THE GREAT CONVERGENCE

Information technology and the New Globalization

A NEW BOOK BY RICHARD BALDWIN

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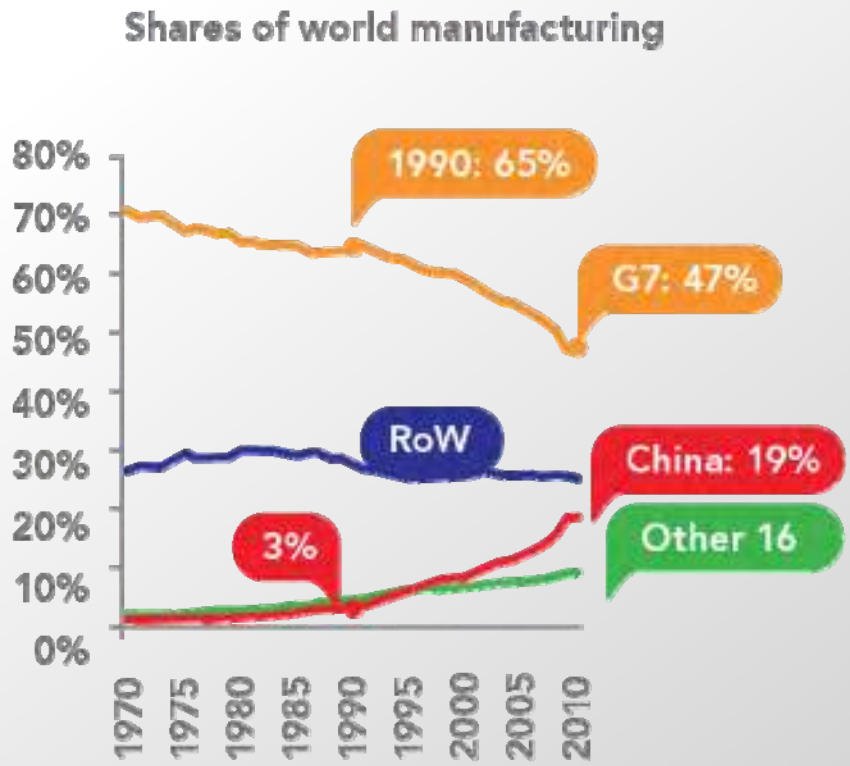
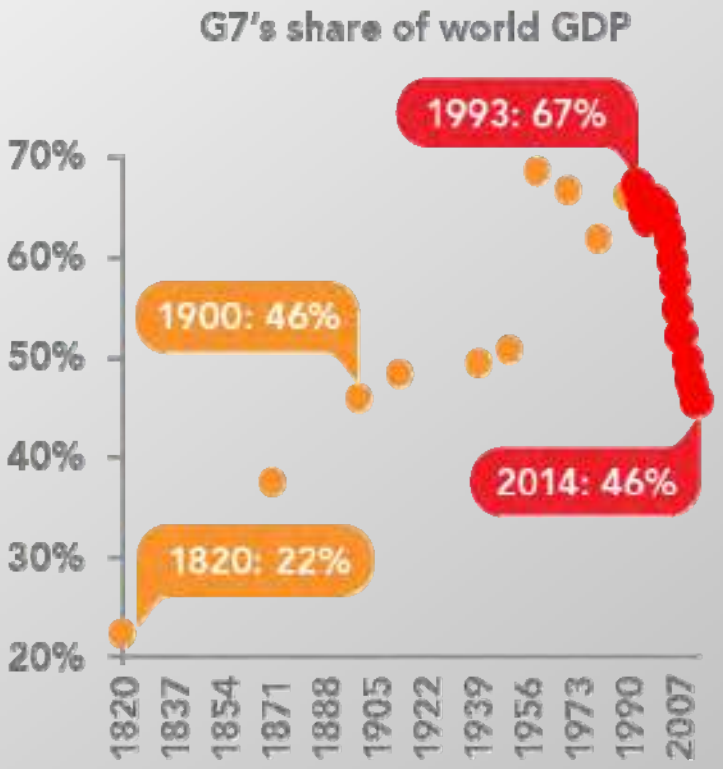
ASR, Sydney
6 March 2017

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





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

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Globalisation's asymmetric impacts & "hyper-globalisation"

1. Disruptive in G7.
2. Cohesive in emerging markets.
3. Many developing nations de-industrialised "prematurely".
4. Trade agreements changed; "Hyper-globalisation."

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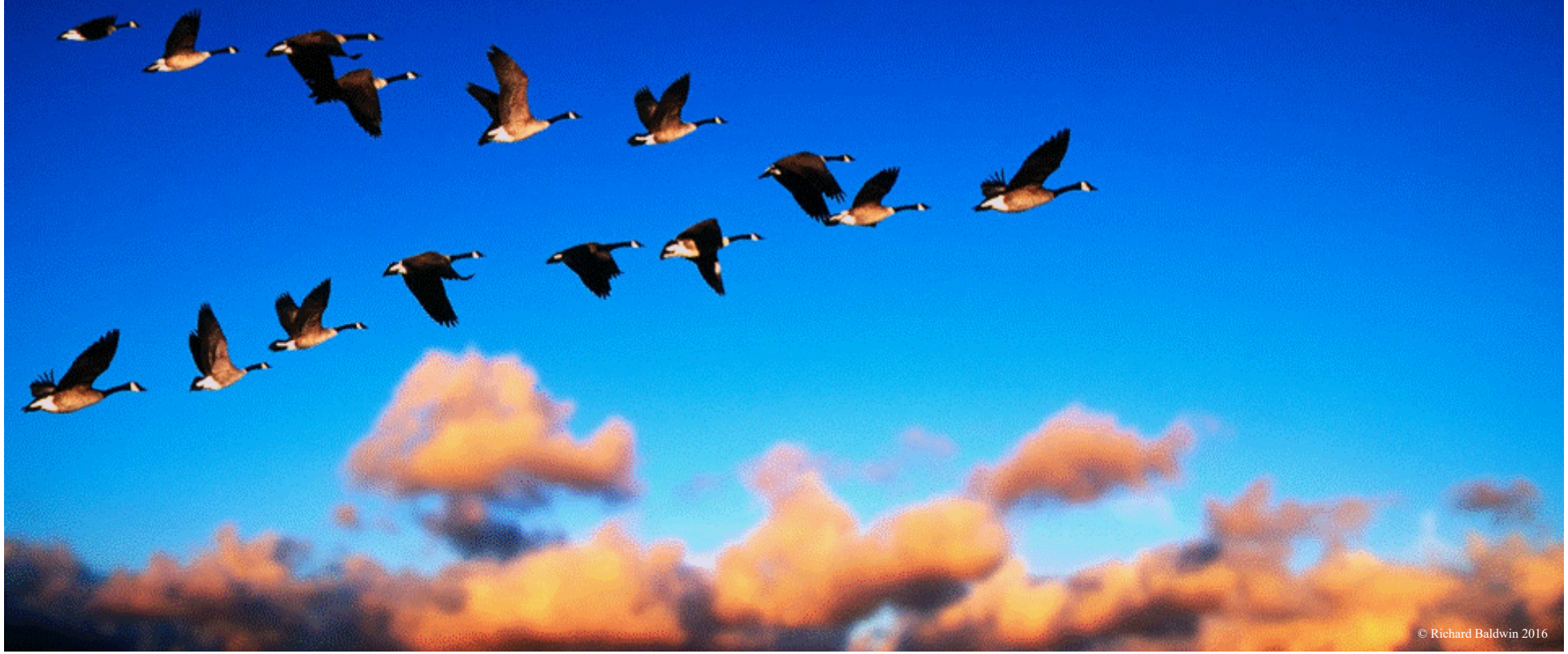
What if globalisation were about knowledge flows instead of trade flows?



