Corona and the World Economy. What to expect for World Trade and Investment?

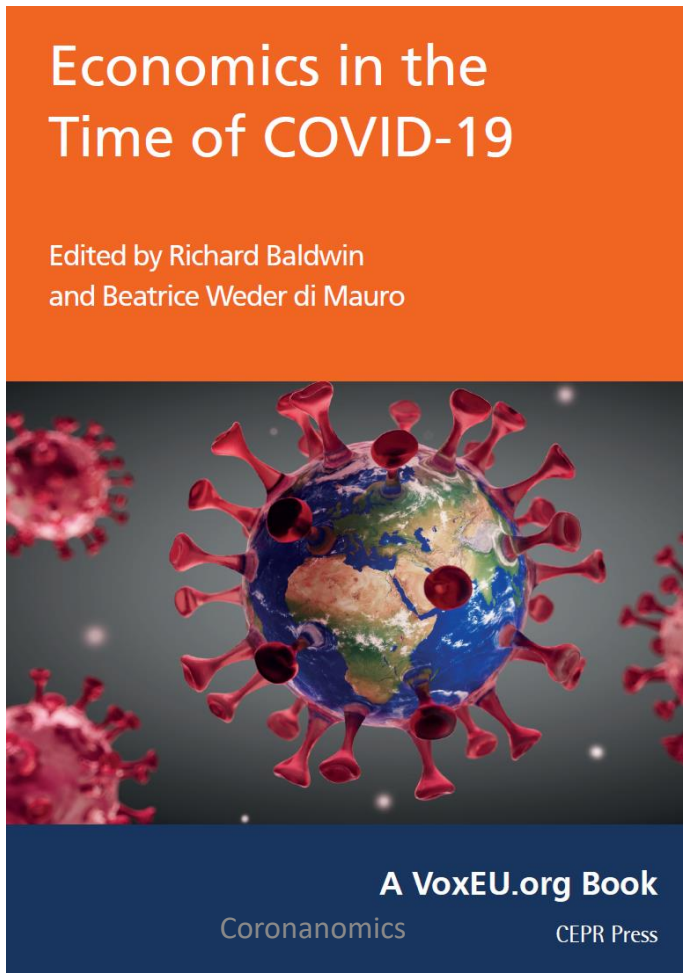
The lecture in a nutshell

1. Focus on impact on international trade and investment
2. Coronanomics (a few key economic principles)
3. Key data and stylized facts (introduction of data sources)
4. Before Corona: deglobalization 2.0
5. What will happen next to the world economy?

6. Suggested readings and useful (data sources)

Why focus on trade?

1. Focus on international trade and FDI: is that not missing the key point?



Why focus on trade?

The macro-economic impact of Corana is serious but not catastrophic

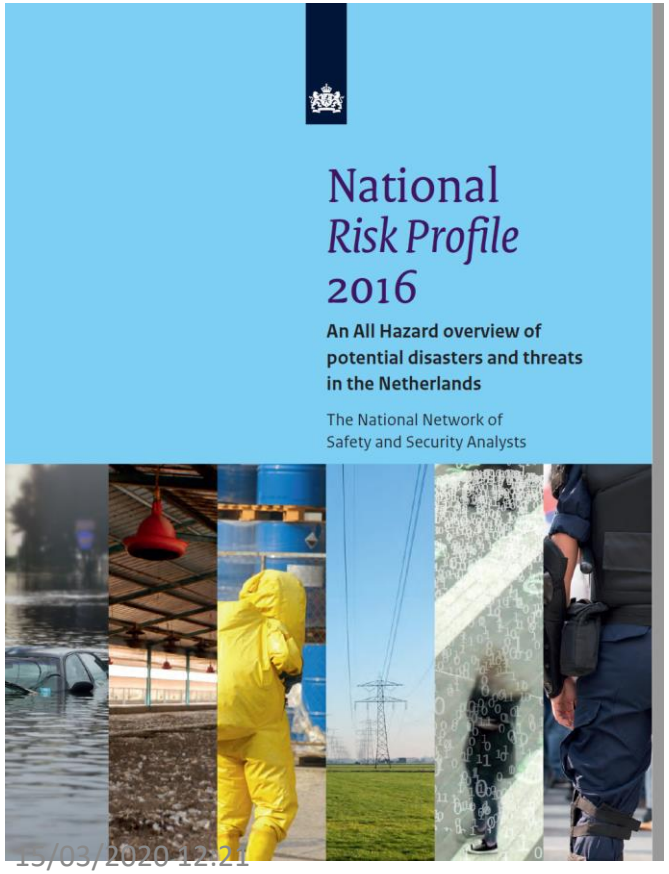


Table 4.9 Worst-case influenza pandemic – severe.

Likelihood assessment							
		Very unlikely	Unlikely	Somewhat likely	Likely	Very likely	Explanation
Likelihood of the scenario occurring between now and 5 years.					o		Based on the number of (serious) influenza pandemics in the last 100 year.
Impact assessment							
Security interest	**Criterion**	**Limited**	**Substantial**	**Serious**	**Very serious**	**Catastrophic**	**Explanation**
Territorial	Territory						Not applicable.
	International position	o					Linked to the purchase of vaccines.
Physical	Fatalities					o	More than 14,000 fatalities.
	Seriously injured and chronically ill people					o	Large number of hospital admissions (40-50,000); pressure on IC.
	A lack of life's basic necessities	o					Scarcely relevant.
Economic	Costs			o			A few up to max. 5 billion euros, due to large-scale unavailability of personnel.
	Violation of vitality						Not applicable.
Ecological	Violation of nature and the environment						Not applicable.
Socio-political	Disruption to daily life					o	Groups not going to work, school, facilities, ...
	Violation of constitutional democratic system	o					
	Societal impact			o			Based primarily on broad social fear and uncertainty.

o average to considerable uncertainty; o minor uncertainty

Why focus on trade?

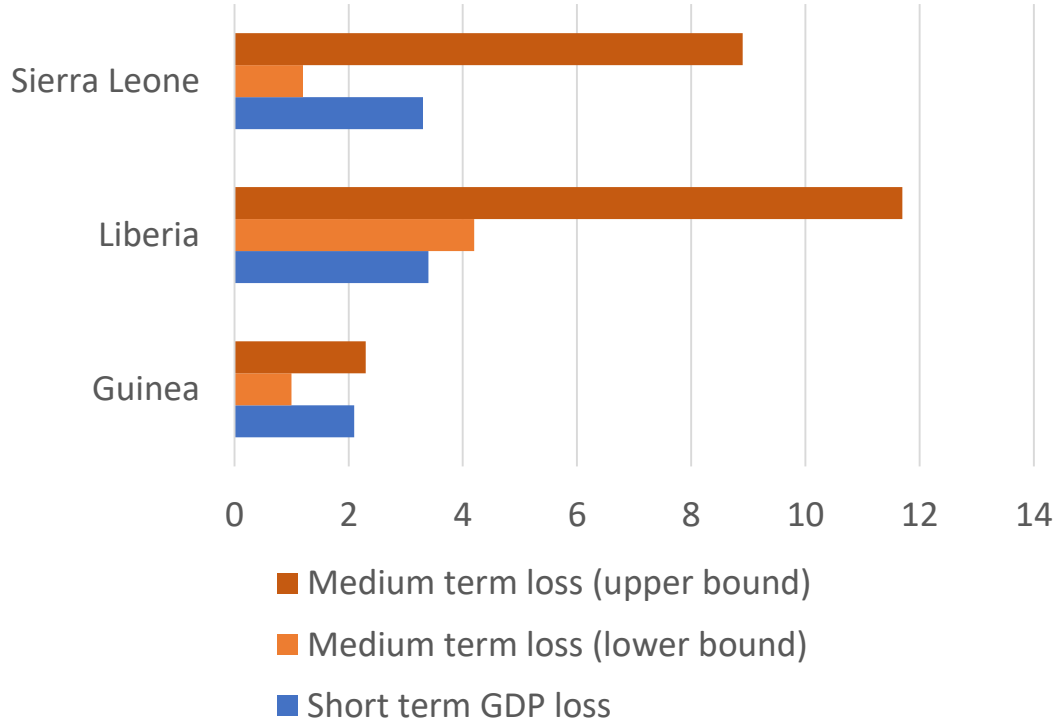
Catastrophic pandemics

Summary of studies of the macroeconomic impact of HIV/AIDS in Africa

Study	Geographic coverage	Annual GDP growth rate reduction (10-15 years)
Dixon et al (2001)	41 countries	2% to 4%
World Bank (2001)	Swaziland	1.5%
World Bank (2001)	Namibia	1.1%
World Bank (2000)	Lesotho	0.8%
Bonnel (2000)	50 countries	0.7%
Quattek et al (2000)	South Africa	0.3-0.4%
BIDPA (2000)	Botswana	1.5%
Bloom et al (1995)	51 countries	Insignificant
Cuddington ea (1994)	Malawi	0.3%
Cuddington (1993)	Tanzania	0.7%
Over (1992)	30 SSA countries	0.15% to 0.6%

Based on Dixon S, McDonald S, Roberts J. The impact of HIV and AIDS on Africa's economic development. Bmj. 2002 Jan 26;324(7331):232-4.

Macro-economic impact of Ebola (GDP reduction, percentage points)

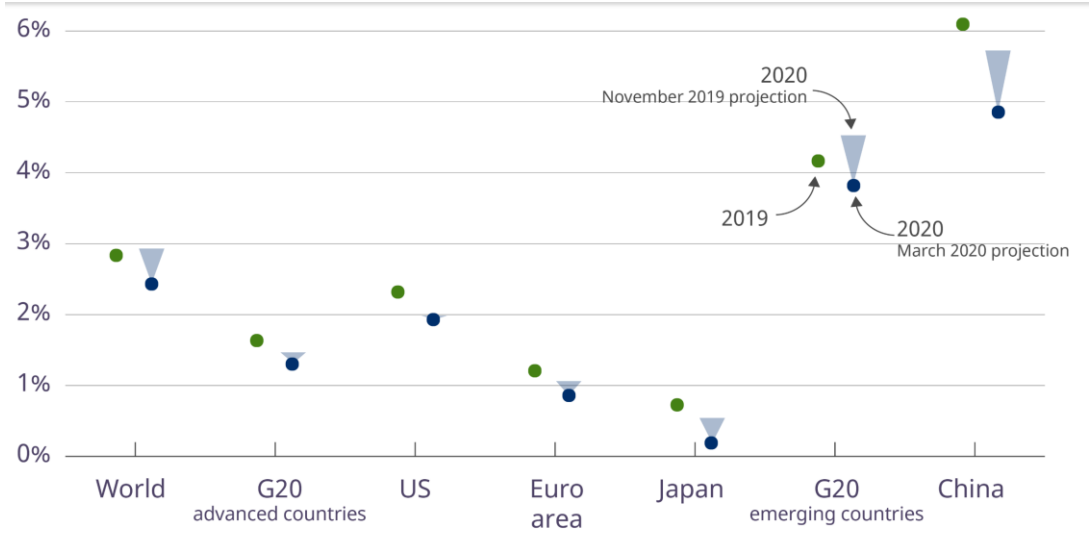


Elmahdawy, Mahmoud, et al. "Ebola virus epidemic in West Africa: global health economic challenges, lessons learned, and policy recommendations." Value in health regional issues 13 (2017): 67-70.

Why focus on trade?

The global growth impact is about – 0.5 percentage points.

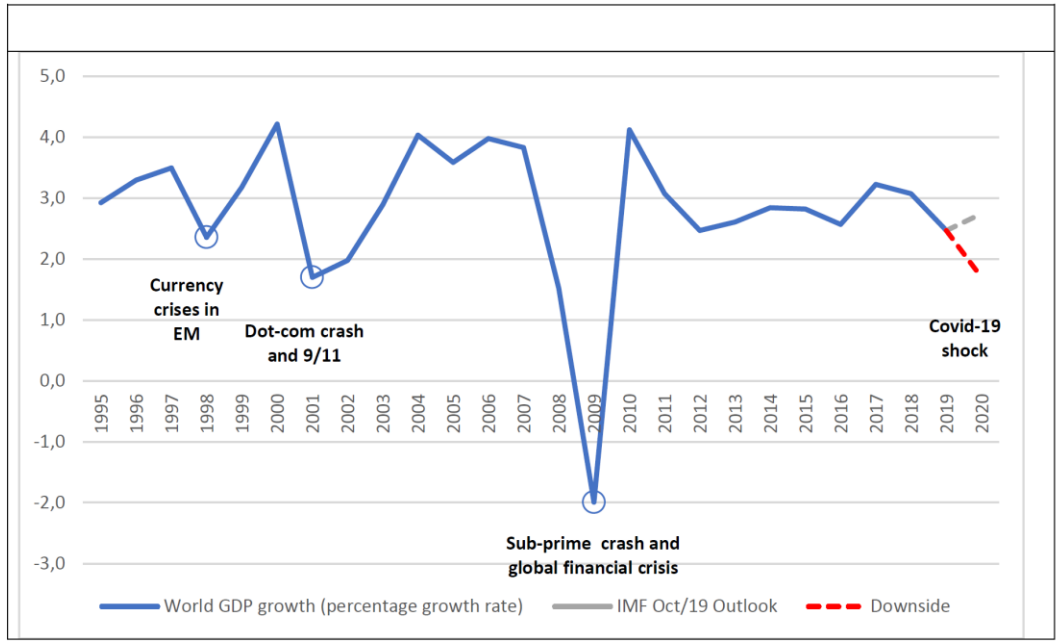
OECD (March 2, 2020 forecast)



Source: OECD Economic Outlook database

UNCTAD (March 9, 2020 forecast)

Figure 1. Global GDP Growth, 1995-2020



Source: UNCTAD calculations based on IMF, WEO, October, 2019

Why focus on trade?

