



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)

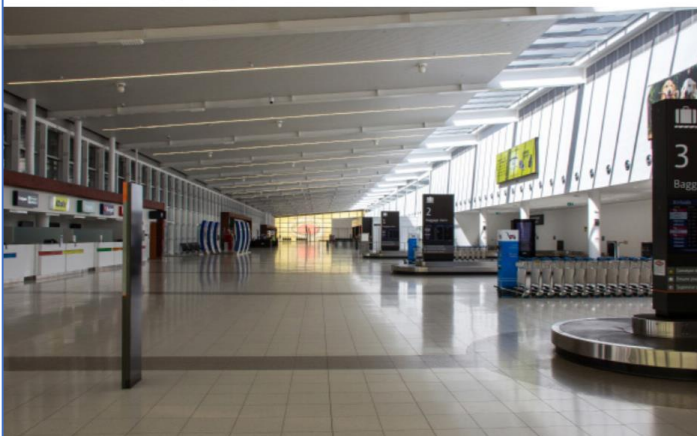


1. Focus on international trade and FDI: is that not missing the key point?

Why focus on trade?

OECD Interim Economic Assessment Coronavirus: The world economy at risk

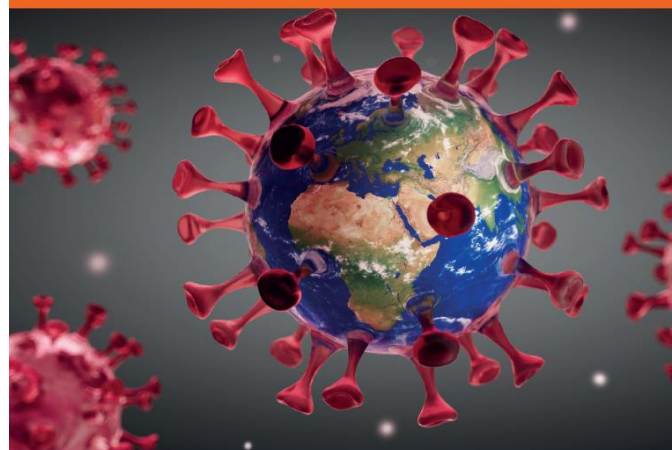
2 March 2020



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Economics in the Time of COVID-19

Edited by Richard Baldwin
and Beatrice Weder di Mauro



A VoxEU.org Book

Coronanomics

CEPR Press

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

TRADE AND DEVELOPMENT REPORT UPDATE

THE CORONAVIRUS SHOCK: A STORY OF ANOTHER GLOBAL CRISIS FORETOLD AND WHAT POLICYMAKERS SHOULD BE DOING ABOUT IT

Geneva, 9 March 2020

A year of living dangerously

The coronavirus crisis is first and foremost a public health threat, but it is also, and increasingly, an economic threat. The so-called "Covid-19" shock will trigger a recession in some countries and a deceleration of global annual growth to below 2.5 per cent -- often taken as the recessionary threshold for the world economy. The resulting hit to global income compared with what forecasters had been projecting for 2020 will be around the trillion-dollar mark; the bigger question is could it be worse?

The duration and depth of the crisis will depend on three variables: how far and fast the virus spreads, how long before a vaccine is found, and how effective policy makers will be in mitigating the damage to our physical and economic health and well-being. The uncertainty surrounding each of these variables is adding to people's sense of anxiety, which is a fourth variable that will shape crisis outcomes.

There are two possible readings of the economic consequences of the Covid-19 shock. The consensus view is that the shock has the potential to upset what was a spluttering but otherwise well-aligned global recovery that had set in during the second half of 2017, with the policy task at hand to nullify the new threats to a renewed economic confidence that had underpinned a string of optimistic growth forecasts for the coming years.

From this perspective, if the outbreak is short-lived, a familiar mix of accommodative monetary policies (ideally limited to cuts in the central bank's rate but possibly involving more unorthodox measures to lower long-term interest rates) and automatic fiscal stabilizers should be sufficient to save the day, with the recovery assuming the "V" shape that followed, for example, the SARS virus shock of 2003.

If, however, the crisis is more long-lasting, most likely due to disruptions on the supply-side of the economy through crippled production networks and squeezed profit margins, hopes of recovery will hinge on more sustained and coordinated liquidity injections by Central Banks, more active fiscal policies (where space is available) and by renewed efforts to bolster free trade and foreign investment. The recovery will then more likely assume a U-shape, like the oil shocks of the 1970s, with some serious economic casualties along the way, but with the organizing principles of the world economy preserved... until the next crisis!

This document has not been formally edited

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

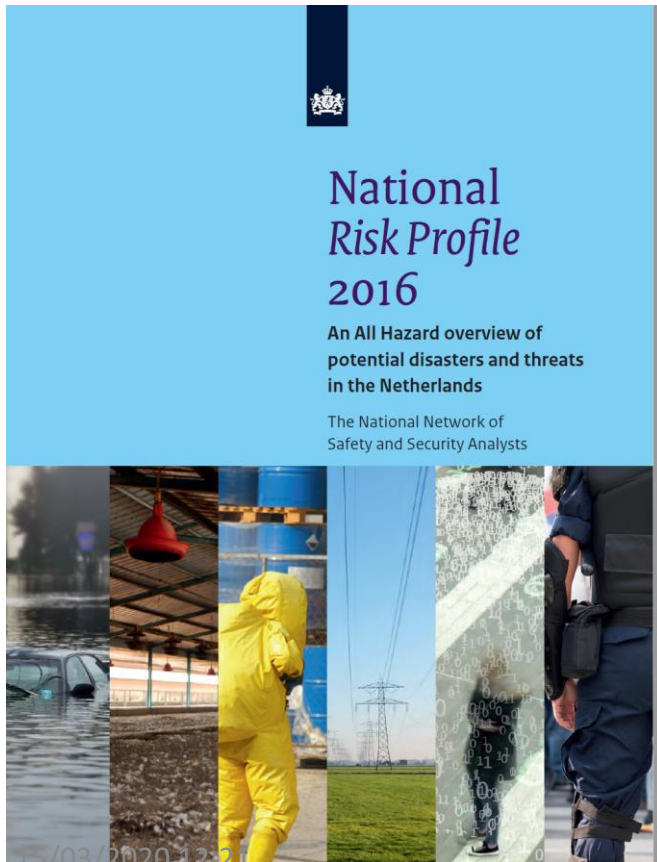


Table 4.9 Worst-case influenza pandemic – severe.

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

Corononomics
 ○ average to considerable uncertainty; ● minor uncertainty



Catastrophic pandemics

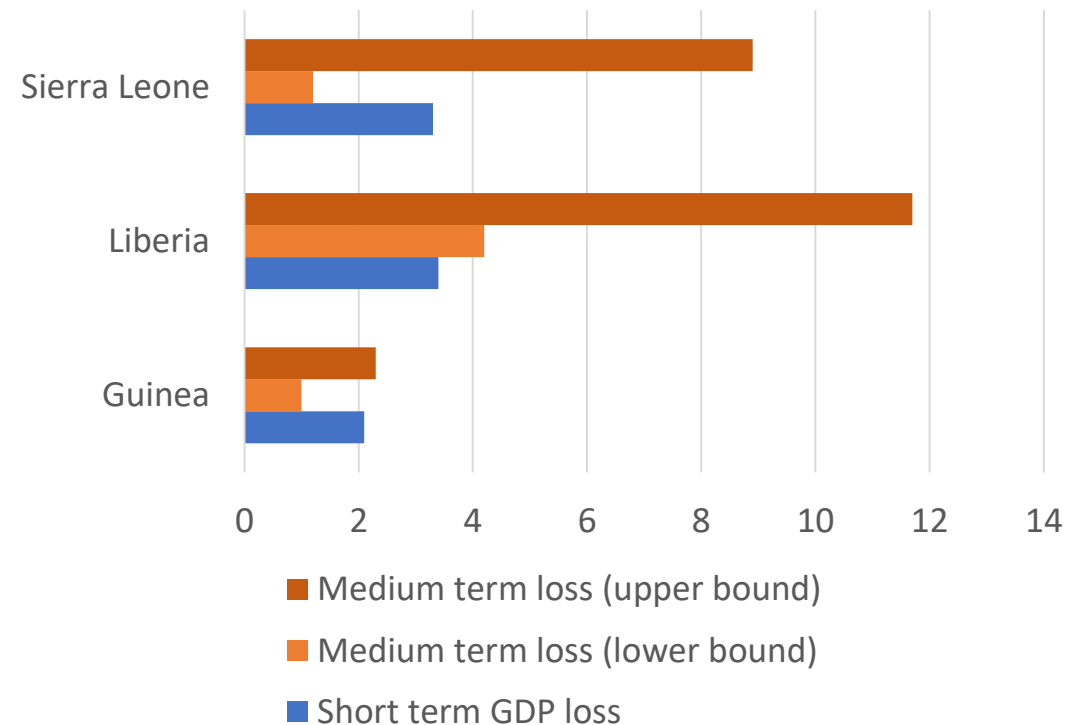
Why focus on trade?

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)

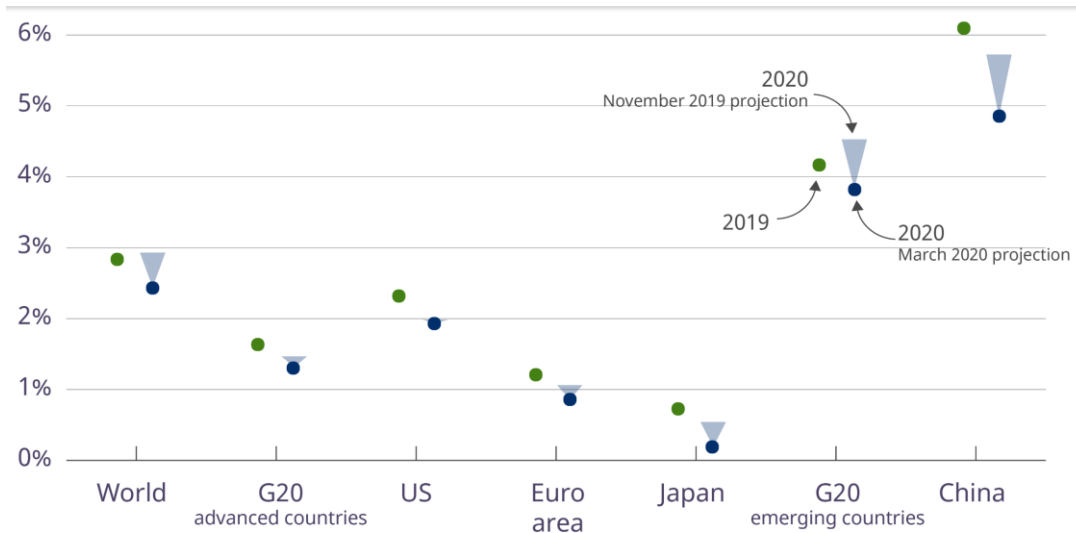


Elmahdawy, Mahmoud, et al. "Ebola virus epidemic in West Africa: global health economic challenges, lessons learned, and policy recommendations." Value in health regional issues 13 (2017): 67-70.



The global growth impact is about – 0.5 percentage points.

