

# Global Supply Chains and Rules

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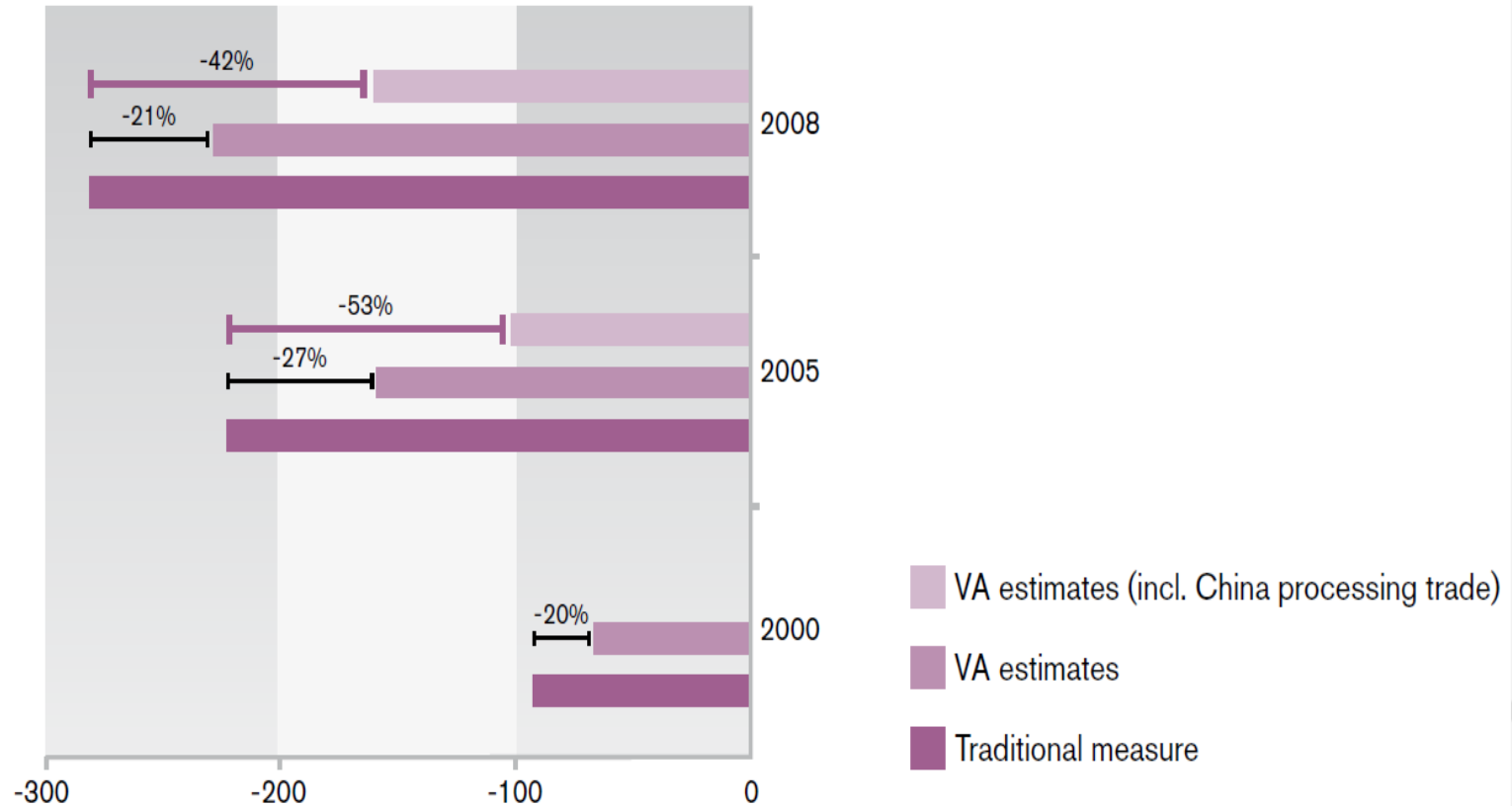
# Overview

- Why measuring trade in value-added matters
- Drivers of change in supply chains
- Supply chain typology
- Value-added attribution
- The role of services
- Where does policy fit in?

