

RIETI International Symposium

Information Technology and the New Globalization: Asia's economy today and tomorrow

Handout



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Research Institute of Economy, Trade and Industry (RIETI)

<http://www.rieti.go.jp/en/index.html>

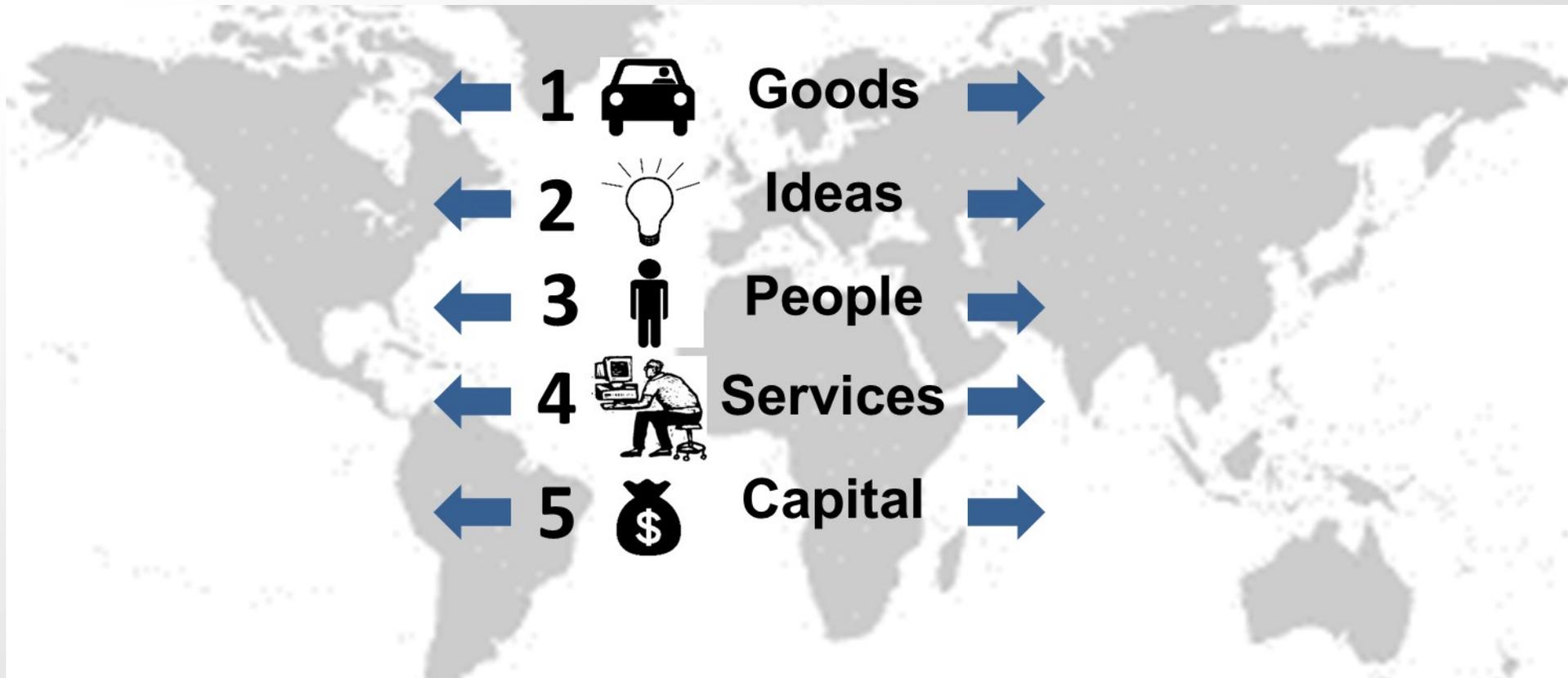
THE GREAT CONVERGENCE

Information technology and the New Globalization

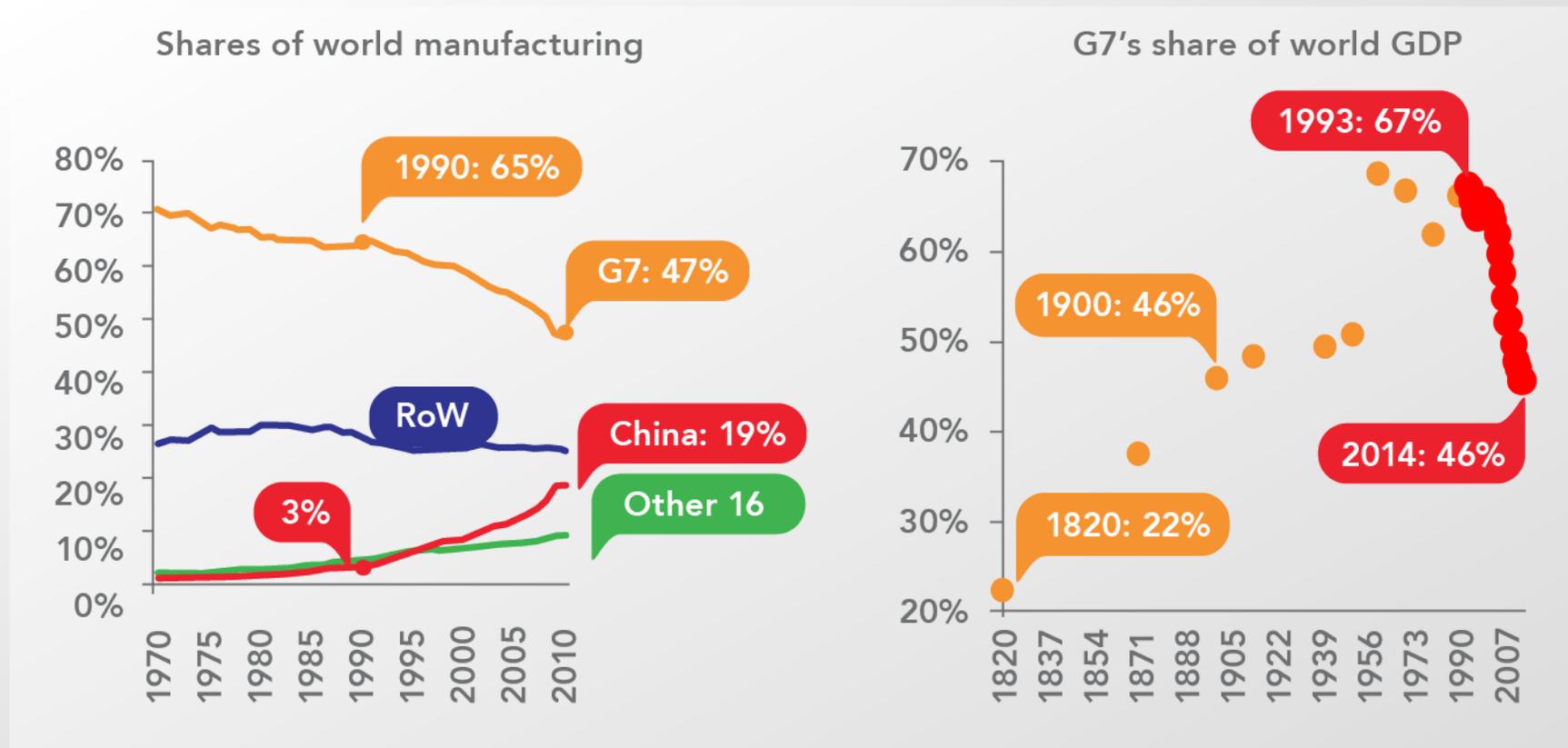
A NEW BOOK BY RICHARD BALDWIN
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THE GRADUATE INSTITUTE | GENEVA

Globalisation is all the things that happen when goods, ideas, people, services & capital move from one nation to another