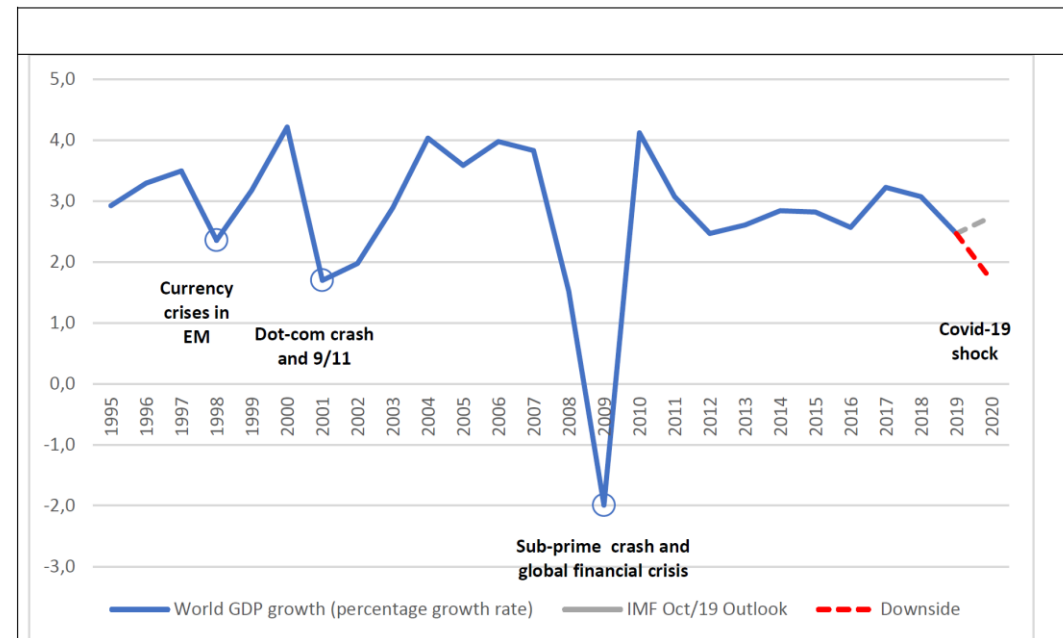
OECD (March 2, 2020 forecast)



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

The analysis of trade and investment has so far been limited



Goods trade barometer

Index value, September 2019



Services Trade Barometer

Index value, December 2019



- Early indicators are only available with two months delay and thus do not contain corona-information,
- but current Coronablaba 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

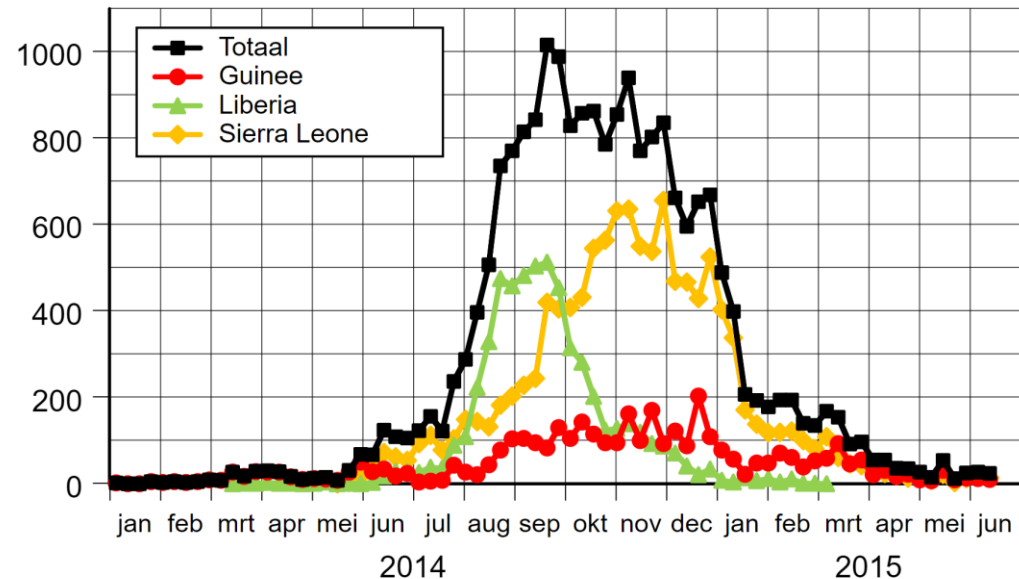
A. The endemic curve



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>

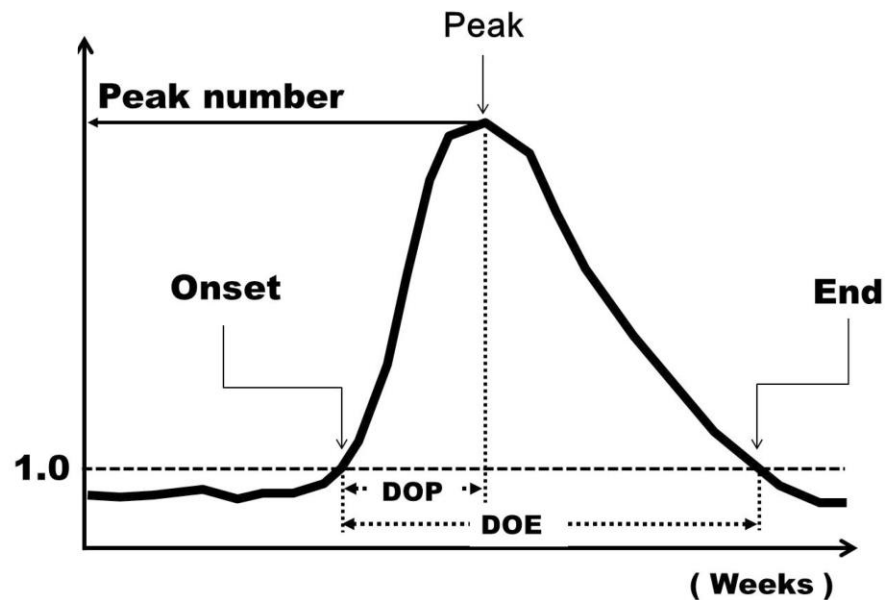
Epidemic (outbreak of Ebola; new cases per week)





The endemic curve

Endemic curve (number of current patients)

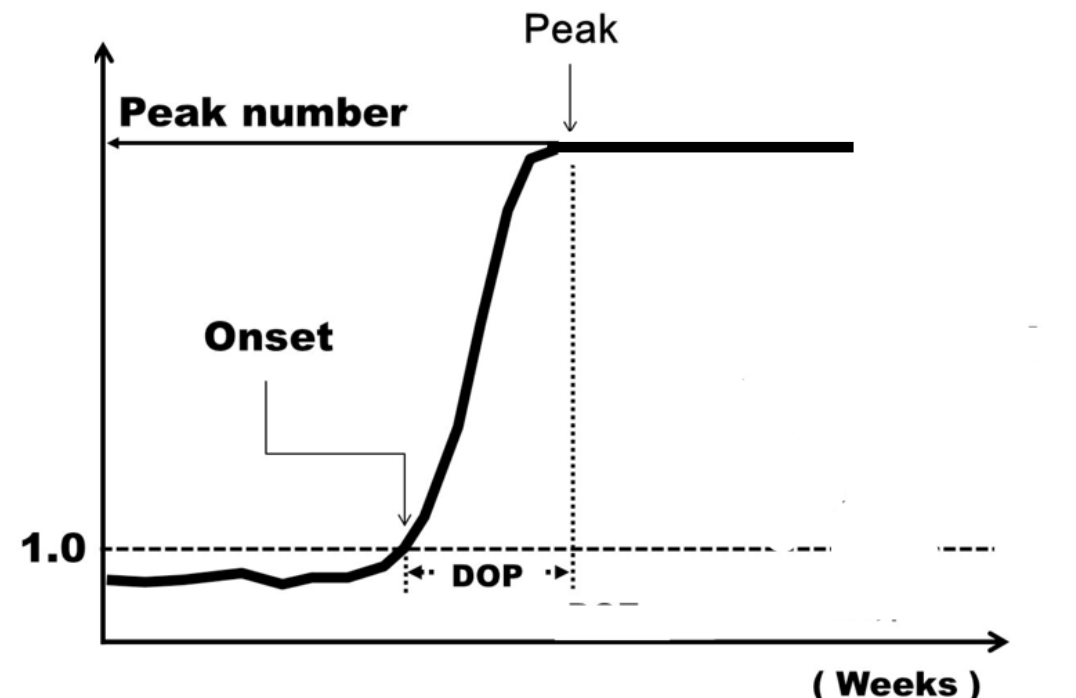


DOP: Duration of Onset to Peak

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)



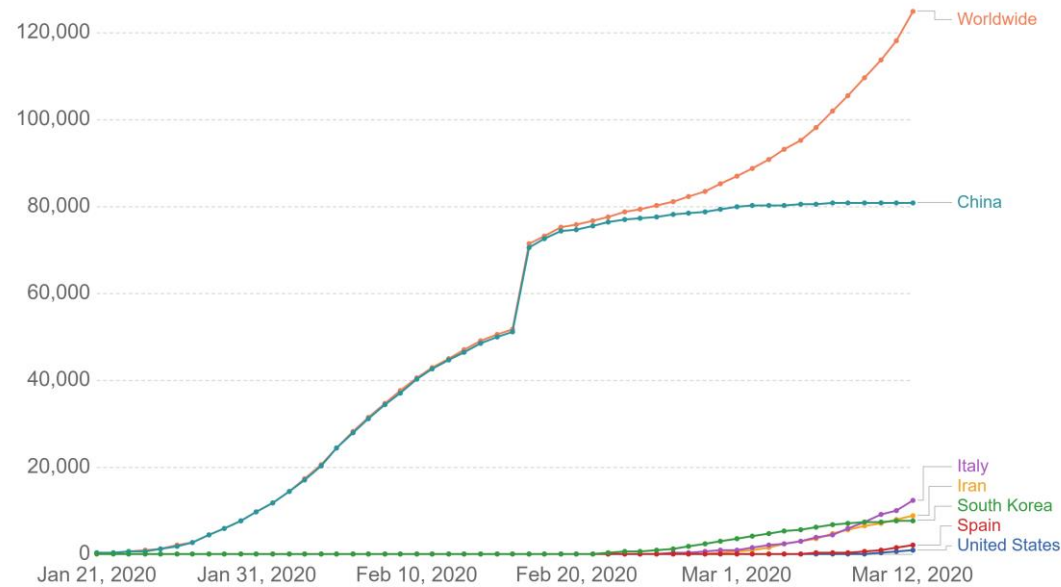


Linear versus logarithmic representation

Linear

Total confirmed COVID-19 cases

The large increase in the number of cases globally and in China on Feb 17 is the result of a change in reporting methodology. It is explained at [OurWorldInData.org/Coronavirus](https://www.ourworldindata.org/coronavirus)

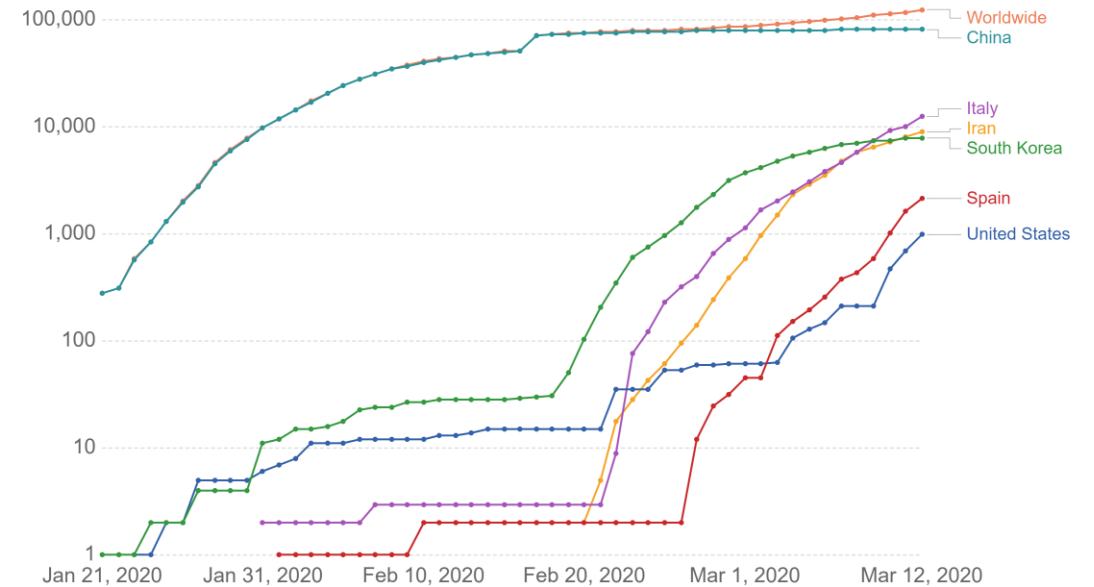


Source: World Health Organization daily Situation Reports [COVID-19] OurWorldInData.org/coronavirus • CC BY

Logarithmic

Total confirmed COVID-19 cases

The large increase in the number of cases globally and in China on Feb 17 is the result of a change in reporting methodology. It is explained at [OurWorldInData.org/Coronavirus](https://www.ourworldindata.org/coronavirus)



Source: World Health Organization daily Situation Reports [COVID-19] OurWorldInData.org/coronavirus • CC BY

Economic channels

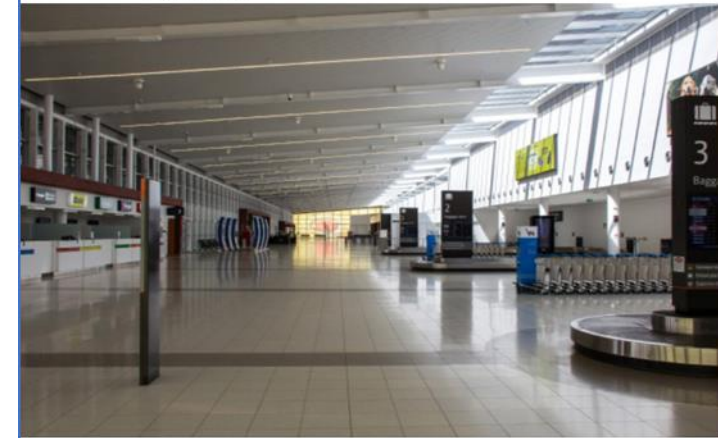


Containment measures	Supply	Demand
Quarantines	Factory closures	Loss of confidence
Travel bans and restrictions	Cutbacks in service provisions	Business and tourism travels
Closure of public places	Supply chain disruption	Education and entertainment services

