Global Industrial Value Chains and Supply Chains

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Executive Summary

Unprecedented developments impacting the global economy are creating structural shifts in the patterns of global trade. Whereas the global Covid-19 pandemic sparked a rebalancing and search for resilience in global supply chains, today Governments and businesses face a new, rapidly evolving environment.

Geostrategic competition, technological advancement, including artificial intelligence, and the transition to a new, sustainable economy are combining and driving businesses to rethink not only where they source and produce goods but also how they finance, manage, and optimise trade flows.

In this paper, we leverage our expertise as the world's largest trade bank, with a 160-year history of connecting the world's economies and access to 85% of global trade flows through our international network, to hone in on the five forces shaping global trade: changing geopolitics; a shift from goods to services trade; B2B platforms and e-commerce; Sustainability; and Digitalisation. These five distinct forces are individually having an impact on global trade. Together, they are overlapping and compounding with the potential to transform global industrial value chains and supply chains as we know them today.

Nowhere are these changes having a more profound impact than in China. As the world's largest manufacturing hub and a dominant player in global trade, China is both a driver and a focal point of supply chain transformation. The country's dual strategy of strengthening domestic industrial capabilities while expanding its influence through programmes like the Belt and Road Initiative is reshaping supply chain dynamics worldwide. At the same time, China's push for greater self-sufficiency in critical industries, its rise as an innovation powerhouse and in green industries, alongside increasing labour costs, and regulatory shifts are changing the landscape for businesses around the world, including in China.

Banks play a critical role in this evolving landscape. As providers of trade finance, working capital, and risk management solutions, financial institutions enable companies to navigate complex supply chain disruptions and capitalise on new opportunities. The rise of digital trade platforms, regulatory demands for sustainability reporting, and new payment models are also reshaping the financial

services that support supply chains. Banks are increasingly able to provide financing solutions that support resilience, digitalisation, and sustainability while helping businesses manage geopolitical and regulatory risks.

To capture the opportunities arising from these changes, we use this report to make five recommendations:

- 1. Leverage bilateral trade agreements, support the establishment of new agreements and partnerships that lower trade barriers, and enhance the rules-based trading system to fuel trade growth.
- 2. Drive value through deeper relationships with new trading partners and focus efforts on enriching promising corridors for trade and investment.
- 3. Protect and grow reputation as the world's manufacturing powerhouse by continuing to move up the value chain in terms of production and exports.
- 4. Capitalise on the huge services growth opportunity and support businesses to innovate and change business models as they consider "servitisation" alongside moving up the production value chain.
- 5. Continue to invest in advanced technology, AI and related research and development to enhance digitalisation, monitoring and transitioning to sustainability.

This paper outlines how action on these recommendations can support China's role in global industrial value chains and supply chains now and into the future.

Value Chains and Supply Chains

While the concepts of Industrial Value Chains and Supply Chains are often used interchangeably, they represent distinct perspectives in the study of production, distribution, and value creation.

An **Industrial Value Chain** emphasises the series of interconnected activities that transform raw materials into finished goods, focusing on the value added at each stage—from research and development to production, marketing, and after-sales service.

In contrast, a **Supply Chain** primarily refers to the logistical and operational flow of goods, services, and information from suppliers to consumers, ensuring efficiency in sourcing, manufacturing, and distribution.

While the industrial value chain takes a broader strategic view of how competitive advantage is created, the supply chain focuses on the movement and management of resources.

For the purposes of this paper, rather than rigid distinctions between the two frameworks, we will use the terms Industrial Value Chain and Supply Chain interchangeably, recognising that both are integral to end-to-end value creation.

1. Changing Geopolitics

The macro landscape has become one of the most significant forces reshaping global industrial value chains and supply chains. The era of hyper-globalisation—characterised by the expansion of global value chains and supported by trade policy liberalisation and advances in technology—has come under pressure, with a renewed focus on industrial policy, trade protectionism, and security concerns, all of which is impacting supply chain strategies. The result is a shift towards diversification, supply chain flexibility, and reshoring, nearshoring and friendshoring strategies, as businesses and Governments look to mitigate risk.

Policies and Tariffs

In recent years, global trade policies have undergone significant changes, driven by the global Covid-19 pandemic, geopolitical change, industrial policy, and shifting supply chain strategies. According to Global Trade Alert, which tracks policy changes affecting global trade and investment, the number of new harmful policy interventions rose from 600 in 2017 to over 3,000 per year in 2022, 2023 and 2024, respectively¹.

Policies, such as tariffs, trade restrictions and reshoring incentives, have encouraged companies to reduce reliance on foreign suppliers, leading to more regionalised supply chain networks. At the same time, uncertainty surrounding tariffs—particularly in U.S.-China trade relations and shifting EU policies—has made long-term supply chain planning more complex. Businesses must navigate fluctuating costs and regulatory risks, often diversifying their supplier base to mitigate disruptions.

Case Study: EU's EV Tariffs

The EU's increase in tariffs on Chinese electric vehicles (EVs) could catalyse more Chinese FDI to the Eurozone.

In 2023, over two-thirds of Chinese investment in Europe was concentrated in the EV sector, according to the Rhodium Group. Hungary stands out, receiving 44% of all Chinese FDI in Europe in 2023, primarily driven by investments in EV and EV battery plants. It is the first EU member to attract substantial Chinese investments in the EV sector, with two EV plants and two EV battery plants. However, other EU economies including France and Germany, have also secured Chinese investments and in 2024 France's former finance minister, Bruno Le Maire, expressed a desire to deepen these ties, stating that France is open to all industrial projects, including those from the Chinese auto industry and its leading manufacturer, BYD (Peterson Institute for International Economics, 30 May 2024).

