sources of optimism underpinning global trade. A shift towards new markets is discernible, with 26% of firms citing this avenue as their primary growth driver. William Reinsch, the Scholl Chair in International Business at the Center for Strategic and International Studies (CSIS), a think tank, emphasises that market diversification is a necessity: “If [American] companies want to grow, they have to go international, they don’t have any choice. America has 4% of the world’s population and 20% of the world’s economy; most of the growth in the world economy is going to be outside America.” The trend extends beyond the US, however—the Middle East is a notable example, with 33% of businesses there looking to diversify into new markets.

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Such expansions not only capitalise on global growth opportunities, but also build resilience against downturns and saturations in domestic markets. And yet, businesses’ desire to enter new markets is concurrent with an expectation for increased demand within existing markets: 24% of the leaders we surveyed expect growth where their firms already have a presence.

Technology’s transformative power stands out as a source of optimism underpinning businesses’ push for growth. Dmitry Grozoubski, founder of ExplainTrade, a trade policy consultancy, highlights this shift, stating, “in trade, there’s a lot that is done manually, but it doesn’t all have to be. I am very excited about the potential of digitalising part of the supply-chain bureaucracy and what that could mean for smaller businesses trading across borders. For example, AI and chatbots could help businesses navigate bureaucratic hurdles like finding the right tariff classification for each of their products.” And, 34% of firms signal optimism about the efficiencies new technologies will bring to supply chains. The enthusiasm of businesses stems from recognition of technology as not just as a means to achieve greater supply-chain efficiency, but also as a transformative source of new opportunities in supply-chain restructuring.

# The Remaking of Global Supply Chains: Suppliers, Geographies and Inventories

Right-sized supply chains and well-positioned suppliers emerge as critical factors for businesses in ensuring operational success while maintaining financial stability amid uncertainty. Even in more predictable times, disruptions in supply chains can cost firms over 40% of a year's profit every decade.<sup>9</sup> The vulnerability in supply chains often stems from the number of geographies they span—which can be multiple continents or countries close to home—and the number of suppliers they include.

Our survey of business leaders reveals a critical insight about the transition in supply chains: there is an observable increase in the variability between the approaches businesses take. This reflects a growing understanding amongst supply-chain managers that no single strategy will meet the needs of all businesses. Indeed, latest business sentiments underscore a dynamic

and ongoing balance between diversifying suppliers and consolidating them. Businesses are also weighing the advantages of geographically widespread networks against the potential benefits of regional consolidation. Our survey finds that in 2024, a trend towards greater regionalisation is not well-supported—a reality of supply-chain reconfiguration in conjunction with businesses' drive to expand into new markets. Lucas Netto, head of supply chain at Magotteaux, a process optimisation firm, attests to this reality: "Right after Covid, there was a strong push for localisation, however, this is no longer the case. There is a natural tendency, especially for businesses that are cost-driven, to look to China and India where they're able to produce cheaply."

## The supplier dilemma: diversify or consolidate?

In 2024, businesses' approach towards supplier management is characterised by a critical dichotomy: diversification versus consolidation. This tension, illustrated by our latest survey, highlights the complex and very subjective decision-making processes businesses face in finding an equilibrium between supply-chain resilience and efficiency.

Survey results indicate a sustained belief in the benefits of diversification when reconfiguring supply chains: 44% of executives still prioritise

**"Right after Covid, there was a strong push for localisation, however, this is no longer the case. There is a natural tendency, especially for businesses that are cost-driven, to look to China and India where they're able to produce cheaply."**

Lucas Netto, head of supply chain at Magotteaux

diversifying their supplier base. The rationale is straightforward: a broader base of suppliers can provide a buffer against disruptions, ensuring continuity and flexibility. A recent analysis examining supply-chain resilience during the Covid pandemic provides strong evidence: while at the onset of the pandemic most businesses suffered from global trade disruptions, over time, those who relied on diversified inputs from abroad exhibited greater supply-chain resilience.<sup>10</sup> Another study of French firms confirms that businesses that diversified their range of suppliers, even reactively during the pandemic, consistently experienced a reduced impact from international lockdowns.<sup>11</sup> Mr Netto shares this experience: “When the shipping crisis started, we began using more suppliers instead of relying on a single source. We diversified to make sure we would have the right level stock at the right plant and this allowed us to go through the crisis without any disruption at all.” Echoing similar sentiments, Bertrand Conqueret, chief procurement officer at Henkel, a chemical innovation firm, shares insights suggesting an inherent need to balance diversification with operational simplicity: “Simplifying internal processes and reducing complexity in your component portfolio is key to better control.”

**“Simplifying internal processes and reducing complexity in your component portfolio is key to better control.”**

Bertrand Conqueret, chief procurement officer at Henkel

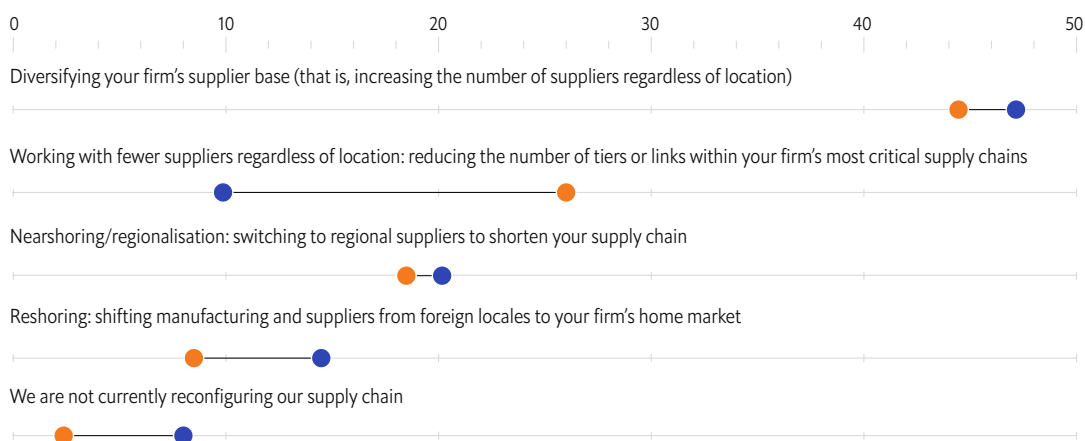


While diversification remains a widely-pursued strategy, a comparison with 2022 indicates a slight shift in this approach (see Figure 4). Although not too significant, this trend reflects a wider reassessment of supply-chain strategies and, likely, a growing recognition of given downsides of supplier diversification in certain operational scenarios. For example, engaging with more diverse suppliers can involve complex and potentially costly efforts to replicate more complex operations. And, even when these efforts are successful, there's a risk that the quality of relationships with each supplier might be diluted, reducing communication and collaboration.<sup>12</sup>

**Figure 4: Supply-chain reconfiguration approaches: 2023 vs 2024**

Percentage of respondents

● 2022 ● 2023



Source: Economist Impact Survey

Moreover, this complexity is heightened by increasing regulations, such as those related to sustainability, which demand greater supply-chain visibility, making oversight of operations more challenging when working with diverse suppliers. Alan McKinnon, professor in Transport and Logistics at Kuehne Logistics University, highlights such challenges, noting that with corporate sustainability reporting requirements on scope three emissions in Europe and North America, there is a significant gap in understanding how to report these emissions from the upstream supply chain. Professor McKinnon points out, “what the policymakers are recommending makes a lot

of sense theoretically, but the practicalities of working out how much CO<sub>2</sub> is emitted from your supply chain is very difficult”.