OECD Interim Economic Assessment

Coronavirus: The world economy at risk

2 March 2020



Economic channels



Supply versus Demand

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



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Corononomics

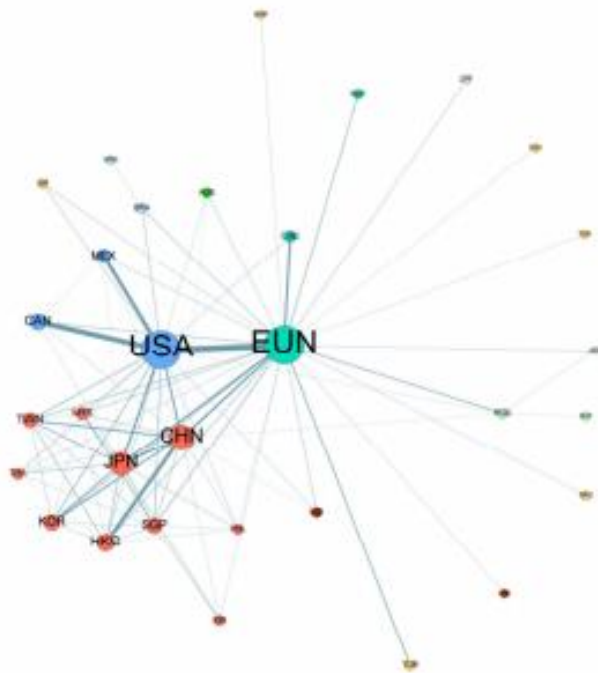


4

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



(a) 2004

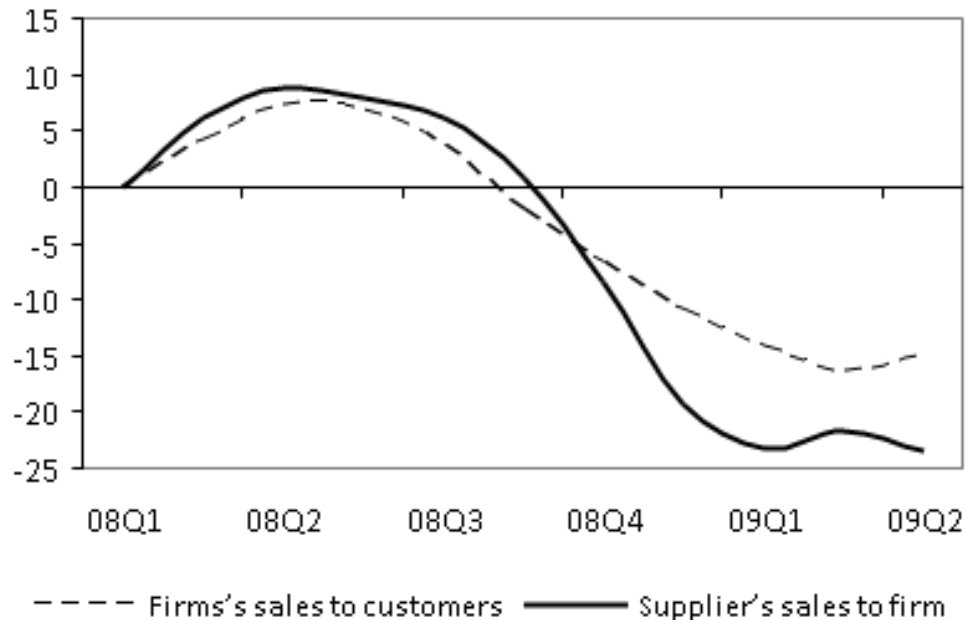


Source: UNCTAD calculations based on Comtrade data

Contagion and international value chains

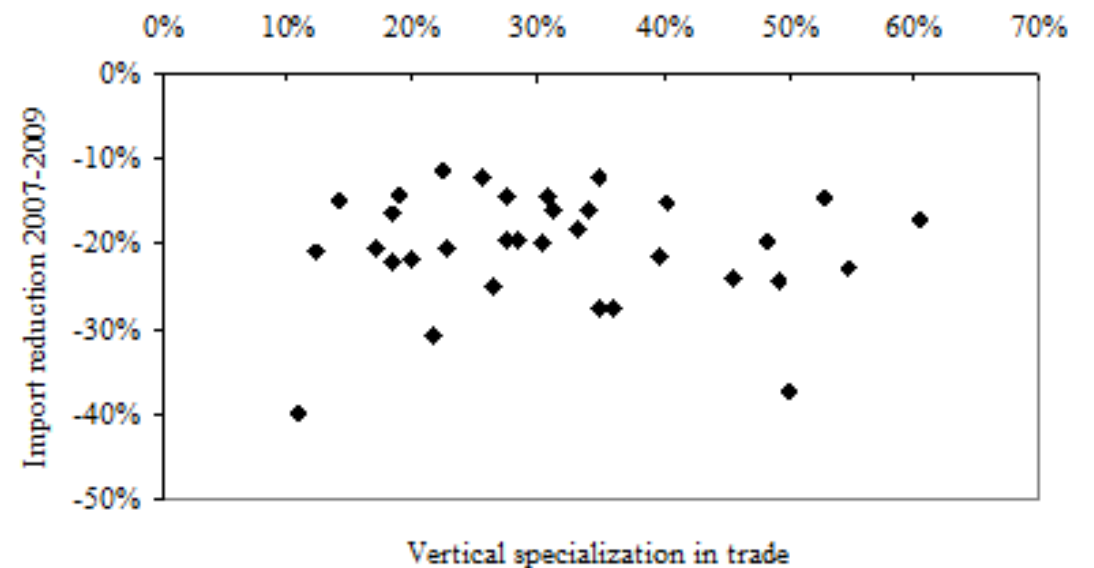


Bullwhip effect 2008Q1/9Q2 (per cent deviation from levels at the start of 2008Q1)



