TRADE POLICY

Lecture 3
"New" trade theory and policy

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Previous lectures

- Trade Theory 1: Classical and neoclassical trade models
  - Comparative advantage
  - Differences in technology, factor endowments, factor intensities
- Policy conclusions
  - ITO, GATT, WTO

Results of the Uruguay Round

- World Trade Organization
- Further tariff reductions
- Agriculture
- Textiles and Clothing
- Services
- TRIPS and TRIMS
- Dispute resolution

After Uruguay

- Biannual ministerial meetings
  - Seattle 1999: meeting stopped by antiglobalization protests
  - ***Doha 2001: development agenda***
  - Cancun 2003: failure to reach agreement
  - Hong Kong 2005: hmmmm….
  - Geneva 2009: more hmmmm…
  - Geneva Dec 2011: still not much…
  - ***Bali Dec 2013: finally! Bali package***
  - ***Nairobi Dec 2015: Nairobi package***
  - Buenos Aires Dec 2017: not much
  - ***Geneva June 2022: Geneva package***

But why are there som many other trade institutions?

- OPEC, other commodity agreements
- UNCTAD, UN regional commissions: ECE, ESCAP, ECLAC, ECA, ECWA
- Regional integration agreements: ECSC, EEC, EC, EU, EFTA, EEA, Euro-Mahgreb, Visegrad, US-Canada Auto Pact, CUSFTA, NAFTA, LAFTA, CACM, Andean Pact, CARICOM, LAIA, MERCOSUR, G3, COMECON, CBI, EAC, CEMAC, COMESA, IOC, SADC, SACU, UEMOA, WAEMU, CEAO, ECOWAS, PTA, UDEAC, CEPGL, ACM, ECO, GCC, ASEAN, AFTA, APEC, and many more
- Bilateral trade agreements (US with lots of countries, EU with lots of countries, Japan with lots of countries)

Today:"New" trade theory
(Trade Theory 2)

- Problems with neoclassical theory
  - Assumptions
  - Predictions
- "New" trade theory
  - Economies of scale
- Policy consequences from new trade theory
- Regional integration
- Other "new" trade models
- Empirical observations

Problems with neoclassical theory

- Some of the assumptions in the H-O model are not realistic
  - the world does not have perfect *competition*, identical *preferences*, constant returns to *scale*
- Empirical findings have contradicted the predictions of the H-O model
  - H-O predicts inter-industry trade (cars vs suits) between countries that look different (Sweden and India). But in reality there is lots of trade between similar countries, and large amounts of intra-industry trade (exports and imports of the same goods)

Solutions: "New" trade theory

- Relaxes central assumptions of H-O theory
  - identical preferences
  - economies of scale and perfect competition
  - externalities
- No consistent theory yet, but important building blocks
  - The Linder-hypothesis: demand matters
  - Models with economies of scale
    - Strategic trade policy
  - Other models built around MNEs and heterogeneous firms

The Linder Model

- Staffan B. Linder (1961), *An Essay on Trade and Transformation*
  - Demand – not only supply – will determine trade patterns
  - Domestic demand determines what product varieties a country manufactures
  - These varieties can mainly be sold in countries with similar preferences
  - Hard to measure demand: preferences have therefore been proxied with income levels
  - Prediction: lots of trade between countries at similar income levels

Routledge
Taylor & Francis Group

One of few
empirical analyses
of preferences
and international trade

Distance, Transaction Costs, and Preferences in European Trade

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Beckerman (1956) and Linder (1961) have suggested that
international trade is not determined by supply-side factors
alone—perceptions about foreign countries and country prefer-
ences matter. We explore the relation between exports, cultural
distance, and country preferences in Europe. The results show
that several distance and preference-related variables, based on
Hofstede's cultural dimensions, income gaps, and voting patterns
in the Eurovision Song Contest, are significantly related to bilat-
eral trade. We conclude that cultural distance and preferences
influence trade through several channels, both indirectly through
transaction costs and more directly, as countries seem to prefer
some trade partners before others.

KEYWORDS   international trade, psychic distance, country pref-
erences, Eurovision, gravity model

Economies of scale and competitive advantages
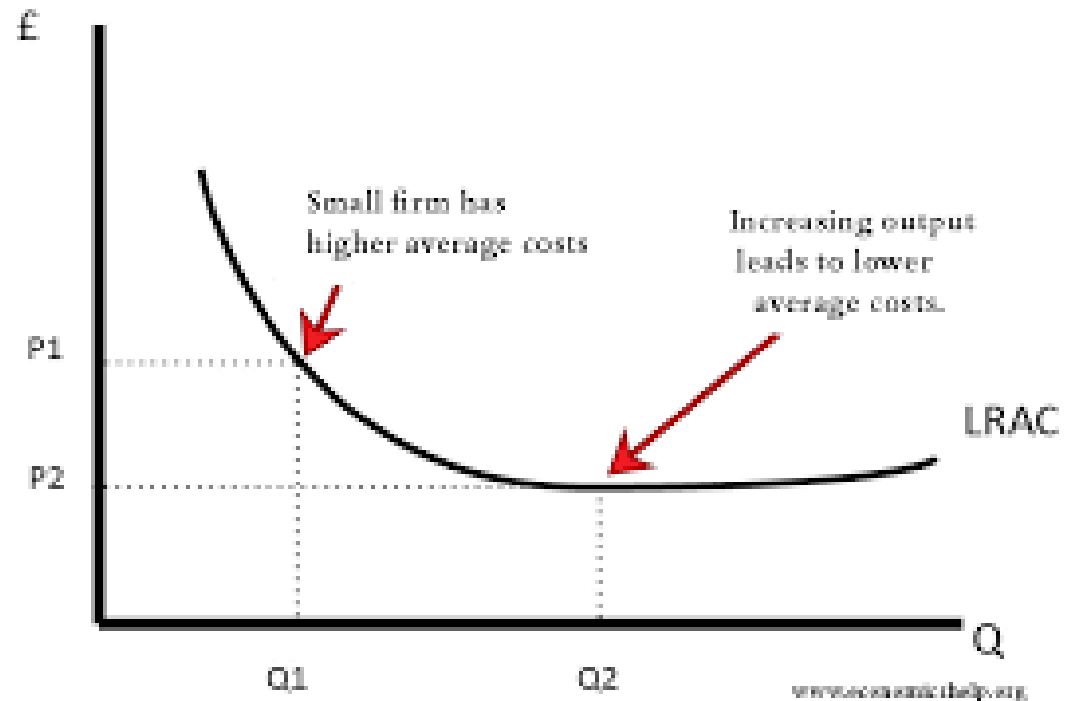
- Why are there economies of scale?
- How can you compete if the other firm is bigger?