And certainly, our latest survey discerns a notable shift towards consolidation among fewer suppliers: a significant 26% of businesses are opting for this approach in 2024, up from 10% in the preceding year. Working with fewer, but more consolidated, suppliers offers several benefits: greater supply-chain visibility and increased quality control through better information-sharing, often more favourable economic terms due to larger contracts and, ultimately, improved trust.<sup>13,14</sup> To illustrate, a recent study of a multinational fashion group finds that, in an industrial context “characterised by mistrust, complexity and privacy”, a key to attaining supply-chain transparency were stronger relationships with suppliers.<sup>15</sup> Mr Conqueret puts it more broadly: “What we are very much aware of, and what the crisis of the last three years has strongly enhanced, is that where you have strong collaboration and trusted relationships, you overcome challenges.”

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Indeed, the appropriateness of either strategy—diversification or consolidation—varies amongst businesses, and is dependent not only on the specific industry or sector they operate in, but also on the particular products they deal with. Mr Reinsch observes, “companies are interested in rationalising and shortening their supply chains, while also navigating the complexities of different business models and levels of investment in various locations”. For instance, our survey suggests that businesses in the fast-moving consumer goods and retail (non-food) sector rely on—and likely benefit from—a more diversified supply chain that allows them to manage high demand variability and ensure constant supply. In contrast, businesses in the industrial sector (automotive, aerospace/defence, manufacturing) find comparatively greater value in working with fewer suppliers, likely because this allows them to ensure quality and greater transparency.

For other businesses, a hybrid approach might be the most pragmatic strategy. This would involve implementing both diversification and consolidation strategies simultaneously, across different segments of their operations or products within their supply chain, optimally capitalising on the strengths of each strategy.

### **Regionalisation taking a back seat**

Despite concerns over the current global trade landscape, business enthusiasm for regionalisation remains tempered. Our latest survey finds that nearly a fifth of business leaders choose nearshoring or regionalisation as their main strategy in 2024, a slight decrease from the previous year. The findings mirror a survey by the European Investment Bank, which indicates that in 22 out of the EU’s 27 member states, businesses are increasing the number of trade partners from international geographies rather

than focusing more on domestic suppliers or markets.<sup>16</sup> It becomes clear that while certain regionalisation is occurring—for example, for critical supply chains—the prevailing business sentiment leans towards supplying from a range of geographies. And the reasons for this, as the WTO's 2023 World Trade Report argues, are well-founded: despite heightened geopolitical risk, global markets often hold competitive advantages over regional sourcing in terms of efficiency, cost-effectiveness and resilience.<sup>17</sup>

### **Just-right inventories: lean stockpiling overtakes both just-in-time and just-in-case**

Inventories are another crucial factor in the interplay between resilience and efficiency. How much businesses stockpile has evolved over the past year, demonstrating a shift towards more balanced approaches. According to our survey, there's a decrease in businesses relying on extreme inventory strategies, such as very short (2-week buffer) or very long (over 6-month buffer) periods (see Figure 5). Besides these shifts on the fringes, however, 2023 did not see significant changes: companies maintained an average of 9.7 weeks of inventories, a slight recalibration from 10.1 weeks in 2022 and 8.9 weeks in 2021. In this context, the insights of Professor McKinnon become particularly relevant. He observes that “companies are identifying more critical products where they need a bit more inventory and are building more of a buffer there. But in the case of other products that are less sensitive or less critical, companies keep inventories lean – yet build them up a little bit more than before.”

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Alan McKinnon, professor of logistics,  
Kuehne Logistics University



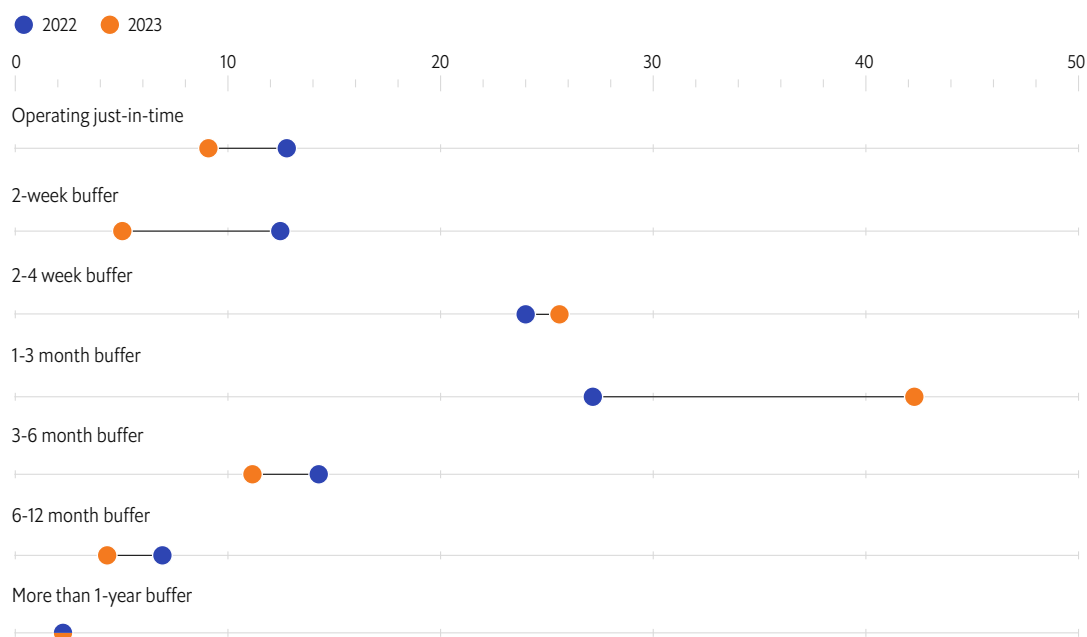
This suggests a clear move away from the just-in-time models popular before the pandemic (in 2023, only 12% of businesses prioritise them) towards a more moderate approach. In this, businesses seek an optimal middle ground that ensures both sufficient stock to buffer against unpredictability and the avoidance of excessive inventory, which can have high capital intensity. When asked about their most effective strategy to reduce overall trade and supply-chain costs, the top priority among executives (34% selected it as one of two options) is leveraging digital tools to streamline inventory management.

Indeed, this is no surprise given the high cost of maintaining ample inventories: an analysis of 52 markets concludes that for prime warehousing, total costs, comprising rents, service charges and taxes, grew 10.1% in the 12 months to June 2023.<sup>18</sup>

These numbers not only outstrip inflation levels, but exceed the 8% annual increase recorded for the same markets between 2021-2022.<sup>19</sup> As a result of such increases in warehousing costs, businesses are confronting the widespread issue of inventory distortion, which, another recent analysis finds, is aggravated by consumer demand dynamics.<sup>20</sup> In particular, this distortion leads to a staggering annual loss of around US\$1.8trn for large organisations, manufacturing firms and e-commerce websites.<sup>21</sup> Fortunately, however, the analysis suggests that effectively addressing inventory distortion could result in a sales increase of up to 10.3%. In this, AI can play a significant role and businesses are fast to act: 35% of business leaders indicate that their firms are now employing AI to optimise inventory levels. Section 4 discusses the role of technology in supply chains further.

### Figure 5: Inventory buffer against supply-chain disruptions: 2023 vs 2024

To what extent is your company carrying additional inventory as a buffer against supply-chain disruptions? Please select one. Percentage of respondents



Source: Economist Impact Survey

# Geopolitical confrontation weighs on global trade but it could get worse

In the new era of globalisation, a landscape of heightened geopolitical risk is unmistakably shaping the contours of global trade. With escalating trade tensions between the US and China, conflicts such as the war in Ukraine and, more recently, the war in Gaza, businesses are increasingly compelled to reassess their partnerships and supply-chain strategies. Indeed, global firms are increasingly finding themselves in a position where they must balance between conventional economic imperatives, such as cost-minimisation and efficiency, and the emerging necessity of safeguarding against geopolitical risks. As Mr Reinsch sees it “as a competent supply chain manager, you have been focusing

**“As a competent supply chain manager, you have been focusing on price, quality and delivery time. Now, you are being told by management to insert additional non-economic variables, the main ones being resiliency and redundancy. The changes you make will cost more and be less efficient than what you’re doing now. Companies have to factor that shift in.”**

William Reinsch, the Scholl Chair in International Business at the Center for Strategic and International Studies (CSIS)

on price, quality and delivery time. Now, you are being told by management to insert additional non-economic variables, the main ones being resiliency and redundancy. The changes you make will cost more and be less efficient than what you’re doing now. Companies have to factor that shift in.” This evolving complexity in managing global supply chains underscores the need for an understanding of the impact geopolitical rifts can have on international trade.