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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 knowhow to flow across borders.

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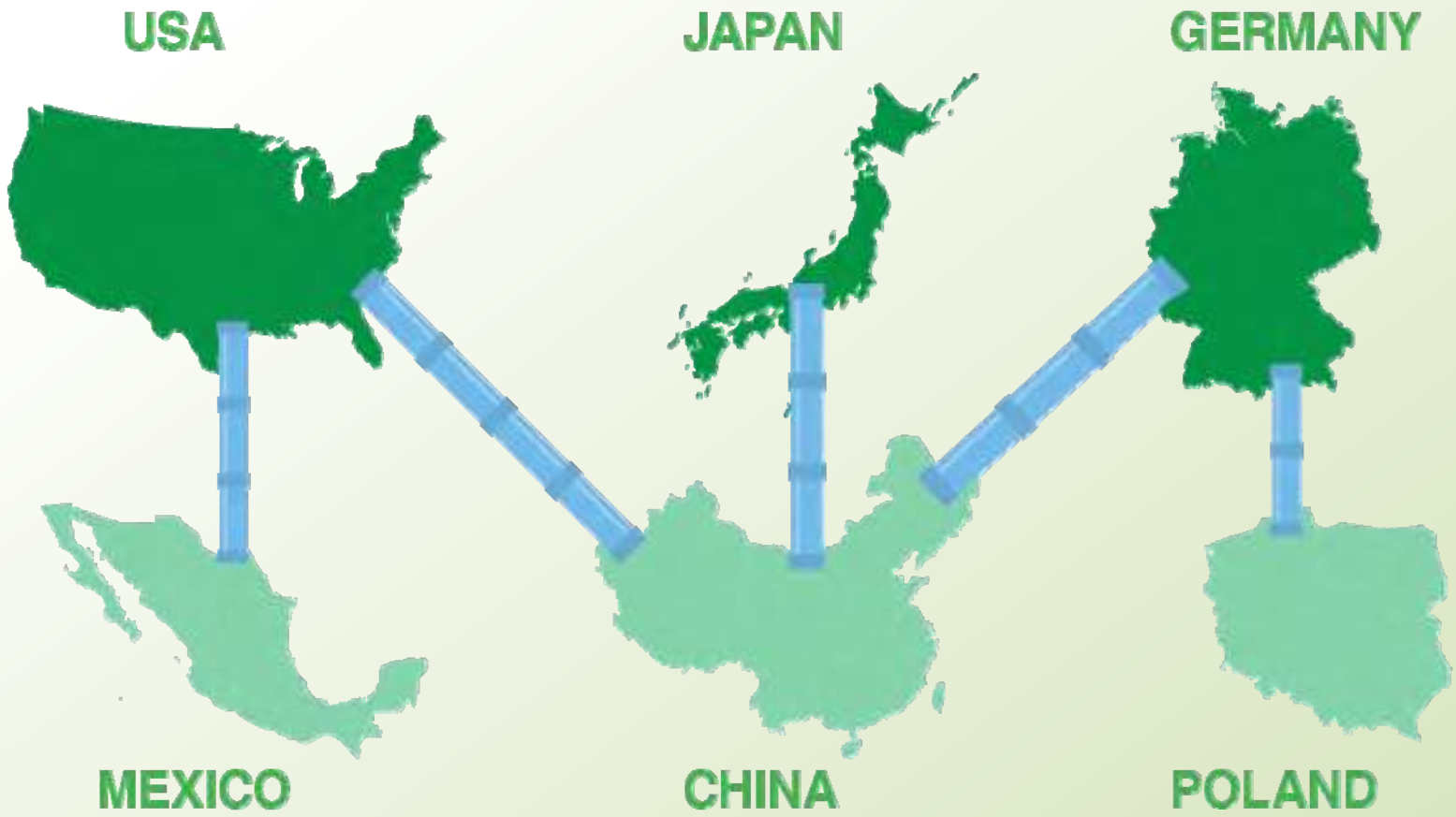
Assume this pipeline pattern



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Pipeline opens; "Globalisation as knowledge arbitrage" begins

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

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What would international impact be?

- Manufacturing shifts from G7 to Factory Economies; is disruptive.
- Factory-Economy growth takes off (Great Convergence); is cohesive.
- Factory Economies embrace policies that foster knowledge flows; HQ Economies embrace policies that protect them.
- Other poor nations hurt by new competitiveness of I6.

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How do we put knowledge back in the box?

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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)

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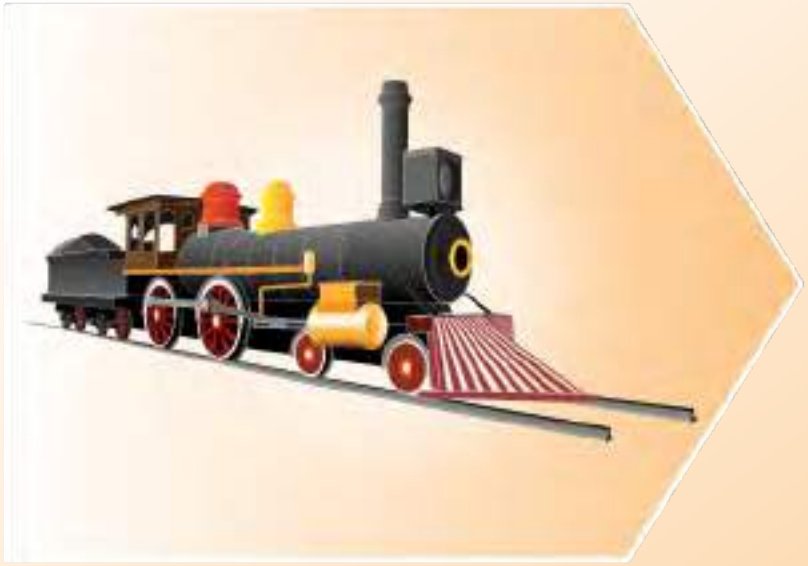
Steam Revolution & Pax Britannica lowered the cost of moving goods