Economies of scale and competitive strategies 1

- It is not easy to compete head-on with bigger companies from bigger countries
- Alternative 1. Product differentiation
  - Create a product that is a little bit different, and that can be priced a little bit higher than the incumbent
  - Result: specialization, intra-industry trade
  - Consequences for policy?

Economies of scale and competitive strategies 2

- Alternative 2. Make sure that the firm grows large enough as soon as possible
  - Government intervention: strategic trade policy
  - Export subsidization or infant industry protection
  - Boeing vs Airbus
- Also interesting when all industries are not of equal value – what if one sector is important for the future?
  - Some industries may have *strategic value* because of better growth potential or positive externalities
  - The first location of an emerging industry may determine future production patterns: path dependency and cluster development

Consequences for economic policy

- Temptation to be strategic
  - Free trade and WTO may be good for *potato chips*... (and other products where we have "normal" competition)
  - ...but other solutions look tempting for *micro chips* (and other products that have have "special" value)

- But strategic trade policy is difficult
  - Hard to identify industries with strategic value: How do you pick the winners?
  - Not WTO consistent: others will complain or retaliate

Economies of scale and competitive strategies 3

- The difficulties in implementing strategic trade policy have led to:

- Alternative 3. Become a big country
  - Trade agreements and regional integration can create a big home market where the best local firms are likely to grow very big
  - EC White Paper on the Common Market: regional integration will allow European firms to grow as large as their competitors from the US and Japan

Regional integration

- "New" regional integration is different from "old" integration
    - *Old* integration was based on neclassical trade theory. Small gains from simple agreements.
    - *New* integration is based on modern trade theory. Economies of scale create big effects and may result in faster economic growth, but the agreements become more complex

Regional integration and competition

- A larger home market means tougher competition and structural change
- The number of firms will diminish, but those that survive – the regional champions – will be larger
- Politically sensitive process: who will get the regional champions, and who will lose?
- Need to create *level playing field*

- More on regional integration next time

Other "New" Trade Theories

- Vernon's Product Life Cycle model
- Porter's Diamond model
- Akamatsu's Flying Geese
- ***Melitz' theory of heterogeneous firms in international trade***

Vernon's Product Life Cycle model

- Dynamic theory to account for changes in the patterns of comparative advantage and trade over time
- Three categories of economies
  - Leading innovators (typically the USA)
  - Other developed economies
  - Developing economies
- Three lifecycle stages
  - New products
  - Maturing products
  - Standardized products

Stages in Vernon's Product Life Cycle model

1. A new technology is first developed by the leading innovator and products are sold at high prices / high to other developed economies

2. When technology matures, production moves to other developed economies

3. When technologies and products are standardized, prices will fall and production will be moved to developing economies to minimize cost

