The Changing Landscape of Global Trade
and some implications for employment and inequality

Handout

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OECD
BETTER POLICIES FOR BETTER LIVES

The Changing Landscape

OECD
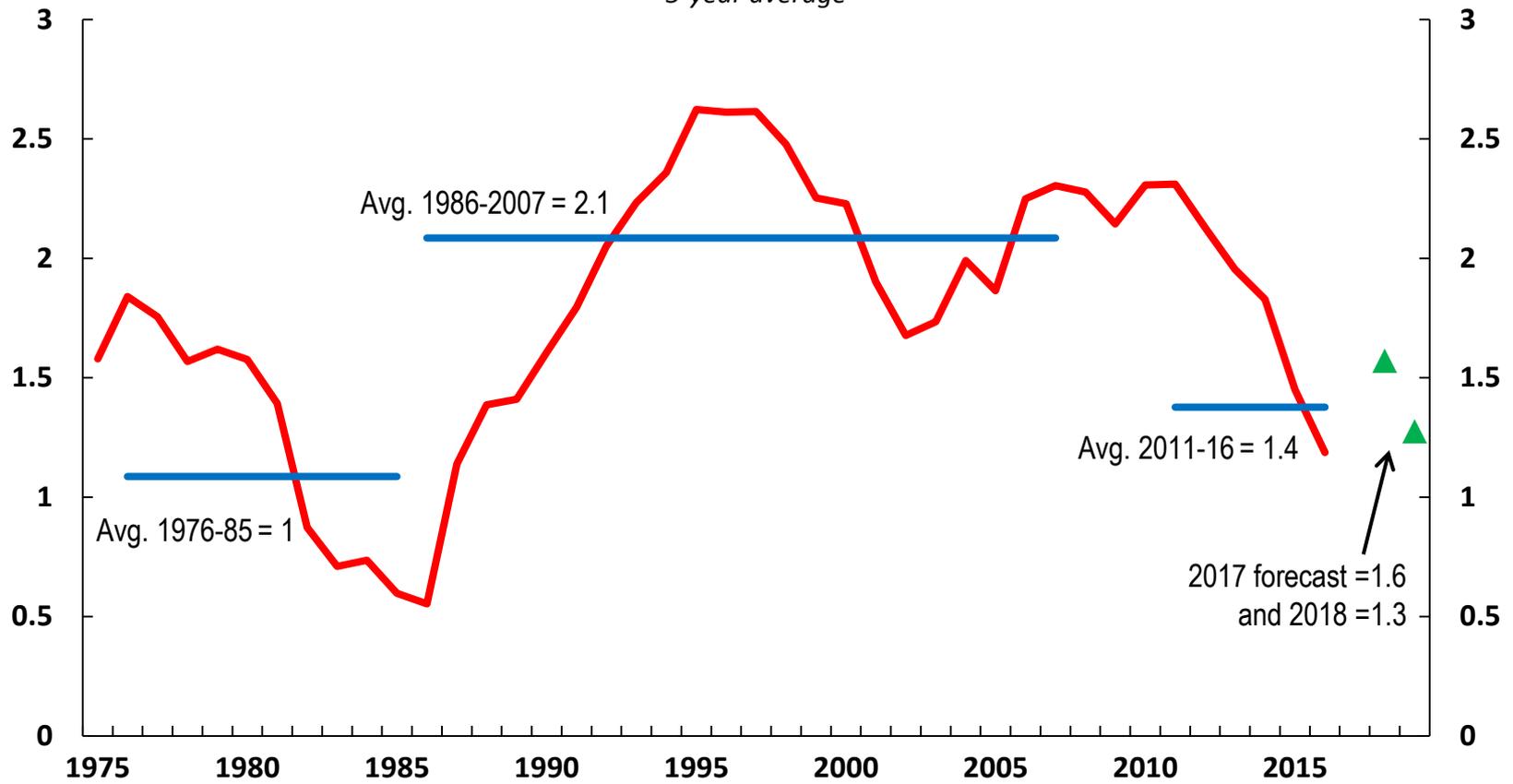BETTER POLICIES FOR BETTER LIVES

Is growth in trade intensity now lower?
Return to earlier times? But, expectations of past decades matter

Ratio of world trade growth to GDP growth
5-year average

Avg. 1986-2007 = 2.1

Avg. 1976-85 = 1

Avg. 2011-16 = 1.4

2017 forecast =1.6
and 2018 =1.3

Note: World trade is goods plus services trade volumes measured at market exchange rates in US dollars.
World GDP volumes measured at market exchange rates in US dollars.
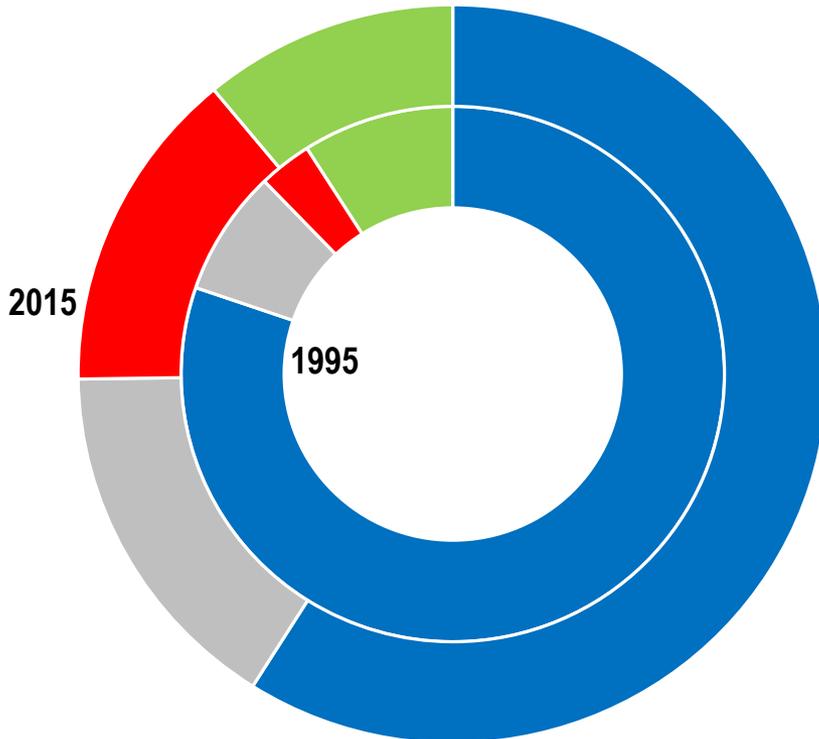Source: OECD June 2017 Economic Outlook database; and OECD calculations.