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

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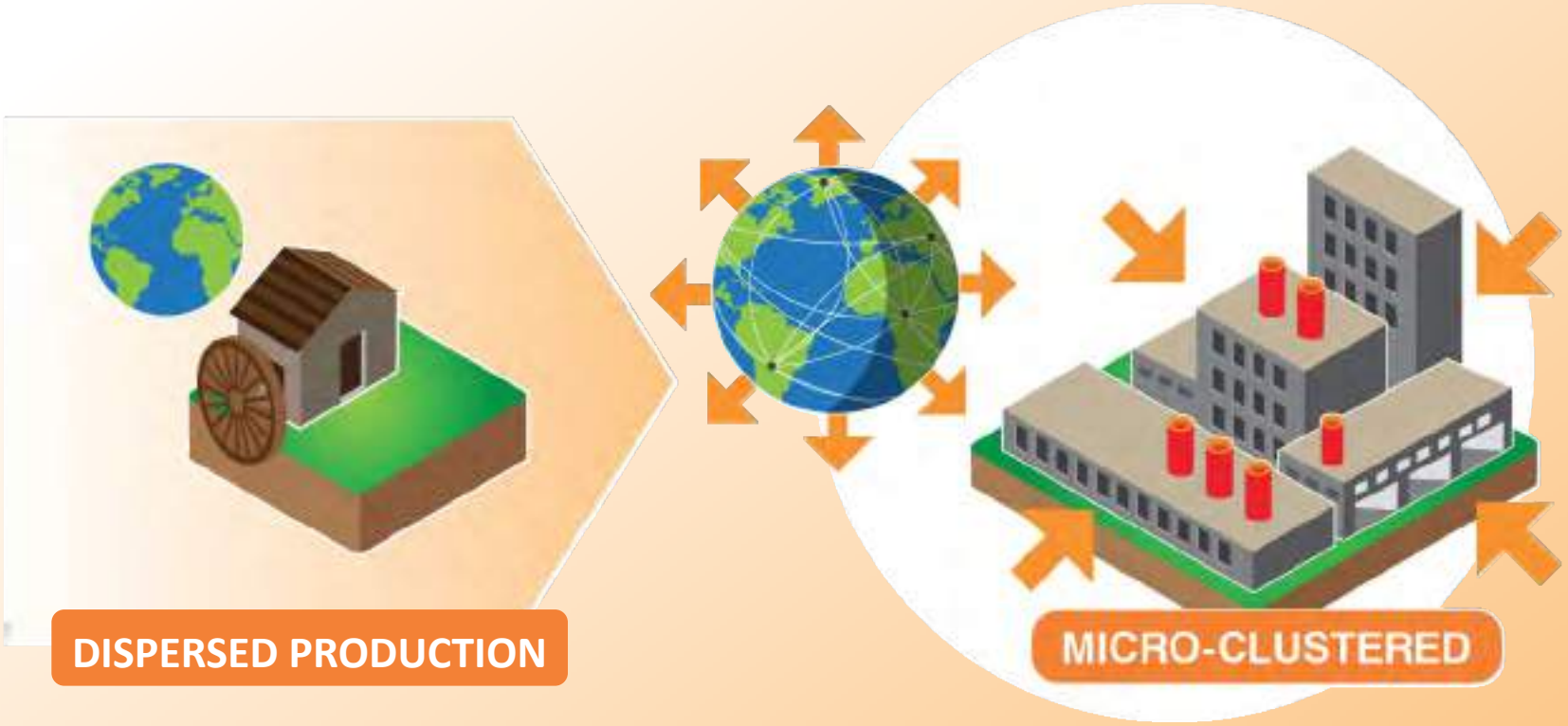
As markets expanded globally, production clustered locally (to reduce communication costs, not trade costs)



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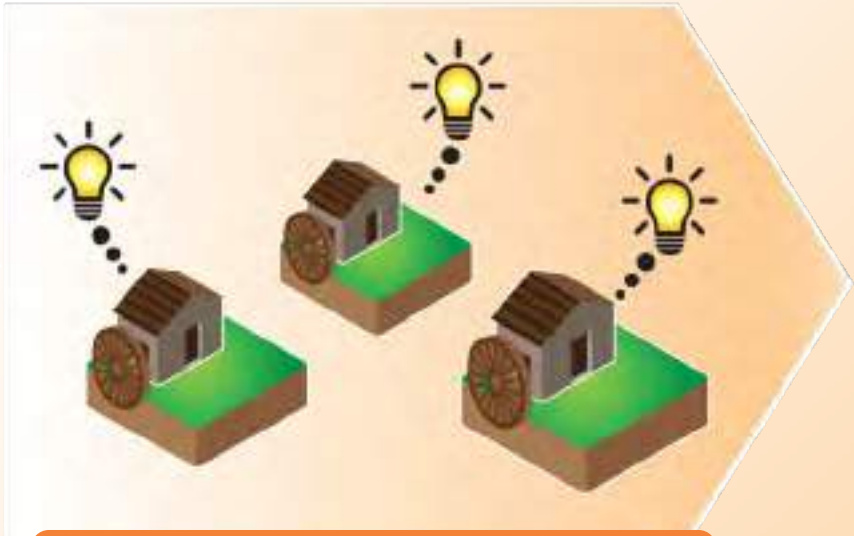
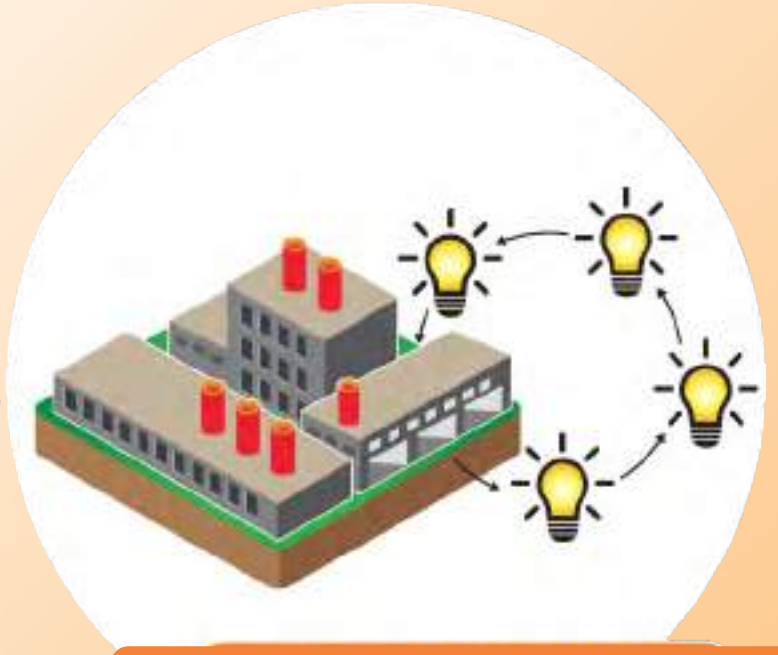
Micro-clustering fostered innovation & ignited bonfire of innovation & modern growth