- But patterns of trade are more complex nowadays, with lots of FDI and MNEs and their global value chains scattered across the world
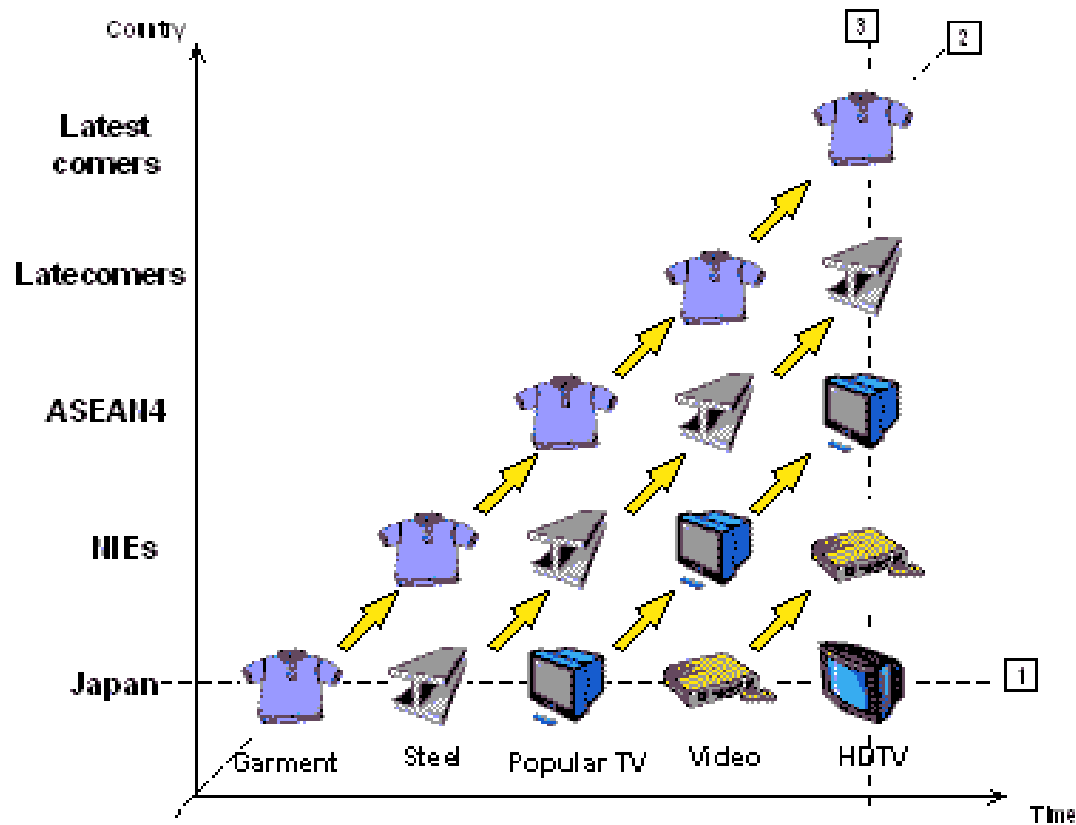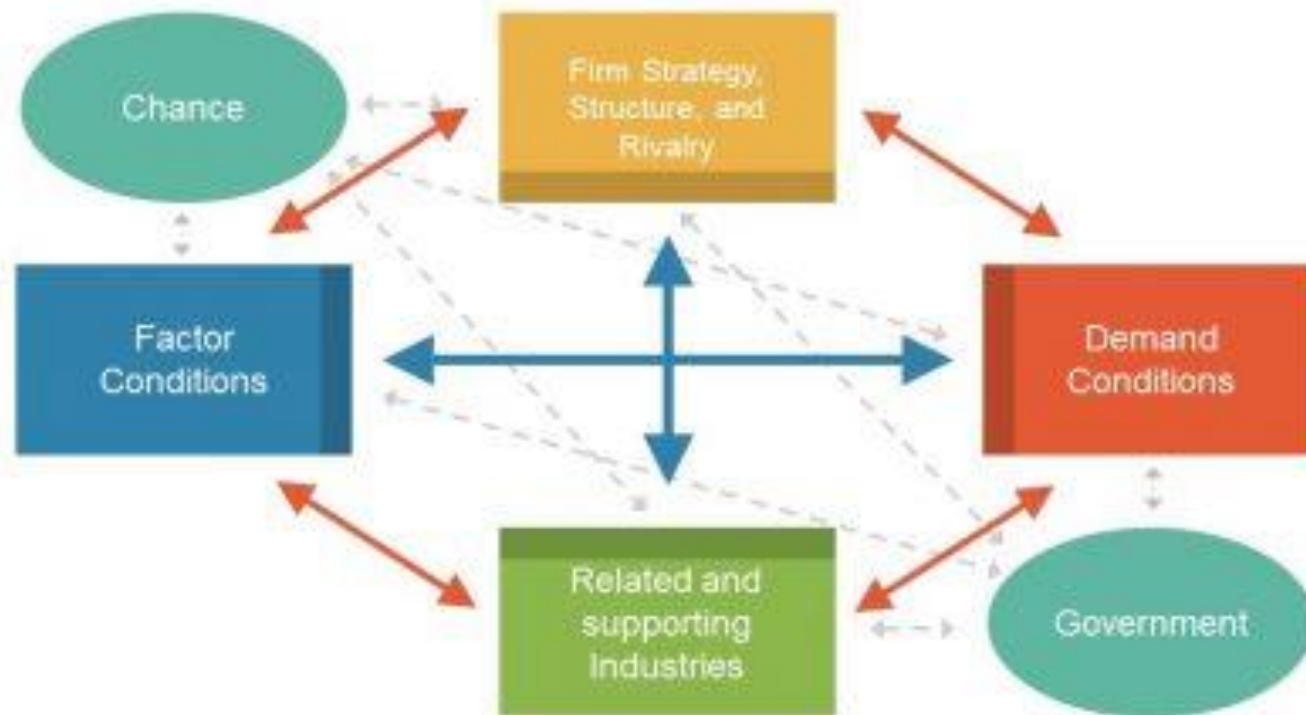
Vernon's Product Life Cycle model
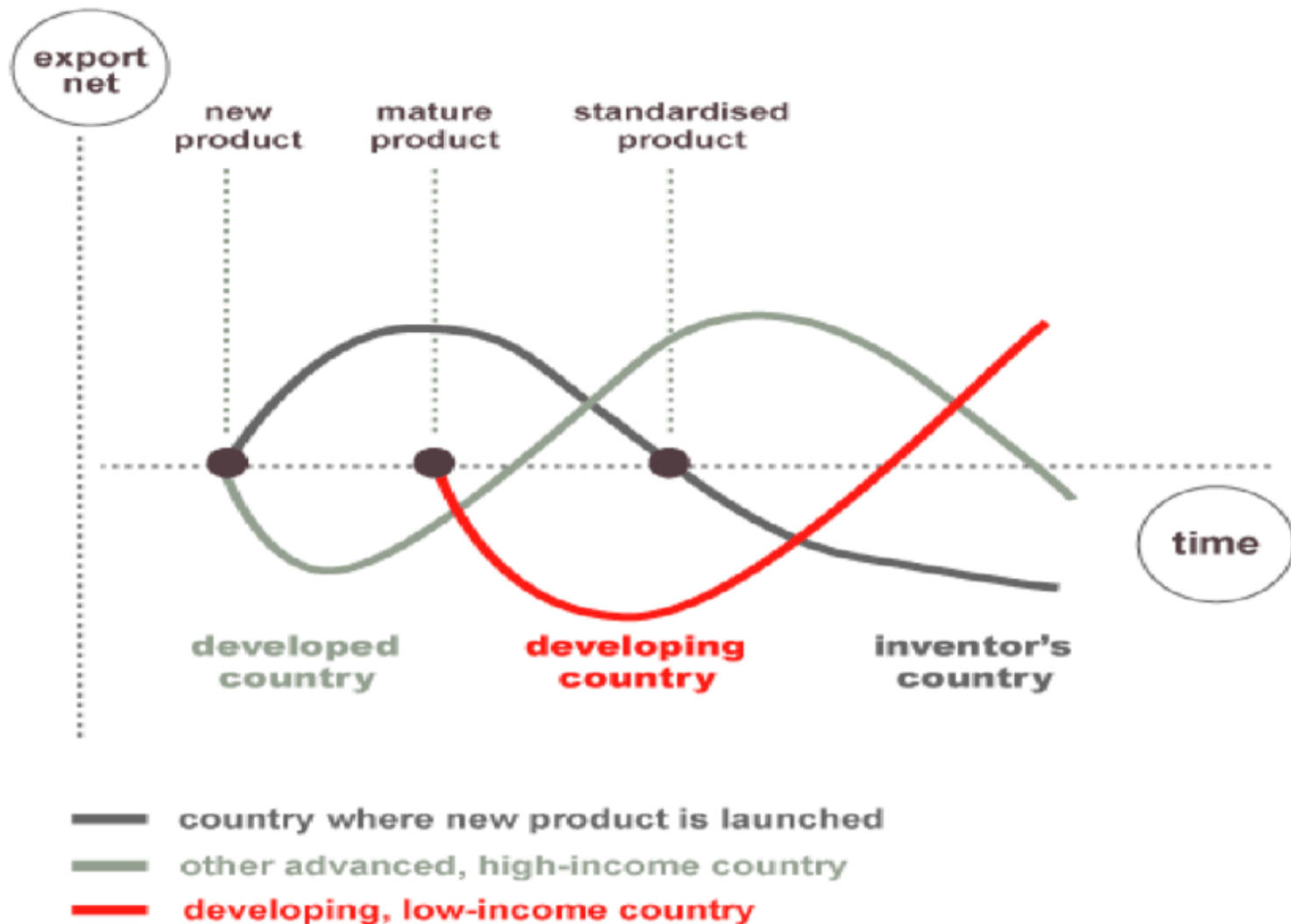
Akamatsu's Flying Geese model
(also a product life cycle model?)

