

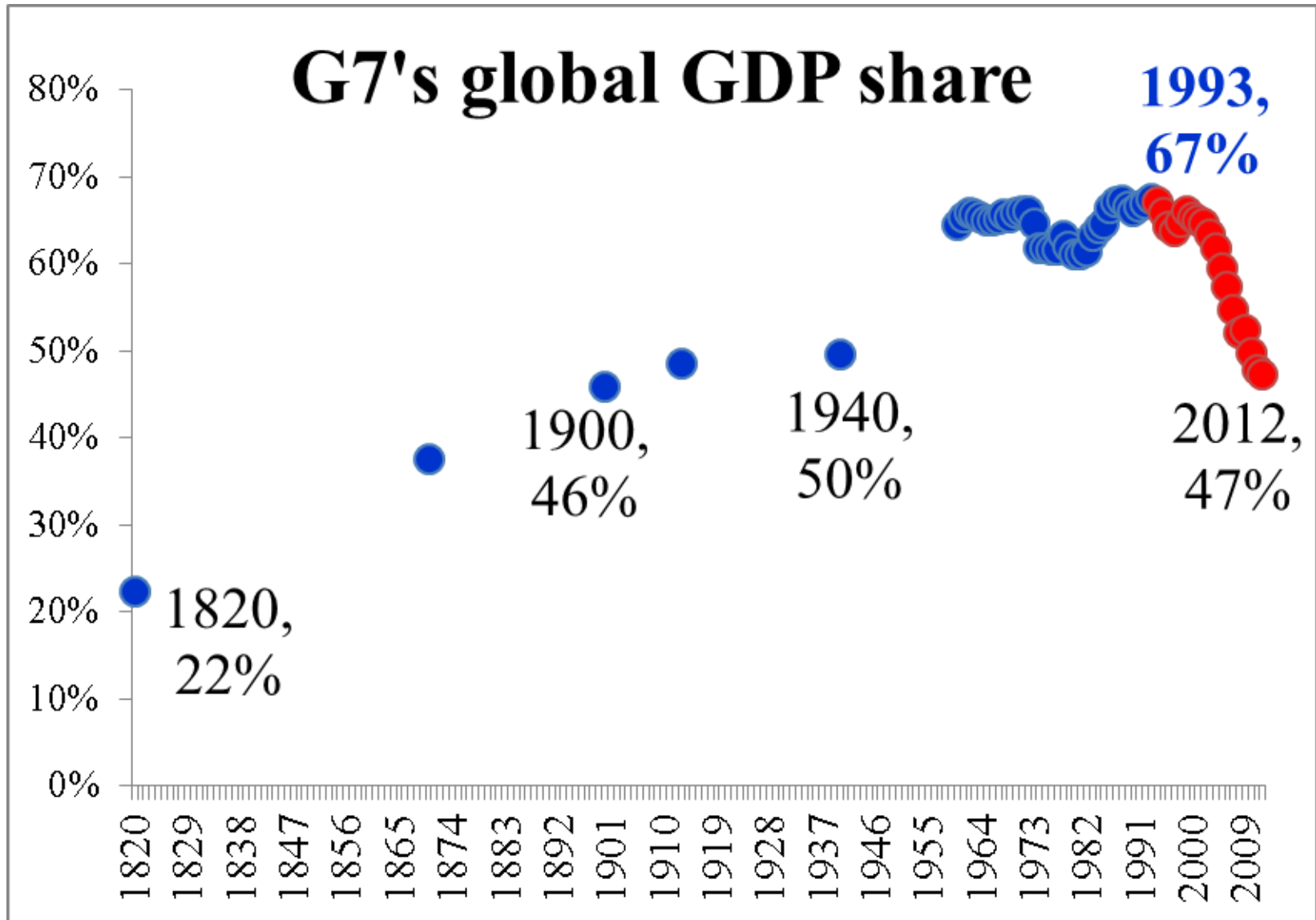
Global value chain revolution: *Implications for central banking*