Manufacturing & GDP shares shifted from G7 to a few developing countries



I6: China, Korea, India, Poland, Indonesia, Thailand

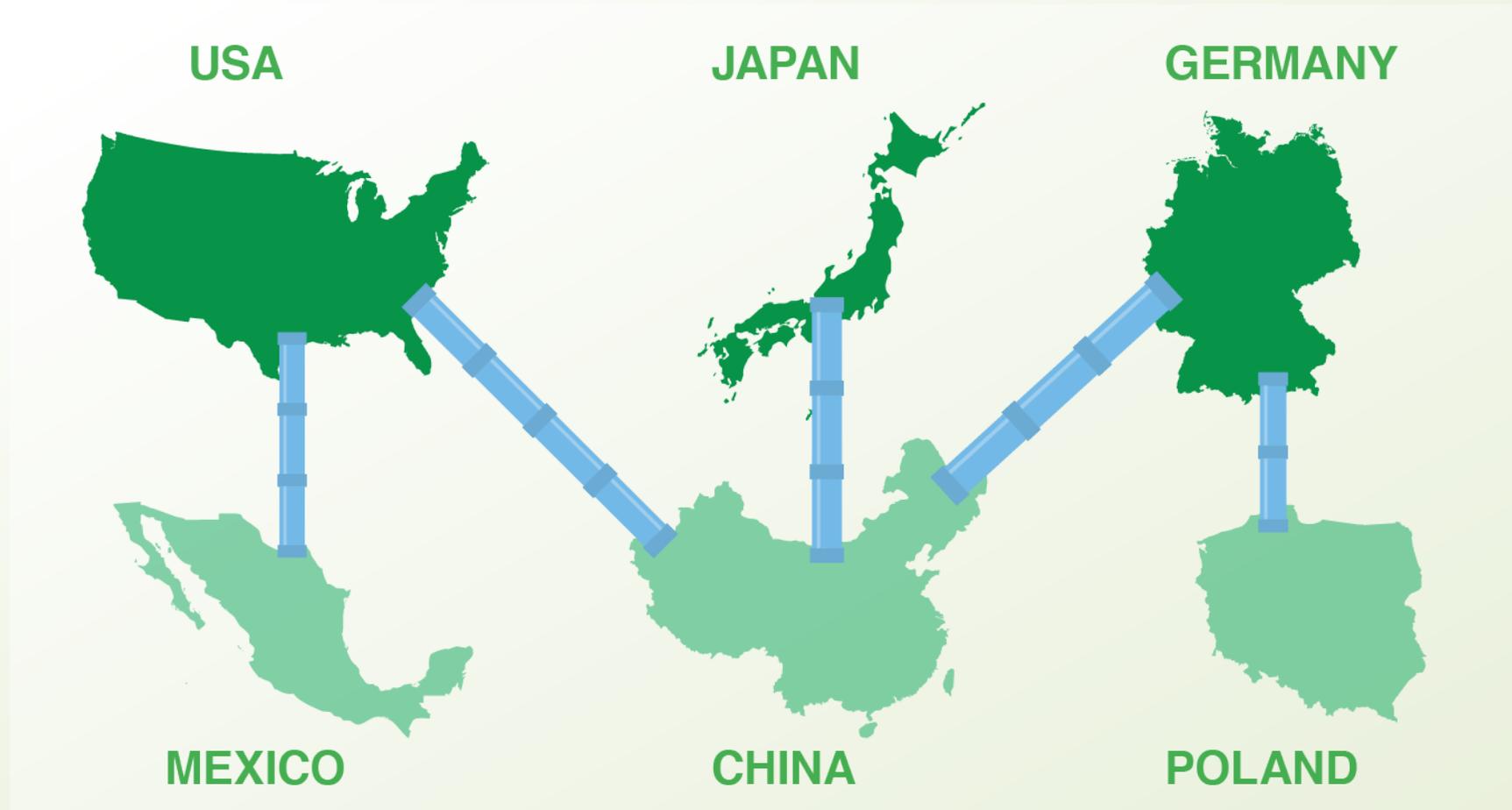
What if globalisation were driven by knowledge flows,
not trade flows?



Be extreme to be extremely clear

- Suppose everything is made from knowhow & labour.
- Suppose trade costs & barriers unchanged since 1990.
- Suppose in 1990 'pipelines' opened that allowed firms to move their knowhow across borders.

Assume this pipeline pattern



Situation in 1990

- Headquarter Economies (G7)
 - High $\frac{\text{Knowhow}}{\text{Labour}}$ implies High Wages
- Factory Economies
 - Low $\frac{\text{Knowhow}}{\text{Labour}}$ implies Low Wages

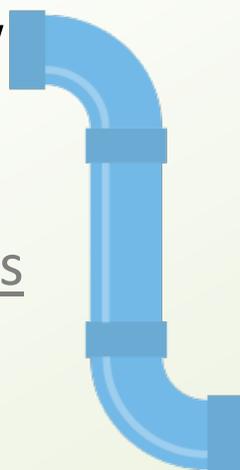
“Globalisation as knowledge arbitrage”

- Headquarter Economies (G7)

- High $\frac{\text{Knowhow}}{\text{Labour}}$ High Wages

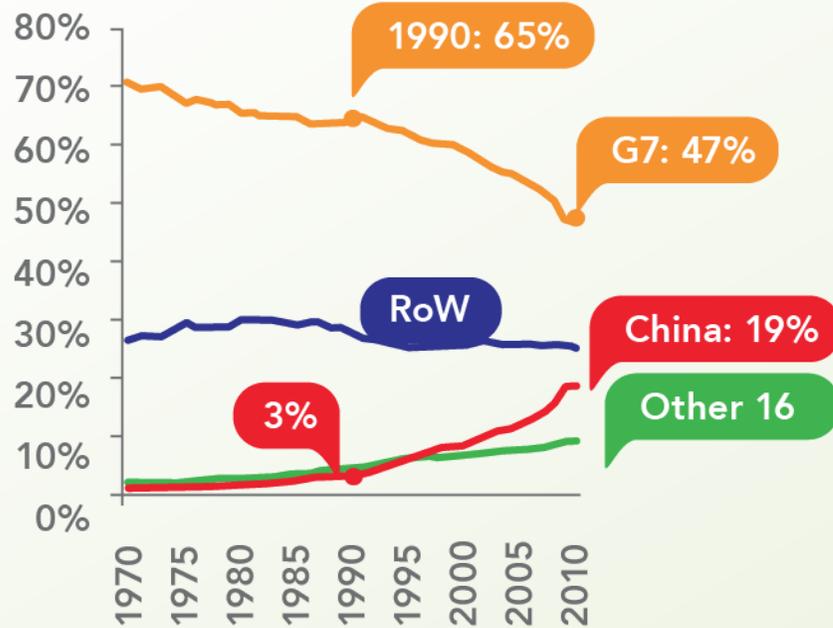
- Factory Economies

- Low $\frac{\text{Knowhow}}{\text{Labour}}$ Low Wages

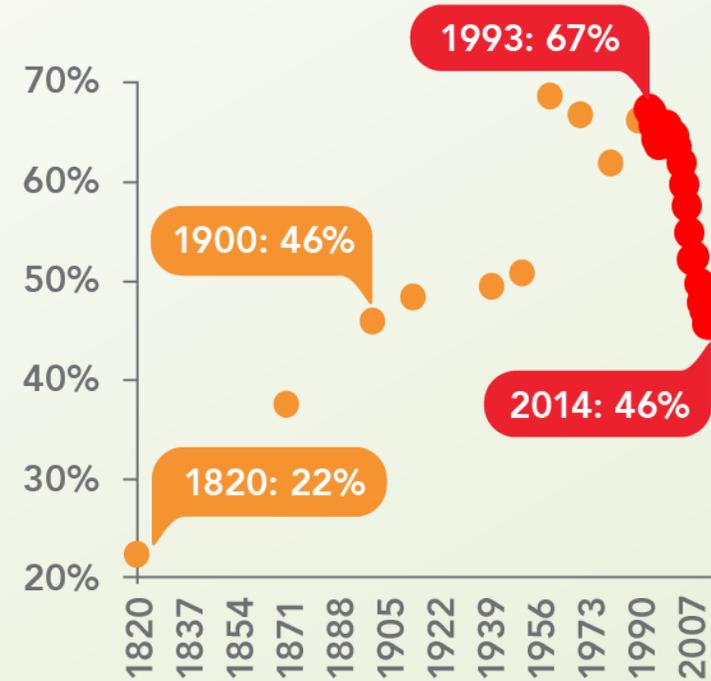


What would knowledge offshoring do?

Shares of world manufacturing



G7's share of world GDP



**How do we put
knowledge back in
the box?**



Broader perspective on globalisation: 3 costs that form 3 constraints on globalisation

Trade costs
(cost of moving goods)



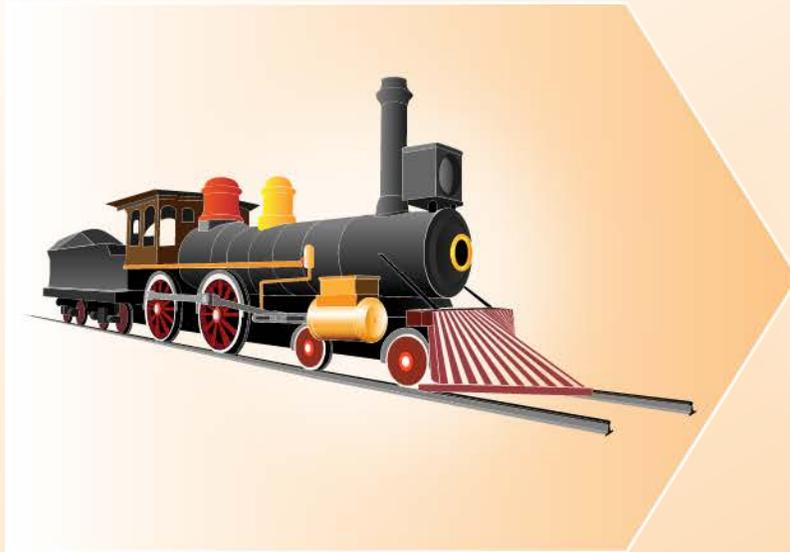
Communication costs
(cost of moving ideas)



