Globalization in transition
The future of trade and value chains

World Bank Group

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MCKINSEY GLOBAL INSTITUTE

We analyze 23 global value chains and group them into 6 archetypes based on their inputs, trade intensity, and country participation

	Description	Value chains included
Global innovations	▪ High trade intensity ▪ Capital-intensive production, with high R&D ▪ High advanced economy participation ▪ Highly complex value chains	▪ Autos ▪ Computers and electronics ▪ Electrical machinery ▪ Other machinery and equipment ▪ Transportation equipment ▪ Chemicals and pharma
Labor-intensive manufacturing	▪ High trade intensity ▪ Labor is key input ▪ Low regional trade; high EM participation	▪ Textiles and apparel ▪ Furniture and leather products
Regional processing	▪ Low trade intensity, due to weight or perishability of goods ▪ Commodities are a key input ▪ High share of regional trade	▪ Food and beverage ▪ Fabricated metal products ▪ Paper and printing ▪ Glass, cement, and ceramics ▪ Rubber and plastics
Resource-intensive goods	▪ High trade intensity ▪ Widespread country participation ▪ Simple value chains	▪ Mining ▪ Agriculture ▪ Basic metals ▪ Energy
Labor-intensive services	▪ Lowest trade intensity ▪ Labor is key input ▪ But largest gross output and employment	▪ Wholesale and retail ▪ Transportation and storage ▪ Healthcare
Knowledge-intensive services	▪ Low trade intensity, but growing rapidly ▪ Highly skilled workforce ▪ Lowest share of regional trade	▪ Financial services ▪ Business services ▪ IT services

Six trends are reshaping global value chains

Six trends are reshaping global value chains

1 A **smaller share of goods is traded** across borders

2 **Services trade is growing** faster than goods trade

3 **Low labor costs** have become **less important**

4 **R&D and innovation** are becoming **increasingly important**

5 **Trade** is becoming **more regional** and less long-haul

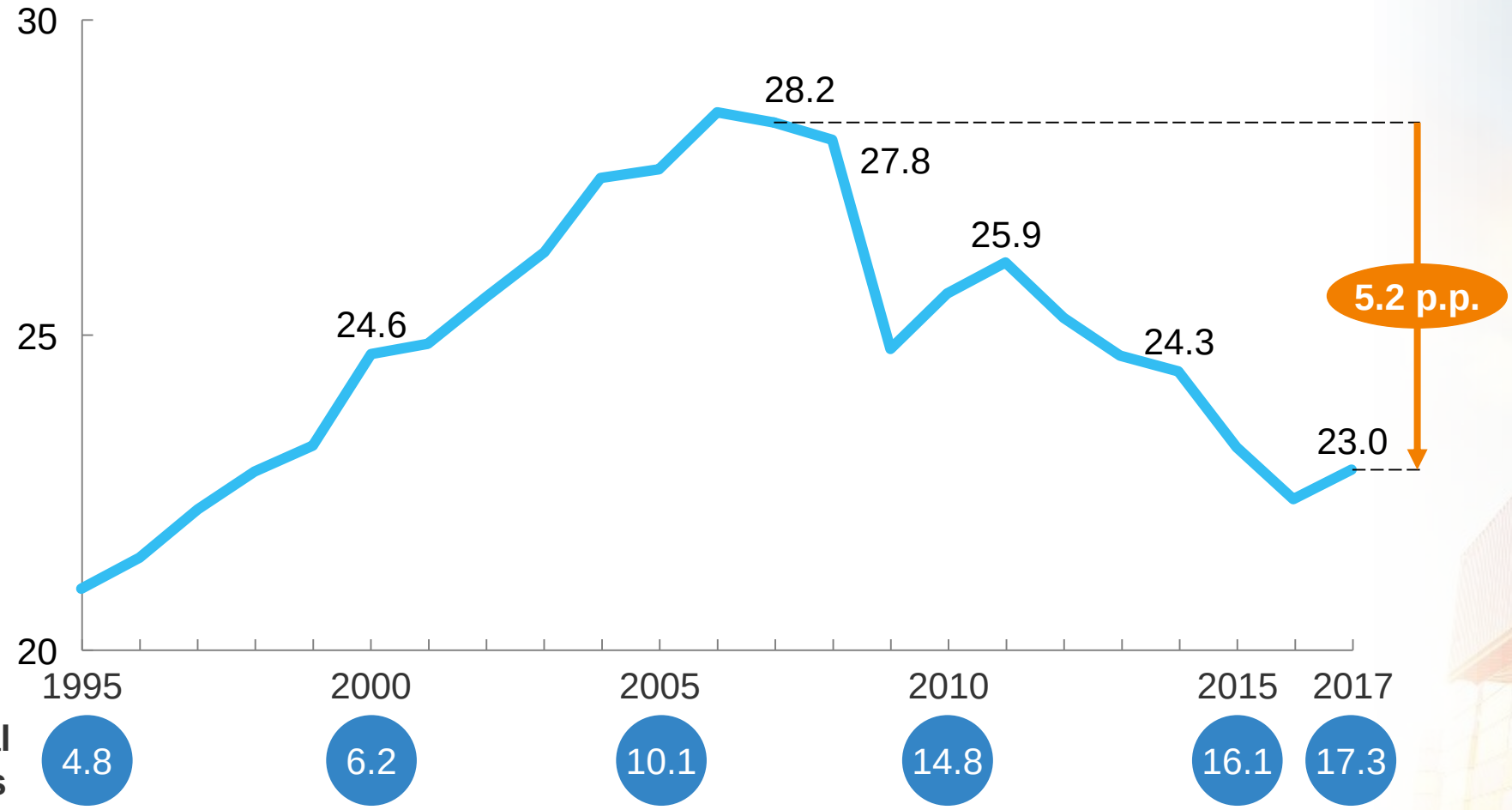
6 **Technology** is **reshaping** global value chains

SOURCE: McKinsey Global Institute

1 Global goods trade intensity declined after 2007

Global goods trade to gross output

Percent



Global goods trade

$ Trillions

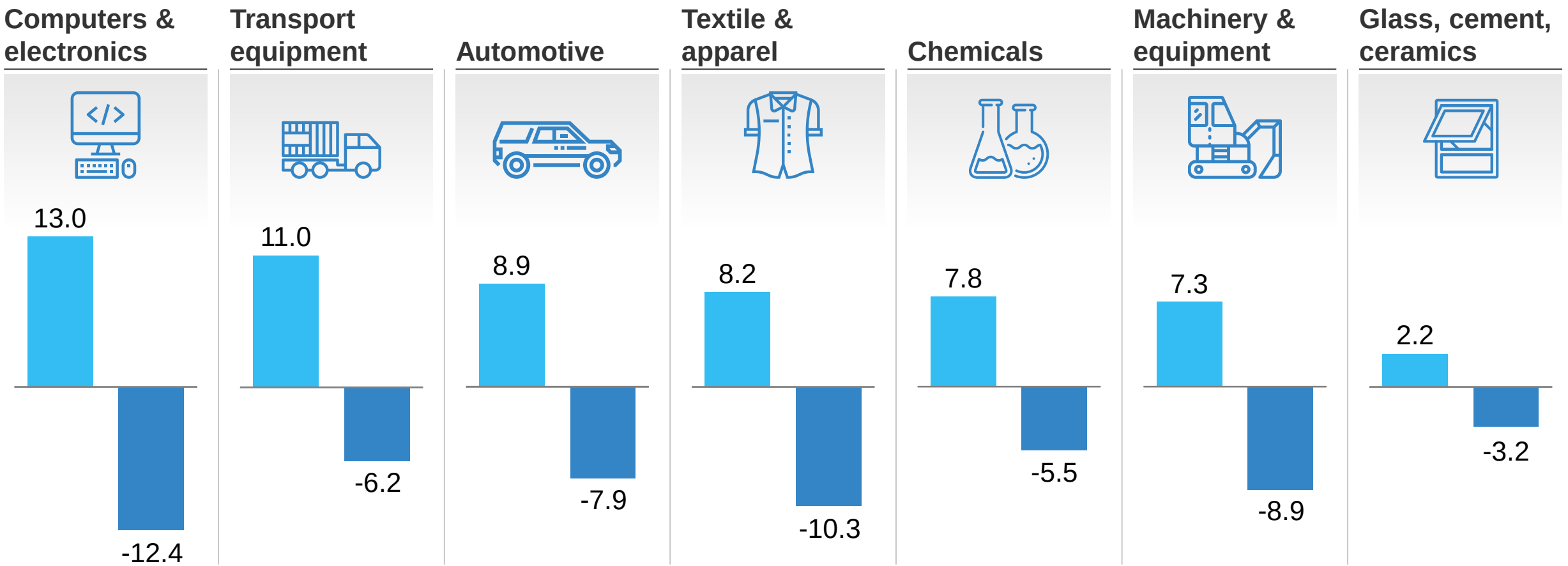
SOURCE: McKinsey Global Institute, Globalization in transition: The future of trade and value chains, January 2019