Richard Baldwin

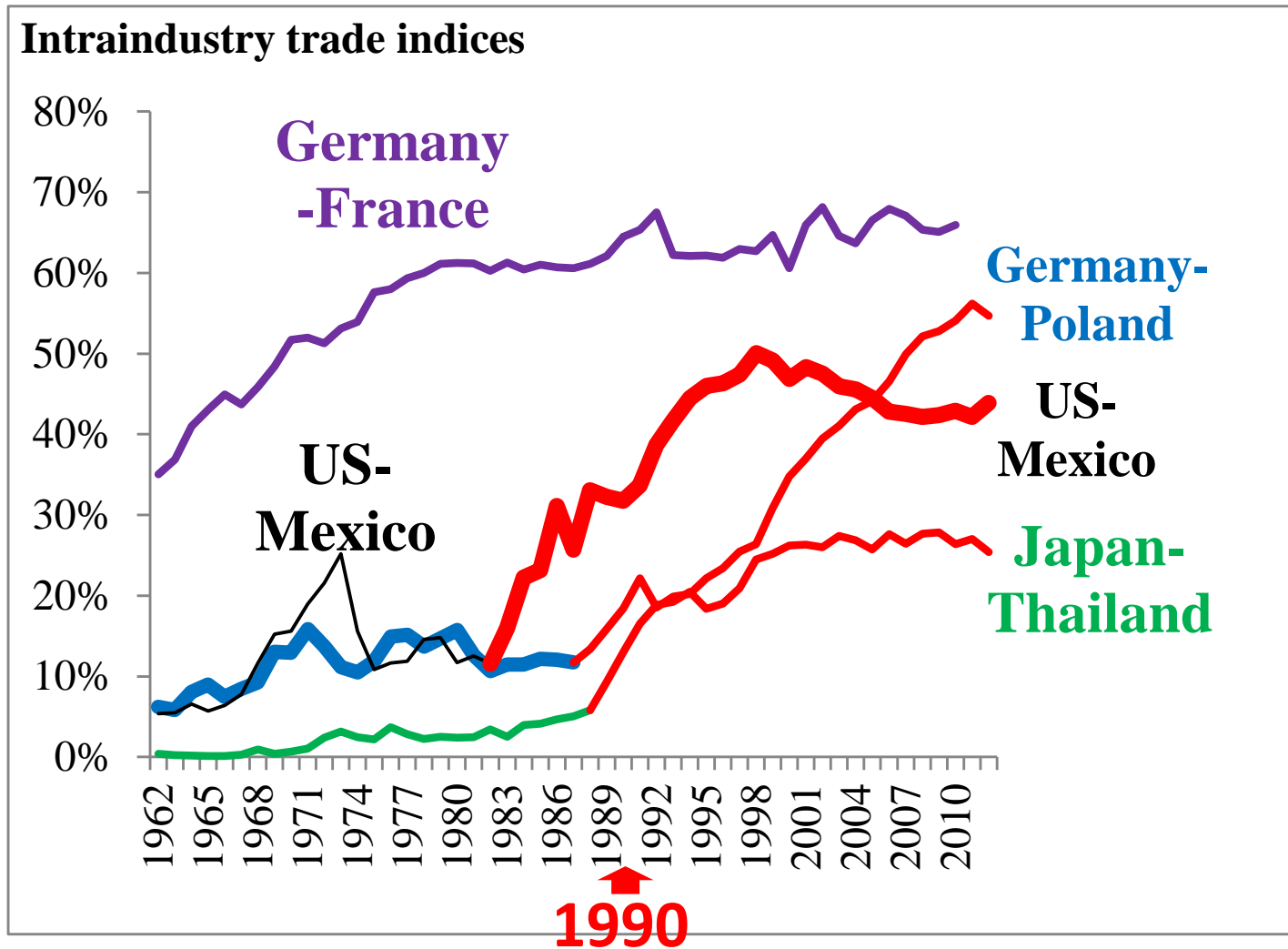
*Professor of International Economics, Graduate Institute,
Geneva*

Director of CEPR

Globalisation changed around 1990



Nature of trade changed: Intra-industry trade (IIT)