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

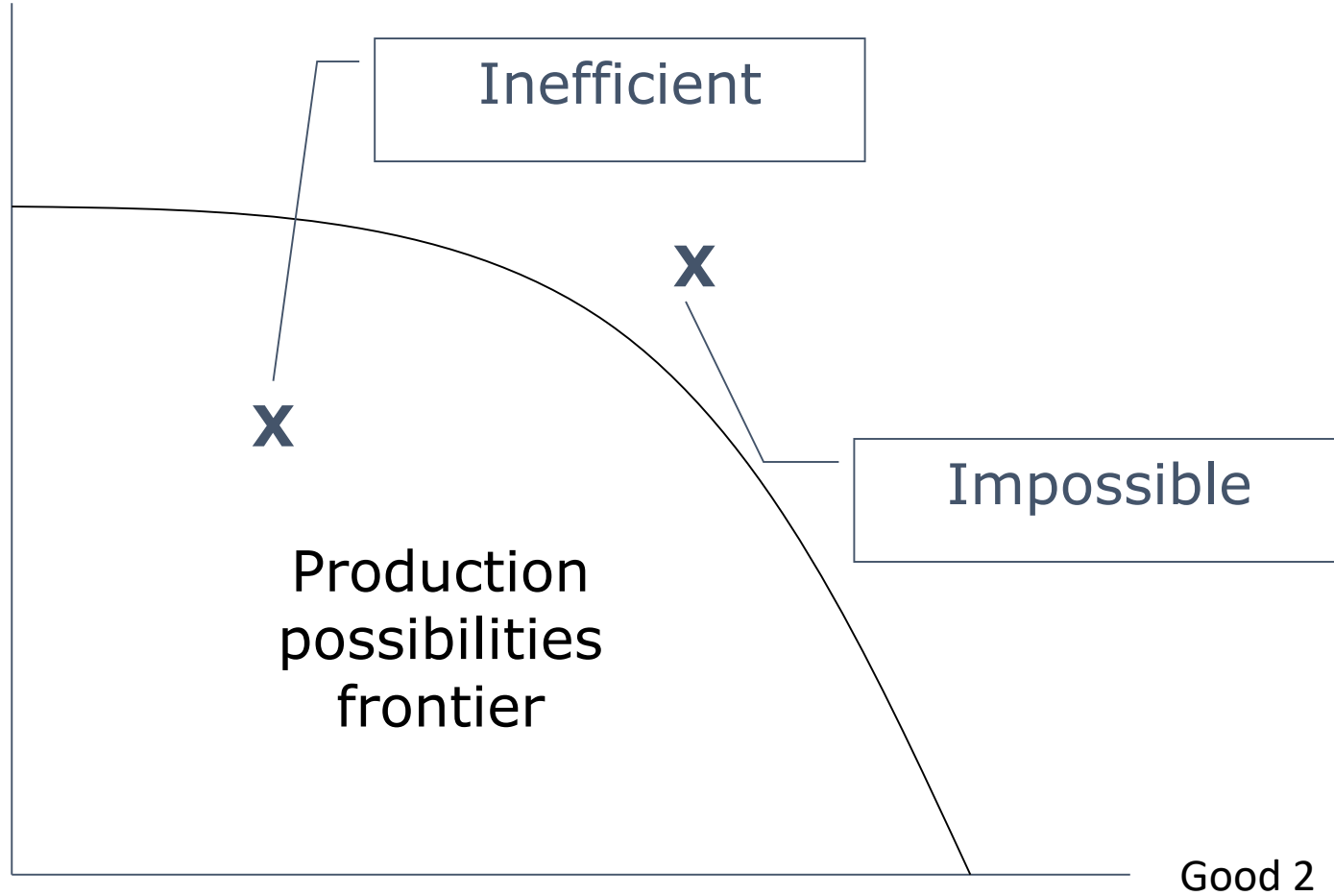


Trade shocks in the neoclassical trade model



Production possibilities

Good 1



Inefficient

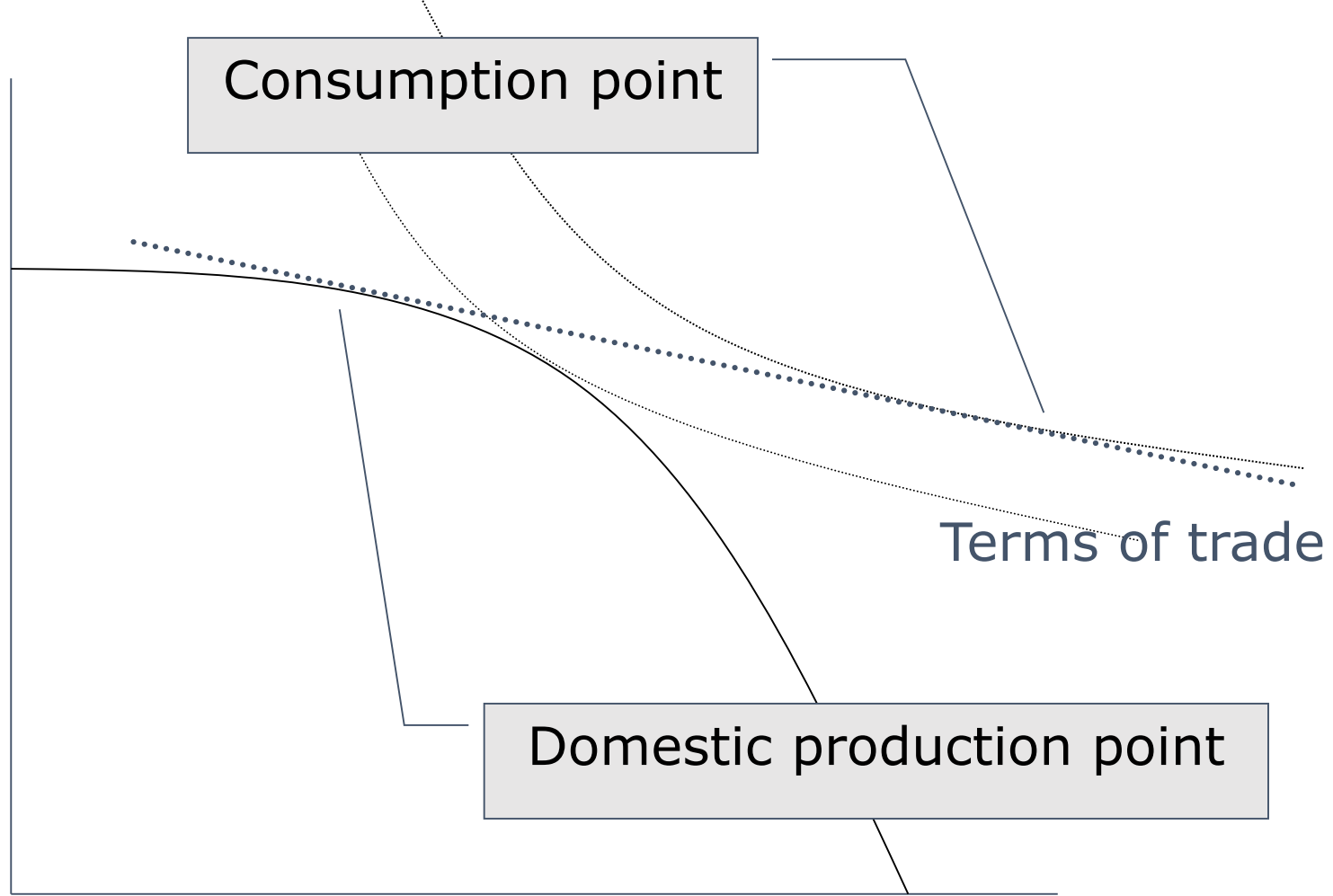
X

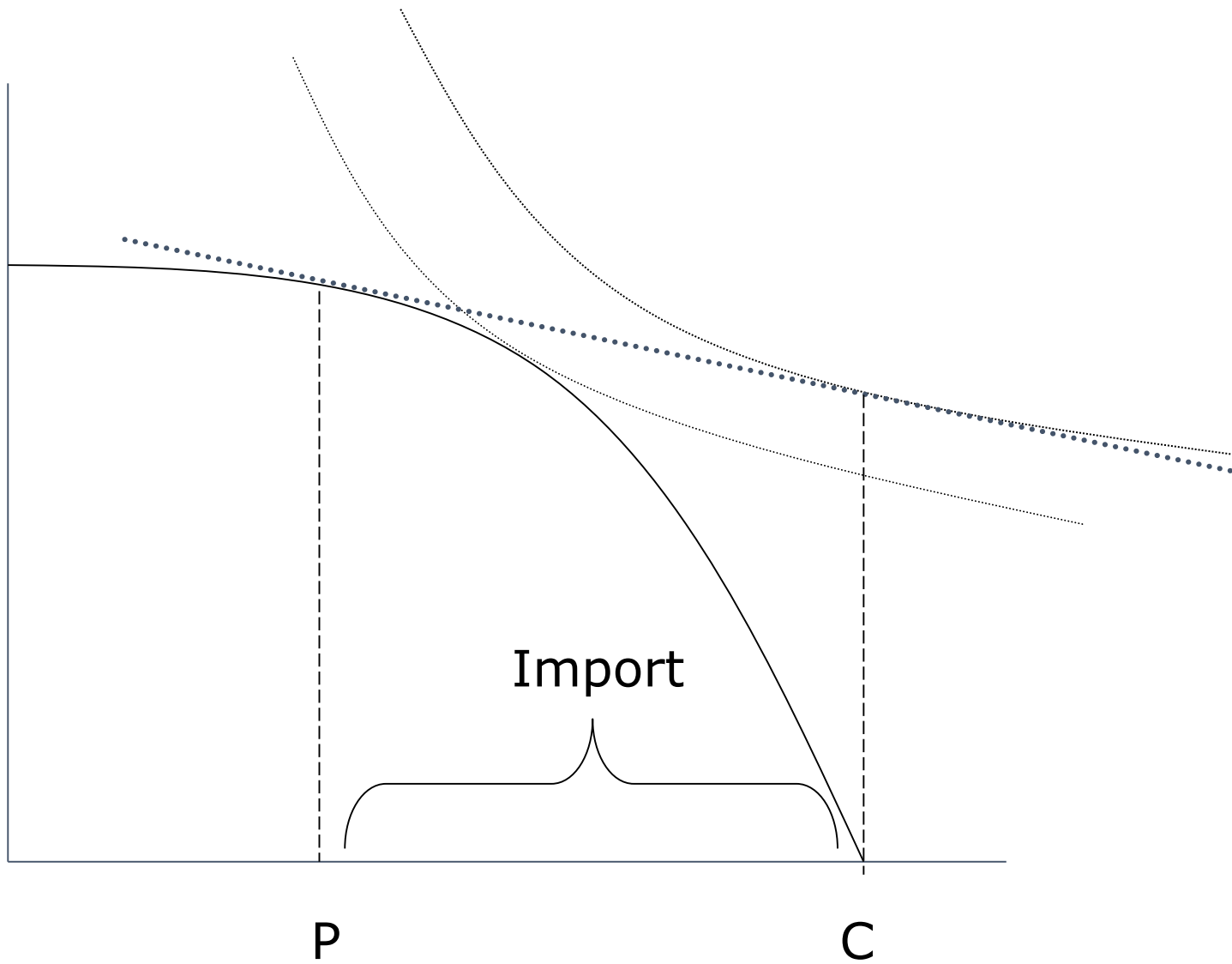
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Impossible

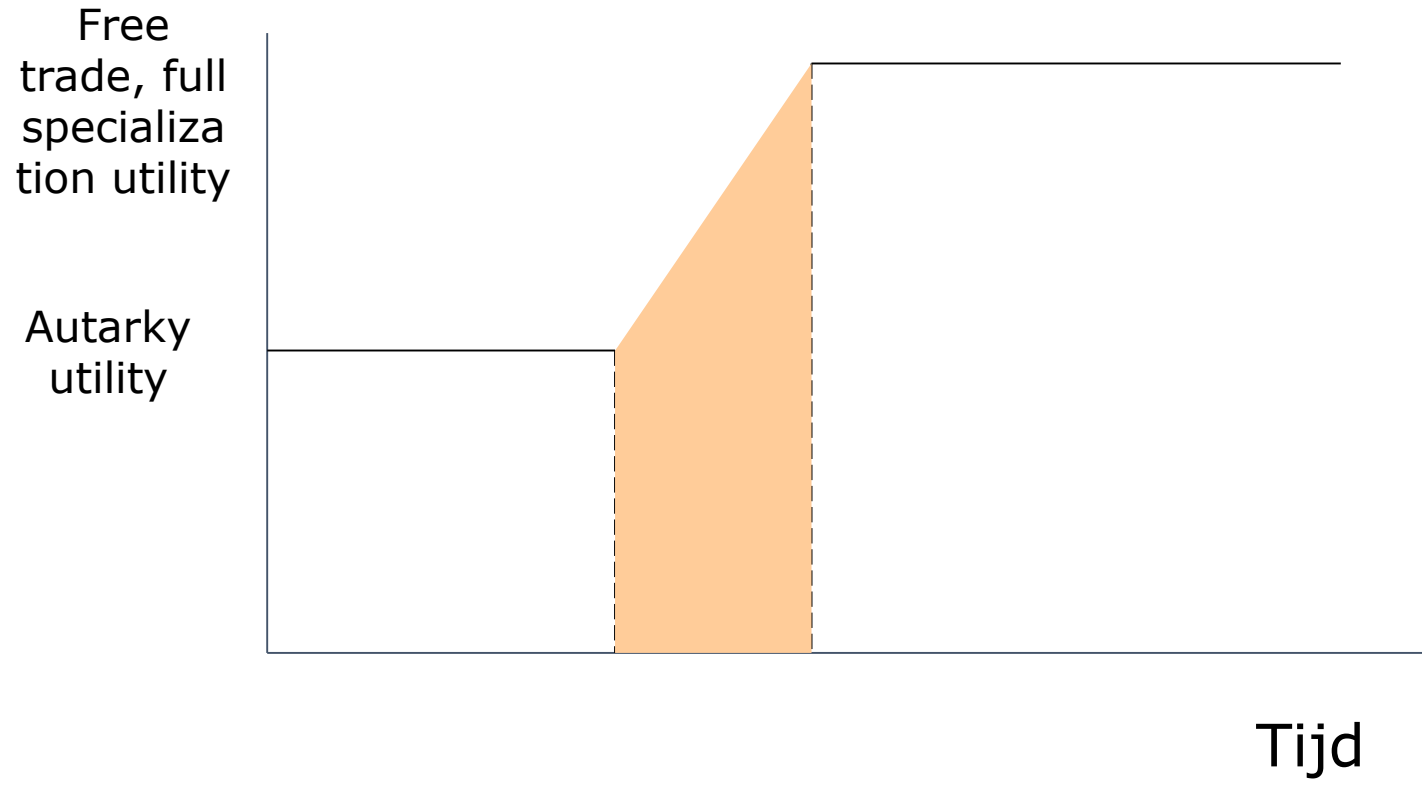
Production possibilities frontier

Good 2





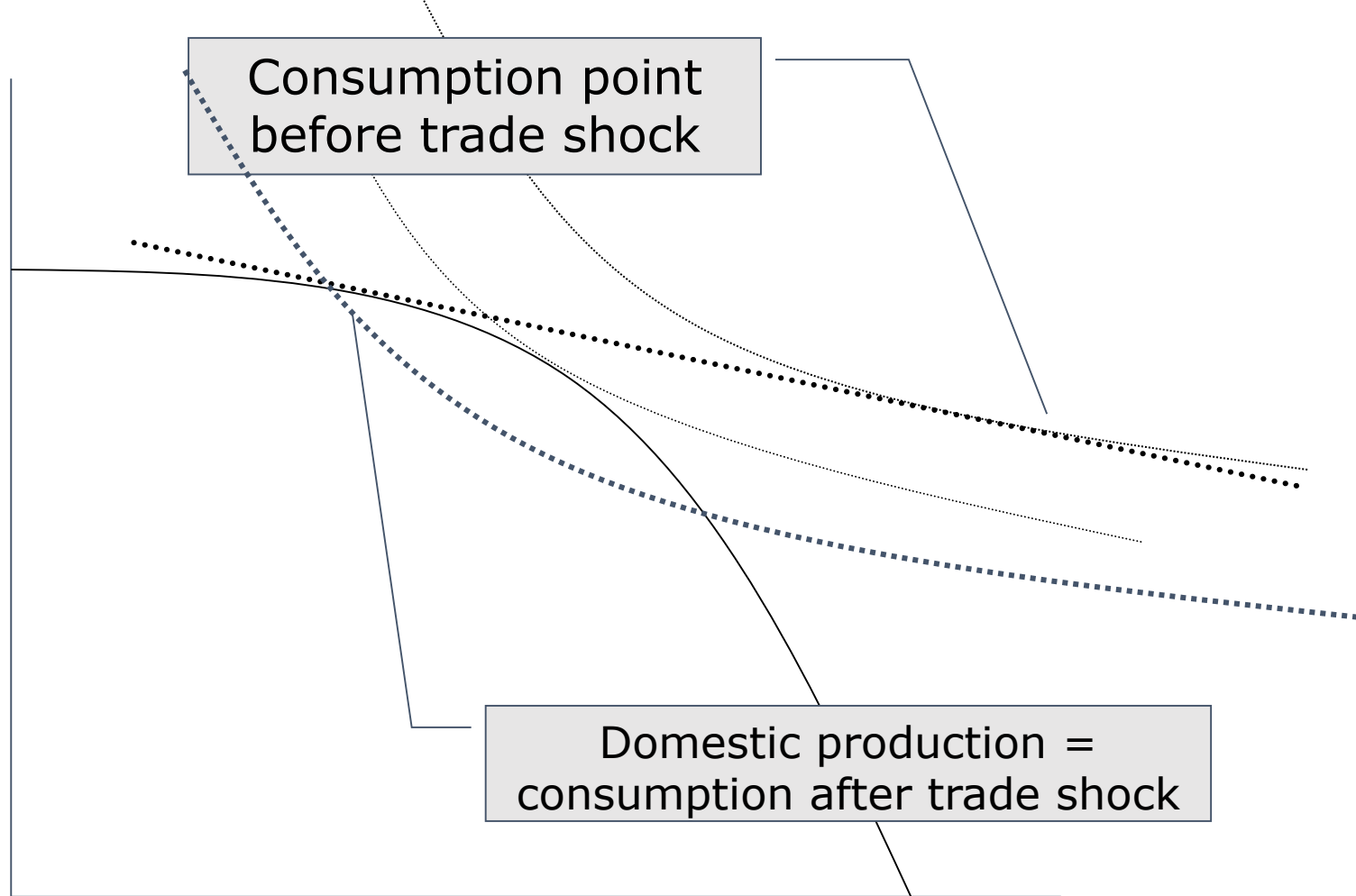
Welfare over time



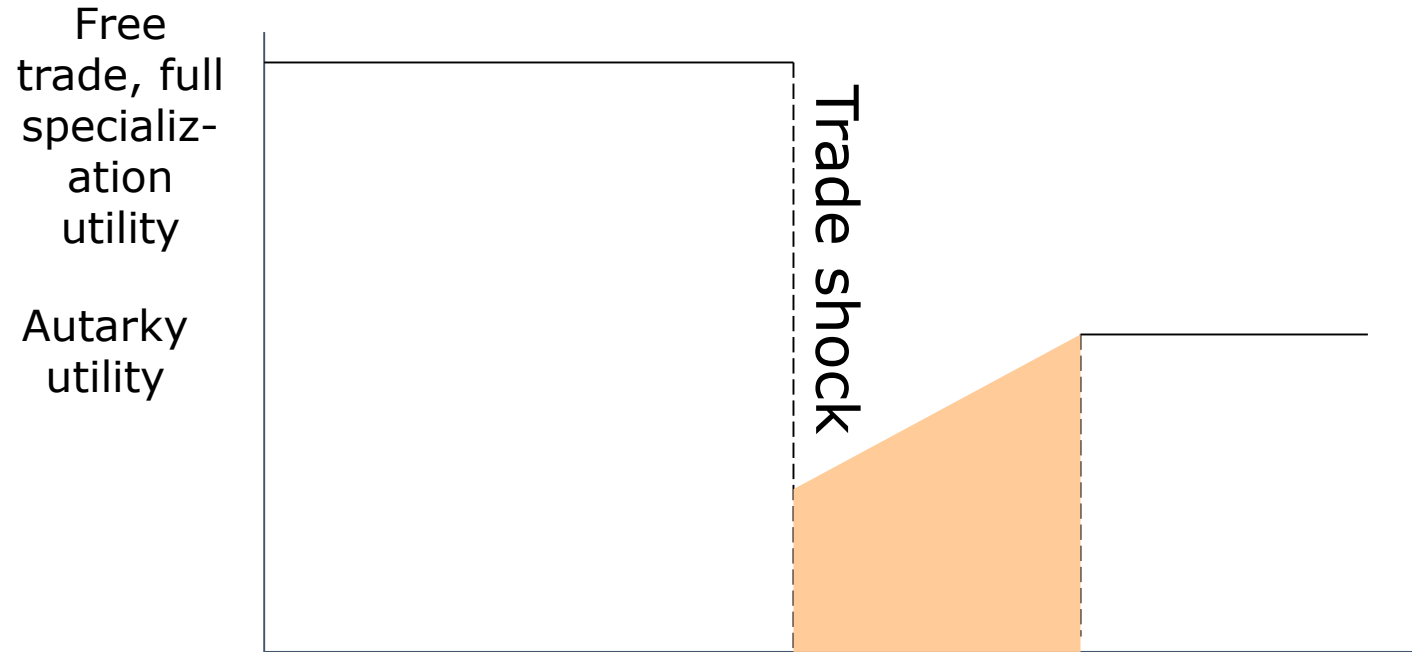
Liberalization: from autarky to free trade



