

## Trade and Aid Policy

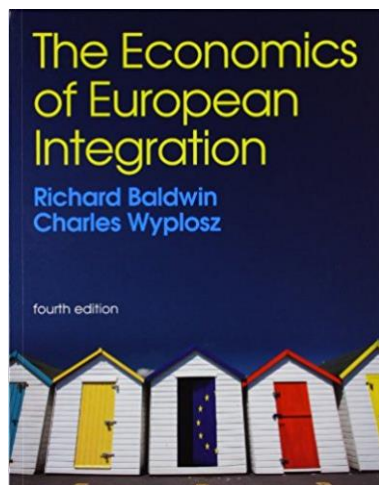
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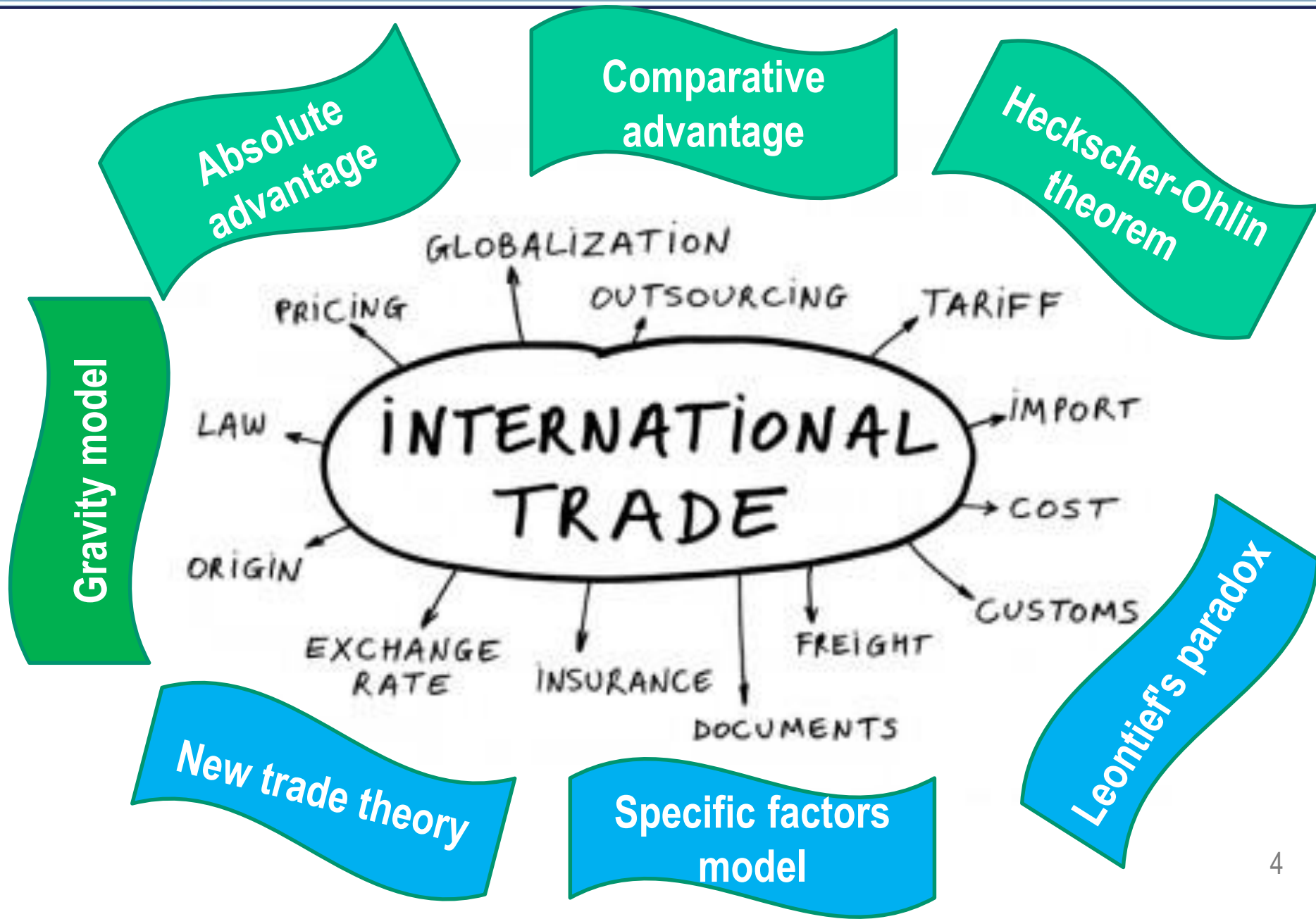
# OUTLINE

- I. Introduction, motivation, theories
  - II. Recent global economic developments in trade
  - III. Twin deficits
  - IV. Trade integration and occurrence of asymmetric shocks
  - V. Organisation of common trade policy and trade agreements
  - VI. Policy simulations (example)
- 
- Readings: Baldwin, Wyplosz (Chapter 12).



# I. Introduction / Motivation / Theories

# Economic theories behind international trade



## Absolute advantage

AA: refers to a country's ability to produce a certain good more efficiently than another country.



## Comparative advantage

CA: refers to a country's ability to produce a particular good with a lower opportunity cost than another country.



## Heckscher-Ohlin theorem

H-O theorem: a country **will export goods** that use its abundant factors intensively, and **import goods** that use its scarce factors intensively.

The results of the H–O model are that the pattern of international trade is determined by differences in factor endowments.

## Leontief's paradox

**L. paradox:** according to H-O theorem the US would export capital-intensive goods and import labor-intensive goods. But Leontief found out that the US' exports were less capital intensive than its imports.



## Specific factors model

SFM:  $\cong$  labor mobility among industries is possible while capital is assumed to be immobile in the short run = **short run version of H-O theorem**. SFM suggests that if there is an increase in the price of a good, the owners of the factor of production specific to that good will profit in real terms.

## New trade theory

NTT:  $\cong$  tries to explain empirical elements of trade that comparative advantage-based models above have difficulty with. For example most trade is between countries with similar (not different) factor endowment and productivity levels. NTT covers also: the large amount of multinational production (i.e., FDI ) that exists, assumptions such as monopolistic competition and increasing returns to scale and so-called „home-market effect“.

Home-market effect = if an industry tends to cluster in one location because of returns to scale and if that industry faces high transportation costs, the industry will be located in the country with most of its demand, in order to minimize cost.

## Gravity model

GM of trade: presents a more empirical analysis of trading patterns. The gravity model, in its basic form, predicts trade based on the distance between countries and the interaction of the countries' economic sizes. *The model mimics the Newtonian law of gravity which also considers distance and physical size between two objects. The model has been shown to have significant empirical validity.*

## II. Recent Global Economic Developments in Trade

# Factors influenced a solid trade growth

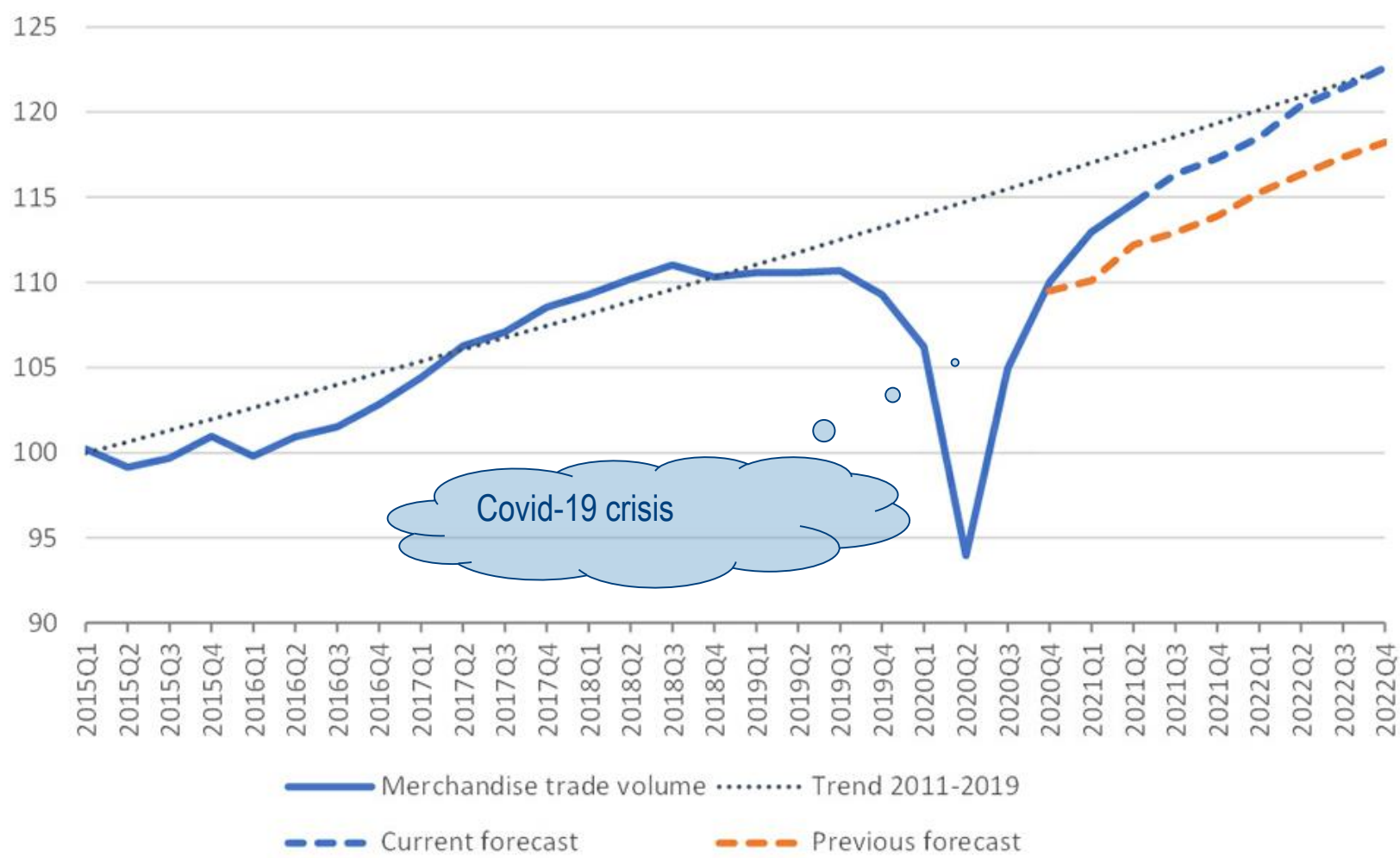
- Factors behind solid trade growth in the past:
  - a. the reduction in trade tariffs and other trade barriers,
  - b. emergence of various trade blocks,
  - c. falling transportation costs,
  - d. trade re-orientation and openness of former socialist (planned) economies, including countries like China
  - e. the expansion of global value chains,....
- The initial stimuluses of many of these factors has already materialized and it is not expected that they will support global trade to the same extent in the future.

# Factors steadily influencing global trade

1. The changing geographical composition of trade
  2. The changing importance of individual countries with an increasing role of emerging economies, the growth of which is less international trade-intensive,
  3. The changing specialisation of emerging economies, China in particular.
- The ECB Task force on Global trade slowdown found that the compositional effect (geographical composition to a large extent) can explain about half of decline in trade during 2012-2015 compared to pre-crisis (1980-2007) period (ECB Occasional Paper No. 178, Sept.2016).
  - Another factor contributing to the global trade slowdown was the demand composition effect, where import-intensive GDP components such as investment weakened more relative to other demand components.