Higher tariffs and growing protectionism more broadly, coupled with the desire to secure supply chains could spur greater Foreign Direct Investment (FDI) flows in

critical sectors (e.g. EVs, chips) as some economies look to reshore production. This in turn may eventually lead to reduced bilateral trade flows in these products. In other words, as more countries increase tariffs, it is possible that FDI could replace some trade flows going forward.

Political Change

In 2024, more than 80 countries/regions held general elections, encompassing a diverse range of political environments. In many of these elections, the incumbents lost, resulting in policy shifts and regulatory changes, including to security policy, environmental policy, and trade policy. These all have profound implications for businesses and supply chain dynamics.

Policy changes at the time of writing also look set to have an impact on conflicts, which have, in recent years, resulted in significant challenges to global supply chains by introducing uncertainty, restrictions to trade and disruption to trade routes.

For example, conflicts in regions such as the Middle East, Europe, and Central Africa have led to considerable disruptions. While some of these disruptions have affected specific industries, others, like the Red Sea crisis, have had widespread repercussions across global trade.

Case Study: Red Sea Crisis

In late 2023, the Red Sea crisis emerged as Yemen-based Houthis initiated attacks on commercial vessels, significantly disrupting global supply chains, as part of the wider conflict in the region.

These assaults led major shipping companies to reroute vessels around the Cape of Good Hope, extending transit times and increasing operational costs. This diversion added approximately 10-12 days and \$1 million in fuel costs per voyage, straining global supply chains and increasing costs for businesses and consumers.

The Suez Canal is a critical conduit for approximately 20% of global container trade and a primary route for China's westward shipments of goods, including around 60% of its exports to Europe. Despite a ceasefire in Gaza and Houthi pledges to limit attacks, shipping companies remain cautious, prolonging the crisis' impact on international trade routes.

These conflicts underscore the vulnerability of global supply chains to geopolitical instability and prompt businesses to reassess and adapt their sourcing strategies. As an outcome of these challenges, the following **imperatives have emerged for businesses navigating this landscape**.

Building Resilience and Security into Supply Chains

Supply chain resilience has become the foremost strategy for businesses navigating an increasingly volatile geopolitical landscape. The Covid-19 pandemic underscored vulnerabilities, as global lockdowns, factory shutdowns,

and logistical bottlenecks led to unprecedented supply chain disruptions. Many businesses found themselves overly reliant on single-source suppliers, particularly in Asia, and struggled with shortages of critical components such as semiconductors and pharmaceuticals. In response, companies have accelerated efforts to diversify supply chains, adopt nearshoring and reshoring strategies, and leverage digital tools for greater visibility and risk management. The emphasis has shifted from purely cost-driven supply chains to ones that balance efficiency with resilience, ensuring long-term sustainability in an era of macro uncertainty.

The future of global trade will belong to companies that can seamlessly integrate resilience strategies with smart financial management, turning supply chain volatility into a competitive advantage².

One early strategy that businesses have employed to mitigate tariff-related risks is increasing inventory levels to buffer against supply disruptions and fluctuating trade policies. However, this approach has significant financial implications, as higher inventory holdings extend the working capital cycle, tying up cash that could otherwise be used for growth or innovation. This shift has intensified the need for financing solutions, including supply chain finance, embedded finance, and alternative credit mechanisms, to help companies manage liquidity while maintaining operational flexibility.

In an environment where geopolitical shifts can result in sudden tariffs, export restrictions, or regulatory changes, businesses must not only strengthen their supply chain networks but also ensure they have the financial agility to absorb shocks. The future of global trade will belong to companies that can seamlessly integrate resilience strategies with smart financial management, turning supply chain volatility into a competitive advantage.

• Developing New Trade and Investment Relationships

Geopolitics is reshaping bilateral relationships by strengthening trade and investment ties between closely aligned economies, while reducing dependence on traditional manufacturing hubs, leading to the formation of new economic partnerships and regional supply chains.

Reshoring, nearshoring and friendshoring are three of the big trends driving the diversification of supply chains.

Reshoring

Reshoring focuses on bringing manufacturing back to a company's home country to enhance supply chain resilience and/or to take advantage of certain onshore incentives. This results in an increase in investment in local manufacturing capabilities. The U.S. CHIPS and Science Act (2022) allocated \$52 billion to boost domestic semiconductor production, leading to over \$100 billion in investments from Intel, TSMC, and Samsung³.

Nearshoring

Nearshoring involves shifting production to nearby countries to lower costs, shorten supply chains and mitigate the impact of tariffs. This change is influencing how supply chains are structured as well as investment flows.

Companies who effectively implement a nearshoring strategy in their supply chain can enhance resilience to geopolitical risks, lower transportation costs, improve supply chain agility, and enhance responsiveness to market demands.

From an investment perspective, nearshoring presents a major opportunity to capitalise on high-growth industrial real estate, infrastructure, and manufacturing sectors in nearshoring hubs, benefiting from increased Foreign Direct Investment (FDI) and Government incentives.

