THE UNIVERSITY of ADELAIDE

CRICOS PROVIDER 00123M

Christopher Findlay

Connectivity: Challenges for Global Value Chains

Content

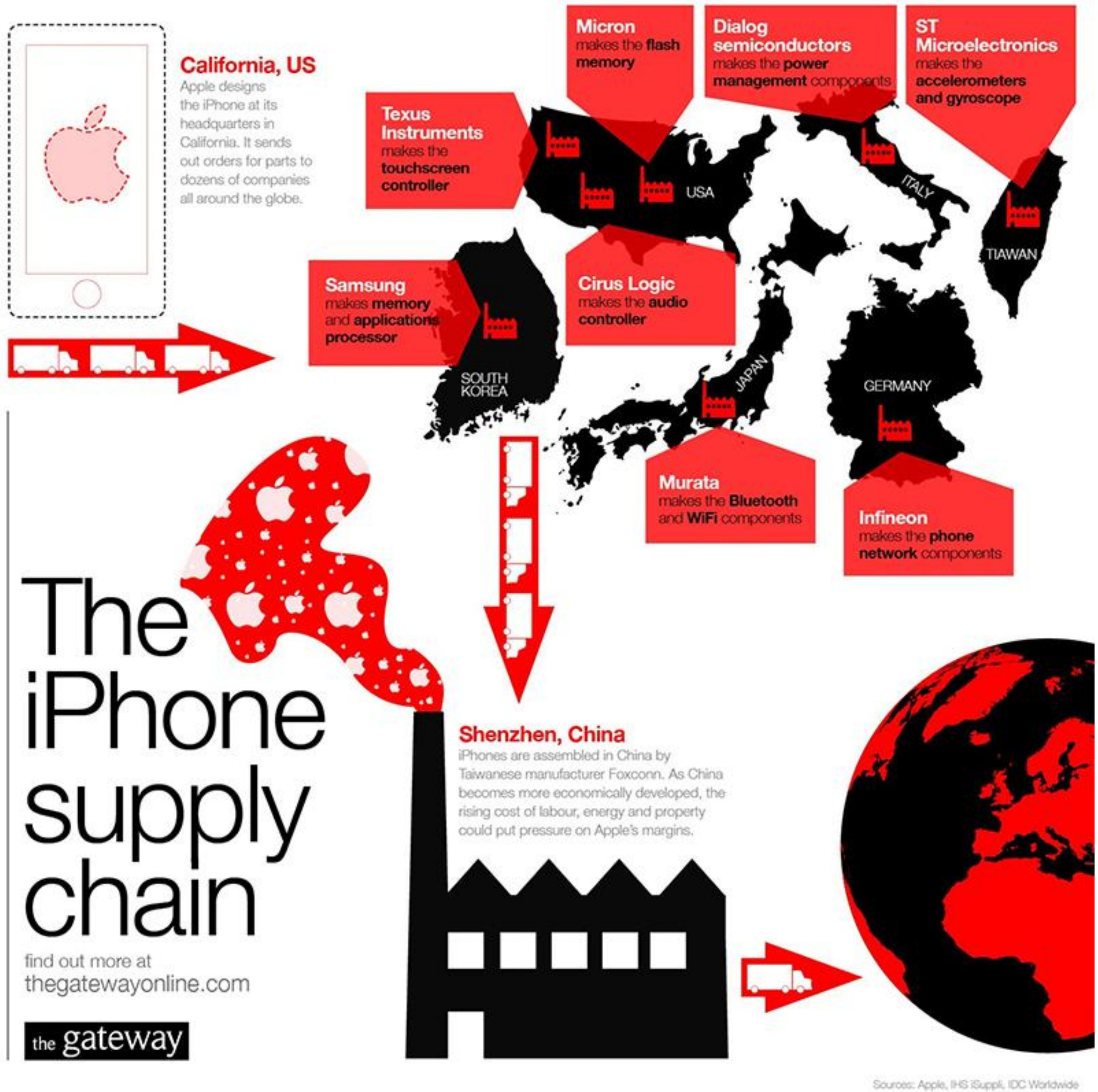
- Five trends in GVCs
- Connectivity and why it matters
  - GVCs and physical connectivity
  - Services provision and institutional connectivity
  - Long run growth and people connectivity
- Inclusive growth, with respect to
  - SMEs
  - Second and third tier cities