To provide this understanding, Economist Impact conducted a quantitative trade analysis through the Global Trade Analysis Project (GTAP) platform. We estimate the potential global output loss from hypothetical scenarios of ‘geo-economic fragmentation’—a strategic, policy-driven reversal of the global economic integration that has expanded since the mid-20th century.<sup>22</sup> Our approach involves using the EIU’s assessment of how sympathetic countries are to Russia (after the Ukraine war) to divide the global economy into hypothetical trading blocs.<sup>23</sup> In particular, we devise three distinct blocks—‘Western’, ‘Neutral’ and ‘Eastern’—while singling out the US and China, as the largest two economies at the centre of global trade tensions. We examine eight main sectors in these blocs to project how three fragmentation scenarios could impact global trade. See appendix I and II for more.



### US-China: A complex interplay of trade and geopolitics

At the heart of global trade dynamics is the complex geopolitical relationship between the US and China. The more significant material onset of the increasing tensions between the world's two largest economies commenced under the Trump administration when the US imposed an average import duty of 19.3% on imports from China, which then responded with an average duty of 21.1% on US imports.<sup>24,25</sup> Impacted were over 66% of Chinese exports to the US and 58% of US exports to China, highlighting the depth of the trade conflict.<sup>26</sup> These tariffs, alongside divergent views on human rights, democracy and growing national security concerns, spurred a desire for reconfiguring supply chains, particularly for critical goods.

The trade relationship between the US and China will remain complex and highly influential. It experienced significant fluctuations in 2023, with variable export and import values leading to a notable shift from the previous year's record-high bilateral trade of US\$690bn and a US trade deficit of US\$382.9bn.<sup>27,28,29,30</sup>

Looking ahead, the evolving US-China relationship suggests a strategic realignment in global trade patterns. Analyses project a decrease in trade between the two superpowers of approximately US\$63bn through 2031.<sup>31</sup> This anticipated change is prompting global companies to shift their operations to less geopolitically risky locations. Indeed, in the first half of 2023, Mexico replaced China as the US's largest trading partner for the first time in almost two decades.<sup>32</sup> A study has found that, since the onset of the Covid pandemic, the value of Mexican manufactured goods imported by the US rose from US\$320bn to US\$402bn – an increase of 26%.<sup>33</sup> At the same time, the analysis finds that in Asia, countries such as Vietnam, Taiwan and India have notably benefitted, securing an increasingly larger share of US imports in recent years. This shift not only provides businesses with opportunities for diversification and risk mitigation, but also aligns with businesses' optimism to tap into new markets as part of their growth strategies. However, the reorientation to new markets also introduces challenges—business will need to navigate different regulatory and cultural landscapes, besides building local partnerships.



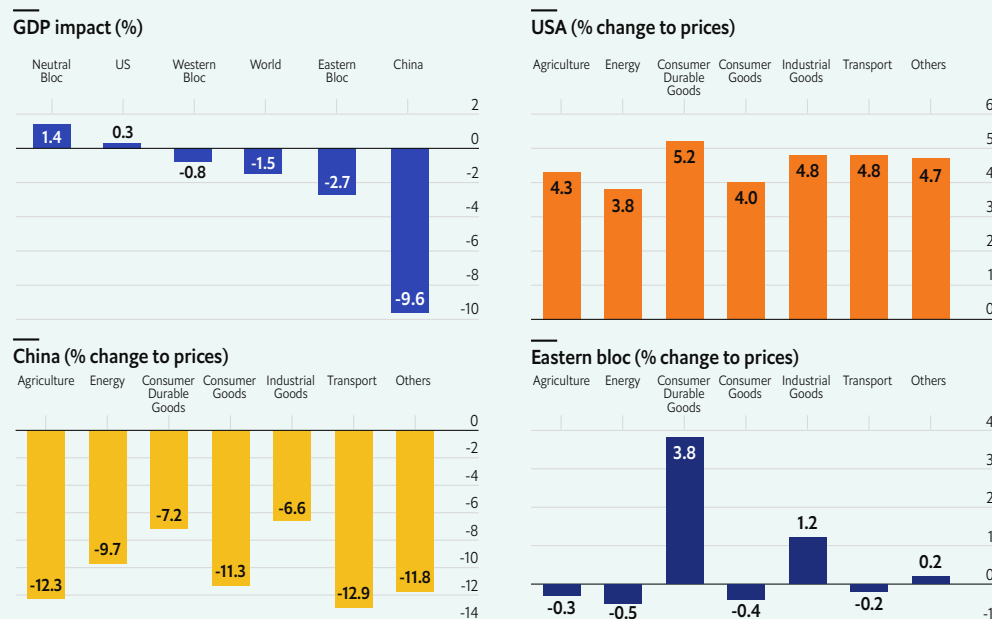
As part of our quantitative trade analysis, we explore a hypothetical scenario where the world is divided into three trading blocs: a Western bloc led by the US, a Neutral bloc, and an Eastern bloc led by China. We examine what might happen if the Western and Eastern blocs shift from cooperative trade (with relatively low tariffs and open markets) to a more competitive stance, where they impose higher tariffs and restrictions on each other's goods. In **scenario I**, we explore an increase in tariffs by 15 percentage points across all industrial goods. Such a change, our analysis finds, would lead to a global output decrease of 0.72%. The differential effects across China, the US and our three blocs are particularly notable. China sees the most significant impact, with a substantial GDP decrease of 4.48%. This underscores China's pronounced susceptibility in a scenario of fragmented global trade, stemming from its dependence on export-led growth, especially towards Western markets, which would be directly affected under heightened tariff conditions. In stark contrast with China, the US experiences a modest increase in GDP of 0.16% in the face of a 15% increase in tariffs. This suggests that the US has a degree of resilience in the face of global trade shifts, stemming from its comparatively more diversified economy, its ability to pivot towards domestic production and its trade within the Western bloc. The divergent impacts of heightened tariffs on China and the US demonstrate the asymmetric nature of global trade dependencies and ultimately, the different capacities of the two superpowers to adapt to a changing trade landscape.

## SCENARIO 1

Our analysis reveals distinct impacts on the three main blocs in **scenario I**, a 15 percentage points increase in tariffs across all industrial goods (see Figure 6). The Western bloc, excluding the US, sees a minor GDP decrease of 0.35%, indicating a degree of resilience, but also highlighting its greater interconnectedness with the global trade system in comparison to the US alone. In turn, the Eastern bloc, excluding China, experiences a GDP decrease of 1.25%, indicating a considerably larger impact from a 15% increase in tariffs. Meanwhile, the Neutral bloc emerges as a relative winner in this scenario, being the only bloc to see a GDP increase—by 0.66%. This growth could be attributed to the bloc's position as a viable alternative in the face of shifting trade dynamics, benefitting from redirected trade flows and reduced competition.