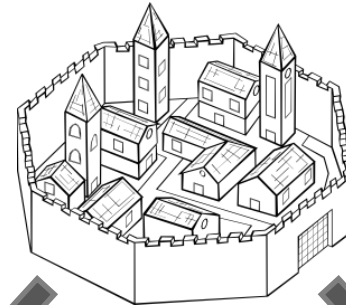


Globalisation: 3 cascading constraints

Goods trade costs
Communication costs
Face2Face costs



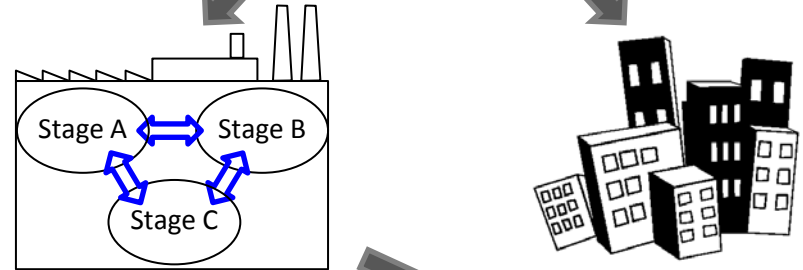
= Pre-globalised world



Steam revolution



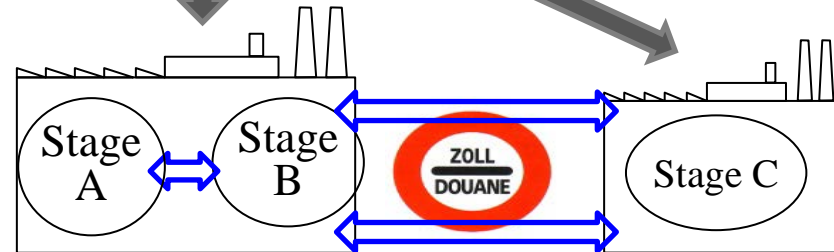