The analysis of trade and investment has so far been limited

- Early indicators are only available with two months delay and thus do not contain corona-information,
- but current Coronablabla suggests that international economic organizations know what is happening.
- Current analyses still deal with a China-only shock
- This will not be a rerun of the 2008/9 world trade and investment collapse
- It may strengthen the tendency towards deglobalization that started around 2008/9
- From a purely scientific perspective this is an interesting natural experiment

2. Coronanomics 1.0

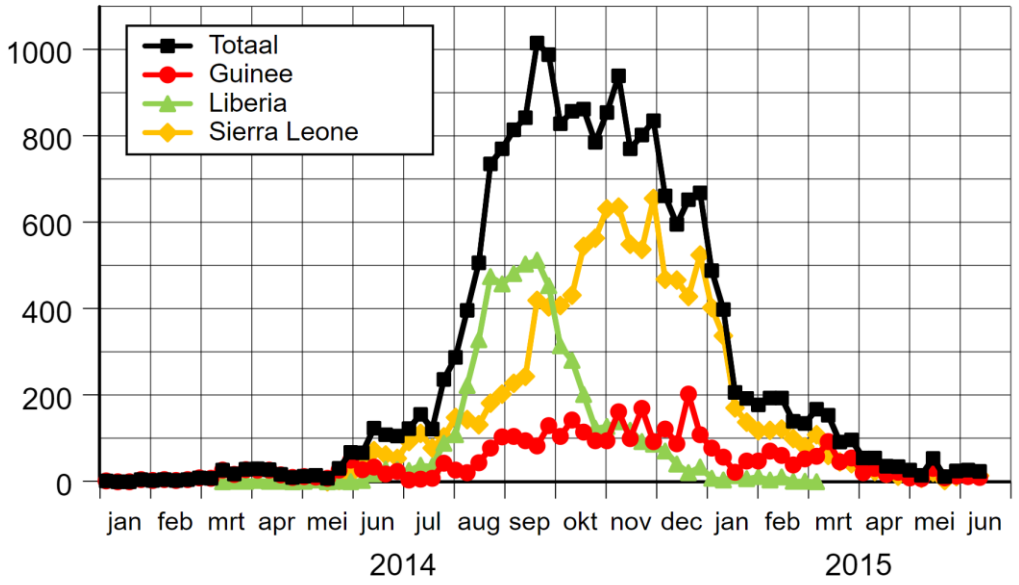
A. How to read and understand pandemic graphs
B. Supply and demand shocks
C. Economic contagion: the role of international value chains
D. Trade Shocks: Uncertainty and International Specialization

A. The endemic curve

Pay attention to

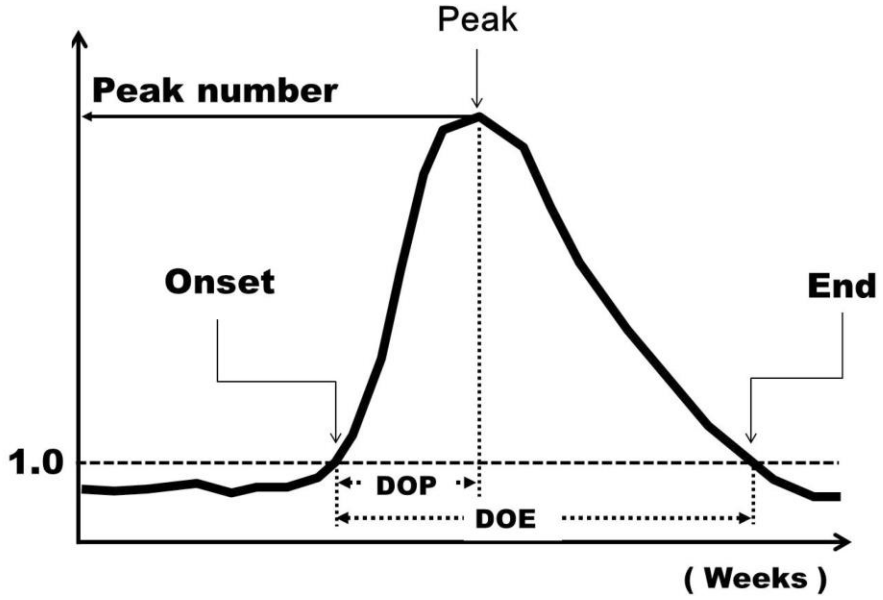
- What is measured?
  - new cases
  - number of sick people
  - Deaths
- Small versus large numbers
- Linear versus loglinear axes
- Read: Our world in data “Coronavirus Disease (COVID-19) – Research and Statistics by Max Roser, Hannah Ritchie and Esteban Ortiz-Ospina”), https://ourworldindata.org/coronavirus

Epidemic (outbreak of Ebola; new cases per week)



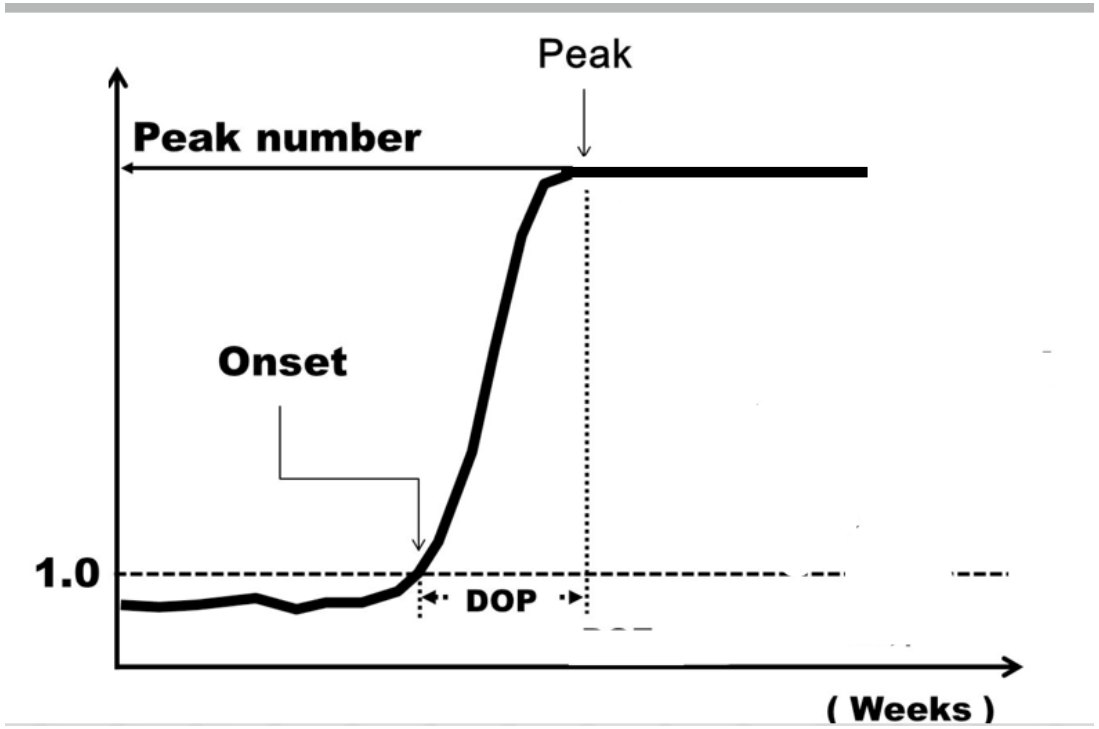
The endemic curve

Endemic curve (number of current patients)



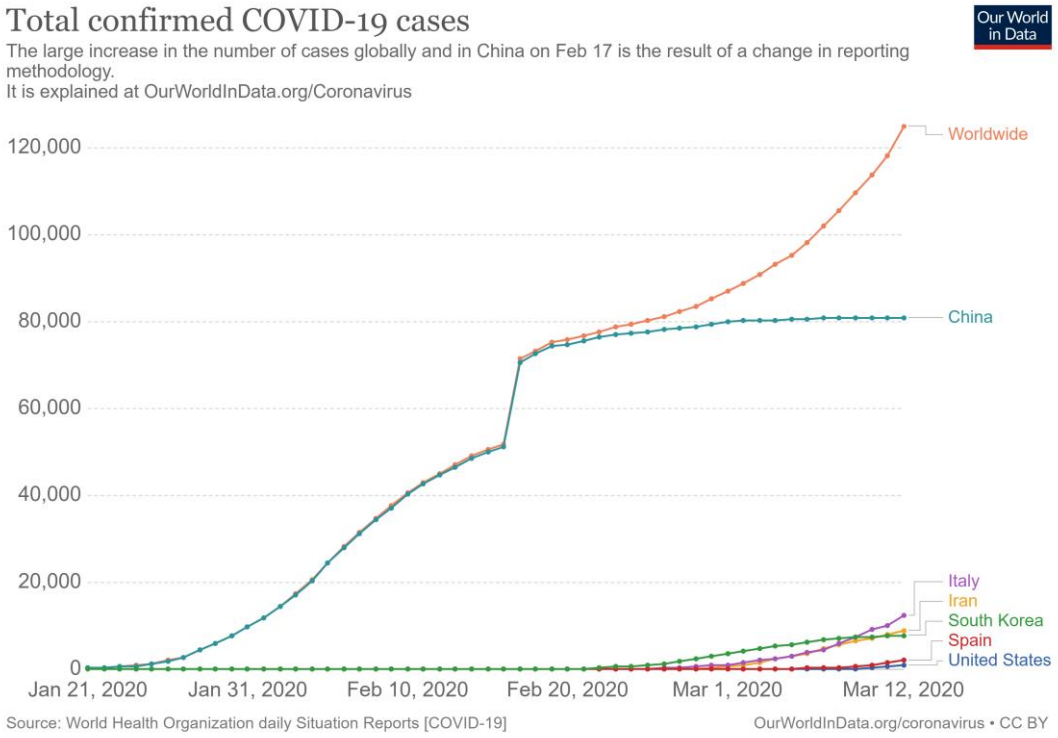
DOP: Duration of Onset to Peak
DOE: Duration of Onset to End
Source: Saito, Satoshi, et al. "Influence of media on seasonal influenza epidemic curves." International Journal of Infectious Diseases 50 (2016): 6-9.

Reported curve in the media (number of positive tests or deaths)

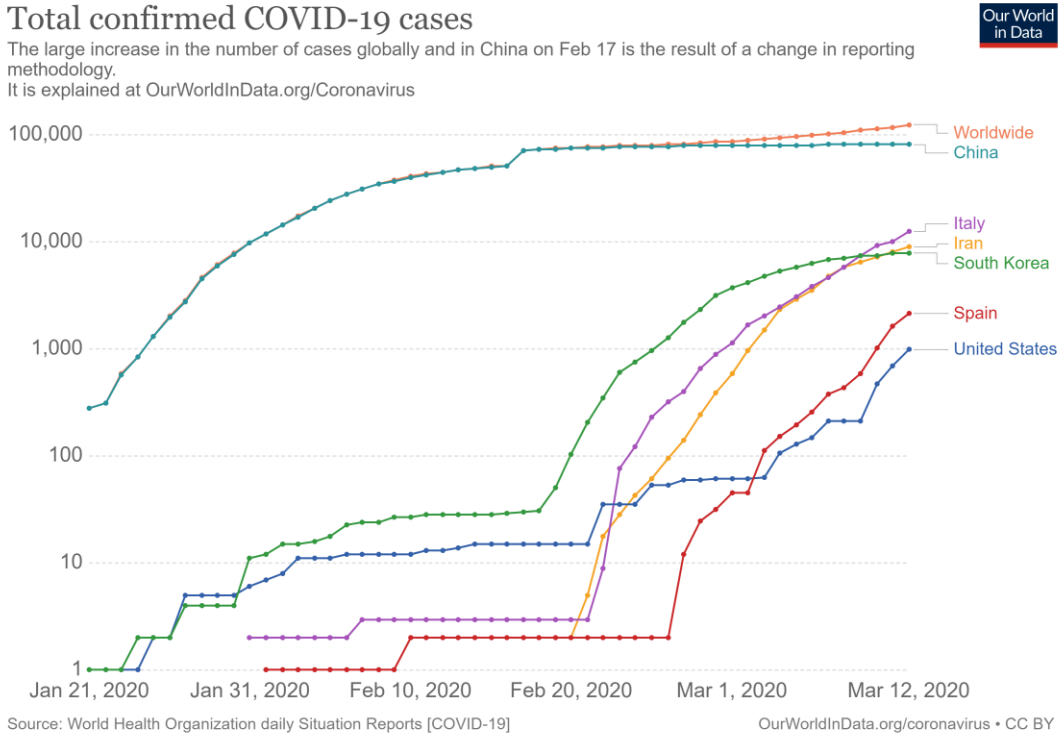


Linear versus logarithmic representation

Linear



Logarithmic



https://www.worldometers.info/coronavirus/ accessed March 13, 2020

Economic channels

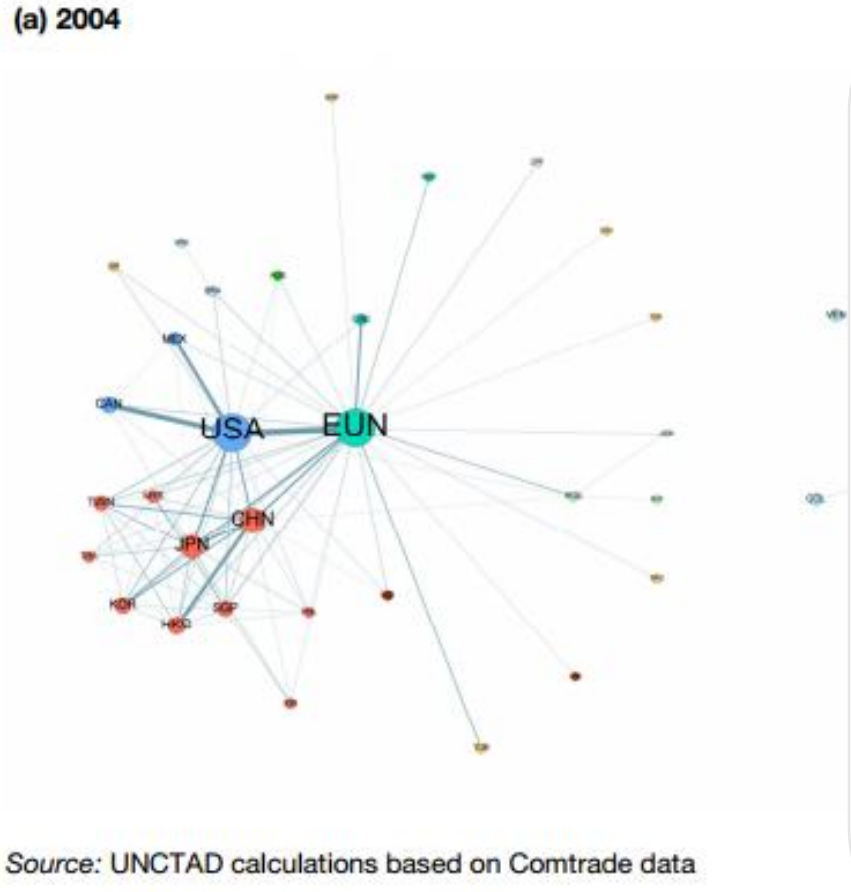
Containment measures	Supply	Demand
Quarantines	Factory closures	Loss of confidence
Travel bans and restrictions	Cutbacks in service provisions	Business and tourism travels
Closure of public places	Supply chain disruption	Education and entertainment services

Economic channels

Containment measures	Supply	Demand	Missing drivers
Quarantines	Factory closures	Loss of confidence	Wealth effects
Travel bans and restrictions	Cutbacks in service provisions	Business and tourism travels	Fear
Closure of public places	Supply chain disruption	Education and entertainment services	Avoidance
Costs of intervention	**Uncertainty, business failures**	**Unemployment**	**Irrationality**