Structural Transformation in East Asia

Porter's Diamond Model

Brings in firms, their strategies, demand conditions, and institutions as export determinants

Melitz' theory of heterogeneous firms
(which will reappear in lecture 5)

- Most economies have a variety of firms with different productivity in almost all sectors.
- Trade is related to firm level productivty and productivity sorting
  - Only the most productive firms can afford to pay the high fixed costs involved in foreign trade
  - Less productive firms focus on domestic customers
  - The least productive firms disappear when trade is allowed, because they can't compete with imports

  - ***Most developed economies have exports in a broad range of manufacturing industries***
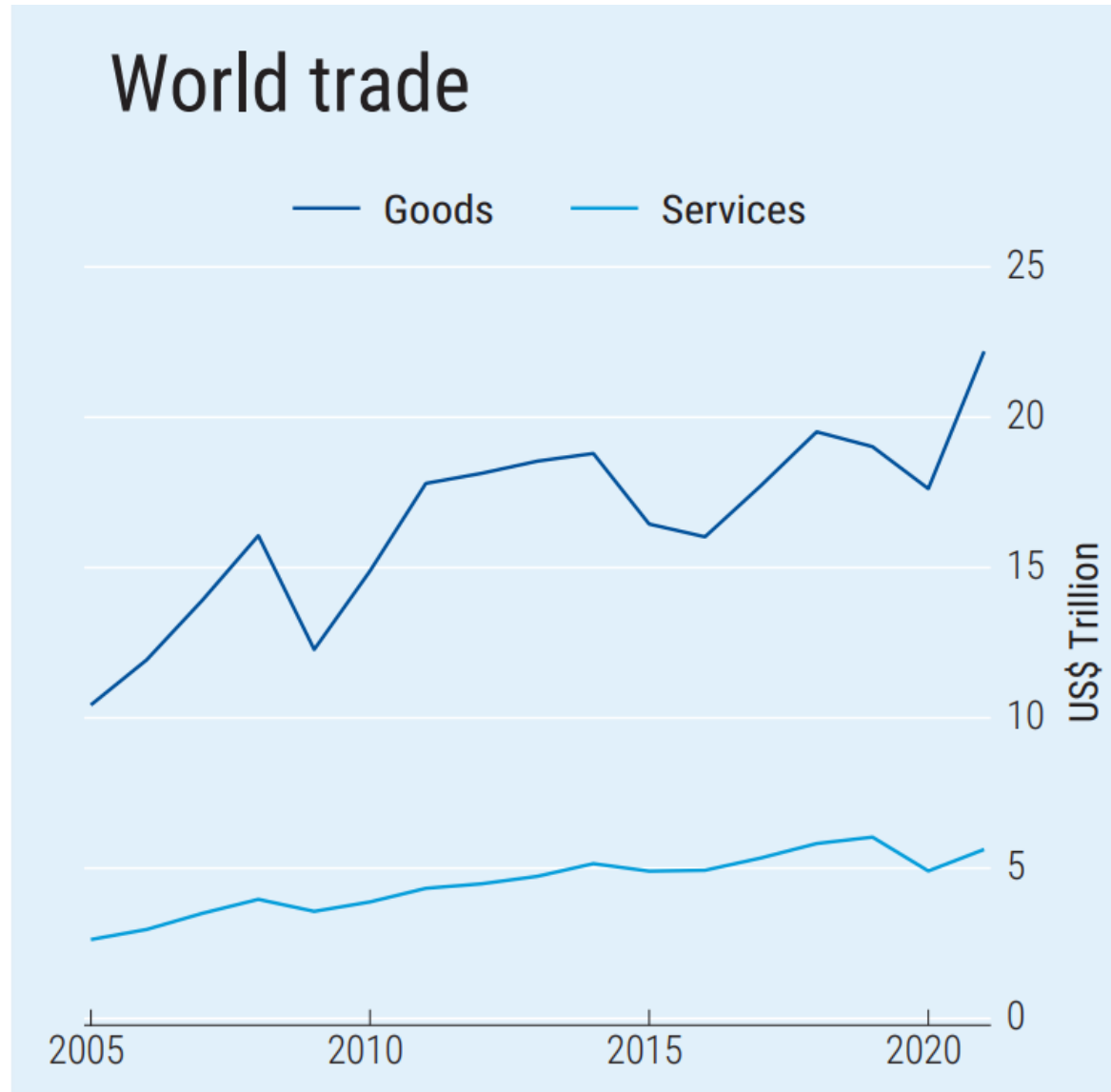
Empirical observations

- Development of world trade

- Trade and country size

- Main goods and services in world trade

See Key statistics and trends in international trade 2022 (unctad.org)