Shift in specialization, patterns, and growth
from more open Advanced and Mfg toward less open EME and Services

World goods trade
Share of world goods exports, volumes

- ■ OECD
- ■ China
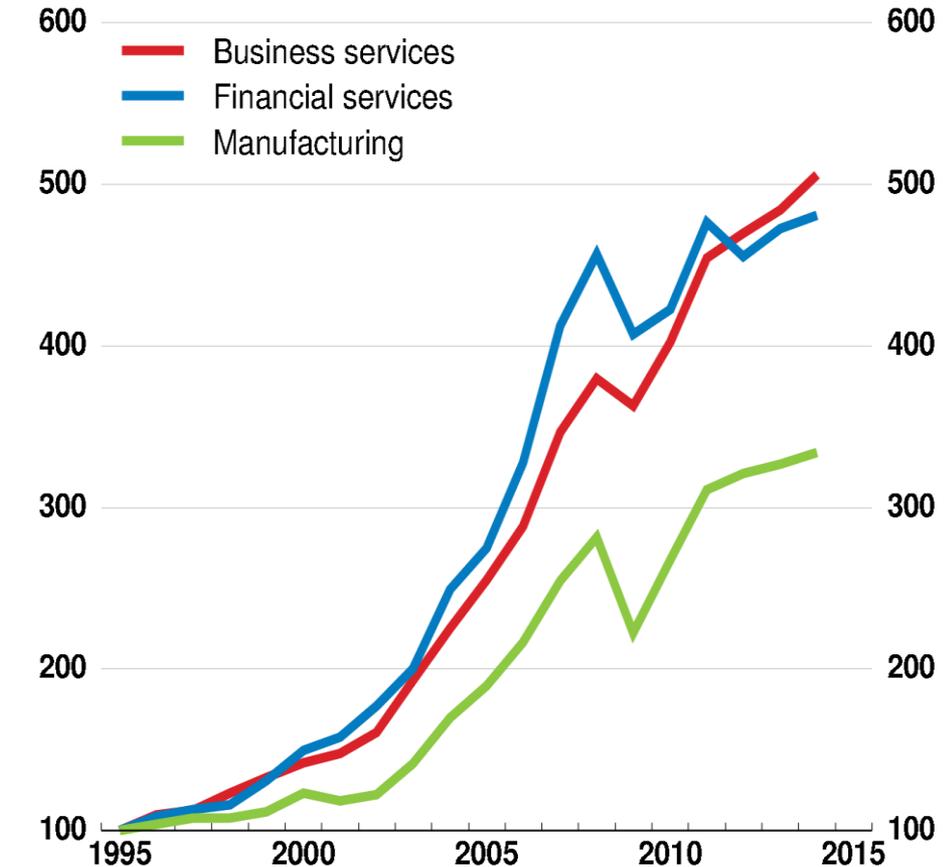- ■ Rest of the World
- ■ Dynamic Asian Economies

2015

1995

World trade by type
Exports, values

Index 1995 = 100

Index 1995 = 100

- — Business services
- — Financial services
- — Manufacturing

Note: LHS – Dynamic Asian Economies includes Malaysia, the Philippines, Singapore, Thailand, Vietnam, Chinese Taipei and Hong Kong.
RHS – Business services includes R&D, ICT, real estate and other business activities. Financial services includes financial intermediation, insurance, pension funding and other financial activities.
Source: OECD-WTO Trade in Value Added (TiVA) database; UN Comtrade database; and OECD calculations.
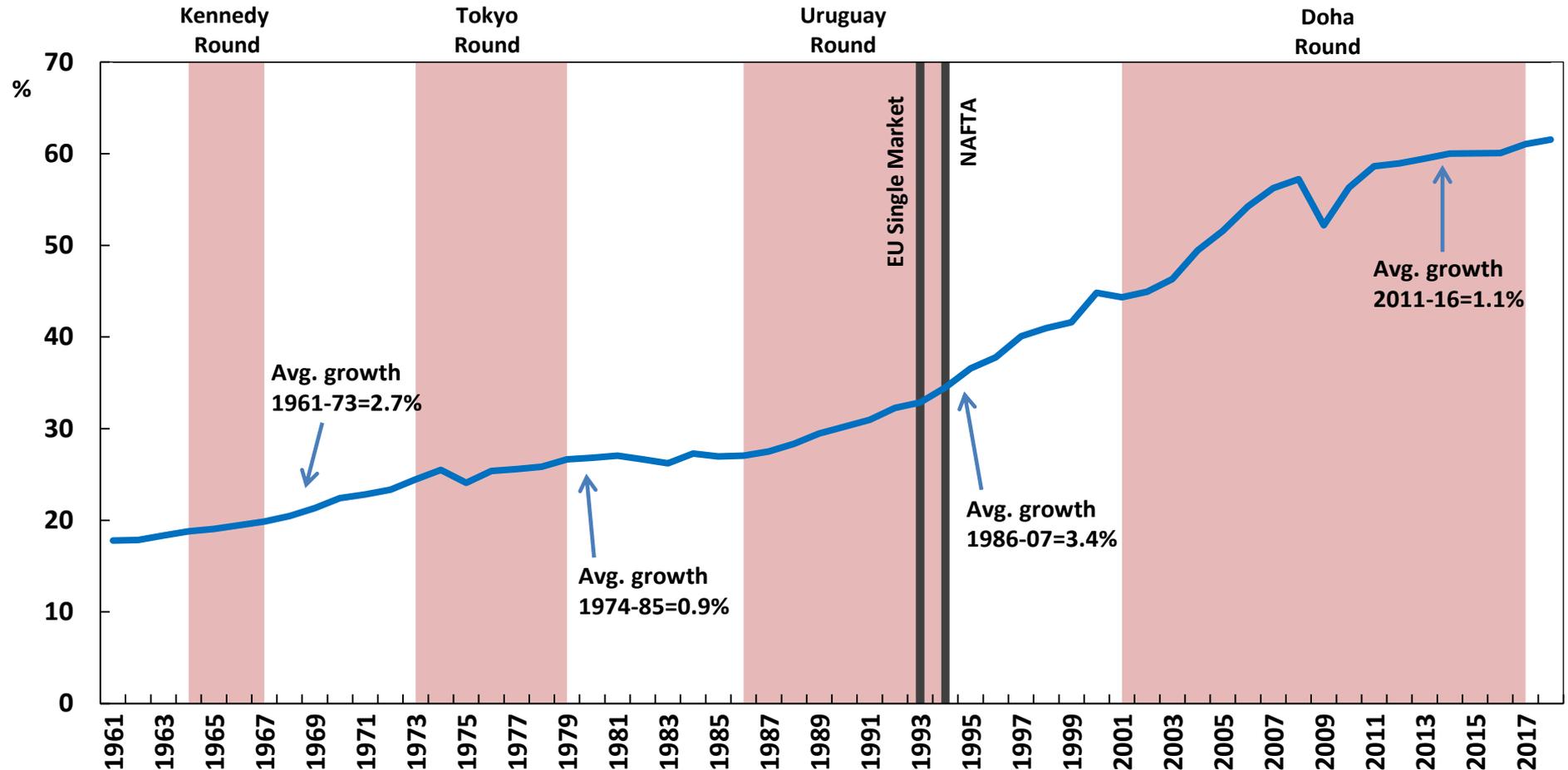
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Perhaps because of stalled global negotiations?
Proliferation of PTAs, but less liberalization esp. in services?