Supply versus Demand

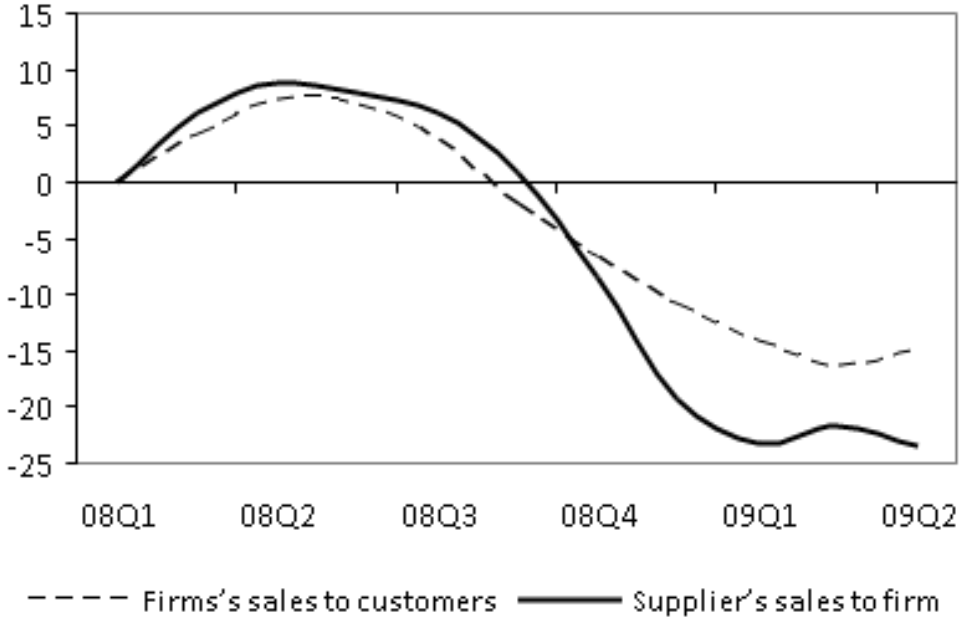
Transmission of Shocks via Global Networks (Value Chains) faster that earlier pandemics.



Source: UNCTAD calculations based on Comtrade data

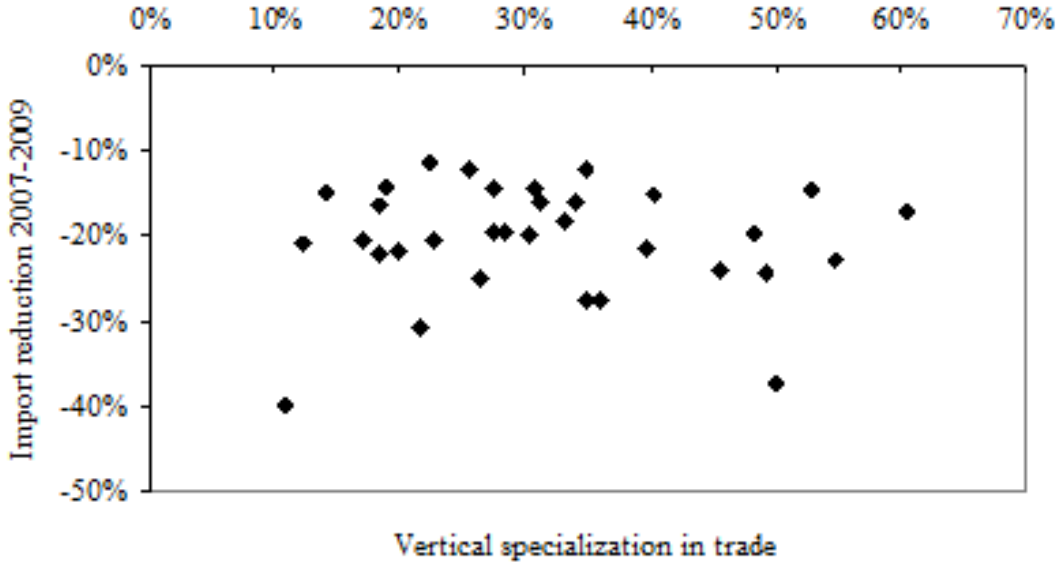
Contagion and international value chains

Bullwhip effect 2008Q1/9Q2 (per cent deviation from levels at the start of 2008Q1)



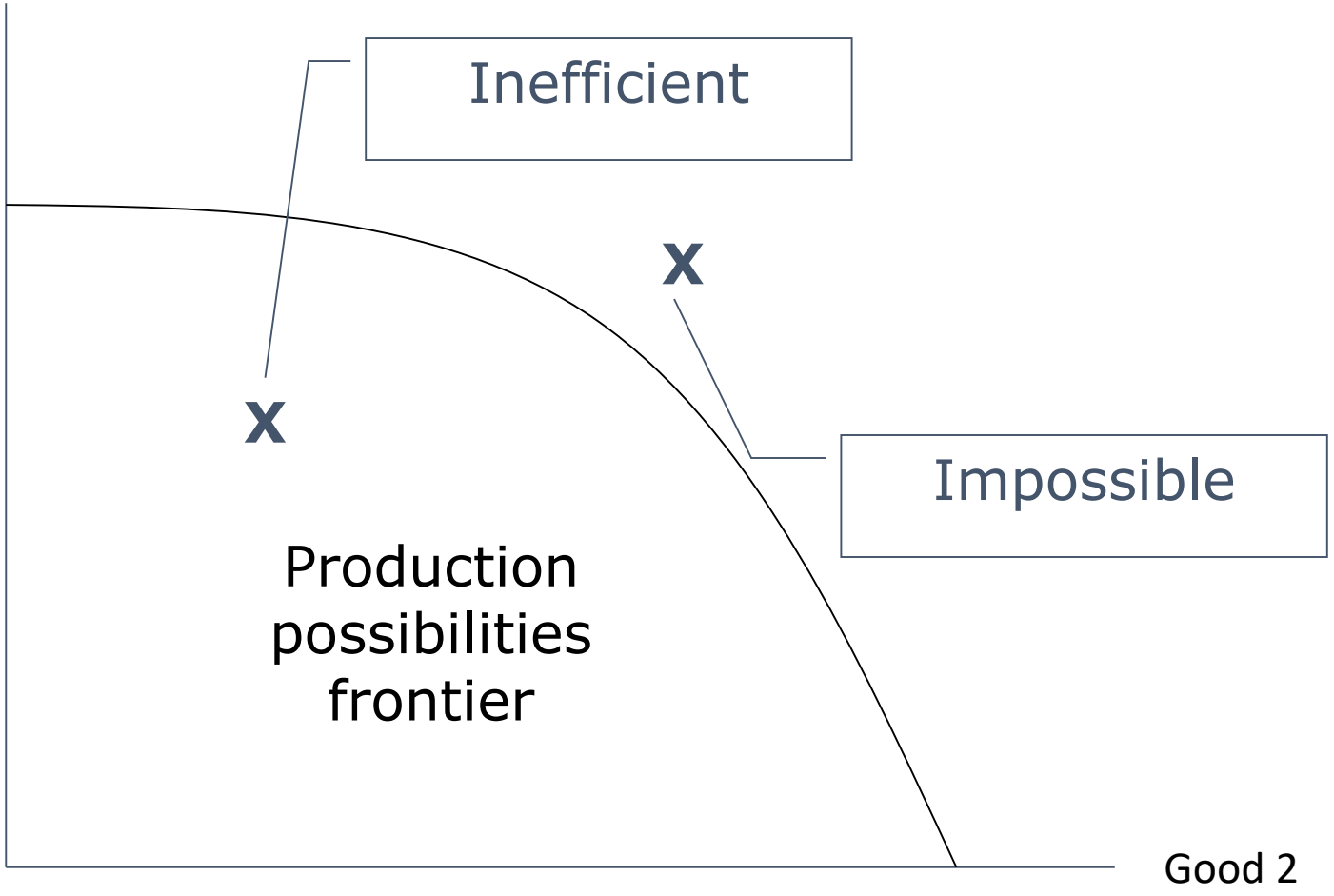
Unweighted simple average based on publicly reported data from DSM, Philips, Akzo Nobel and Thyssen Krupp (Peels et al., 2009, p. 6 and appendix)

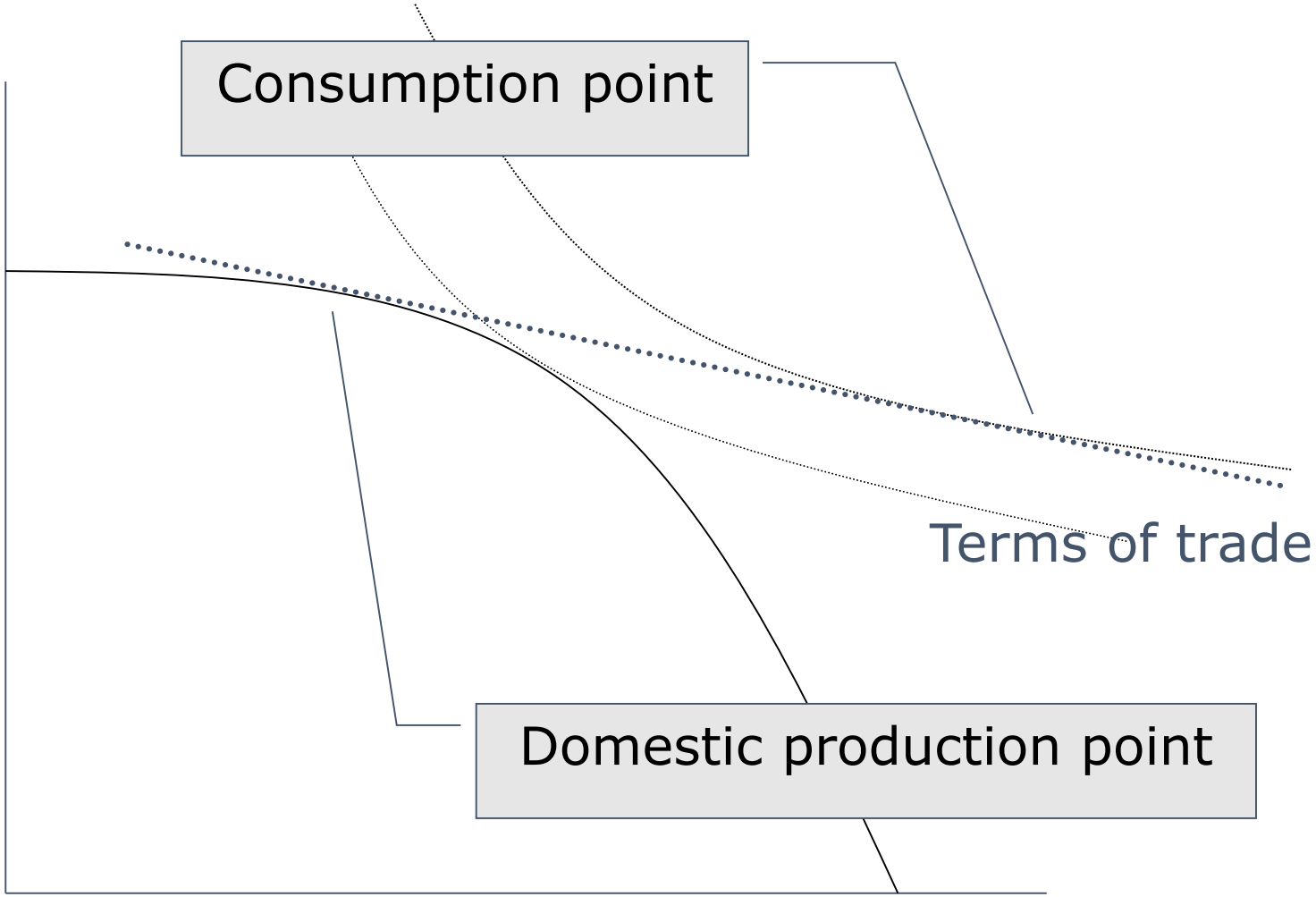
Import reduction during the trade collapse versus share of vertical specialization in trade



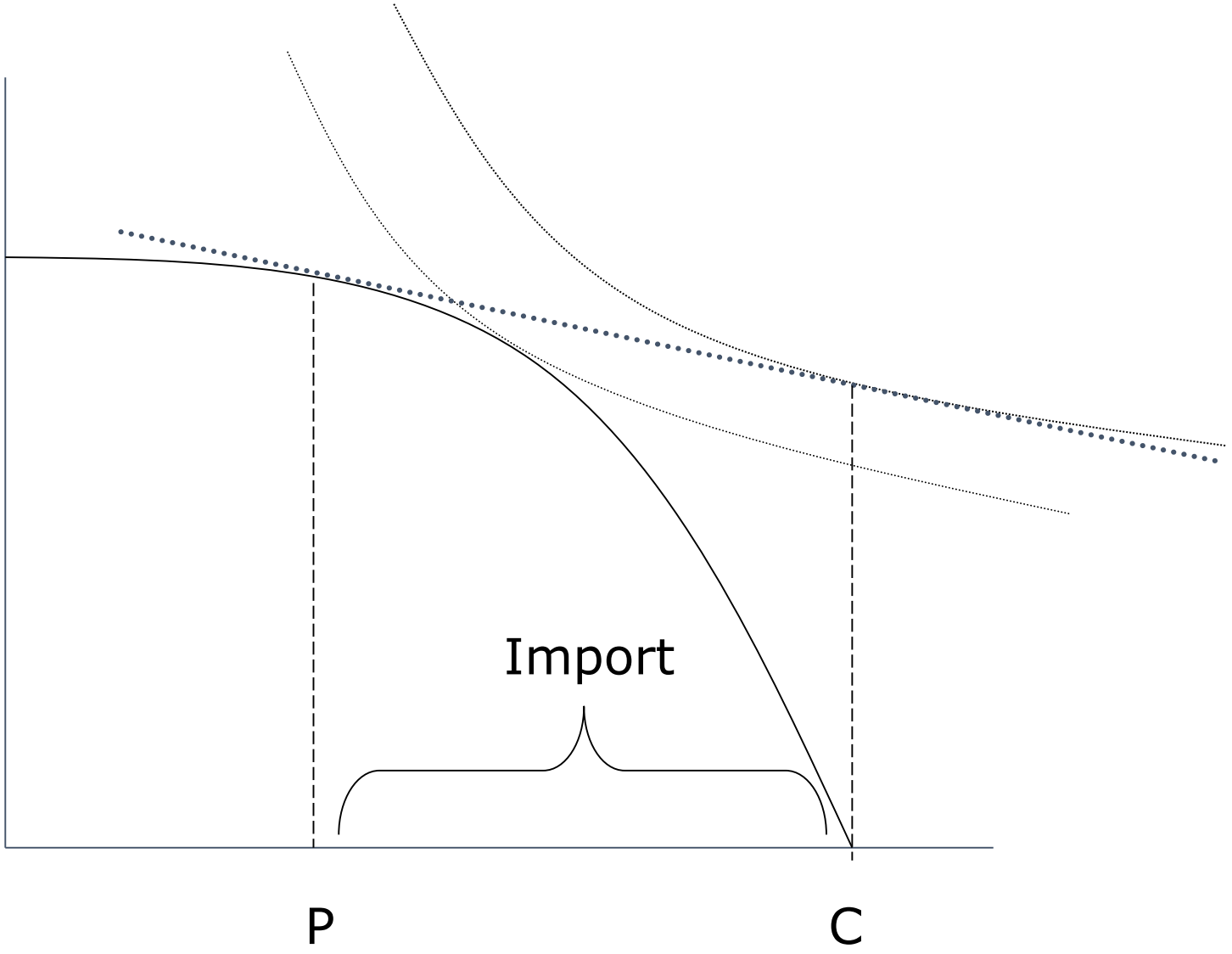
Trade shocks in the neoclassical trade model

