

#### **Discussant Comments**

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#### Overview

- Challenging, ambitious, and new material
  - Participation in global value chains (GVCs) throughout the world
  - Contributions of workers and capital
- Shows great strides profession is making in mapping global value chains and providing useful information to economists and policy makers
- Substantial challenges remain
  - Stress testing methodologies
  - Quantifying policy effects
  - Extending results to new regions
  - Understanding why countries and industries differ so widely in their participation in supply chains



# Trade in value-added: concepts, methodologies, and challenges

- Ambitious layout of goals, with honest appraisal of challenges
- Final goods trade: Need to follow
  - Single trade flow direct from producer to final consumer
- Twenty-first century: Need to follow/harmonize/concord
  - Information about the final goods flow
  - Information about the journeys of all intermediate components
  - Plus flows of indirect inputs, including services
  - Requires details about national accounts of every country along the way
- Not to mention
  - More information on firms, products, and changes over time would be helpful
- So why set such an ambitious goal given current limitations?



#### Trade in value added: challenges for policy analysis

- Effects of trade policy now depend on the composition of imports and the routes those goods and services took on their way to your country
- Without considering GVCs, border measures may be counterproductive: May reduce national competitiveness and welfare rather than increasing them
- Border measures may also be undpredictable:
  - May chiefly affect upstream exporting countries rather than the direct exporter
  - May have larger effect if direct exporter contributes little value added
  - May differ for intermediate and final goods
- Need to know more about quantifying the effects of trade policy in the new world



### Mapping global value chains: highlights

- Demonstrates the role that countries and their firms play in global value chains
- Uses latest indicators and a few new ones
  - Concise despite a wealth of data (ICIO table with 56 countries and 37 industries has 4.3 million intermediate use coefficients)
  - Nicely extends IO analysis when data are lacking (e.g., ownership networks)
- Can inform policy makers on
  - What is country's participation/role in GVCs?
  - What is the effect of trade policy, given that role?
- Highlights:
  - New indicators confirm the extent of fragmentation.
  - All OECD economies show a comparable level of participation in GVCs
  - Larger countries generally have lower share of foreign content in their exports
  - Participation/role varies by country, and by products within countries.



#### Mapping global value chains: Comments on indicators

- Paper address both GVC participation and introduces policy effects (more to come in follow-up report)
- I have a few comments on indicators in this paper, and some questions for the follow-up paper
- Indicators
  - Show useful trends and contrast between countries
  - Some estimates differ from previous studies (particularly US, Mexico, and China)
    - Need for some decidedly unsexy work on the effects of different data sources and database construction methods



#### Mapping global value chains: indicators

• Examples:

Import content of exports in OECD countries, 2005



Foreign value-added and domestic value-added used in third-countries exports





Mapping global value chains: Comments on policy implications

- Paper highlights policy implications for trade policy, trade and employment, national competitiveness and growth, and moving up the value chain
  - Effects of trade policy may differ for upstream and downstream countries. But may not be simple:
    - e.g., "countries downstream are more affected by direct barriers to their exports in the countries of final consumers"
    - But Timmer et al. show: K = F (I-B)<sup>-1</sup>C
      - All countries affected by same final demanders, and effects on upstream and downstream countries determined by Leontief inverses

Looking forward to follow-up paper on trade policy



#### Slicing up global value chains: WIOD

- WIOD—commendable effort
- Publicly accessible database of great quality and utility
- High quality of database construction
  - Use trade data to extend the UN Broad Economic Category approach
  - Bilateral sectoral services located or estimated
  - Excellent detail on contributions of different types of workers (extension of KLEMS)
- Coherence
  - IO structure matches industry detail in KLEMS and research goals (focus on workers and capital)
- Extension to 2009



#### Slicing up global value chains: highlights

- Paper examines factors payments directly, not as a proxy of global integration, etc.
- Factor income in manufacturing:
  - Advanced-country share in decline since 1999
  - Emerging economies (China, East Asia, Brazil, India, Russia, etc.) capturing greater shares
  - Equal shares in global manufacturing by 2013?
- Examination of specific countries:
  - Deveolped countries: not homogeneous
  - Developing countries not homogeneous
- Examination of specific sectors (Brazil and Mexico,)
  - Different sectors largely move together despite difference in exposure to global supply chains
  - Not all about supply chains: Macroeconomic and institutional forces still key determinants of success
- Examination of specific factors
  - High capital shares in China and North America



- What do we need to understand factor contributions in modern supply chains?
  - Results focus on global manufacturing shares
  - But example of iPod is largely a service story
    - Are upstream activities (R&D) included in shares?
    - Are downstream activities (retail) captured in IO studies of specific products?
      - IO tables are based on purchaser's prices, so retailing value is included in final demand



#### Conclusions

- Ambitious efforts are paying dividends
- Getting better at measuring participation (improved databses) and summarizing it (more helpful indicators)
- Remaining challenges (in addition to those highlighed by Hubert)
  - Can we reconcile the different approaches to value-added trade in these papers?
    - Most WIOD reports to date have looked at value added consumed abroad
    - Policy focus is on value added in export flows (both intermediate and final goods)
  - Policy effects not yet quantified (need new models)
  - Understudied regions: Latin America and Africa



## Questions/Comments?

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