Friendshoring

Friendshoring prioritises trade with geopolitical allies to reduce reliance on strategic competitors. For example, the European Union is diversifying lithium and rare earth sourcing to Australia, Canada, and Chile to secure green energy supply chains.

China is also deepening trade ties with 'friendshoring' markets and Chinese exports to economies that are rising in the ranks of US import sources—like Mexico and ASEAN —are climbing. For example, U.S. imports from Vietnam have increased by approximately 72% since 2018, while Chinese exports to Vietnam have risen by a similar margin, indicating that Chinese manufacturers are relocating operations to these economies while also moving up the value chain – including its increasing role as a source of inputs and components as its role in global supply chains evolves.

Spotlight: China's move up the value chain

As a global manufacturing powerhouse, China benefits from extensive, complex, and tightly integrated supply networks that have developed over decades, fostering efficiency and innovation. While some production has shifted outside of China since in 2017, the pace of this transition varies by sector, with countries like Vietnam and India seeing increased investment. However, China's production ecosystem and logistical efficiency continue to drive its competitiveness as a manufacturing base. Discussions on supply chain diversification highlight the need to replicate China's strengths while addressing associated risks, with economies actively working to attract foreign investment to bolster their manufacturing capabilities.

China's exports are rapidly moving up the value chain, driven by a strategic focus on high-tech industries and advanced component manufacturing. Once known for low-cost, labour-intensive goods, China has shifted towards exporting high-value products such as electric vehicles (EVs), semiconductors, advanced machinery, and renewable energy technologies. In 2023, China's high-technology exports were valued at approximately \$825 billion⁴. This figure represents a significant portion of China's total export value, which stood at around \$3.585 trillion in the same year. Consequently, high-tech products accounted for approximately 23% of China's total exports in 2023. The Government's supportive policies, including subsidies for research and development, tax incentives, and state-backed industrial strategies have accelerated this transformation.

• Leveraging Emerging Trade Corridors

The Asia-Middle East trade corridor's evolution reflects a strategic response to global economic shifts, aiming to create resilient, diversified, and efficient trade networks that benefit a broad spectrum of stakeholders.

Asia-Middle East Trade Corridor

The Asia-Middle East trade corridor is experiencing significant expansion, evolving beyond traditional energy exchanges to encompass diverse sectors such as technology, infrastructure, and logistics, enhancing economic connectivity between the two regions. Annual two-way goods trade between Asia and the Middle East is expected to more than double from approximately \$950 billion in 2022 to over \$1.9 trillion by 2035, according to HSBC Global Research⁶. Two-way investment, led by the China-Saudi and India-UAE corridors, could surge to USD36bn annually by 2035⁷.

Key Developments:

• <u>India-Middle East-Europe Economic Corridor (IMEC)</u>: Launched during the G20 summit in September 2023, IMEC aims to establish a comprehensive trade route connecting India to Europe via the Middle East. The corridor includes an eastern segment linking India to the UAE, Saudi

Arabia, Jordan, and Israel, and a northern segment extending to Europe. This initiative seeks to streamline trade flows, reduce transit times, and foster economic integration across continents.

- <u>Iraq's Development Road Project (DRP)</u>: Iraq is advancing the DRP, a \$17 billion⁸ infrastructure endeavour designed to link the Grand Faw Port in southern Iraq to Türkiye's border, and further into Europe. This project aspires to transform Iraq into a pivotal transit hub, offering an alternative route to the Suez Canal and enhancing regional trade dynamics.
- <u>Middle Corridor Expansion</u>: The Trans-Caspian International Transport Route, known as the Middle Corridor, connects China to Europe through Central Asia and the Caucasus. Efforts to upgrade infrastructure and harmonise regulations along this route aim to boost trade connectivity and supply chain resilience, providing a viable alternative to traditional Eurasian trade pathways.

ASEAN-China Trade Corridor

The realignment of global supply chains is opening new opportunities for businesses at both ends of the ASEAN-China corridor. Asian economies are increasingly looking to one another as sources of demand, supported by population growth, rising middle class, and urbanisation – which are driving higher disposable income in the region. Since the establishment of the China-ASEAN Free Trade Area in 2010⁹, bilateral trade has seen an average annual increase of 11% from 2004 to 2023, outpacing China's overall foreign trade growth by 3% during the same period. ASEAN is China's top trading partner, with total trade between the two reaching \$911.7 billion in 2023¹⁰.

For ASEAN businesses, China is an important and accessible consumer market, as well as a key source of materials and investment. With a GDP growth target of around 5% for 2025, China's economic prospects remain robust compared with those of many other countries, especially in advanced manufacturing¹¹.

Chinese companies, meanwhile, have been investing heavily in ASEAN production to serve consumers in Southeast Asia and the West. Much of the manufacturing that takes place in ASEAN depends on components or materials that are made in China.

New Trade Agreements

Regional trade agreements are becoming increasingly important as countries seek to boost intra-regional trade and cooperation through formal agreements.

Trade agreements such as Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the African Continental Free Trade Area (AfCFTA) have emerged as countries seek to create regional trade alliances.

In January 2022, the Regional Comprehensive Economic Partnership (RCEP) also came into effect. This trade agreement, comprising 15 Asia-Pacific economies including China, Japan, and South Korea, was established to enhance trade by reducing tariffs and standardising trade rules among member countries. The member countries account for about 30% of the world's population (2.2 billion people) and 30% of global GDP (\$29.7 trillion), making it the largest trade bloc in history.