What needs to be recognised in the above is that while the Neutral block and the US might see marginal GDP growth, the broader economic and social costs resulting from the hypothetical tariffs considered in **scenario I** will be substantial. More specifically, a 15 percentage point increase in tariffs on industrial goods will lead to changes in consumer prices, with varying impacts across different regions. In particular, our analysis finds that in the US, **scenario I** leads to considerable price increases across sectors, with agriculture seeing a 4.34% rise and industrial goods facing a notable 4.8% increase. These changes imply a potential shift in demand, especially in sectors like consumer goods, where prices would rise by 4.04%. In China, **scenario I** indicates a different landscape. Substantial decreases in consumer prices across all sectors, including agriculture (-12.3%), energy (-9.74%), consumer goods (-11.25%) and industrial goods (-6.58%), imply an economy with significant deflation, which could restrict business growth. Conversely, in the Eastern bloc, scenario I suggests mixed impacts. Moderate increases in sectors like heavy manufacturing (1.16%) and consumer goods (3.77%) indicate a resilience, albeit with potential stress on profit margins for businesses, necessitating strategic adjustments to maintain market positions in the face of shifting global trade dynamics.

**Figure 6: Scenario I: Economic impact of 15% tariff increase on industrial goods, global regions and sectors analysis**



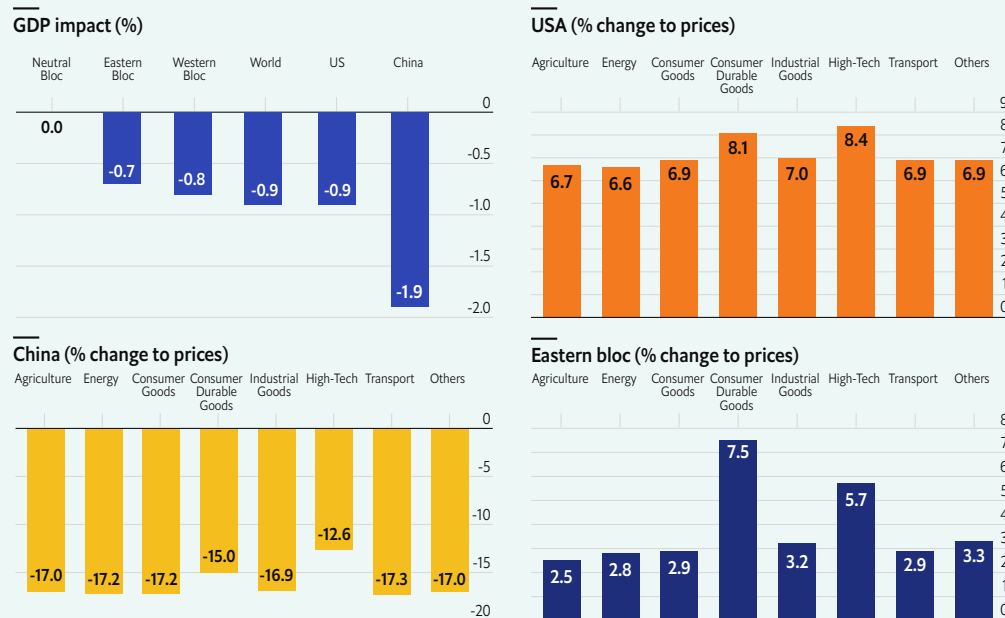
Source: Economist Impact Quantitative Trade Analysis (GTAP Model)

## SCENARIO 2

As part of our quantitative trade analysis, we also explore a hypothetical scenario where trade barriers in high-tech manufactured goods, including advanced semiconductors, are increased. This scenario reflects a focal point of the current geopolitical climate, in which the capacity to manufacture and manage the supply of advanced semiconductors is seen as a strategic advantage and has become central to national security policy. These chips have received significant attention as they are integral to numerous technologies, ranging from everyday devices like smartphones to sophisticated military systems and the development of sophisticated AI. This also makes them central to many business operations, with the significance of high-tech manufactured goods to the global economy becoming evident in the repercussions within **scenario II**.

**Scenario II** reveals that eliminating high-tech trade between the US and China blocs would lead to a global output decrease of 0.88%. China's GDP would decrease by 1.87%, while the remaining Eastern bloc would see a 0.66% decrease. In turn, the US's GDP would decrease by 0.92%. The remaining Western bloc is projected to experience a 0.81% decline, and the Neutral bloc would see virtually no change. This data underscores the profound impact such trade policies could have on the global economic landscape, particularly in the high-tech sector.

**Figure 7: Scenario II: Impact of high-tech trade barriers on global economies**



Source: Economist Impact Quantitative Trade Analysis (GTAP Model)

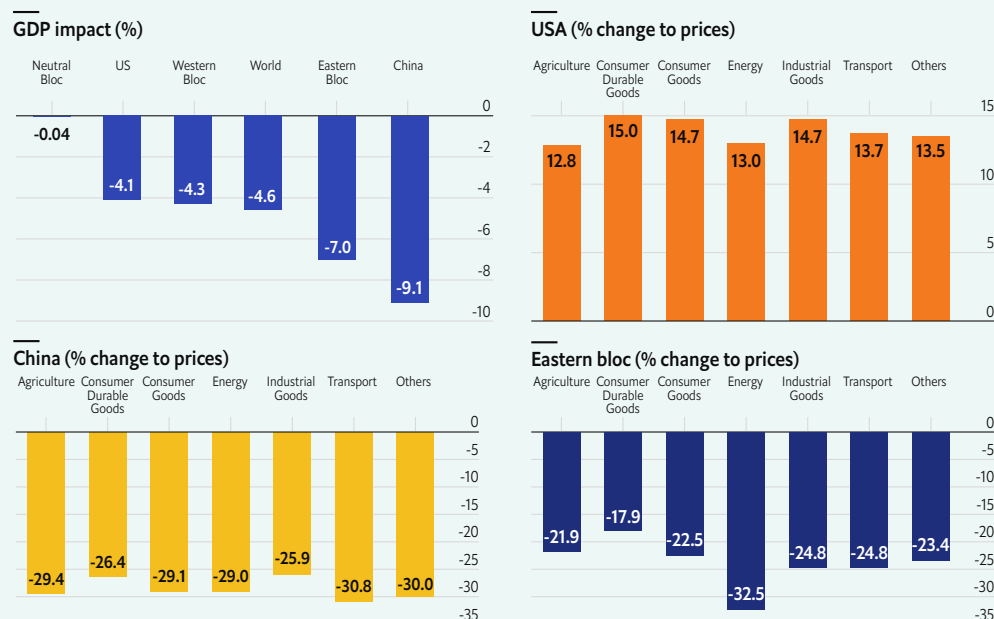
### SCENARIO 3

Our quantitative analysis included a third hypothetical scenario: a complete 'decoupling' across all traded goods between rival geopolitical blocs. This scenario envisages a complete cessation of trade in goods between the 'Western' bloc and the 'Eastern' bloc, while maintaining intra-bloc trade. In turn, the 'Neutral' bloc in this scenario trades with the 'Western' bloc and the 'Eastern' bloc individually and on the same terms as they currently do.

The impact of such a scenario is significant, our analysis finds. The Western bloc would see a GDP decrease of 4.34%, with the US, in particular, seeing its GDP fall by 4.05%. China's GDP would drop by 9.14%, and the Eastern bloc would experience a 7.04% decrease. The Neutral bloc, being in the comparatively most favourable position, would face a marginal decline of 0.04%. Globally, such a complete decoupling would result in a 4.59% decrease in output.

Beyond the immediate GDP impacts, this complete decoupling scenario holds profound ramifications for the global economy. Supply chains would be completely upended, facing more than mere disruptions, leading to shortages and price hikes in essential goods and services (see Figure 8). Furthermore, such a scenario would precipitate a ripple effect across economies, affecting employment and consumer spending, and disturbing the basic economic equilibriums that underpin the global economy. These hypothetical ramifications underscore the critical need to balance concerns around geopolitical risk and national security against considerations of economic prudence. Governments and businesses alike need to be cautious and collaborate to mitigate the risks of trade disruptions with wide economic ramifications.