1 Trade intensity has declined in all goods value chains since 2007

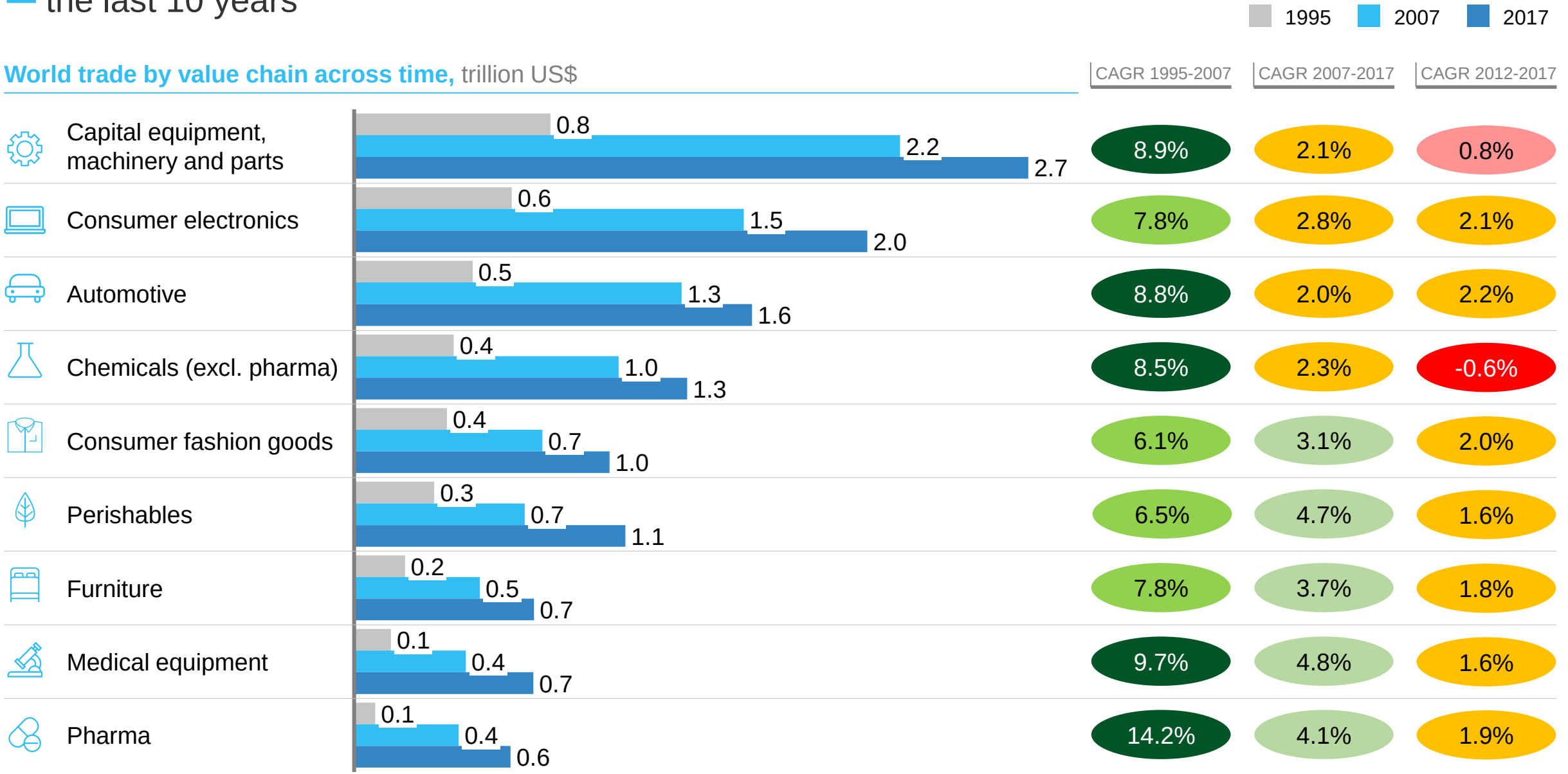
Change 2000-07, p.p. | Change 2007-17, p.p.

Change in trade intensity (trade / gross output)

2000–07 vs. 2007–17, p.p.



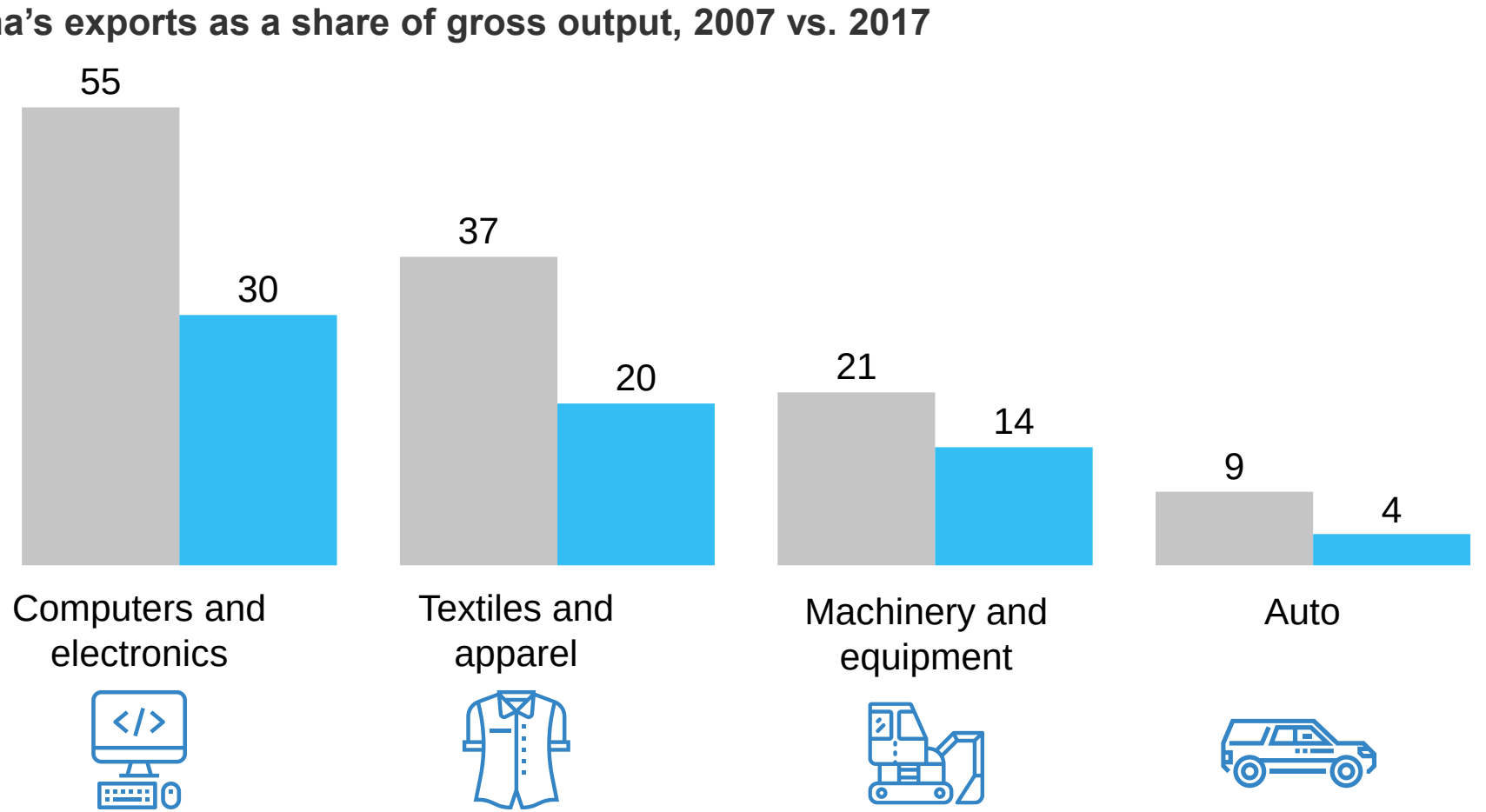
1 The value of goods trade continues to grow, but growth rates have fallen significantly over the last 10 years