Face-to-face costs
(cost of moving people)



Steam Revolution & Pax Britannica lowered the cost of moving goods



LOWER

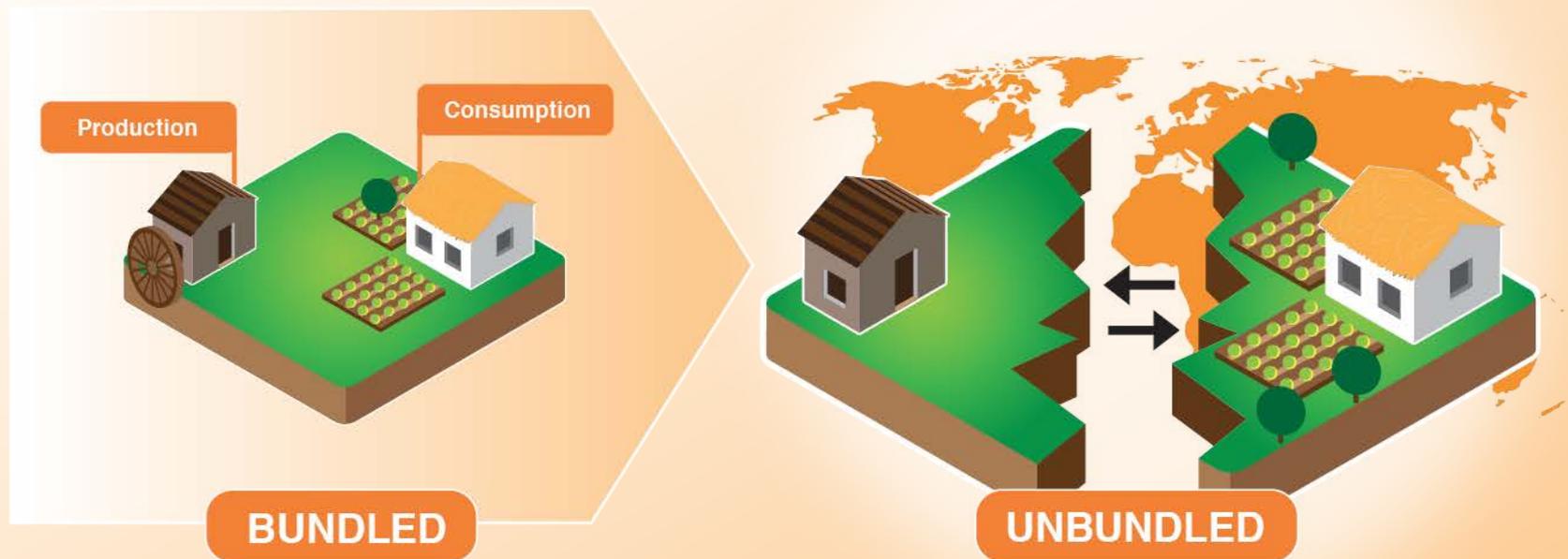


High
Communication costs

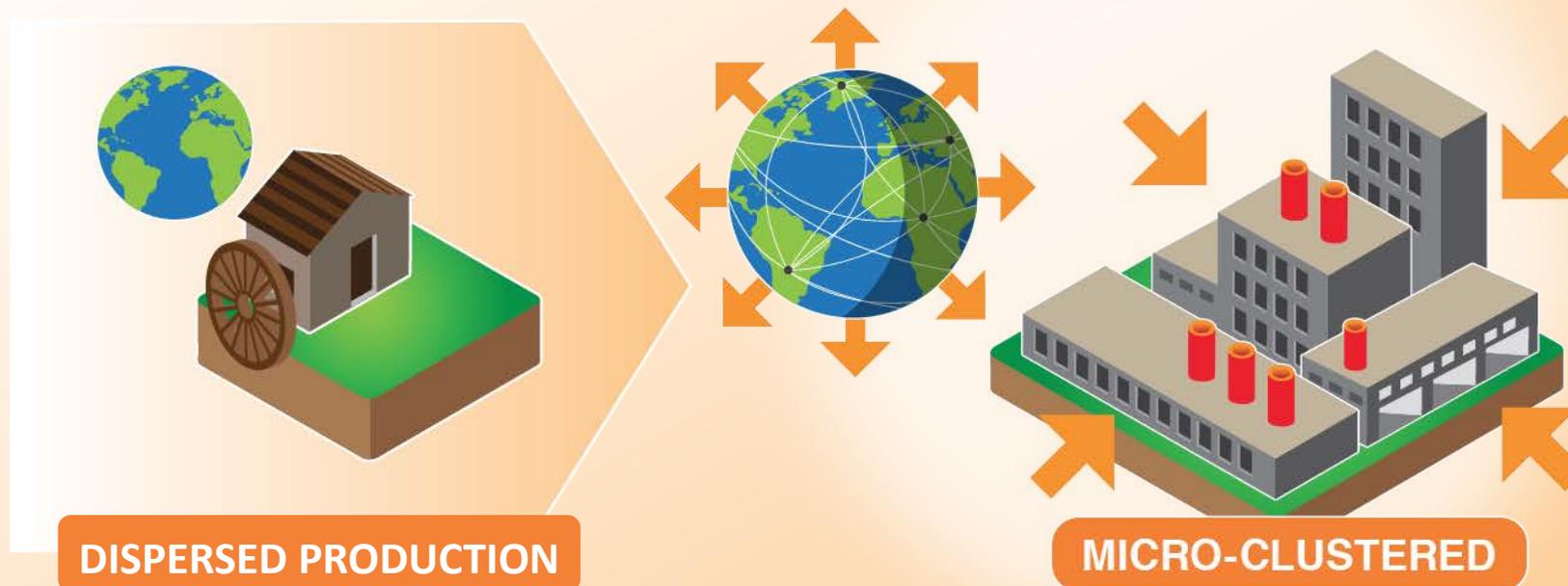


High
Face 2 face costs

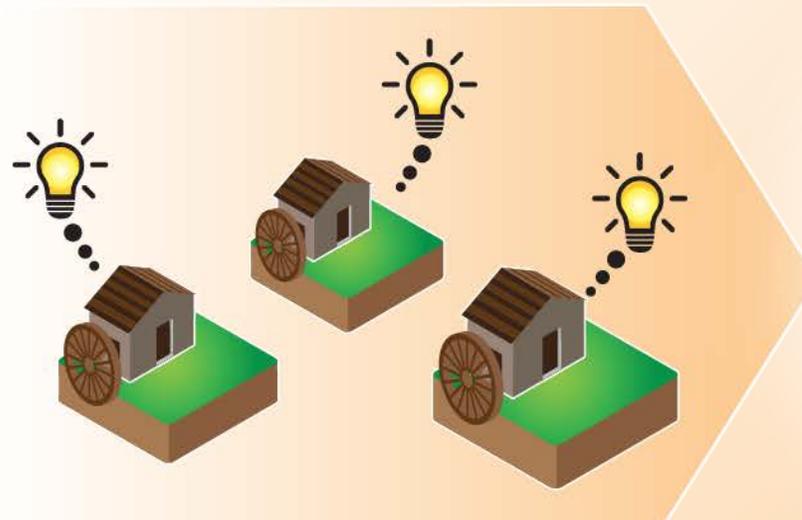
Low trade costs made high volume trade feasible; Comparative advantage made it profitable



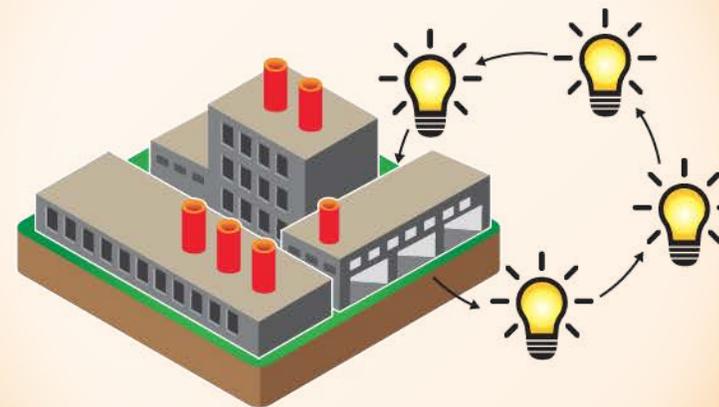
As markets expanded globally, production clustered locally
(to reduce communication costs, not trade costs)



Micro-clustering fostered innovation & ignited bonfire of innovation & modern growth

