

Prospects for international trade by 2030

March, 2021



01

Main messages

Prospects for international trade by 2030: main messages

- International trade has slowed down, mainly since the 2008 GFC, after having grown sharply in the previous decades on declining trade costs, trade liberalization, China integration into global markets...
- International trade is expected to continue exhibiting a downbeat tone over the next decade; the trade-income elasticity will likely remain close to 1, well-below the levels reached before the GFC
- Economic factors (such as cost differentials) will be less relevant drivers of trade than they have lately been, while geopolitical, regulatory, etc. issues will play a bigger and in general negative role
- There are positive prospects for high-value services, including financial services, which will partially offset the expected moderation in goods trade, mainly in high-tech, GVC-intensive manufacturing
- Still, the positive spillovers of the expected service expansion may be constrained by the oligopolistic structure of some of its segments (such as ICT) and geographical concentration in some few places
- International trade will rely more on regional trade, which will present opportunities
- Expected disruptions, such as those sustainability-driven, will also introduce opportunities
- Although prospects for trade are not bright, some factors could trigger more positive scenarios:
 - better global governance, with a renewed boost to trade, regulatory harmonization (mainly on services, data)...
 - · more significant technological gains, mainly due to automation, digitization and Al
 - openness and integration of new markets (Africa, India...)



02

The past evolution of international trade

- Tracing the evolution of global trade openness reveals five distinct eras of globalisation 1) 1870-1914 industrialisation, 2) 1914-45 interwar era of reduced trade integration, 3) 1945-80 post war rebound, 4) 1980-2008 liberalization-led economic integration marked by Global Value Chains (GVC) acceleration and the China and Emerging Asia integration into global trade, 5) 2009 onwards era of post crisis slowbalization
- The steady growth in global intra-industry trade since the early 1960s has reflected a dual process of world-wide structural convergence across economies and rising product complexity at industry level
- Between 1980s and 2007, the ratio of average imports to GDP growth, or global trade-income elasticity, was much above unity, even reaching 2, reflecting the increasing fragmentation of production across the global, creating GVCs, thanks to reduced communication and transportation costs
- Global fragmentation of production, especially since 1990s, is characterized by three major trends: 1) A strong shift towards value being added by capital and high-skilled labor in most GVCs, 2) advanced economies (AEs) increasingly specializing in activities carried out by high-skilled workers, 3) EMs specializing in capital-intensive activities -rise in capital share and a decline in share of low-skilled labor in value added
- The drivers of GVC participation across countries, beyond factor endowments, include 1) liberal trade policy, 2) higher FDI presence, 3) better institutions, 4) political stability, 5) domestic market size, 7) lower tariff and non-tariff barriers, 8) ICT advancement, 9) better logistics, 10) labor and capital intensity

The past evolution of international trade: main stylized facts

- Studies suggest that the pre-crisis experience of high trade-income elasticity was exceptional -a period in which factors such as global integration, declining trade costs and advances in technology provided a one-off, albeit persistent, boost to trade growth. The post 2009 financial crisis period has seen a marked decline in global trade-income elasticity relative to pre-crisis levels, normalizing towards unity.
- Global trade growth has slowed in recent years due to compositional as well as structural shifts:

a. Compositional

- geographical shifts in economic activity and trade to low trade intensity countries such as EMs
- changes in aggregate demand composition to lower trade intensity components
- iii. changes in type of trade: manufacturing goods to services

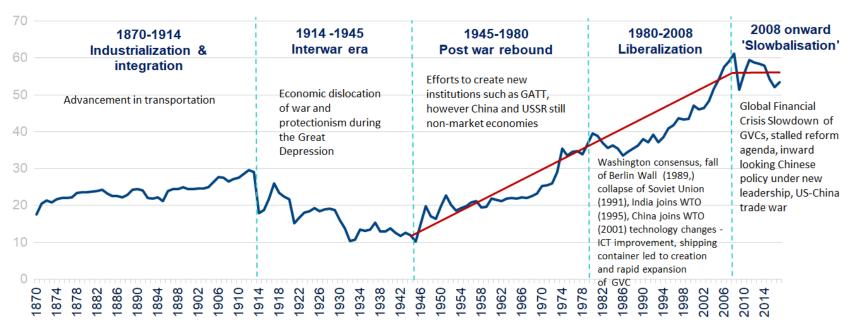
b. Structural

- waning growth of/reliance on GVCs (individual country or product specific changes in part due to rising labor costs in EMs, supply risk considerations. The latter has intensified more recently due to the pandemic),
- ii. protectionism (affects global income elasticity of trade), declining marginal impact of financial deepening).
- Stagnation in cross border investments is also identified as one of the main drivers of slowing trade growth since 2010. AE investment share of GDP has not recovered its pre-2009 crisis level while that of EMs has fallen since 2014.