SOURCE: McKinsey Global Institute, Globalization in transition: The future of trade and value chains, January 2019. MGI Bilateral Trade database

1 China is consuming more of what it produces and exporting less

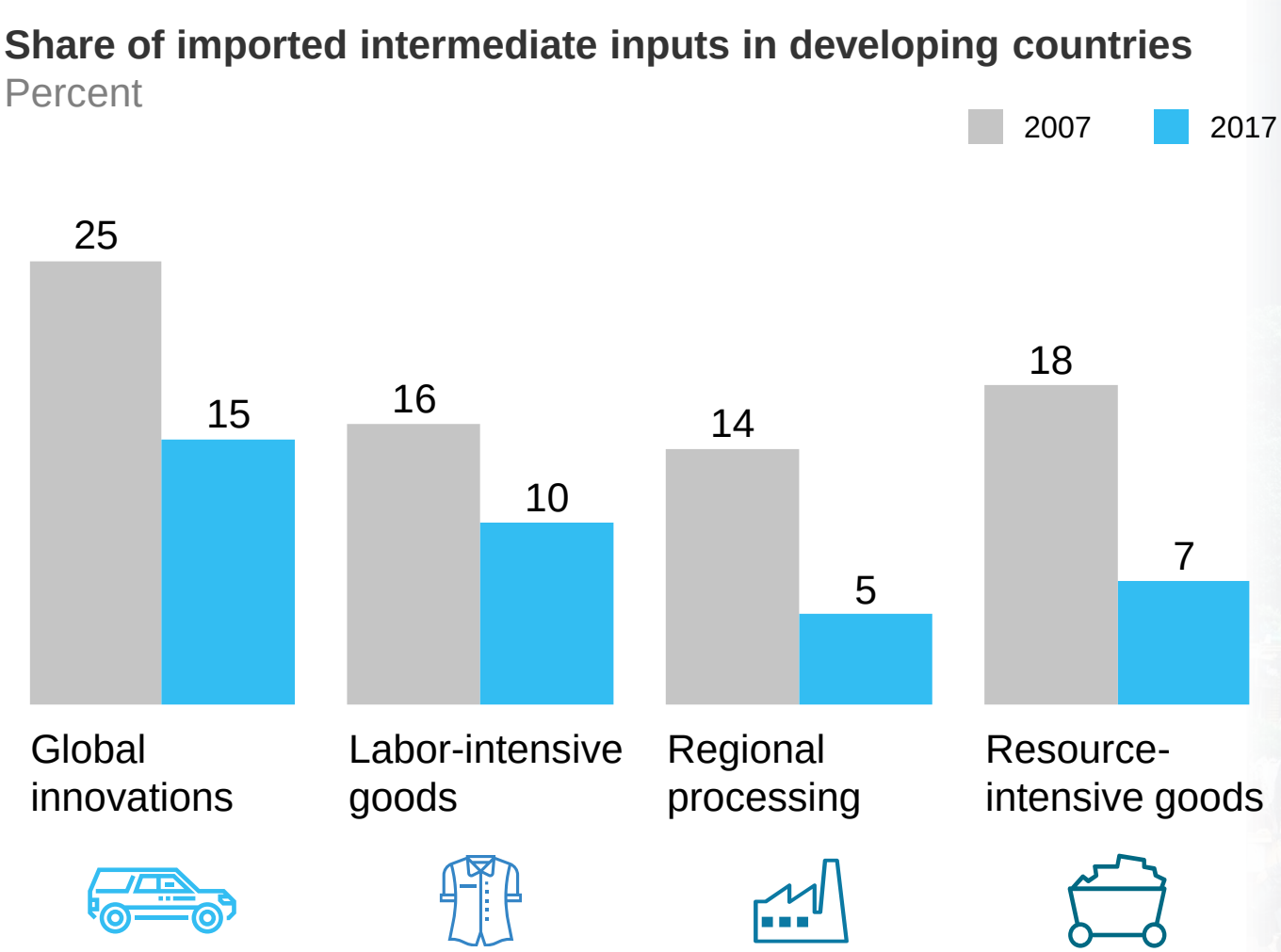
China's exports as a share of gross output, 2007 vs. 2017



China's trade surplus has fallen from 7.6% of GDP in 2007 to 1.5% in 2017

SOURCE: McKinsey Global Institute, Globalization in transition: The future of trade and value chains, January 2019

1 Declining trade intensity also reflects growing domestic supply chains in China and other developing countries



Why does this trend matter?

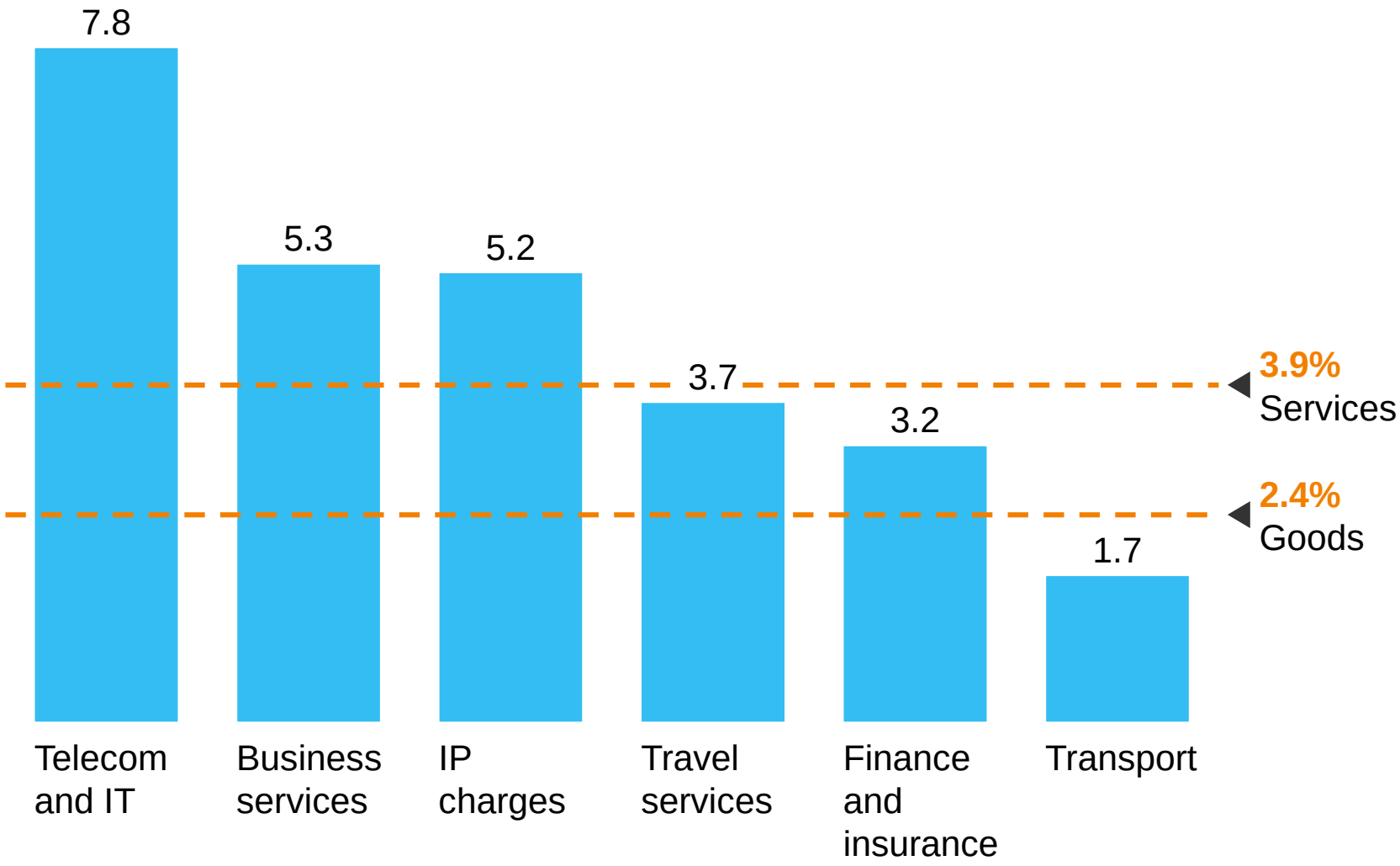
Lower goods trade intensity is here to stay