and World Trade Statistical Review 2021 (wto.org)
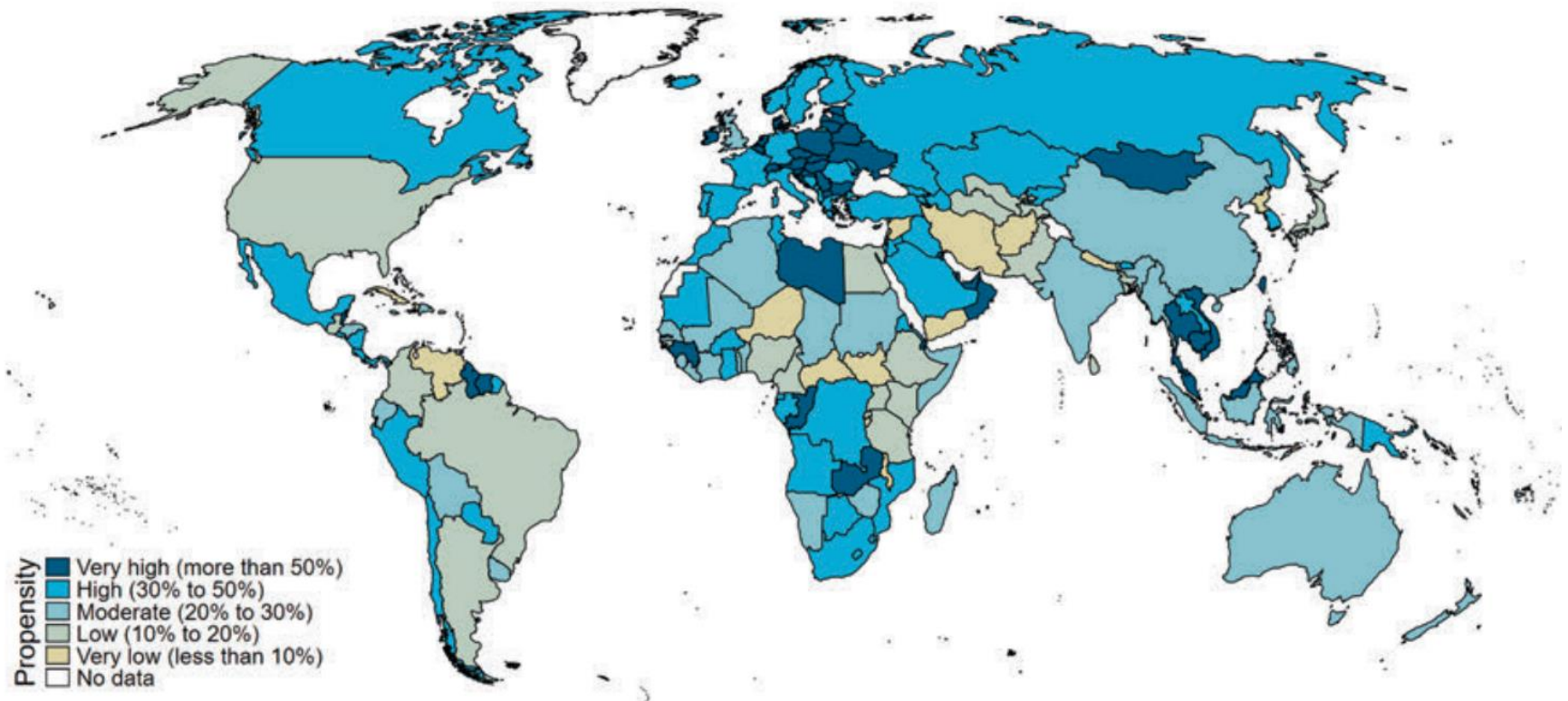
World trade in goods and services

Leading exporters and importers in merchandise trade 2020

Rank	Exporters	Value	Share	Annual percentage change	Rank	Importers	Value	Share	Annual percentage change
1	China	2591	14.7	4	1	United States of America	2408	13.5	-6
2	United States of America	1432	8.1	-13	2	China	2056	11.5	-1
3	Germany	1380	7.8	-7	3	Germany	1171	6.6	-5
4	Netherlands	674	3.8	-5	4	United Kingdom	635	3.6	-9
5	Japan	641	3.6	-9	5	Japan	635	3.6	-12
6	Hong Kong, China	549	3.1	3	6	Netherlands	597	3.4	-6
	Domestic exports	35	0.2	131					
	Re-exports	513	2.9	-1					
7	Korea, Republic of	512	2.9	-5	7	France	582	3.3	-11
8	Italy	496	2.8	-8	8	Hong Kong, China	570	3.2	-1
						Retained imports (1)	133	0.7	-2
9	France	488	2.8	-14	9	Korea, Republic of	468	2.6	-7
10	Belgium	419	2.4	-6	10	Italy	423	2.4	-11
11	Mexico	418	2.4	-9	11	Canada	414	2.3	-11
12	United Kingdom	403	2.3	-14	12	Belgium	395	2.2	-8
13	Canada	391	2.2	-13	13	Mexico	393	2.2	-16
14	Singapore	363	2.1	-7	14	India	372	2.1	-23
	Domestic exports	158	0.9	-14					
	Re-exports	204	1.2	-1					
15	Chinese Taipei	347	2.0	5	15	Singapore	330	1.9	-8
						Retained imports (1)	125	0.7	-18

Country size and exports/GDP

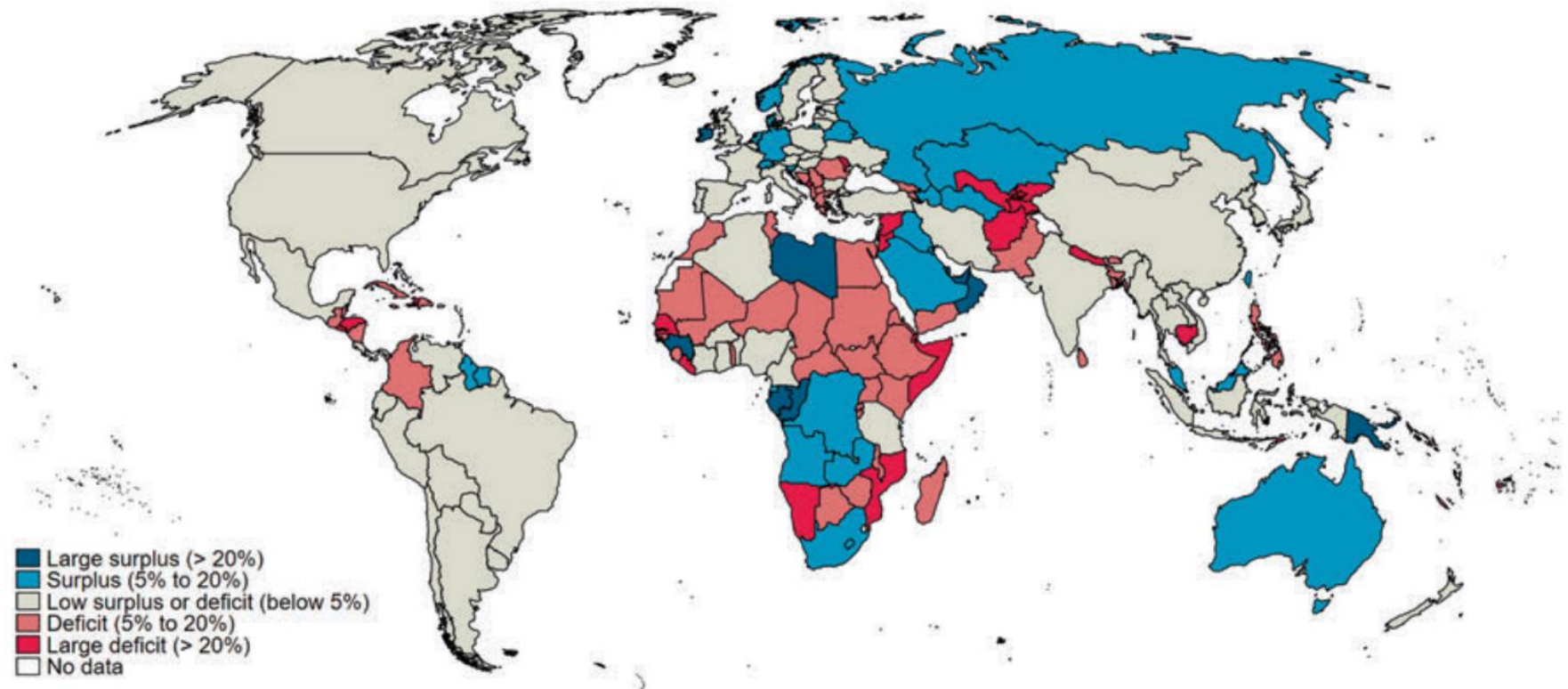b) Exports of goods and services over gross domestic product, 2021