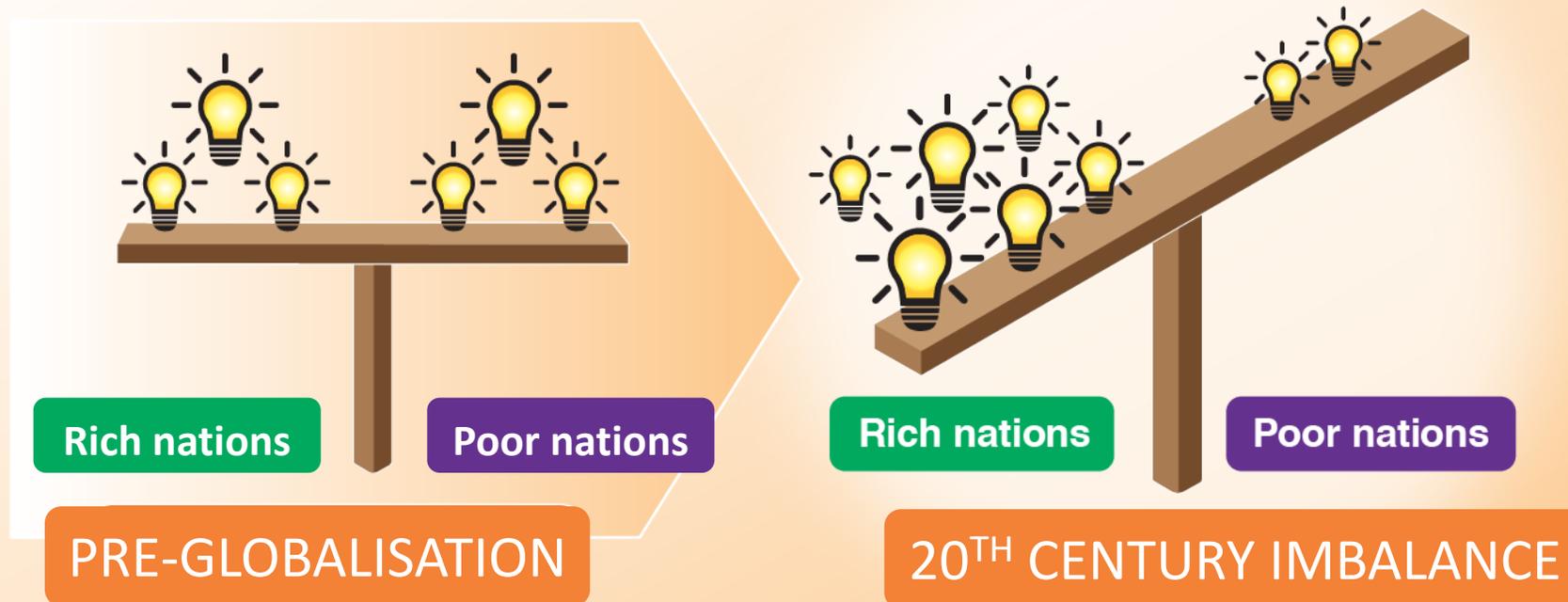


DISPERSED INNOVATION

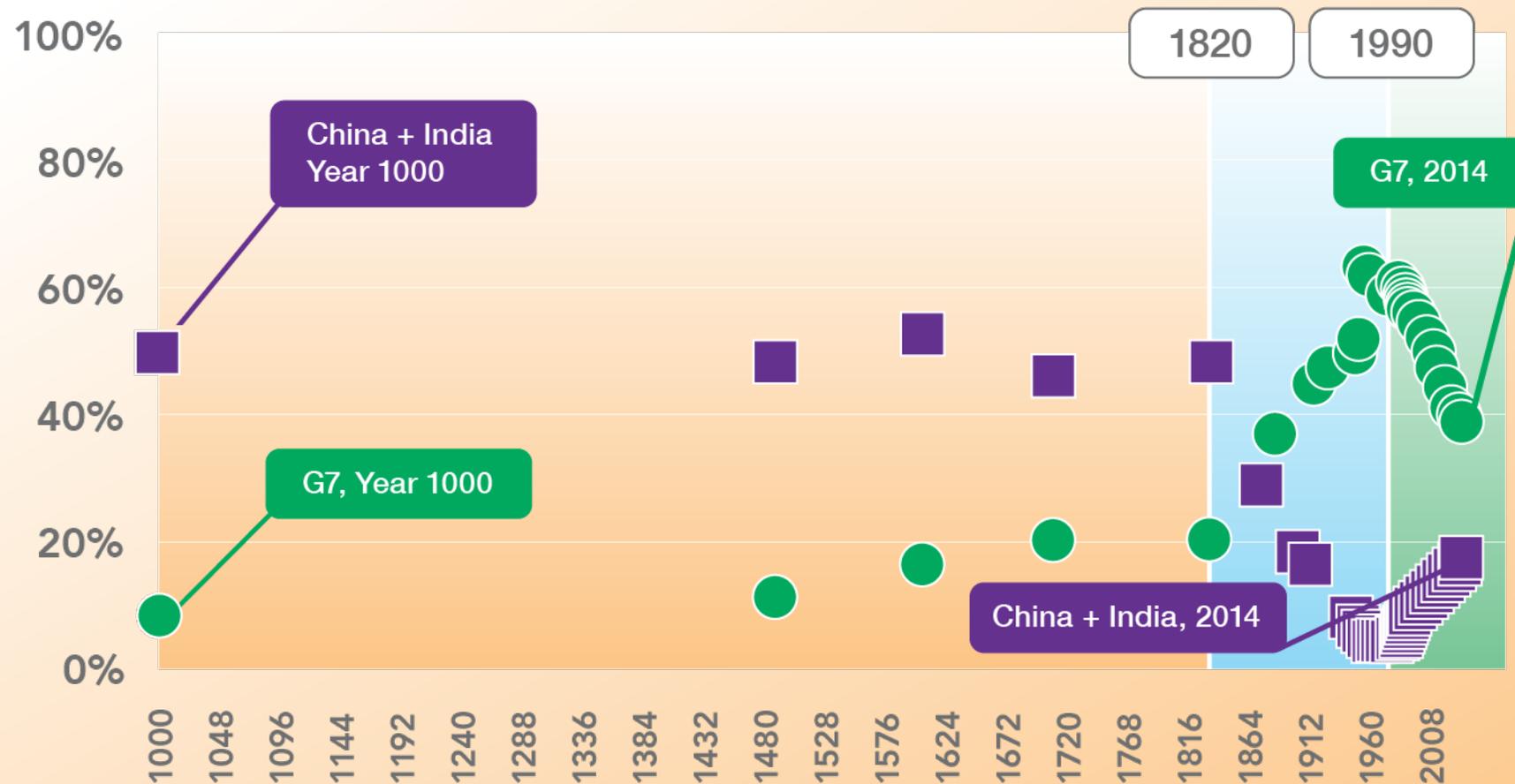


CLUSTERED INNOVATION

High communication costs meant G7 innovations stayed in G7 nations; Knowhow imbalances appeared



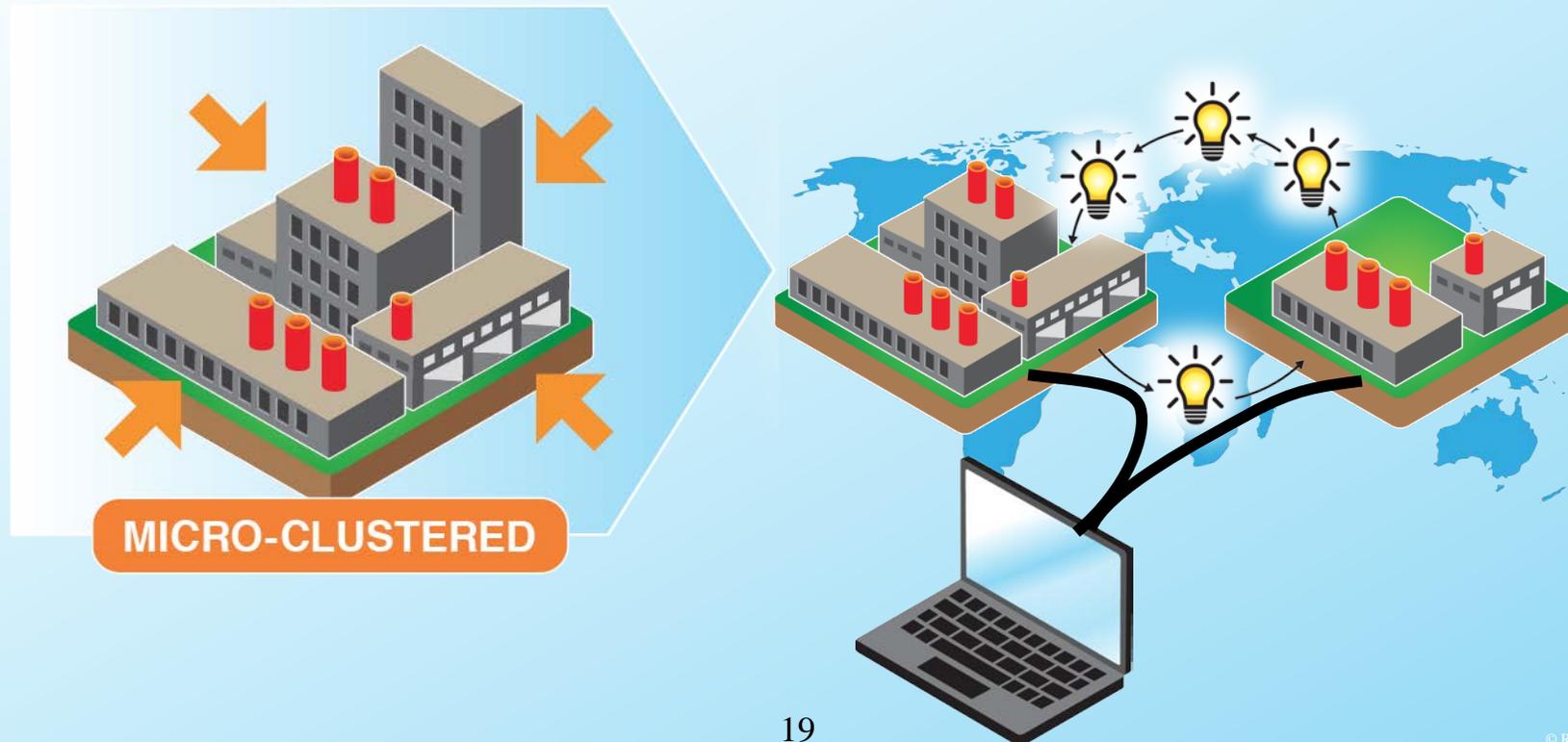
Result: "The Great Divergence" (1820 to 1990)