As highlighted in our spotlight on China's growing overseas investment, China's increasing investment in ASEAN economies has not only reshaped supply chain networks in Asia but has also deepened regional economic integration.

Spotlight: China's growing Overseas Investment

China's overseas investment, though increasing, is still small relative to the size of its economy. At 16.1% of GDP, China's outward direct investment (ODI) stock in 2023 is well below that of the major developed economies, as well as the world average of 34%. There is therefore plenty of room for China's overseas investment footprint to grow. While a change in the Government's ODI policy in 2016-17 and the pandemic have made a dent in China's outbound investment in recent years, Chinese firms continue to have strong incentives to "go out" to explore the global market in search of growth.

Among the main regions in the world, ASEAN was the number one recipient of China's outbound direct investment flows in 2022 (according to data from the MOFCOM). Chinese ODI flows to ASEAN have been rising steadily in the past 15 years. Their share in total Chinese ODI has tripled from 3.7% in 2007 to 14.2% in 2023. The first underlying force of the rise in Chinese FDI in ASEAN's manufacturing sector is that China is becoming more of an exporter of intermediate goods used by manufacturers in the region as it moves up the value chain.

Aligning with ASEAN's development priorities and China's Belt and Road Initiative (BRI), sectoral trends include investment into infrastructure, digital economy, renewable energy, and financial services. Investment into transport, storage and postal services have also been rising steadily in the past few years.

In this context, Hong Kong SAR serves as a crucial financial and trade conduit for China's ODI into ASEAN. The city's deep capital markets, well-established banking sector, and sophisticated financial services ecosystem provide Chinese enterprises with essential funding, risk management solutions, and legal expertise to navigate cross-border transactions. Many Chinese firms use Hong Kong SAR as a regional headquarters or a springboard for structuring investments into ASEAN, leveraging its unique status as a global financial hub with strong international trade linkages. Additionally, Hong Kong SAR's ambitions to participate in the Regional Comprehensive Economic Partnership (RCEP) could further enhance its role as a connector between China and ASEAN, facilitating smoother trade and investment flows under

a unified regulatory framework. As ASEAN continues to attract increasing levels of Chinese investment, Hong Kong SAR's strategic position will remain critical in bridging capital, expertise, and business networks between the two regions.

2. The Growth of Services Trade

Over the past few decades, global consumption patterns have experienced a significant transformation, with a marked shift from goods to services. The services sector, fuelled by digitalisation, changing economic models and regulatory support, has seen exponential growth. Today, the services sector generates 50% of worldwide employment¹², accounts for 67% of global GDP¹³ and attracts over three-quarters of Foreign Direct Investment in advanced economies¹⁴

Macroeconomic Factors Fuelling Services Growth

Digitalisation and Technological Advancements

Digitalisation and technological advancements have transformed services trade by reducing barriers, increasing efficiency, and creating new market opportunities.

The proliferation of high-speed internet and mobile technology has facilitated the seamless delivery of services across borders, enabling businesses to reach global markets more efficiently.

Platforms offering e-commerce, cloud computing, and digital media have expanded the reach of service providers, allowing them to tap into new customer bases worldwide.

The global digital economy is expected to reach \$20.8 trillion by 2025, making up 24% of global GDP¹⁵.

Rising Middle Class and Changing Consumer Preferences

As disposable income increases across more markets, consumers are spending more on services.

China's middle class has been among the fastest growing in the world, forecast to grow from 400 million people in 2023 toward 800 million in the next 15 years¹⁶. With increased disposable income and urbanisation, consumers are spending more on services across healthcare, education, entertainment, retail and hospitality.

The shift towards a service-oriented economy reflects changing consumer preferences, with individuals increasingly valuing experiences over material possessions. This trend is evident in the growing popularity of subscription services (e.g. tv subscription services Youku, Netflix) and shared economy

models (e.g. ride-sharing services like DiDi, Uber). Companies that can adapt to these changing preferences by providing unique and engaging experiences are likely to succeed in the evolving market landscape.

Regulation and Infrastructure

Many Governments are recognising the importance of the services sector and are enacting policies to foster its growth. This includes reducing barriers to trade in services, enhancing regulatory frameworks, and promoting investment in service-oriented industries. Such supportive measures can further accelerate the expansion of services trade and contribute to economic development.

Modern trade agreements increasingly encompass services, reducing barriers and facilitating cross-border service provision. Efforts to align regulations across countries make it easier for service providers to operate internationally, promoting trade in sectors like finance and telecommunications.

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) is a free trade agreement that aims to improve trade in services and specifically, digital trade. The CPTPP also addresses non-tariff barriers to trade. CPTPP represents close to 15% of the global economy. Current members include Japan, Australia, New Zealand, Canada, Peru, Chile, Mexico, Brunei, Singapore, Vietnam, Malaysia and the United Kingdom. The UK was the first non-founding country to join in December 2024, and is the pact's second biggest economy after Japan. China has formally applied to join the CPTPP.

Rapidly Changing Business Models

The integration of global markets has enabled the outsourcing and offshoring of various services, further boosting the sector. Companies are increasingly leveraging global talent pools to provide services, leading to the rise of business process outsourcing (BPO) and knowledge process outsourcing (KPO). This trend has not only enhanced efficiency but has also allowed businesses to focus on core competencies while accessing specialised services from around the world.