**Figure 8: Scenario III: Impact of complete decoupling between blocs on global economies**



Source: Economist Impact Quantitative Trade Analysis (GTAP Model)

## Businesses Responses

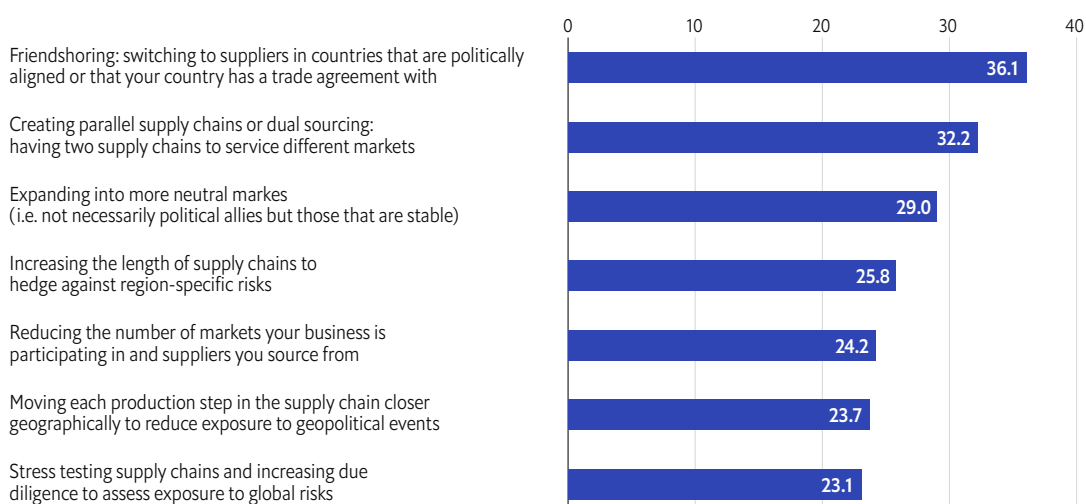
As a response to ongoing geopolitical shocks and in preparation for further escalation of geopolitical tensions that disrupt global trade, strategies like 'friendshoring' and the creation of dual supply chains are gaining prominence. Indeed, in light of scenarios such as those we modelled above, businesses with critical supply chains that span various geographies will face a pressing challenge. Mr Reinsch emphasises this point: "We're seeing companies not so much abandoning their existing setups but creating redundant capabilities elsewhere. This is to ensure they have alternatives in case of disruptions like geopolitical conflict. [...] The 'China + 1' strategy is becoming more prevalent as businesses seek to diversify and reduce their dependency on a single region."

**"We're seeing companies not so much abandoning their existing setups but creating redundant capabilities elsewhere. This is to ensure they have alternatives in case of disruptions like geopolitical conflict."**

William Reinsch, the Scholl Chair in International Business at the Center for Strategic and International Studies (CSIS)

## Figure 9: Influence of geopolitical events on trade and supply-chain operations

How are current geopolitical events shaping your trade and supply-chain operations (e.g. the war in Ukraine, tensions between the US and China, Taiwan and China etc.)? Please select one or two. Percentage of respondents.



Source: Economist Impact Survey

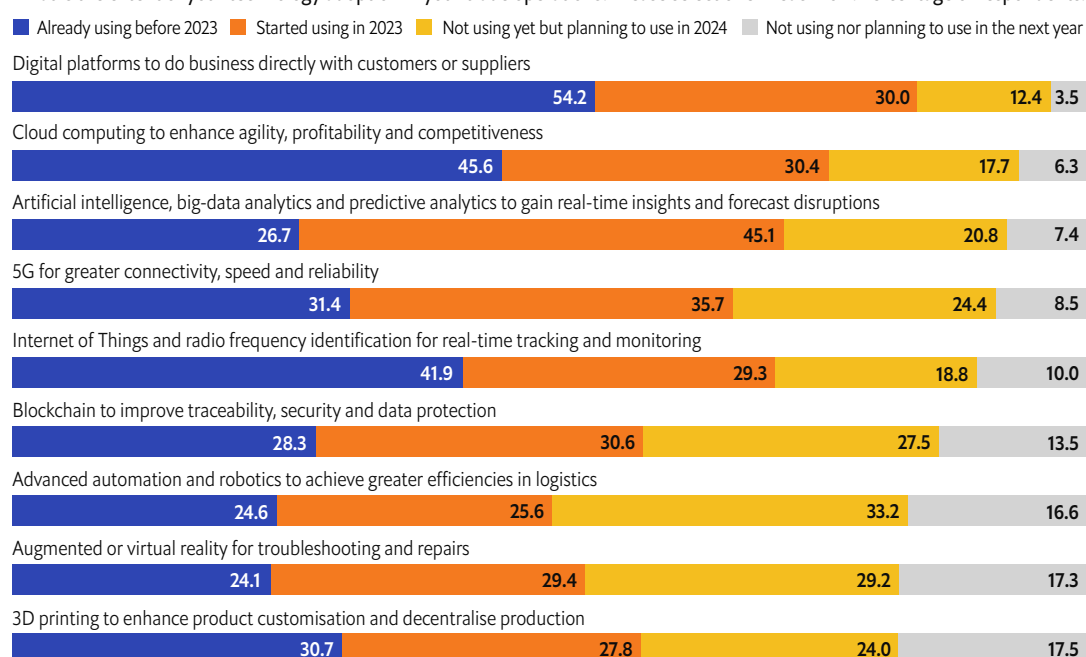
# Supply chains in sync: harnessing technology to redefine global trade

Technology, long a cornerstone in fostering our interconnected global economy, is playing an increasingly critical role in businesses' response to the challenges of today's trading environment. Predominantly fuelled by breakthroughs in AI, optimism about technology among business leaders has led to a paradigm shift. Where technology was once viewed as a supplementary tool, technology is now increasingly recognised as the backbone of supply-chain restructuring. Our survey is unequivocal: technologies that improve supply-chain efficacy and resilience are,

by far, the main source of optimism for business leaders when asked to assess the future of global trade. However, this optimism is tempered by the challenges that come with adopting new technologies. As Mr Grozoubinski points out, a key issue is "the rapid pace of technological change". He underscores the challenge businesses face in keeping up with the fast-paced introduction of new technologies, necessitating agility and prudence to remain competitive and effectively leverage digital advancements.

**Figure 10: Extent of technology adoption in trade operations**

What is the extent of your technology adoption in your trade operations? Please select one in each row. Percentage of respondents.



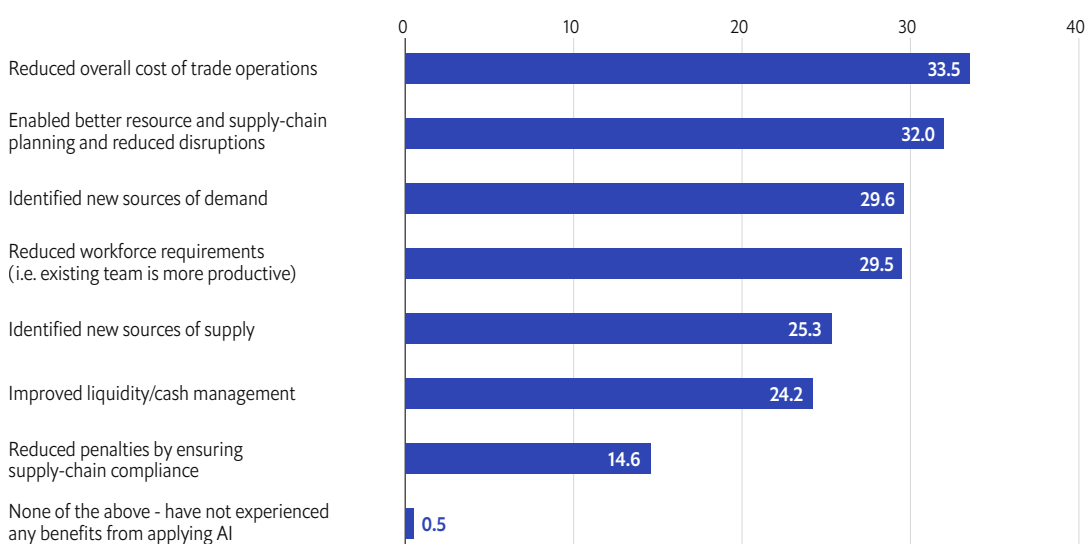
### AI and Big Data transforming supply chains

AI and big-data analytics are perceived as game-changers in supply-chain management. A clear signal of the excitement around the technology, sparked by advancements in ever-more-capable AI, is evident in our survey: 45.1% of respondents report integrating these technologies in their supply chain in 2023 and an additional 26.7% report using them already. In 2023, the use of AI spanned various domains: 39.6% of business leaders stated that they have applied AI in optimising the customer experience, 34.8% in forecasting demand, 34.6% in optimising inventory levels, and 34.5% in identifying potential supply-chain disruptions.