DISPERSED INNOVATION



CLUSTERED INNOVATION

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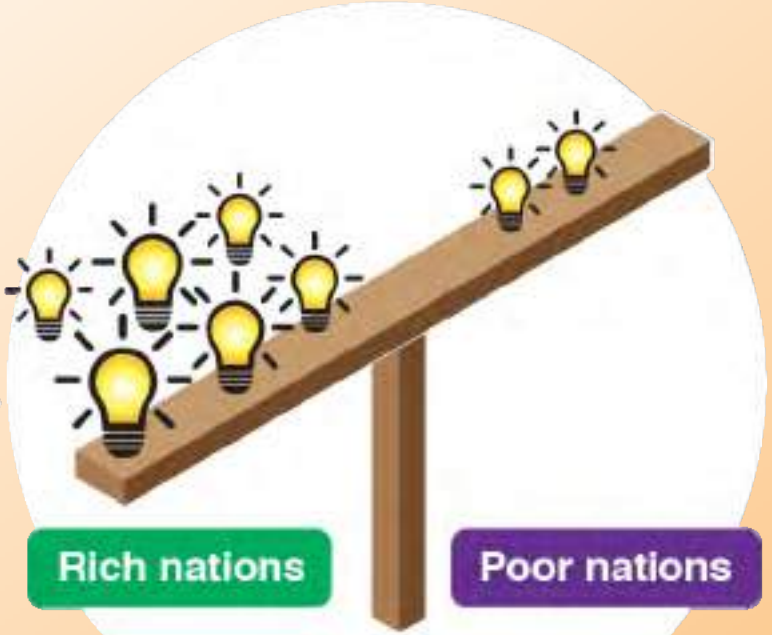
High communication costs meant G7 innovations stayed in G7 nations; Knowhow imbalances appeared

PRE-GLOBALISATION



20TH CENTURY IMBALANCE

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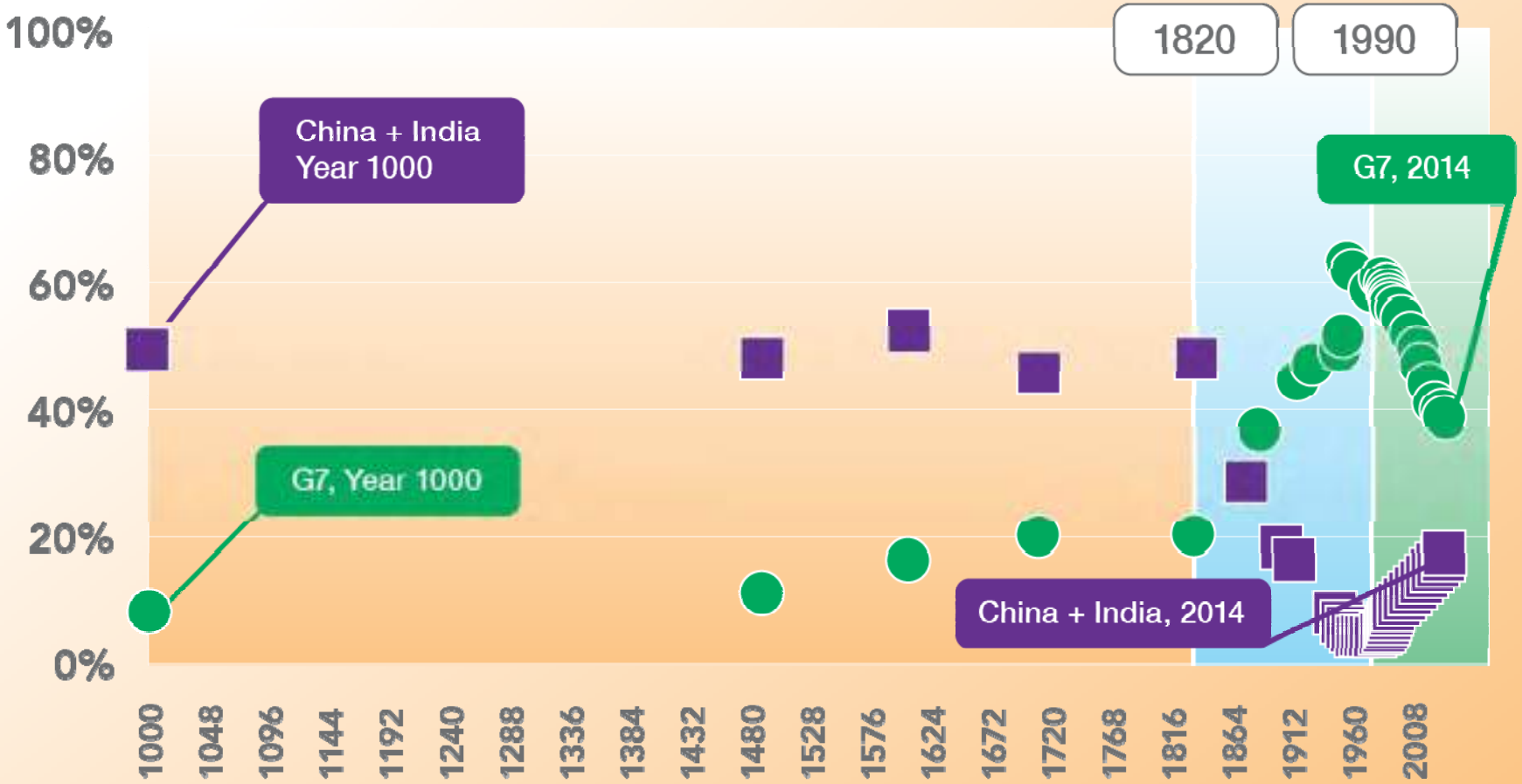
OLD GLOBALISATION

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



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Revolution in information & communications technology (ICT) lowered the cost of moving ideas

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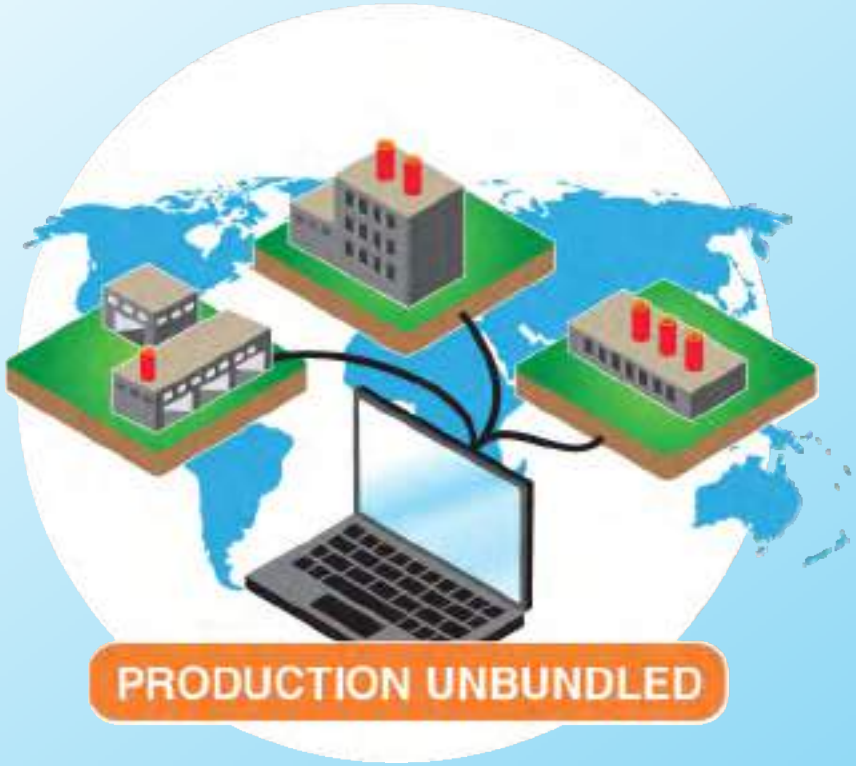
Lower communication costs made offshoring feasible; Vast wage differences made it profitable