Production possibilities

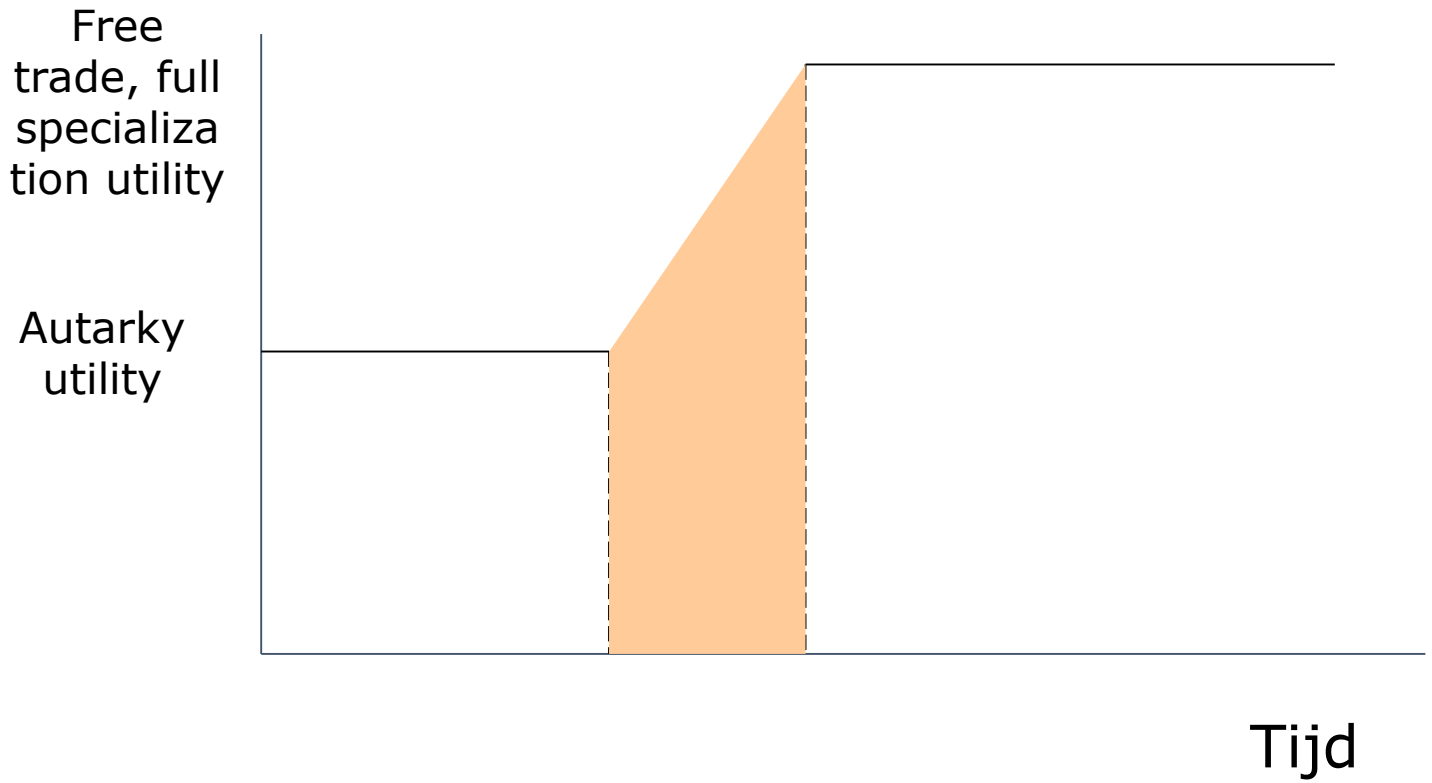



Consumption point
Terms of trade
Domestic production point

Theory of trade shocks



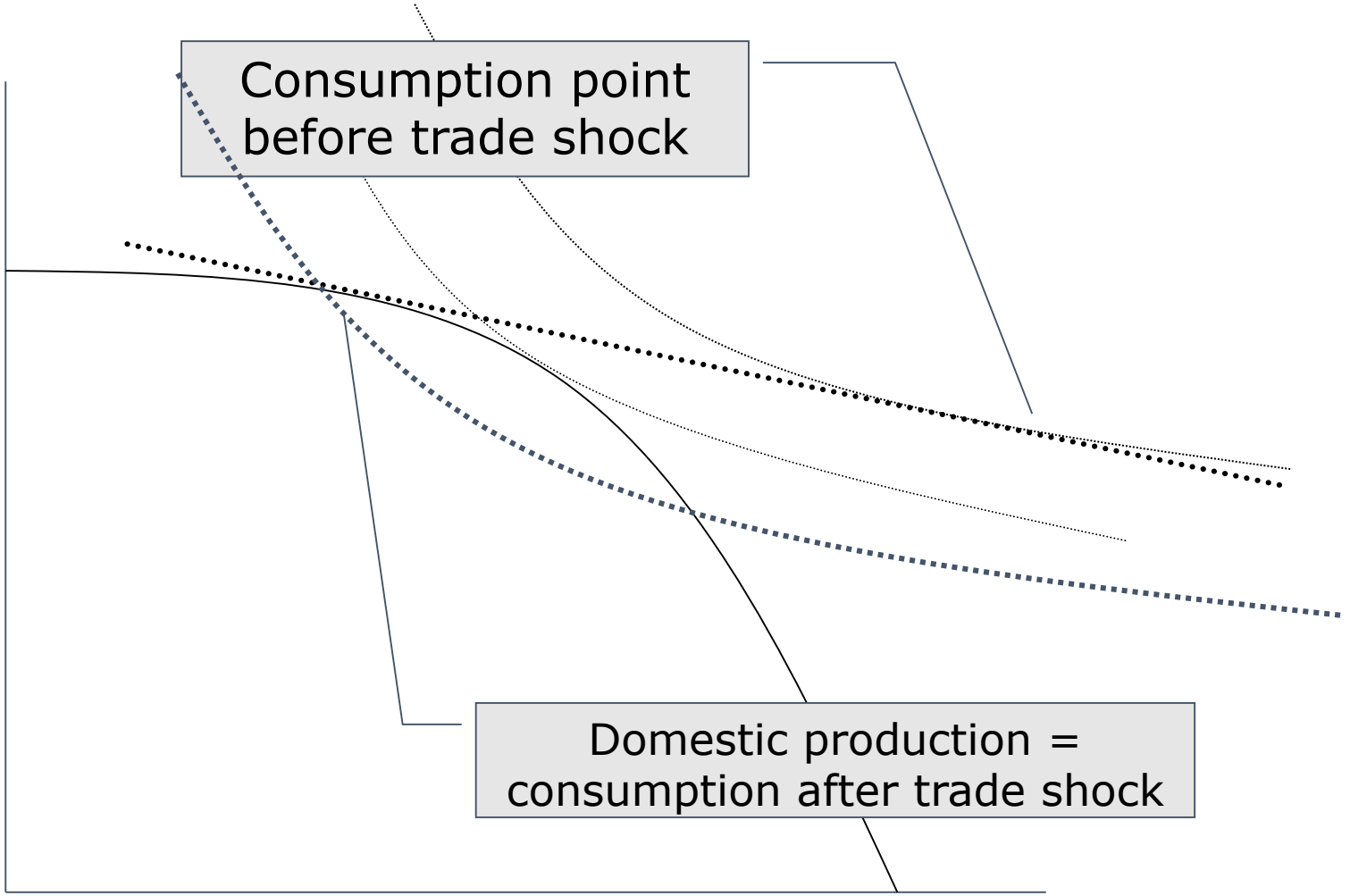
Welfare over time



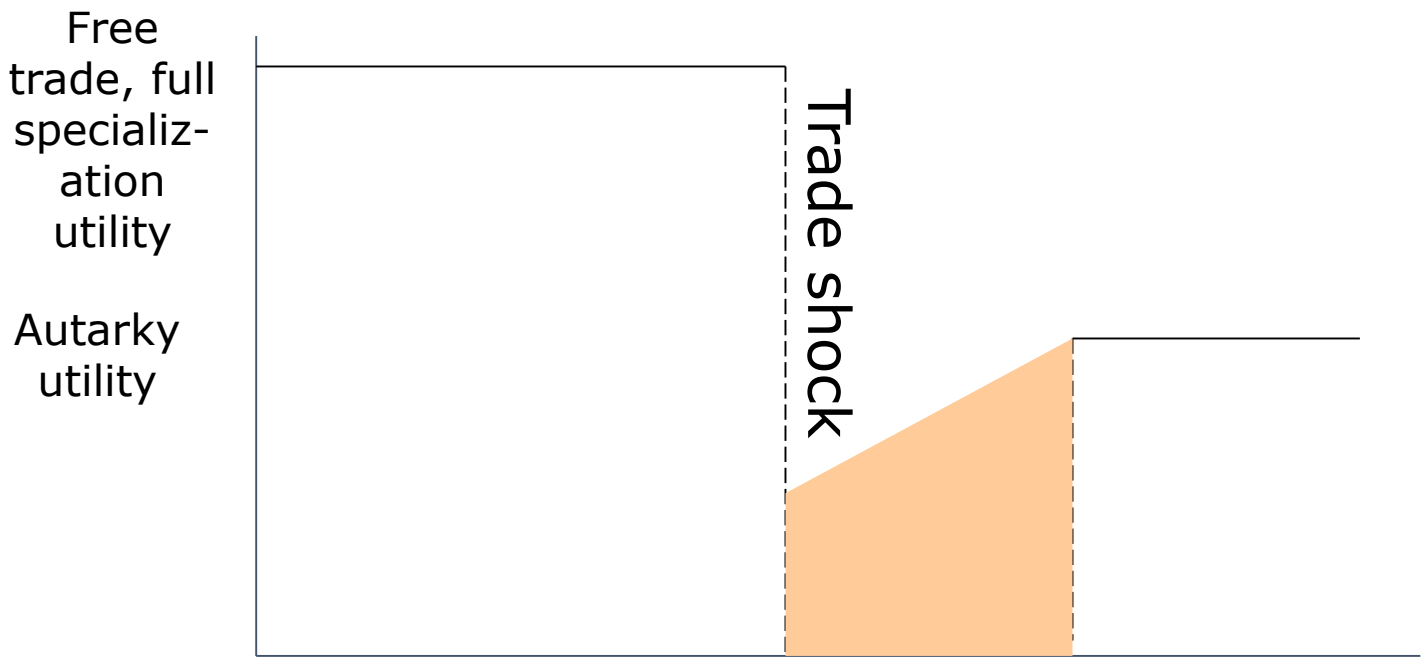
Liberalization: from autarky to free trade

- Opening of trade (different price ratio's)
- Specialization starts: growing export sector; declining import sector
- Reallocation of factors of production takes time
- Consumption (welfare) follows specialization
- Note that this is a positive trade shock

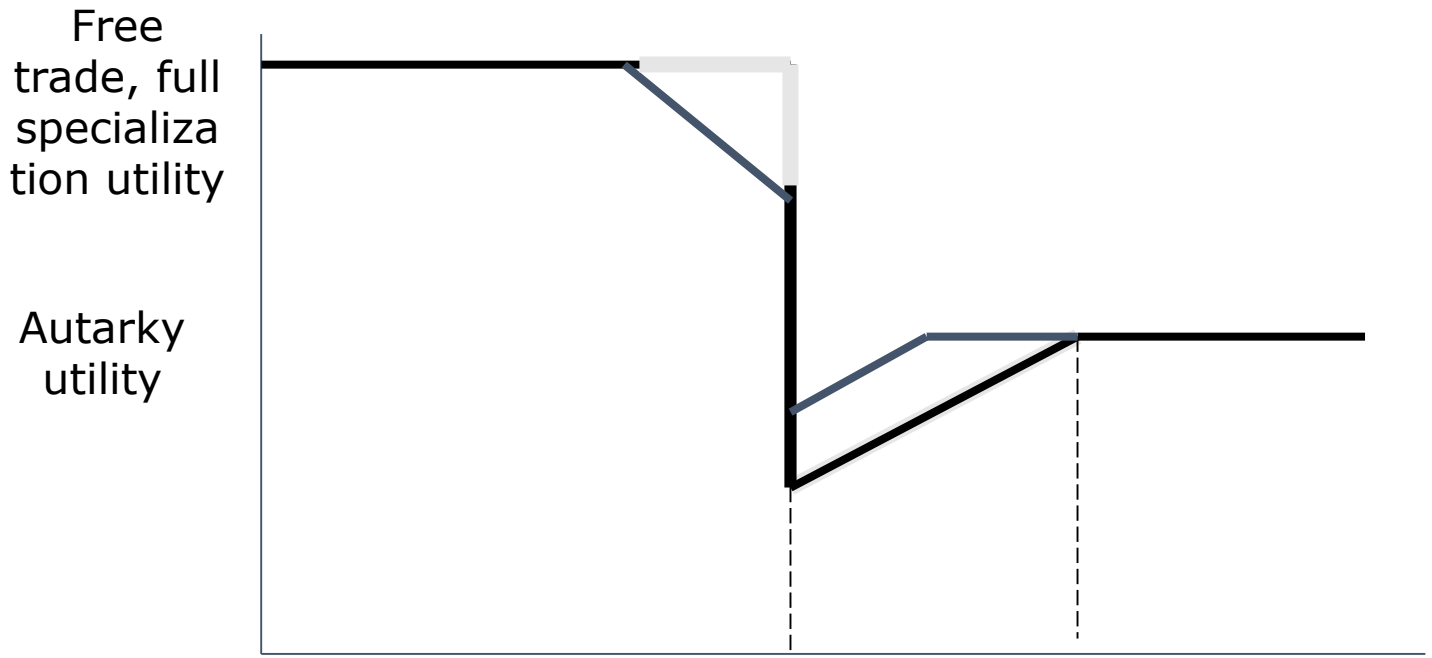
- What happens if a trade shock occurs?
- So movement from free trade to autarky!