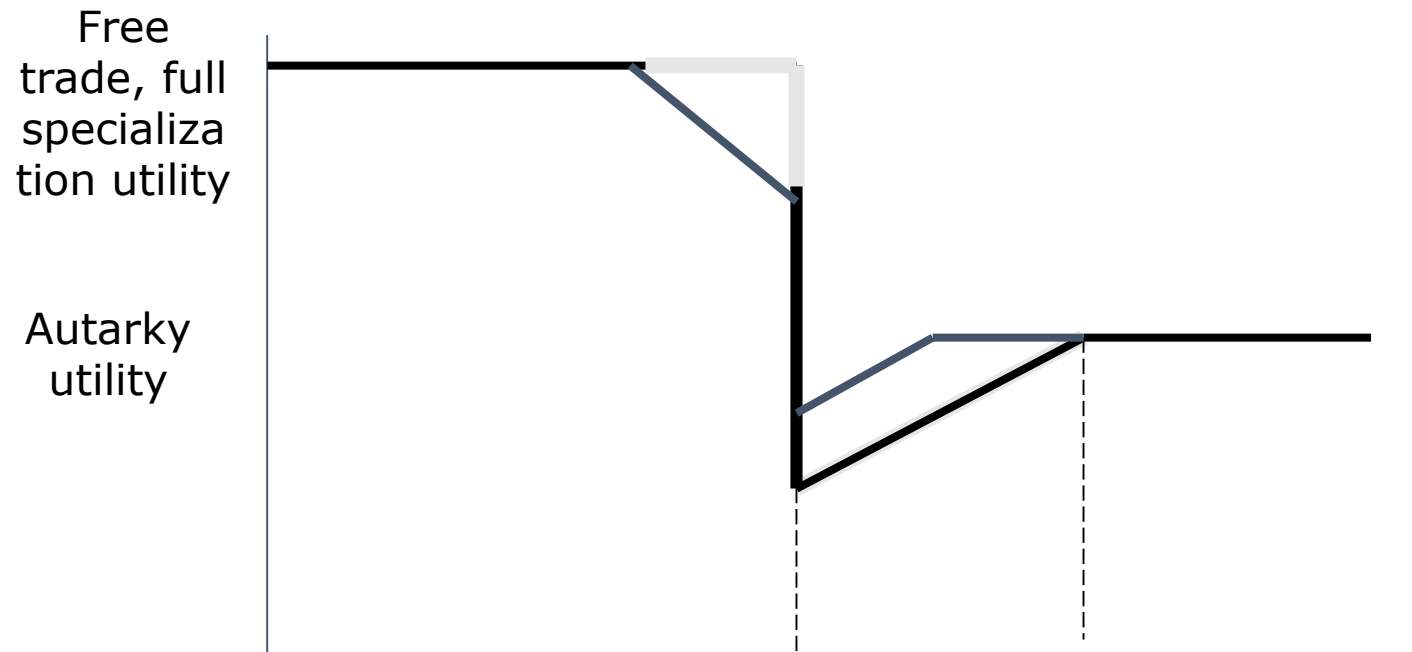
- Opening of trade (different price ratio's)
 - Specialization starts: growing export sector; declining import sector
 - Reallocation of factors of production takes time
 - Consumption (welfare) follows specialization
 - Note that this is a positive trade shock
- What happens if a trade shock occurs?
 - So movement from free trade to autarky!



Welfare over time



Welfare over time



Two major implications follow from this model

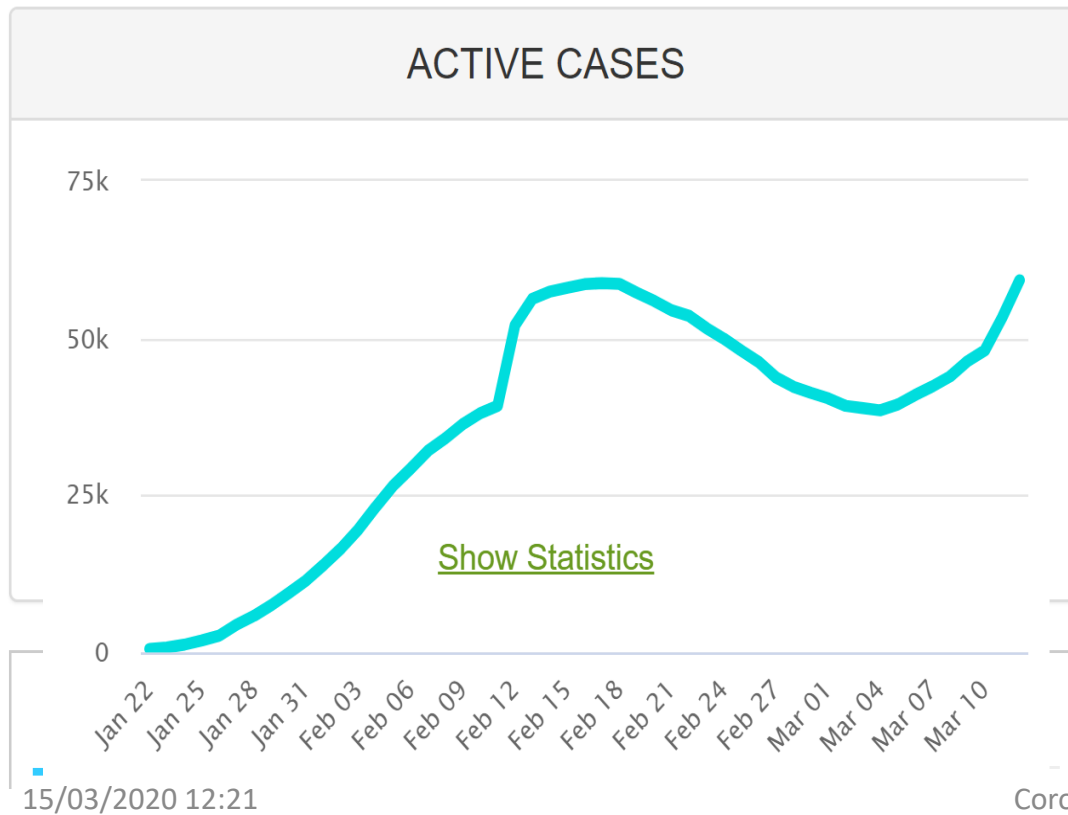
- The initial impact of a trade shock is deeper than the long run impact
- For the future, firms and consumers will realize the risks of globalization and see the benefits of lesser specialization. This is an additional force towards deglobalization

3. Key data and stylized facts



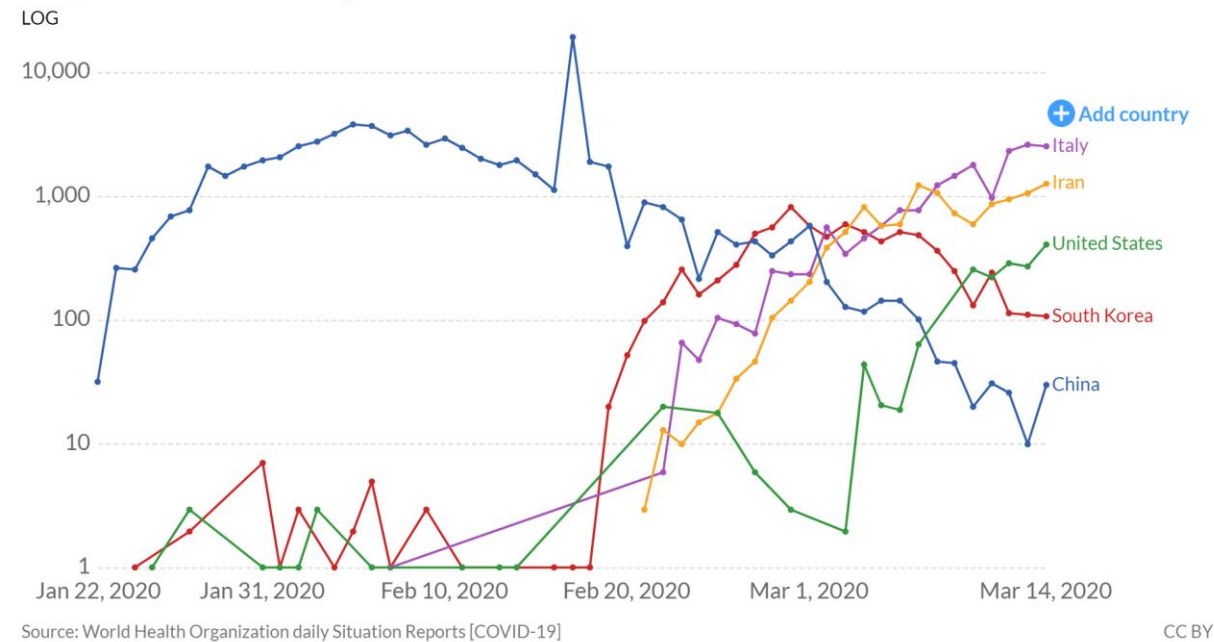
<https://www.worldometers.info/coronavirus/>

<https://ourworldindata.org/coronavirus>



Daily new confirmed cases of COVID-19

The large number of cases globally and in China on Feb 17 is the result of a change in reporting methodology. It is explained at [OurWorldInData.org/Coronavirus](https://ourworldindata.org/coronavirus)

