

# Global trade and value chains

Shaken not stirred

December 2023



World trade and production have plateaued in recent years, hinting at a potential shift in the global economic paradigm.

The potential for output losses and increased vulnerability to shocks highlight the complex trade-offs in reshaping supply chains.

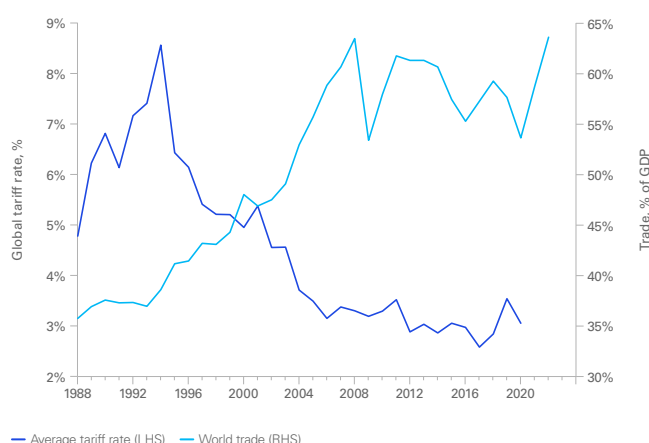
Increased potential for inflationary episodes may exert upward pressure on future interest rates, as central banks recognise the risks associated with fragmentation.

Trade openness increased sharply after the Second World War. World trade as a share of GDP increased from 33% in 1975 to a peak of 64% in 2008, where it remains today (see [Chart 1](#)). Trade related to global value chains (GVCs), measured as intermediate inputs share in gross production, has risen from 47% in the mid-1990s to a peak of 52% in 2014, before flatlining since. However, flows have stabilised in recent years, leading some to speculate that globalisation may be turning.

The main concern relates to the idea that structural tailwinds, which supported global integration during the period of trade liberalisation, have been broadly exhausted. The average global tariff rate has fallen from nearly 9% in 1994 to around 3% today. The technological advancements in transportation and communication during the ICT revolution facilitated greater specialisation of production and led to offshoring of manufacturing to emerging markets at a low cost. At the same time, operations of multinational corporations have become more service heavy and less dependent on investment in physical assets, which has limited the expansion in goods trade.

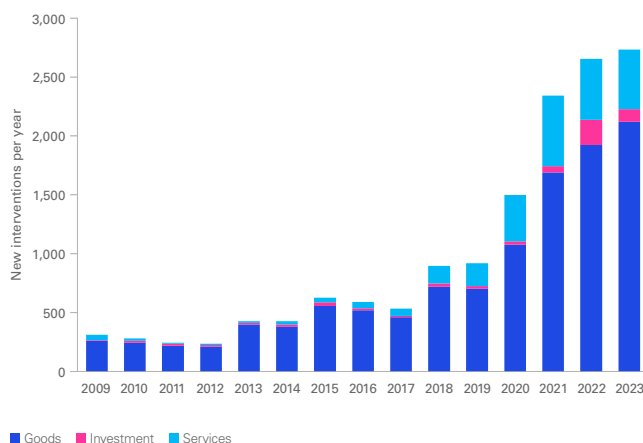
While the low-hanging fruit in trade liberalisation has been picked, headwinds have also risen. Rising geopolitical tensions have led to a greater focus on political and national security goals in international trade. Trade restrictions – including tariff and non-tariff barriers – have increased sharply since 2018, with a discernible rise in measures targeting services (see [Chart 2](#)). A stark example is the bilateral trade relationship between the US and China. The average US tariff rate vis-a-vis China increased from around 3% to 19% since 2018, with a corresponding rise from 8% to 21% on the part of China. Other recent policies – such as the recent EU Carbon Border Adjustment Mechanism – seek to reshore production which was previously lost due to manufacturing offshoring to avoid domestic carbon taxes (also known as ‘carbon leakage’).

**Chart 1: The exhaustion of global trade tailwinds has led to a slowdown**



Source: World Bank, KPMG analysis.

**Chart 2: Number of new trade barriers by commercial flow**

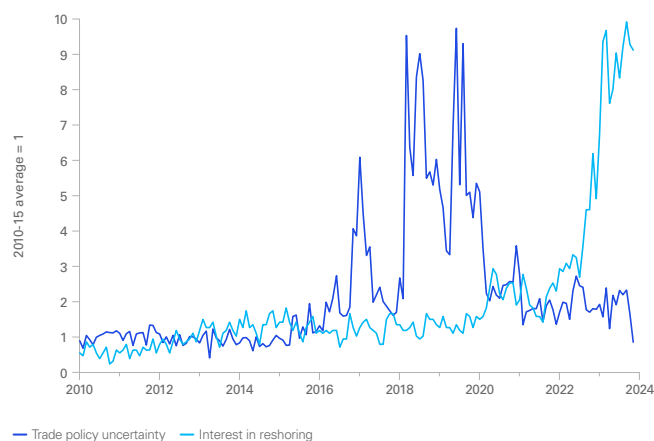


Source: Global Trade Alert, KPMG analysis.

There has also been a surge in government subsidies. For example, the U.S. Inflation Reduction Act, worth an estimated USD 369 billion, aims to incentivise firms to manufacture green energy components domestically or in countries which have a free-trade agreement with the US. The U.S. Creating Helpful Incentives to Produce Semiconductors and Science (CHIPS) Act, worth USD 280 billion, aims to boost domestic semiconductor manufacturing capacity through a wide range of subsidies and tax incentives. This sparked a response from the European Union in the form of the European Chips Act (worth USD 47 billion), while similar packages were introduced by China, South Korea, Japan, and Taiwan to support their respective domestic semiconductor industries.