Companies have new opportunities in consumer markets in developing countries

2 Services trade is growing 60 percent faster than goods trade

Service sectors CAGR, 2007–17

Percent

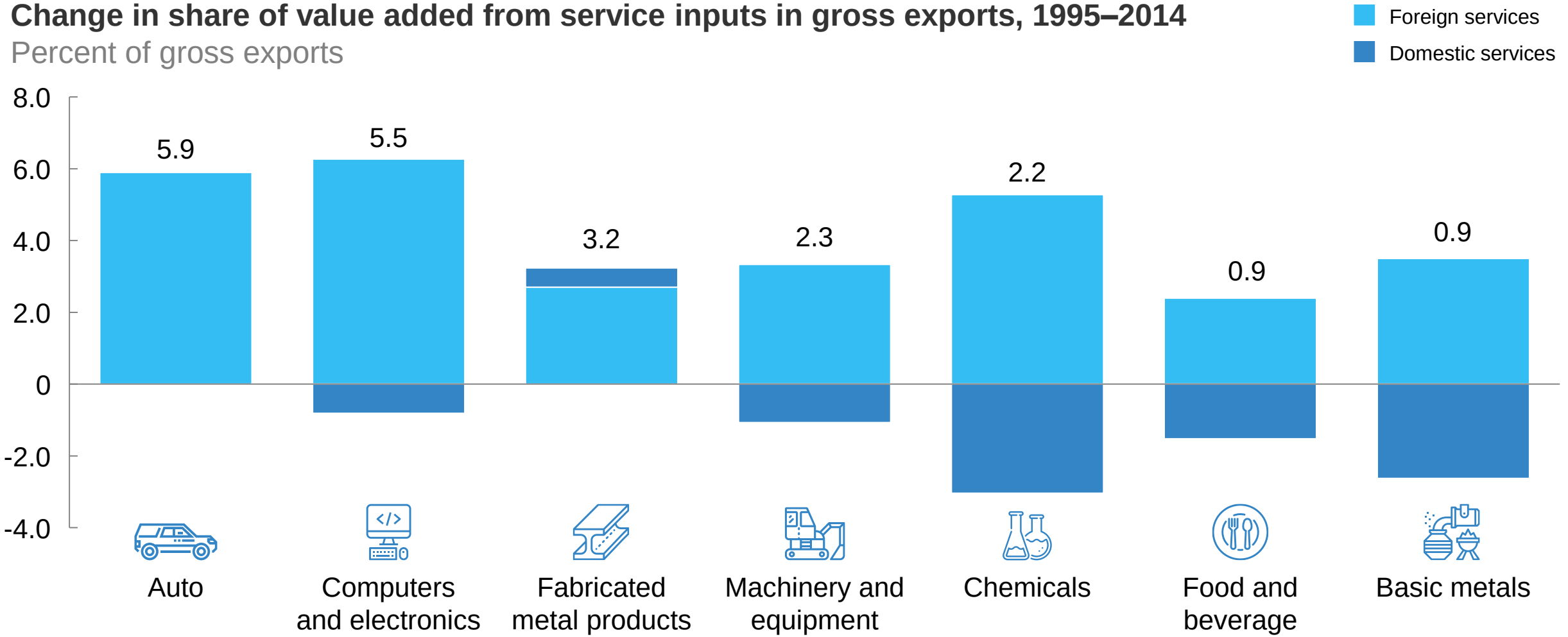


SOURCE: McKinsey Global Institute

2 The role of services in goods production has increased across all value chains

Change in share of value added from service inputs in gross exports, 1995–2014

Percent of gross exports

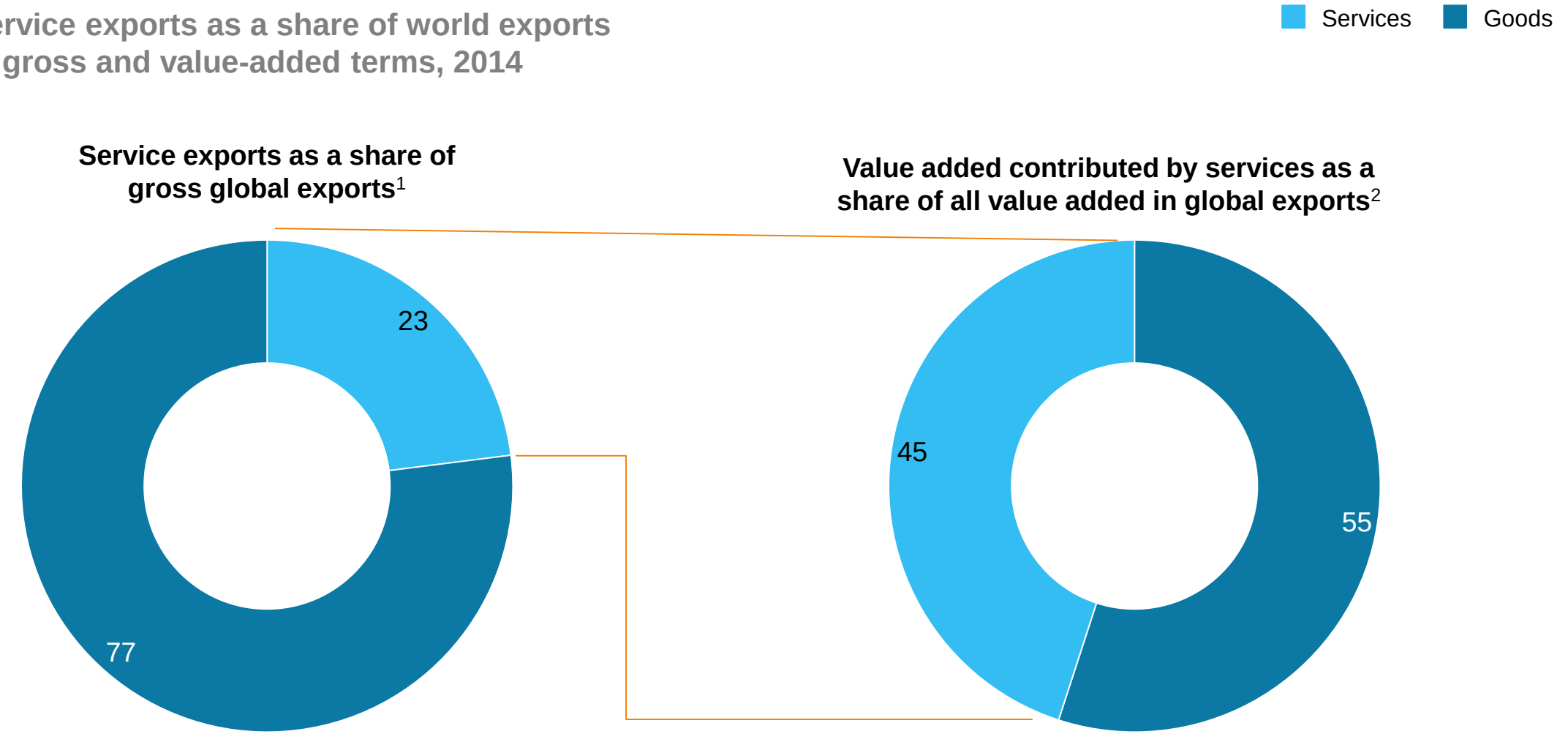


30% of value of exported goods comes from services

2 Although services directly make up only 23 percent of global trade, they contribute 45 percent of the total value added