Acknowledgements: PECC meetings in Boracay and Cebu – with ABAC and ITC

The case of Kaliabu and 99designs.com

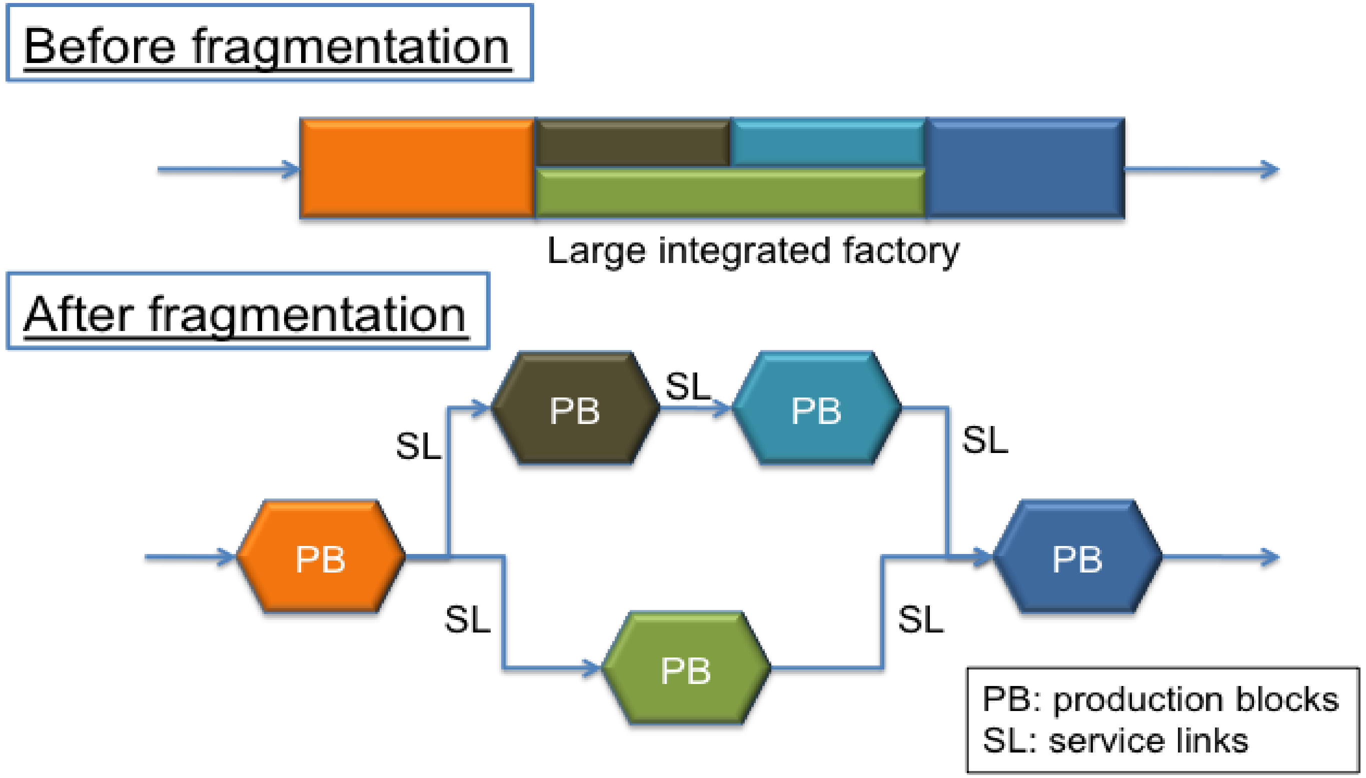
More on this later.

GVCs – what are they?



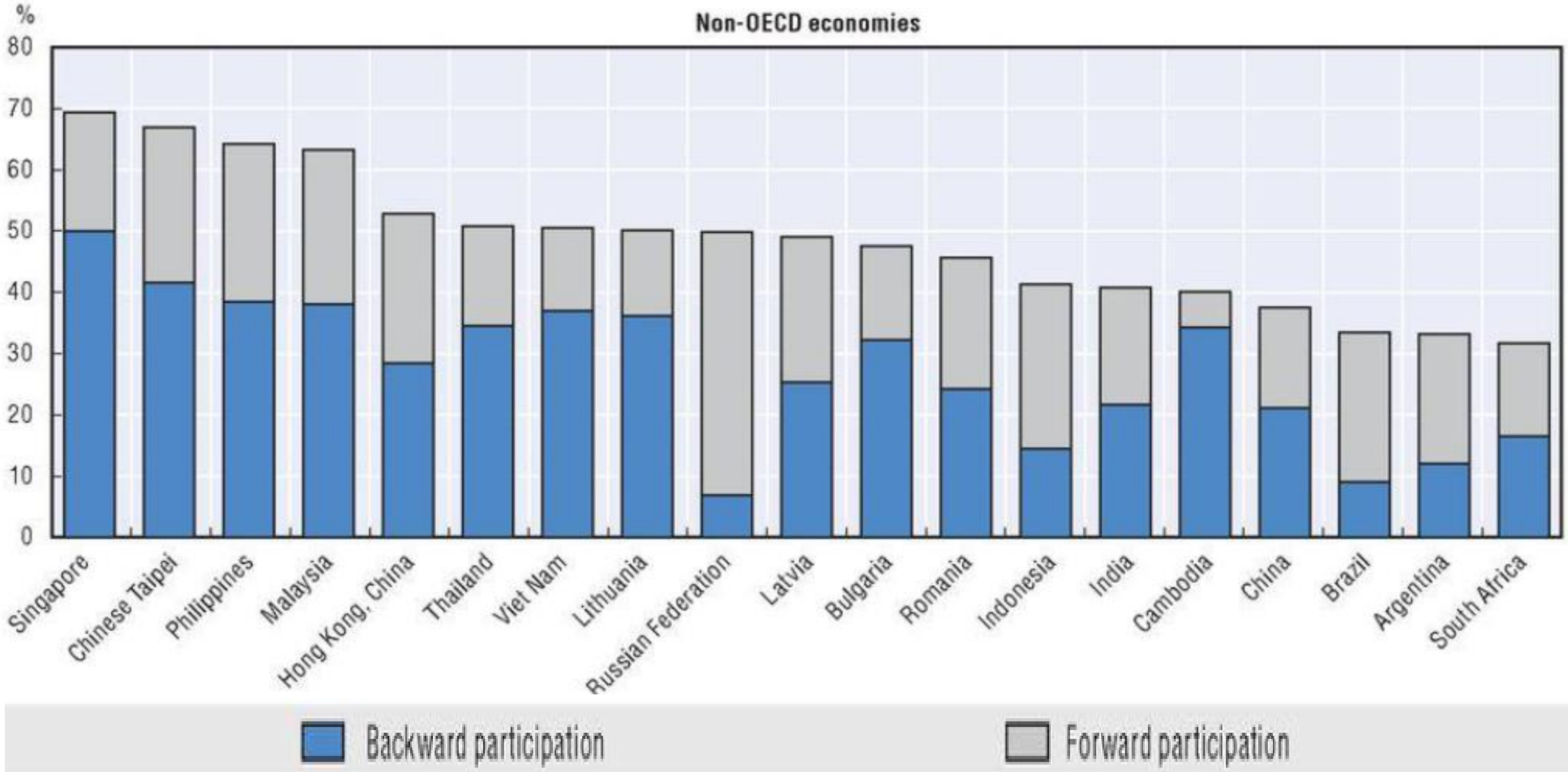
http://www.supplychain247.com/article/apples_supply_chain_gearing_up_for_80million_iphone_sales_in_2014