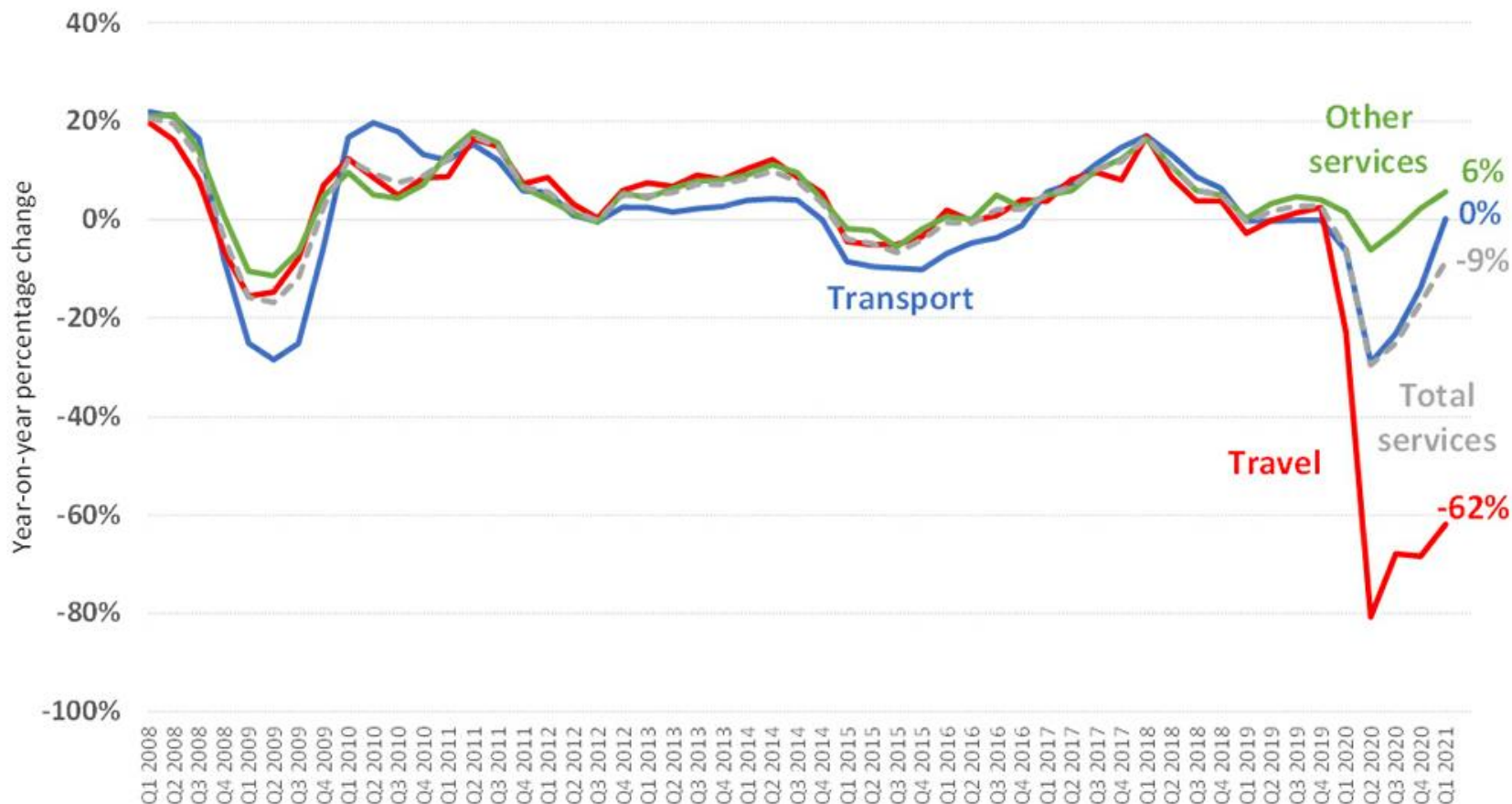
# Shares in world merchandise trade and Covid- 19

World merchandise trade volume, 2015Q1-2022Q4



# Shares in world merchandise trade and Covid- 19

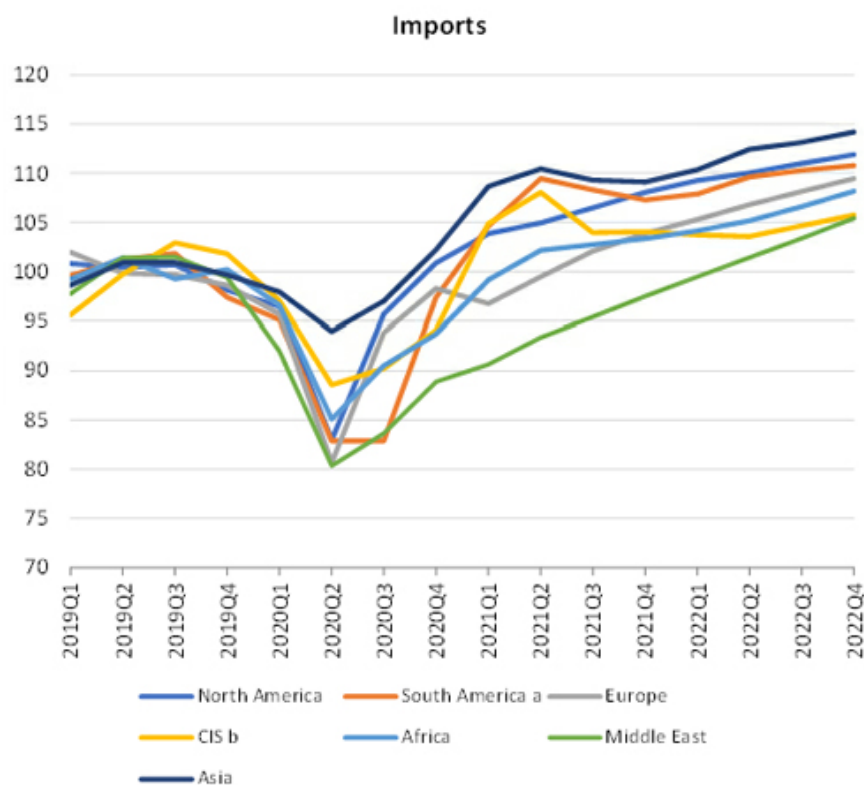
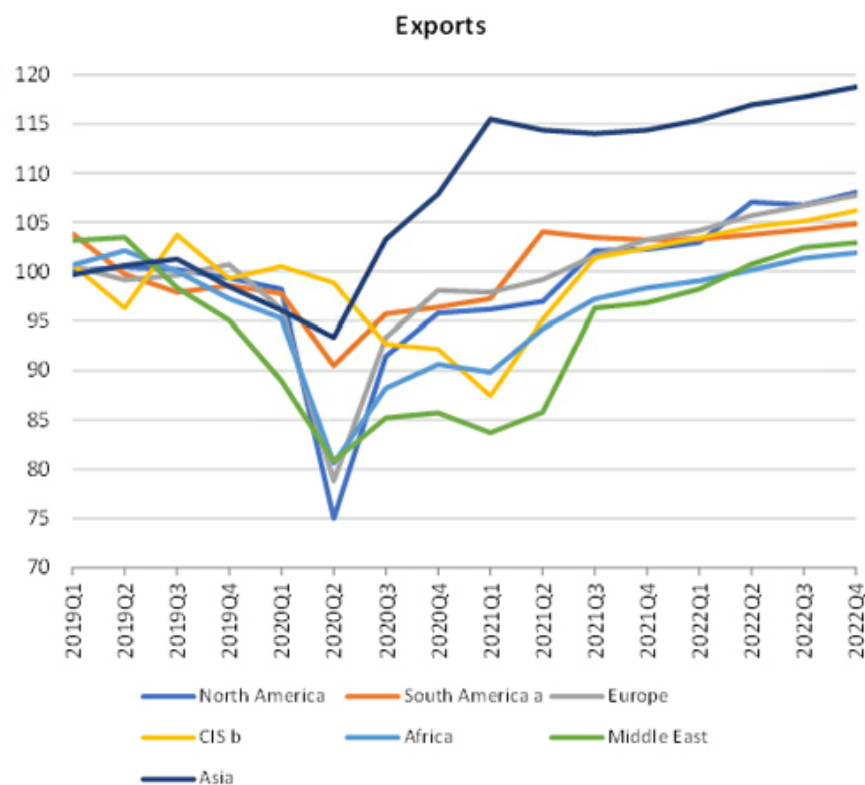
World commercial services trade by sector, 2008Q1-2021Q1





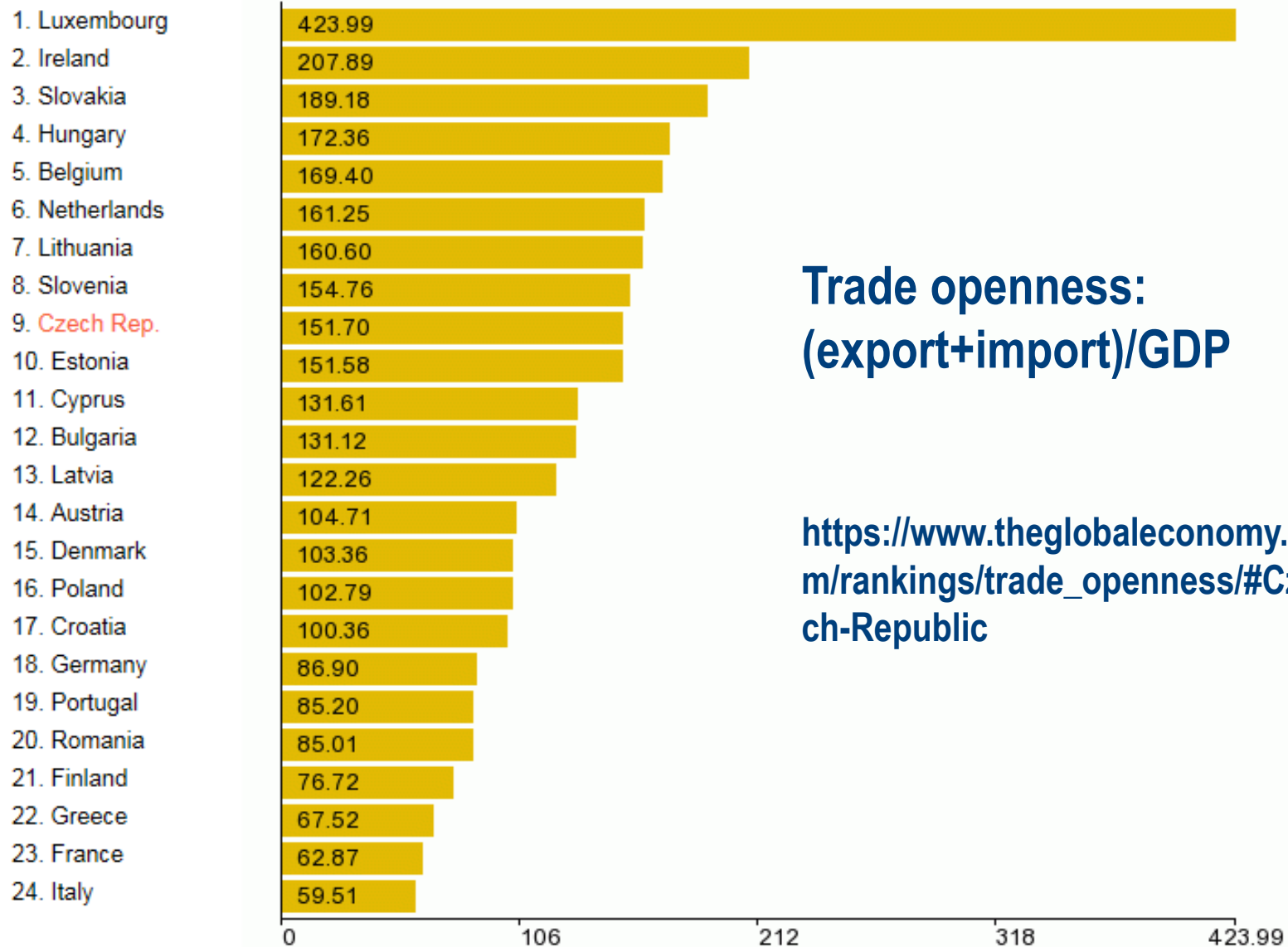
# Shares in world merchandise trade and Covid- 19

## Merchandise exports and imports by region, 2019Q1-2022Q4



- EU is the principal trading block with a profound effect on the world economy
- Relatively high degree of openness of EU economies (measured by shares of exports plus imports in the GDP)
- Commodity structure:
  - leading exporter of manufacturing products
  - marginal role of agriculture (highly politicized area)
  - dependence on imports of oil and other primary commodities
- EU is also important player in world trade in services
- Balanced position of EU trade contrary to permanent US trade deficits

# Trade openness



**Trade openness:  
(export+import)/GDP**

[https://www.theglobaleconomy.com/rankings/trade\\_openness/#Czech-Republic](https://www.theglobaleconomy.com/rankings/trade_openness/#Czech-Republic)

Source: TheGlobalEconomy.com, The World Bank

# World trade institutional setup

## ■ Multilateralism

- General rules binding on **all countries**
- Prominent role of World Trade Organization (WTO) established in 1995 as permanent forum for trade issues (successor of GATT)
- Approximately 160 member states (from among existing approx. 240 states)