Global trade has gone through five distinct eras since the 1870s; after booming for decades, trade has stagnated since the 2008 Great Financial Crisis

TRADE OPENNESS INDEX - SUM OF EXPORTS AND IMPORTS OF GOODS AND SERVICES

(% OF GLOBAL GDP 1/)



^{&#}x27;(1) The series were from data published by the sources in current US dollars, and then converted to GDP shares using a unique source (WB) Source: PIIER, BBVA Research

The trade income elasticity has declined sharply to less than 1 after the 2008 crisis on structural and compositional factors

Trade income elasticity > 1

1945-2008:

Post-war rebound and liberalization

Declining cost of trade

GVC

- New trade institutions (GATT)
- Washington consensus, fall of Berlin Wall (1989), collapse of USSR (1991), India (1995), and China (2001) joins WTO

Trade income elasticity < 1

2008 - 2020:

'Slowbalisation'

Structural Factors

- GVC waning growth
- Protectionism

Compositional Factors

- Geographical shifts
 - Demand composition
 - From manufacturing to services

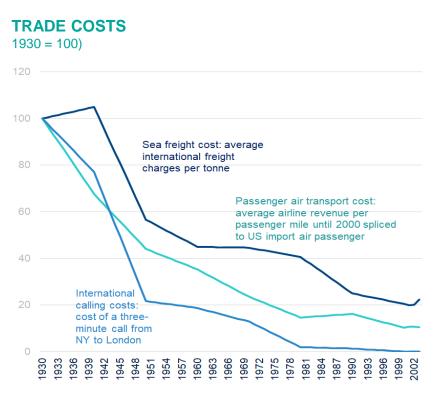
2021 - 2030:

?

Traditional and new drivers

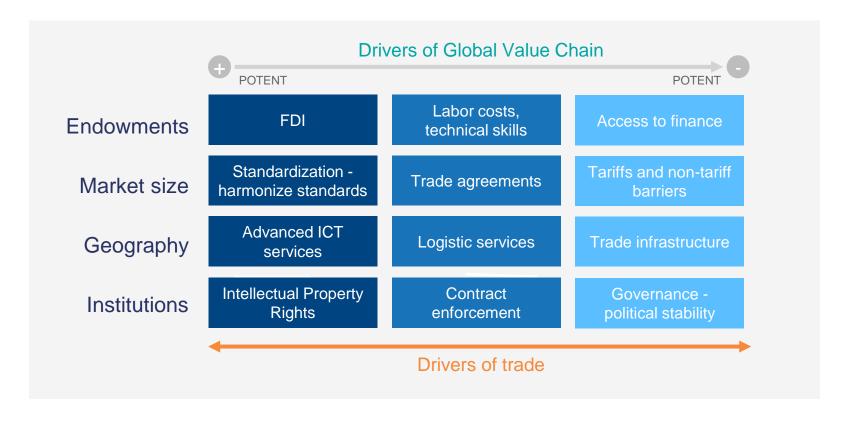
- Technology
- Economic Development
- Policy
- Covid
- Sustainability

In the post-world war period international trade benefited from technological advances that reduced trade costs as well as liberalization policies



- Following the WWII, technological advances led to lower costs which benefited commerce through efficiency gains in transportation.
- In addition, negotiations within the framework of the GATT and WTO involved significant reductions in tariffs and greater policies of openness and trade liberalization.

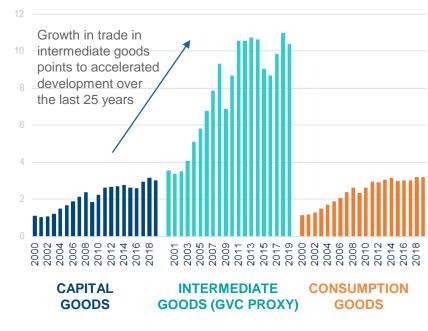
GVC trade culminated the process of increasing specialization in the conduct of global trade alongside deeper firm-to-firm linkages



GVC trade grew rapidly in the 1990s, led by China, the US and EU, but stagnated after the 2008 global financial crisis