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To ensure offshored production meshed seamlessly, G7 firms offshored knowhow with the jobs

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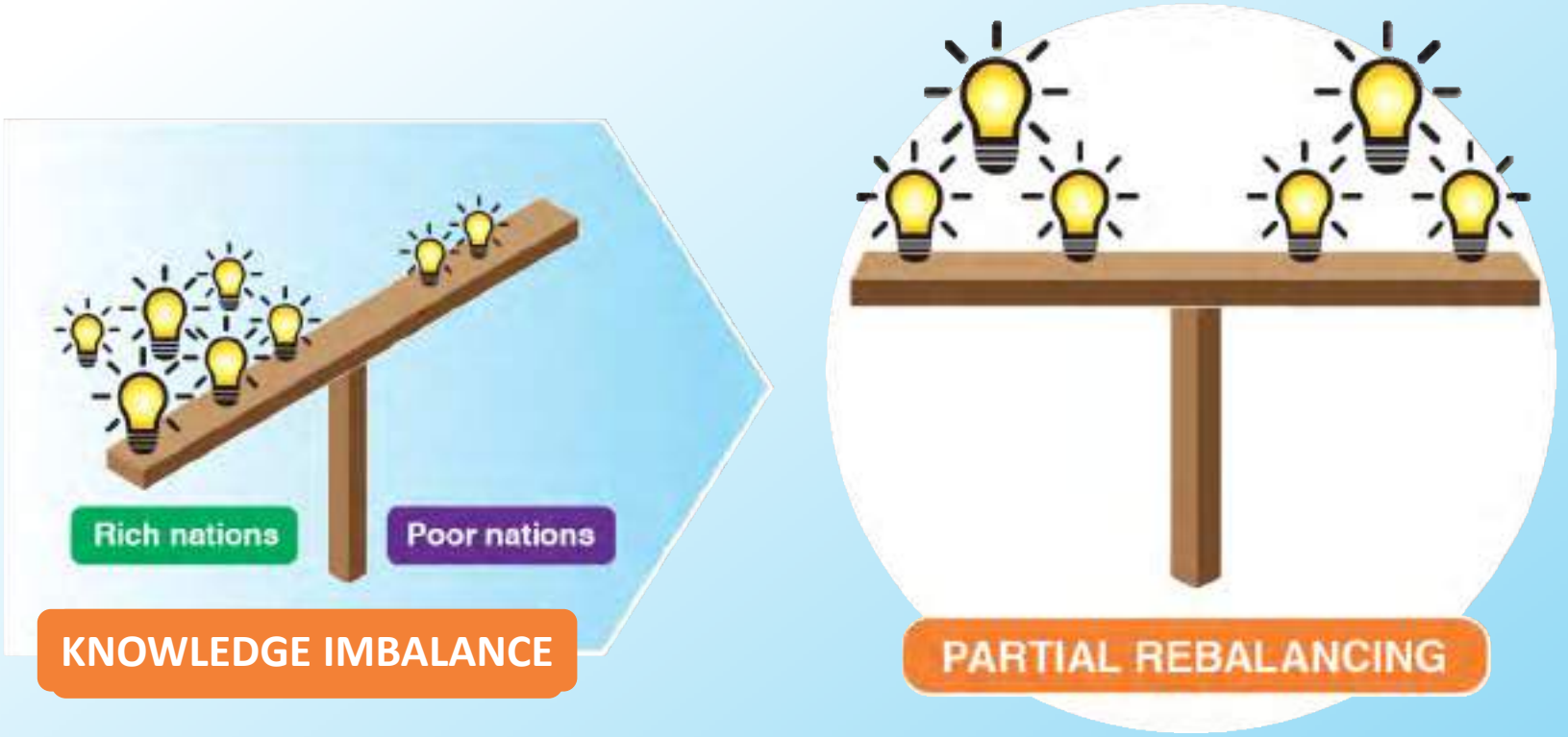
The new 'hi-tech-low-wage' mix shifted manufacturing & knowhow massively to a handful of developing nations



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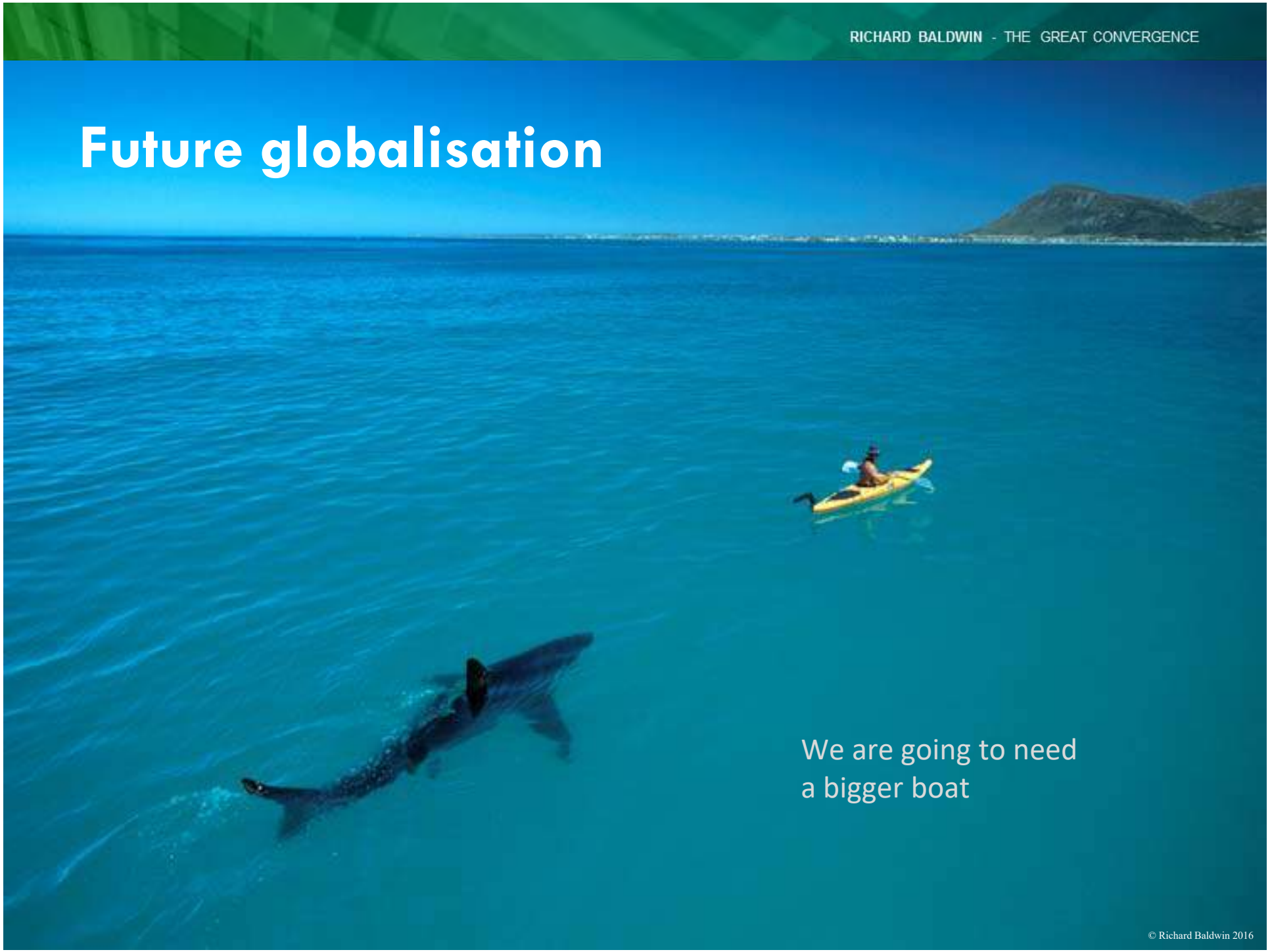
Future globalisation