## ■ Regionalism

- Proliferation of **regional trade blocks** composed of limited number of states that are linked by geographical and economic relationships. Two variants:
  - **Acting as „stumbling block“**: potential risks of protectionism, discrimination and fragmentation in international trade
  - **Acting as „building block“**: promoter of multilateral negotiations, openness to adding new members

## ■ Unilateralism

- Preference for its own trade practices that are imposed on foreign countries through **bilateral negotiations**
- Settlement of trade disputes in domestic courts outside the framework of multinational organizations
- International trade seen as a useful diplomatic weapon, jeopardy for multilateral trade (vicious circle of retaliation and counter retaliation)
- (Occasional) feature of US external trade relations

## Reciprocity

- Particular concessions (i.e. tariff reduction) granted by one country only extends to other countries which offer similar concessions
- Less that full reciprocity may be applied towards less developed nations

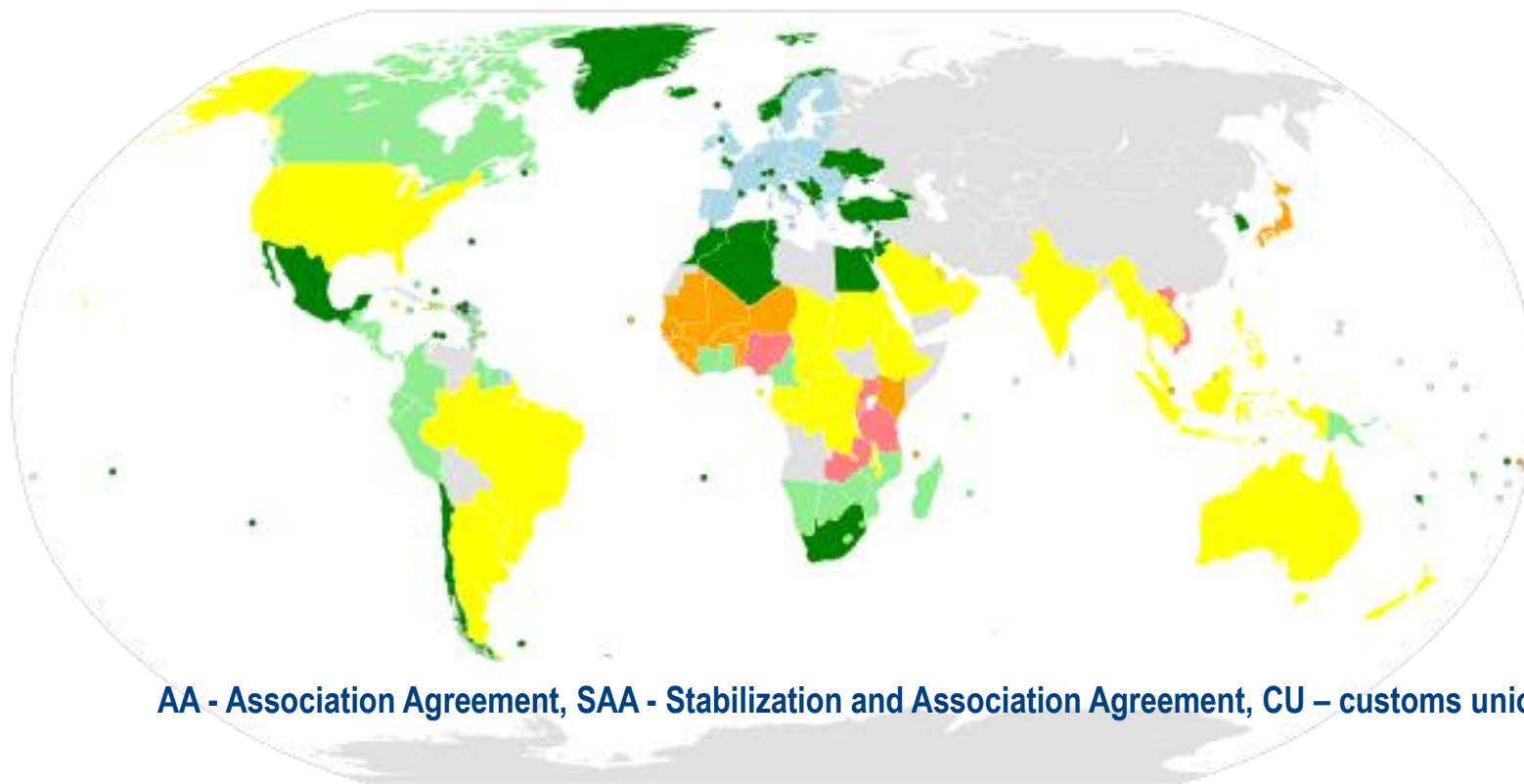
## Non-discrimination (most favoured nation clause, MFN)

- Concessions granted to some countries should be extended to other countries (non-discriminatory liberalisation)
- Transparent rules for discriminatory liberalisation such as:
  - **FTA = free trade areas**
  - CU = customs union
  - GSP = Generalised System of Preferences

## Main functions of WTO

- Regulations governing conduct of international trade
- Impartial settlement of trade disputes
- Framework for multilateral negotiations to liberalise world trade

# Free-trade areas of the EU



**AA - Association Agreement, SAA - Stabilization and Association Agreement, CU – customs union**

Albania SAA (2009), Algeria AA (2005), Andorra CU (1991), Bosnia and Herzegovina SAA (signed 2008, entry into force pending), Canada: Comprehensive Economic and Trade Agreement (provisionally applied), Chile AA (2003), Egypt AA (2004), Faroe Islands, autonomous entity of Denmark (1997), Israel AA (2000), Jordan AA (2002), Lebanon AA (2006), Macedonia SAA (2004), Mexico AA (2000), Montenegro SAA (2010), Monaco CU (1958, Franco-Monegasque Treaties), Morocco AA (2000), Palestinian Authority interim AA (1997), San Marino CU (2002), Serbia SAA (signed 2008, entry into force pending), South Africa AA (2000), South Korea: European Union–South Korea Free Trade Agreement (entered in to force on 13 December 2015), Switzerland FTA (1973), Tunisia AA (1998), Turkey CU (1996), EU Overseas Countries and Territories, EU-Japan Economic Partnership Agreement (2018)

# Difficulties in GATT/WTO negotiations

- Long rounds of trade negotiations followed by long transitory periods
- Growing number and increased diversity of negotiators
  - Previous model with EU-USA as leaders gradually ceased to exist
  - More active role of less developed countries (BRICS = Brazil, Russia, India, China, South Africa)
- More difficult issues on agenda
  - Initial agenda: tariffs on manufactured goods
  - Current agenda: liberalisation of agriculture and services, non-tariff trade barriers, competition policies, market access, protection of intellectual property, environment, etc.)
- Significant differences in opinion
  - Among developed countries (USA, EU, Japan)
  - Developed versus less developed countries
  - Pressure groups (NGOs, consumer associations, trade unions, etc.)

# Rule-making negotiating rounds

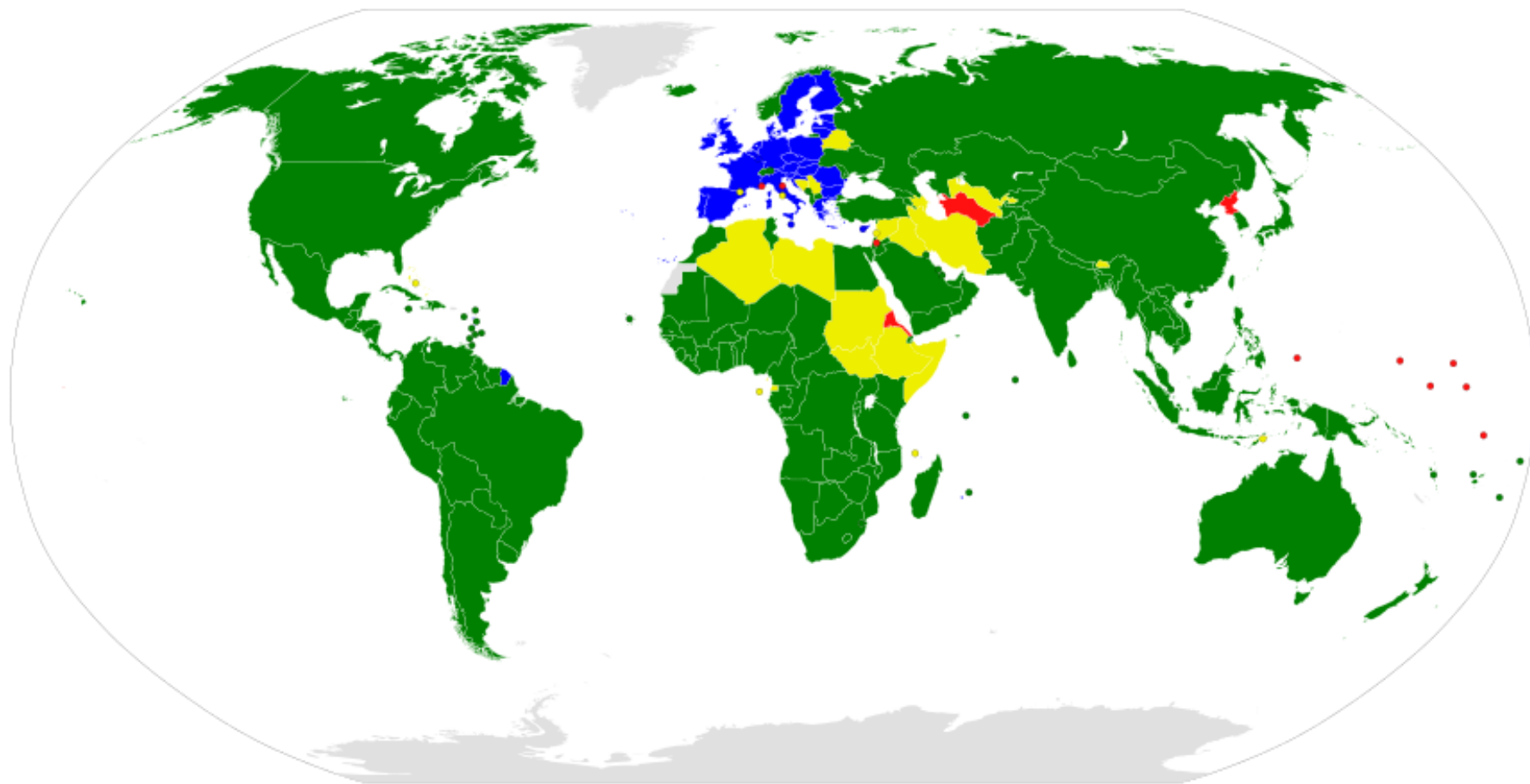
- 1. Geneva (1947, 23 countries)
  - Tariffs on manufactured goods
- 2. Annecy (1949, 13 countries)
  - Tariffs on manufactured goods
- 3. Torquay (1950-51, 38 countries)
  - Tariffs on manufactured goods
- 4. Dillon (1959-1962, 26 countries)
  - Tariffs on manufactured goods
- 5. Kennedy (1963-1967, 62 countries)
  - Tariffs on manufactured goods, anti-dumping
- 6. Tokyo (1973-1979, 102 countries)
  - Tariffs on manufactured goods, non-tariff barriers
- 7. Uruguay (1986-1994, 125 countries)
  - **WTO creation**, tariffs on manufactured goods, non-tariff barriers, agriculture, textiles, services, intellectual property, dispute settlement
- 8. Doha (2001-suspended in 2008, 149 countries)
  - Agriculture, services, intellectual property, investment, competition rules, public procurement, electronic commerce, environment

WTO:

[https://www.wto.org/english/docs\\_e/gattbilaterals\\_e/indexbyround\\_e.htm#di1960](https://www.wto.org/english/docs_e/gattbilaterals_e/indexbyround_e.htm#di1960)



# WTO members



Members, Members dually represented by the EU, Observers, Non-members

The WTO has 164 members and 23 observer governments

# Why a common (EU) trade policy ?

## ■ Arguments in favour of common (EU) trade policy?

- Current world is far from free trade area  $\Rightarrow$  governments tend to promote through trade their own interests
- Greater negotiating power in multilateral GATT/WTO negotiations and bilateral agreements
- Trade distortions caused by different trade instruments damages integrity and fair competition in internal market (trade deflection, technical barriers to trade, quotas, etc.)
- Positive influence on terms of trade ( $TT = P_{EX}/P_{IM}$ )

## ■ Heterogeneity of trade interests

- Diverse geographical location of EU countries
- Historical and cultural proximity of trade partners
- Colonial heritage