Service exports as a share of world exports in gross and value-added terms, 2014

%



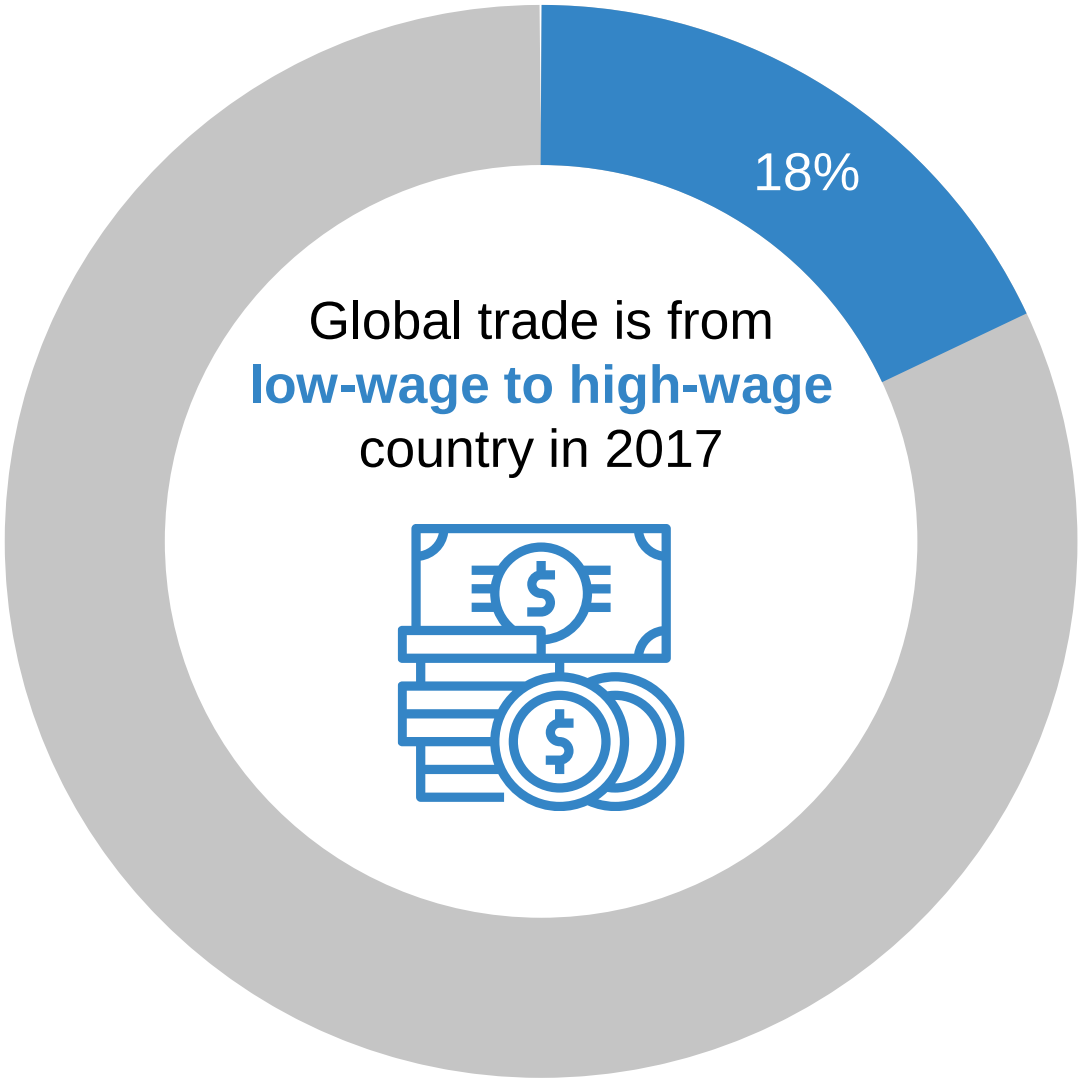
1 Share based on WTO and IMF.
2 Share based on World Input-Output Database.

SOURCE: WTO; IMF; World Input-Output Database; McKinsey Global Institute analysis

Why does this trend matter?

Companies (and countries)
have growing opportunities
in services trade

3 Trade based on labor-cost arbitrage has declined across many value chains

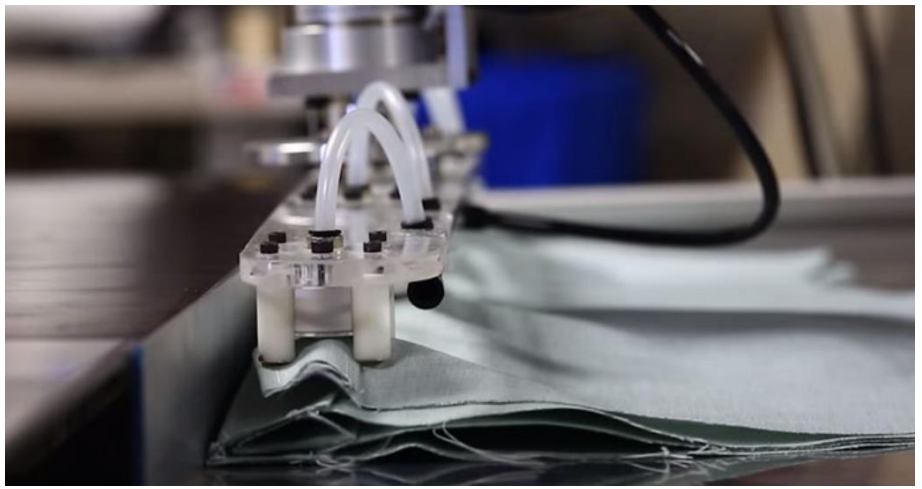


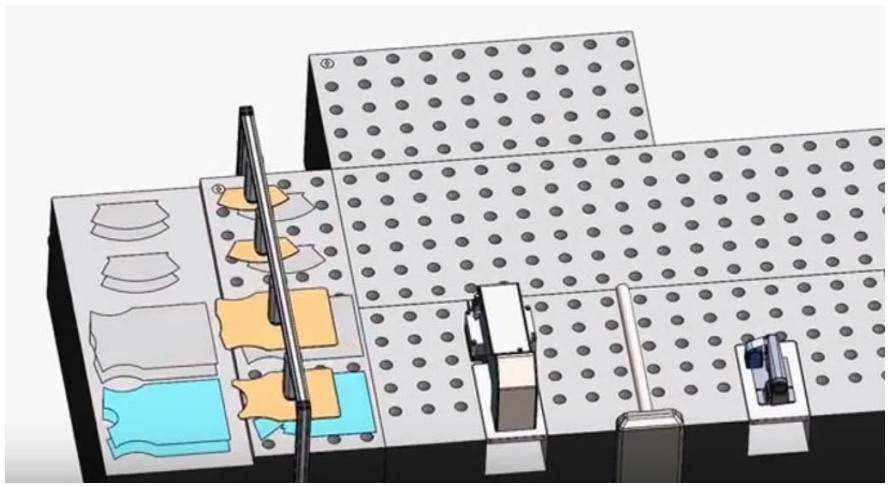
SOURCE: McKinsey Global Institute

3 Robotics is expanding even to the most labor-intensive processes

Sewbot, fully automated sewing workline, developed by SoftWear, Atlanta-based company

SoftWear AUTOMATION





Replaces **10** full-time employees

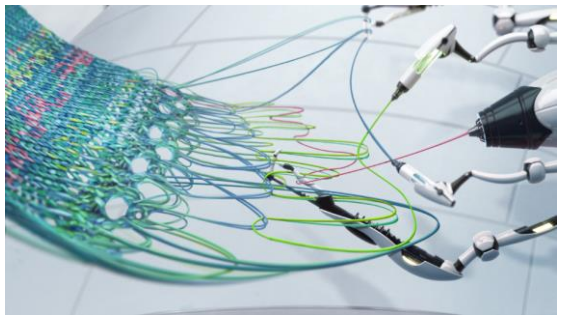
2x more productive than a human sewing line
(1,142 t-shirts in 8 hours by sewbot vs. 669 by human sewing line)

11x faster manufacturing of a shoe upper

SOURCE: McKinsey Global Institute, Globalization in transition: The future of trade and value chains, January 2019