Propensity
- Very high (more than 50%)
- High (30% to 50%)
- Moderate (20% to 30%)
- Low (10% to 20%)
- Very low (less than 10%)
- No data

Country size and imports/GDP

a) Imports of goods and services over gross domestic product, 2021

Propensity
- Very high (more than 50%)
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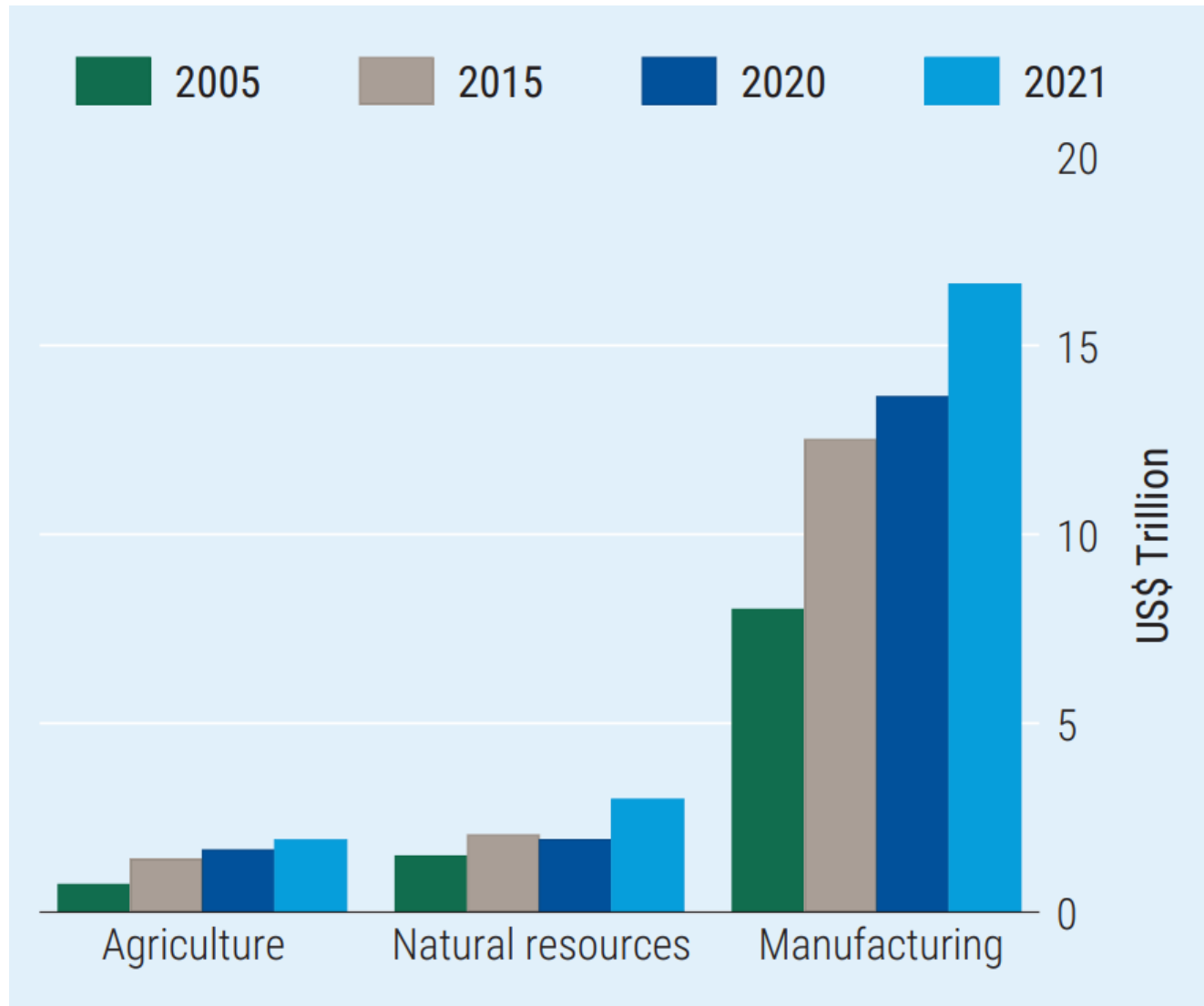- Moderate (20% to 30%)
- Low (10% to 20%)
- Very low (less than 10%)
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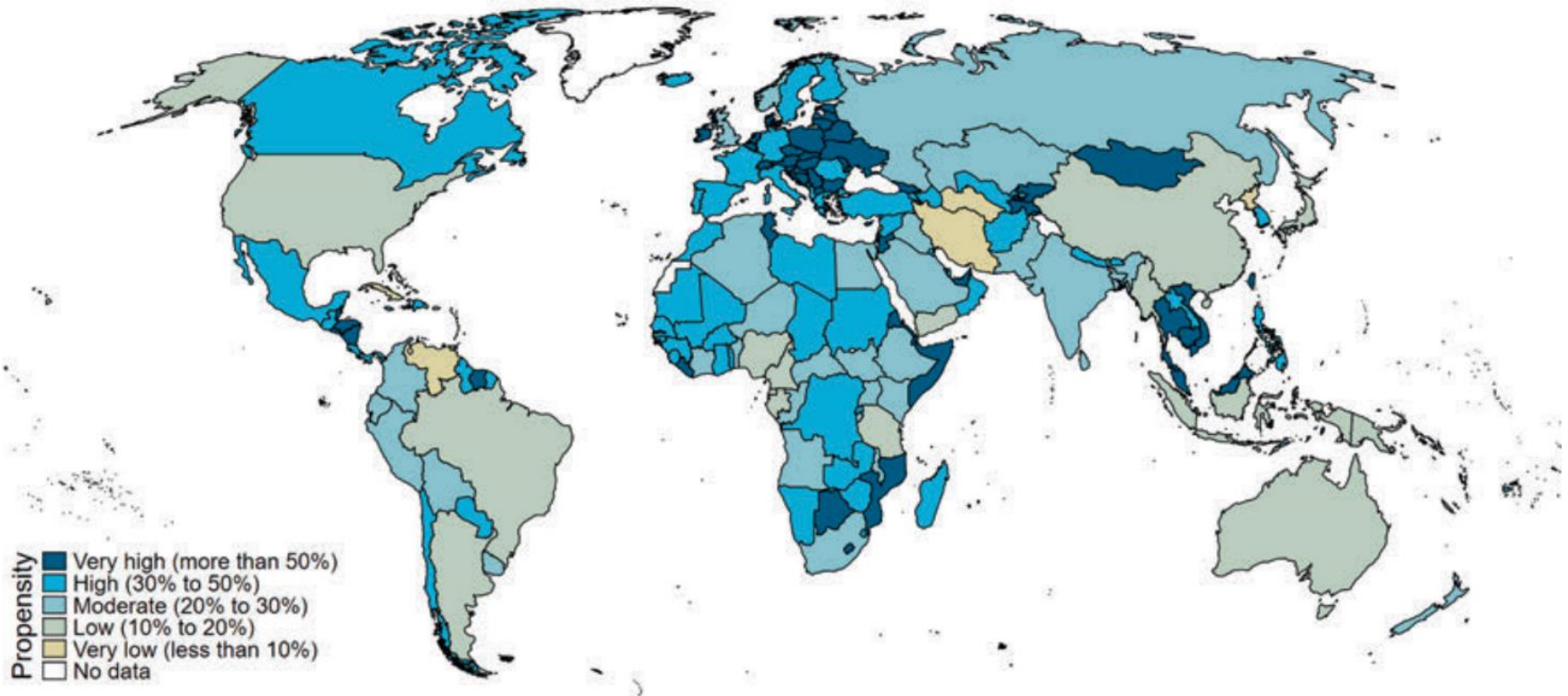
Trade balances in world trade