GVC Indicator (*) (change in pp)							
19	90 - 2007	2008 - 2018					
EU27	+13.5	-3.6					
China	+17.1	-2.3					
USA	+16.0	-5.6					
Latam	+9.1	-3.3					
Asia (ex CHN)	+10.1	-6.2					
Other	+9.9	-3.4					

IMPORTS BY STAGE OF GOODS (US\$ TRILLION)

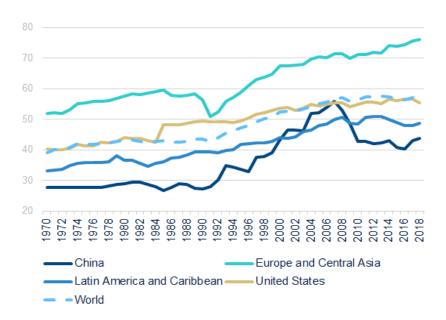


^(*) GVC Indicator: (Foreign Value Added + Indirect Domestic Value Added) /Value Added Exports. Source: Eora Global Value Chain database (UNCTAD) and BBVA Research

Globalization over the past 4 decades has been largely led by falling trade costs in the wake of trade agreements, policy reform, technology

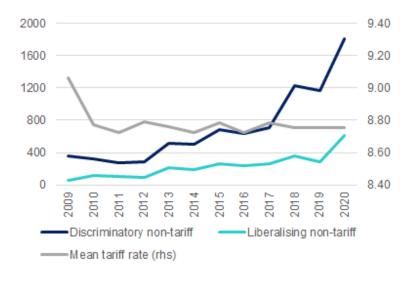
KOF TRADE GLOBALISATION INDEX

(BASED ON TRADE REGULATIONS, TRADE TAXES, TARIFFS)



NUMBER OF NON-TARIFF MEASURES AND MEAN TARIFF RATE

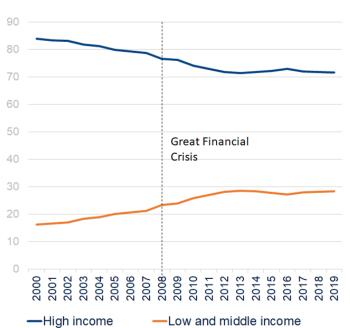
(FREQUENCY OF DISCRIMINATORY MEASURES, %)

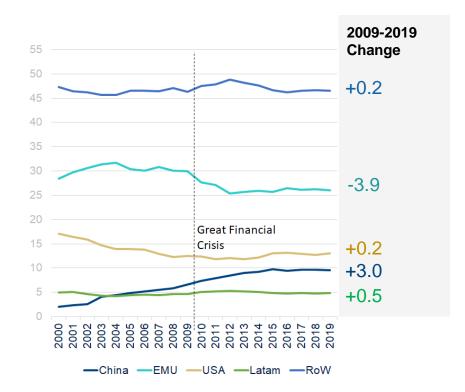


There has been a geographical re-composition, with advanced economies gradually losing participation in total global trade

PARTICIPATION IN TOTAL TRADE BY REGION

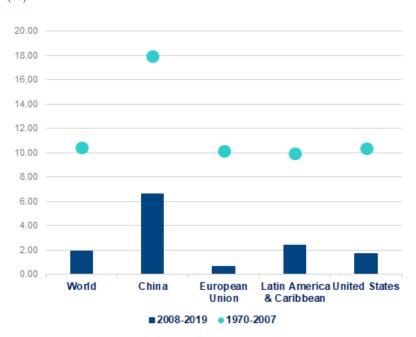
(AS % OF WORLD TRADE)





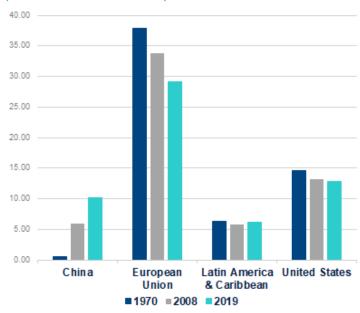
China's rapid trade growth has taken the country to a leading position in global international trade, at the expense of the EU and US

AVERAGE IMPORT GROWTH ACROSS REGIONS (%)