= 1st unbundling



ICT revolution

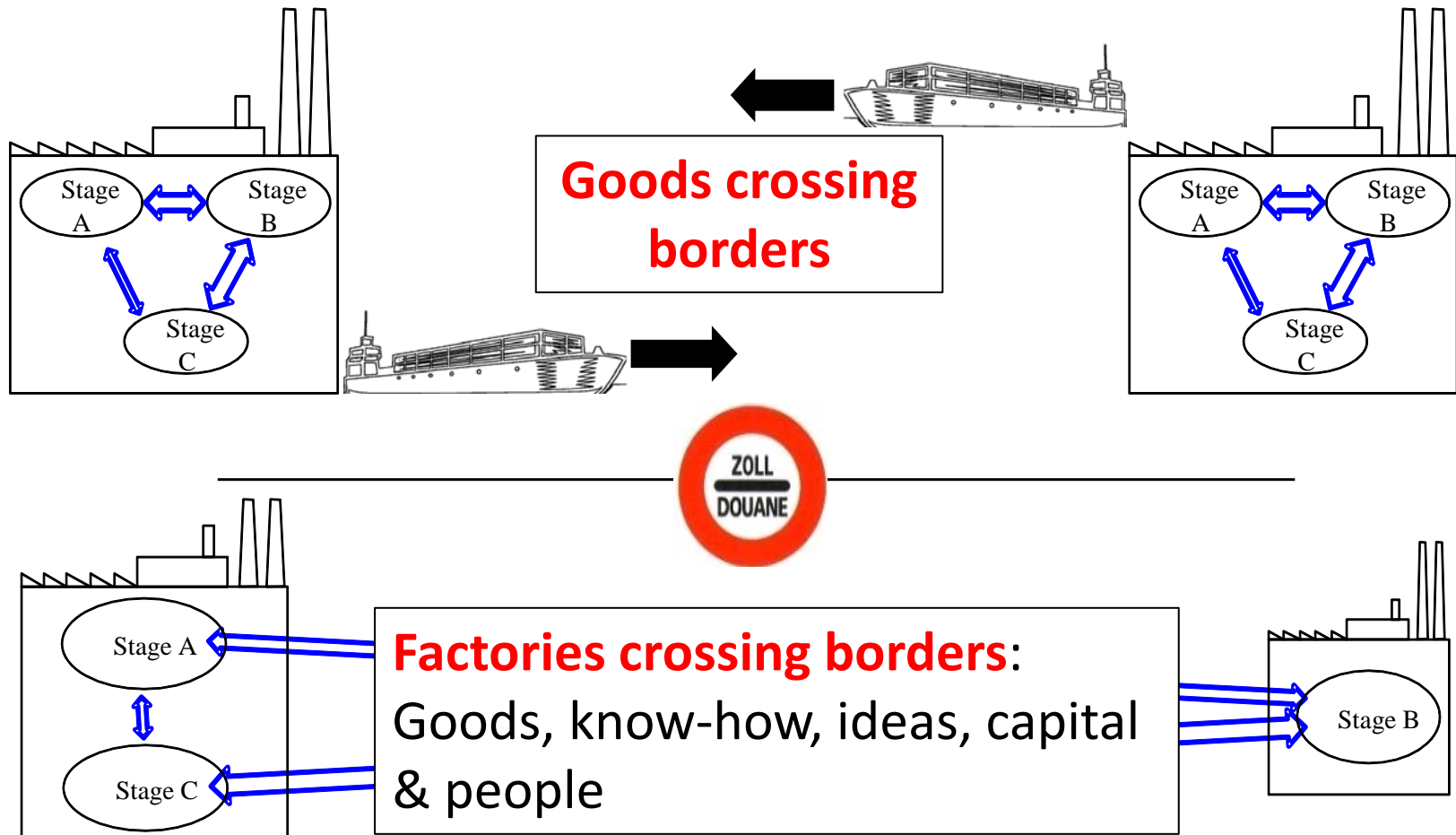


= 2nd unbundling



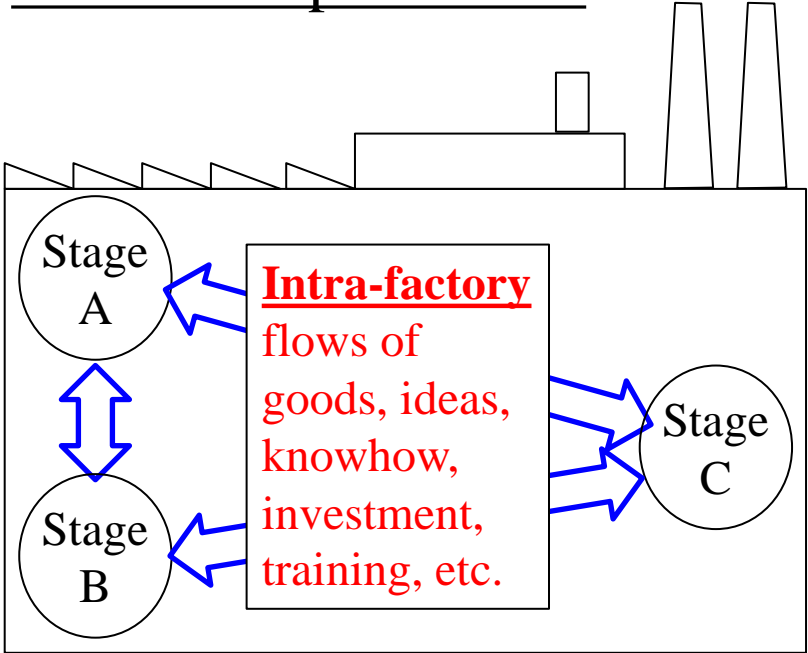
“2nd unbundling”: 3 basic differences

#1: Trade is not just “Goods crossing borders”, also “Factories crossing borders”