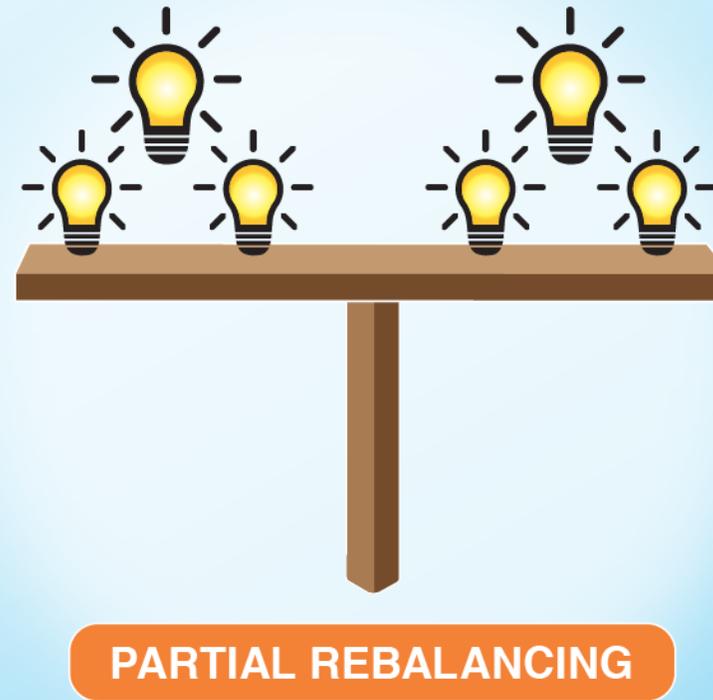
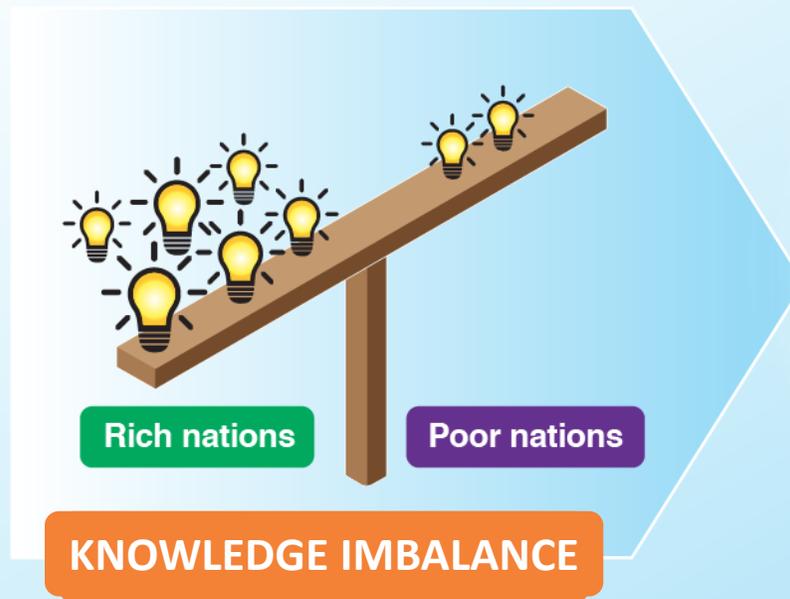
Information & Communications Revolution (ICT) lowered the cost of moving ideas



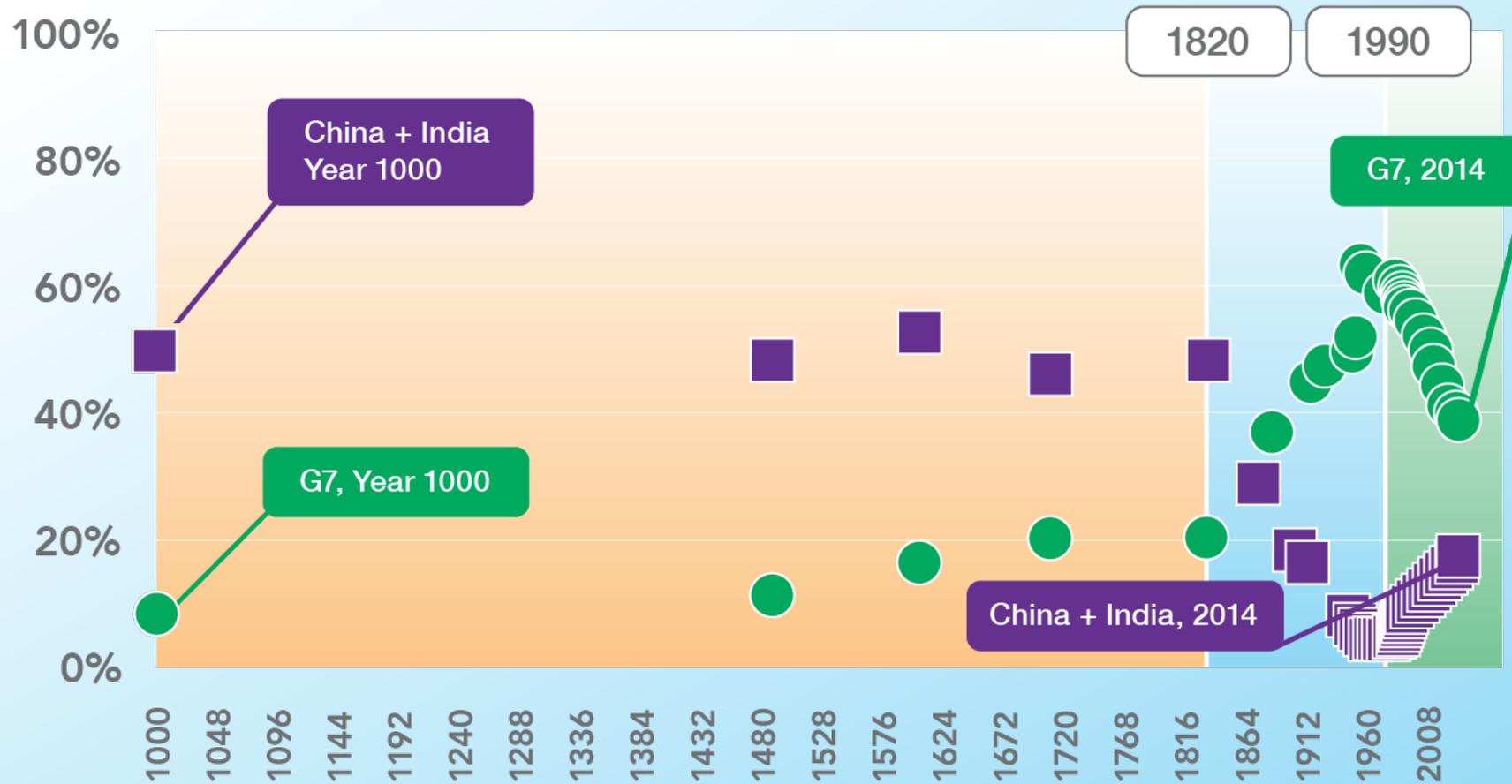
ICT made offshoring feasible; Vast wage differences made it profitable → “Knowledge offshoring” & Commodity Super Cycle



The new 'hi-tech-low-wage' mix shifted manufacturing & knowhow massively to a handful of developing nations



Result: 'The Great Convergence' (1990 to 2014)