Fragmentation



Jones and Kierzkowski (1990) and Kimura (2015).

Significance of GVCs, 2009



Note: The participation index is calculated as the sum of Hummels (2001) so-called VS (i.e. the share of imported inputs in the overall exports of a country) and VS1 (i.e. the share of exported goods and services used as imported inputs to produce other economies' exports) measures.

Source: Miroudot and De Backer (2013).

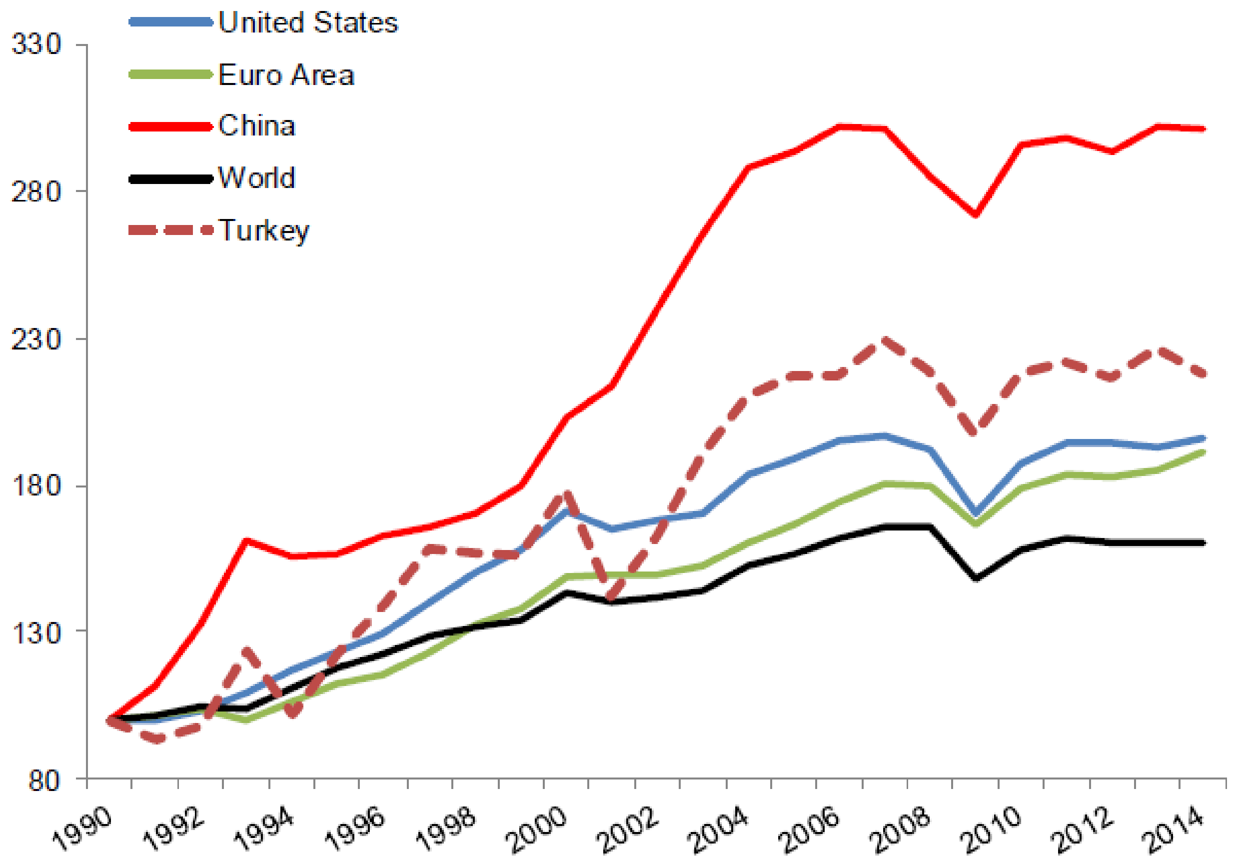
Drivers and Enablers

- Drivers
  - Technology and the scope to digitise and divide production
  - Differences in wage rates to promote reallocation of tasks
  - Low costs of management – access to enablers