## ■ Origins of common trade policy

- One of the founding policies based on Rome Treaty (common external tariff, common trade agreements with third countries)

## III. Twin deficits

# Economic theory behind twin deficits

- **The twin deficit hypothesis** claims that budget deficit causes current account deficit. In other words, rising public expenditures cannot be fully and immediately satisfied by domestic production. Significant importations to a country are required and this will, ceteris paribus, lead to current account deficit. This phenomenon has been clarified via two possible approaches:
  - a) the Mundell-Fleming theory
  - b) Keynesian absorption theory
  
- $(S - I) + (T - G) = NX$ 
  - if public revenues  $T$  are lower than public expenditure  $G$ , a public (government) sector deficit arises.
  - if this situation occurs and the economy is simultaneously close to its potential output level, private investment  $I$  or net exports  $NX$  must decline given a constant saving rate
  - can be rewritten into the equivalent form  $S + \text{goods and services deficit} = I + \text{budget deficit}$ , where a goods and services deficit arises if  $Ex < Im$  and a budget deficit arises if  $T < G$ .
  - Simple rearrangement gives the relationship  $\text{goods and services deficit} = \text{budget deficit} + I - S$ , which shows the link between the two deficits more directly.
  - **Full article:** [https://www.cnb.cz/export/sites/cnb/en/monetary-policy/.galleries/geo/geo\\_2022/gev\\_2022\\_01\\_en.pdf#page=15](https://www.cnb.cz/export/sites/cnb/en/monetary-policy/.galleries/geo/geo_2022/gev_2022_01_en.pdf#page=15)

# Economic theory behind twin deficits

**Tab. 1: Relationship between current account deficit and budget deficit**

i) twin deficit hypothesis	budget deficit $\rightarrow$ current account deficit	<ul style="list-style-type: none"> <li>■ Mundell-Fleming theory</li> <li>■ Keynesian absorption theory</li> </ul>
ii) <b>current account targeting</b>	budget deficit $\leftarrow$ current account deficit	
iii) feedback linkage	budget deficit $\leftarrow \rightarrow$ current account deficit	<ul style="list-style-type: none"> <li>■ bidirectional causality</li> </ul>
iv) no linkage	budget deficit X current account deficit	<ul style="list-style-type: none"> <li>■ inter-temporal Ricardian view</li> </ul>

- On the other hand several authors, e.g. Anoruo and Ramchander (1998), Marinheiro (2008), and Stiglitz (2010), observed and confirmed reversal relationship between external and internal deficit. This opposite relationship was named as “current account targeting” by Summers (1988).
- Deterioration in the current account will probably curb economic growth, tax revenues will drop down and this will raise budget deficit, ceteris paribus.

# Economic theory behind twin deficits

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- Other researchers confirmed a bidirectional causality between internal and external deficits. Feldstein and Horioka (1980) observed that investments and savings are significantly correlated and this leads to bi-causality between the two variables. Similar empirical findings are in the contribution by Kalyoncu (2007).

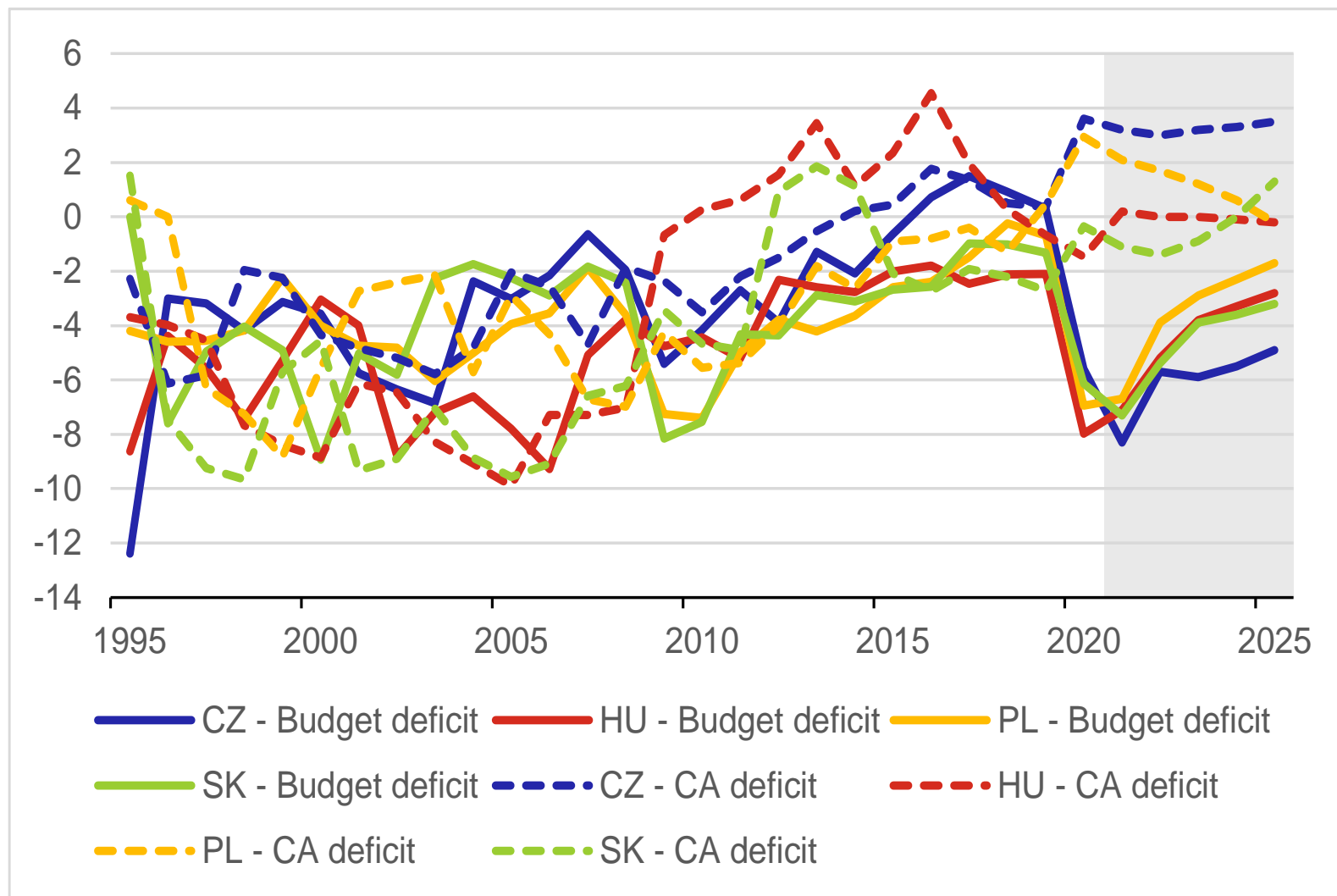
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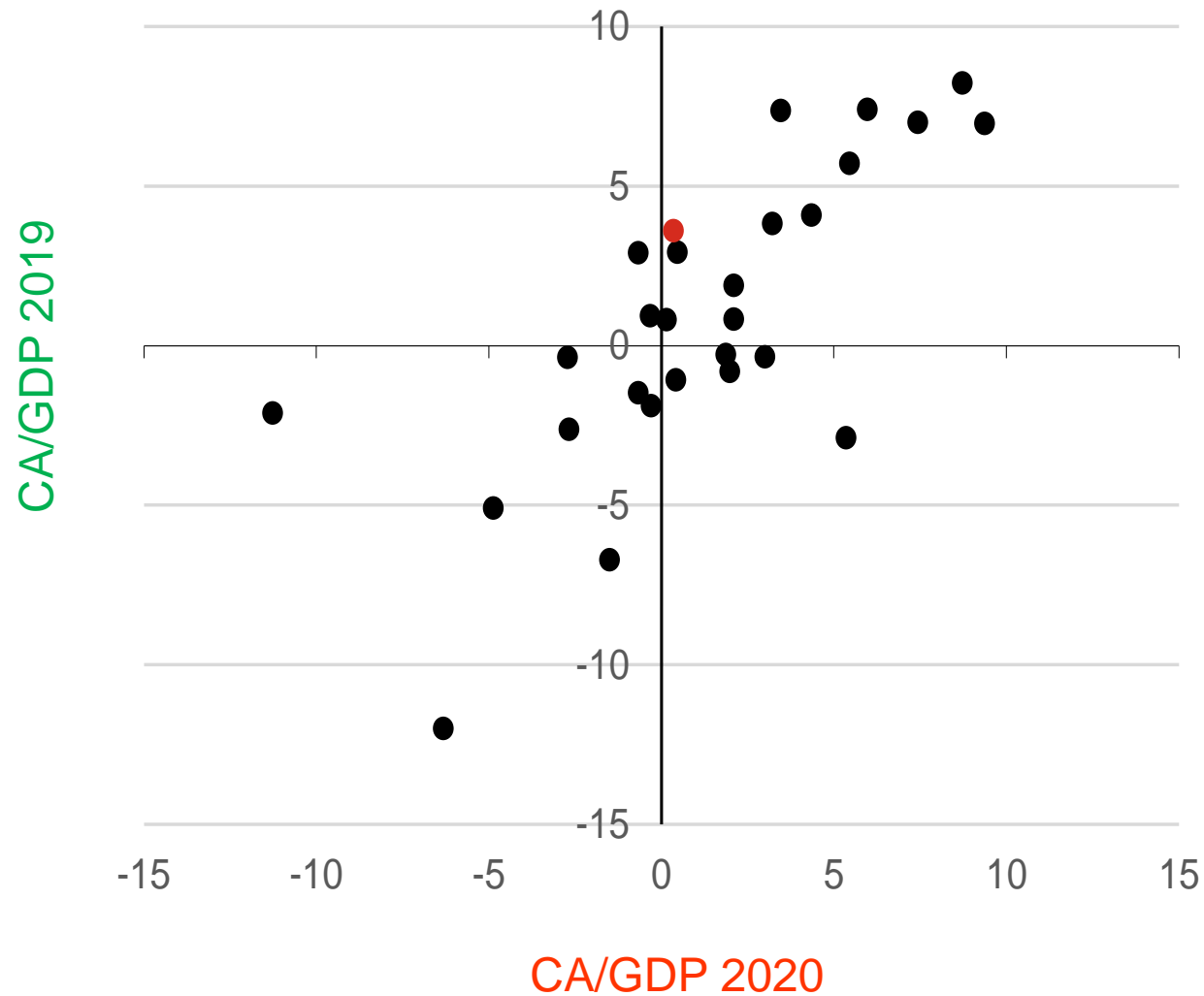
- However, some authors did not find any relation between the two deficits. These results are in line with the Ricardian equivalence hypothesis. This hypothesis postulates that budget and current account deficits are not interdependent. If economic growth drops, government will probably realise fiscal measurements to influence savings and investments, therefore real interest rates, exchange rates and current account does not have to be changed (Garcia & Ramajo, 2004; Michalski, 2009).