3 Manufacturing process automation allows to locate production closer to consumers - examples

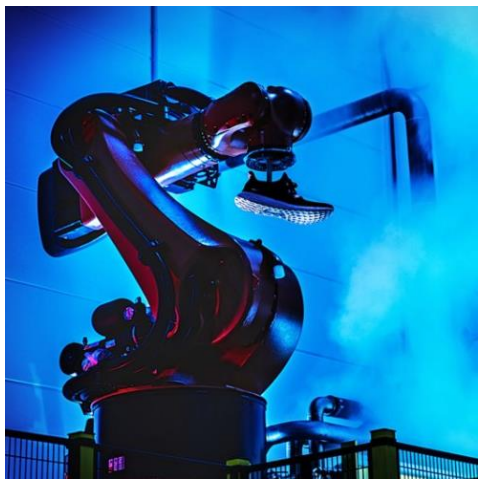
Nike Flyknit Automated Manufacturing Process



Flyknit running shoe

- **19x** less sewn pieces – from **37** to just **2**
- Shoe weight down by **45%** – from 290g to 160g
- **$1B** sales of Flyknit shoes 2012-2017
- Lower labor costs, reduced waste and cycle time
- Embedded customization features
- Factory in Mexico (other Nike shoes mainly produced in Asia)

Adidas Speedfactory

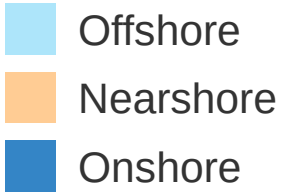


Futurecraft 4D shoe

- **95%+** fewer employees
- **3x** faster time to market
- **100,000** pairs sold in 2017-2018
- Goal to produce **1M** Futurecraft 4D athletic shoes in the coming years
- Location in Ansbach, Germany and Atlanta, U.S.

SOURCE: McKinsey Global Institute, Globalization in transition: The future of trade and value chains, January 2019

3 Nearshoring production can decrease costs while increasing speed to market



Jeans production, US company

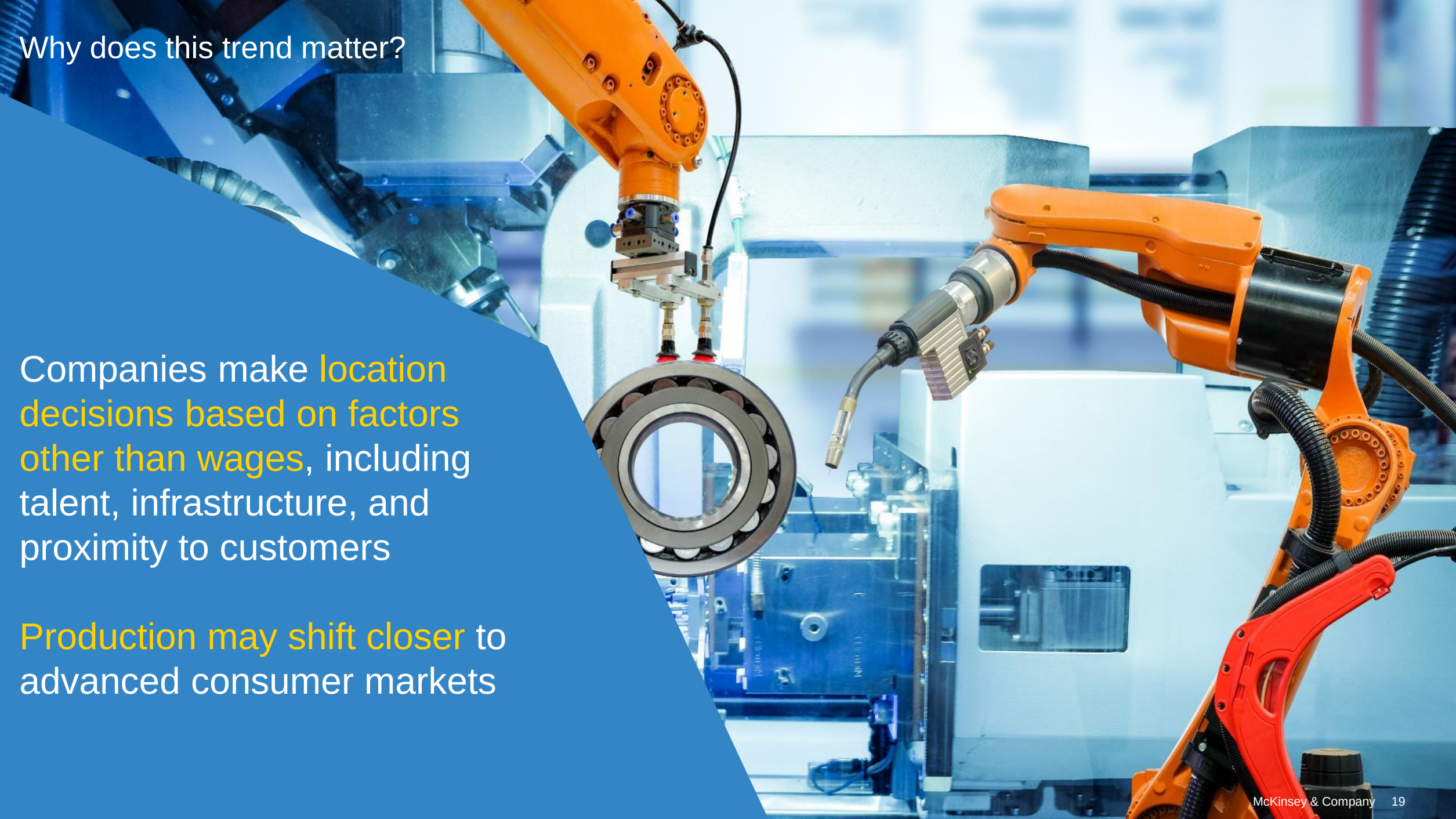
	Freight Mode/days	Landed cost price, 2016 $ per pair of jeans
Bangladesh	/ 30	10.68
China	/ 30	12.04
Mexico	/ **2**	10.57
USA	0	14.05

Jeans production, German company

	Freight Mode/days	Landed cost price, 2017 $ per pair of jeans
Bangladesh	/ 30	9.94
China	/ 30	12.46
Turkey	/ **3–6**	12.08
Germany	0	30.36

SOURCE: McKinsey Global Institute

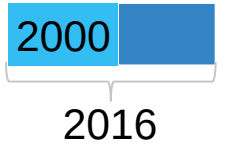
Why does this trend matter?



Companies make location decisions based on factors other than wages, including talent, infrastructure, and proximity to customers

Production may shift closer to advanced consumer markets

4 All global value chains are becoming more knowledge-intensive



Intangible assets as a share of revenue, 2000 vs 2016, Percent

	2000	2016	Total
Machinery and equipment	7	29	36
Computers and electronics	8	17	25
IT services	5	14	19
Textiles and apparel	8	8	17
Chemicals	7	8	15
Auto	5	7	12
Professional services	7	4	10
Agriculture	4	5	9
Wholesale and retail	5	4	9
Mining	0	5	5