- Enablers
  - Liberalisation
    - Lower tariffs
  - Physical connectivity
    - Services
    - Trade facilitation
  - Connectivity via
    - Communication
      - Data flows
    - People movements
    - Capital flows via FDI

GVC trends #1

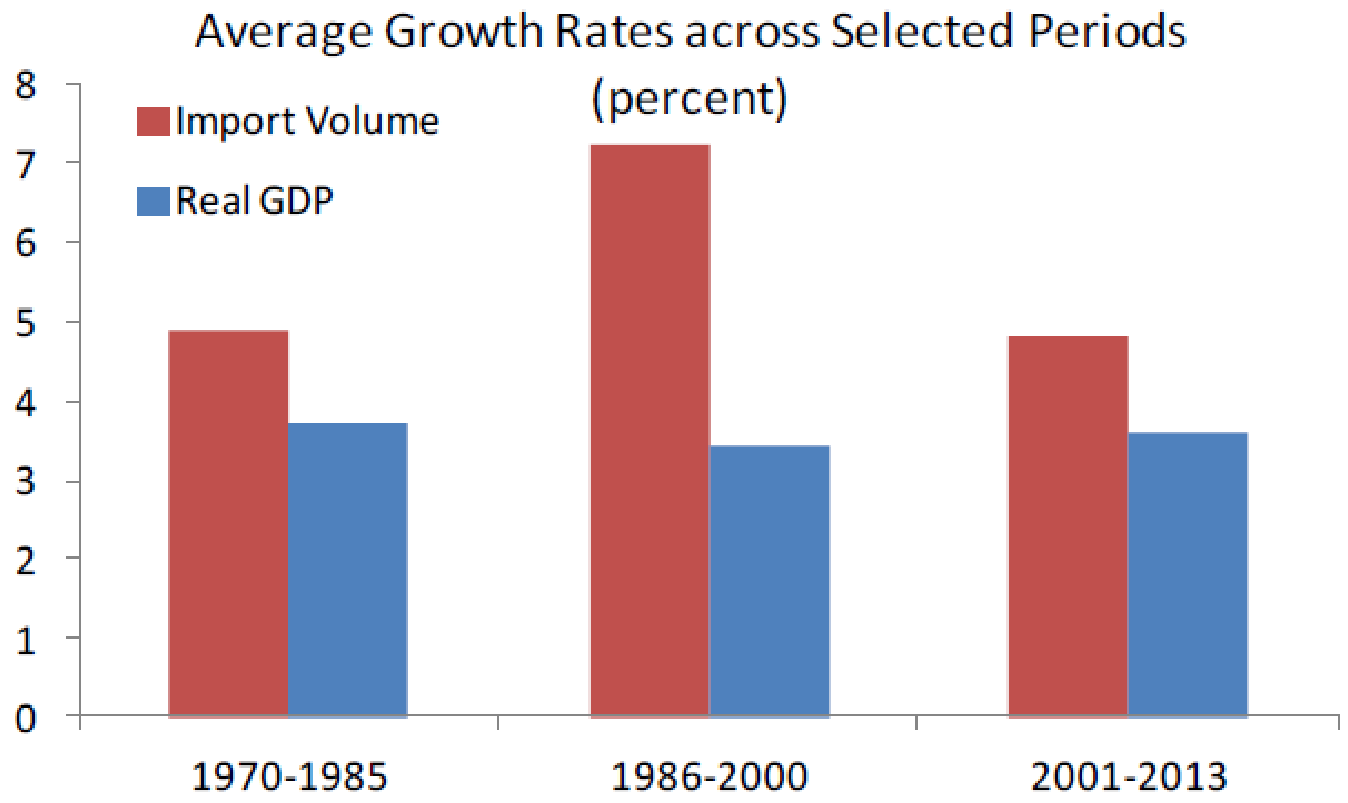
- Exhausting the drivers
  - Use of GVCs in goods may have reached saturation
    - slow down in trade liberalisation
    - ‘technological change’ has been exhausted
  - There is still scope for new actors to enter the process
    - Total trade will not grow as fast
    - Levels of openness remain high

Trade slowdown
(import share of GDP, 1990 =100)



