THE GREAT CONVERGENCE
Information technology and the New Globalization

A NEW BOOK BY RICHARD BALDWIN
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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

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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 **Knowhow** implies High Wages
  - Labour

- **Factory Economies**
  - Low **Knowhow** implies Low Wages
  - Labour
“Globalisation as knowledge arbitrage”

- **Headquarter Economies (G7)**
  - High Knowhow Labour High Wages

- **Factory Economies**
  - Low Knowhow Labour Low Wages
What would knowledge offshoring do?

Shares of world manufacturing

- 1990: 65%
- G7: 47%
- RoW: 3%
- China: 19%
- Other 16

G7’s share of world GDP

- 1993: 67%
- 1900: 46%
- 1820: 22%
- 2014: 46%
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
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
High communication costs meant G7 innovations stayed in G7 nations; Knowhow imbalances appeared
Result: “The Great Divergence” (1820 to 1990)

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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 Knowhow
  - High Labour
  - High wages

- **Factory Economies**
  - Low Knowhow
  - Low Labour
  - Low wages
Telepresence technology today
Brain jobs that telepresence could offshore?

<table>
<thead>
<tr>
<th>Position</th>
<th>US</th>
<th>Philippines</th>
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<tr>
<td>University Professor</td>
<td>6,100</td>
<td>400</td>
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<td>School Teacher</td>
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<tr>
<td>Engineer</td>
<td>6,200</td>
<td>570</td>
</tr>
</tbody>
</table>
Telerobotics today

The surgeon who operates from 400km away

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:

Q + A
How not to address anti-globalisation
“Trump Tariff Act of 2017”: Would tariffs bring manufacturing jobs back to US?
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

Manufacturing jobs (millions)

Manufacturing employment share (%)

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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