The tangible benefits of integrating AI are evident, with businesses experiencing a 33.5% reduction in overall trade operation costs and a 32.0% enhancement in resource and supply chain planning. The scale of these optimisations indicates that the impact of AI on existing supply-chain operations has already been transformative for certain businesses. The use of AI is exemplified by the optimisations it delivered to a crucial supply chain: in the NHS Blood and Transplant system, advanced machine learning significantly improved the platelet supply chain, achieving a 54% reduction in expired platelets and eliminating ad hoc transport costs, while maintaining high delivery reliability.<sup>34</sup>

### Figure 11: Benefits experienced from applying AI to trade operations and supply chain

What top benefits has your company experienced/does your company expect from applying AI to these activities? Please select up to two. Percentage of respondents.



Source: Economist Impact Survey



### Blockchain technology: trust the digital

Blockchain technology is offering a range of benefits that align with the emerging demands of transparency and accuracy in modern supply-chain management. Our survey finds a wide uptake of blockchain technologies, with 58.9% of businesses using it by 2023 and an additional 27.5% planning its implementation in 2024. The technology's use in supply-chain management reduces or eliminates fraud and errors, streamlines processes by reducing paperwork delays, and minimises courier costs. A likely more valuable result from these improvements,

**“Trust is a critical commodity, especially in regions like Africa ... people want to know that what they’re getting is certified by the right body, [and, in my view,] digitalisation offers a very big opportunity to cut that time, cost and bureaucracies—and to ensure trust.”**

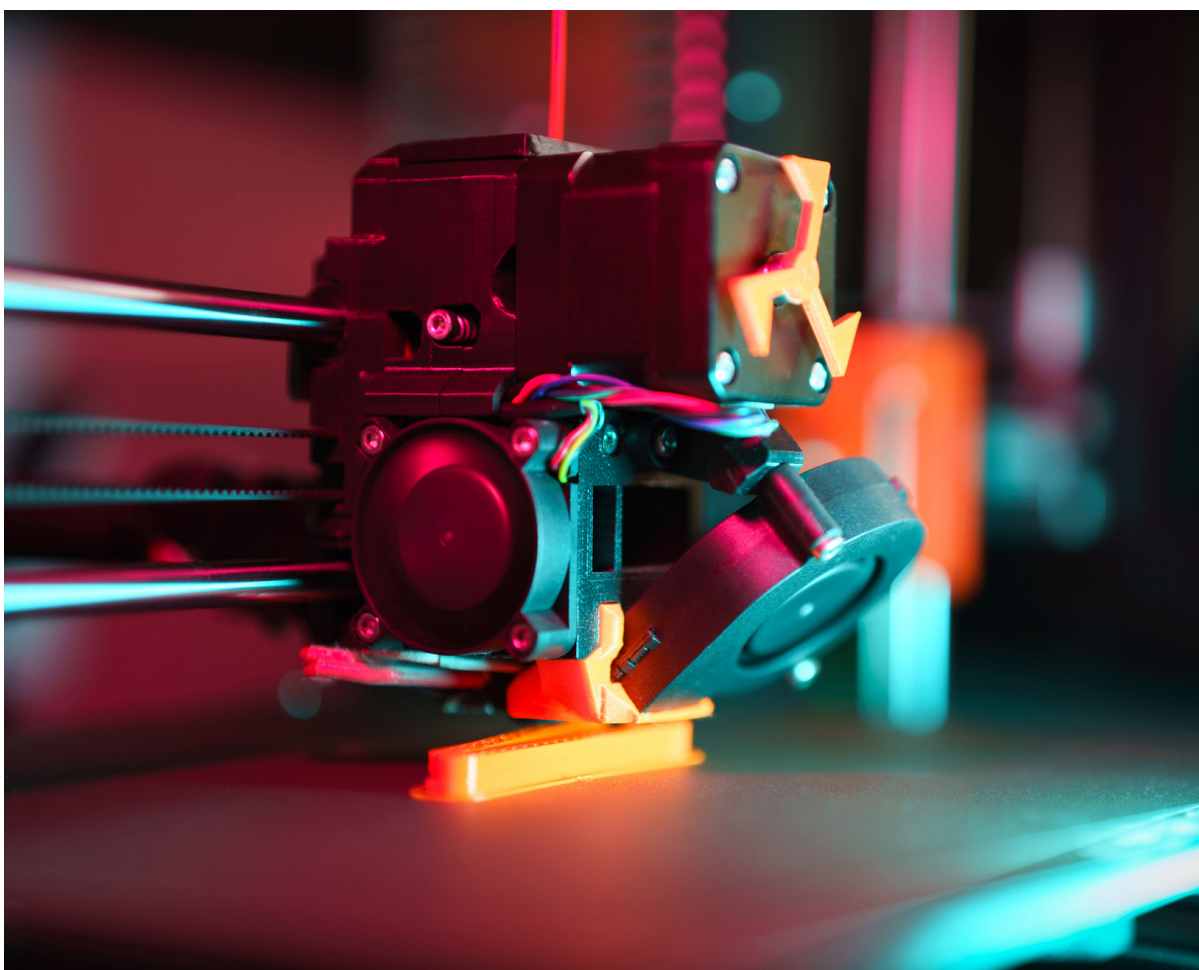
Allen Asimwe, chief of programmes at TradeMark Africa

however, is intangible: an increase in trust among consumers and partners—a prudent step towards having more consolidated suppliers.<sup>35,36</sup> As Allen Asimwe, chief of programmes at TradeMark Africa, a trade organisation, sees it, “trust is a critical commodity, especially in regions like Africa... people want to know that what they’re getting is certified by the right body” and, in her view, “digitalisation offers a very big opportunity to cut that time, cost and bureaucracies—and to ensure trust”. Indeed, Ms Asimwe and TradeMark Africa have taken practical steps: “We have piloted a product called TLIP (Trade Logistics Information Pipeline) blockchain technology. [...] it allows you to cut by half the time it takes to clear produce that is destined for markets”, she says. An analysis of blockchain in healthcare supply chains reveals the great potential for the technology, where integrity and security are paramount due to the direct impact on patient safety and health outcomes.<sup>37</sup> In particular, blockchain shows great potential in enhancing drug-recall management, addressing prescription drug abuse and combating counterfeit medicines, leading to a general improvement in public health supply chains.

### 3D Printing: the road to customisation

In the realm of product customisation and decentralised production, 3D printing stands out, with a combined 58.5% of businesses either using it already or commencing its use in 2023. This trend is vividly illustrated in the automotive industry, as highlighted by the insights of Suleiman Pallak, general manager at General Motors who discusses the automotive giant's integration of 3D printing into its supply-chain strategy. Mr Pallak discloses the widespread adoption of this technology across General Motor facilities in the US, China and Europe, emphasising its use in the development and

production of newer models: "With the Hummer EV, we are increasingly relying on 3D printing for designing key components. This shift is pivotal in advancing our manufacturing techniques." Delving deeper into the impact on supply chains, Mr Pallak explains, "by integrating 3D printing, we're not just enhancing our design capabilities but also significantly improving the efficiency of our supply-chain operations". In the automotive sector, Mr Pallak continues, "the transition to virtual modelling with 3D printing is key to improving our production flexibility and responsiveness to market changes".