Source: Mattoo, 2015

Growth goods trade relative to GDP



Source: IMF World Economic Outlook

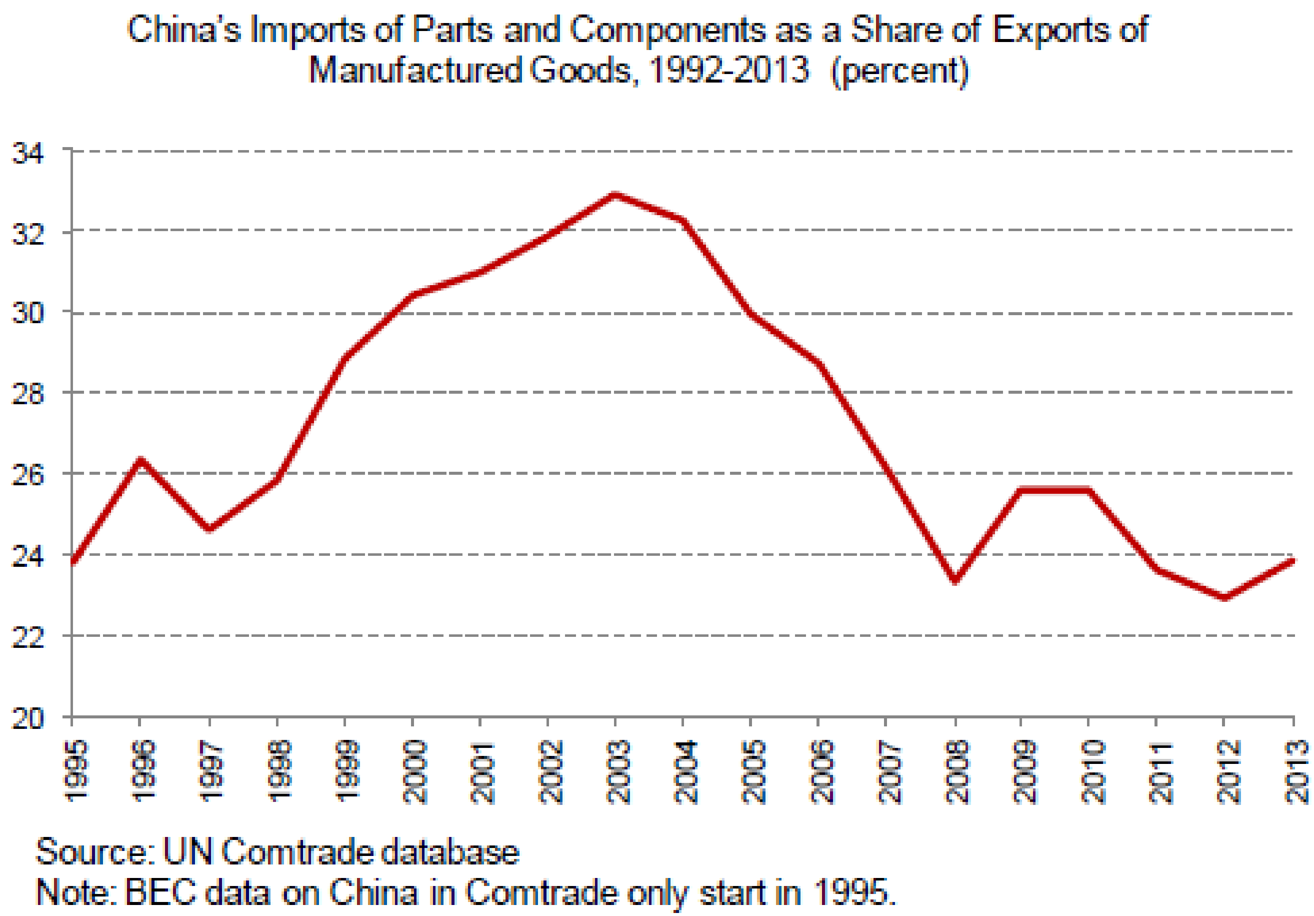
SME participation in the new world

- Structural change continues, rising wage costs in China for instance, opportunities exist as the chains relocate
- New opportunities from agglomeration around entry points in the chain, driven by FDI
- Positive factors other than firm size (up to a point) include (Wignaraja, 2015)
  - Technological capability
  - Access to the formal financial sector
  - Age (younger firms more likely)
  - Foreign ownership
  - Environment (transport quality, electricity costs, education of workers)

GVC trends #2

- Forces to concentrate
  - around a place of production
    - Initial participation leads to an industrial agglomeration and more local sourcing
  - around a place of consumption
    - Forces towards sourcing ‘near’ consumers
      - Technological change eg 3D printing
      - Connectivity problems or policy constraints
  - GVCs (in goods) become ‘shorter’

China experience



Mattoo, 2015

‘Near sourcing’ in the US

Some Headlines:

- **‘More Businesses Turn to 'Near-Sourcing' to Save Time and Money’**
- **‘The Short Tail:** Near-Sourcing Trends Create New Winners & Losers in the Supply Chain’
- **‘Near-Sourcing: Globalization Becomes Local’**