# Why measure trade in terms of value-added?

- Value-added versus gross measures of trade
  - A different view on bilateral trade balances
  - A different view on the technology content of trade
  - A different view on the true nature of interdependency through trade
  - The context for understanding supply chains
  - A better understanding of the interface with policy
- Import content of exports is rising globally (i.e. more intermediates in total merchandise trade: 50-65%), emphasizing the growing role of supply chain production in the world economy

# United States-China trade balance Traditional vs VA measure (billion US\$)



Sources: UN Comtrade Database, IDE-JETRO AIO table and WTO estimates

# Drivers of Change

- Shifting patterns of demand
- Consumer expectations
- New perceptions of risk
- Challenges of sustainability
  - Environmental
  - Social
- Advances in technology

# Shifting patterns of demand

- Rising incomes in emerging markets
- Increasing consumption
- Emerging markets as significant sources of growth for the foreseeable future
- Changing production costs also shift supply chains
- These changes the shape of and direction of global supply chains, carrying implications for the attribution of value-added

# Changing consumer expectations

- Communication and information technology has made consumers more demanding
- In a number of product areas, consumers' access to information and expectations increasingly influence production decisions
- We see new value-based product preferences
- Speed in production and delivery assume a new urgency

# New perceptions of risk

- The millennium bug, 9/11, Fukushima, Thai floods – all disruptors of supply chains
- New attitudes towards managing risk, the development of ‘plan B’
- Drawing supply chains less tightly – a potential trade-off with speed and efficiency
- New risk on the consumption side because of rising consumer expectations



# Challenges of sustainability

- Environmental sustainability
  - Environmental quality considerations, CO2 emission levels and increasing resource scarcity all constrain the Asian growth model compared to the way the West grew
- Social sustainability
  - The Foxconn effect: wage levels, working conditions
  - A lack of social legitimacy can become a major disruptor
  - The role of consumers in this context

# Advances in technology

- New technologies can disrupt supply chains over time
- Examples:
  - The digital revolution has expanded locational choice, emphasizing the distinction between trading in goods and trading in tasks – a kind of disembodiment that emphasizes services
  - 3D printing or additive manufacturing can disrupt large parts of the supply chain, both upstream and downstream

# A Typology of Supply Chains

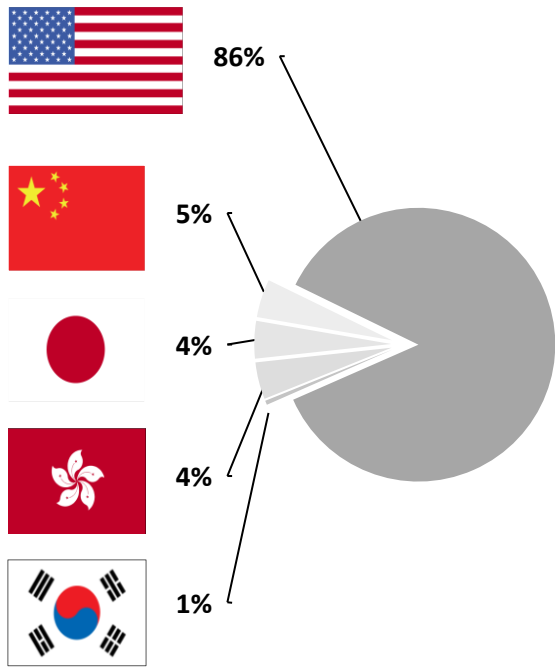
- **Resource-Based:** Demand-driven; location-determined; mining, extracting, growing, harvesting; varying technological components; issue of where value is added
- **Cost Minimization:** buyer-driven, high volume of consumer goods/commodities, low technology, low margins, cost/price competition and speed oriented, many firms, SME involvement
- **Mass Customization:** buyer-driven, high volume but higher margins, cost/price competition but elements of market segmentation (branding, trademarks) higher technology, speed oriented, multi-firm but some market dominance, SME involvement
- **Product Differentiation:** producer-driven, lower volume, higher margins, speed less important, technology and proprietary knowledge matters and is key to market segmentation, fewer firms, perhaps only one

# Value-added attribution

- Understanding the predominant role of services in supply chain production
- Breaking down the sources of value-added
- Who acquires the value-added – climbing up the value chain