We are going to need
a bigger boat

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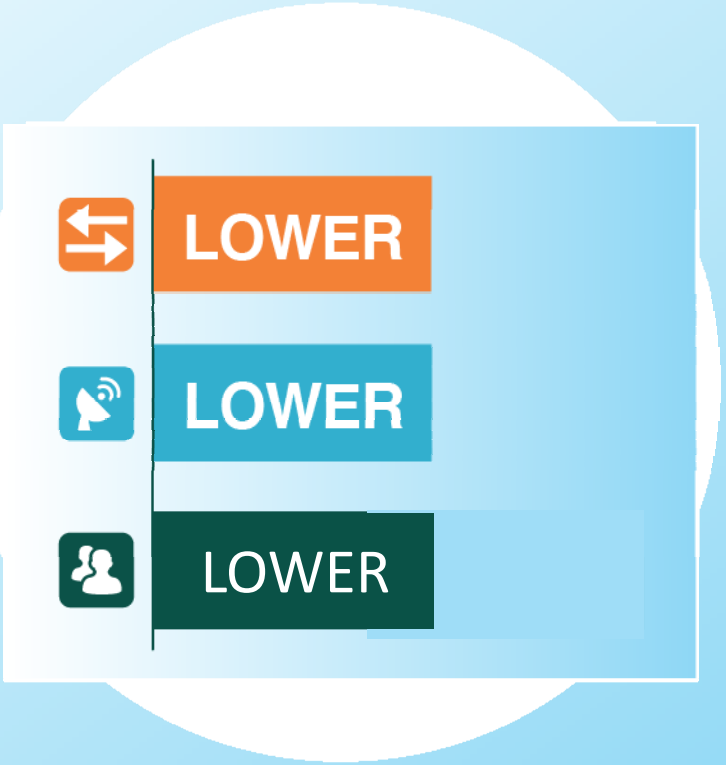
What happens when the Face-to-Face constraint is relaxed by technology?

Advanced technology for communications, not travel



CLOSE SUBSTITUTES TO "BEING THERE"

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Technology opens new kind of pipeline: Virtual migration

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

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NEW, NEW GLOBALISATION?

Heart-warming story; Or massive disruption foretold?

THE TIMES
SATURDAY NOVEMBER 12 2016

Surgeons save Syrian lives by Skype

Tom Coghlan, Beirut

October 1 2016, 12:01am, The Times

- Technology allows "unbundling" of labour & labourers
- Telepresence & Tele-robotics.
- "virtual migration".

Telepresence technology

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NEW, NEW GLOBALISATION?

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

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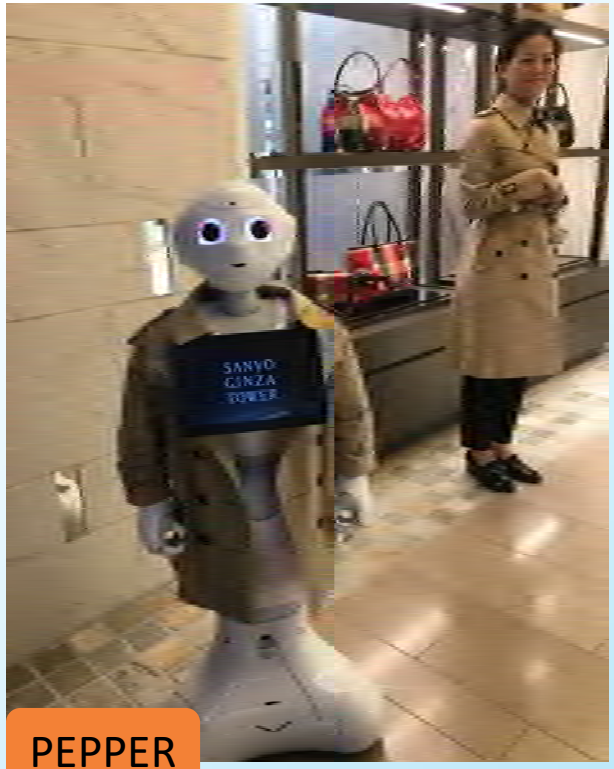
Robots vs telerobots

Robot & Artificial Intelligence (AI)



PEPPER

Telerobot & Remote Intelligence (RI)

DRONE

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Telerobotics today

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Jobs that telerobotics could offshore?

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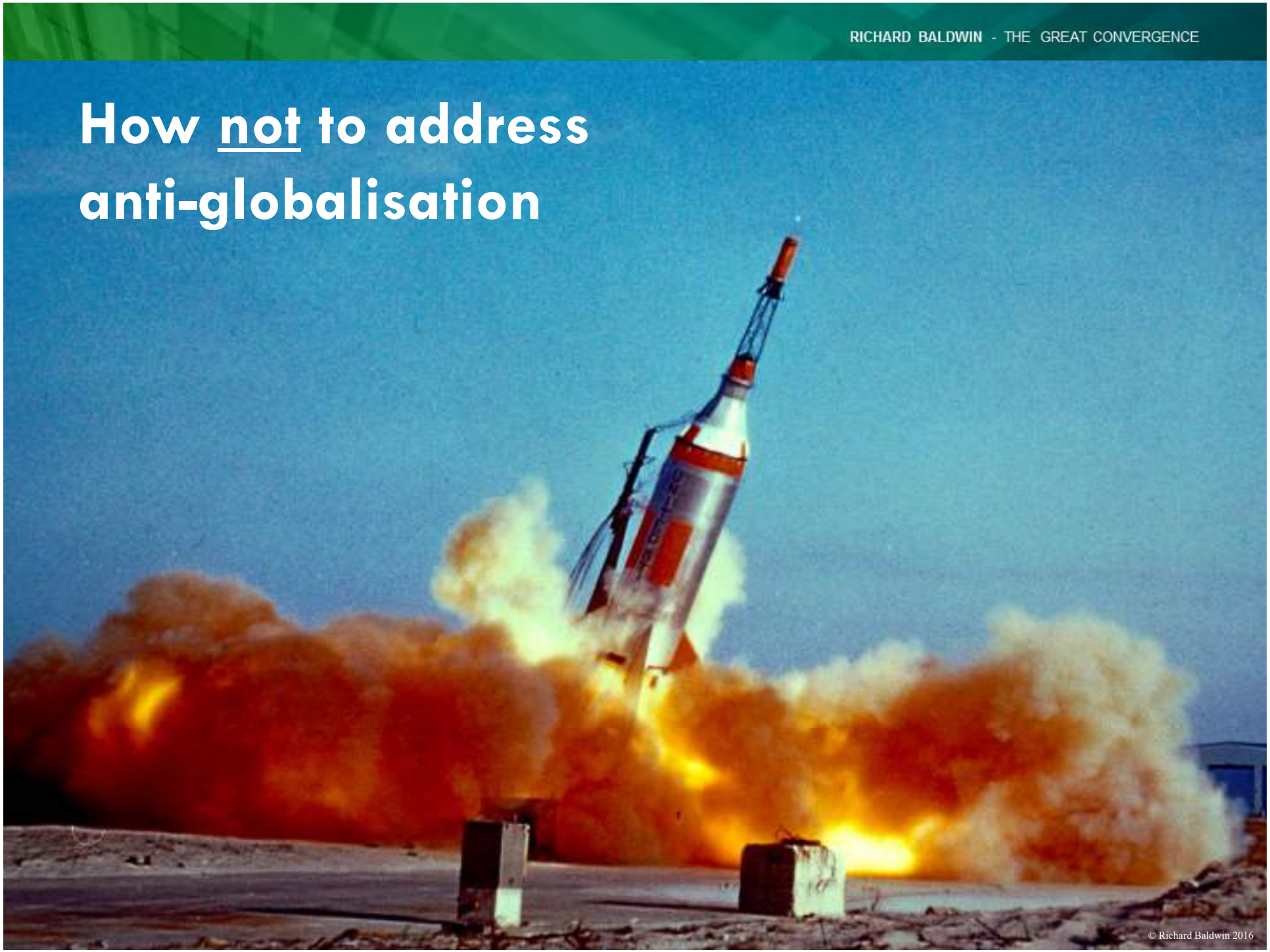
How not to address anti-globalisation