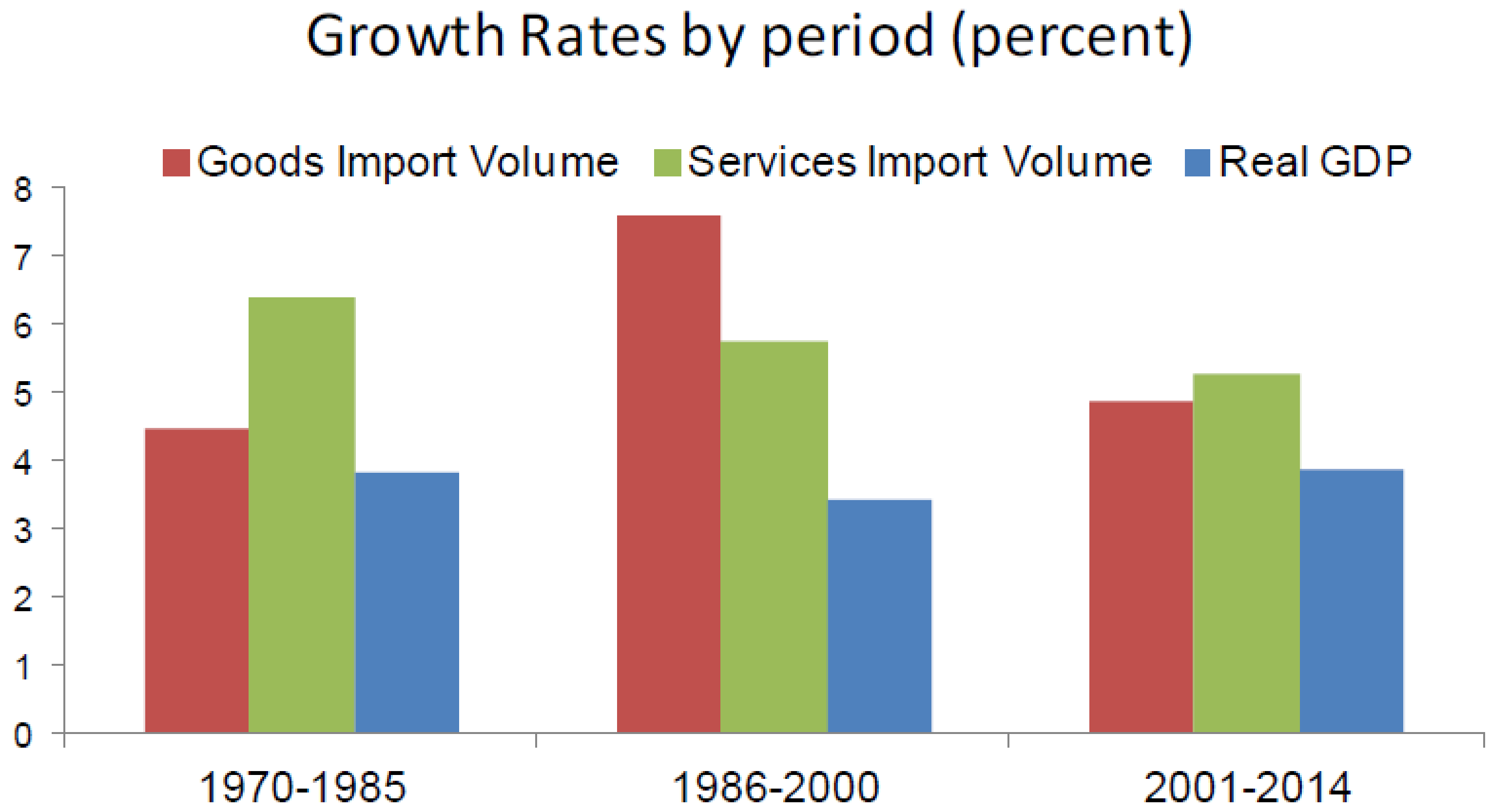
- Highly publicized quality issues cause harm to company reputations and customer confidence
- Rising labor rates in supplier countries lessen the cost advantage
- Unpredictable oil prices make transportation costs a more critical concern
- High inventory requirements and long lead times are a challenge in light of shrinking product cycles and increasing demand volatility
- Companies are becoming more aware of the risk and cost of supply chain disruptions

http://www.jeeveserp.com/en/blogs/108/procurement-trends-outsourcing-near-sourcing

GVC trends #3

- ‘Services and value chains’
  - Perspective is often about the ways in which services support value chains in manufacturing and agriculture
- Application within services
  - Digital technologies and innovation creating new options for trade
  - Restrictions remain, scope for significant liberalisation
  - Demography could be another driver, from the mismatch of demands for services and skills available in ageing societies
    - The people story
  - And services themselves are delivered or can be in ‘chains’ (probably better thought of as networks) of elements or tasks.

