Discussion of:
A Portrait of US Factoryless Goods Producers
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Disclaimer: This work is unofficial and thus has not undergone the review accorded to official Census Bureau publications. All results have been reviewed to ensure that no confidential information is disclosed. The views expressed in the paper are those of the author and not necessarily those of the U.S. Census Bureau.
What is factoryless goods production?

- Performance of pre and post production activities
- No (or minimal) physical transformation activities
How are factoryless goods producers defined?

- Economic Classification Policy Committee FGP establishment:
  - Outsources physical transformation activities
  - Undertakes all of the entrepreneurial steps for production
  - Arranges for all required capital, labor, and material inputs

- Bernard and Fort FGP definitions
  - Wholesale estab designs product and involved with manufacturing
  - FGP firm has 1+ FGP estabs and no manuf plants

- Kamal FGP definition
  - Broad: firm or estab reports CMS purchases
  - Restricted: firm and estabs both report CMS purchases
Hypothetical Examples of Contract Manufacturing Services

- Manufacturing of MP-3 player components designed and specified by Banana Electronics
- Processing of semiconductors in Intelium’s plants in Costa Rica
- Assembly of Athena’s shoes in non-affiliated factories using soles provided by Athena
- Does NOT include “off-the-shelf” inputs
Why do we care about FGPs?

- Census Bureau: accurate measures of economic activity
  - NAICS is based on establishment production process
  - Heterogeneity in how FGPs classified across sectors

- Bureau of Economic Analysis:
  - Input-output table metrics
  - Correct national accounts

- Broader research community
  - New type of production function
  - Specialization in innovation
  - Evolution of US manufacturing?
2007 FGPs more involved in manufacturing in the past

Manufacturing Employment Shares by 2007 FGP Status and Year

From Bernard and Fort (2015)
Comment 1: Outsourcing versus fragmentation

- Estabs can purchase CMS within the firm (2007 CMF & CWH)
- Current questions ask about CMS purchases
  - From other companies
  - From foreign plants of your company
- Current questions drop domestic fragmentation within firm
  - Perhaps at the firm level this is hard to track?
  - Still important for many questions on specialization
Comment 2: Plant versus firm-level responses

- 40% disagreement between firm and estab level data
  - Most due to plants that purchase CMS
- Is this noise or information?
  - How do disagreement plants compare to population?
  - Which type of firm-level CMS purchases agree most?
  - What is value share of CMS purchases by agreement status?
- Firm-level question explicitly asks about incorporating firm IP
  - Do IP differences suggest this as explanation?
  - Do estabs know more about operational detail of CMS purchases?
  - Do firms know more about what estabs are doing?
Comment 3: Is IP creation necessary for FGP status?

- Paper finds that FGP firms innovate more
- This is also true at the plant level
Innovation is correlated with manufacturing activities

(a) No Design at Plant (84.8%)

(b) Design at Plant (15.2%)

- Should innovation be a criteria for FGP status?
- How many FGPs get missed using only CMS criterion?
Comment 4: Addressing sample selection

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Notes: Excludes administrative records. CMS questions only asked on CMF long form.

- Non-respondents systematically smaller and less productive
- Need to address sample selection
Fort (2017) finds low CMS purchase shares
- Similar patterns within industries and in wholesale
- Are higher shares in this paper due to selection?
Comment 5: Very exciting paper! Tell us more!

- Main sectors for FGP activity
- Intensity of FGP purchases
- CMS from foreign subsidiaries versus domestic firms
Concern about inconsistent classification systems

- **31331 Textile and Fabric Finishing Mills**
  This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) **establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale.**

- **541512 Computer Systems Design Services**
  This U.S. industry comprises establishments primarily engaged in planning and designing **computer systems** that integrate computer hardware, software, and communication technologies. **The hardware and software components of the system may be provided by this establishment** or company as part of integrated services or may be provided by third parties or vendors.