Discussion of Factoryless Production

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Introduction

• Fragmentation of production into specialized establishments raises many interesting economic issues.
  – Both domestic and foreign aspects.
  – The development of networks of specialized establishments is an old phenomenon
  – Reflected in distinction between establishments and enterprises
  – New element seems to be emergence of global supply networks (chains)
  – Extreme version – factoryless manufacturing
Doherty Paper

• Very useful survey and overview of issues
  – Companion paper by Jennifer Ribarsky with a focus on SNA
  – Current efforts to redefine the boundaries of manufacturing are reminiscent of the efforts to create an *ownership-based* framework for international transactions dating back to the early 1990s.
  – Potentially, a very extensive restructuring of statistics on national accounts, balance of payments, merchandize trade, and classification of domestic establishments.

• Not clear about the problems that all these changes are meant to resolve.

• Domestic value added is captured under current system, and distortion is largely due to tax issues.
Manufacturing Value Added and Employment as a Share of GDP, 1960-2011

Share of Real GDP

Share of Employment
Supply Chains

• Stages of process
  – Product Design
  – Manufacturing (transformation)
  – Marketing and Distribution

• Long history of movement away from integrated producers (example of multinational corporations).

• Factoryless manufacturer (Apple) often engages in product design, outsources transformational activities, and may or may not be engaged in marketing.
Tax Implications

• Although not discussed, the issue of the boundaries of production is intimately tied in with tax concerns.
  – Transfer prices used to shift income among differing tax jurisdictions.
  – Statistical agencies will use revenues as reported by firms but the firms are strongly influenced by tax considerations.
  – Income shifting is particularly common for industries with large IP content – others are restricted by regulations on transfer pricing.
Tax Issue

• Issue highlighted by Apple’s decision to outsource all manufacturing.
  – Only products sold in the United States return
  – Foreign sales are undertaken by foreign affiliates with profits remaining abroad.
  – IP is transferred to affiliates at a nominal or cost basis.
  – There often is no comparable market price for the IP.
• Similar concerns in earlier years with pharmaceutical firms’ shift of income to Puerto Rico, and
• Microsoft’s sale of software out of Ireland.
Impact on China Trade

• China is the assembly point for an East Asian supply chain as Asian exports to the EU and US have been rerouted through China.
• China has a large bilateral trade surplus with the United States and EU, but it value added in processing trade is much lower than for normal trade.
• All of China’s trade surplus is in the processing sector.
Proposed changes

• Changes are potentially very extensive affecting all major business statistics programs
• Attempt at international coordination
• Focus on redefinition of the role of establishments, not enterprises.
• Basic problems raised by outsourcing exist in both domestic and international context.
Proposed Changes (2)

• Should there be a netting of processing transactions that do not involve a change of ownership with the net recorded as a service?
  – Parallels domestic treatment of outsourcing.
  – Shift away from focus on physical movement of goods toward ownership of processed goods
  – Merchandize trade statistics continue focus on cross-border movement of goods, but BOP incorporates a distinction between processing and other forms of trade.
  – SNA also relies on change of ownership and would not record trade in goods for processing (only the service fee).
Proposed Changes (3)

- U.S. response distinguishes among:
  - Integrated producer
  - Manufacturing service provider
  - Factoryless goods producer

- Most uncertainty surrounds classification of FGPs by economic ownership
  - Manufacturer, distributor, R&D, or management
  - Economic owner?
  - US objects to international criteria based on ownership of raw materials
Proposed Changes (4)

• Potentially very disruptive
• Insufficient evaluation of temporal consistency of resulting statistics – not like NAICS
• Inconsistencies across countries and statistical programs.
• Feasibility of changes in data collection have not been fully evaluated.
• Treatment of FGPs compared to that for MNEs.