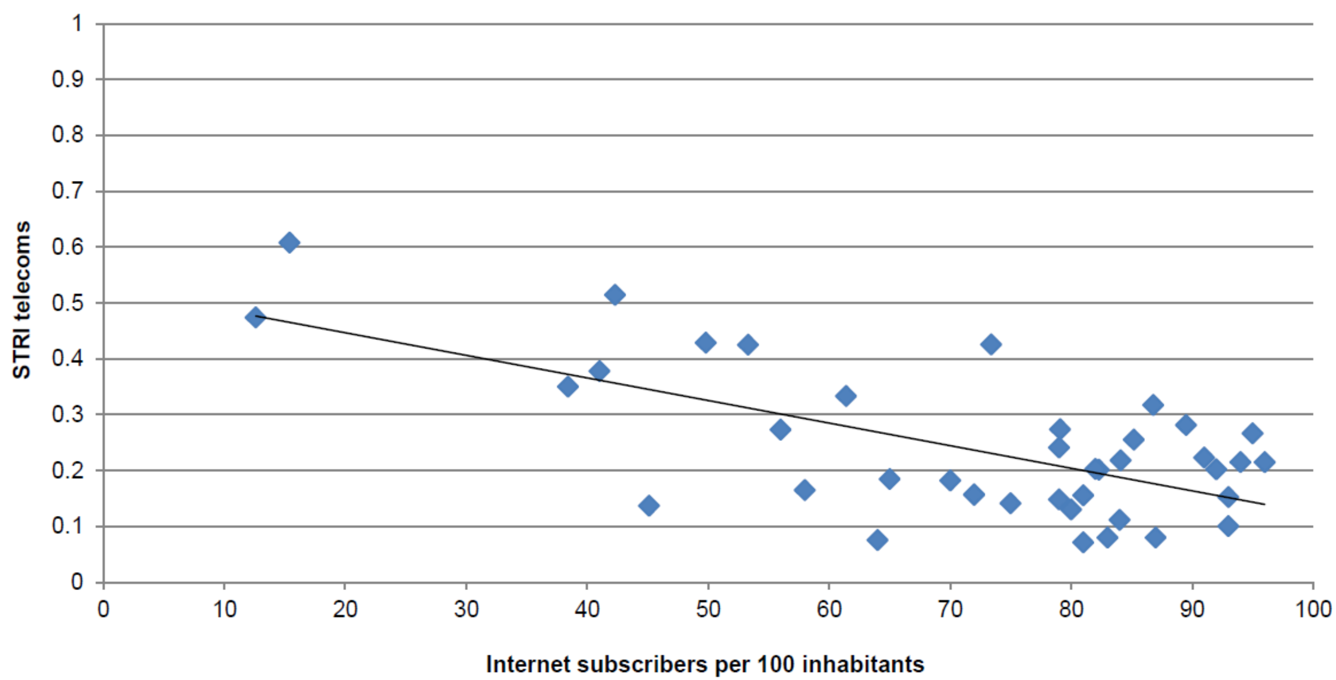
Services are another story



Source: IMF World Economic Outlook

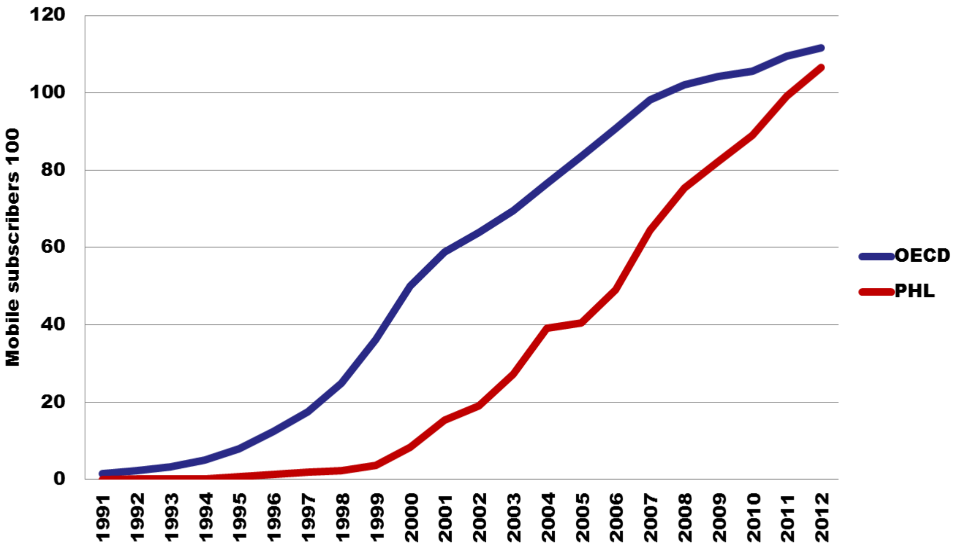
Scope for liberalisation

- Substantial scope for reform remains in the services sector where significant restrictions remain
- We can now measure these restrictions, and new policy measures are available to guide reform…
- …and they can be used to estimate the returns to effort
  - eg OECD data on STRI vs internet access



Cases of telecom reform

- Reform in telecom leading to higher mobile penetration rates in Viet Nam, PNG and the Philippines
  - The rate in PHL caught up to the OECD following reform
    - then built a new sector of the economy.



http://www.thedailypedia.com/2014/11/philippines-bpo-nation/

Services reform requires regulatory cooperation

- Nature of restrictions – mainly regulatory
- Role of regulatory cooperation
  - Simultaneity of production and consumption make it more difficult to establish quality before 'its too late'
  - Concern remains therefore about market failures
  - So a restriction of some form on international access is the result
    - Although, there is always a 'get around'
      - Mobility of consumers
      - Dealing over the internet
- Regulatory cooperation (exports and imports) would be preferred.
  - This is institutional connectivity.