Consumption point before trade shock
Domestic production = consumption after trade shock

Welfare over time



Welfare over time

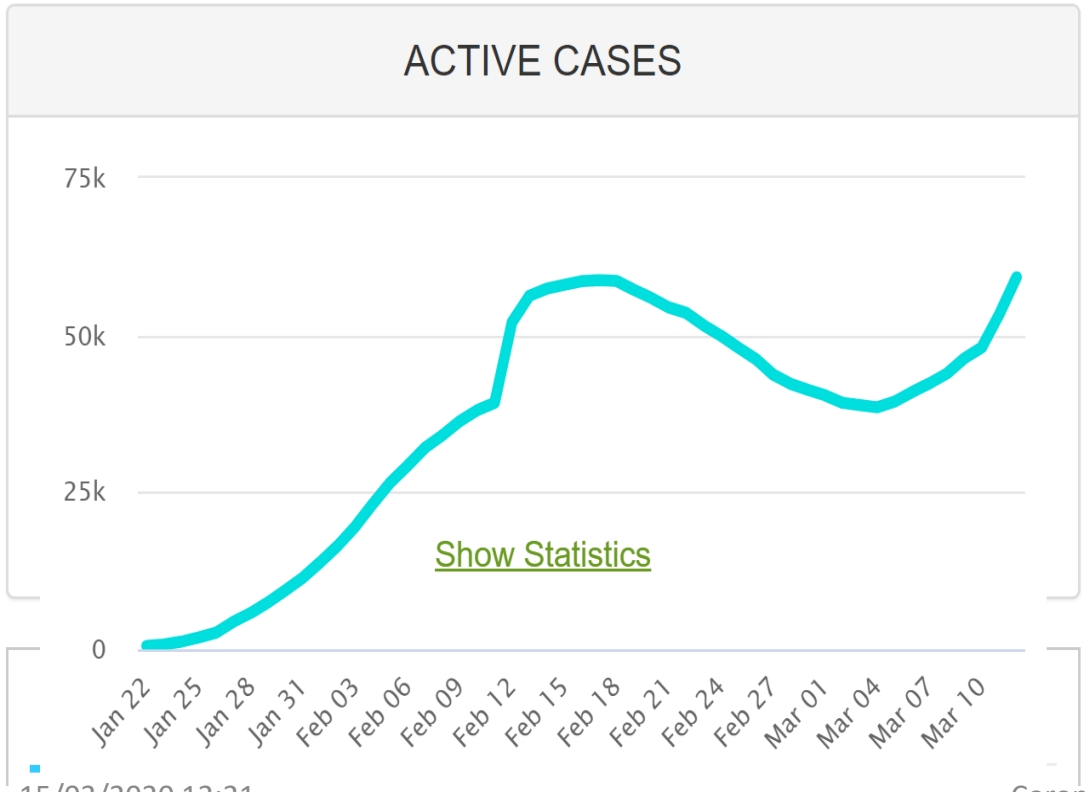


Two major implications follow from this model

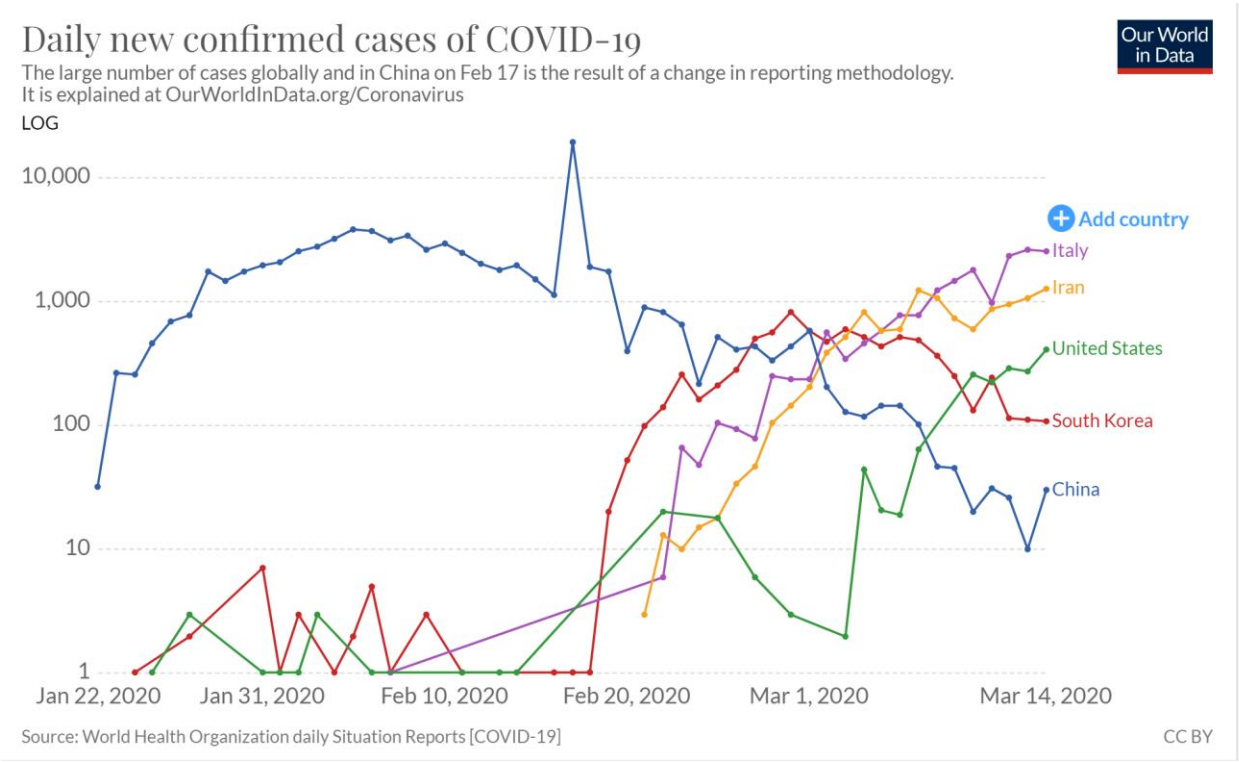
- The initial impact of a trade shock is deeper that the long run impact
- For the future, firms and consumers will realize the risks of globalization and see the benefits of lesser specialization. This is an additional force towards deglobalization

3. Key data and stylized facts

https://www.worldometers.info/coronavirus/



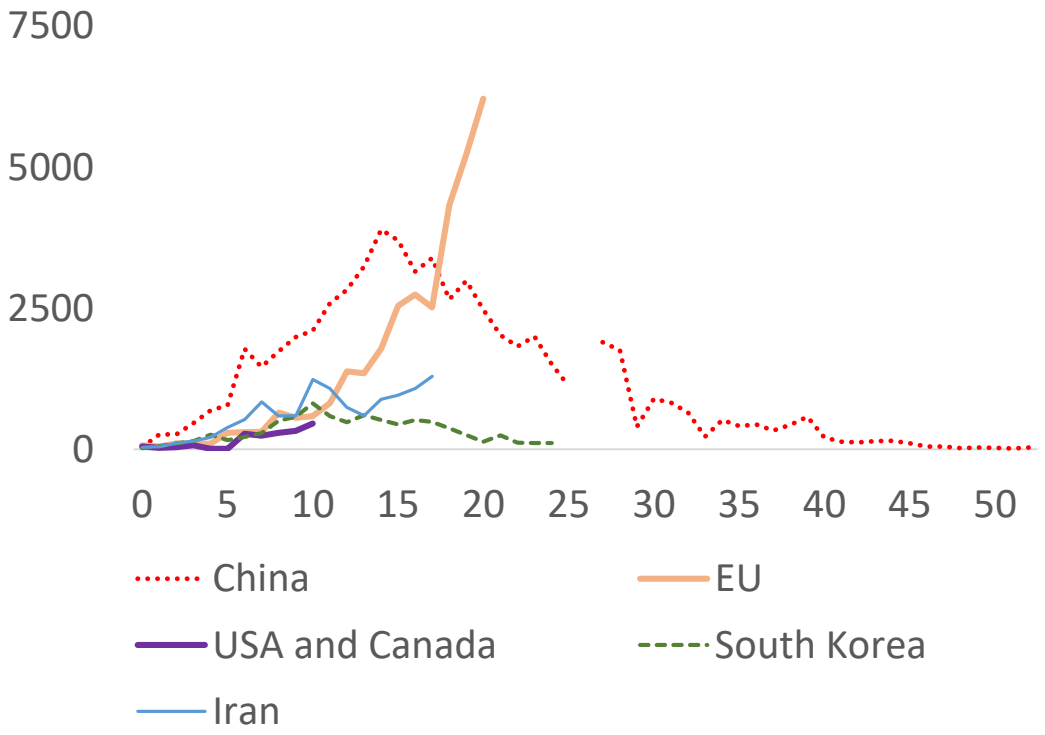
https://ourworldindata.org/coronavirus



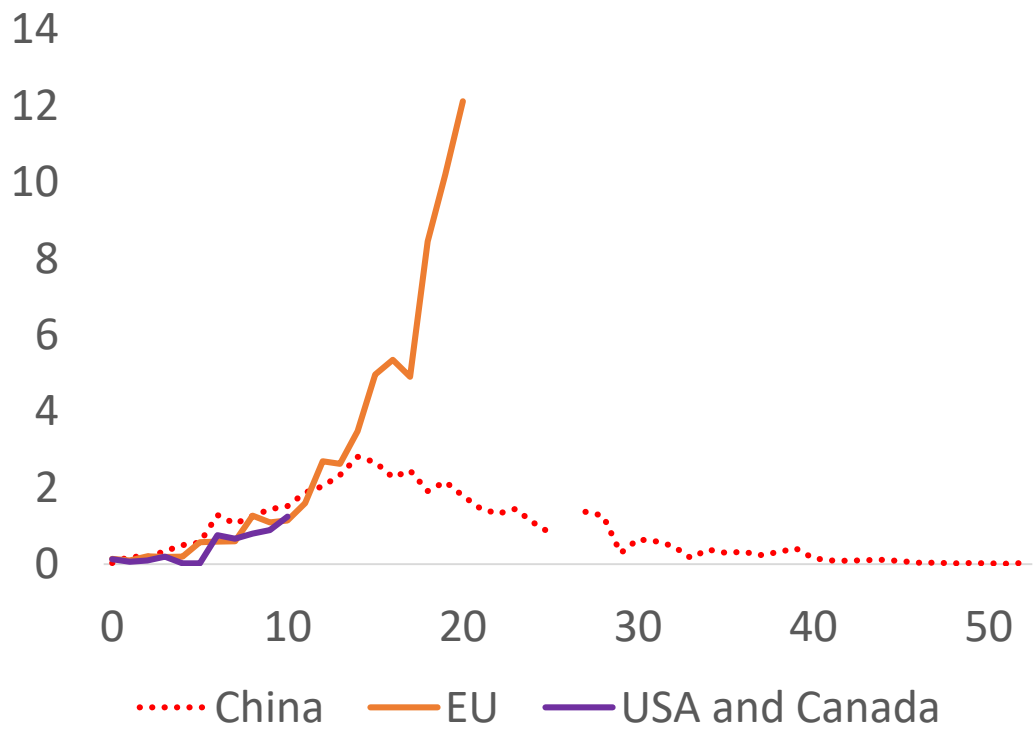
Interpreting the data

(series start when more than 20 cases per day are reported)

New cases



New cases per million population

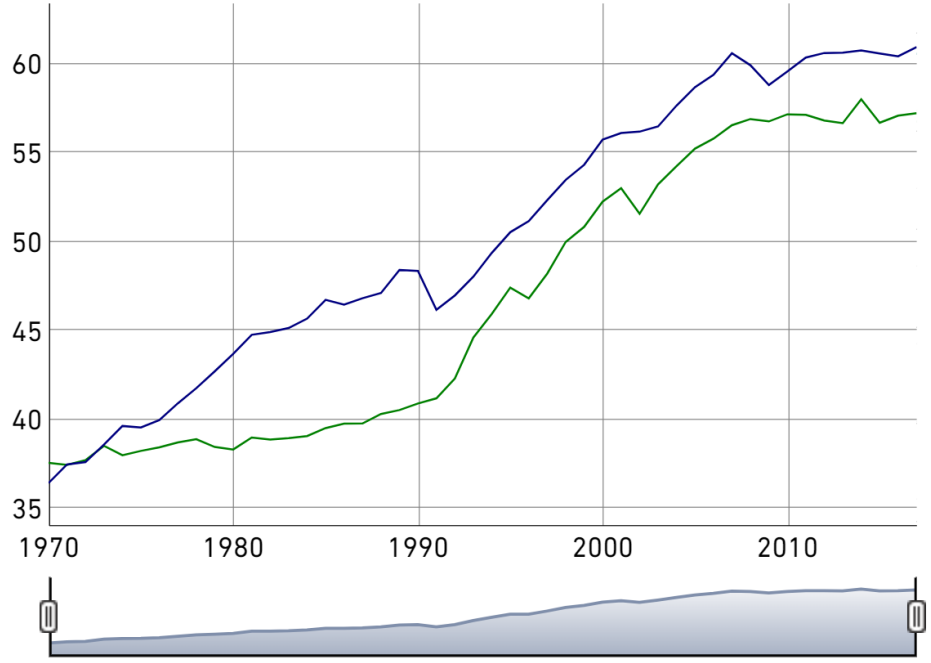


Preliminary Findings

- China has been able to contain and the same seems true for South Korea. The top in the number of patients occurs after about 4 weeks.
- The virus spreads and as it does the epicenter of the pandemic shifts toward Europe and then probably the US.
- This generates a cycle in the number of patients.