Despite a fall in trade policy uncertainty, recent supply chain disruptions have led to an increased interest in reshoring (bringing production stages back to the home country), nearshoring (moving them geographically closer) and friendshoring (restricting or reorienting production to economic and political allies) (see [Chart 3](#)). However, reorganising supply chains is easier said than done. Given the capital in place, the cost of searching for alternatives, and factors such as wage differentials across countries, this process is likely to be slow. A good example is the largely abandoned effort to switch from just-in-time to just-in-case inventory levels. In many cases, higher interest rates have made the cost of carrying excess inventory prohibitive.

**Chart 3: Growing interest in making supply chains less vulnerable to uncertainty**



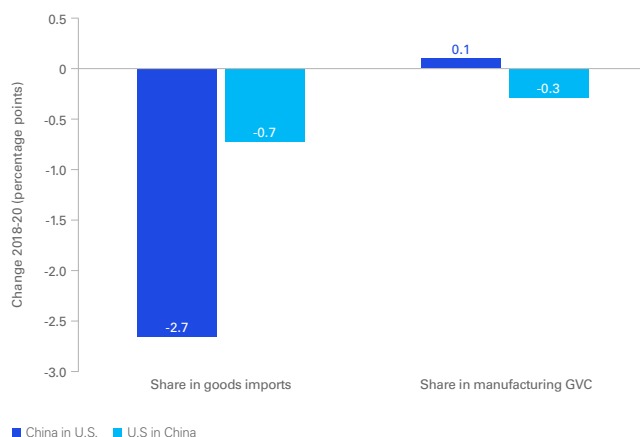
Source: Caldara et al (2020), Google Trends, KPMG analysis. The dark blue line measures media attention to news related to trade policy uncertainty. The light blue line shows the number of Google searches for 'nearshoring', 'reshoring' and 'friendshoring'.

Recent evidence supports the idea that companies are making an effort to reorganise their production. KPMG has seen an increase in clients who are considering changes to their logistics in order to mitigate risks, but movement has been slow. For example, a large manufacturer has moved production of some laptops and phones from China to India and Malaysia. While that is an example of diversifying the manufacturing base, it shouldn't be confused with nearshoring: the finished goods are still moving vast distances because they're high value and relatively cheap to transport. Creating an entirely new production base is costly both in terms of capacity building and the skills base of the labour force in the new location.

The US is ahead of its peers in this regard. There have been at least 32 projects announced in the US of over USD 1 billion in investment toward batteries and electric vehicles since the passing of the Inflation Reduction Act. The value of construction in computer, electronic and electrical manufacturing facilities has shot up by over USD 100 billion since 2020. US trade has realigned to key partners such as Mexico and Canada via the USMCA trade agreement – one of the strongest examples of friendshoring to date.

Evidence for brute force relocations of production is limited. Trade in value added statistics are only available until 2020, but recent forecasts which combine production and trade statistics suggest that GVCs have remained stable since.<sup>1</sup> That being said, the cracks are starting to show. Foreign direct investment has shown dramatic swings in recent quarters, with investment being concentrated among close trading partners. That could translate to realignments in the longer run. There have also been reconfigurations in trade relations on a balance-of-payments basis. For example, China's share of US goods imports fell by nearly 3 percentage points between 2018 and 2020, even as its value-added share of US consumption actually increased over the same period (see [Chart 4](#)).

**Chart 4: GVC shares have been steady despite a drop in bilateral trade**



Source: Haver, OECD, KPMG analysis.

<sup>1</sup> Knutsson et al (2023), 'Nowcasting trade in value added indicators', VoxEU, September 26.

These shifts do not necessarily mean that we are seeing less global trade. In the short run, trade barriers and reorganising supply chains combined are likely to lead to a lengthening of supply chains and so-called 'triangular trade', where countries divert their products to avoid trade barriers, potentially leaving the networks more susceptible to supply chain shocks. In the example above, goods could be flowing from China to the US via other countries, leading to the discrepancy between the trade data and the value-added data. Indeed, the share of US goods imports from Vietnam, Malaysia and Taiwan has risen by 6 percentage points over the period considered, all of which have strong trade ties with China. A similar pattern could be observed over the past year between Russia and its trading partners.

Empirical estimates point to potentially large output losses from geoeconomic fragmentation (see [Chart 5](#)). They suggest that the global economy could be up to 5% smaller in the long run, depending on the exact nature of the shock. Fragmentation in commodities markets is expected to have a relatively modest effect given the offsetting effects across producing and consuming countries. Set against that, a decoupling of global technology hubs, or restricting foreign direct investment flows, could result in greater losses, owing to impaired diffusion of knowledge and intellectual capital. A less efficient allocation of resources would also lead to higher prices, especially if it requires labour to be sourced from a more expensive domestic or friendly pool.

**Chart 5: Estimates of geoeconomic decoupling can be large**



Source: Various sources.

Increasing fragmentation in trade, along with geopolitical shifts, could lead to more supply chain disruptions by constraining the availability of possible substitutes in the face of logistical breakdowns. The inherent risk is that those disruptions are inflationary. Recognising that risk, central banks around the world have begun to focus on supply chains as an area which will increase the likelihood of inflationary episodes. This could put upward pressure on interest rates going forward.

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