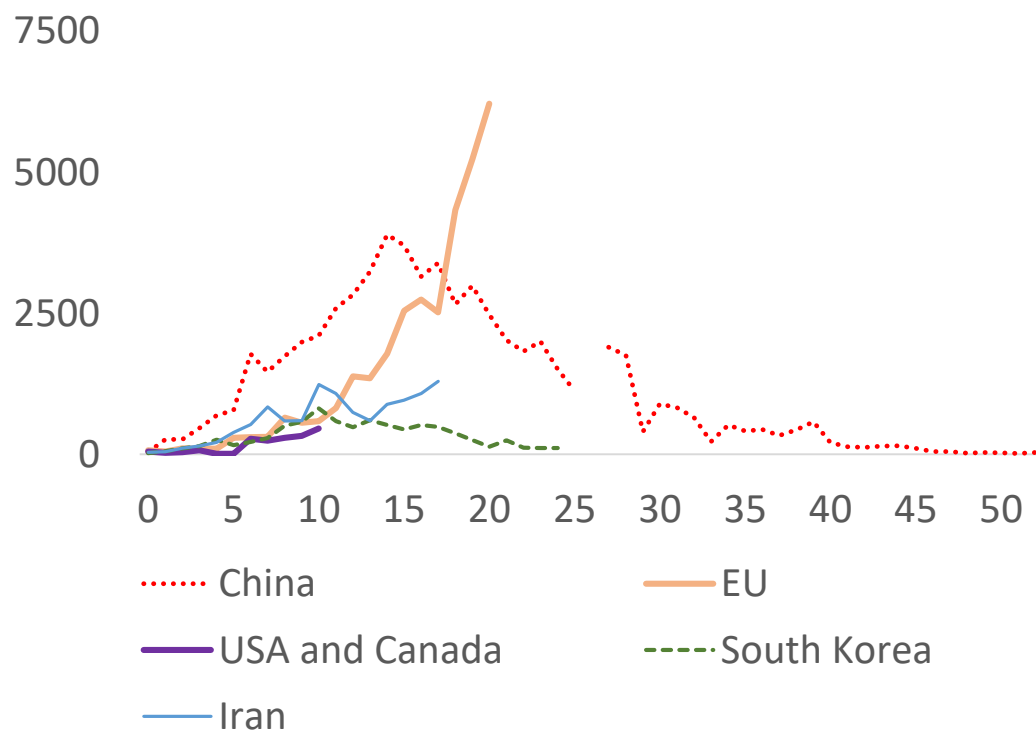




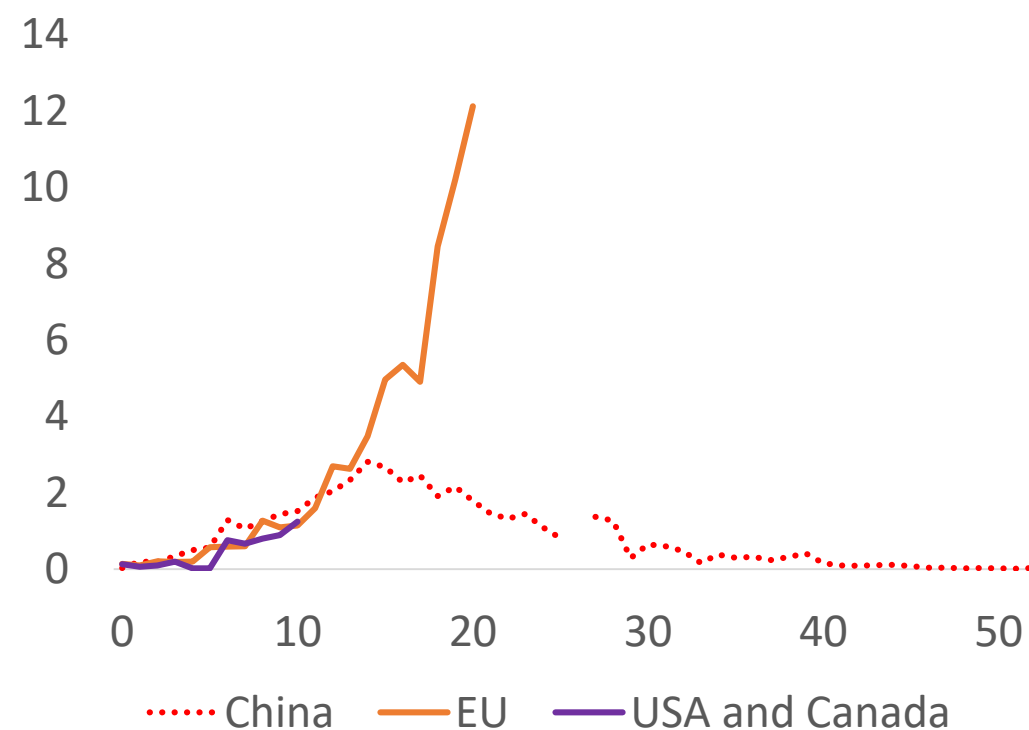
Interpreting the data

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

New cases



New cases per million population





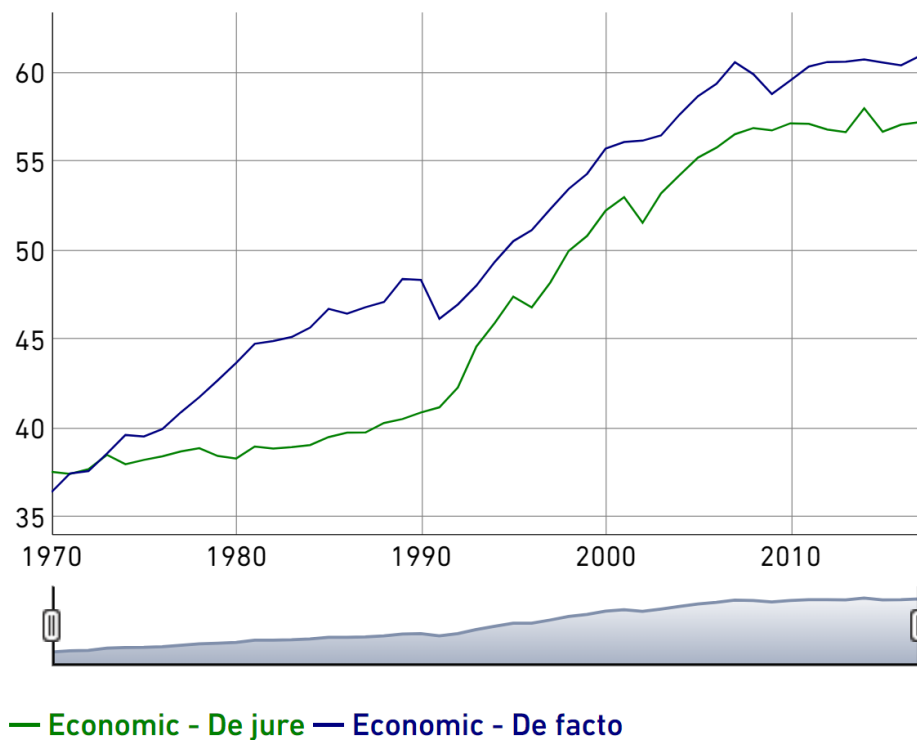
Preliminary Findings

- 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.



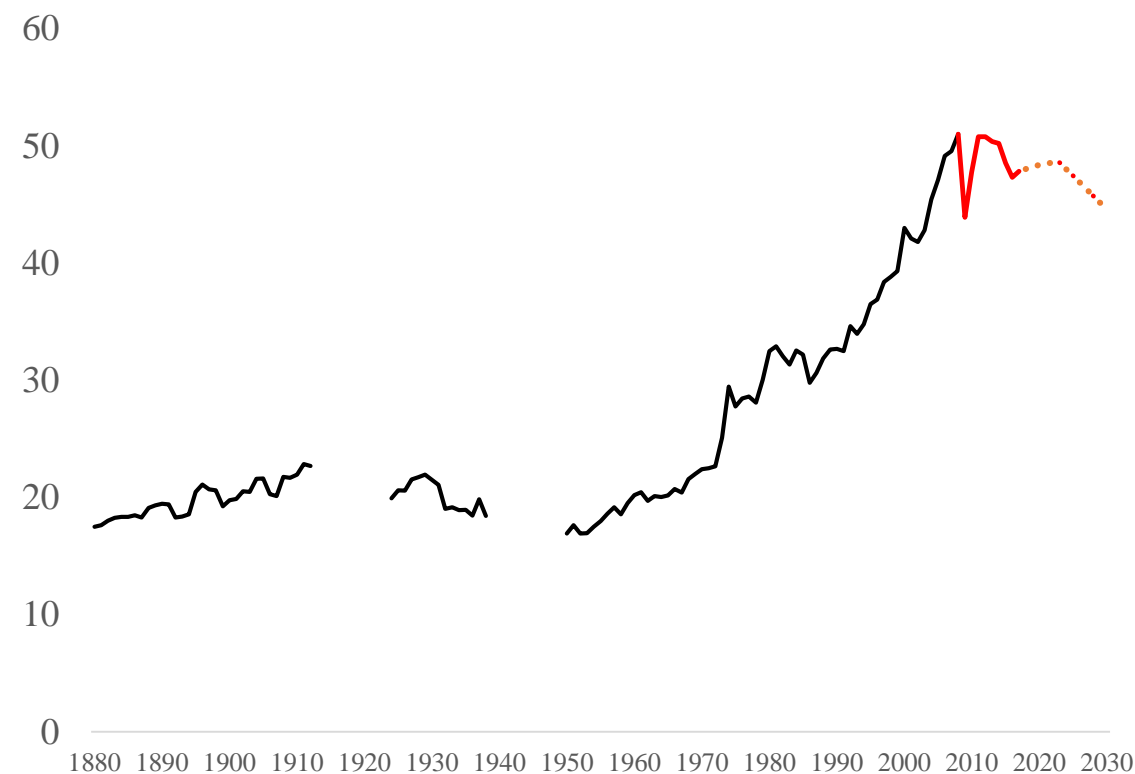
4. Before Corona: Deglobalization 2.0

KOF globalization index 1970-2017



Accessed March 15, 2020

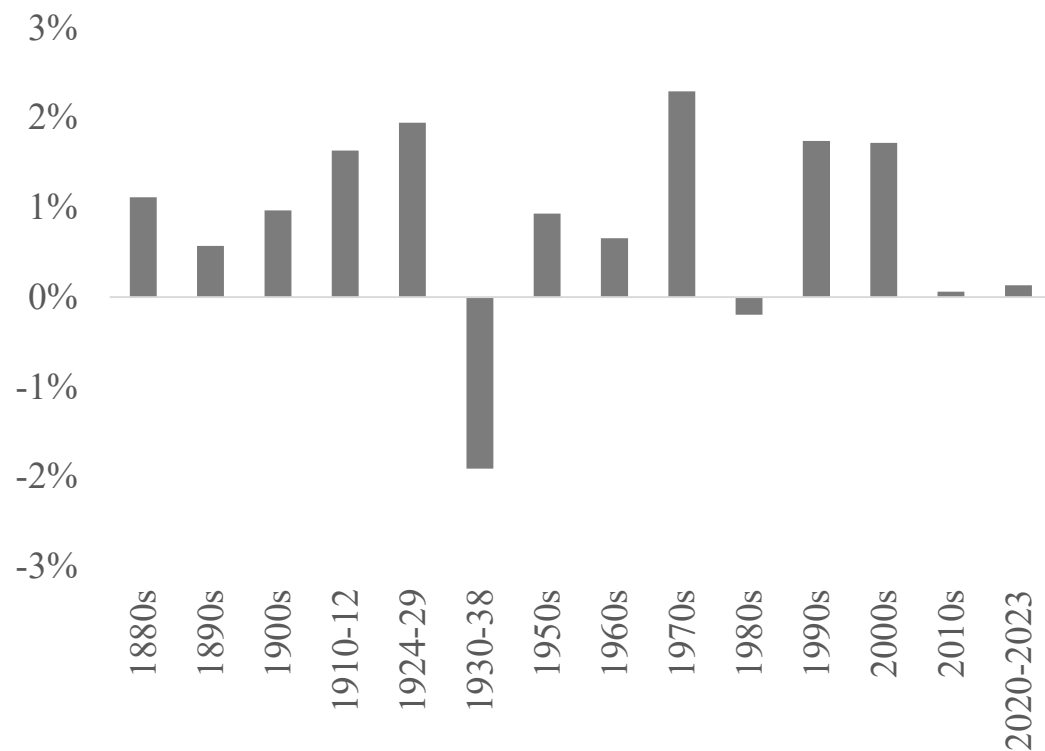
Openness of the world economy



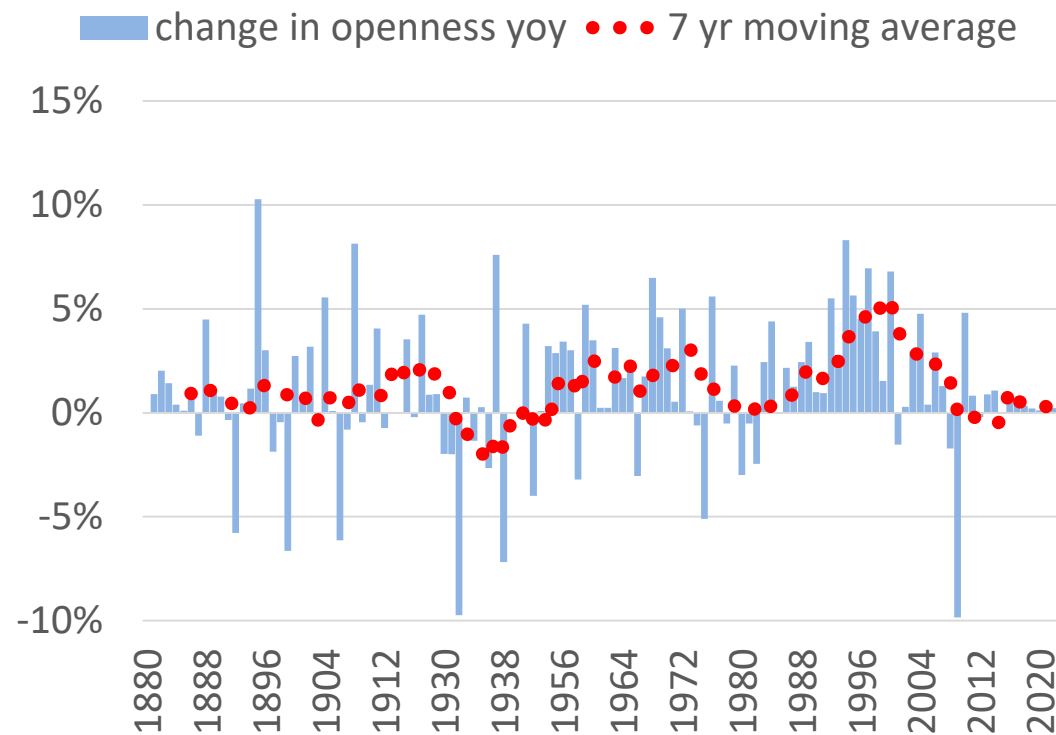


4. Before Corona: Deglobalization 2.0

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

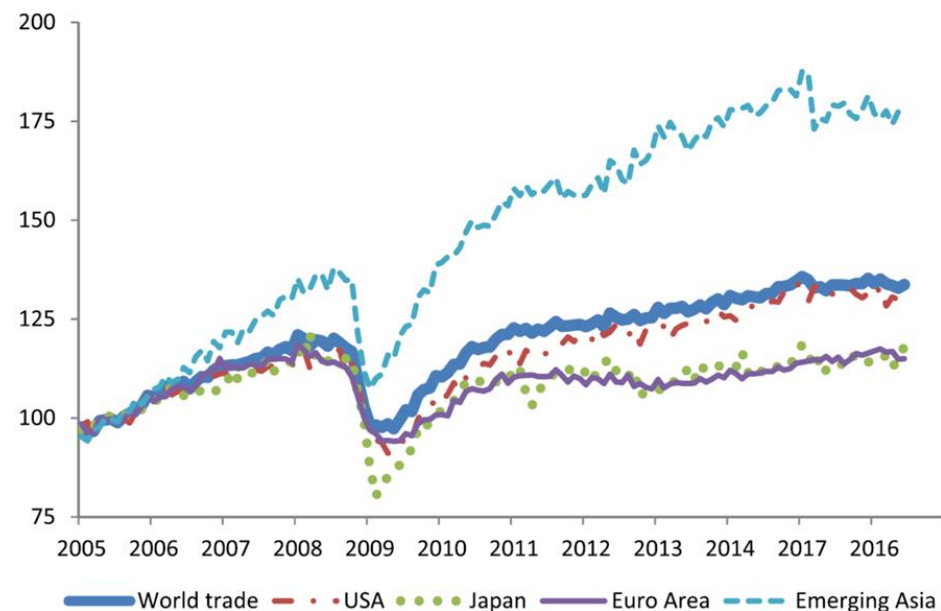


Fig. 3. Volume of Trade, selected regions and countries; index (2005 = 100)

based on monthly data from CPB Netherlands Bureau for Economic Policy Analysis (CPB, date accessed 15/05/2020); trade volume for a country or region is average of export and import index.