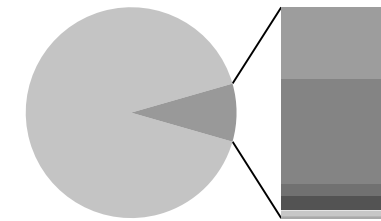
# The Role of Services

Cost Breakdown by Country



Manufacturing Costs and Invisible Assets

Manufacturing

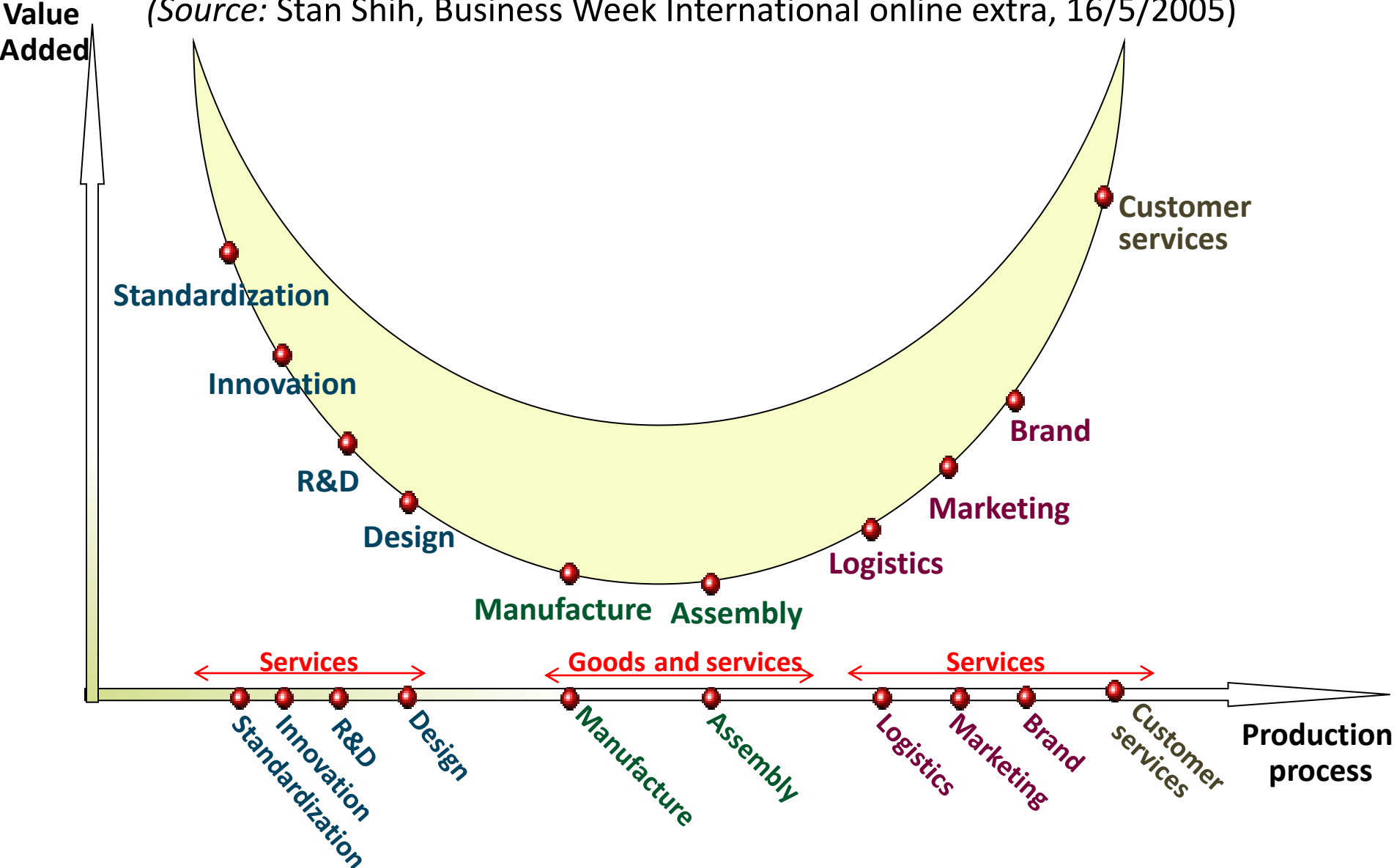


Invisible Assets

- Services (retail, logistics, banking, etc.)
- Intellectual Property
- Profits
- Other Unknowns

# V-A Attribution: Smiley Face

(Source: Stan Shih, Business Week International online extra, 16/5/2005)



# Some Questions for WTO (and PTAs)

- The multiplicative effects of policy intervention
- Is our frame of thinking about trade policy adequate in the contemporary global economy?
  - Design of regimes for goods, services and investment
  - Design (existence) of rules of origin
  - Treatment of NTMs
  - Standards: harmonization versus mutual recognition
  - Competition
  - Contingency trade policy
  - Institutionalized mechanisms for managing uncertainty/unpredictability in trade policy

Thank you