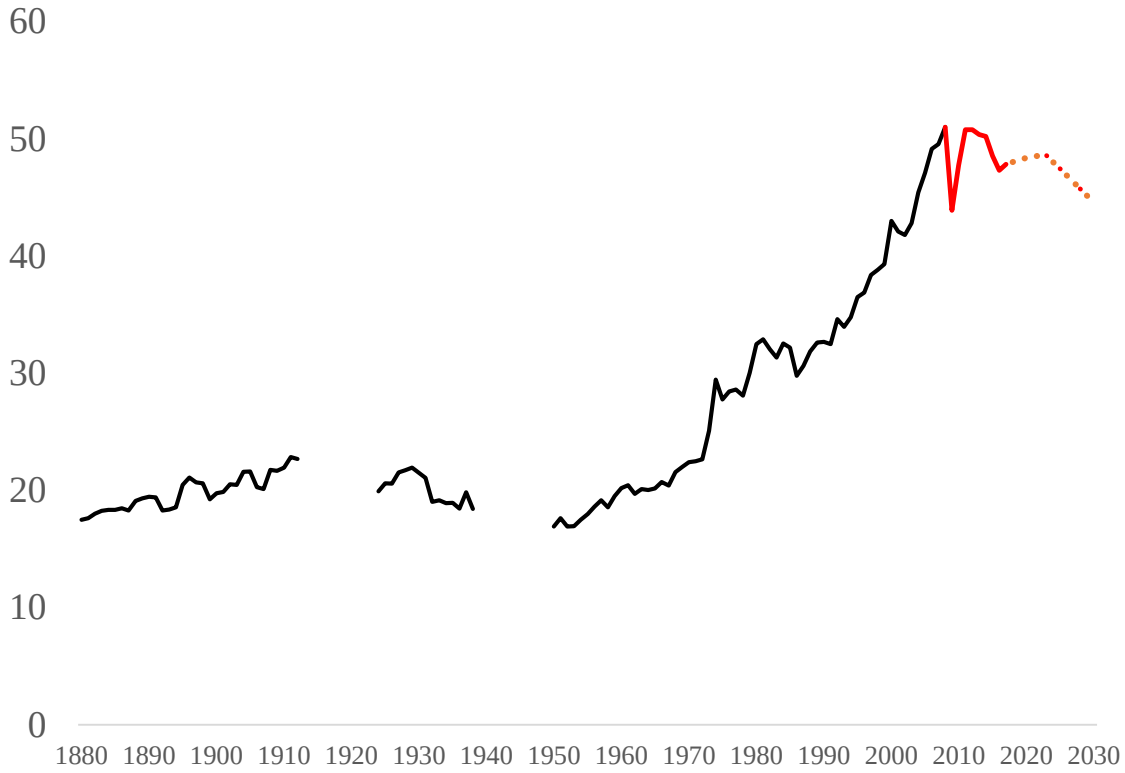
4.Before Corona: Deglobalization 2.0

KOF globalization index 1970-2017



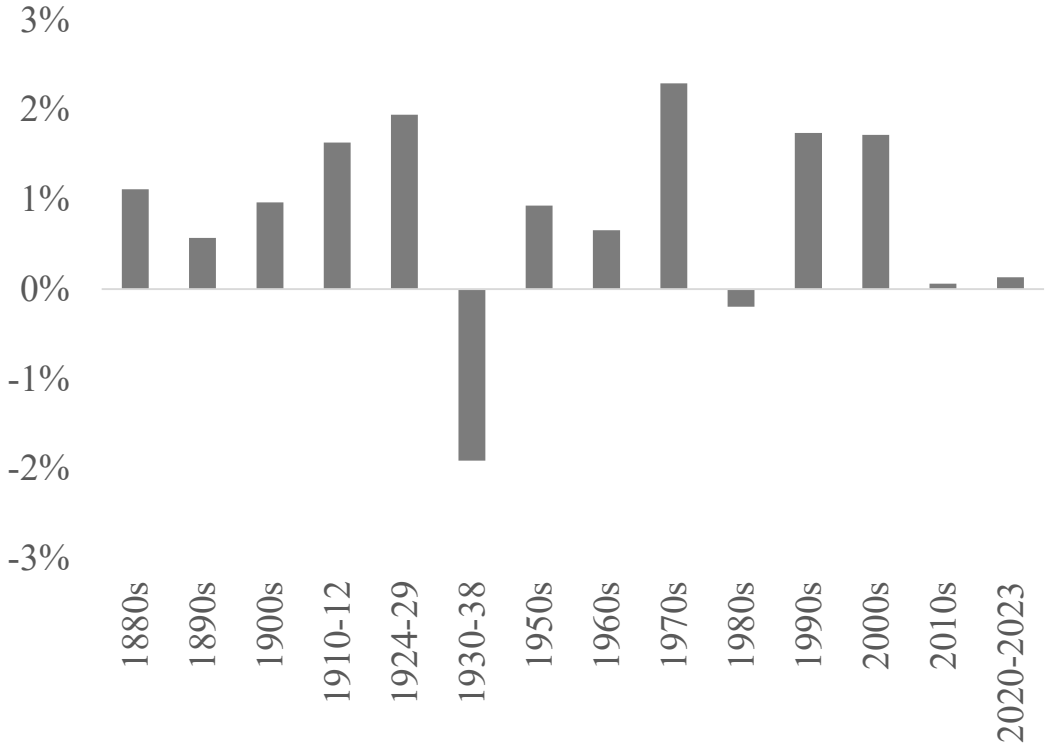
Accessed March 15,2020

Openness of the world economy

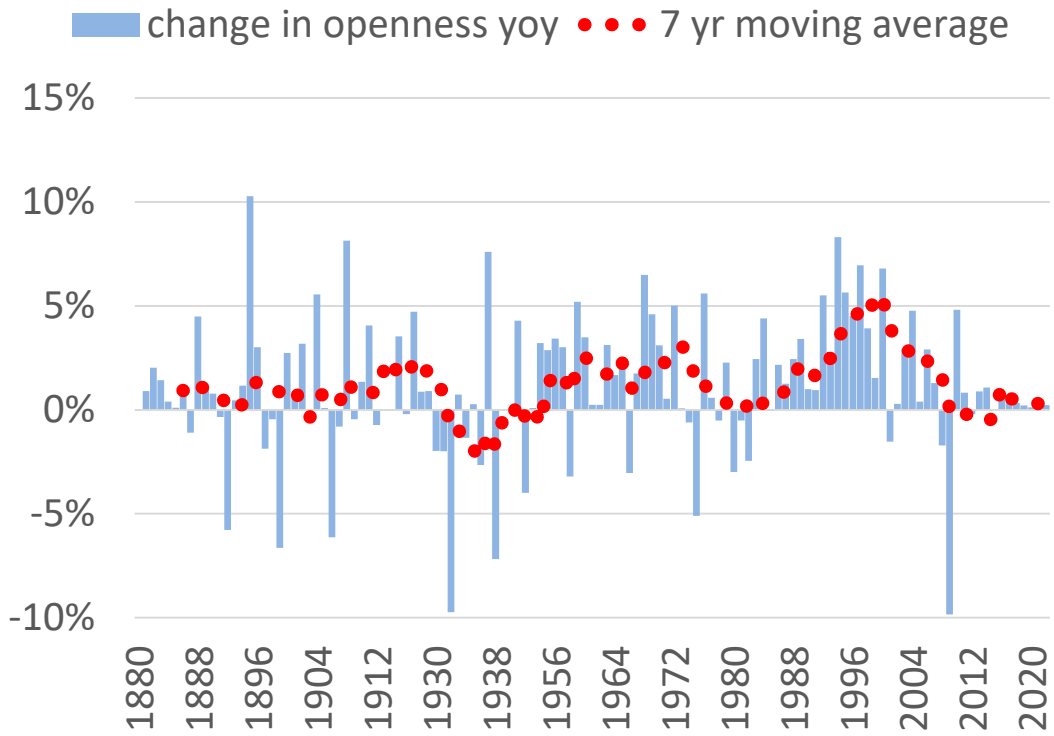


4.Before Corona: Deglobalization 2.0

Change in world openness by decade



Change in world openness 1880-2020



Some differences and similarities of the context of the 1930s and the 2000s

	1930s	2000s
Long-run reductions of trade costs	●	●
New modes of transportation	●	●
Revolution in communication	●	●
Entry of new countries (recent capitalist countries)	●	●
Key innovations	●	●
Financial innovation and capital account liberalization	●	●
Changing hegemony	●	●
Saving surplus hegemon	●	
Multilateral trade governance		●
Protectionism	●	
Economically motivated mass migration	●	
Initial international policy coordination		●
Substantial presence of international value chains		●

Trade developments

World trade collapse 2008/9 and world trade slowdown

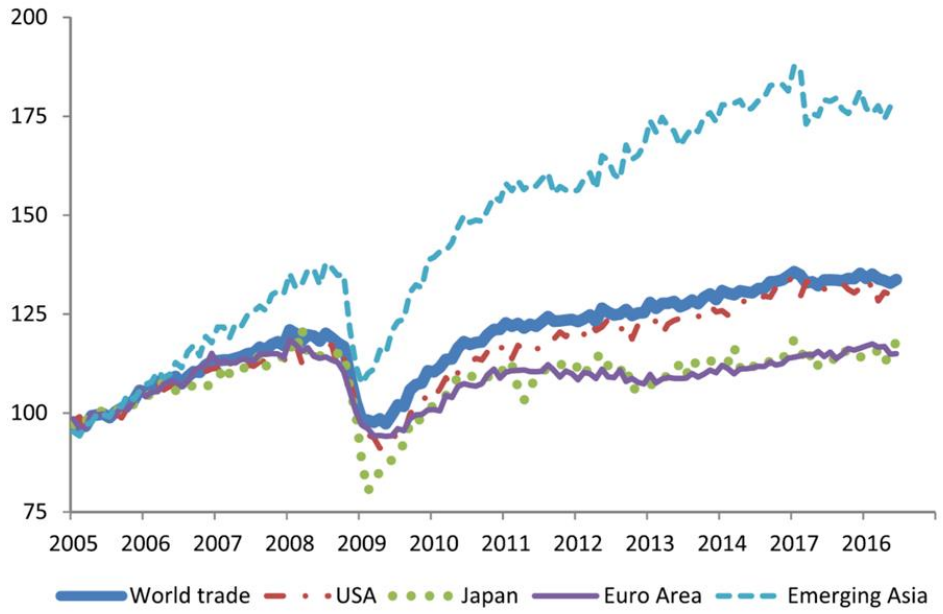
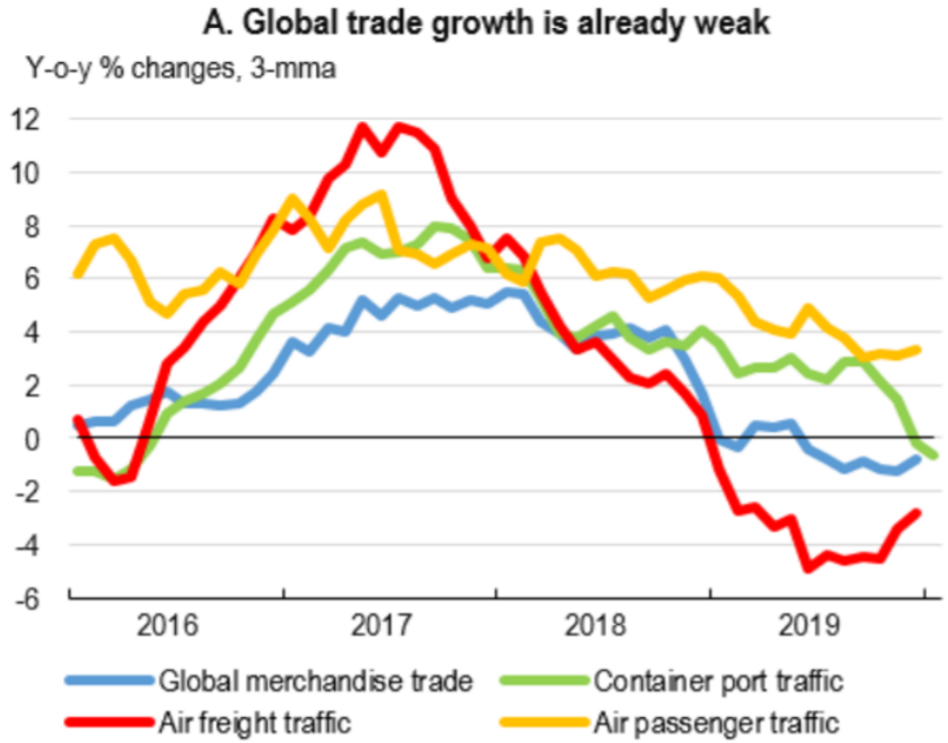


Fig. 3. Volume of Trade, selected regions and countries; index (2005 = 100)
sed on monthly data from CPB Netherlands Bureau for Economic Policy Analysis (CPB, date accessed 15 2016); trade volume for a country or region is average of export and import index.

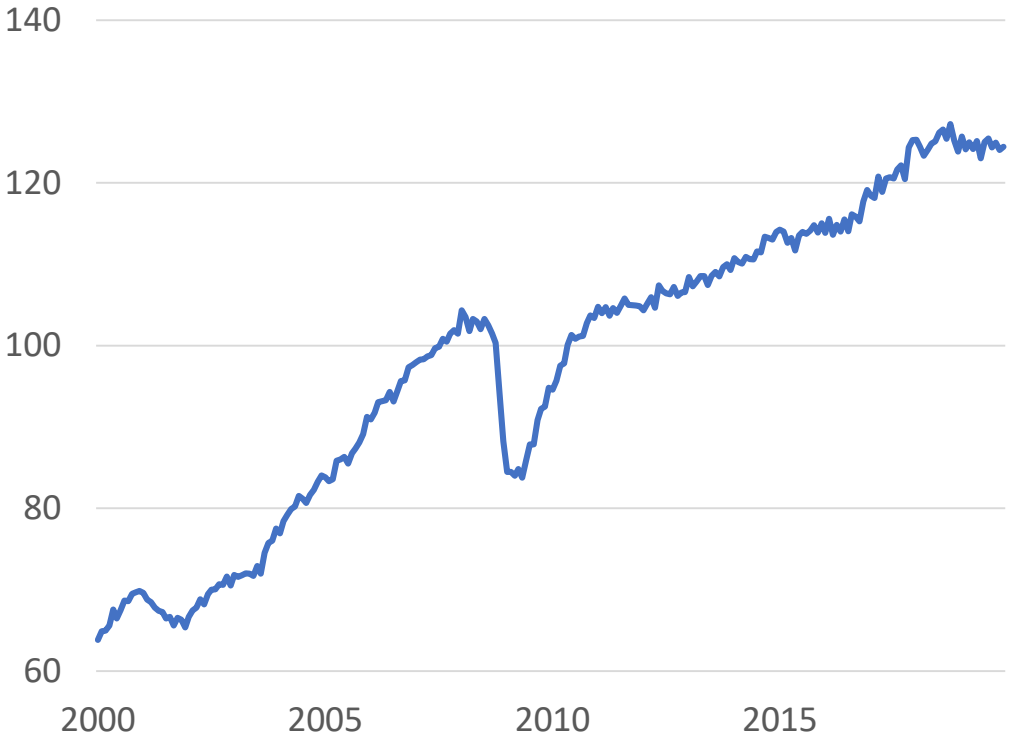
Trade weakness especially since mid 2019



World Trade (almost real time)