IMPORTS OF GOODS AND SERVICES BY COUNTRY AND REGION

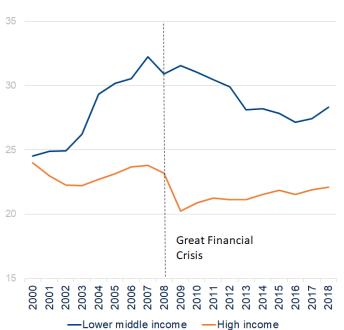


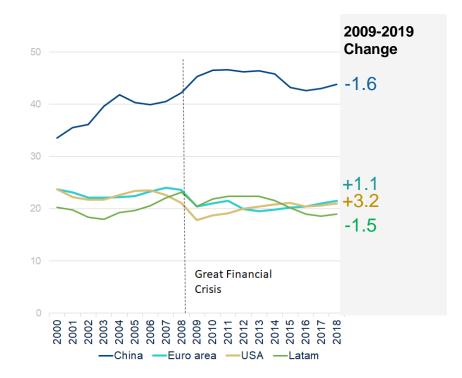


Investment, which is highly import-intensive, has weakened since the GFC, contributing to the recent slowdown in global trade

GROSS CAPITAL FORMATION

(AS % OF GDP)

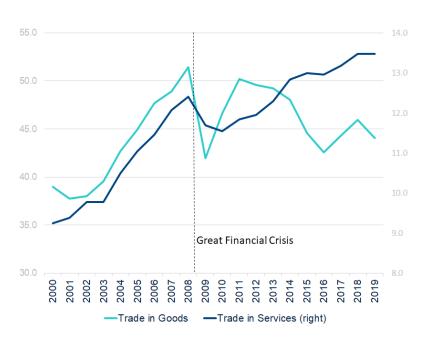




Service trade has increased steadily, from 9% to 13.5% of world GDP, with less volatility than goods trade

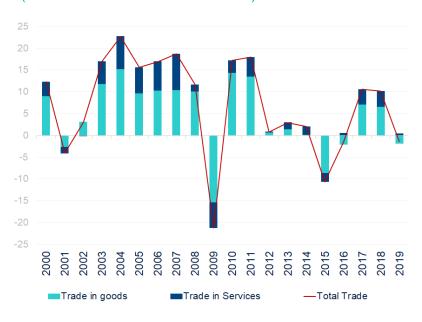
PARTICIPATION IN TOTAL TRADE BY TYPE

(AS % OF WORLD GDP)



TRADE CONTRIBUTION BY TYPE

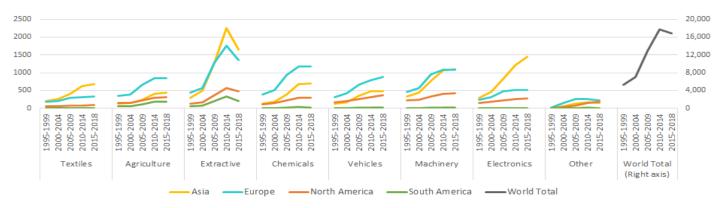
(CONTRIBUTIONS TO YoY GROWTH)



Asia, led by China, has gained ground in the trade of machinery and electronic goods

MERCHANDISE EXPORTS BY TYPE OF PRODUCT

(CURRENT USD)



- China is the leading exporter of textiles (33% of global exports) and Germany and Italy in Europe (5.5% and 5.3%)
- Exports of the extractive sector are mostly due to oil exports, which boomed in the 2000s; Saudi Arabia stands out (strong price effects to be considered)
- Europe leads trade in chemicals, led by Germany (11.3%) followed by United States (9.6%) and China (9.2%)
- In Vehicles and Machinery, Europe (mainly Germany 17%) and Asia (Japan in vehicles, China in machinery up to 20%) are the countries that lead the trade exchange. In electronics the key dominant exporter is China with 27% of total.

Source: Atlas of Economic Complexity, based on COMTRADE, HS Code, for Goods, BBVA Research. Trade data on services are based on IMF via the World Development Indicators. "Extractive" includes Stone, Minerals and Metals, being the most important part "fuels and oil"

Asia ex-China, UK, Netherlands, Denmark and the US are among the main exporters of services

SERVICES EXPORTS BY TYPE

(CURRENT USD)



- In financial services, the UK (around 17% of global exports) and the US (around 20%) stand out
- In ICT, top exporters among European countries are the Germany (7%), Netherlands (6.6%) and France (5.8%), while US in North America (22%) and Japan and China in Asia (which together represent almost 16%)
- In transportation services, the Germany, France, Denmark and UK (16.5% of total exports), followed by Asia led by Singapore (5.2%) and China (4.25%) and United States (9.32%).
- In tourism services, Spain (nearly 5.3%), North America(15%), Thailand (5.3%) and Japan (4%) are among top exporters