World trade intensity

World exports plus imports to GDP

Note: Both world trade and GDP measured at market exchange rates in constant 2010 US dollars.
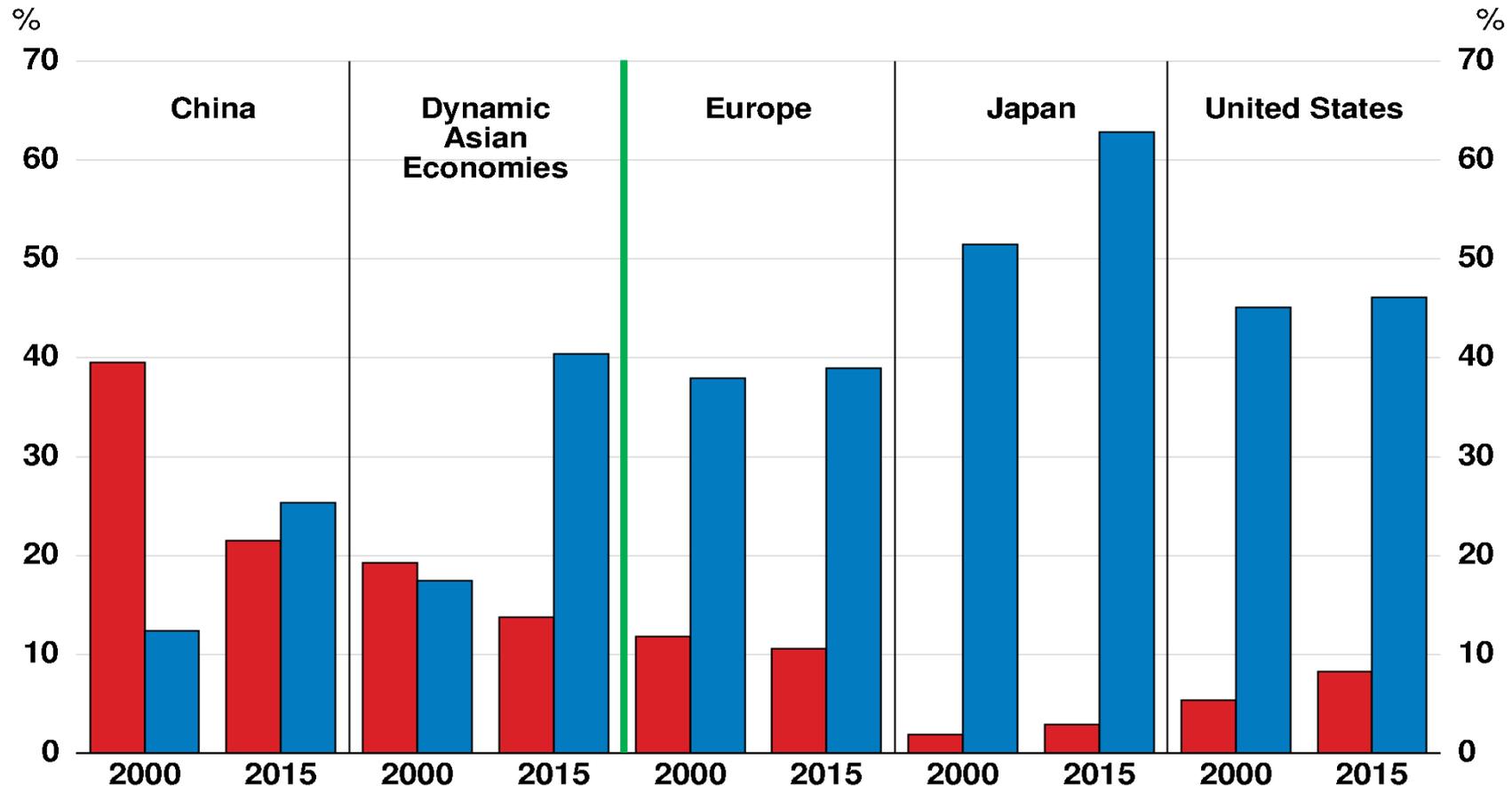Source: OECD Economic Outlook database.