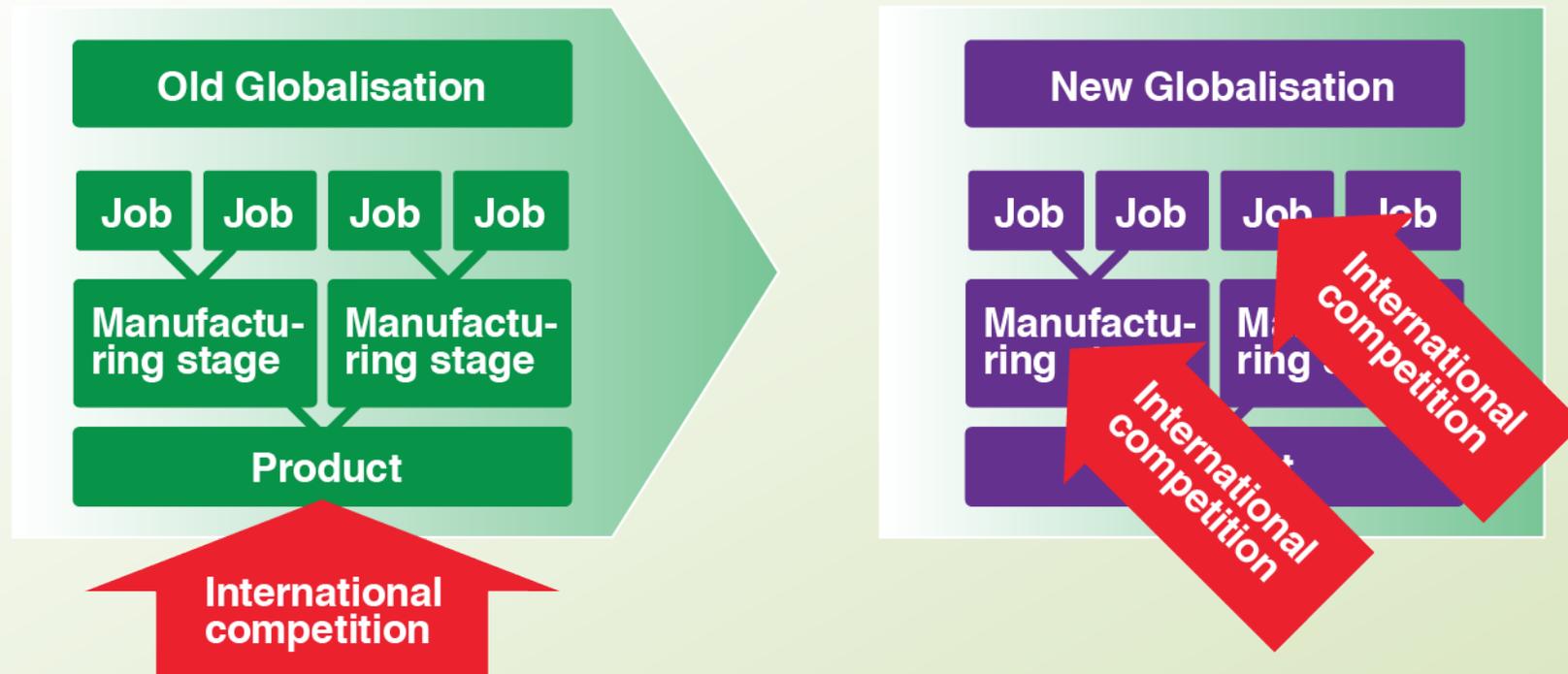
**How it explains
today's anti-
globalisation
in many rich
nations**



#1) New Globalisation breaks monopoly that G7 labour had on G7 knowhow



#2) New Globalisation affects economies with finer resolution; It's not sectors & skill groups anymore



Result in most G7 nations: Economic anxiety, fragility & disenfranchisement

- #1 & #2 mean New Globalisation's impact is:
 - More sudden;
 - More individual;
 - More unpredictable;
 - More uncontrollable.

No matter what job or skills you have, you can't really be sure your job won't be next.

How likely is it that your job will be disrupted by globalisation in next 5 years:

1. Very likely in a good way
2. Somewhat likely in a good way
3. I expect no change
4. Somewhat likely in a bad way
5. Very likely in a bad way

Will globalisation
advance or retreat
in next 5 years?



Future globalisation

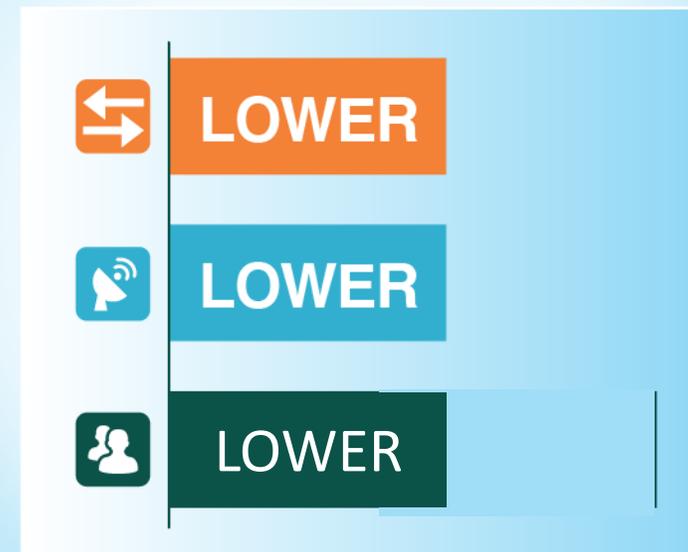


We are going to need
a bigger boat

What happens when the Face-to-Face constraint is relaxed by technology?

Advanced
communications
not travel
(telepresence &
telerobotics)

CLOSE SUBSTITUTES TO “BEING THERE”



Technology opens new kind of pipeline: Virtual migration

- Headquarter Economies (G7)
 - High $\frac{\text{Knowhow}}{\text{Labour}}$ **High wages**
 - Factory Economies
 - Low $\frac{\text{Knowhow}}{\text{Labour}}$ **Low wages**
- 

Telepresence technology today



Brain jobs that telepresence could offshore?

Average monthly salaries in USD		
	US	Philippines
University Professor	6,100	400
School Teacher	4,100	300
Engineer	6,200	570



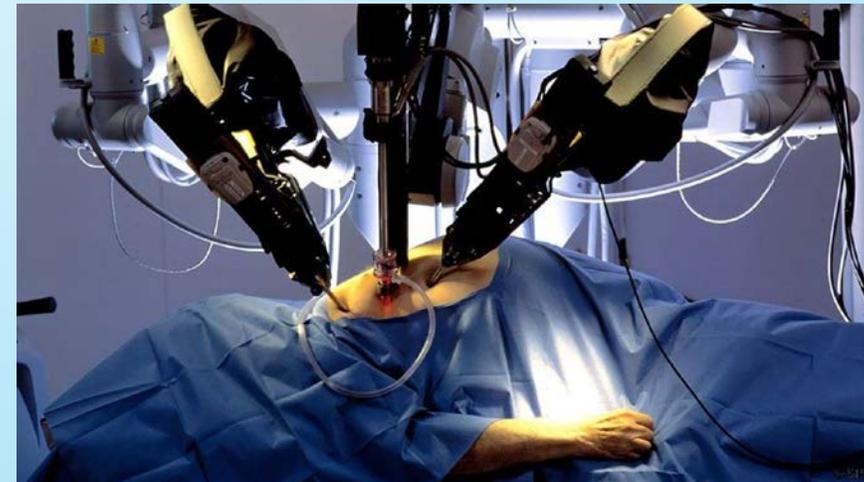
Telerobotics today

Tomorrow's Lives | Hospital | Human body

The surgeon who operates from 400km away

(St Joseph's Healthcare) (Credit: St Jose

Doctors are controlling scalpel-wielding robots in real operations from afar, finds Rose Eveleth. Is this the future of surgery?



Jobs that telerobotics could offshore?