b) Trade balances of goods and services as a percentage of gross domestic product, 2021

- Large surplus (> 20%)
- Surplus (5% to 20%)
- Low surplus or deficit (below 5%)
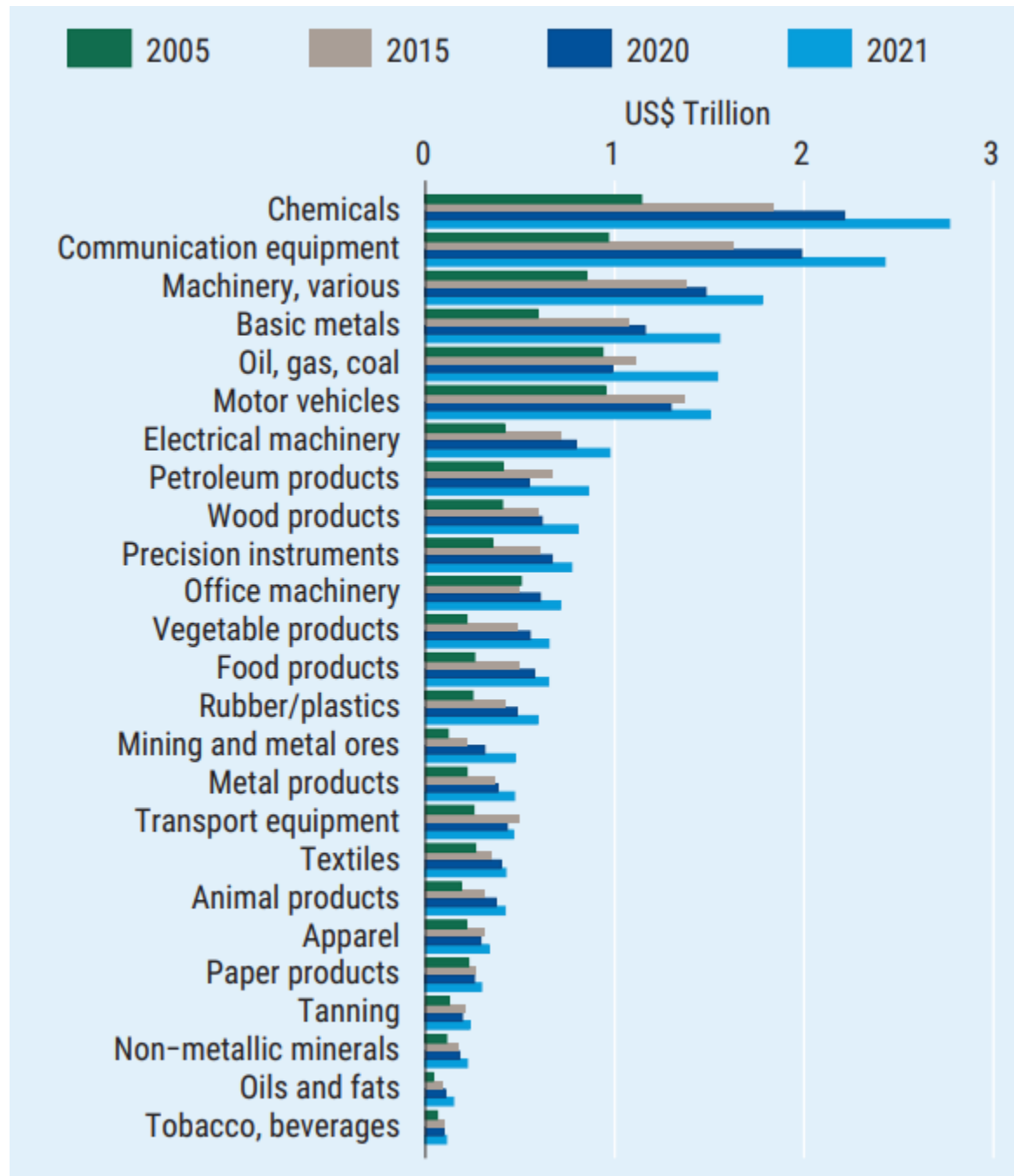- Deficit (5% to 20%)
- Large deficit (> 20%)
- No data