Changing competition in product space
Products of advanced economies face greater competition relatively more from each other, but also increasingly from products of EMEs

Share of export goods by complexity

■ Least complex ■ Most complex

Note: In nominal terms. Least complex is the 1st quartile of products by complexity (e.g. crayons), most complex is the 4th quartile (e.g. medical equipment), excluding major commodities. Dynamic Asian Economies includes Malaysia, the Philippines, Singapore, Thailand, Vietnam, Chinese Taipei and Hong Kong. Europe is the unweighted average of the Czech Republic, France, Germany, Ireland, Italy, Poland, Portugal and the UK. Source: UN Comtrade database; and OECD calculations.
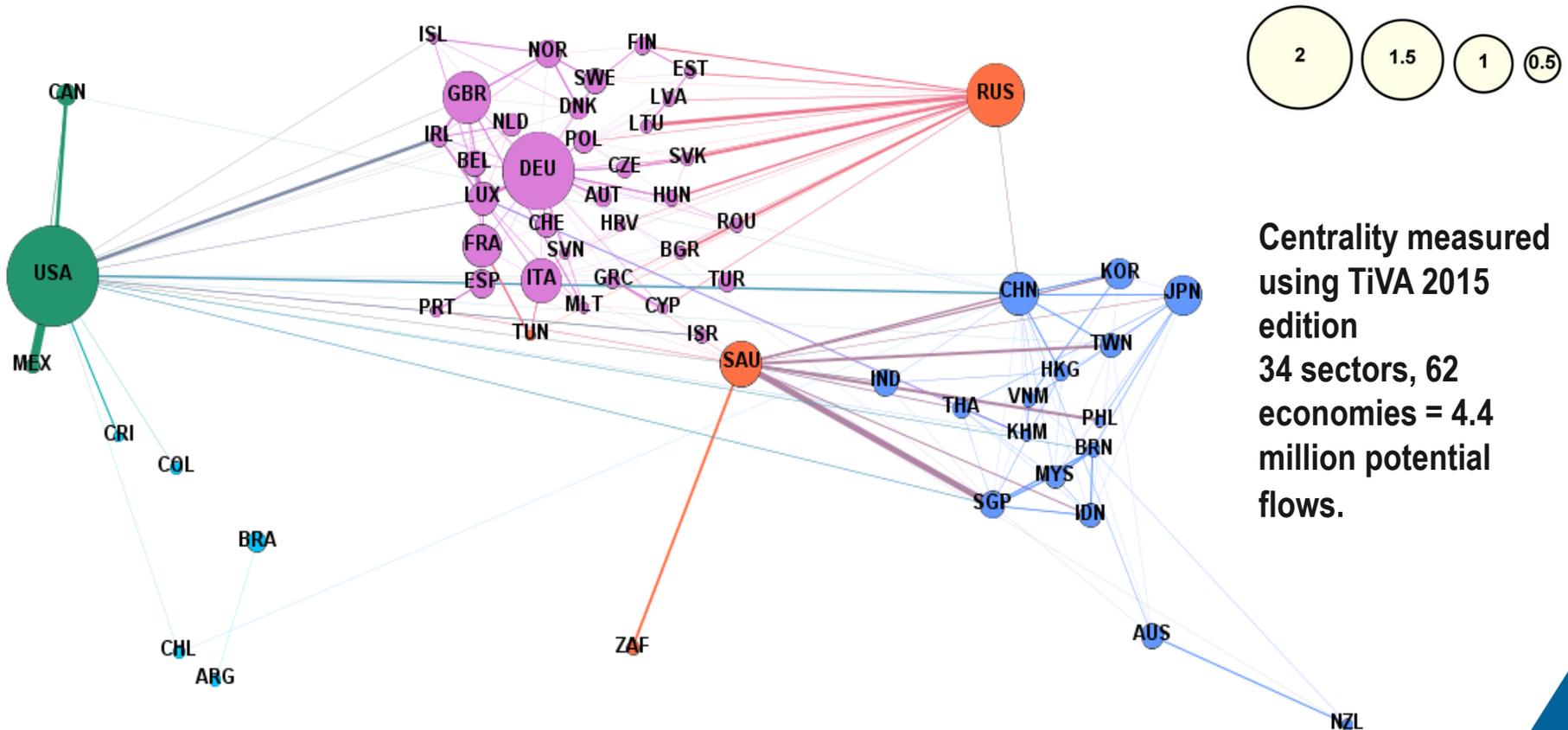
A new way to look at GVCs
Bonacich-Katz eigenvector centrality strength of direct and indirect connections

Hubs and production networks

Aggregate central and peripheral economies, 2011

Centrality measured using TiVA 2015 edition 34 sectors, 62 economies = 4.4 million potential flows.

Note: Economies are placed according to their location. Node size denotes total centrality (forward and backward) aggregated at an economy-level and includes all sectors within global production networks. Edges reflect direct input flows. For clarity only the largest input flows are reflected, those exceeding 2% of total inputs used in the importing or exporting economy.
Source: Criscuolo, C. and J. Timmis (2017), "The changing structure of GVCs: Are hubs central for productivity?" (forthcoming), OECD Directorate for Science, Technology and Innovation.