# BD/GDP & CA/GDP: Visegrad countries



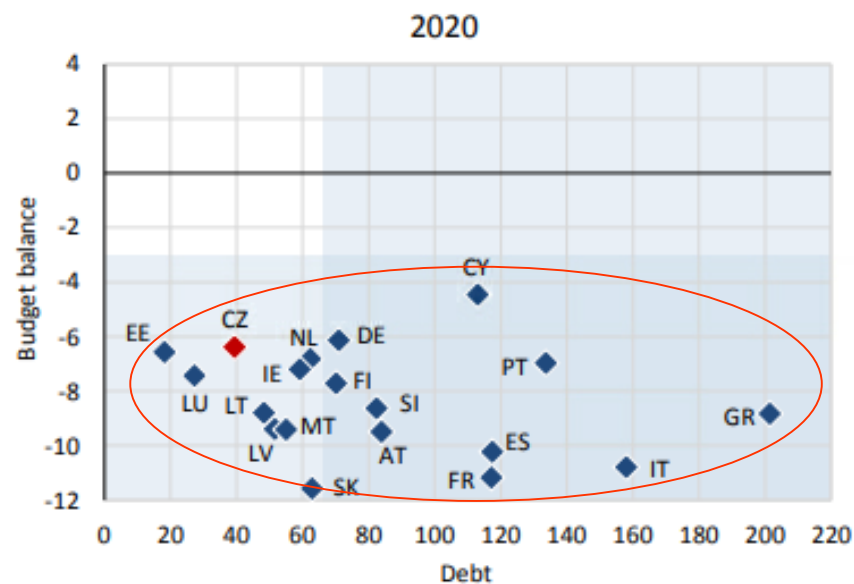
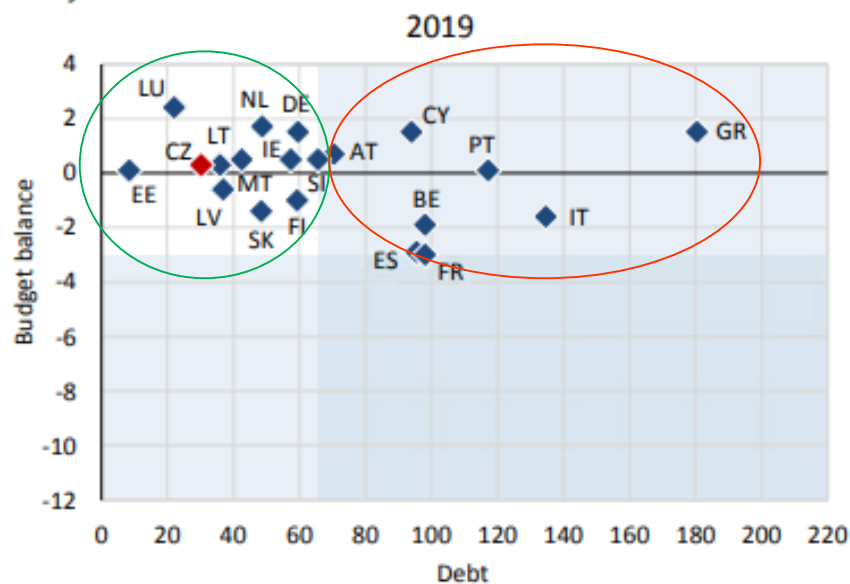


# CA/GDP (2019 $\Rightarrow$ 2020): EU



# BD/GDP (2019⇒2020): EU

**Chart 3.1: Fiscal positions in the euro area and the Czech Republic**  
in % of GDP

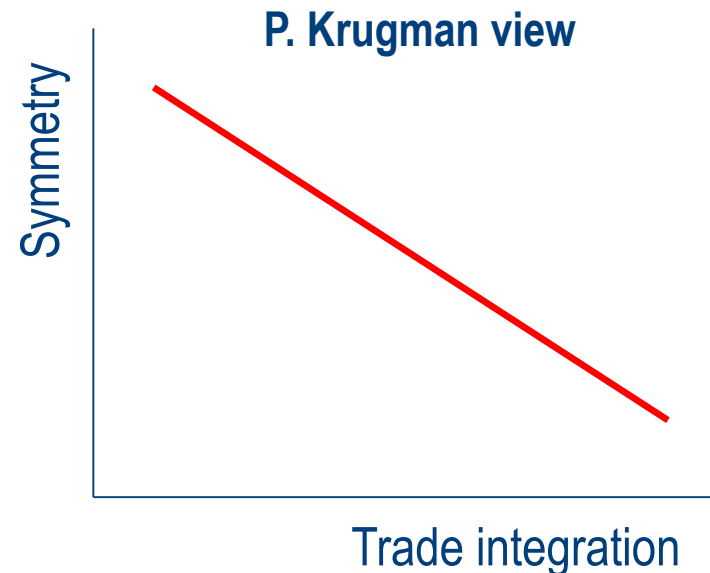
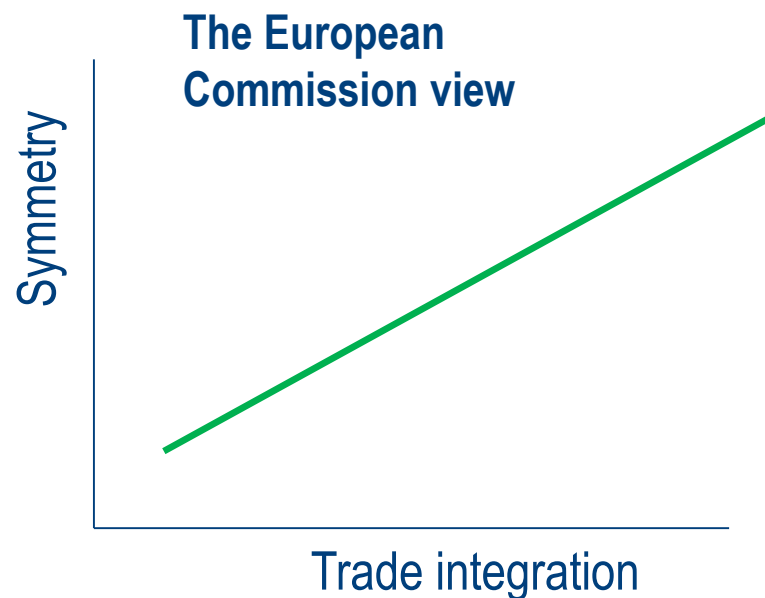


*Note: The Czech Republic is not a euro area country and is only listed here for comparison. Data as of 22 October 2020.*

*Source: Notification tables of the various countries, Eurostat (2020).*

## IV. Trade integration and occurrence of asymmetric shocks

# Two different views...



- **Vertical Axis:** the degree of symmetry in the movements of output and employment between groups of countries (regions) that are candidates to form MU.
- **Horizontal Axis:** degree of trade integration between these countries.
- The degree of economic integration increases => asymmetric shocks will occur less frequently.
- The degree of economic integration increases => countries become more specialized => subject to more rather than fewer asymmetric shocks.

## V. Organisation of Common Trade Policy and Trade Agreements

# Organisation of common trade policy

## ■ European Commission

- Mandate to negotiate trade agreements with third countries on behalf of member states (MSs in position of observers)
- Mandate to enforce active agreements

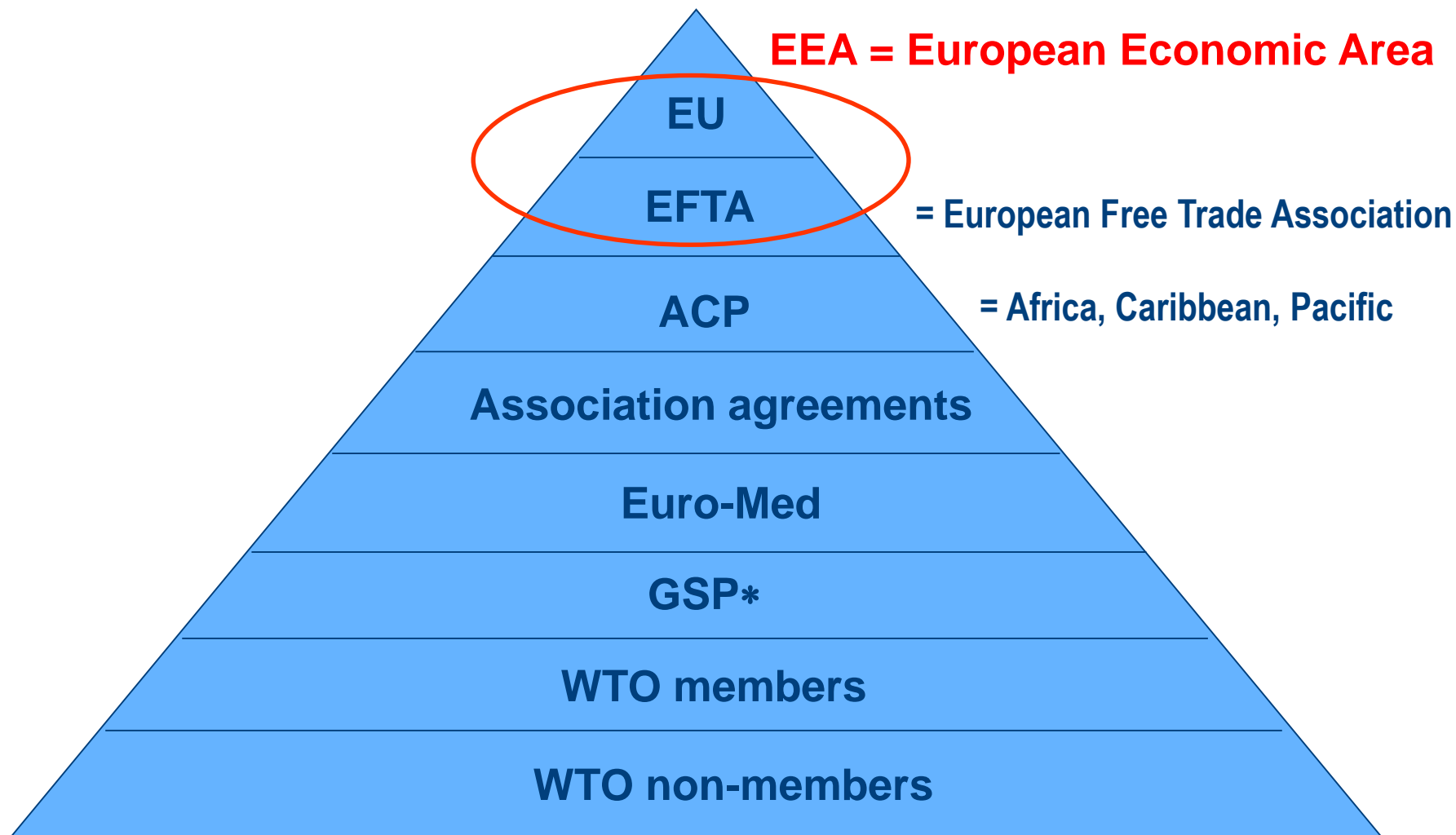
## ■ Council of EU

- Approves directives for negotiations
- Approves or rejects negotiated agreements (QMV = qualified majority voting principle)

## ■ Competence complications

- Rome Treaty gave EC powers only in goods trade
- Clumsy position in WTO rounds dealing with broader array of trade issues
- **Principle of parallelism**: unanimity required where EC law on internal market also requires unanimity (e.g. immigration policy)

# Preferential pyramid in EU trade relations



\* GPS - Generalised System of Preferences

[http://trade.ec.europa.eu/doclib/docs/2013/december/tradoc\\_152012.pdf](http://trade.ec.europa.eu/doclib/docs/2013/december/tradoc_152012.pdf)

# Stages of economic integration (lecture 1)

## ➤ Free Trade Area (FTA)

- Tariffs and quotas abolished for imports from members
- Members retain national tariffs and quotas against third countries

## ➤ Customs Union (CU)

- **FTA** + equalization of tariffs (possibly quotas) in trade with non-members

## ➤ Common Market (CM)

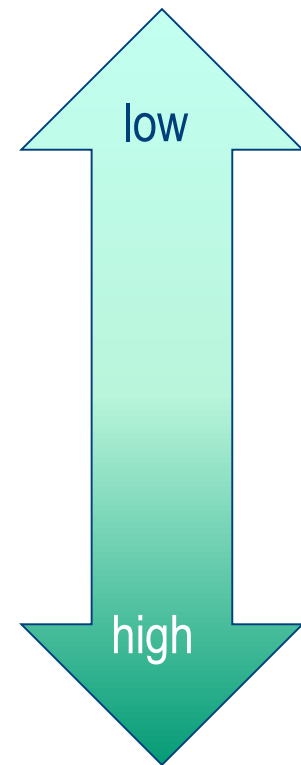
- **CU** + free movement of production factors (capital, labour) and services (four fundamental freedoms in EU)

## ➤ Economic Union

- **CM** + harmonization of selected economic policies (fiscal, regional, industrial, competition, energy, transport, social, etc.)