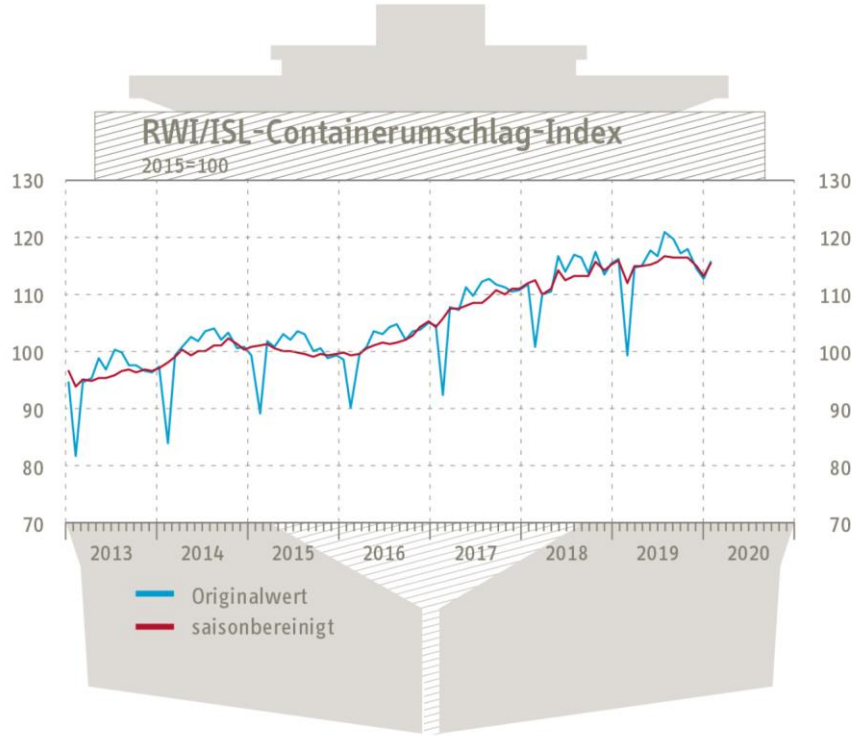
CPB world trade monitor 2000-2019

Index number



Container troughpout

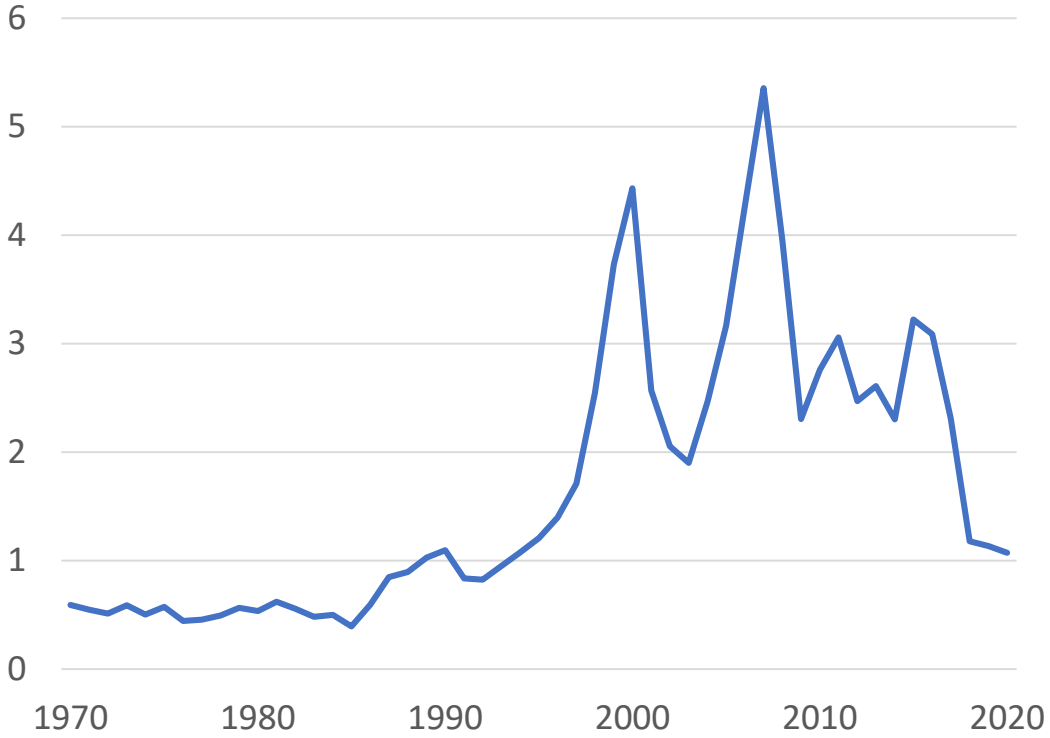
Index number



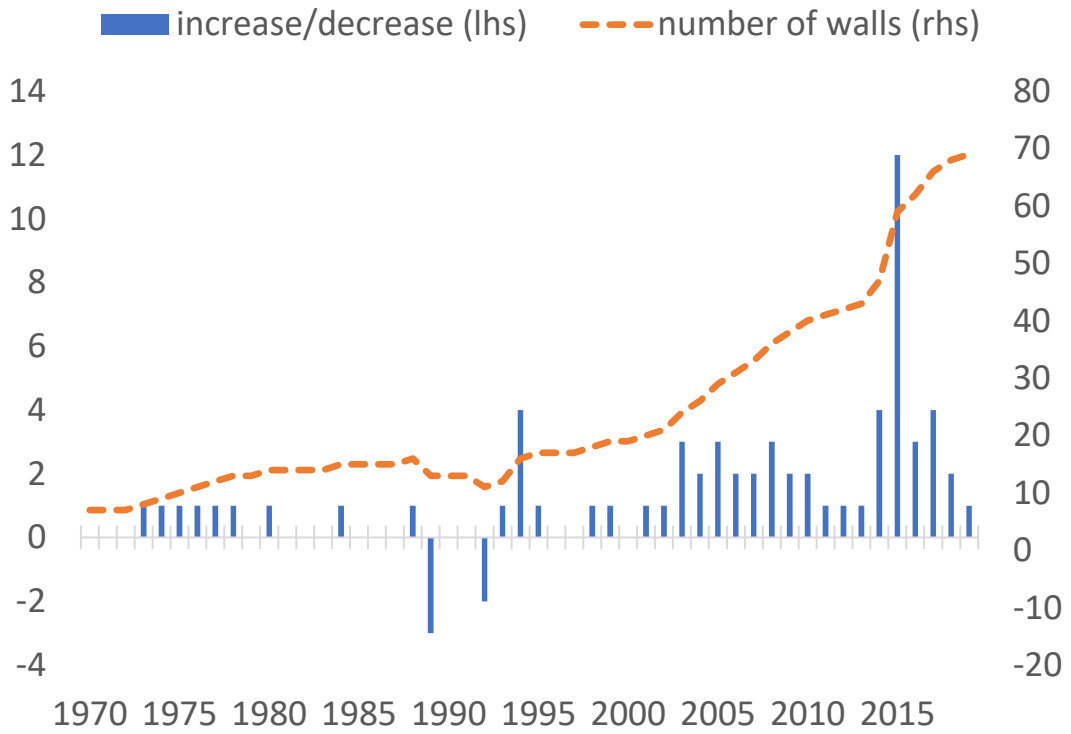
Date accessed: March 16 2020

Other correlates of deglobalization

FDI in percent of GPP

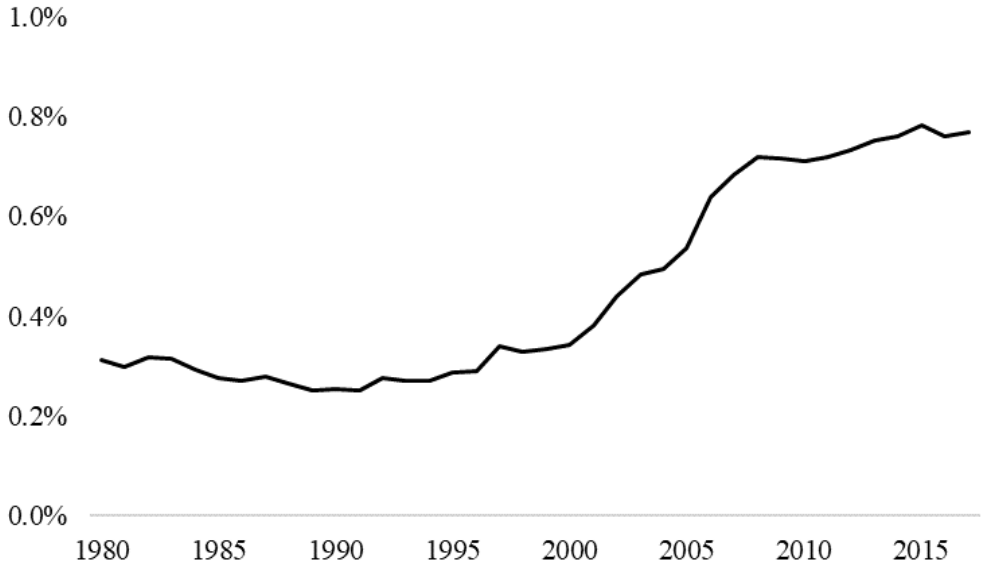


Border walls and fences 1970-2019



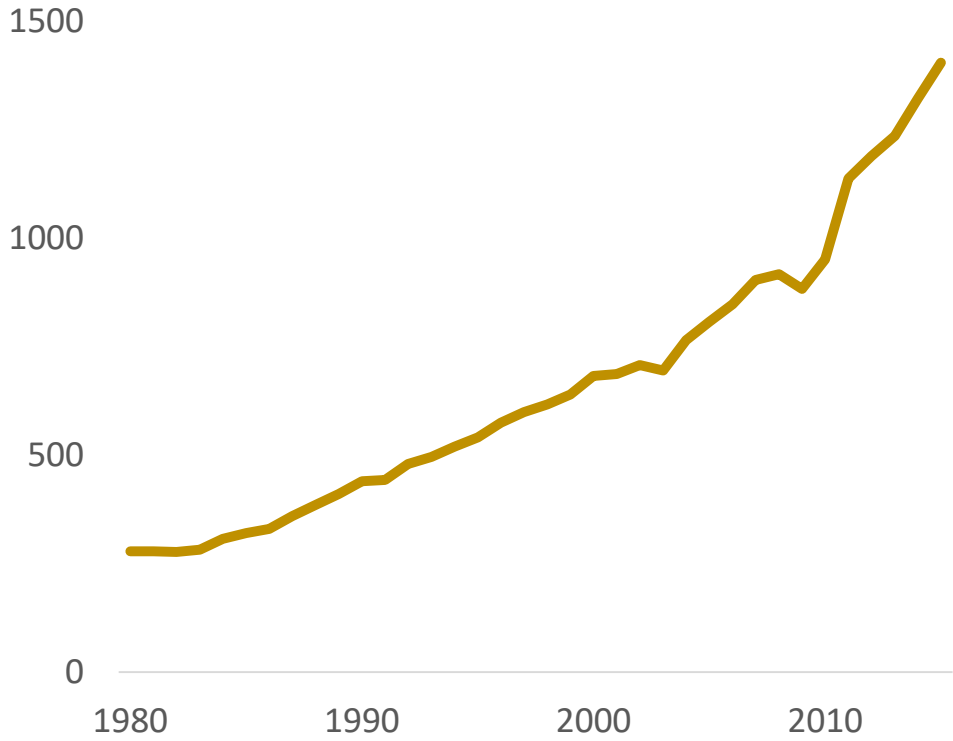
Private (household) flows

Remittances (%GPP 1980-2018)



Source: World Bank Migration and Remittances Data, Annual data (April 2018), available at http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data and accessed August 8, 2018 and IMF WEO data base (April 2018).

Global annual tourism arrivals (millions, 1980–2018)



Source: Roser (2018) based on UNWTO

Trump's foreign (trade) policy is rational

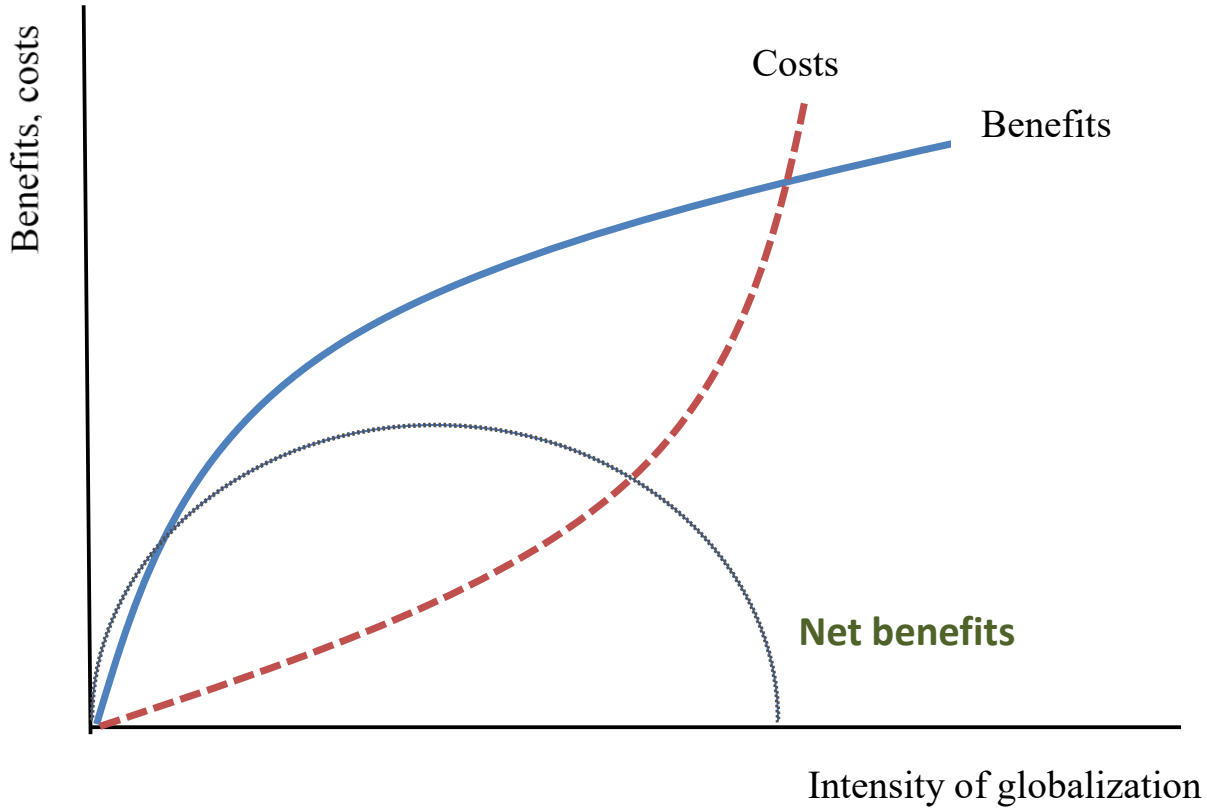
- Large Country can benefit from trade restriction (terms of trade)
- Neo-Mercantilistic: hurt the adversary more
- Destroy the governance instruments of the next hegemon
- It is dangerous, but not irrational