Relative change in computer and electronics manufacturing

From 1995 to 2011
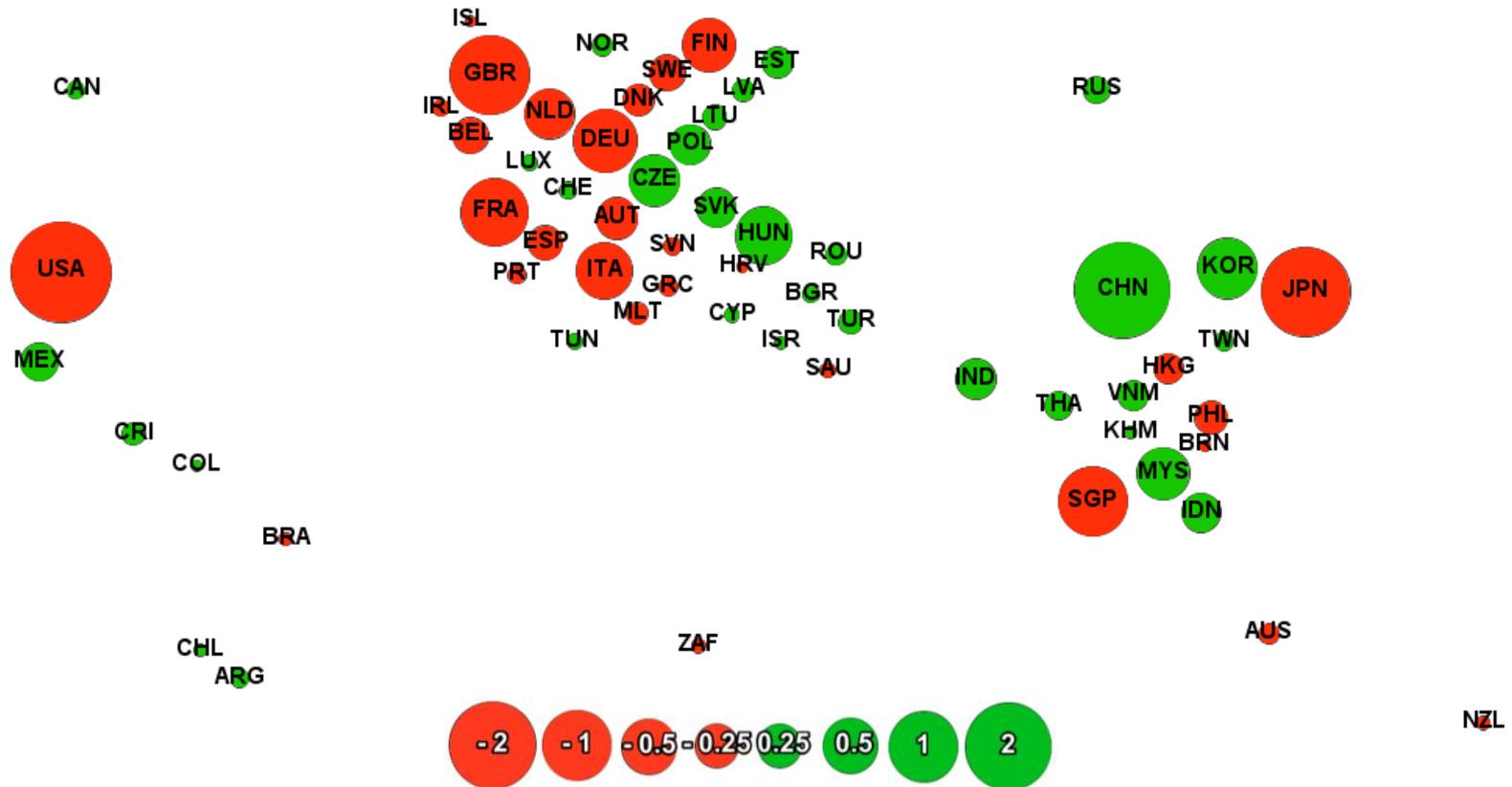
Note: Economies are placed according to their location. Size of the nodes reflects the magnitude of the change (in levels) of total foreign centrality over the period 1995-2011. As reflected in the key, these changes are graphed using a log scale for readability. Green coloured nodes reflect increasing centrality and red denotes falling centrality.

Source: Criscuolo, C. and J. Timmis (2017), "The changing structure of GVCs: Are hubs central for productivity?" (forthcoming), OECD Directorate for Science, Technology and Innovation.

Changing structure of Global Value Chains
but IT services increasingly central to all GVCs

IT services − Δ1995-2011

Note: Economies are placed according to their location. Size of the nodes reflects the magnitude of the change (in levels) of total foreign centrality over the period 1995-2011. As reflected in the key, these changes are graphed using a log scale for readability. Green coloured nodes reflect increasing centrality and red denotes falling centrality.
Source: Criscuolo, C. and J. Timmis (2017), "The changing structure of GVCs: Are hubs central for productivity?" (forthcoming), OECD Directorate for Science, Technology and Innovation.

In recent years, overall GVCs are contracting
GVCs have been a source of tech transfer, economies of scale, cluster economies, all supporting productivity growth