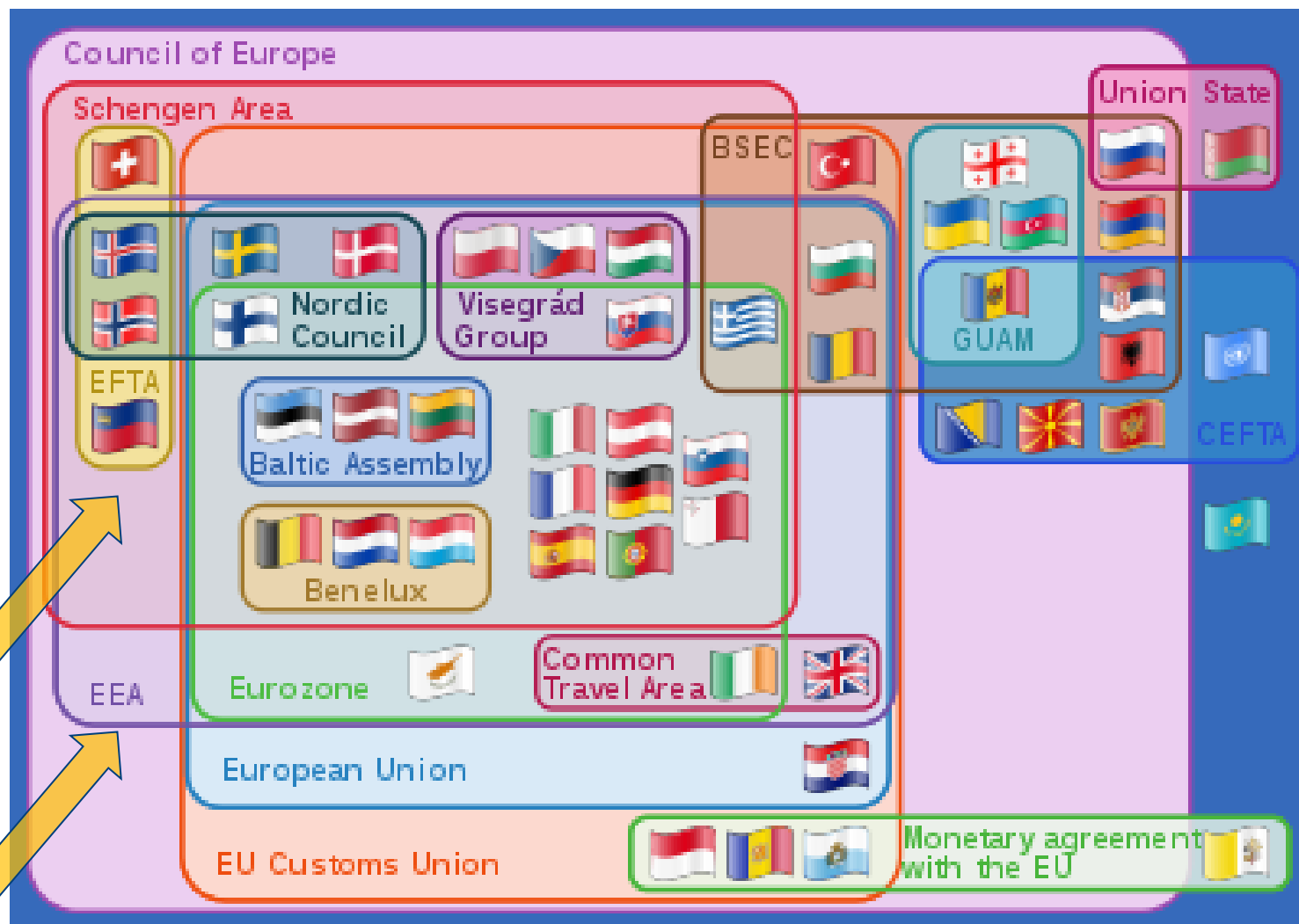
## ➤ Total economic integration (Political Union)

- Centralization of key policies (monetary, fiscal, social, etc.)
- Setting up of a supranational authority binding for the members





# Areas, Councils, Groups, ....



# European Free Trade Association (EFTA)

## ■ Origins of EFTA

- Signed in July 1959 (Stockholm Convention), active since May 1960 (dominant initiative of UK)
- Founding members: Austria, Denmark, Norway, Portugal, Sweden, Switzerland, United Kingdom (1961 Finland, 1970 Iceland)
- Established as FTA integration grouping (discouraged by far-reaching integration ambitions of EEC)

## ■ European Economic Community (EEC) ≈ European Community ≈ Common Market

- was a regional organisation which aimed to bring about economic integration among its member states. It was created by the Treaty of Rome of 1957.

## ■ Economic rivalry between EEC and EFTA

- 1961: UK applied for membership of EEC (shock for “Eftans”)
- Domino effect: Applications of Denmark, Norway and Ireland (strong ties with UK)
- January 1973: First EEC enlargement (Denmark and UK leave EFTA, Norway remains in EFTA after referendum)
- Remaining EFTA members negotiated bilateral agreements on free trade (active since EEC enlargement)
- **Current EFTA members: Iceland, Liechtenstein, Norway and Switzerland (non EEA member, special treaty with EU)**

# European Economic Area (EEA)



EU and EEA member state  
EFTA and EEA member state  
EU member state  
provisionally applying the EEA  
agreement (Croatia)  
EFTA member state and  
signatory of the EEA  
agreement that has not  
ratified (Switzerland)

# European Economic Area (EEA)

## ■ Basic facts

- Agreement extending EU single market to EFTA countries
- Signed in May 1992, active since January 1994
- Some EFTA members understood EEA as waiting room for full EC membership (applications from Austria, Finland, Norway, Sweden, Switzerland)
- January 1995: Fourth enlargement (Austria, Finland and Sweden leave EFTA, Norway stays in EFTA after referendum)
- Switzerland rejects EEA in referendum (application for EC membership shelved)

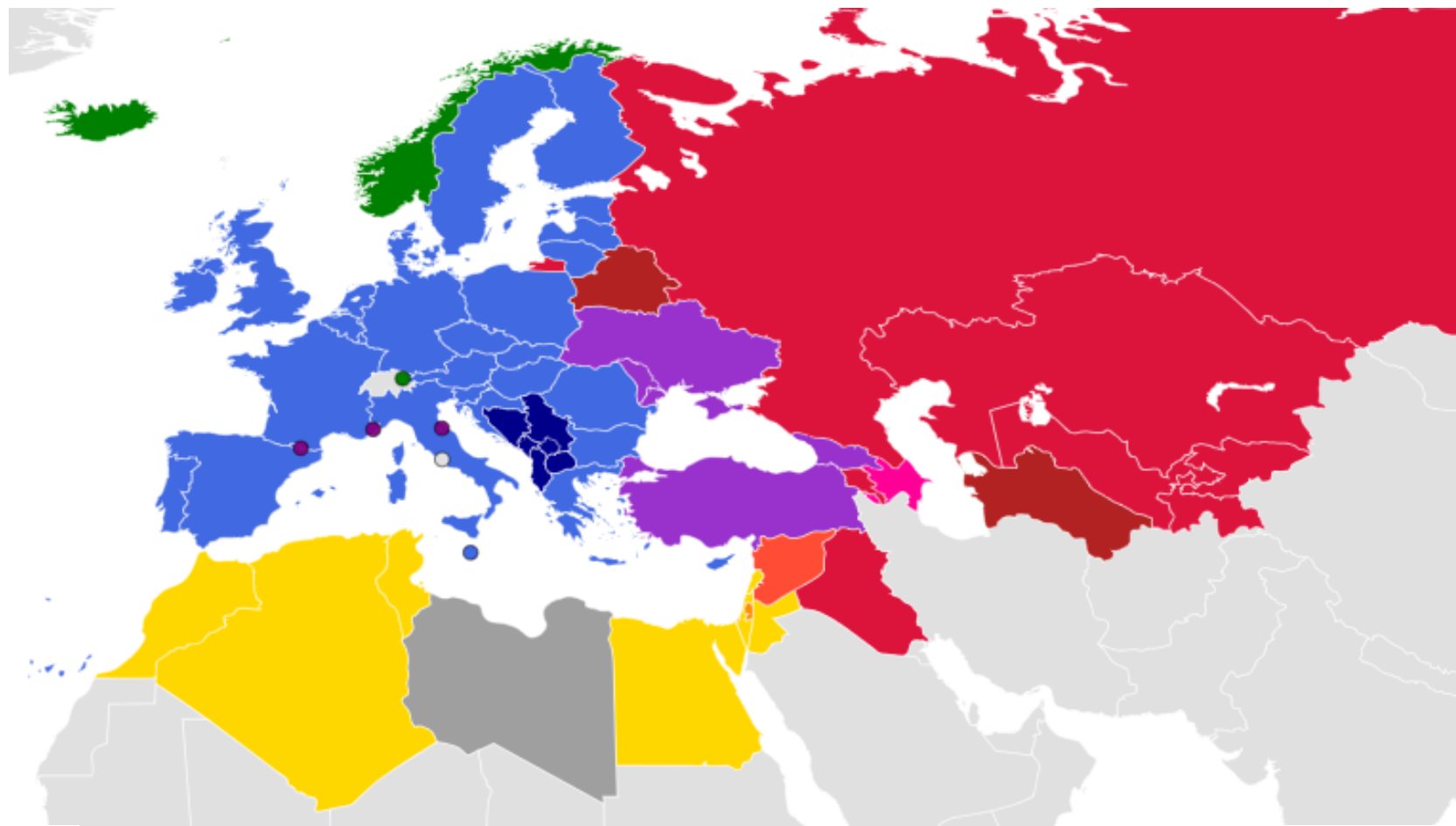
## ■ General features of EEA

- Access of EFTA to EU markets in exchange for complying with internal market legislation (some exceptions from general rule)
- Strong limits on shaping EU legislation
- Non-participation in common policies: Common Agricultural Policy or the Common Fisheries Policy
- EFTA trade policy usually shadows EU trade agreements

# Association agreements (AA)

- Agreements concluded between EU and transition economies in anticipation of their full membership in EU
  - The most favourable arrangement that EU can offer to foreign countries (apart from EEA and ACP members)
  - Asymmetric elimination of trade restrictions (unilateral abolition of quotas on the part of EU, slower pace of tariff reduction on the part of transition economies)
  - More cautious trade liberalisation in „sensitive“ commodities (steel, textiles, chemical products, farm products, etc.) where transition economies had some comparative advantage
  - Possibility of reintroducing transitory protection measures in case of serious damage to EU producers or problems in depressed industries
- **Copenhagen criteria**
  - Eligibility criteria for joining the European Union (laid down in June 1993 at European Council in Copenhagen)
  - *Membership requires that candidate country has achieved stability of institutions guaranteeing*
    - i) *democracy, the rule of law, human rights, respect for and protection of minorities*
    - ii) *the existence of a functioning market economy*
    - iii) *capacity to cope with competitive pressure and market forces within the Union*

# Association agreements (AA)



EU Association Agreements with neighbouring countries

■ EU member states
 ■ Agreement on the European Economic Area
 ■ Stabilisation and Association Agreement
 ■ Agreement Establishing an Association
 ■ Partnership and Cooperation Agreement; Association Agreement under negotiations
 ■ Euro-Mediterranean Agreement Establishing an Association
 ■ Interim Euro-Mediterranean Agreement Establishing an Association
 ■ Cooperation Agreement; Euro-Mediterranean Agreement Establishing an Association initialled
 ■ Partnership and Cooperation Agreement signed
 ■ Negotiations on a Framework Agreement suspended

## ■ Historical background

- Mediterranean region is one of the EU's closest neighbours with special historic, political and strategic interests
- Key stumbling block in trade relations: production of similar agricultural commodities to ones produced in southern Europe (wine, olive oil, citrus fruits, vegetables), dependency on oil imports from Middle East and North Africa

## ■ Trade arrangements

- Separate trade agreements with Mediterranean African and Asian countries (Morocco, Algeria, Tunisia, Egypt, Israel, Palestine, Lebanon, Jordan, Syria)
- Economic objectives: FTA (free trade agreement) in industrial goods, industrial cooperation, technical and financial aid, concessions in farm imports to EU
- Political objectives: preventing emigration from the region to the EU, addressing the threat of militant Islamic fundamentalism

## ■ Special status of Turkey

- Association agreement signed in 1963, formal request for EC membership presented in 1987, accession negotiation started in 2004
- Reasons given against EU membership: the country is too big in terms of population, too poor and agricultural, too Muslim (concerns about undermining the integration process)
- Customs union since 1996 (agriculture is not addressed in full), commitment to align with EU industrial standards, suspended liberalization of services and public procurement

# Generalised System of Preferences (GSP)

## ■ Characteristics of GSP programmes

- Scheme under which industrialised countries can grant trade concessions to developing countries **without asking for reciprocity**
- GSP is not a single consistent system but a complex of individual schemes offered by donor countries
- Instruments: non-tariff imports (within given quotas), lower tariffs on industrial products or selected agricultural products, development finance
- Attractiveness of GSP systems has been eroded by continuous tariff reductions under the auspices of GATT/WTO, by restrictions on commodity coverage (trade in farm, textile or leather goods) or by red tape (provision of certificate of origin)