Source: Atlas of Economic Complexity, based on COMTRADE, HS Code, for Goods, BBVA Research. Trade data on services are based on IMF via the World Development Indicators BBVA Research



03

Prospects for international trade by 2030

Main potential drivers of international trade by 2030 (*)

	Traditional dr	New	New drivers		
Technology	Economic Technology Development Policy			Sustainability	
Digitalization	Tensions due to China's emergence	Protectionism and interventionism	Self-reliance strategies	Regulation	
Automation	Rising income and labor costs in EM		Social norms	Social norms	
Additive manufacturing (3D Printing)				Physical impacts	

^(*) The analysis and the results in this section benefited significantly from <u>UNCTAD's 2020 World Investment Report</u> Source: BBVA Research and UNCTAD's 2020 Investment Report

Technology: digitalization

Use of digital technologies such as **Internet of Things, cloud, augmented and virtual reality, platforms (blockchain, e-commerce, fintech), big data**, etc. will be gradually incorporated into production processes.

Positive effects:

- Lower governance, transaction, trade costs (mainly with a global level playing field)
- More effective coordination of GVCs
- Improved access to GVCs for SMEs
- More modularity of production process
- Distributed manufacturing and geographical dispersion of production

Negative effects:

Concentration of value in some few developed countries

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Technology: automation

Employment of machines to replace physical labor (by 2030, mainly "blue collar") will gain momentum, with increasing use of advanced industrial robots, Al-enabled robotics, etc. Limited productivity gains.

Positive effects:

- Productivity gains
- Reduction in transport costs

Negative effects:

- Lower competitive advantage of low-cost manufacturing
- Reshoring
- Rebundling of tasks
- High capital investments favor geographical concentration

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Technology: additive manufacturing (3D printing)

Additive manufacturing will gain momentum, with potential to even reaching mainstream industries ahead. It will pave the way to a change **from mass production and economies of scale to mass-customization**.

Positive effects:

- Distributed manufacturing and geographical dispersion of production
- Internationalization strategies based on proximity to market

Negative effects:

- Rebundling of manufacturing steps
- Lower competitive advantage of low-cost manufacturing
- Concentration of high-value activities (programming, design...) in few developed countries
- Commoditization of manufacturing
- Reshoring incentives (if skilled labor or high-cost printers are needed)

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Economic development: tensions on China emergence

China will continue to convert itself into an economic and geopolitical global leader, which will shape a strategic rivalry with the US and other developed countries countries and be a source of tensions.

Positive effects:

Negative effects:

- Higher trade costs, countering arbitrage opportunities, favoring rebundling and reshoring
- Policy uncertainty
- Regionalization (as opposed to globalization)
- Lower efficiency gains

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Economic development: rising income and labor costs in EMs

Declining per capita income and labor costs gaps between DMs and EMs (mainly China and Asia) will continue to take place over the next decade.

Positive effects:

- Expansion of middle classes in EMs creates higher demand for superior goods and services
- Further incorporation of poor regions (Africa, India, etc.) into global markets

Negative effects:

- Higher labor costs in EMs and lower competitive advantage of low-cost manufacturing
- Lower income growth in EMs than in the past
- Incorporation of new regions into global markets will be less relevant than in the past

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Policy: interventionism and protectionism

Industrial and other interventionist policies as well as protectionist measures will be more prevalent over the next decade than they were some decades ago. That will be due **geopolitical (US-China rivalry)**, **economic** (inequality), political (populism) and other (Covid, failure of the Washington Consensus, GFC...) reasons

Positive effects:

Negative effects:

- Higher trade costs, countering arbitrage opportunities and favoring rebundling and reshoring
- Policy uncertainty
- Regionalization (as opposed to globalization)
- Lower efficiency gains

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
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Covid: self-reliance strategies

Self-reliance, reliance on strategic partners or diversification will be increasingly used to **guarantee the provision of strategic inputs**. **State support programmes** and policies adopted to tackle the Covid effects will also back the adoption of interventionist and protectionist measures.

Positive effects:

Geographical diversification on diversification to guarantee input provision

Negative effects:

- Higher trade costs, countering arbitrage opportunities and favoring rebundling and reshoring
- Policy uncertainty
- **Regionalization** (as opposed to globalization)
- Lower efficiency gains

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Covid: social norms

Changes in social habits and production norms will favor social distancing, teleworking, protective equipment, etc. will have a significant in the short and medium terms. But by 2030 their impact will be small.