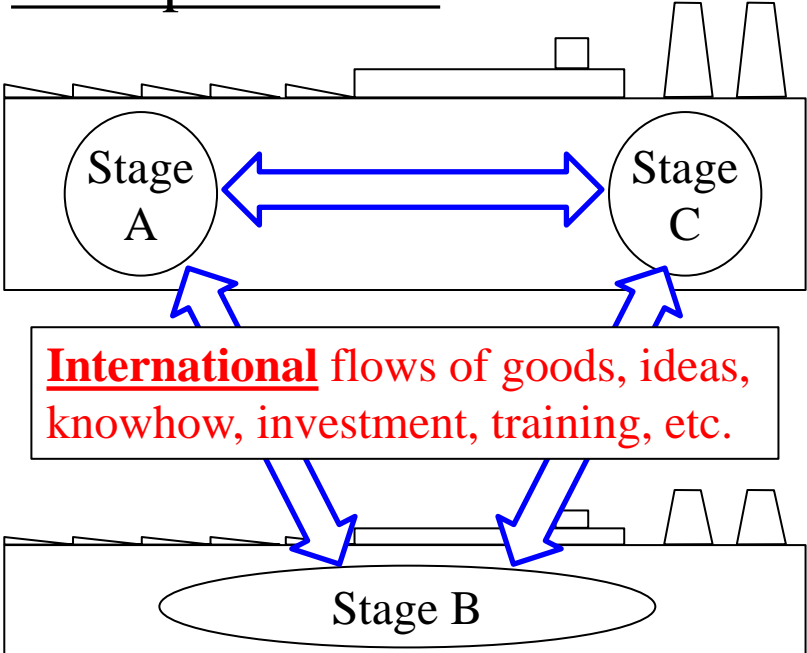


Why it matters: Technology boundaries

Traditional production



GVC production



#2: De-nationalised comparative advantage (Hi-tech goes to lo-wage)

Apple IIc made in Dallas area, 1980s:
Apple's know-how + US labour



Apple's know-how + Chinese labour



#3: Globalisation with “finer degree of resolution”

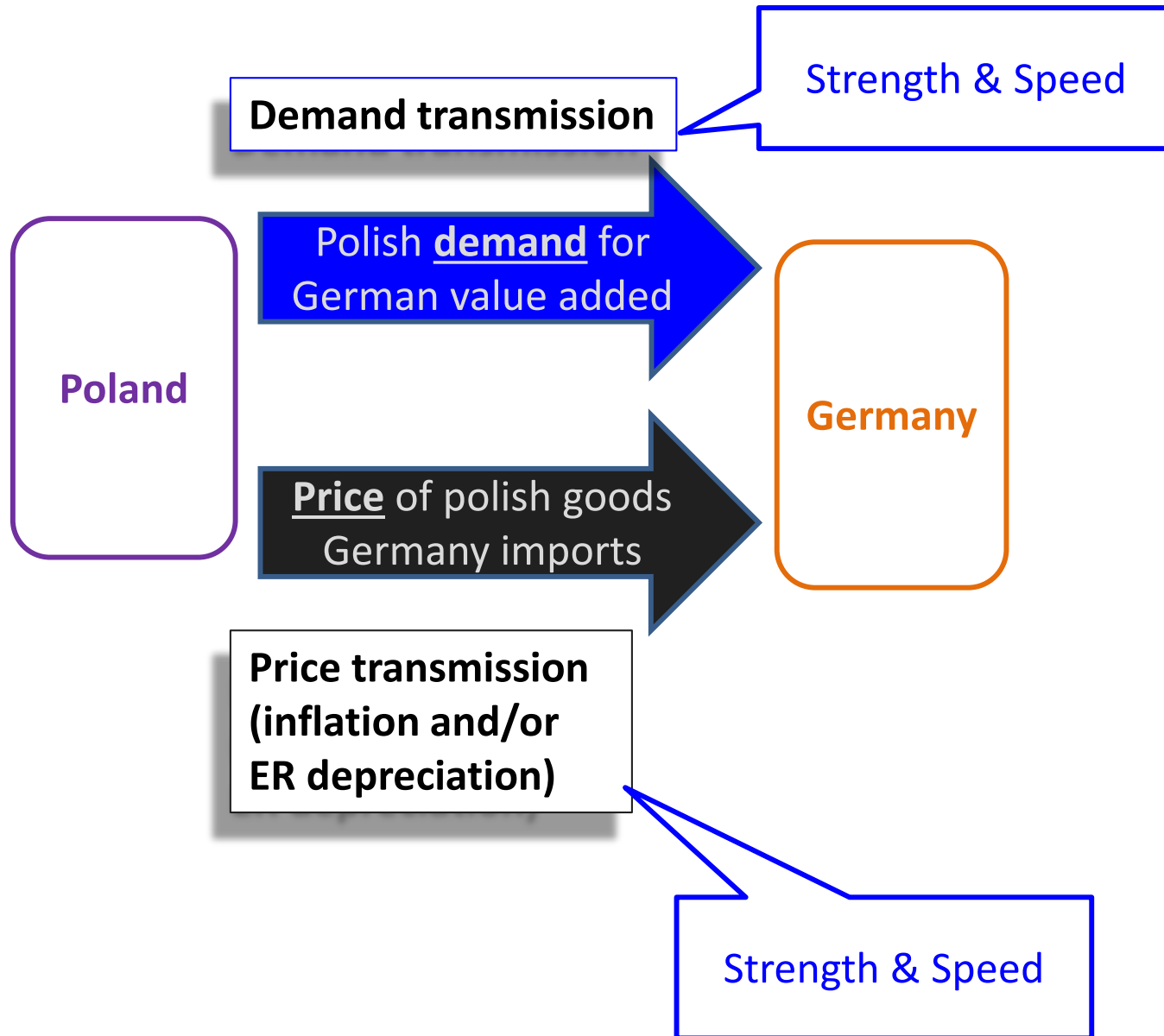
Globalisation’s impact is:

- More sudden;
- More individual;
- More unpredictable;
- More uncontrollable.

Some implications for central banking

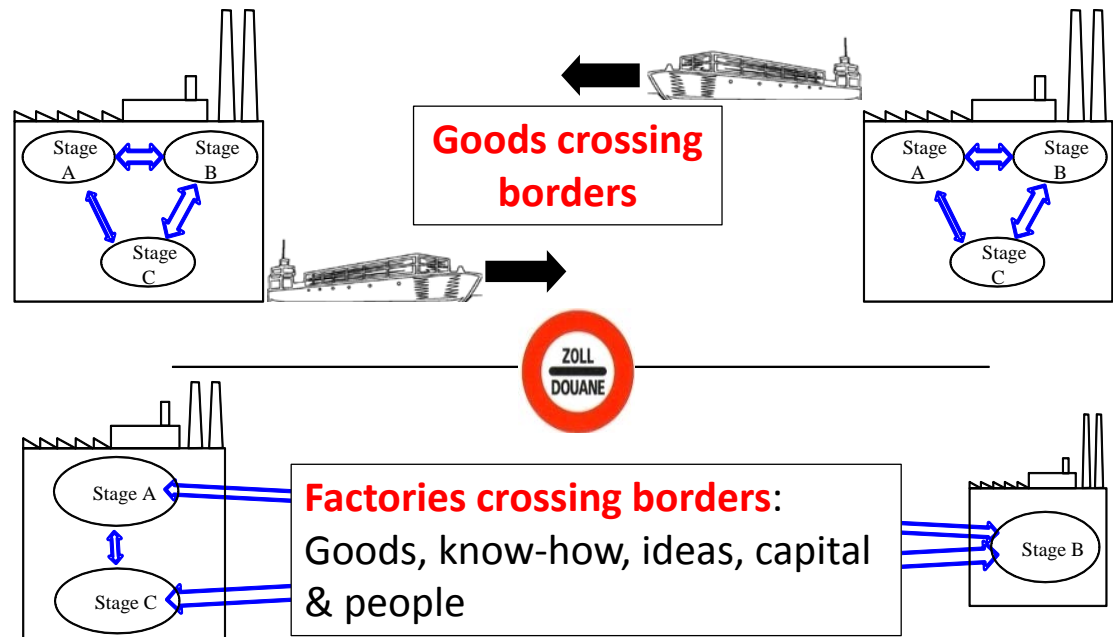
International linkages changed by the
GVC revolution

International macro trade linkages



GVCs may matter for:

1. Measurement of strength of linkage.
2. Measurement of 3rd nation effects.
3. Speed of transmission (within firm as opposed to arm's length or market transaction)



Some macro applications

- Measurement of effect real exchange rate.
 - Value added trade, not gross trade.
- Determine who is the ultimate purchaser of our value added exports for demand shocks.
 - Whose GDP shock boosts our demand?
 - Value added trade, not gross trade.
- International demand shock transmission.
 - New Twist: ‘Bullwhip’ effect
- Wage formation.
 - Sudden, individual, unpredictable => wage bargaining
- Global growth factors.