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Trade weakness especially since mid 2019

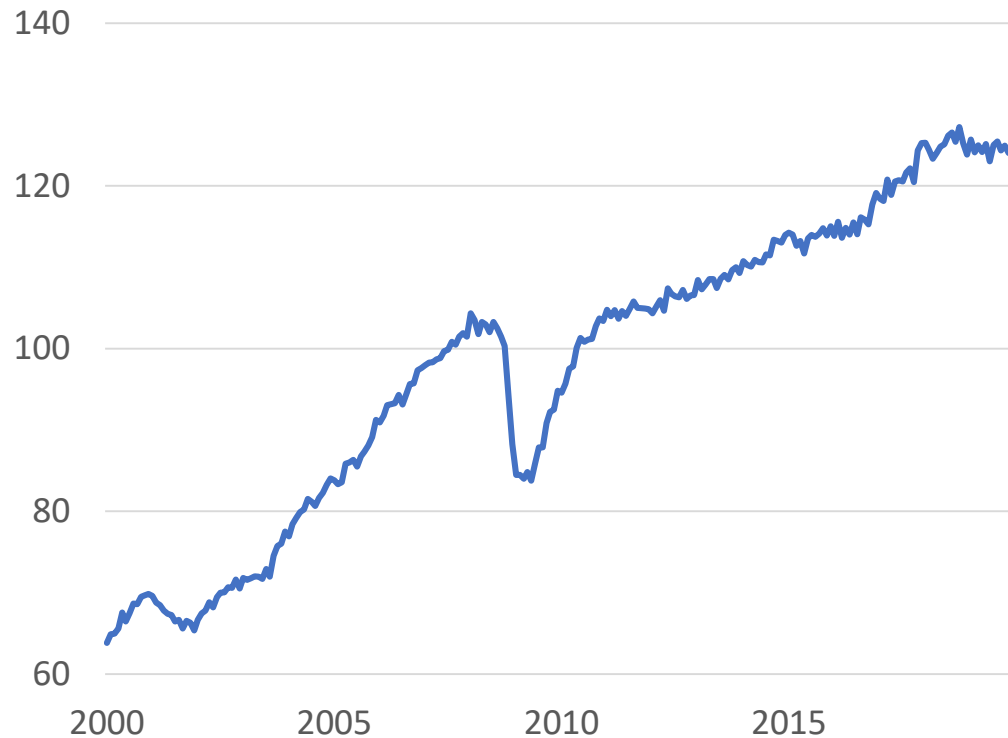




World Trade (almost real time)