Source: Mattoo 2015

GVC trend #4: upgrading and the war for talent

- Entering GVC is step one
- Upgrading is step 2
  - Could be within the chain
  - Or by building an agglomeration
- Step 3 is a more creative contribution
- That depends on access to the right people, who can create, innovate and commercialise
- There is now a global pool of mobile people who can make this contribution
- The new form of competition is for a critical mass of this pool.

Urban amenities (services) matter

Critical urban amenities:

(i) the presence of a rich variety of services and consumer goods

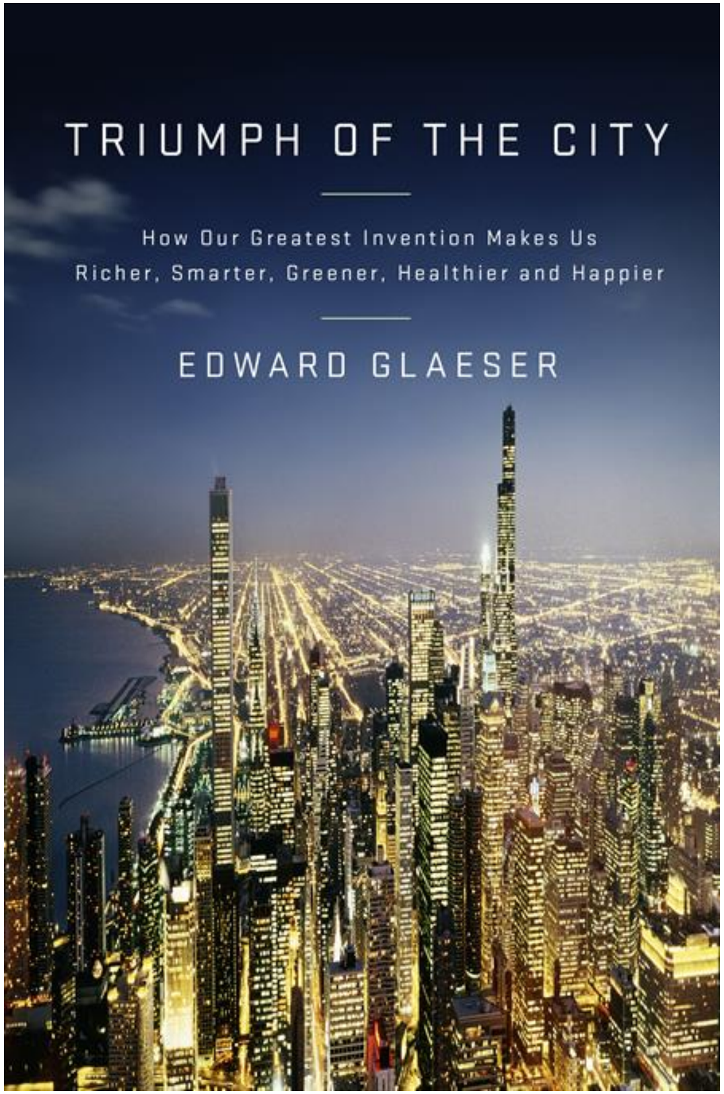
(ii) aesthetics and physical setting

(iii) good public services ('safe streets and good schools')

(iv) Transport speed

Glaeser, Kolko, and Saiz (2001)

'The most liveable places, notes the EIU, tend to be "mid-sized cities in wealthier countries with a relatively low population density"'



2^{nd} and 3^{rd} tier cities

- Some opportunities according to this view and the EIU data
- And there is no one solution eg low density and high density
- Opportunities
  - In services!

- Challenges often quoted
  - Poor infrastructure
  - Low telco quality
  - Poor quality of urban amenities
  - Lack of human capital
- Enablers
  - Jump over the legacy national infrastructure
    - eg open skies
    - mobile telco
    - transport quality
  - Contract out to invest in urban amenities with private/foreign investors
  - Open all/facilitate all modes of supply of education locally including recognition of qualifications

GVC trend #5

- Producer-driven vs retailer-driven chains
  - Electronics vs clothing
- Greater scope for consumer-driven chains
  - Including services bundled with goods
- New roles for intermediaries ('platforms') between consumers and producers
- New services in data management and processing

Summary

- GVCs are built on the foundations of connectivity
  - physical, institutional and people
- GVCs continue to evolve
  - prospects for growth?
  - Services vs goods
  - People movement more important
  - Who is the chain leader?
- Their evolution creates opportunities
  - for SMEs and
  - for 2nd and 3rd tier cities
    - those with the right characteristics.

Desainer Kampung

- Kaliabu, a village where hundreds of people have taken on graphic design as a side job.
- Interest in the industry has grown rapidly – from just two designers in 2012 to around 250 designers today.
- There were two early adopters of 99designs – Fahmi, a farmer, and Khoirul, a construction worker.
- Having most of his clients come from Australia, Fahmi is thrilled that his work is used and gaining exposure overseas.
- "The background of the designer is not as important. What's more important is the design itself."