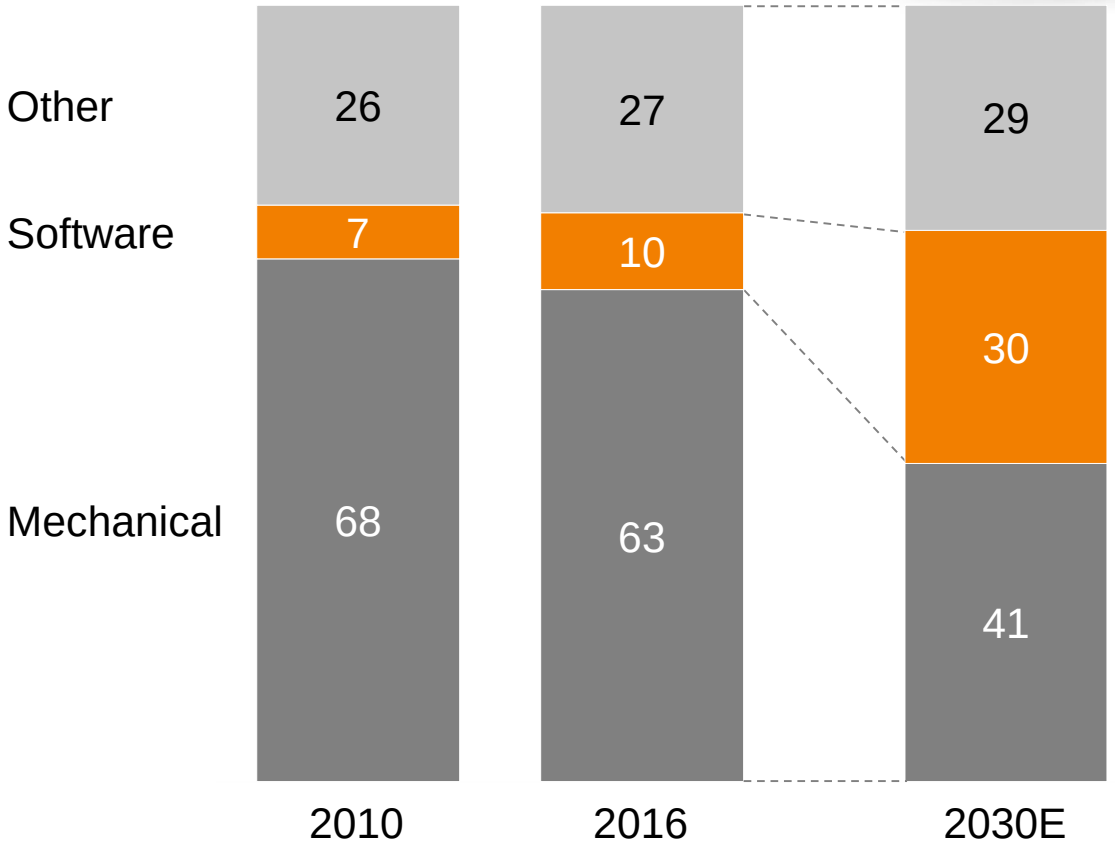
Global intangible assets as a share of revenue: 5.4% (2000) 〉 13.1% (2016)

SOURCE: McKinsey Global Institute

4 Intangible assets, such as software, design, and R&D, are an increasingly important part of the value of physical goods

Average value of vehicle content

Percent



Value of an iPhone

R&D, software, retail margin

62%

Manufacturing cost

38%

SOURCE: McKinsey Global Institute

Why does this trend matter?

Companies should focus on R&D and innovation to succeed in the next era of globalization

Countries with strong innovation ecosystems and highly skilled workforces will gain

5 Trade is becoming more regional rather than long-haul

Share of intraregional goods trade in total trade (exports + imports)

%

Intra-regional goods trade by value chain

Most regional value chains

59% auto

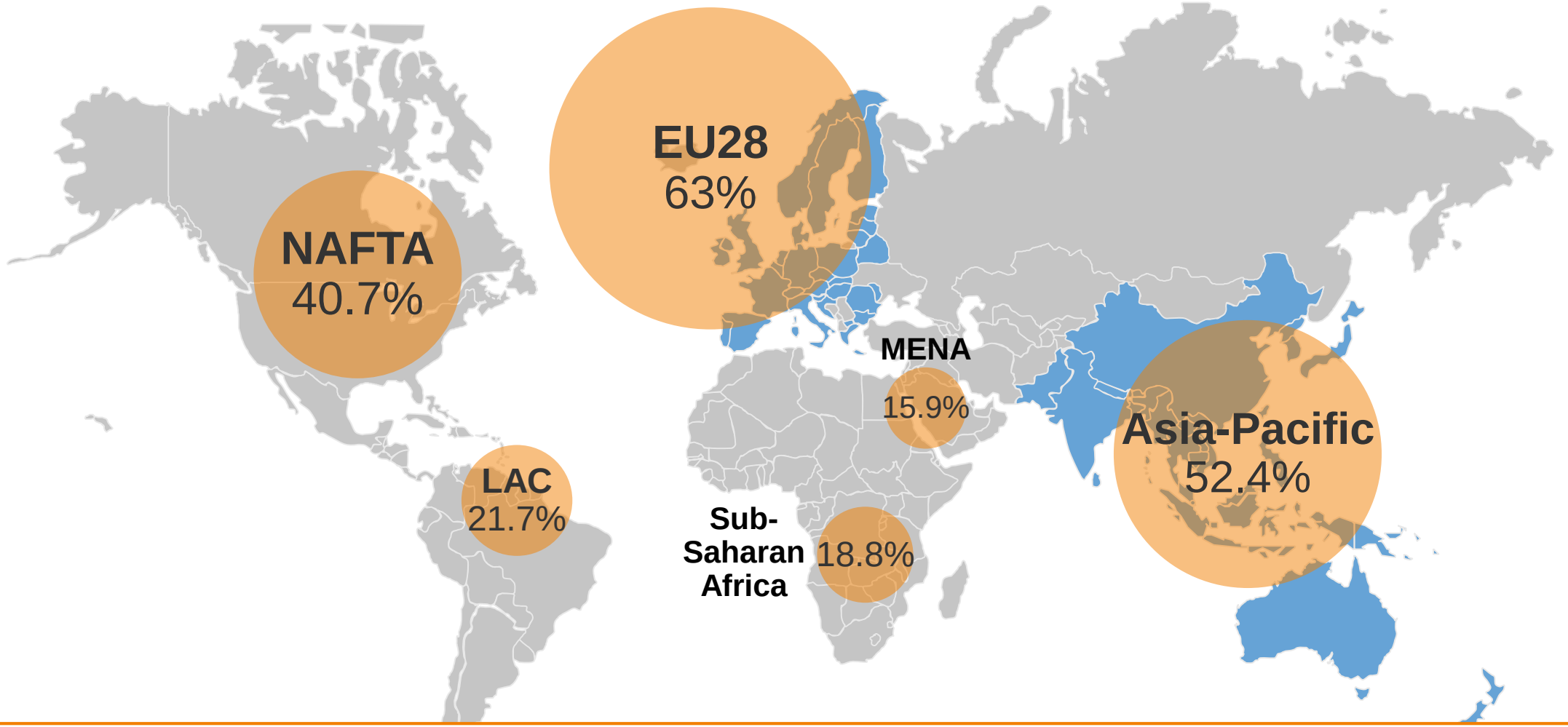
56% glass, cement, and ceramics

55% food and beverage

54% computers and electronics

5 More than half of goods trade is intraregional in EU-28 and Asia-Pacific

Share of intraregional goods trade by region, 2017



Why are companies trading more within regions?