# Step into the spotlight: the evolution of supply chains in business strategy

The transformation of global trade has elevated supply-chain management from a background operation during the years of uninterrupted economic globalisation to a critical business component in the new era of globalisation. Facing the convergence of macroeconomic uncertainties, geopolitical tensions, climate impacts and technological advancements, supply-chain strategies need to be woven into wider business strategies.

The elevated importance of supply-chain management requires a nuanced foresight that balances global trends and regional and sector-specific peculiarities with internal business structures. Such nuance is crucial, since the effect of a global event can vary significantly across regions and industries: a disruption that severely impacts a European automotive company may have a minimal effect on a South American agricultural enterprise, and vice versa.

Despite the variance between sectors and regions, a key finding that business leaders align on is the prioritisation of delivery times. This focus is not without reason: it aligns with consumer expectations for rapid fulfilment—enhancing customer satisfaction and retention—but also streamlines operations by reducing capital-intensive high levels of inventory—increasing adaptability and planning capacity.



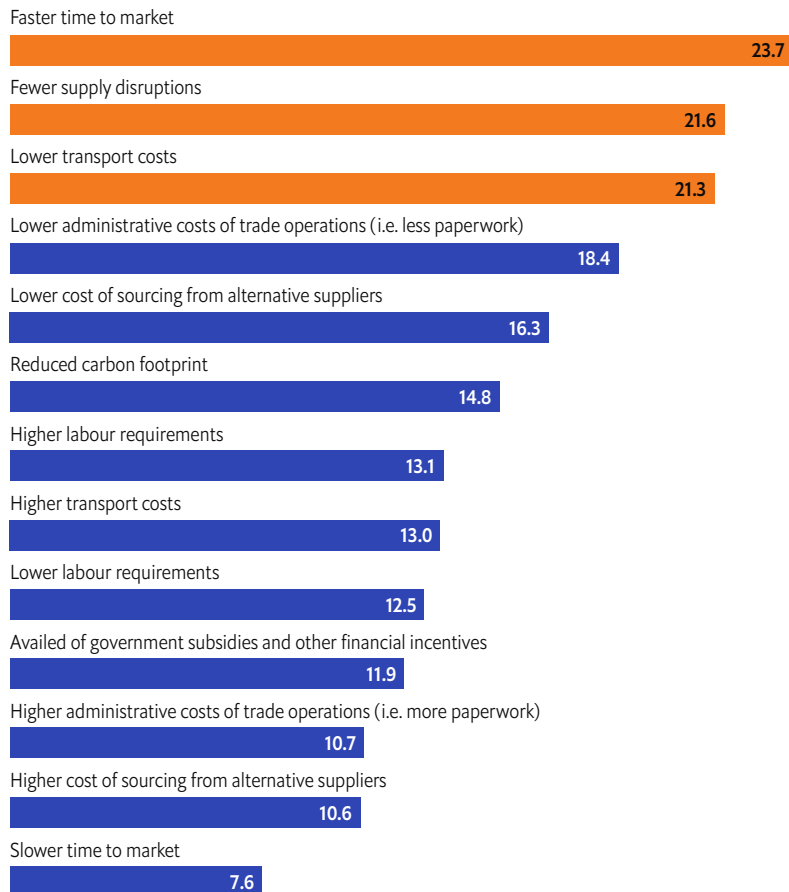
Despite these ambitions, the complexity of supply-chain organisation can still yield unexpected or even counterproductive business results. Our survey underscores this reality: while 23.7% of businesses experienced faster market times, 7.6% faced a slowdown; 21.3% saw reduced transport costs, yet 13% encountered increased expenses; 16.3% noted a decrease in supplier sourcing expenses, but 10.6% saw an increase. These variances are not statistical anomalies – they capture the insurmountable trade-offs involved in simultaneously aiming to enhance resilience and cost-efficiency.

Moreover, given the dynamism of the new era of globalisation, the 'shelf life' of a supply-chain strategy itself becomes short: an approach that proved to be effective a year ago may no longer yield the anticipated results amidst changed circumstances. This underscores the importance of a near-constant reconsideration of what is the best-suited strategy for each business, given its unique demands based on regions of operation, industry trends and internal structure of operations.

In short, as businesses navigate the new era of globalisation, the emphasis must be on responsive and customised supply-chain strategies. Despite the various challenges posed by heightened geopolitical tension, the impacts of climate change and a complex macroeconomic background, there is optimism for growth in exports and imports in 2024. To optimally realise this potential, businesses need to harness technological advancements and strategically reorganise their supply chains, balancing their internal considerations with the diverse and evolving landscape of global trade.

### Figure 12: Main outcomes of supply-chain management over the past 12 months

Question: In your opinion, what are the main outcomes of your company's approach to supply-chain management over the past 12 months? Please select the top two.  
Percentage of respondents



Source: Economist Impact Survey

# Appendix 1

## Methodological approach - Global Trade Analysis Project (GTAP)

The following section outlines how we estimated the global output loss arising from hypothetical scenarios of 'geo-economic fragmentation' referenced in the global report. Fragmentation broadly refers to the reversal of a multi-decade expansion (starting in the middle of the 20th century) of global cross-border flows of goods, services and capital. In the context of this exercise the term 'geo-economic fragmentation' is used to describe a policy-driven reversal of global economic integration often guided by strategic considerations.

Economist Impact employed the static CGE model (GTAP) developed by researchers and economists at Purdue University to estimate geo-economic fragmentation under different hypothetical scenarios. For more information about GTAP please consult: <https://www.gtap.agecon.purdue.edu/>

### Approach

*Please note the regional trading blocs and scenarios presented below are purely hypothetical in relation to the way fragmentation may threaten global trade in the short term. None of the scenarios presented are necessarily more likely or unlikely than the other. These are not forward-looking forecasts and do not represent the views of Economist Impact.*

### Regional aggregations

We divided the global economy into three distinct trade blocs based on the proxies for current geopolitical alignment. We used the [EIU closeness to Russia index](#), which looks at the level of support for Russia following the invasion of Ukraine. We aggregated countries that are supportive of Russia or Russia leaning into the Eastern bloc and those who oppose Russia into a Western bloc. Neutral countries are aggregated into a Neutral bloc. A detailed list of countries falling into each trading block can be found in Appendix 2.

### Sectoral Aggregations

We have assumed 8 sectors in the global economy in GTAP.

**Table 1: Summary of regional and sectoral aggregations**

Regions	Sectors
<ul style="list-style-type: none"> <li>Western bloc - includes US, UK, EU27</li> <li>Eastern bloc - includes Russia, China</li> <li>Neutral bloc - includes India, Brazil, UAE, Turkey</li> </ul>	<ul style="list-style-type: none"> <li>Agriculture</li> <li>Energy</li> <li>Consumer Goods</li> <li>Industrial</li> <li>Healthcare</li> <li>High-tech</li> <li>Transport</li> <li>Other (includes services)</li> </ul>

### Trade Scenarios

We ran three scenarios that highlight increasing degrees of severity/ downside for the world economy divided into trading blocs.

**Table 2: Summary of Trade Scenarios**

Scenarios	Sectors
1. Industrial goods decoupling	<ul style="list-style-type: none"> <li>Industrial sector</li> <li>High-tech manufactured goods</li> </ul>
2. Technological decoupling	<ul style="list-style-type: none"> <li>High-tech manufactured goods</li> </ul>
3. Total decoupling	<ul style="list-style-type: none"> <li>All sectors</li> </ul>

#### Scenario 1 - Industrial goods decoupling

In this scenario we assume a further escalation of trade tensions between rival blocs. Trade barriers are extended to all industrial goods. The tariff schedule for industrial goods between rival blocs will be increased by 15 percentage points above baseline levels. This is based on research done by Nicita, Olarreaga and Silva (2018) and Bolhuis et al (2023). The Neutral bloc will continue to trade freely with both Eastern and Western blocs.