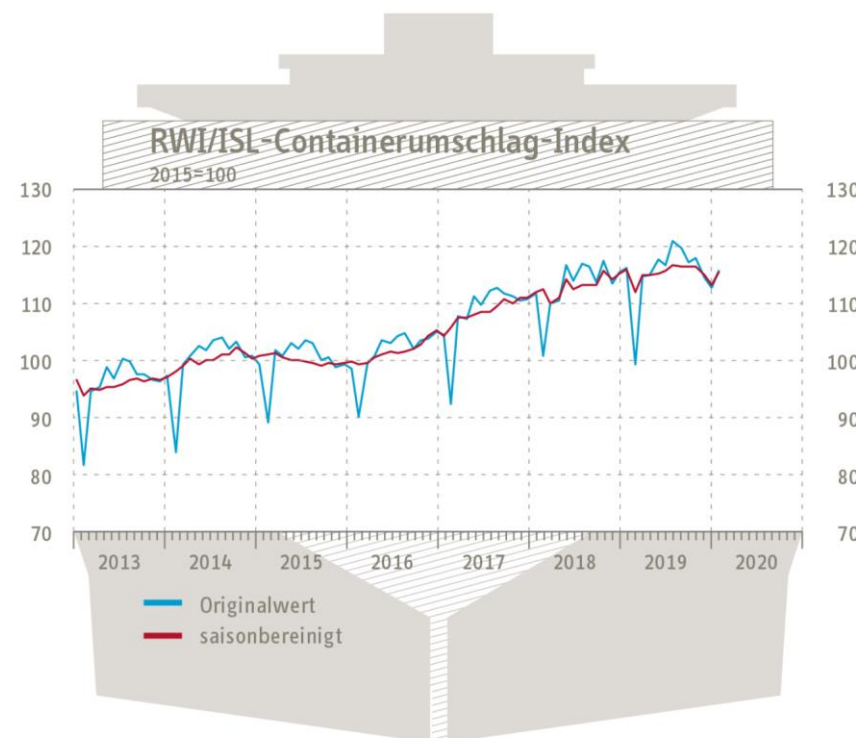
CPB world trade monitor 2000-2019

Index number



Container throughput

Index number

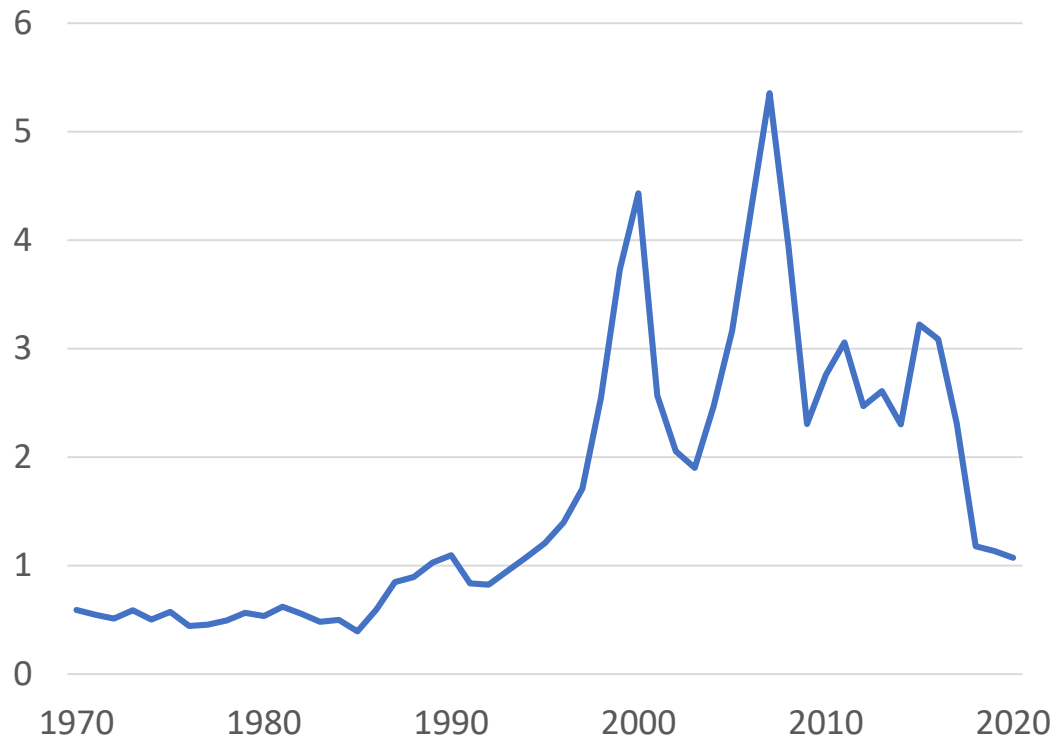


Date accessed: March 16 2020

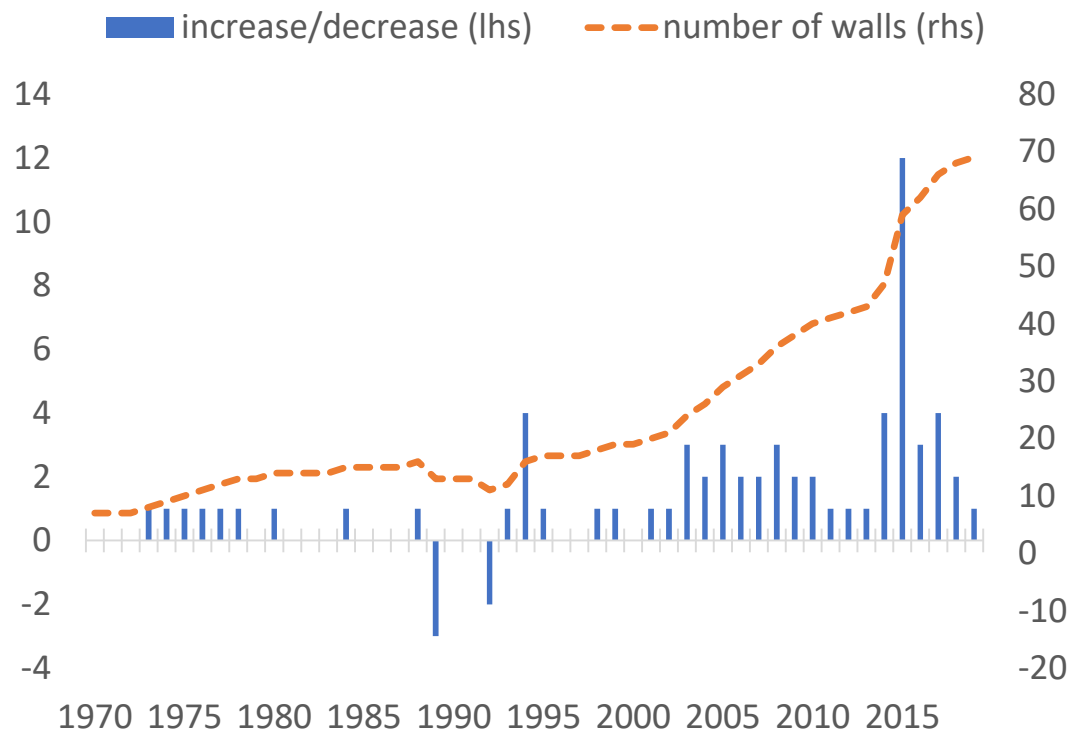


Other correlates of deglobalization

FDI in percent of GPP



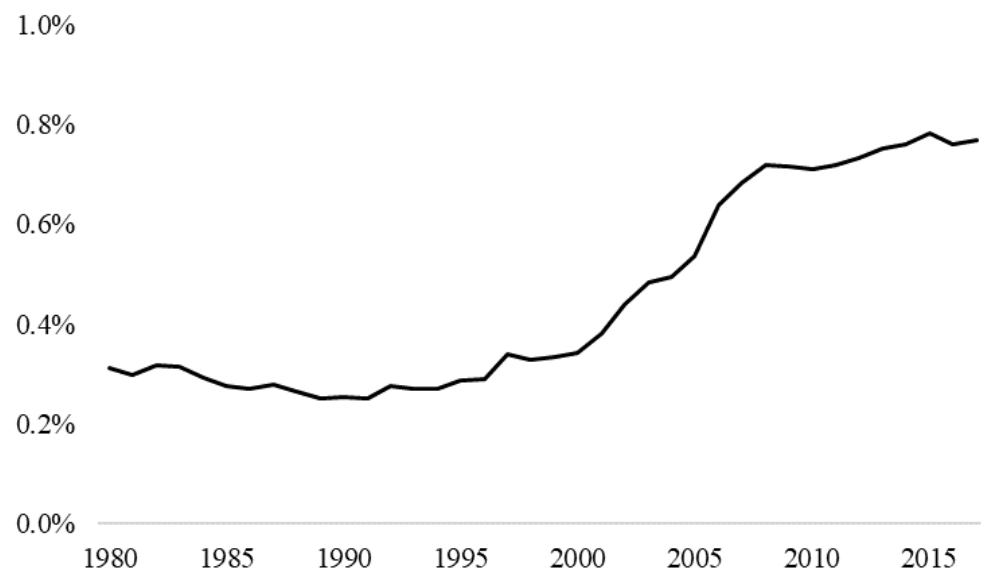
Border walls and fences 1970-2019





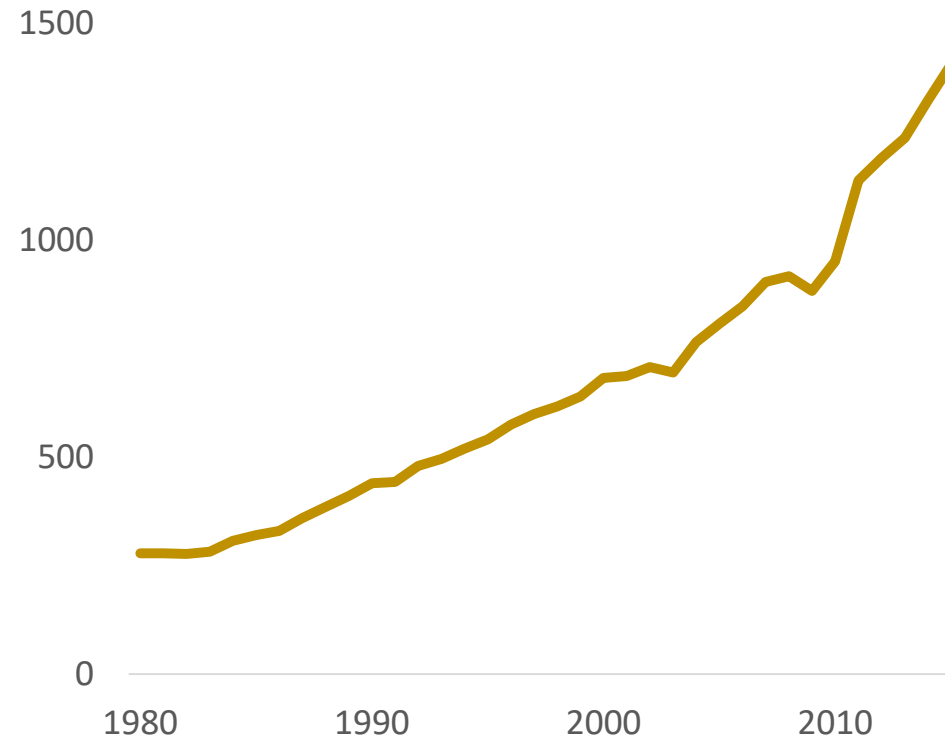
Private (household) flows

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

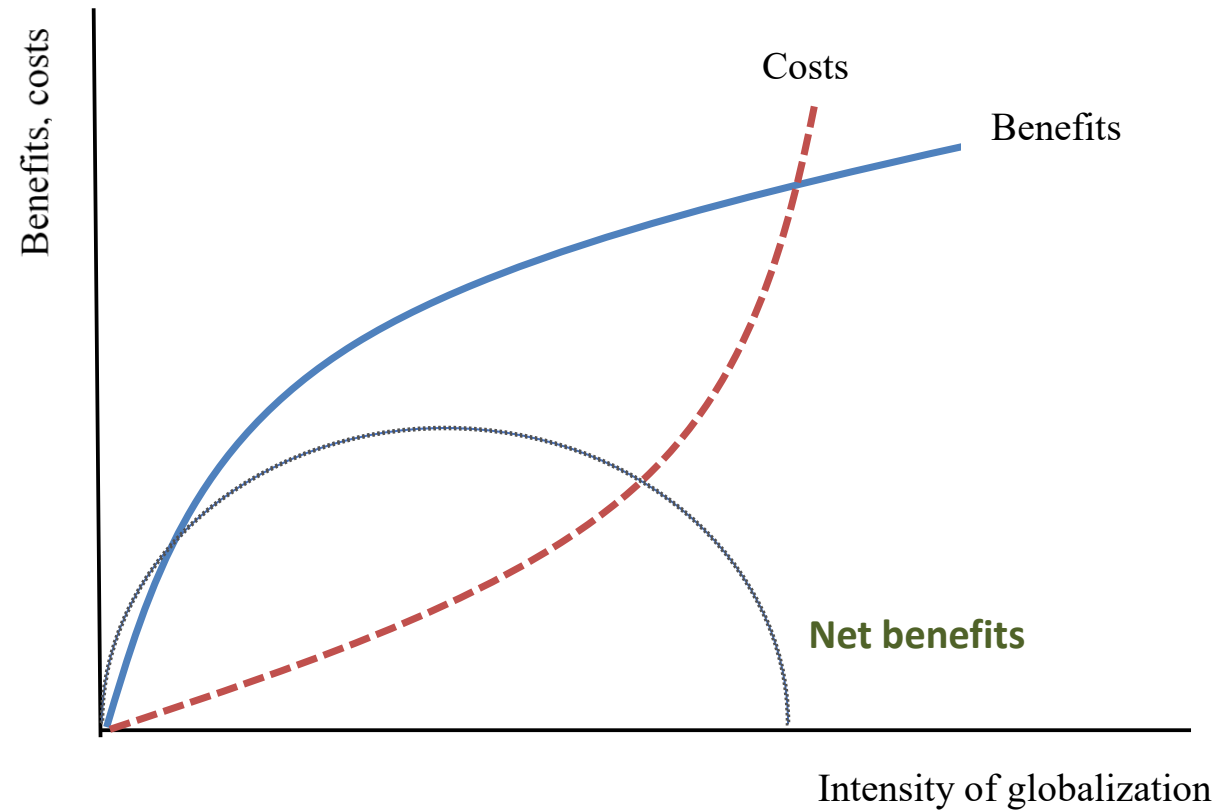


Maximum impact trade wars in 2030 (percentage change from base line)

	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.

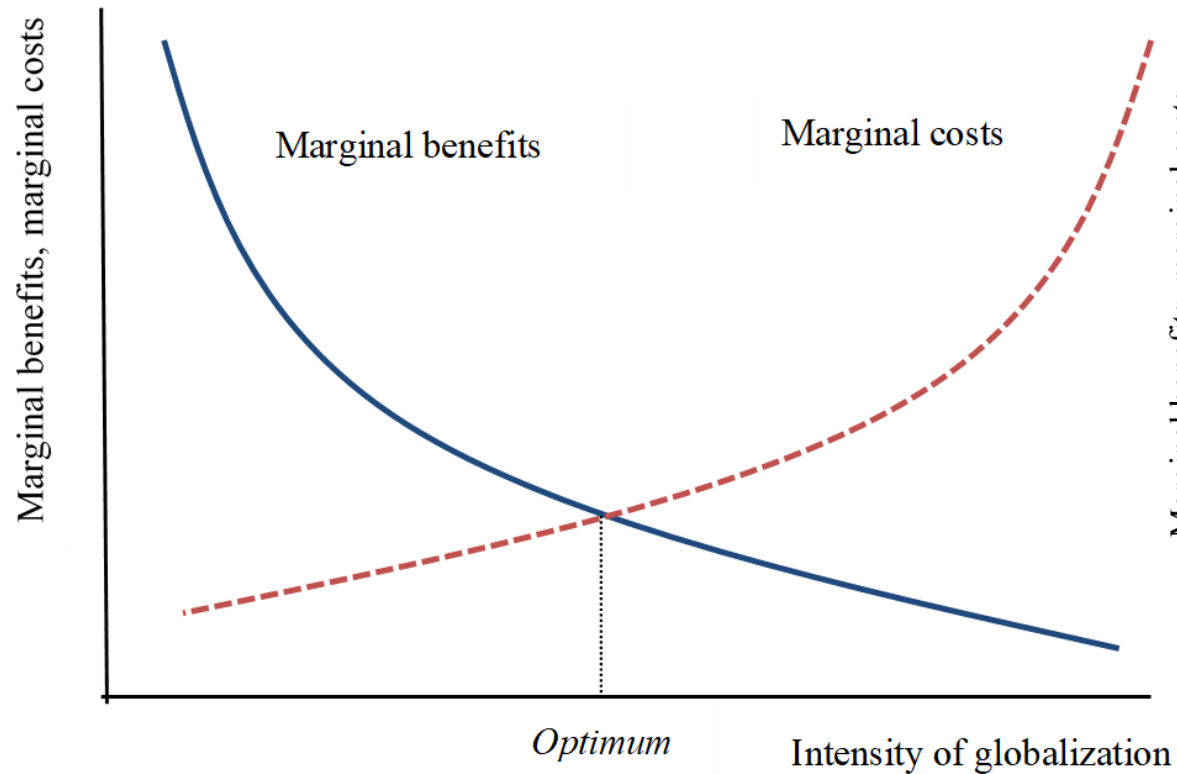
Costs and benefits of globalization



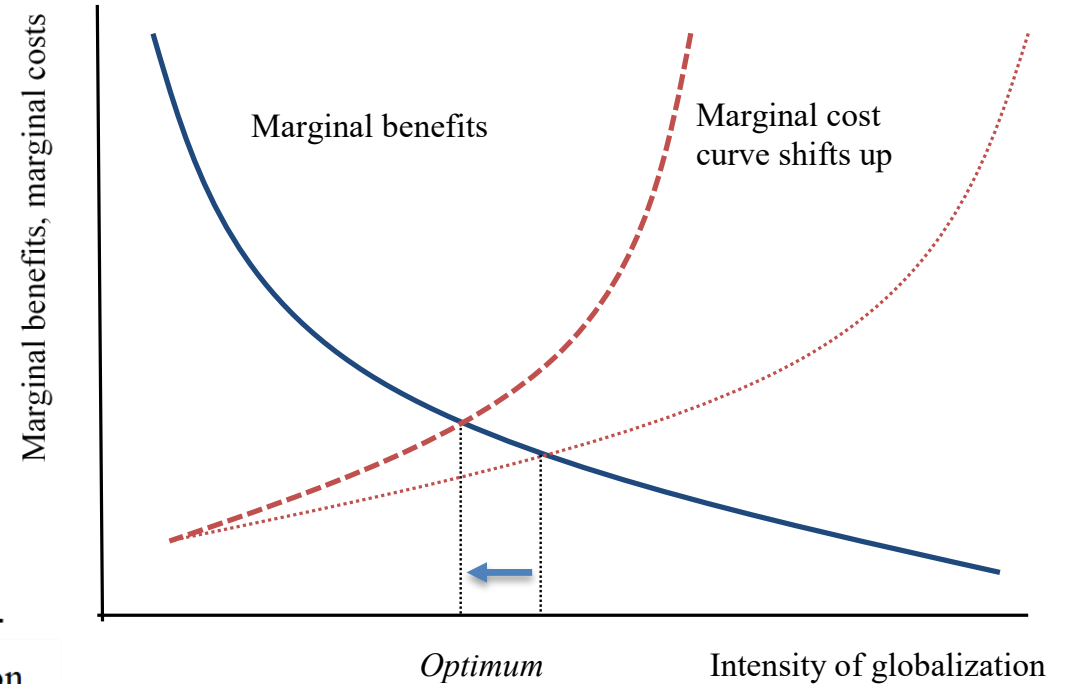


Shift in marginal cost schedule

Marginal costs and benefits, optimum intensity



Shift in marginal cost schedule



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

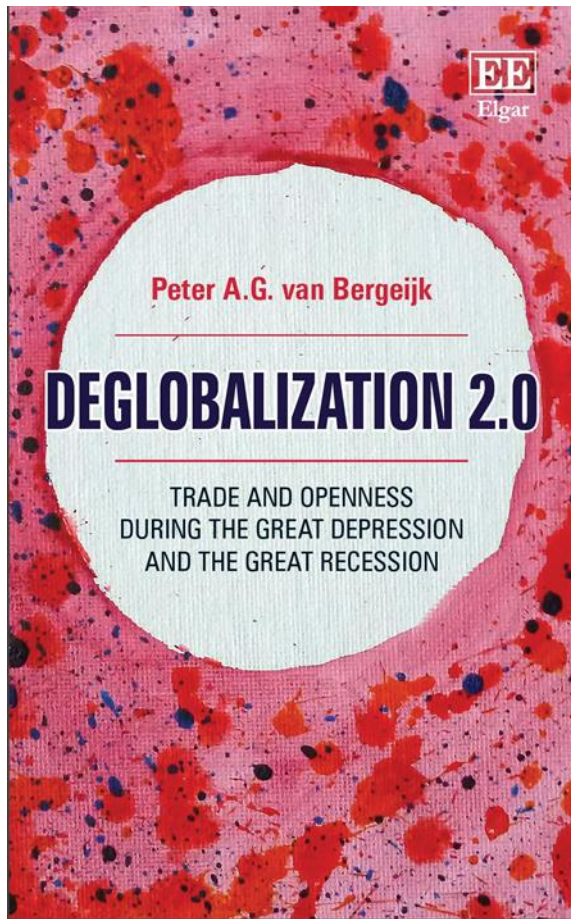
Accessed March 15,2020

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



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 curves, 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/statistics_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 facilitation indicators)
- WTO https://www.wto.org/english/res_e/statistics_e/statistics_e.htm
- Global trade alert http://www.globaltradealert.org/data_extraction
- CPB World trade monitor <https://www.cpb.nl/en/worldtrademonitor>

Useful Resources

☰ YouTube^{NL} Search



Deglobalization 2.0 (Video by Institute of Social Studies in The Hague)

704 views • Jul 25, 2019

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