Broad categories of goods in world trade 2005-2021

Product groups in world trade 2005-2021

Service sectors in world trade 2005-2021

Legend: 2006, 2015, 2020, 2021

US$ trillion

Axis values: 0, .5, 1, 1.5

Categories (top to bottom):
- Transport
- R&D, professional and consulting
- Telecomm and IT
- Technical and trade-related
- Financial
- Travel
- IPR
- Goods-related
- Insurance
- Cultural and recreational
- Construction
- Government
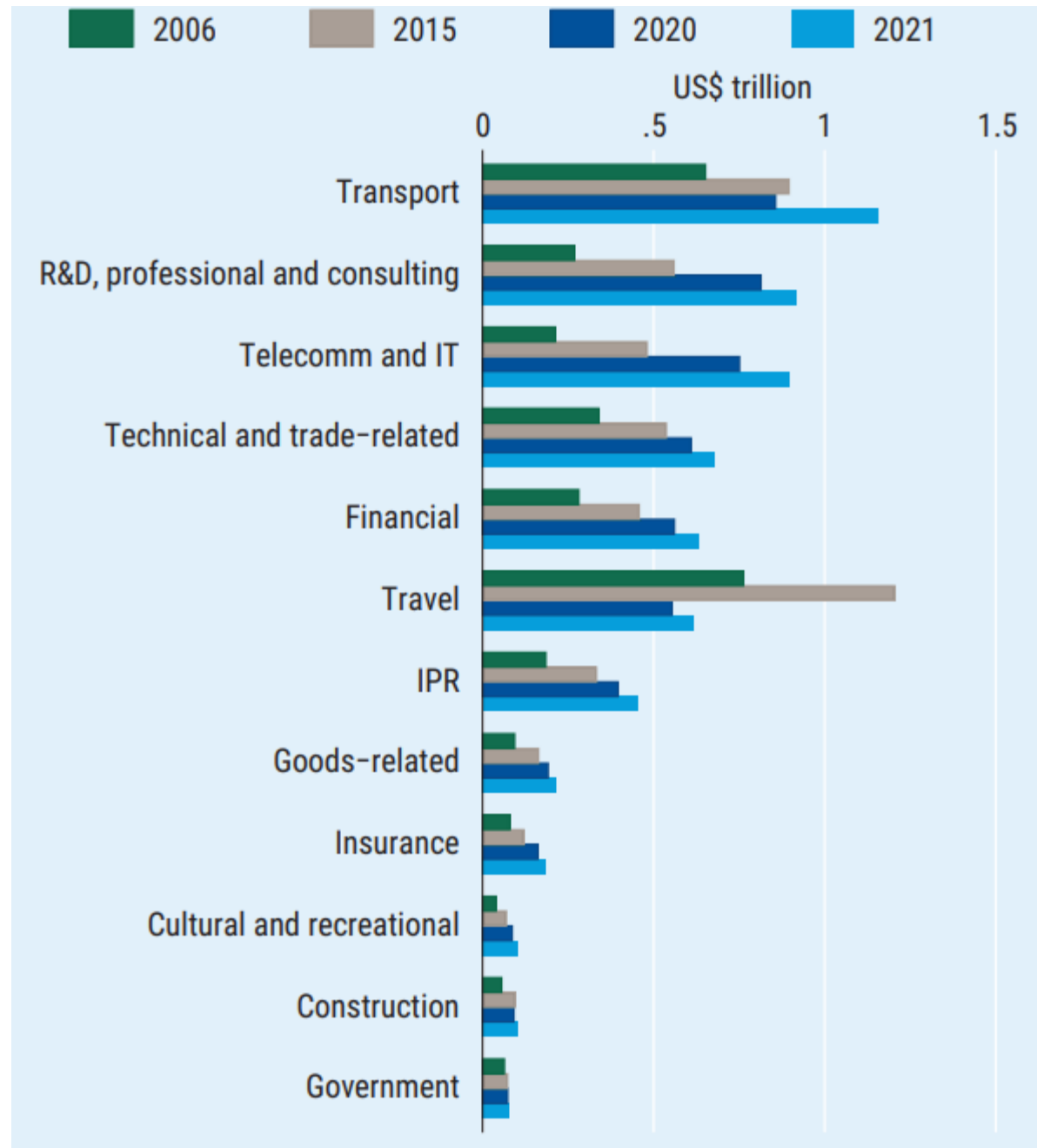
So which model gives the best description of world trade?

- No economic theory can claim to provide a perfect description of the real world
  - The world is complex and many things happen at the same time
  - Theories are meant to reduce complexity and direct attention to specific causal processes: they are simplifications of reality
  - The choice of theory depends on data availability and what the objective (and object) of the research exercise is
    - How does market structure look?
    - What are the key factors of production? Technologies? Raw materials?

  - The *Gravity Model of Trade* provides a "good enough" explanations of trade determinants for many analyses involving developed countries

The gravity model of international trade

- Bilateral trade flows tend to be positively related to economic size and negatively related to trade costs (distance between economies)

Simplest estimation model:

$$\log X_{ij} = c + b1 \log GDP_i + b2 \log GDP_j + b3 \log(distance_{ij}) + e_{ij}$$

Ben Shepherd (2016), The Gravity Model of International Trade: A User Guide (An updated version), United Nations (ESCAP) and ARTNet: Bangkok