Real time global value chain indicator

Average annual % changes
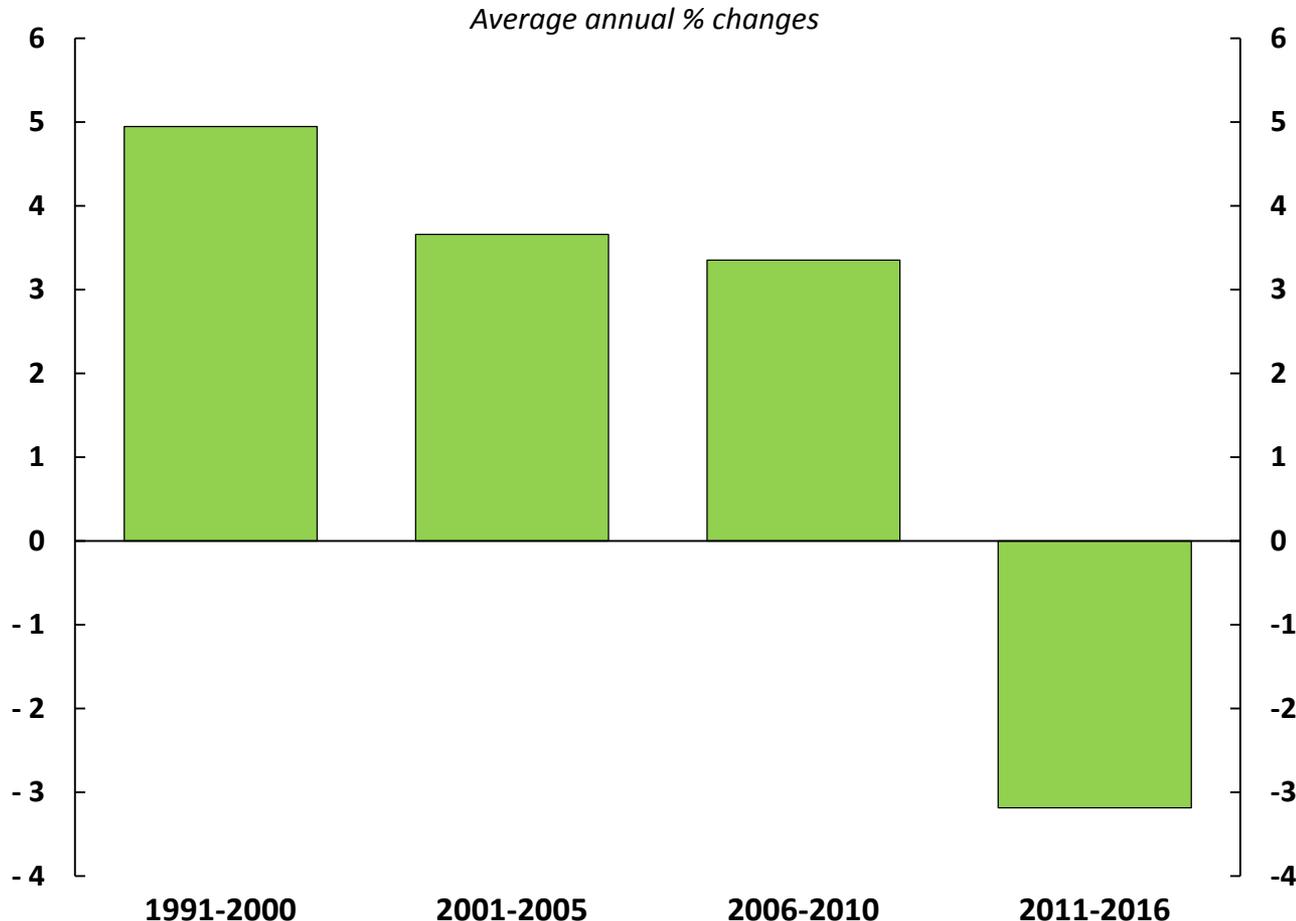
Note: Structural global value chain indicator shown which adjusts for the economic cycle and changes in commodity prices. For further detail see OECD 2016 Economic Policy Paper "Cardiac Arrest or Dizzy Spell: Why is World Trade So Weak and What Can Policy Do About It?".
Source: OECD June 2017 Economic Outlook database; OECD STAN Bilateral Trade database; and OECD calculations.
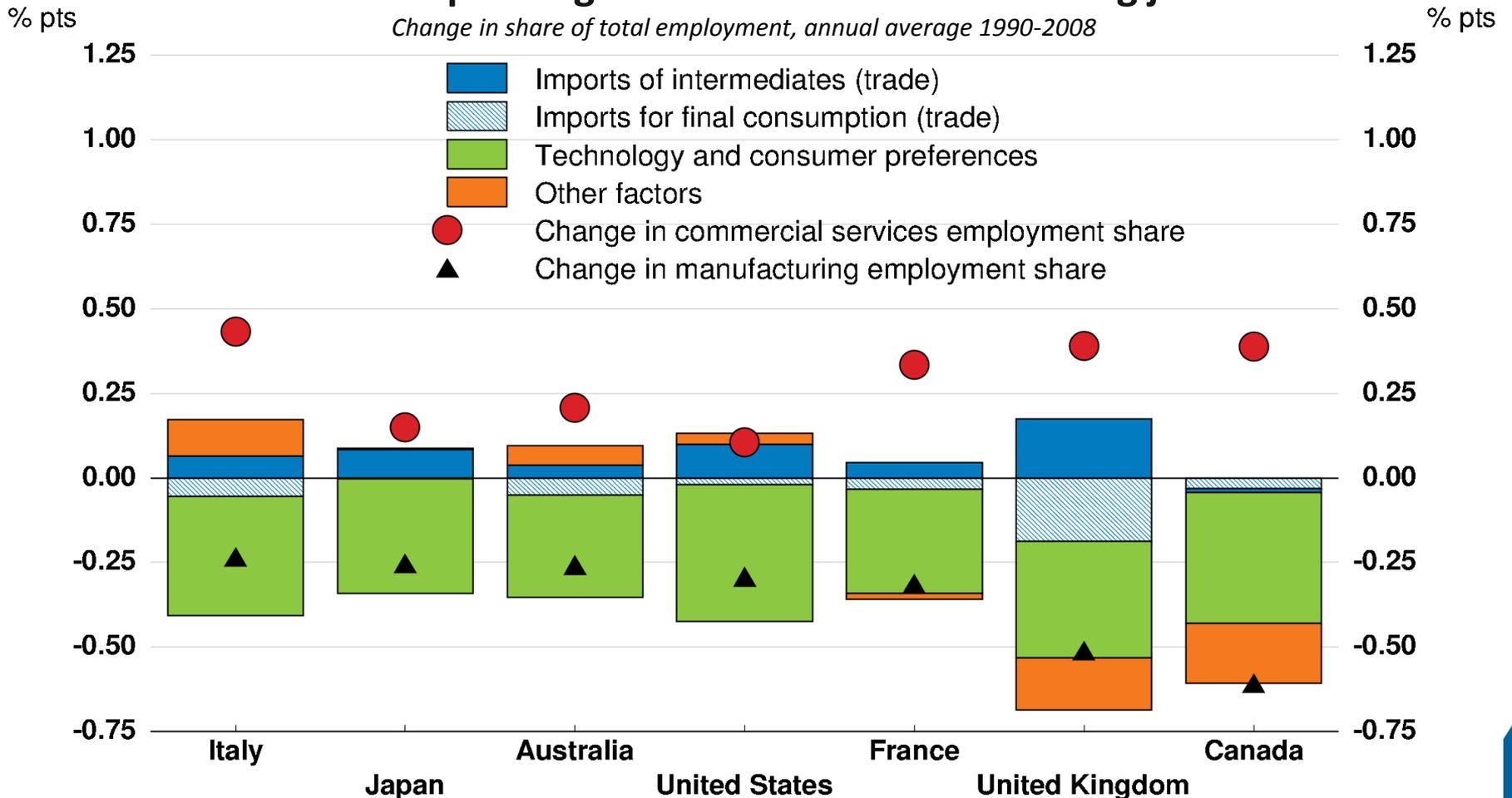
Some Implications
for manufacturing jobs and inequality

Technology & "Tastes" dominate role for Trade in manufacturing job loss

Factors explaining the decline in manufacturing jobs

Change in share of total employment, annual average 1990-2008

Legend:
- Imports of intermediates (trade)
- Imports for final consumption (trade)
- Technology and consumer preferences
- Other factors
- Change in commercial services employment share
- Change in manufacturing employment share

