

# Comments on “NAPCS and the Economic Census”

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# Overview

- Part of Long Term Plans to implement NAICS and NAPCS
  - NAICS is in principle production based -- not blending of production and demand based as in SIC
  - Some discussion that NAPCS is in principle demand based.
    - But also some discussion what “demand based” means is less transparent.
    - Detail and consistency of product codes across statistical system is especially important (so that for example revenue/price data can be integrated).
- NAICS has been in implementation since late 1990s. NAPCS full implementation has been slower.
- Proposal on the table:
  - Move to complete NAPCS implementation in 2017 Economic Census – that is, product classes not tied to industries (production based) but instead to demand based.
    - Core question is what this really means to be demand based.
  - Greater transparency of products and potentially some savings down the road.
  - But downstream implications:
    - Other business surveys and in turn economics measurement that depends critically on integration of business surveys (GDP, productivity, etc.)
    - So consistency of product codes especially important.
  - But I will also raise questions about the relationship between the conceptual motivation and the actual implementation of NAICS and NAPCS
    - Those questions should be addressed in considering these issues.

# Some old wisdom but still highly relevant...

Economic Classification Policy Committee, Issues Paper No. 1 (1994):

*The demand-side concept is more intuitively understandable than is the supply-side concept, but, at the same time, is technically more difficult to define (page 6)*

# Some Specifics

- Planned implementation will imply that there will be some loss of information in terms of specialization (what is primary product of given industry) and coverage (how much of a given product does this industry cover).
  - Potentially limit (for example) ability of PPI to produce primary and secondary product price indices by industry.
- Part of the issue for coordination with BLS and BEA
- Coordination is key here. Apparently much ongoing discussion of this already. But I would like to see more on:
  - What is impact on other Census business surveys?
  - What is the impact on NAICS itself? What is impact on detailed product lists for Economic Census? How will they be updated?
  - If PPI does not transition about the same time, does this make sense? What is transition plan?
  - Do the mitigation approaches resolve most of the problems?
    - Some plans to release enough detail about product mixes within industries that specialization and coverage ratios could be recovered?
  - Critical to getting this agreed upon – nominal revenue statistics in absence of price deflators have limited value. Things were pretty ugly between 1997-2004 for generating real value added and real gross output by industry during transition period to NAICS.

# Taking a step back...

- Evaluation of NAICS and NAPCS?
  - Goal of NAICS was production oriented classification. Is it (or put differently has there been any work to validate)? Or are primary gains (non-trivial) of getting more detail in service sector?
  - Reading background material including papers cited heavily in handouts date to 1993-94.
    - Little evaluation of NAICS and NAPCS relative to their objectives.
    - Frank Gollop wrote “Report No. 2” in 1994 on methods for evaluating NAICS using “The Heterogeneity Index: A Quantitative Tool to Support Industrial Classification”
      - Basic idea: Use heterogeneity indices on input mix to evaluate and/to enhance/refine NAICS.
      - This paper cited in the background material distributed and is one of the key background papers on Census and BLS web sites about NAICS.
      - Has this been implemented in any fashion?
      - How are new industries determined in NAICS?
        - SIC system used size and product specialization as determinants.
        - NAICS and NAPCS are in principle separate and these plans are to bring this to fruition.

# Evaluation of NAPCS as well...

- What about related approaches for evaluating/refining NAPCS?
  - If it is demand based
    - How do we determine product classes?
    - How how do we update product classes?
    - How do we evaluate whether the chosen classes have the desired properties
      - Close substitutes being grouped together? How do we do this in practice?
      - In principle, this would require an evaluation of the degree of substitutability of products.
      - Would be useful to have someone try to develop Gollop equivalent approach for demand side – and/or to point out the inherent difficulties in doing so.
- Some conceptual based framework for implementation and evaluation seems necessary.

# General Concern: What is the connection between the conceptual framework and the actual implementation and evaluation of NAICS and NAPCS?

- NAICS (production-based) is a sensible approach conceptually.
- NAPCS (demand-based) is somewhat less clear – what does this mean and how will it be done?
- But do we have a process that insures that the approaches match concepts?
- Do we have a way to evaluate the match between concept and implementation?
- In principle, we should want guidance for selecting and/or updating NAICS industry classes and NAPCS product classes based upon the underlying conceptual framework?
- Understand that resources are scarce – Perhaps at least some focus on industries/product classes which look problematic? (Specific examples very helpful to illustrate issues and resolution).  
And/or a periodic evaluation study?