END - Thanks for listening

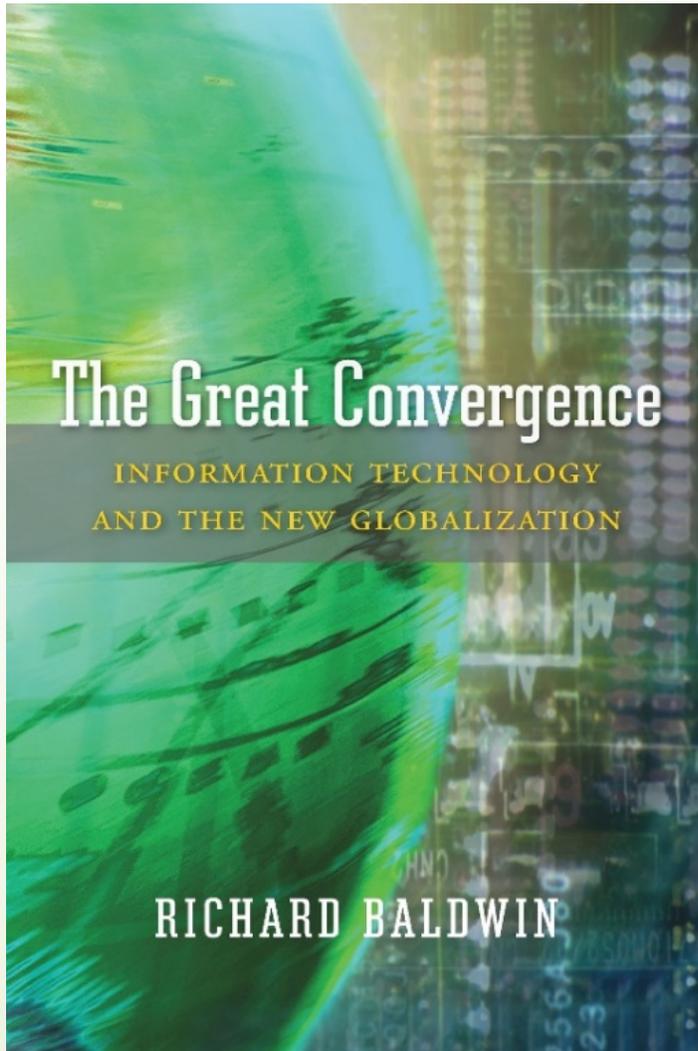


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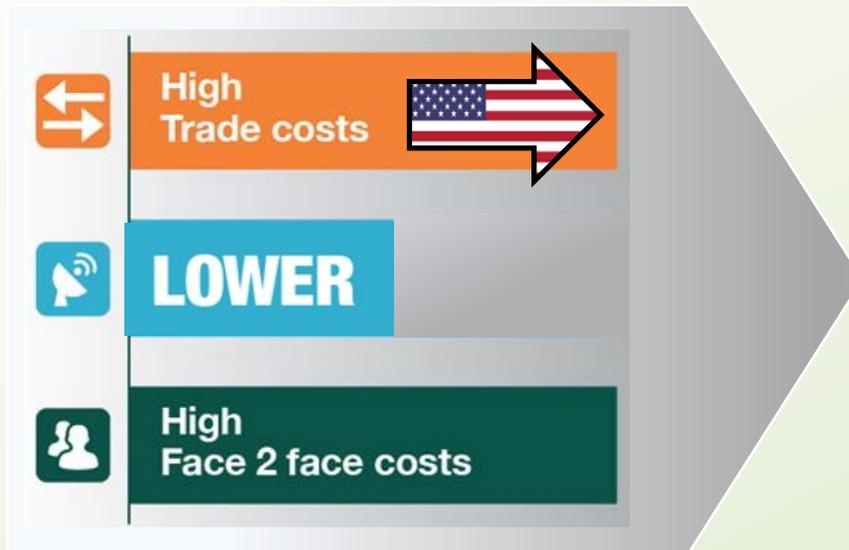
Extra slides for:



How not to address anti-globalisation



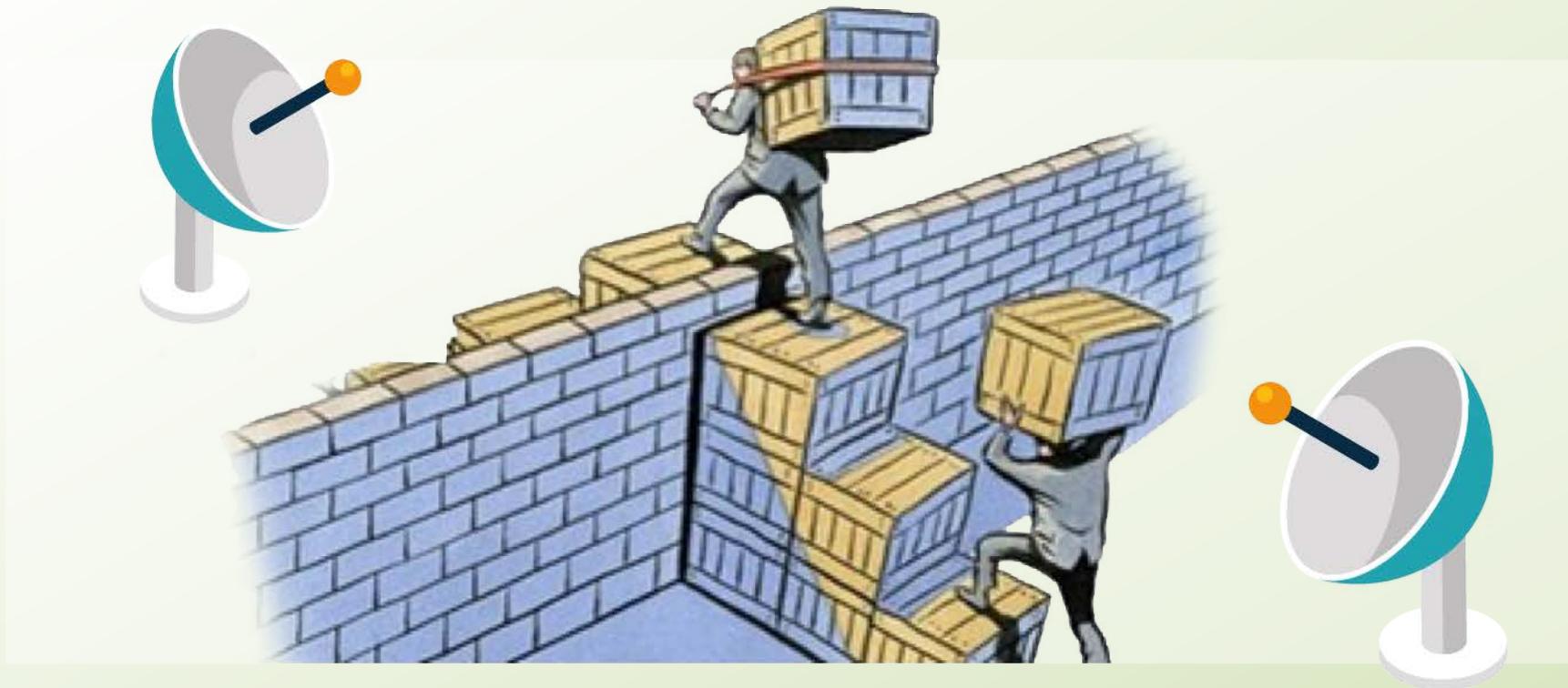
“Trump Tariff Act of 2017”: Would tariffs bring manufacturing jobs back to US?



RE-OFFSHORING?

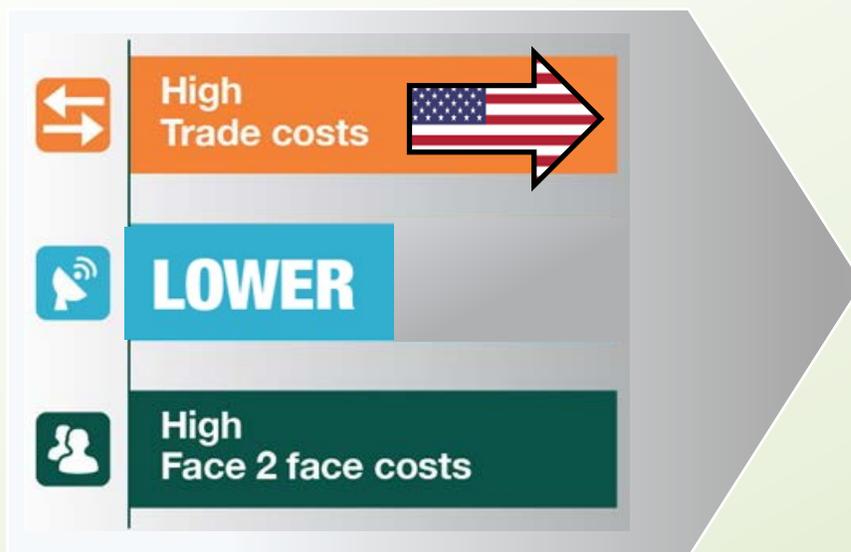
20th century thinking meets a 21st century problem

#1) US tariffs won't stop knowledge offshoring but will raise cost of industrial inputs inside US