Maximum impact trade wars in 2030 (percentage change from base line)

	US-China-EU trade war		US-OECD trade war	
	GDP	import openness	GDP	import openness
United States	-1.2	-21.0	-3.1	-45.1
China	-3.5	-12.6	-4	-12.1
European Union	-1.7	-2.1	-2.1	-1.6
World	-1.2	-4.3	-2.5	-9.2

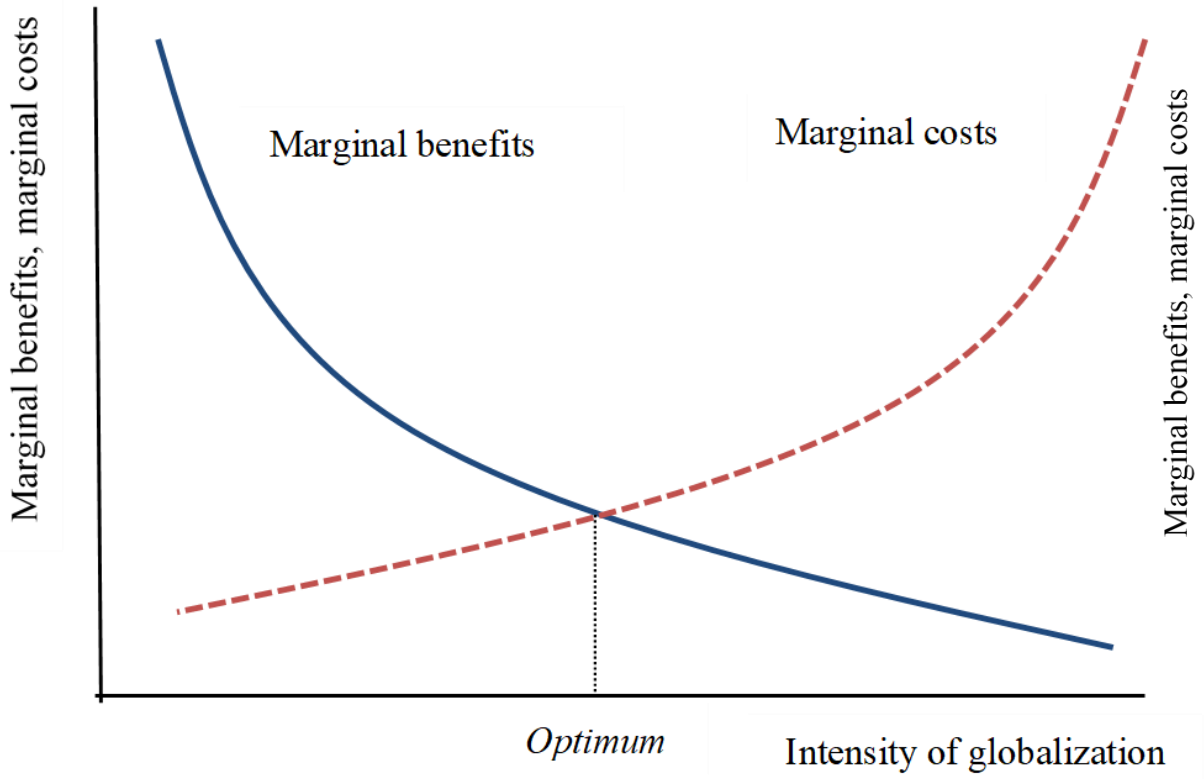
Source: Bollen and Rojas-Romagosa, 2018, Appendix 3.

Costs and benefits of globalization

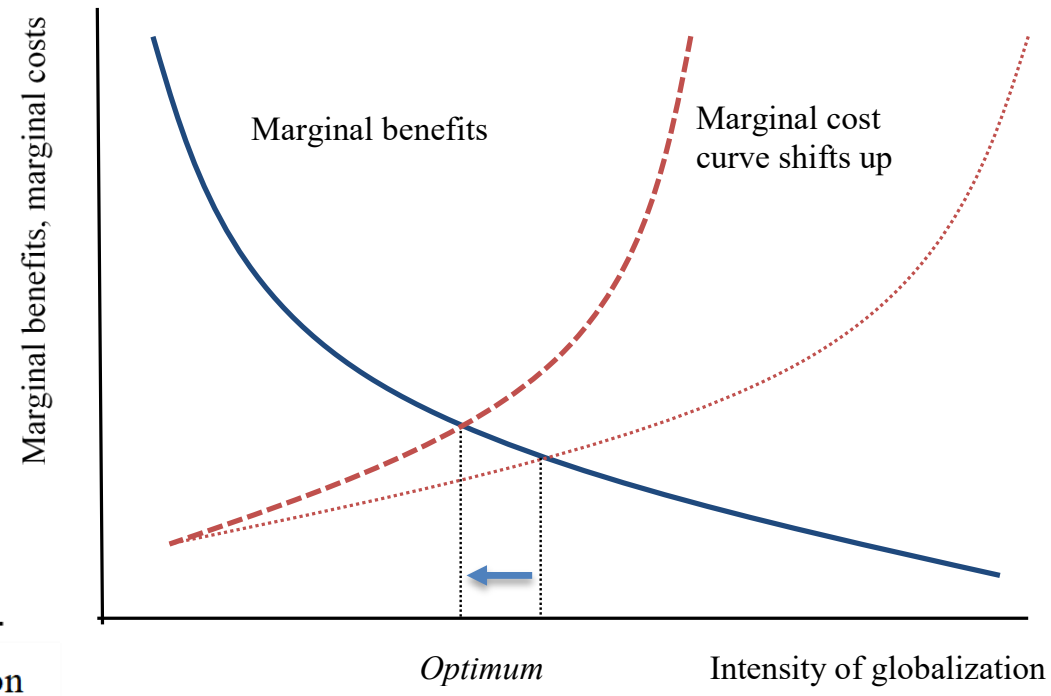


Shift in marginal cost schedule

Marginal costs and benefits, optimum intensity



Shift in marginal cost schedule



Conclusions

5.What did we learn?

- The policy and scientific communities were prepared for a pandemic. Pandemics cannot be prevented, they can be managed to some extent
- The assessment is still very preliminary; we first need data The economic impact of the corona virus is not catastrophic even when the costs of policy measures are higher than expected
- Economic corona shocks are going to cascade until group immunity at the world level is sufficient
- The corona virus increases the ‘marginal cost of intensified globalization’ (the curve shifts up) and the optimal level of globalization is reduced

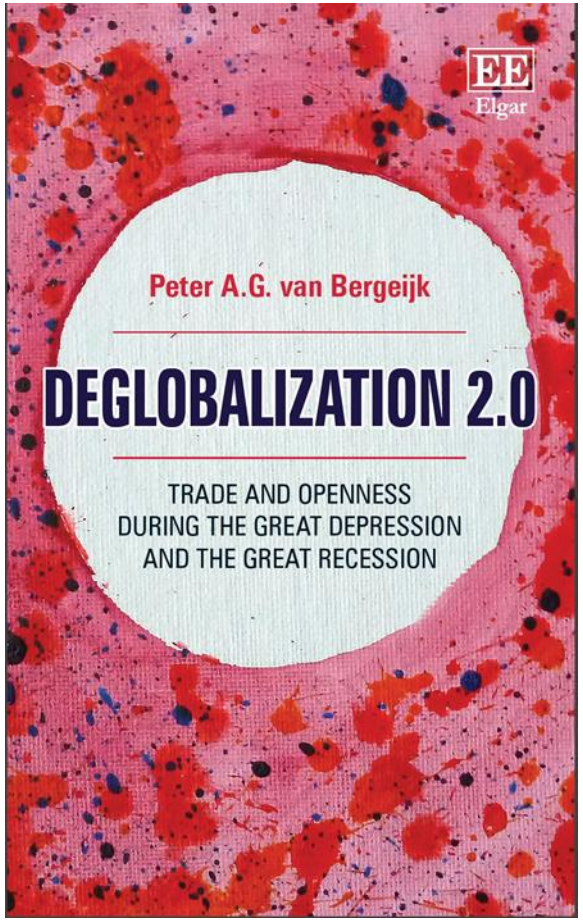
Accessed March 15,2020

Conclusions

5. What's next?

- We will see cascading trade shocks. Trade uncertainty will increase and reduce international specialization. Deglobalization will deepen, also when the virus disappears
- If we can keep our heads cool and implement trustworthy, sustainable and transparent policies, this crisis is manageable
- If irrationality, denial and fake statistics get the overhand this may develop into another global financial crisis – even though the real economy impact is manageable
- You can help! Stay calm, stay safe.

Useful Resources



SCAN ME

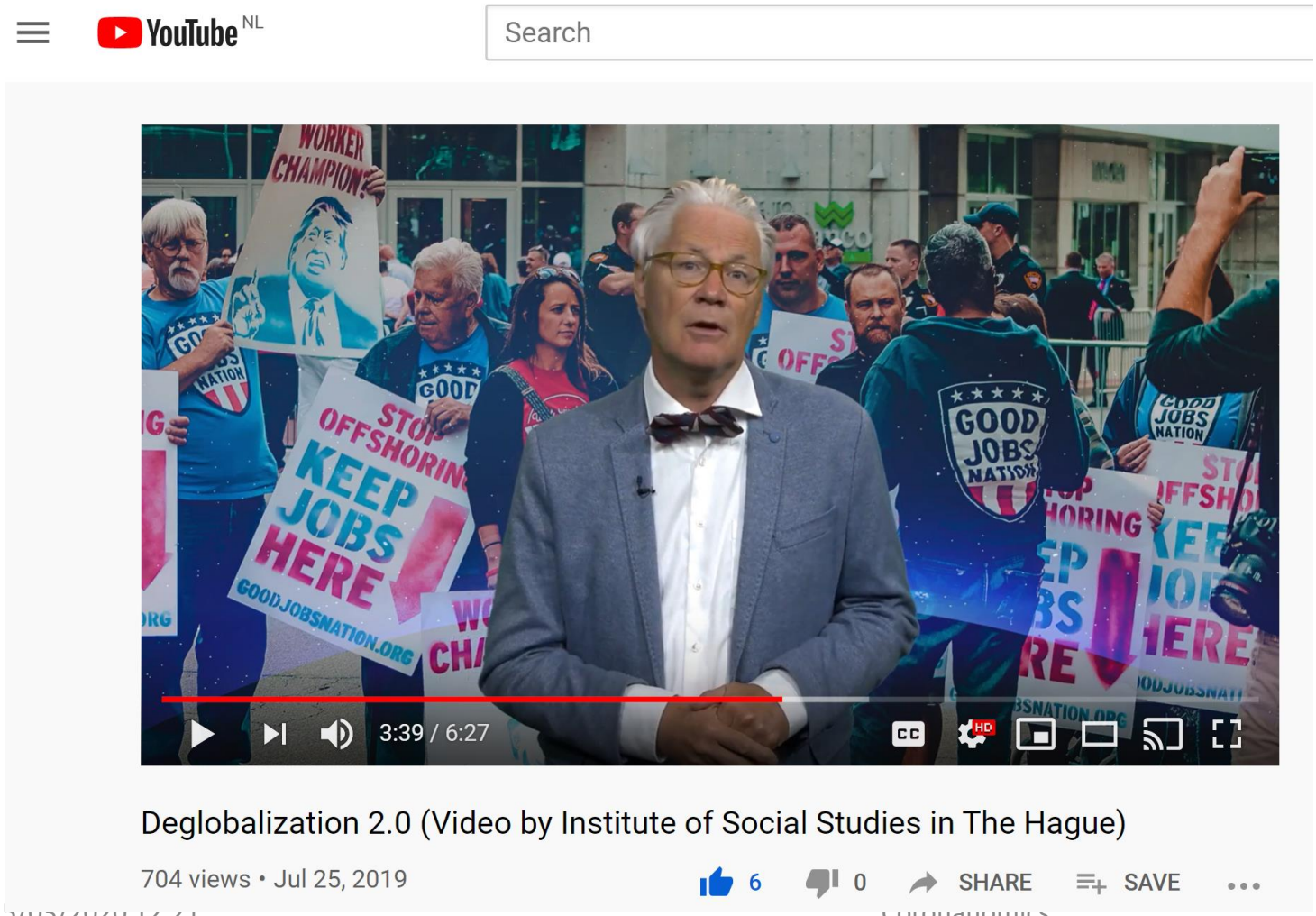
Useful Resources

- CEPR, Economics in the time of COVID-19 by Richard Baldwin, Beatrice Weder di Mauro, https://voxeu.org/article/economics-time-covid-19-new-ebook
- OECD Interim Economic Assessment "Coronavirus: The world economy at risk March 2020, http://www.oecd.org/berlin/publikationen/Interim-Economic-Assessment-2-March-2020.pdf.
- Our world in data (interactive curevs, doubling time, data) "Coronavirus Disease (COVID-19) – Research and Statistics by Max Roser, Hannah Ritchie and Esteban Ortiz-Ospina"), https://ourworldindata.org/coronavirus
- UNCTAD, The Coronavirus Shock: A Story of Another Global Crisis Foretold https://unctad.org/en/PublicationsLibrary/gds_tdr2019_update_coronavirus.pdf
- UNCTAD, Global investment monitor, Impact of The Coronavirus Outbreak on Global FDI
- Voxeu (columns for economic policy makers), : https://voxeu.org/article/oil-price-wars-time-covid-19 (Links to an external site.) and https://voxeu.org/article/coronavirus-and-macroeconomic-policy
- World-o-meters (interactive curves the global level; data; active cases), https://www.worldometers.info/coronavirus/
- WTO trade barometers, https://www.wto.org/english/res_e/statis_e/wtoi_e.htm

Useful Data Resources on International Trade and Investment

- IMF WEO database (note that the update is due in April 2020) https://www.imf.org/external/ns/cs.aspx?id=28
- KOF globalization index (update due in March or April 2020) http://globalization.kof.ethz.ch/
- World development indicators (best to use the download options for the full data set) http://data.worldbank.org/data-catalog/world-development-indicators
- OECD (interactive): https://data.oecd.org/trade/trade-in-goods.htm and http://www.oecd.org/trade/ (also trade faciltation indicators)
- WTO https://www.wto.org/english/res_e/statis_e/statis_e.htm
- Global trade alert http://www.globaltradealert.org/data_extraction
- CPB World trade monitor https://www.cpb.nl/en/worldtrademonitor

Useful Resources



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