The rise of remote working has further increased the demand for digital services related to collaboration, communication and online education. Businesses have also begun to innovate in the manner in which they create and deliver their products. This is apparent in the advent of many service offerings that may have been traditionally offered as goods, often called "servitisation" (e.g. "lighting as a service", "equipment as a service", "software as a service").

Implications

• Services Trade Presents a Huge Opportunity

In 2023, global services exports reached \$7.9 trillion, marking an 8% annual increase.

China has significantly contributed to this upward trend. In 2023, China's total trade in services amounted to approximately \$933 billion, with imports at \$552 billion and exports at \$381 billion. This reflects an increase of 5% from the previous year, underscoring China's expanding role in the global services market.

China has been actively enhancing its services sector. In 2023, China's share of global service exports and service imports stood at 4.8% and 7.5% respectively¹⁷, positioning it among the top service-trading economies worldwide.

China's strategic initiatives, such as the "Belt and Road" infrastructure projects, have bolstered its services trade, particularly in sectors like construction, finance, and technology. These efforts aim to diversify China's trade portfolio and reduce reliance on goods exports, aligning with global trends that emphasise the growing importance of services in international trade.

Over the next decade, digitally delivered services (which are currently 54% of the total value of global services trade¹⁸) are expected to dominate new international trade. Businesses that adapt by offering ancillary services and embracing digital innovation will likely thrive.

Spotlight: China's digital trade

Digitally delivered trade currently accounts for about 41% of China's services trade, according to the Ministry of Commerce, against 54% globally, according to the United Nations Conference on Trade and Development.

There are ambitious plans to boost digital trade. In November 2024, China published a high-level plan to meet these ambitions. The guidelines, released by the Central Committee of the CCP and the State Council, aim to support the growth of digital businesses, further open up the digital sector to foreign investment, enhance governance and increase Government support.

The guidelines set an ambition of increasing digitally delivered services trade to 45% of China's total services trade in 2029 and to exceed 50% by 2035.

Services represent the biggest opportunity for businesses, both domestically and in global trade, not only due to their rapid growth and scalability but because unlike physical goods, services are less constrained by supply chain disruptions, tariffs, and transportation costs, making them more adaptable to changing market conditions. Demographic changes have increased the demand for online services

and as the world ages, sectors like healthcare and the services they provide will only see more growth.

Financial institutions can play a pivotal role in this transformation by providing balance sheet-efficient funding flows that empower businesses to invest in innovation and infrastructure. Tailored financing solutions like contract monetisation can provide immediate liquidity by converting future receivables into cash flow, thereby supporting ongoing operations and growth initiatives. Through fostering these partnerships and accessing timely funding flows, services provide a pathway for growth, resilience, and differentiation in an increasingly competitive global economy for businesses focussed on higher-margin, knowledge-based offerings.

3. The Rise of B2B Platforms

The global business-to-business (B2B) e-commerce is now growing at such a rapid rate that it is shaping global trade and will be a pivotal driver of future trade. In this transformational shift, the B2B e-commerce market has become substantially larger than its business-to-consumer (B2C) counterpart, with projections indicating that by 2028, the global B2B e-commerce market will reach approximately \$25.65 trillion, significantly outpacing the B2C market's anticipated \$7.65 trillion valuation¹⁹.

Embedded finance, which integrates financial services into non-financial platforms, is revolutionising B2B e-commerce by streamlining payment processes and offering value-added services. In 2023, the embedded finance market was valued at \$83 billion, with projections suggesting it could reach \$7 trillion by 2030²⁰. This growth presents opportunities for B2B platforms to incorporate services such as lending, insurance, and payment processing directly into their ecosystems, thereby enhancing the purchasing experience and fostering customer loyalty.

For instance, integrating trade finance solutions allows B2B platforms to offer immediate credit options to buyers, facilitating larger transactions and improving cash flow for sellers. This seamless access to financial services not only reduces transaction friction but also enables businesses to scale more efficiently²¹.

Trust remains a cornerstone of B2B transactions. The implementation of robust data validation mechanisms enhances trust in commercial relationships, enabling businesses to engage with previously unknown partners confidently. By leveraging technologies and artificial intelligence, B2B platforms can verify the credibility of participants, ensuring secure and transparent transactions.

Enhanced data validation opens new markets by mitigating risks associated with cross-border trade and partnerships with emerging enterprises. As trust barriers diminish, businesses are more inclined to explore opportunities beyond their traditional networks, leading to a more interconnected and dynamic global trade environment.

Case Study: MercadoLibre's Integration of Financial Services

A practical example of this trend is MercadoLibre, Latin America's leading e-commerce platform. The company has successfully integrated financial services into its platform, offering instant loans to businesses based on their sales data. This strategy has not only enhanced seller liquidity but also strengthened the overall ecosystem by fostering increased sales and customer retention.

As the B2B market continues its exponential growth, these integrated solutions offer businesses enhanced operational efficiency, expanded market access, and fortified trust in commercial partnerships. Embracing these innovations is becoming imperative for businesses aiming to remain competitive in the evolving landscape of international commerce.

Firms in all economies can capitalise on this trend but will rely on being able to utilise advancements in technology such as AI, machine learning, and data analytics which makes technological enablement, and the leveraging of technology, in economies a necessary ingredient for success.

As HSBC's CDF paper last year highlighted, alongside the invention and development of new technologies, the world's second largest economy also has a legitimate claim as a pioneer in the 'tech enablement' of traditional business models and novel changes to business processes.