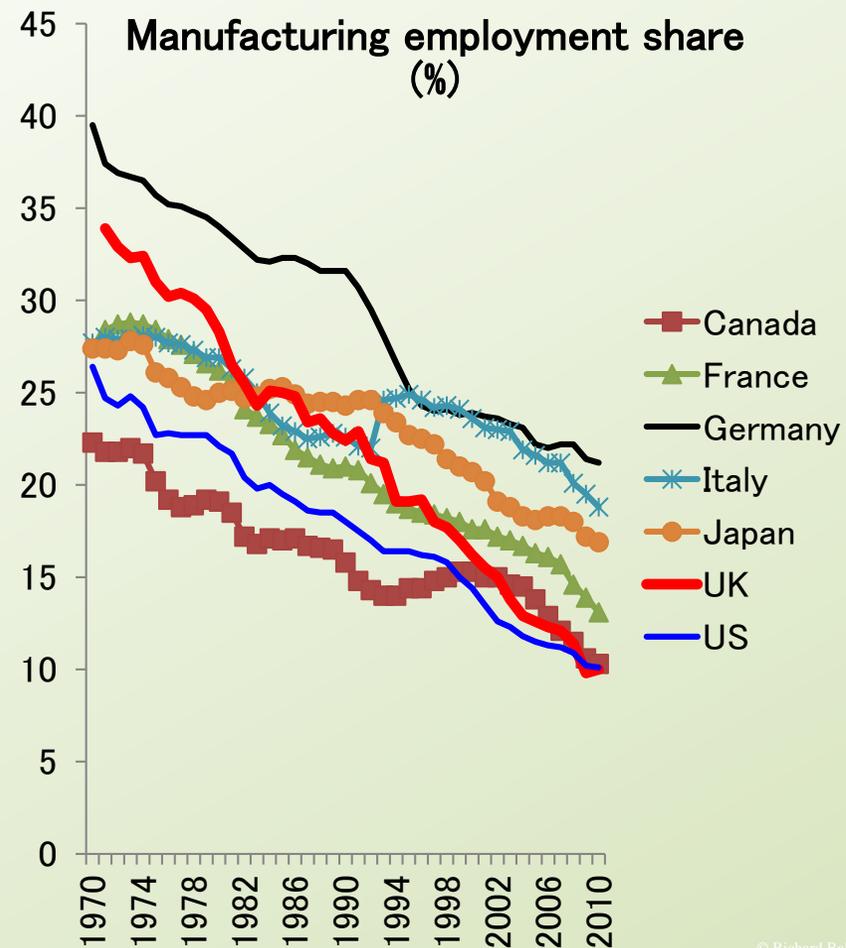
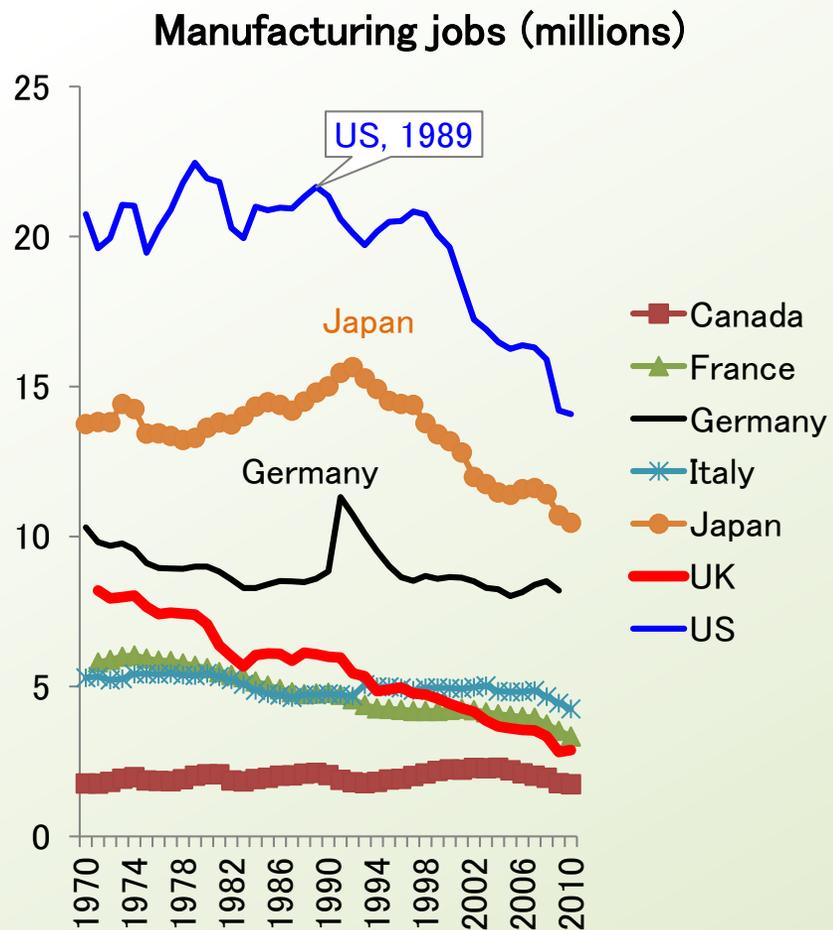
20th century thinking meets a 21st century problem

Protection makes US a high-cost “island” for imported industrial inputs

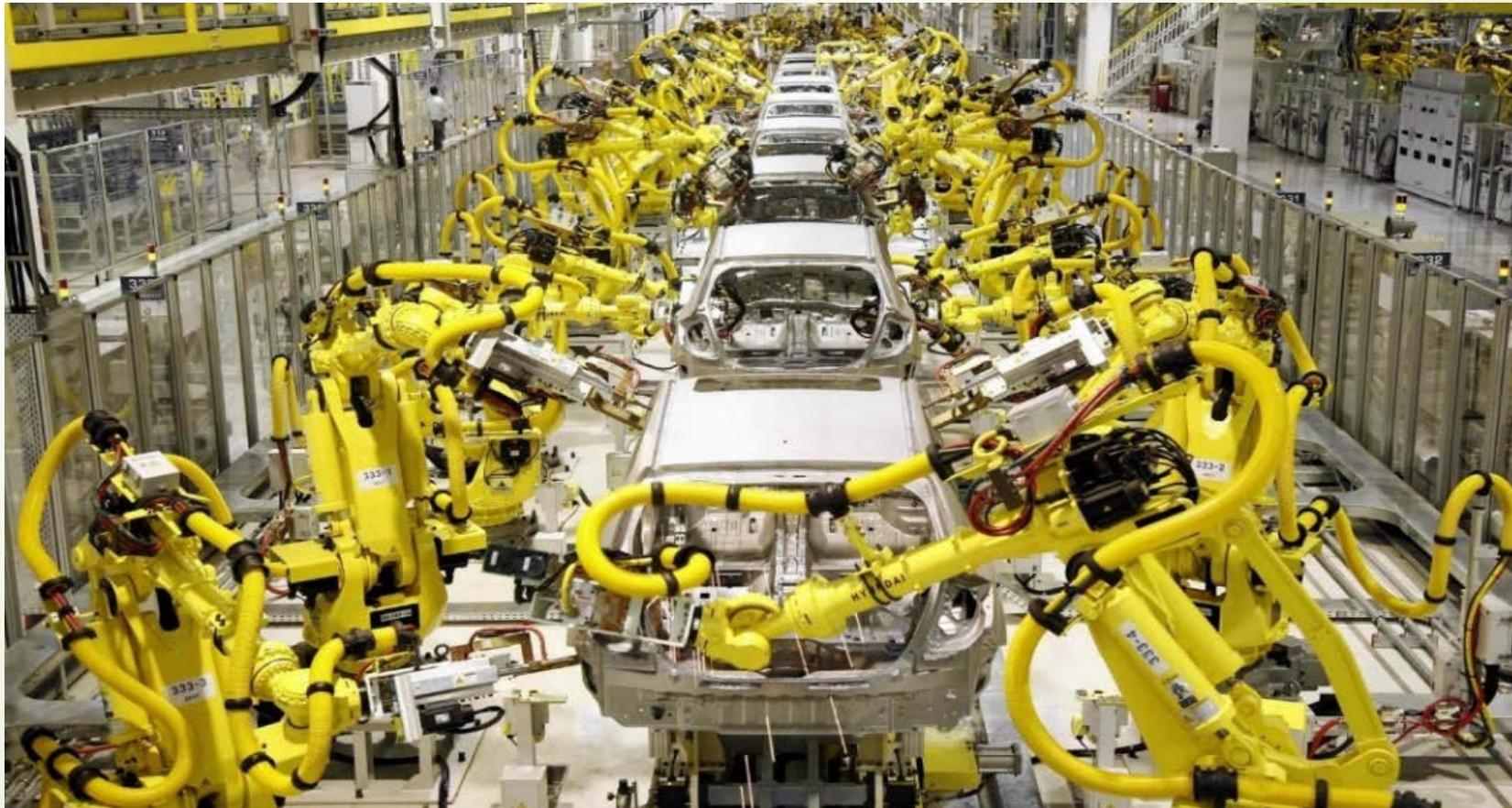


US tariffs encourage some reshoring of production for US market & more offshoring of production for non-US markets (foreign affiliate sales replace exports)

#2) Jobs come back? US workers competing with China abroad & robots at home



Offshored jobs were low-skill & routine so reshoring production likely to make jobs for US robots, not US workers



What way forward?

Step 1: Accept 21st century realities

- New Globalisation isn't something foreigners doing to US.
- You can't vote against the New Globalisation by voting against the agreements that shape & control it.
- Old Globalisation tools harm competitiveness in New Globalisation world.

Step 2: Rebuild the team & package it politically

- Rebuild the team:
 - Restore social cohesion with policies that protect individual workers, not individual jobs; Retraining, education, mobility support, income support, maybe even active regional policy.
- Package it politically:
 - “Trade policy in the service of society;”
 - When proposing more open trade & international production share policies, also propose policies that help economically disenfranchised.

Rapid industrialisers vs commodity exporters

Sector origin of value-added in export growth