## ■ GSP of European Union

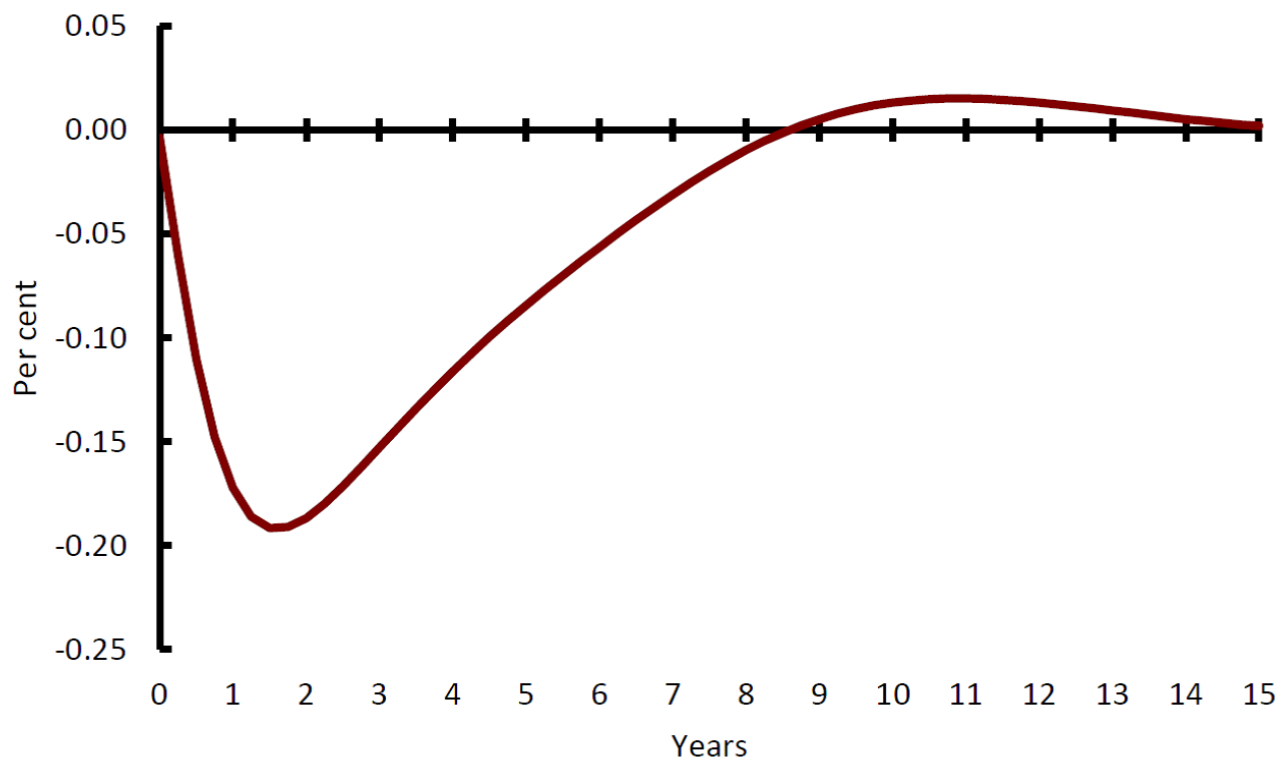
- General arrangement: products classed as non-sensitive enter EU duty free, sensitive products are subject to tariff reduction
- Special incentive arrangement (GSP+): additional benefits for countries respecting broader objectives (respect for labour and human rights, environmental protection, fighting drugs trafficking, etc.)
- Special arrangements for the poorest countries (*Everything But Arms*): all imports are duty free and quota free apart from arms and ammunition



## V. Policy Simulations (model NiGEM)

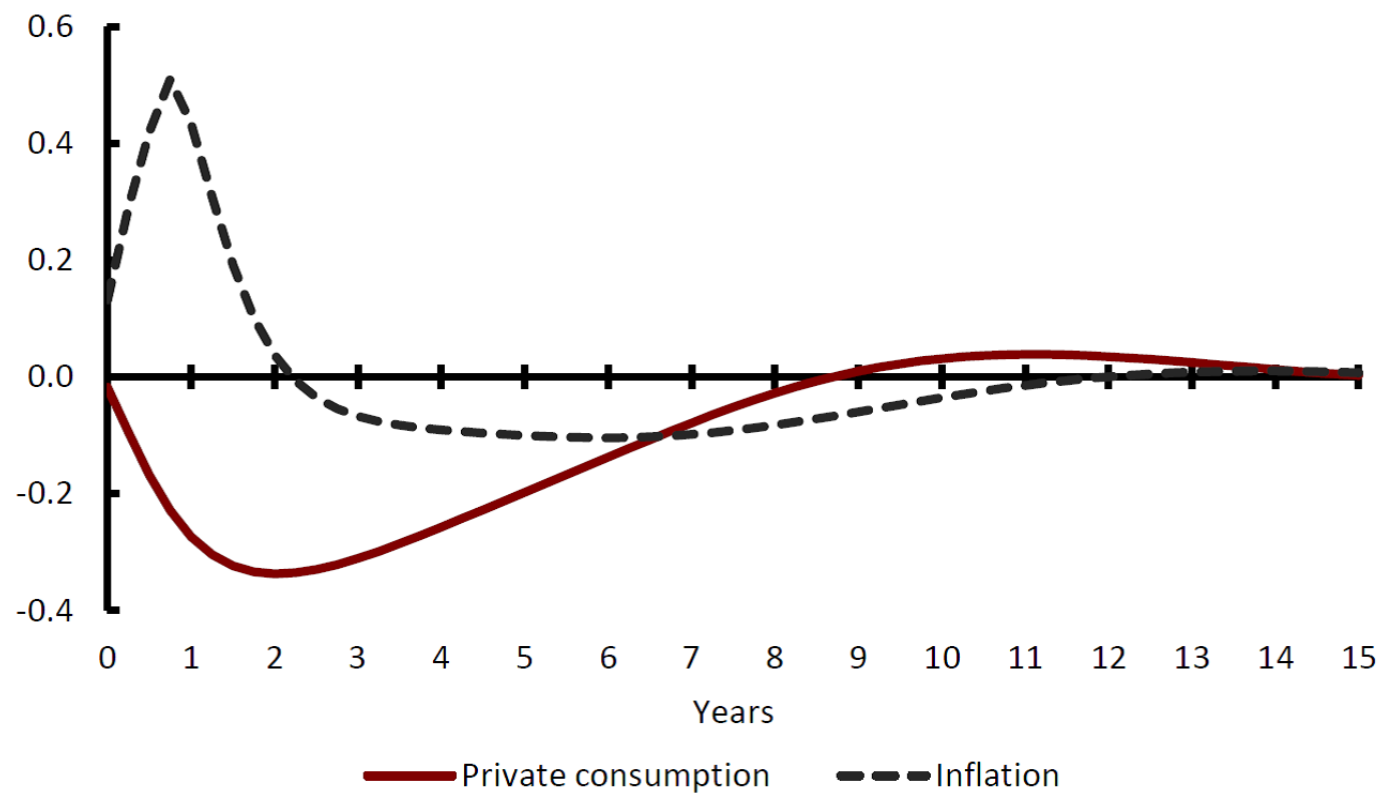
# NIESR: increase of tariffs by 10% (no retaliation of China)

Effects to GDP (USA) (in p.p., percentage deviation from the baseline scenario)



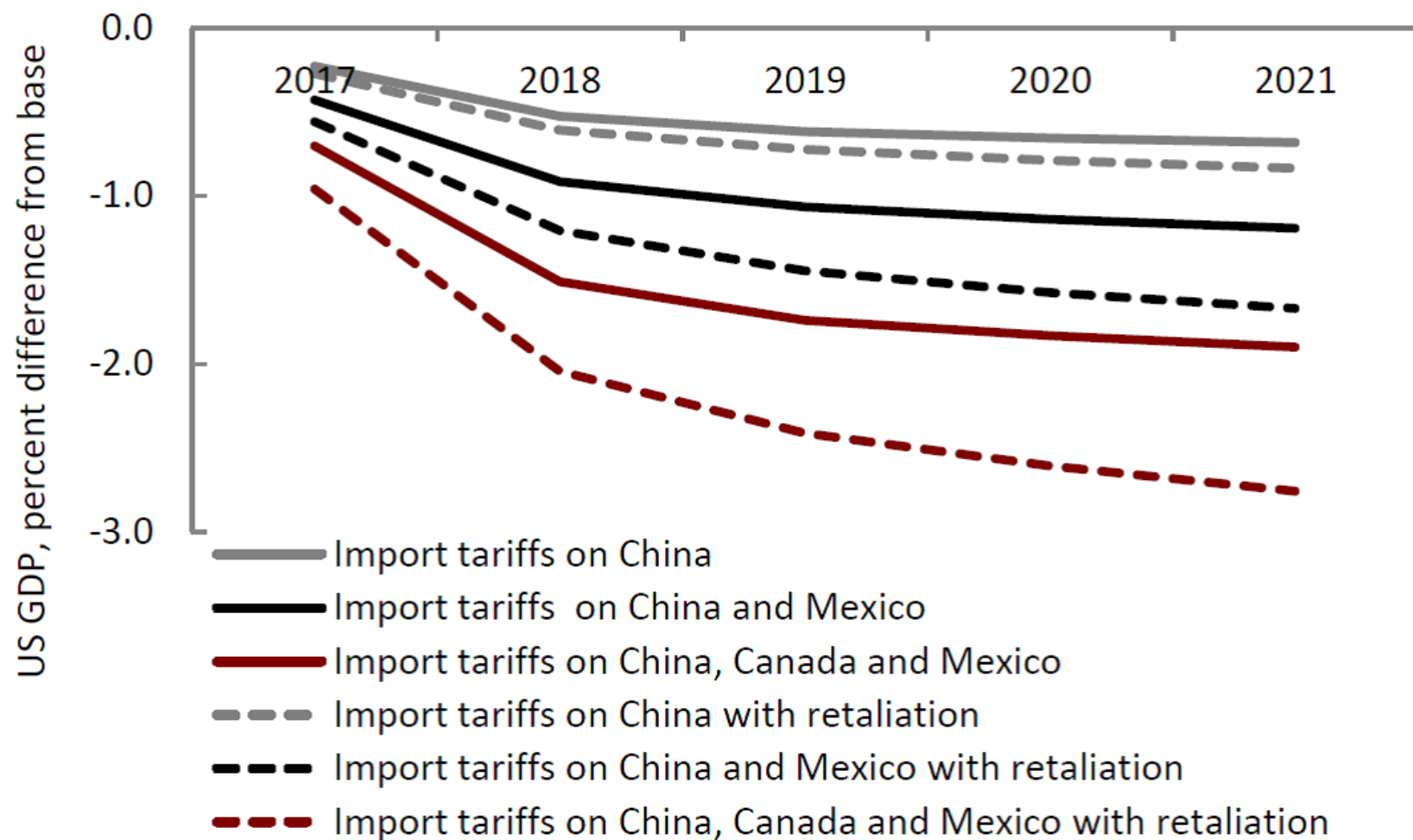
- Increase of tariffs by 10% on Chinese goods into the US GDP (no retaliation of China)

## Effects to consumption and inflation in the USA



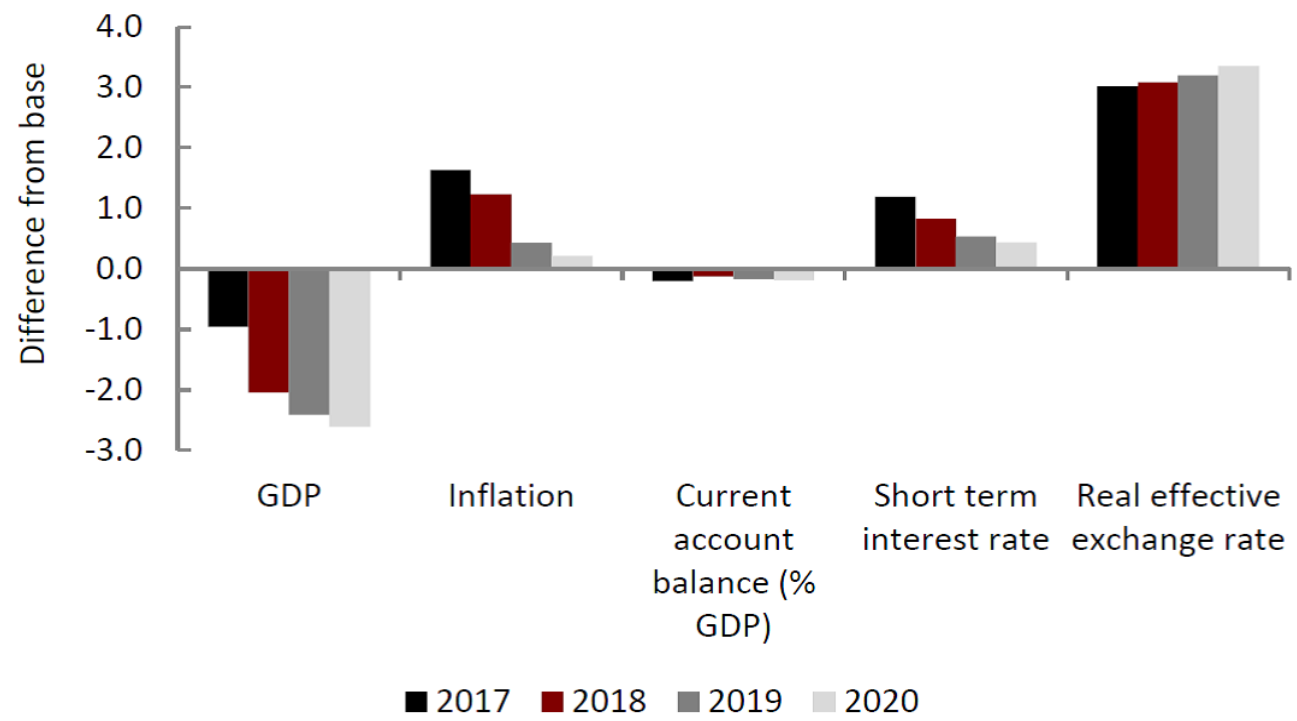
- Decline of private consumption in the US (percentage deviation from the baseline scenario)
- Increase of inflation (difference from the baseline scenario)

# NIESR: increase of import tariffs by 20% (effect to US GDP)



Source: NiGEM simulations.