To build closer relationships with suppliers

To increase speed to market

To increase proximity to customers

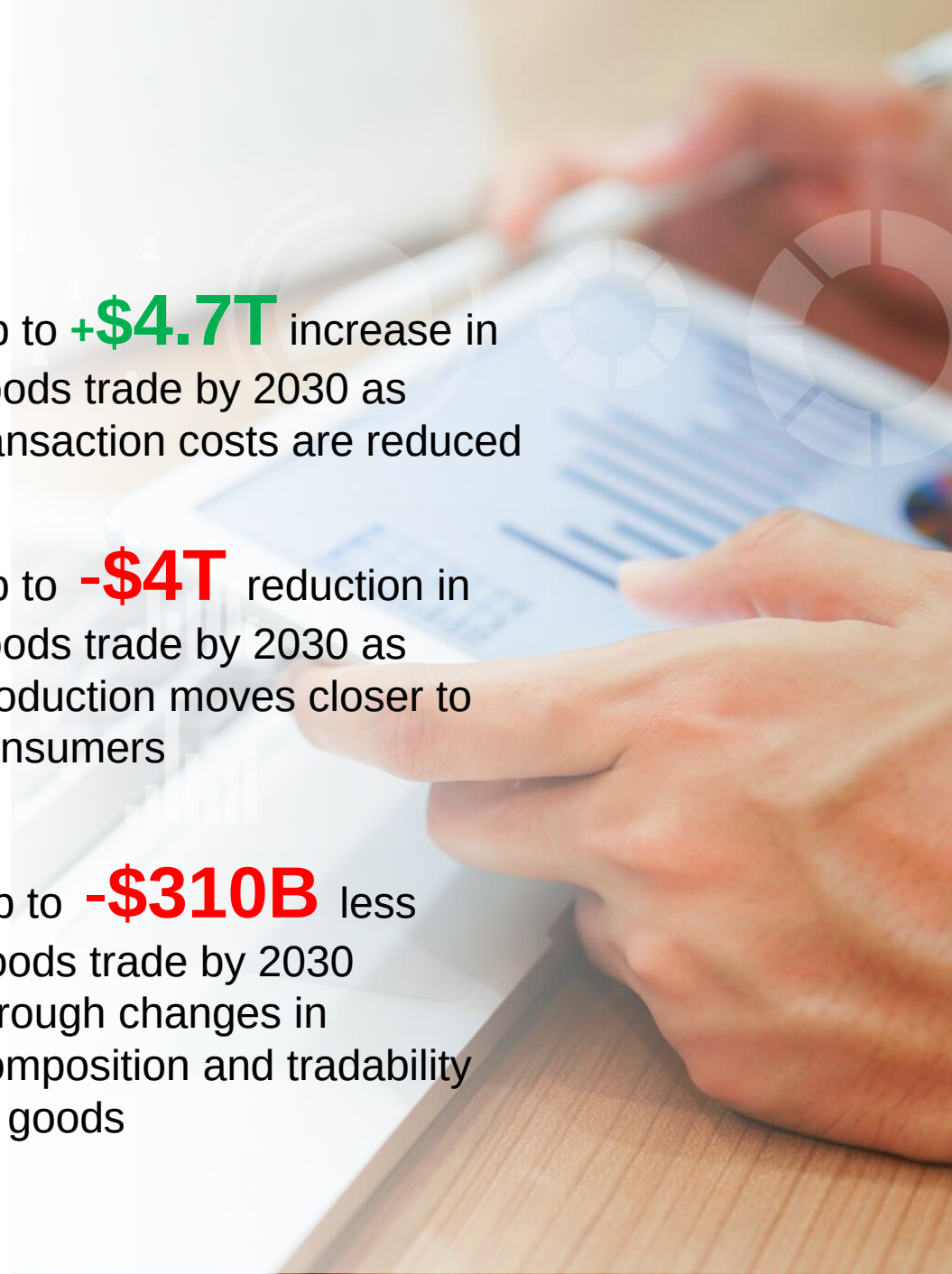
SOURCE: McKinsey Global Institute

Why does this trend matter?

Companies can develop closer ties with regional suppliers and increase speed to market

"Nearshoring countries" stand to gain (e.g., Mexico, CEE)

6 Technology is reshaping value chains in three ways



Reduce transaction costs

- Internet of Things
- E-commerce
- Blockchain
- Automated document processing

Up to **+$4.7T** increase in goods trade by 2030 as transaction costs are reduced

Change production processes

- AI
- Automation
- 3D printing

Up to **-$4T** reduction in goods trade by 2030 as production moves closer to consumers

New goods

- Electric vehicles
- Renewables
- Digital goods

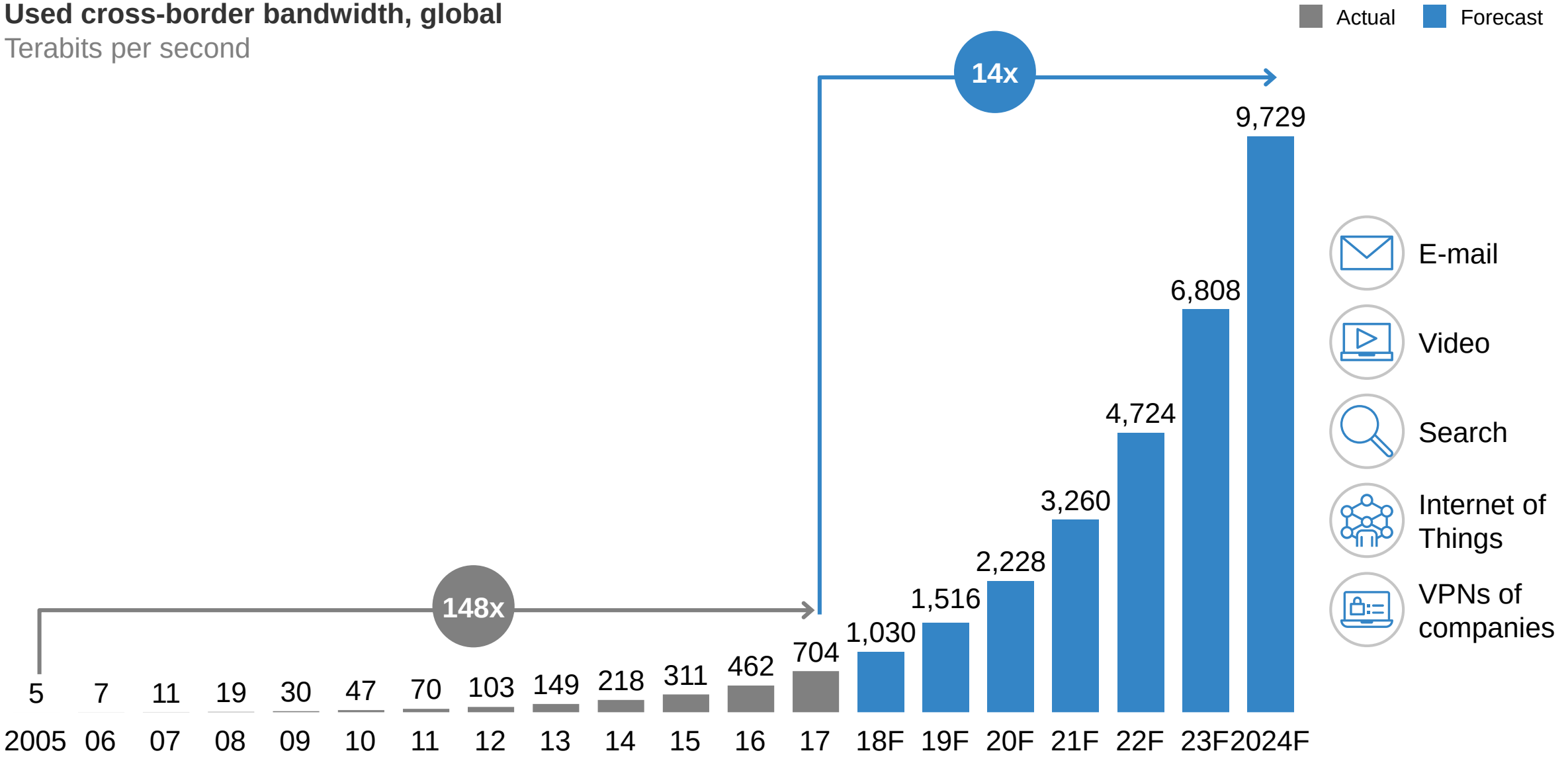
Up to **-$310B** less goods trade by 2030 through changes in composition and tradability of goods

SOURCE: McKinsey Global Institute

6 Globalization is digital: Cross-border data flows have grown 148 times larger since 2005

Used cross-border bandwidth, global

Terabits per second



6 SMEs can also compete in global markets through Facebook, Alibaba, Amazon

Number of SMEs on select platforms

80 million

10 million

2+ million

Multiple tech startups enable SME trade

shippo zendesk POWER2SME .velotrade

SOURCE: Facebook; Amazon; WSJ; McKinsey Global Institute analysis

Implications for companies and countries

Companies we surveyed are changing their global strategies

Global executive survey, September 2018, n=1,021

75%

Expect to change strategy due to trade tensions and uncertainty

49%

Change geography of their operations

24%

Invest more in local supply chains

33%

Consider trade uncertainly to be top concern

SOURCE: McKinsey Global Institute

Key messages for advanced economies

- Shifts in global value chains **favor advanced economies** with highly **skilled talent, innovation, and large consumer markets**
- **Service providers stand to gain**
- **Countries that focus on global innovation value chains** will face **greater competition from developing countries** like China
- Countries that specialize in **regional processing goods** may be more **insulated from shifts in global value chains**
- **Resource producers**, whether high-income or low-income, face a growing imperative to **diversify their economies**

Key messages for developing economies

- **Labor-intensive manufacturing** still offers some opportunities, but **the window will not remain open indefinitely**
- **Countries near large consumer markets** may benefit from the growing importance of **speed to market**
- **Service exporters stand to gain,** provided they can move up the value chain as automation performs basic tasks
- **New engines of growth** are needed, and may include intra-regional trade, digital “leapfrogging”, remote work, and others

Thank you

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