#### Scenario 2 - 'Technological decoupling'

In this scenario, we assume that, due to the ongoing China-US conflict, rival blocs introduce trade barriers in high-tech manufactured goods, under concerns of national security. Trade in high-tech manufactured goods would cease between rival blocs (i.e. we assume no trade flows in high-tech manufactured goods between the Eastern and Western blocs), while the Neutral bloc will continue trading freely in high-tech manufactured goods with both blocs. A similar scenario is discussed by Goes and Bekkers (2022), Cerdeiro et al (2021) and Bolhuis et al (2023).

### Scenario 3 - Total decoupling

In this scenario, we assume a 'full decoupling' across all traded goods between rival blocs. Trade in goods between rival blocs will cease, while intra-bloc trade will continue. The Neutral bloc will trade only with the blocs it has relatively stronger trade ties with. This severe scenario has been hypothesised by IMF (2022), Goes and Bekkers (2022) and Bolhuis et al (2023).

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## Appendix 2:

# List of countries organised by blocs

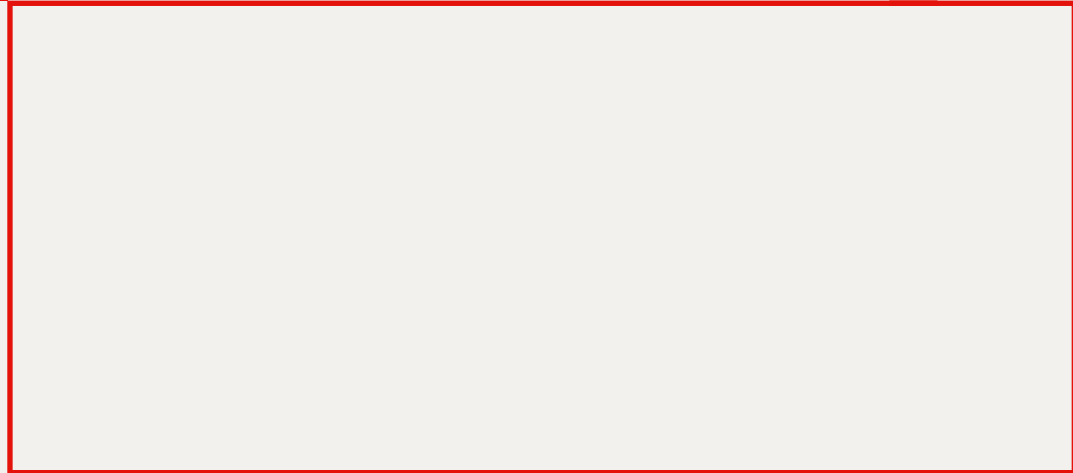
West			
<ul style="list-style-type: none"> <li>• Australia</li> <li>• New Zealand</li> <li>• Rest of Oceania</li> <li>• Japan</li> <li>• Korea</li> <li>• Taiwan</li> <li>• Brunei Darussalam</li> <li>• Cambodia</li> <li>• Indonesia</li> <li>• Malaysia</li> <li>• Philippines</li> <li>• Singapore</li> <li>• Thailand</li> <li>• Rest of Southeast Asia</li> <li>• Bangladesh</li> <li>• Nepal</li> <li>• Rest of South Asia</li> <li>• Canada</li> <li>• Mexico</li> <li>• US</li> <li>• Rest of North America</li> <li>• Argentina</li> <li>• Chile</li> </ul>	<ul style="list-style-type: none"> <li>• Ecuador</li> <li>• Paraguay</li> <li>• Peru</li> <li>• Uruguay</li> <li>• Rest of South America</li> <li>• Costa Rica</li> <li>• Guatemala</li> <li>• Panama</li> <li>• Rest of Central America</li> <li>• Dominican Republic</li> <li>• Jamaica</li> <li>• Puerto Rico</li> <li>• Trinidad and Tobago</li> <li>• Rest of Caribbean</li> <li>• Austria</li> <li>• Belgium</li> <li>• Bulgaria</li> <li>• Croatia</li> <li>• Cyprus</li> <li>• Czech Republic</li> <li>• Denmark</li> <li>• Estonia</li> <li>• Finland</li> </ul>	<ul style="list-style-type: none"> <li>• France</li> <li>• Germany</li> <li>• Greece</li> <li>• Hungary</li> <li>• Ireland</li> <li>• Italy</li> <li>• Latvia</li> <li>• Lithuania</li> <li>• Luxembourg</li> <li>• Malta</li> <li>• Netherlands</li> <li>• Norway</li> <li>• Poland</li> <li>• Portugal</li> <li>• Romania</li> <li>• Slovakia</li> <li>• Slovenia</li> <li>• Spain</li> <li>• Sweden</li> <li>• Switzerland</li> <li>• UK</li> <li>• Switzerland</li> <li>• Norway</li> </ul>	<ul style="list-style-type: none"> <li>• Rest of EFTA</li> <li>• Albania</li> <li>• Ukraine</li> <li>• Rest of Europe</li> <li>• Georgia</li> <li>• Bahrain</li> <li>• Israel</li> <li>• Jordan</li> <li>• Kuwait</li> <li>• Oman</li> <li>• Tunisia</li> <li>• Cote d'Ivoire</li> <li>• Ghana</li> <li>• Nigeria</li> <li>• Rest of Western Africa</li> <li>• Kenya</li> <li>• Malawi</li> <li>• Mauritius</li> <li>• Rwanda</li> <li>• Zambia</li> </ul>
East			
<ul style="list-style-type: none"> <li>• China</li> <li>• Hong Kong</li> <li>• Rest of East Asia</li> <li>• Lao People's Democratic Republic</li> <li>• Pakistan</li> <li>• Bolivia</li> <li>• Venezuela</li> </ul>	<ul style="list-style-type: none"> <li>• Nicaragua</li> <li>• Belarus</li> <li>• Russian Federation</li> <li>• Kazakhstan</li> <li>• Kyrgyzstan</li> <li>• Tajikistan</li> <li>• Armenia</li> <li>• Iran</li> </ul>	<ul style="list-style-type: none"> <li>• Benin</li> <li>• Burkina Faso</li> <li>• Senegal</li> <li>• Togo</li> <li>• Central Africa</li> <li>• South Central Africa</li> <li>• Ethiopia</li> <li>• Uganda</li> </ul>	<ul style="list-style-type: none"> <li>• Botswana</li> <li>• Mozambique</li> <li>• South Africa</li> <li>• Zimbabwe</li> </ul>
Neutral			
<ul style="list-style-type: none"> <li>• Mongolia</li> <li>• Vietnam</li> <li>• India</li> <li>• Sri Lanka</li> <li>• Brazil</li> <li>• Colombia</li> <li>• El Salvador</li> </ul>	<ul style="list-style-type: none"> <li>• Honduras</li> <li>• Rest of Eastern Europe</li> <li>• Rest of Former Soviet Union</li> <li>• Azerbaijan</li> <li>• Qatar</li> <li>• Saudi Arabia</li> <li>• Turkey</li> </ul>	<ul style="list-style-type: none"> <li>• United Arab Emirates</li> <li>• Rest of Western Asia</li> <li>• Egypt</li> <li>• Morocco</li> <li>• Rest of North Africa</li> <li>• Cameroon</li> <li>• Guinea</li> </ul>	<ul style="list-style-type: none"> <li>• Madagascar</li> <li>• Tanzania</li> <li>• Rest of Eastern Africa</li> <li>• Namibia</li> <li>• Rest of South African Customs</li> <li>• Rest of the World</li> </ul>

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