# NIESR: increase of import tariffs by 20% (effect to US)

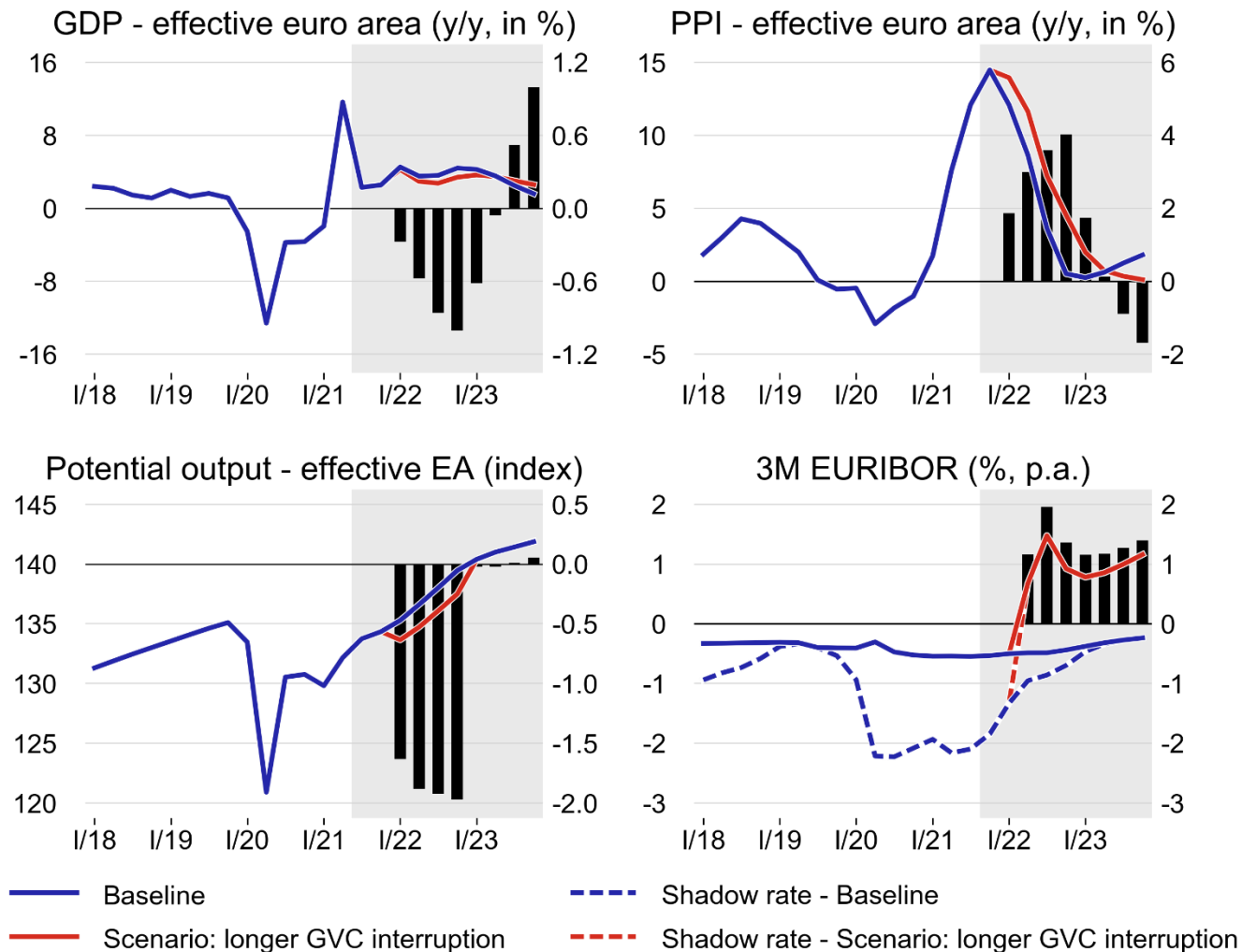


Source: NiGEM simulations.

Note: GDP (level) and real effective exchange rate are reported as per cent differences from base; inflation rate, short term interest rate and current account balance (%GDP) are reported as percentage point differences from base.

- With retaliation from China, Mexico and Canada

# NiGEM: Longer lasting GVC disruption



## Now..., what next?

- Economists still working on better answers concerning the factors behind observable growth renewal as well as its sustainability.
- Economists know that trade development is also crucial in connection with the overall development of economic activity, quantitatively expressed by the relation of trade dynamics to growth.
- Can we expect elasticity to be substantially higher than 1 or will trade growth remain broadly similar to GDP growth in the upcoming years?

**Thank you for your attention!**



# Appendix

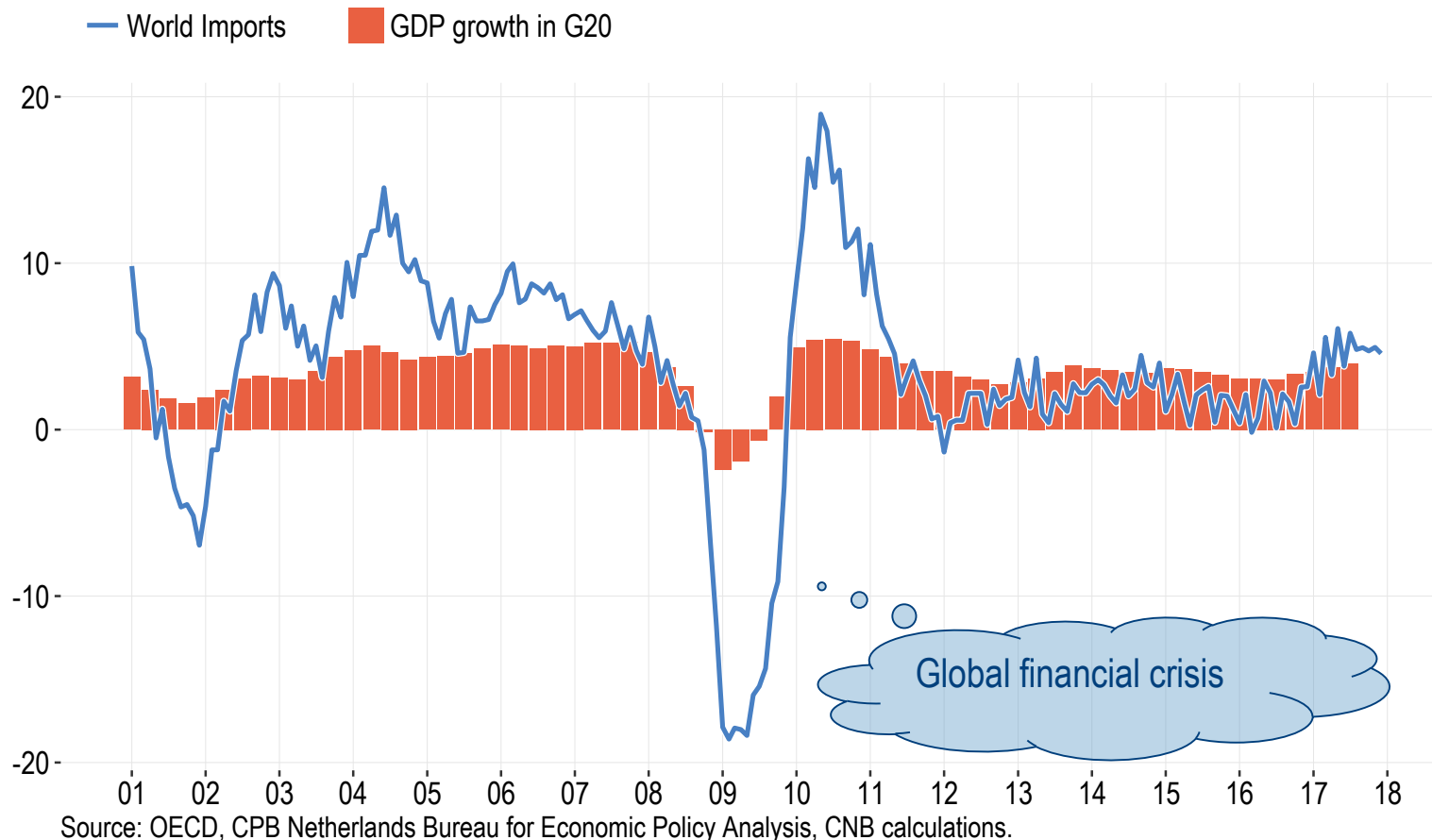
## A. Tariff and non-tariff trade barriers (Lecture 2)

- *Import tariff* is a tax or duty levied on imported goods (ad valorem, specific, compound)
- *Quota* is a quantitative restriction imposed on imports of a particular product or on imports from a particular country
- *Voluntary export restraint* (VER) is restriction imposed unilaterally by the exporting country, usually to avoid hostile measures by the importing country
- *Dumping* occurs when the price charged by an exporter to a foreign market is lower than the domestic price
- *Export subsidies* take various forms of assistance to exporters (direct payments, tax breaks, low-interest or subsidised loans, etc.)
- *Technical barriers to trade* (TBT) are specified modifications of products that make entry to national markets possible (safety regulation, health and environmental requirements, labelling, customs formalities, etc.)

## B. World trade and GDP growth developments

### Global economic growth and trade

annual growth rates, %



- Over the last two decades we have experienced periods of both **huge trade growth** and **huge trade decline** worldwide.

## Elasticity of world trade growth to world GDP growth

- In theory: The most common theories predict elasticity between trade and GDP to be around 1 (*theoretical foundations of Gravity equation by Anderson 1979 and his later work*).
- $\ln(F_{ij}) = \beta_0 + \beta_1 \ln(M_i) + \beta_2 \ln(M_j) - \beta_3 \ln(D_{ij}) + \varepsilon_{ij}$ 
  - $F_{ij}$  - represents **volume of trade** from country i to country j
  - $M_i$  and  $M_j$  typically represent the **GDPs** for countries i and j
  - $D_{ij}$  denotes the distance between the two countries
- In reality: the statistical evidence shows that since WWII the elasticity between trade and GDP is generally higher than 1.

# Historical ratios ....

## Historical ratios of global trade to output growth

Sample period	Ratio <sup>1)</sup>	Trade variable	Output variable
1981-2007	1.8	Imports of goods and services	GDP <sup>2)</sup>
2011-2013	1.1		
1981-2007	2.0	Imports of goods and services	GDP <sup>3)</sup>
2011-2013	1.4		
1950-2007	1.6	Merchandise exports	Merchandise production
1981-2007	1.9		
2011-2013 <sup>4)</sup>	1.4		
1950-2007	1.6	Manufacturing exports	Manufacturing production
1981-2007	2.1		
2011-2013 <sup>4)</sup>	1.5		

Sources: ECB calculations, World Trade Organization, CPB Netherlands Bureau for Economic Policy Analysis and United Nations Industrial Development Organization (UNIDO).

1) Imports, GDP: quarterly data; exports, production: annual data.

2) At purchasing power parity.

3) At market exchange rates.

4) For 2013, WTO series are extrapolated using growth rates from CPB and UNIDO data.