Global growth: *New Kuznets Cycle?*

Old Kuznets Cycle

- 19th century:
 - North America: Abundant land & scarce labour;
 - Europe: Abundant labour & scarce land.
- Mass migration → Ag boom in US.
- Ag boom triggers broad growth & more migration.

New Kuznets Cycle

- Around late 1980s
 - ‘South’: Abundant labour & scarce knowhow;
 - ‘North’: Abundant knowhow & scarce labour;
- ICT revolution & global value chains → manufacturing boom in China and few others (‘Rising 7’).
 - But only where the GVCs operated.
 - Triggers broader growth:
 - R7 = 45% of world population.
 - Triggers commodity ‘super cycle’

END

- Thank you for listening.

- Please visit:

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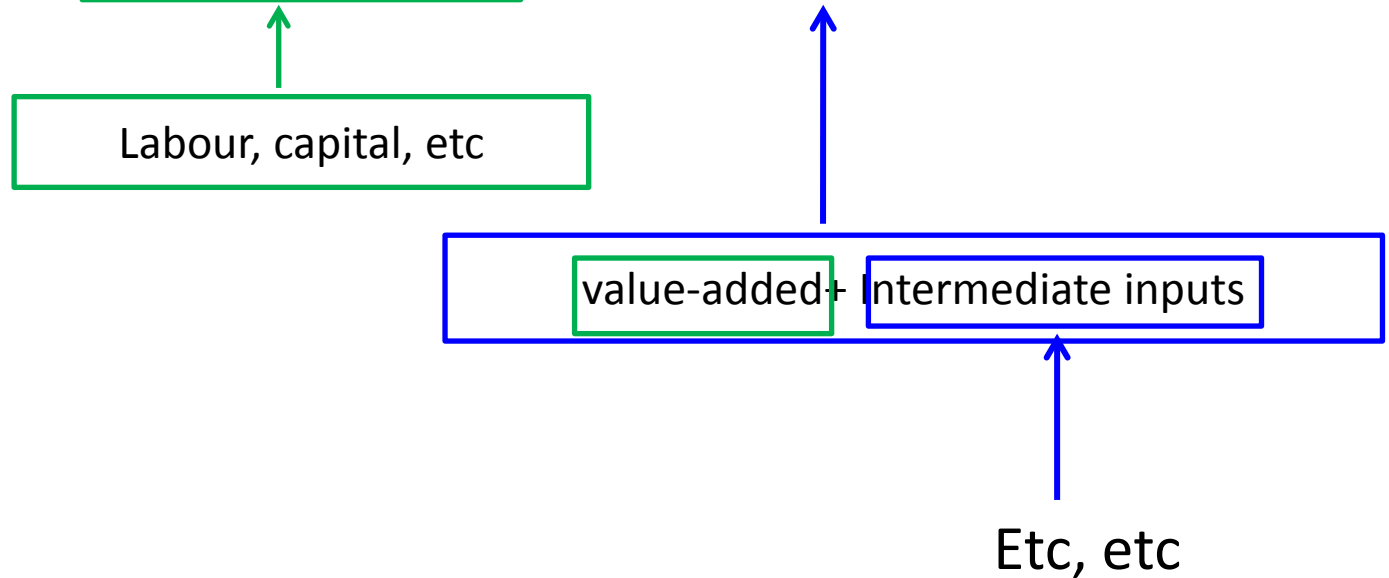
“Research-based policy analysis and commentary by leading economists”