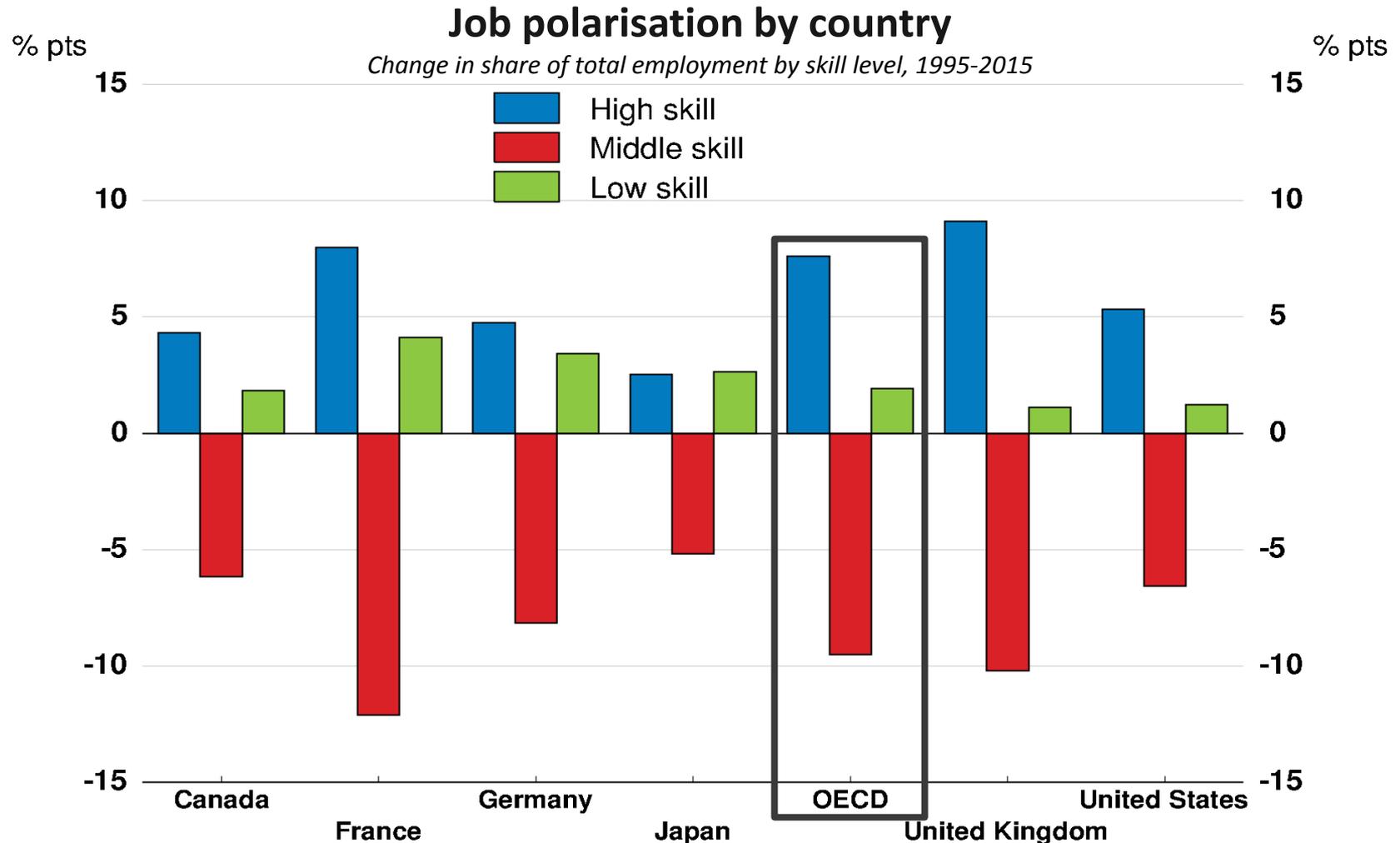Countries: Italy, Japan, Australia, United States, France, United Kingdom, Canada

Note: Decomposition based on regression estimation. Each factor is based on the change over the period. Technology and consumer preferences include ICT and machinery investment, changes in the manufacturing consumption share and time specific effects.
Source: OECD Economic Outlook database; STAN database; and OECD calculations.

Job losses have centred on people with mid-level skills

Job polarisation by country
Change in share of total employment by skill level, 1995-2015

Legend:
- High skill
- Middle skill
- Low skill

Countries: Canada, France, Germany, Japan, OECD, United Kingdom, United States

Note: OECD is the unweighted average of 24 countries. For Japan 1995-2010.
Source: OECD Employment Outlook 2017; European Union Labour Force Survey; Labour force surveys for Canada, Japan and the United States; and OECD calculations.

But, decline in manufacturing matters because activity is regionally concentrated