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

RE-OFFSHORING?

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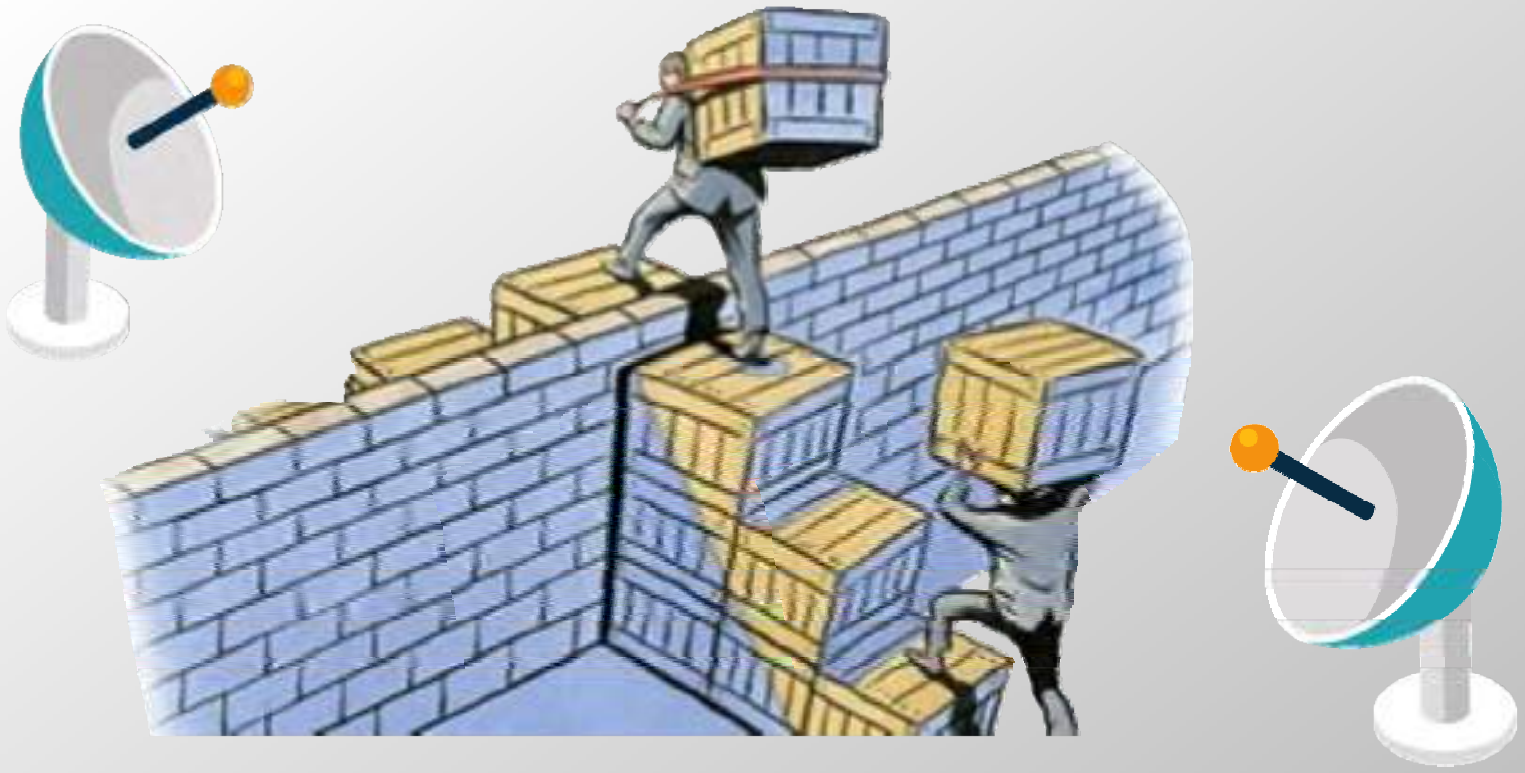
20th century thinking meets a 21st century problem

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



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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)