Implications

Spotlight: B2B e-commerce in China

The B2B e-commerce market in China is growing fast and steadily. China's domestic B2B e-commerce market reached \(\xi\)16.7 trillion (USD 2.3 trillion) in 2023 and is projected to grow to \(\xi\)20.2 trillion (USD 2.8 trillion) by 2026²².

Across China, there are more than 100,000 cross-border e-commerce entities, and the growth of the sector has evolved to support a range of services, including marketplace platforms, direct-to-customer (D2C) solutions, and platform self-operated centralised procurement systems.

This success has been possible, in part, because of the development of the necessary sophisticated logistical networks that support the growth of B2B, as well as Government policies toward digital commerce, specifically the promotion of a digital transformation of the supply chain - outlined in the e-commerce Development Paper in the 14th Five Year Plan.

The push to support B2B e-commerce platforms to accelerate the digital integration of supply chain resources such as finance, logistics, warehousing, processing and design, and cultivate new models and new formats of industrial Internet has also helped.

At the same time, there is a growing imperative to integrate comprehensive financial service modules - including but not limited to automated payment processing, multi-currency settlement mechanisms, supply chain financing solutions, and transaction assurance protocols - into the digital transaction lifecycle. Such integration aims to establish a streamlined, end-to-end commercial experience that addresses the sophisticated financial management needs of corporate entities.

Supply chain platforms is a unique area where China is making strides

Dowsure, founded in 2016 and headquartered in Shenzhen, is one of China's leading digital API platform that aims to help Chinese cross-border e-commerce sellers on platforms such as Amazon, eBay and Walmart, revalue their digital asset and support them to obtain access to get trade finance more conveniently. Its proprietary credit assessment model is designed and tailored to serving these e-commerce sellers. HSBC is one of the banking partners on the platform providing financing and its equity investor.

This represents HSBC's latest initiative to help SMEs capture cross-border e-commerce opportunities and expand internationally. Through this collaboration with Dowsure, one of Amazon's Seller Lending Programme partners in mainland China, a streamlined credit assessment process leveraging transaction data, such as inventory, sales and refund records, will be tailored for Amazon's merchants in applying for HSBC's trade finance. Without requiring further financial statements or collaterals, the process improves cross-border e-commerce merchants' access to trade finance. As the largest trade bank in the world, HSBC is in a unique position to transform the way trade is financed. Using big data and API technology to enable credit approvals on a real time basis and embedded on platforms, it is expected to transform the traditional financial service model for cross-border e-commerce.

4. Sustainability

Sustainability continues to be a key driving force influencing the future of trade. This shift is propelled by changing consumer preferences, escalating regulatory pressures, industry mandates, and a concerted emphasis on innovation and circular economy principles. Companies that invest in sustainability can lower operational expenses, mitigate regulatory risks, and differentiate themselves from competitors.

• Climate Change is Beginning to Impact Supply Chains

The effects of climate change are impacting businesses and supply chains.

Climate change has heightened the frequency and severity of extreme weather events, such as floods, wildfires, and draughts, which disrupt critical infrastructure including ports, highways, and factories. These disruptions impede the flow of goods, leading to delays and increased costs.

Case study: Extreme Weather Impacts Supply Chains

The Panama Canal plays a vital role in the world of trade, accounting for 2.5%-5% of global maritime trade. During 2024, it faced significant operational challenges due to severe prolonged drought conditions in the region, resulting in shipping delays and increased costs. The Panama Canal Authority reported a 29% drop in vessel transits during fiscal year 2024. This is not an isolated incident, and it is likely to recur as extreme weather events become more frequent and severe.

In 2021, China's Henan province suffered severe flooding that impacted global supply chains for food, lead, and aluminium. Henan accounts for about 36% of China's total production capacity for primary lead and about 15% for recycled lead. It also produces about 5% of the country's electrolytic aluminium, a metal processed to make aluminium products. The province also plays a crucial role in the national food supply, accounting for almost one-third of the national wheat supply and around a tenth of the economy's corn, vegetable, and pork production.

Events like these can have a significant impact on supply chains, causing delays and additional operational costs. In the short-term, businesses need to be prepared to respond to these events by understanding where there are risks in their supply chain and developing contingency plans. In the longer term, Governments need to drive investment in the underlying infrastructure to mitigate and avoid the damage caused by extreme weather events.

Regulation is a Driving Force

Governments and industry bodies worldwide are intensifying efforts to enforce supply chain sustainability. In the European Union, the Corporate Sustainability Due Diligence Directive (CSDDD), adopted in 2024, mandates companies to identify sustainability requirements throughout their supply chains. This directive

applies to large EU-based companies and non-EU firms with significant EU market activities, compelling them to implement comprehensive due diligence processes.²³

Similarly, Germany's Supply Chain Act, effective from 2023, requires companies to conduct thorough analyses of their supply chains to identify sustainability requirements, enforcing compliance through substantial fines for violations²⁴ These regulations reflect a broader trend of holding businesses accountable for the sustainability of their operations and extended supply chains. The Massachusetts Institute of Technology's 2024 State of Supply Chain Sustainability report highlights that over the past five years, there has been a significant increase in investor and regulatory pressures driving companies to adopt sustainable supply chain practices²⁵.