Geographic concentration index by sector
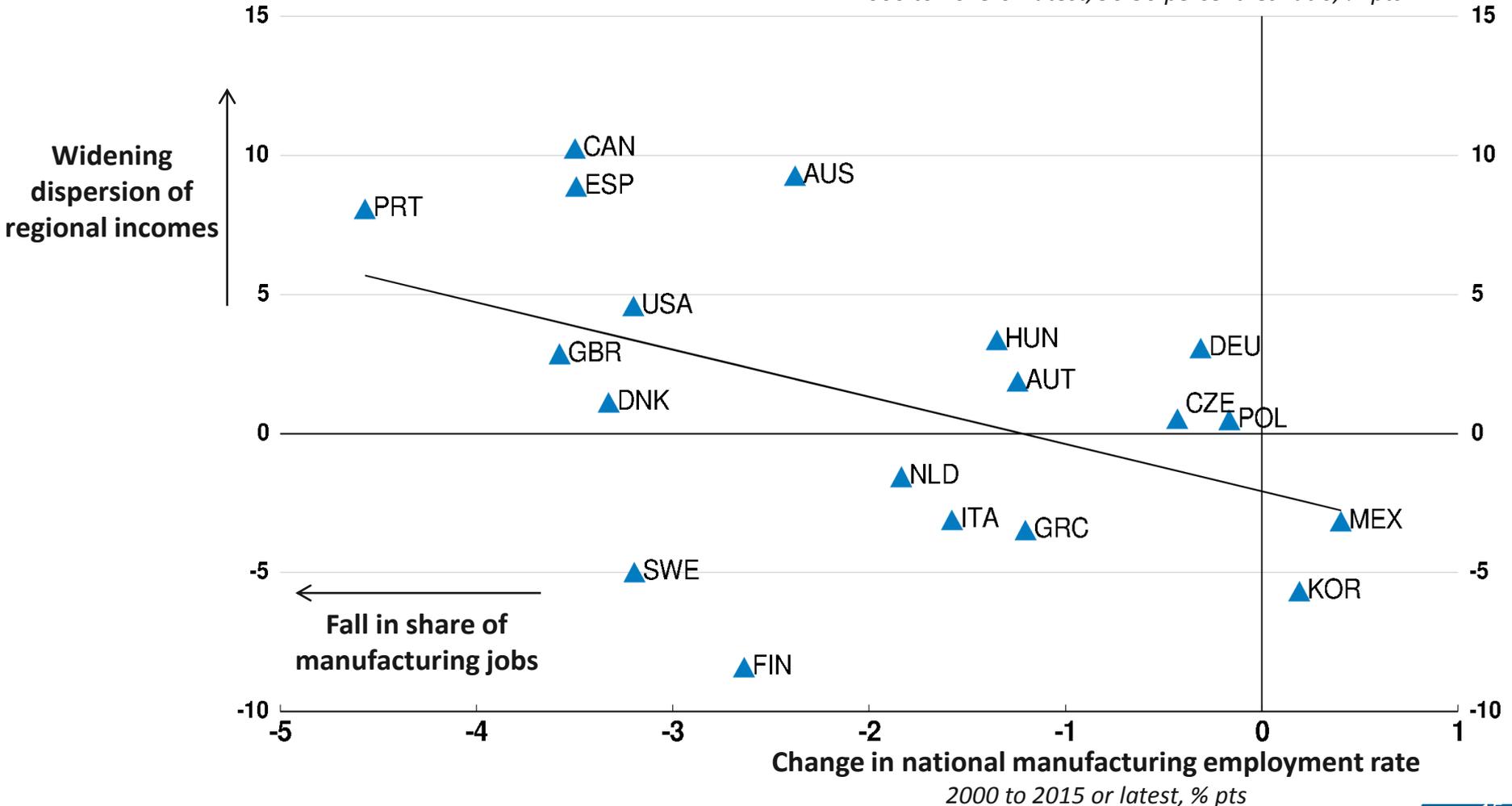*Average from 2000 to 2015 or latest*
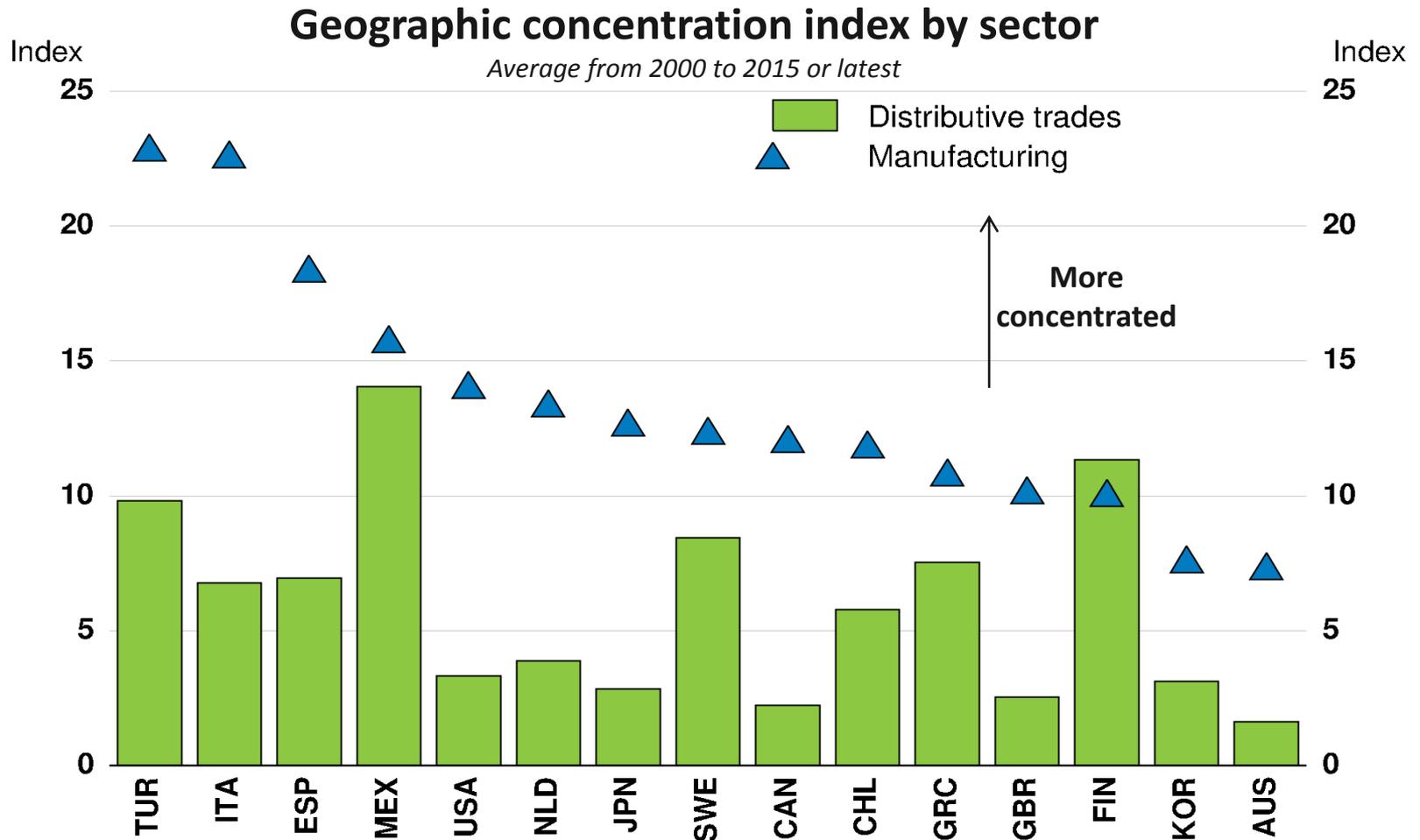
Note: "Distributive trades" includes distributive trade, repairs, transportation and storage, accommodation and food service activities. Index measures the extent to which employment is concentrated in particular regions, varying between 0 (no concentration, where all regions of a country have the same manufacturing employment rate) and 100 (maximum concentration, where all manufacturing employment is concentrated in the smallest region). The index incorporates the size of the region and is based on OECD (2003) "Geographic Concentration and Territorial Disparity in OECD Countries".
Source: OECD Regional database; and OECD calculations.

Countries with larger falls in manufacturing jobs have increased regional inequality

Change in average income inequality across regions
2000 to 2015 or latest, 90:50 percentiles ratio, % pts

Widening dispersion of regional incomes

Fall in share of manufacturing jobs

Change in national manufacturing employment rate
2000 to 2015 or latest, % pts

Source: OECD Regional database; and OECD calculations.

Policy implications

International policies

Domestic policies

Make the international system fairer and work better

Policies to encourage new firms, innovation & job creation

Targeted policies to help people seize new opportunities