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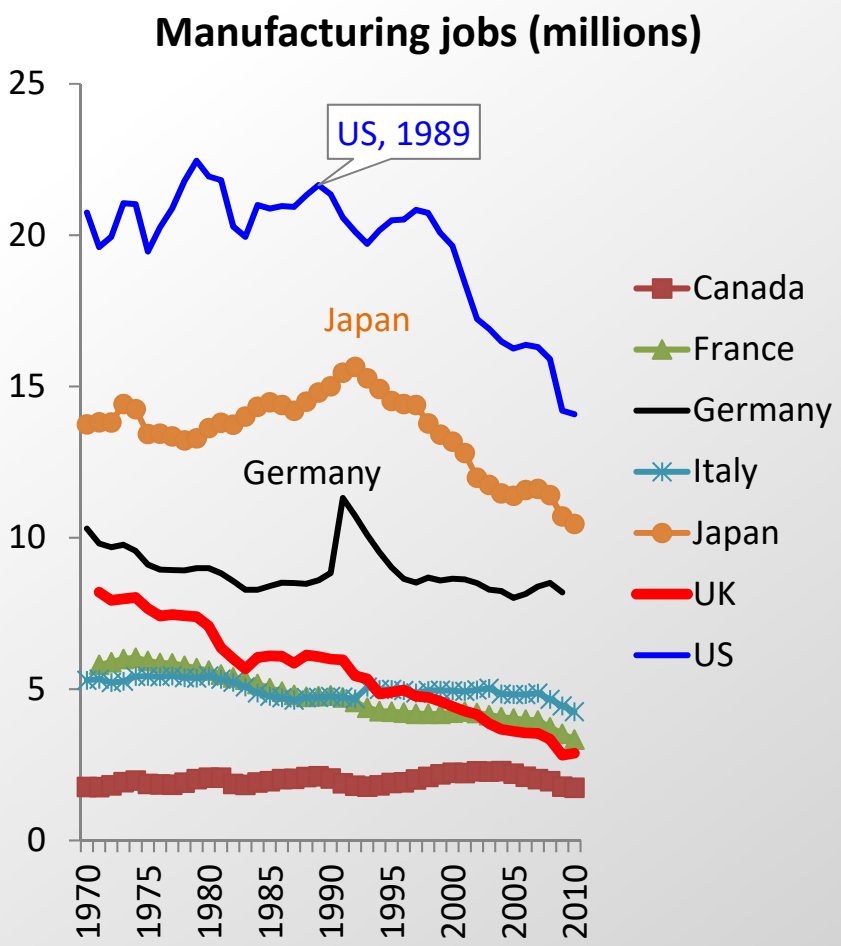
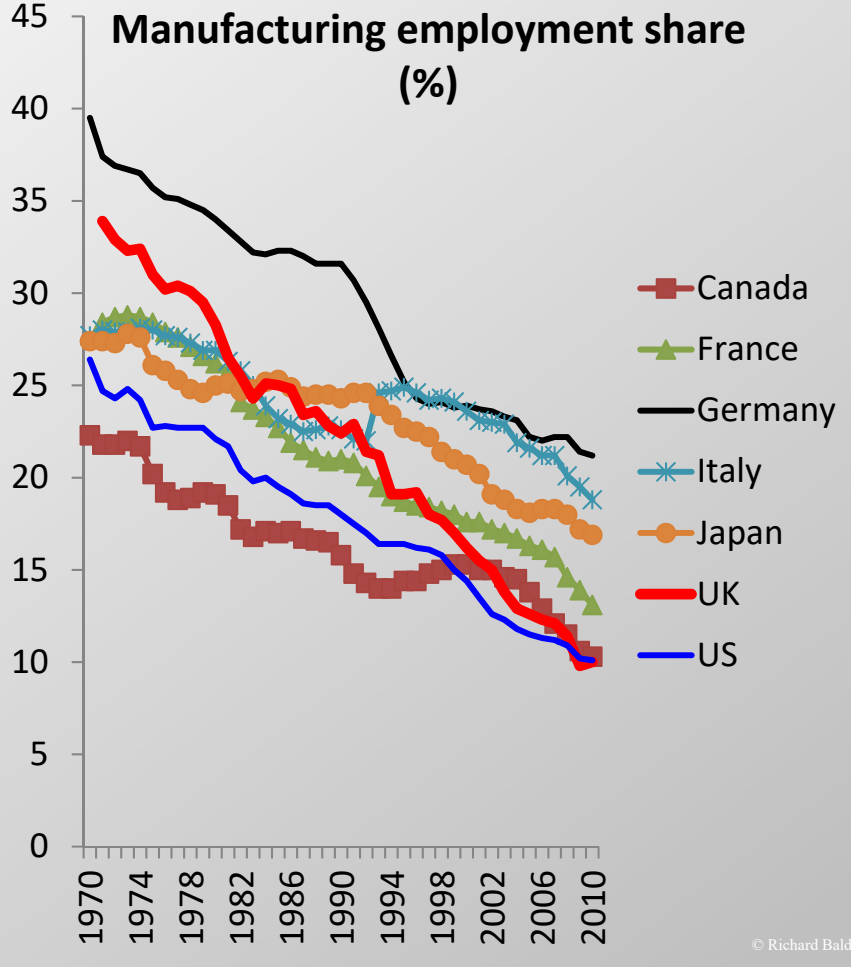
#2) Jobs come back? US workers are competing with China abroad & robots at home; it's not going well





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

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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
  - When water is flowing thru your hands, making a fist doesn't stop the flow.
- Old Globalisation tools harm competitiveness in New Globalisation world
  - All manufacturing nations must import to export.

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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.

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END - Thanks for listening

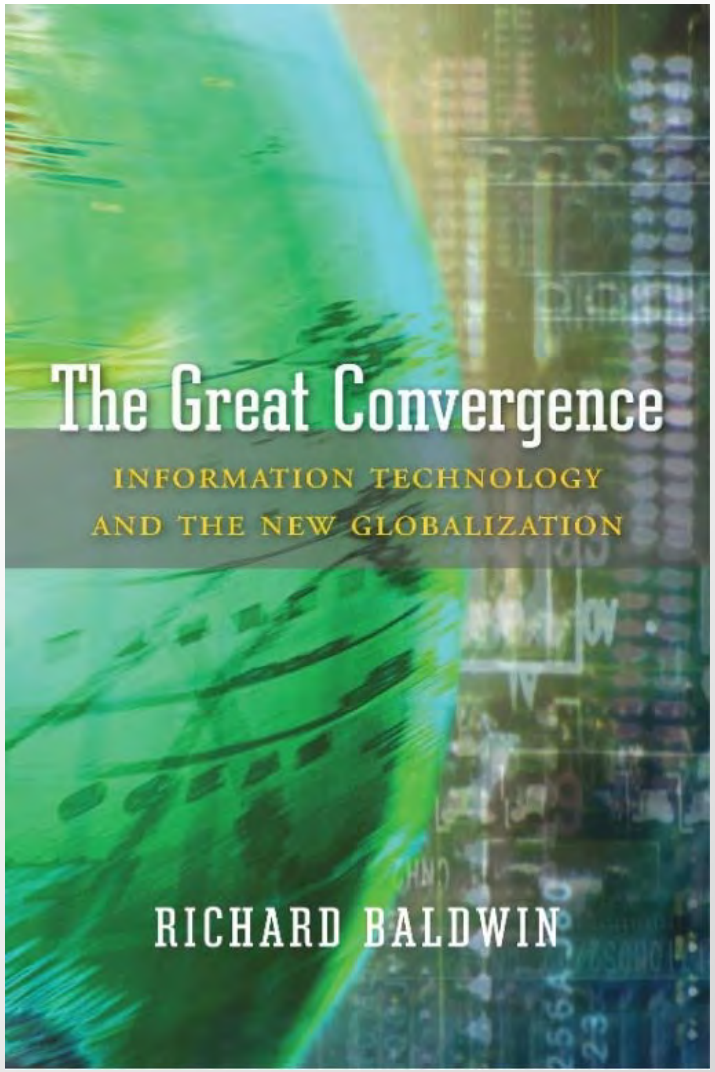

Table of Contents

Introduction · 1

Part I: The Long History of Globalization in Short · 17
1 Humanizing the Globe and the First Bundling · 21
2 Steam and Globalization's First Unbundling · 47
3 ICT and Globalization's Second Unbundling · 79

Part II: Extending the Globalization Narrative · 111
4 A Three-Cascading-Constraints View of Globalization · 113
5 What's Really New? · 142

Part III: Understanding Globalization's Changes · 177
6 Quintessential Globalization Economics · 179
7 Accounting for Globalization's Changed Impact · 207

Part IV: Why It Matters · 221
8 Rethinking G7 Globalization Policies · 225
9 Rethinking Development Policy · 242

Part V: Looking Ahead · 281
10 Future Globalization · 283

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