New Solutions and Trade Flows are Emerging

Innovation is at the forefront of transforming supply chains, particularly through the adoption of circular economy models. The circular economy emphasises designing out waste and keeping products and materials in use, which necessitates reimagining traditional supply chains. By integrating circular principles, companies can enhance supply chain resilience and sustainability. The emphasis on circular economy principles also encourages the development of new markets for recycled and refurbished goods, altering traditional trade flows and creating economic opportunities centred around sustainability. As companies adapt to these changes, those that proactively integrate sustainable practices into their supply chains are likely to gain a competitive advantage in the evolving global marketplace.

For instance, the fashion industry is exploring reverse logistics to manage product returns more sustainably, reducing waste and promoting the reuse of materials. This approach not only minimises environmental impact but also aligns with emerging waste and environmental legislation, compelling brands to innovate in their supply chain processes

Implications

As businesses reevaluate their sourcing and manufacturing strategies to comply with new standards, transparency is increasingly becoming an important factor. Powered by timely data networks and supportive policy frameworks, businesses will be well equipped to make the transition at pace and mitigate risks associated with non-compliance and reputational damage.

China is dedicated to minimising its carbon footprint, with its supply chains leading the charge in this transformation. Through the "dual carbon" strategy, China is incorporating renewable energy sources and electric vehicle (EV) fleets

into its supply chains. A notable example is the Tianjin Zero-Carbon Port, which utilises solar and wind energy to significantly lower emissions. Furthermore, logistics companies are increasingly adopting EVs for deliveries, contributing to a substantial reduction in the carbon footprint associated with transportation. This commitment to sustainability is reshaping China's supply chains into more eco-friendly and resilient systems fuelled by advanced technologies such as AI, IoT, and clean energy innovations. These technologies are not only improving efficiency and transparency but also promoting sustainable practices throughout manufacturing, logistics, and global trade. As China continues to invest in and develop these technologies, it is well-positioned to spearhead the future of resilient and environmentally friendly supply chains, setting a benchmark for sustainable practices worldwide²⁶.

• How Banks are Helping to Fund the Transition

Banks play a key role in funding the transition to net-zero supply chains by providing sustainable financing, green bonds, and transition loans that help businesses reduce their carbon footprint.

Sustainable supply chain finance enables companies to invest in environmentally and socially responsible practices by providing financial incentives for suppliers to adopt sustainable operations, thereby enhancing their overall Environmental, Social, and Governance (ESG) performance. This approach not only reduces carbon emissions and waste but also fosters transparency and accountability throughout the supply chain, aligning business objectives with sustainability goals.

5. Digitalisation of Global Trade

The journey toward digitalising trade has been marked by challenges, yet there is a growing sense of optimism as it emerges as a crucial force in shaping the future of international commerce. To facilitate this transformation, four key pillars must be established: Standards, Legislation, Reliable Systems, and Adoption. These pillars are essential for creating a cohesive digital trade environment that unlocks new business opportunities.

Standards

Standards play a vital role in establishing common data frameworks that enable seamless information flow across various platforms and jurisdictions. The ICC's Digital Standards Initiative (DSI) is at the forefront of this effort, working to develop and promote digital standards that enhance interoperability among stakeholders in the trade ecosystem, including exporters, importers, banks, and customs authorities. By harmonising these standards, the DSI aims to simplify digital transactions and reduce complexities in cross-border trade.

Legislation

Legislation is equally important in creating a robust legal framework for electronic documentation. The United Nations Commission on International Trade Law (UNCITRAL) introduced the Model Law on Electronic Transferable Records (MLETR) to provide a legal basis for electronic records, such as bills of lading and promissory notes. This model law ensures that electronic records are legally equivalent to their paper counterparts, facilitating their acceptance in international trade. According to the UNCITRAL, 10 jurisdictions (Bahrain, Belize, France, Kiribati, Papua New Guinea, Paraguay, Singapore, Timor Leste, Abu Dhabi, and the UK) have enacted legislation based or influenced by the Model Law²⁷.

Reliable Systems

Reliable Systems are necessary to support the digital infrastructure that enables data sharing and transaction processing. The application of systems designed to digitalise trade finance addresses challenges such as fraud and inefficiencies associated with traditional paper-based systems. By enabling real-time verification of documents and automating contractual processes through smart contracts, the application of the right systems reduces the time and costs linked to cross-border trade, streamlining processes and minimising discrepancies.

Adoption

Adoption of these digital frameworks is crucial for fostering an ecosystem of participants willing to act on shared data. The Group of Seven (G7) economies have recognised the transformative potential of digital trade and endorsed the adoption of frameworks compatible with the principles of the MLETR. In April 2021, G7 members agreed to promote the use of electronic transferable records, aiming to harmonise legal frameworks and encourage broader international adoption. This collective commitment from major economies highlights the strategic importance of digitising trade to enhance resilience and competitiveness in the global market²⁸.

Implications

• A Unique Opportunity for Growth

For emerging markets, the digitalisation of trade presents a unique opportunity to integrate more effectively into the global economy. By adopting digital trade standards and aligning with international legal frameworks like the MLETR, these markets can lower barriers to entry, attract foreign investment, and enhance the competitiveness of their exports. Digital trade also facilitates greater participation of small and medium-sized enterprises (SMEs) in international markets by

reducing transaction costs and simplifying compliance with trade regulations, fostering economic growth and diversification.