Extra slides for Q&A

Value-added trade vs 'gross' trade

Export value =

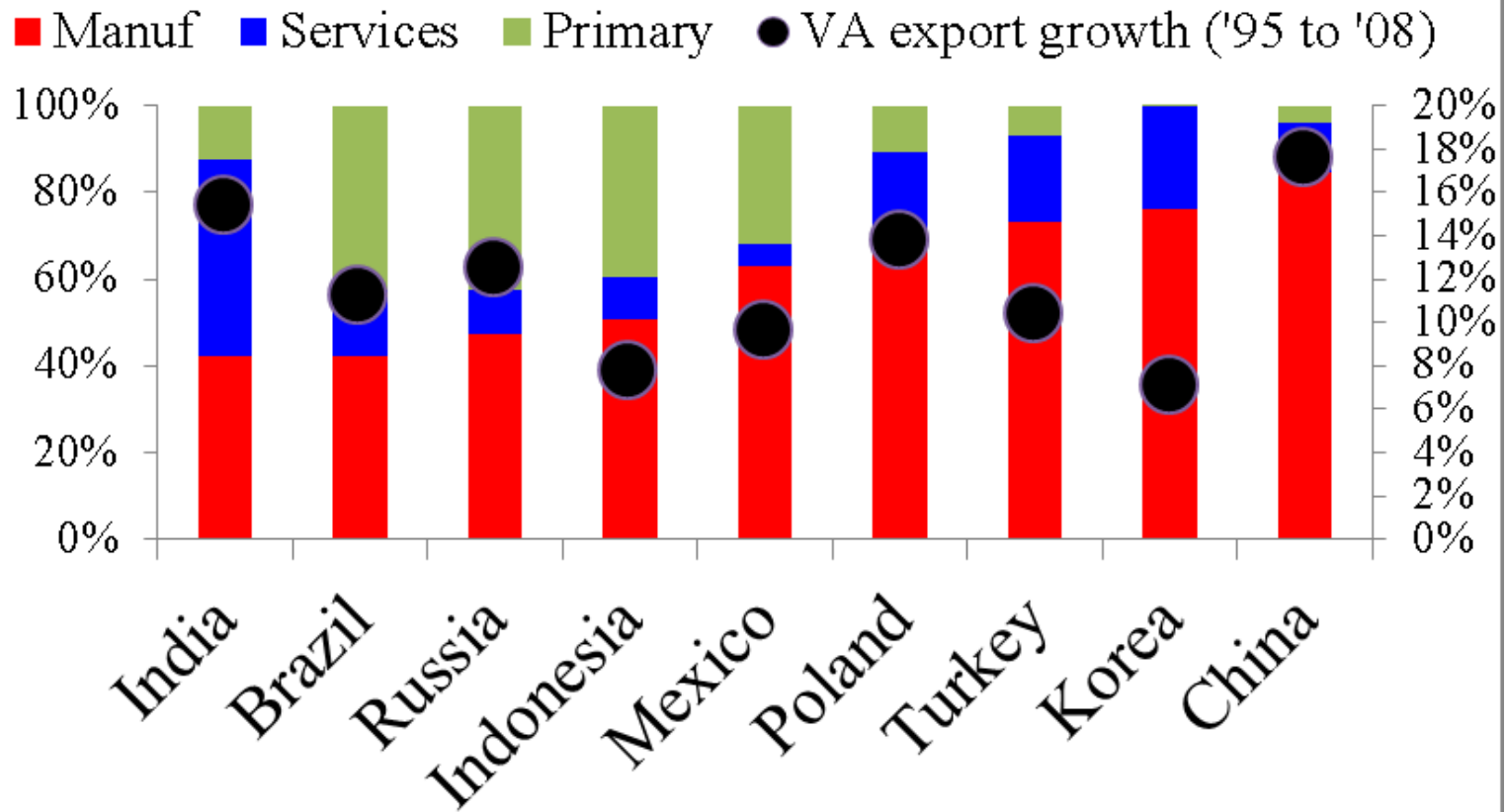
the cost of value-added + intermediate inputs.



Iterate to converge (or matrix algebra)

Source of Value-Added Export growth (10 GDP gainers) 1995-2008

Domestic VA in exports, by source sector



Rethinking the commodity supercycle

Price of all commodities
(10 year average rate of return)

At no time in the last 200 years have commodity prices risen as fast and as high as in the last decade without a sharp decline