Positive effects:

 Eventual positive effects on non-social products, mainly the digital ones

Negative effects:

- Higher production and transport costs
- Lower demand for social products

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Sustainability: regulation

Climate change policies, carbon border adjustment mechanisms, emission targets, green taxes, green conditionality in international trade/production agreements, etc. will be gradually adopted.

Positive effects:

New business opportunities due to mitigation, adaptation and new arbitrage possibilities

Negative effects:

- Higher production, transaction and transportation costs mainly without global level playing field and on the sectors more carbon-exposed
- Shifts in locational advantages, favoring reshoring or regionalization

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Sustainability: social norms

The sustainability trend will be reinforced ahead. There will be an increasing pressure, which will augment risks, for producers to deliver socially and environmentally responsible goods and services.

Positive effects:

New business opportunities due to mitigation, adaptation and new arbitrage possibilities

Negative effects:

- Higher production, transaction and transportation costs
- Reshoring or regionalization on shifts in locational advantages

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma

Sustainability: physical impacts

Shifts in weather patterns, floods, forced changes in soil usage, damage to infrastructure, the need of new transportation routes, etc. will be more frequent over the next decade than they were in the recent past.

Positive effects:

- New business opportunities due to mitigation, adaptation and new arbitrage possibilities (construction, consulting, insurance...)
- Geographical diversification on strategies to guarantee input provision

Negative effects:

- Higher costs/risks from increased frequency of extreme weather events
- Reshoring or regionalization on shifts in locational advantages
- Periodic trade disruptions

Extractive industries	Agro-based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services	
Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharma	

Main drivers of international trade by 2030: primary and service sectors

MAIN DRIVERS OF INTERNATIONAL TRADE BY 2030 - PRIMARY AND SERVICE SECTORS

(IMPACT ON INTERNATIONAL TRADE: ORANGE - NEGATIVE, GRAY: NEUTRAL; GREEN: POSITIVE)

		Primary		Services				
		Extractive industries	Agro- based	Wholesale, retail trade	Transportation and logistics	Tourism	Financial services	High-value services
	Digitalization							
Technology	Automation							
	Additive manufacturing							
Davelenment	Tensions on China emergence							
Development	Higher income, labor costs in EMs							
Policy	Interventionism, protectionism							
Covid-19	Self-reliance							
Covid-19	Social norms							
	Regulations							
Sustainability	Social preferences							
	Physical impacts							

Source: BBVA Research and UNCTAD's 2020 Investment Report

Main drivers of international trade by 2030: manufacturing sectors

MAIN DRIVERS OF INTERNATIONAL TRADE BY 2030 - MANUFACTURING SECTORS

(IMPACT ON INTERNATIONAL TRADE: ORANGE - NEGATIVE, GRAY: NEUTRAL; GREEN: POSITIVE)

		Manufacturing Manufacturing						
		Automotive	Machinery, equipment	Electronics	Textiles, apparel	Food, beverage	Chemicals	Pharmaceuticals
	Digitalization							
Technology	Automation							
	Additive manufacturing							
Dovolonment	Tensions on China emergence							
Development	Higher income, labor costs in EMs							
Policy	Interventionism, protectionism							
Covid-19	Self-reliance							
Covid-19	Social norms							
	Regulations							
Sustainability	Social preferences							
	Physical impacts							

Source: BBVA Research and UNCTAD's 2020 Investment Report

Global trends will negatively affect global trade by 2030

MAIN DRIVERS OF INTERNATIONAL TRADE BY 2030

(EXPECTED EFFECT ON GROWTH TREND: ORANGE: NEGATIVE, GRAY: NEUTRAL; GREEN: POSITIVE)

Covid: self-reliance

Technology: automation

Sustainability: social norms

EM development: income, labor costs

Interventionism and protectionism

Sustainability: policy/regulation

Covid: social norms

Development: China - frictions

Technology: 3D printing

Sustainability: physical impact

Technology: digitalization

High-tech, GVC-intensive manufacturing will be the most affected; high-value services will be the main winners

INTERNATIONAL TRADE BY 2030 ACROSS SECTORS

(EXPECTED EFFECT ON GROWTH TREND: ORANGE: NEGATIVE, GRAY: NEUTRAL; GREEN: POSITIVE)

Manufacturing: automotive

Primary: agro

Manufacturing: food/beverage

Services: retail, wholesale trade

Services: tourism

Manufacturing: electronics

Primary: extractive

Manufacturing: chemicals

Services: finance

Manufacturing: machinery

Manufacturing: textile/apparel

Manufacturing: pharmaceutical

Services: logistic transportation

High-value services

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