China's approach to the UNCITRAL Model Law on Electronic Transferable Records (MLETR) and the ICC's Digital Standards Initiative (DSI) reflects an engaged stance. While China has not fully adopted the MLETR, it has expressed interest in aligning its domestic laws with international standards to facilitate cross-border paperless trade. This is evident from China's participation in international discussions regarding the MLETR and related legal reforms. Furthermore, China emphasises a development-oriented perspective in digital trade governance, focusing on bridging the digital divide and ensuring that developing countries benefit from the digital economy. This approach indicates China's commitment to contributing to the formulation of global digital trade rules that are inclusive and considerate of varying economic contexts²⁹.

Collaboration is Key to Global Success

Trade digitalisation has the potential to revolutionise global commerce by enhancing efficiency, reducing costs, and increasing transparency. However, its full benefits can only be realised through global collaboration and partnership between businesses, banks, industry bodies and Governments. Without coordinated efforts, digital trade risks becoming fragmented, limiting its ability to drive economic growth and resilience.

Recommendations

Industrial Value Chains and Supply Chains are undergoing a period of rapid transformation, shaped by structural shifts in global trade, technology, and regulatory landscapes. Companies are reconfiguring their supply networks in response to shifting geopolitical dynamics, emerging business models, digital innovation and increasing sustainability pressures. To capture the opportunities arising from these changes, we offer five recommendations.

1. Leverage bilateral trade agreements support the establishment of new agreements and partnerships that lower trade barriers, and enhance the rules-based trading system to fuel trade growth.

Capitalising on trade agreements such as the Regional Comprehensive Economic Partnership (RCEP) and working to tackle trade barriers with regions further afield such as the Gulf Cooperation Council (GCC), while actively supporting the rules-based trading system and the establishment of new agreements that lower trade barriers would play an important role in fuelling trade growth. This includes promoting awareness among businesses about the benefits of these agreements, collaborating with industry stakeholders to identify opportunities in emerging markets, and continuously monitoring the effectiveness of trade partnerships to maximise their impact on trade growth. By adopting this comprehensive approach, China can strengthen its global trade position and foster a more conducive environment for trade expansion.

2. Drive value through deeper relationships with new trading partners and focus efforts on enriching promising corridors for trade and investment.

To drive value through deeper relationships with new trading partners, it is essential to optimise the potential of promising trade corridors such as China-MENA and China-ASEAN, leveraging Hong Kong SAR's strategic role and looking to support the availability of offshore RMB. Investment in connectivity infrastructure, logistics, and transportation is crucial to establish strong foundations for these corridors, facilitating smoother trade and investment flows. Additionally, implementing robust frameworks for risk assessment and management is vital for Chinese firms investing abroad, particularly in navigating geopolitical and economic factors. Understanding local regulations and market dynamics will further empower these firms in their overseas expansions. Lastly, facilitating access to a comprehensive range of financing capabilities, including project finance and risk mitigation instruments like guarantees is necessary to support companies of all sizes in adapting to the evolving landscape and ensuring successful international ventures.

3. Protect and grow reputation as the world's manufacturing powerhouse by continuing to move up the value chain in terms of production and exports.

China will benefit from continuing to move up the value chain in production and exports by strategically focusing on high-tech industries and advanced component manufacturing. This continued shift from being known primarily for low-cost, labour-intensive goods to exporting high-value products such as electric vehicles (EVs), semiconductors, advanced machinery, and renewable energy technologies is crucial for enhancing competitiveness in the global market.

By investing in research and development, fostering innovation, and strengthening partnerships with leading technology firms, China can further solidify its position as a leader in high-value manufacturing. Additionally, promoting skills development and workforce training will ensure that the labour force is equipped to meet the demands of advanced manufacturing, ultimately driving sustainable growth, and reinforcing China's status as a manufacturing powerhouse.

4. Capitalise on the huge services growth opportunity and support businesses to innovate and change business models as they consider "servitisation" alongside moving up the value chain in production.

Support businesses in innovating and transforming their business models through "servitisation", while simultaneously advancing up the value chain in production. This transition involves encouraging companies to shift from traditional product-centric approaches to service-oriented solutions that enhance customer value and foster sustainable revenue streams in line with the global trend of exponential growth in services.

5. Continue to invest in advanced technology, AI and related research and development to enhance digitalisation, monitoring and transitioning to sustainability.

To drive progress towards sustainability and enhance transparency and ease of trade through digitalisation, it is essential to continue investing in advanced technology, artificial intelligence, and related research and development, focusing on improving the availability of critical data. This investment should emphasise collaboration between academia and industry, fostering partnerships that leverage academic research and strong relationships with Government and private institutions to address real-world challenges and drive innovation. Additionally, strengthening the partnership between the public and private sectors will be crucial in creating an enabling environment for these advancements.

Furthermore, ongoing support for clean energy investments and the green transition is vital, particularly through joint ventures in the green value chain. By aligning efforts across sectors and regions, China can effectively transition towards a more sustainable future while maximising the potential of advanced technologies.

Finally, collaboration between academia, industry, and public-private partnerships is essential to drive innovation and create an enabling environment for these advancements. By aligning with China's growth ambitions, businesses can effectively navigate the complexities of modern supply chains and secure their position in the next phase of industrial evolution.

Overall, this evolving landscape of industrial value chains and supply chains presents both challenges and opportunities for businesses aiming to thrive in a competitive global market. These recommendations are geared towards helping businesses effectively navigate the complexities of modern supply chains and align with China's growth ambitions, securing their place in the next phase of industrial evolution

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