Sector Paper: ISIC 661

Activities Auxiliary to Financial Service Activities, Except Insurance and Pension Funding

Andrew Baer
U.S. Census Bureau

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United States Census Bureau
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Economics and Statistics Administration
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Mini-paper contributions

- Turnover
  - Siti Salwani Ismail – Malaysia
  - John Murphy – U.S.

- Prices
  - Nassim Ketita, Lucy Opsitnik, Min Xie – Canada
  - Bonnie Murphy, Kathleen Frawley – U.S.
  - Aki Ono – Japan
  - Mohan Chutani, Anupam Mitra - India

Definition of Industry

- ISIC 6611, Administration of financial markets
  - Operation and supervision of securities exchanges
  - Participating countries had no experience with pricing these services
- ISIC 6612, Security and commodity contracts brokerage
  - Includes dealing in financial markets on behalf of others (e.g. stock broking) and related activities
  - In NAICS the phrase “dealing” is reserved for when firms act as a principal in buying and selling securities on a spread basis – which according to concordances is classified in ISIC 6499, Other financial service activities
- ISIC 6619, Other activities auxiliary to financial service activities
  - Includes transaction processing, investment advice, mortgage brokerage, trustee and custody services

Country Status

	Countries for ISIC 6611, Administration of financial markets	Countries for ISIC 6612, Security and commodity contracts brokerage	Countries for ISIC 6613, Other activities auxiliary to financial services
PPI details >= CPC	0	2	2
PPI details>=CPC soon	0	0	0
Turnover details>=CPC	1	3	1
Turnover details>=CPC soon	0	1	0
Industry-level prices collected	1	2	3
Industry-level turnover collected	9	9	9
Detailed turnover and prices well aligned	0	1	1
Detailed turnover and prices well aligned soon	0	0	0
Industry level turnover and prices well aligned	1	1	2
Industry level turnover and prices well aligned soon	0	0	0
No industry coverage	19	18	17

Turnover - Challenges

- Bundled products
  - In U.S. fee-based accounts have been growing rapidly
  - Single quarterly fee charged for unlimited trades, investment advice, access to research products
  - Instructions are to allocate the turnover to component products – but not clear how to do this
  - Since the turnover is not earned per trade, respondents often allocate all turnover to investment advice
  - Similar situation for institutional services – "prime brokerage" encompasses securities lending, trade execution, clearing, etc.

Turnover - Challenges

- Identifying an appropriate survey unit
  - Establishment collection extremely difficult as large financial firms do not record turnover or product data by location
  - Enterprise collection challenging as enterprises cross many financial industries. Classifying these firms in one industry produces industry data that is difficult to interpret, increasing the importance of product data.
  - Kind-of-activity unit makes sense, but lose ability to collect secondary production by industry. Essentially makes industry data more like product data.

Turnover - Opportunity

- Availability of administrative data
  - Financial firms heavily regulated in many countries
  - Potential to partner with regulatory agencies for data sharing, relieving response burden
  - Would likely necessitate deviation from standard industry and product classification systems

Contributing Country Progress on Prices

- India/Canada – pilot, research phase
- Japan – produces SPPI for B2B segment of securities brokerage
- U.S. – produces SPPIs for securities brokerage and investment advice

Pricing Methods – Transaction Fees

- Flat transaction fees
  - Example 1: an online broker charges $10/trade for online sale or purchase of stocks for non-premium clients (account values less than $100,000)
  - Example 2: an investment adviser charges a fee of $500 for a customized investment plan delivered in writing and with a 1 hour in-person consultation
  - Direct prices for repeated services in U.S. and Japan
  - Unit value prices in Canada

Pricing Methods – Transaction Fees

- Value-based commissions
  - Example: a stock broker charges 1% to execute a sale or purchase of 1,000 shares of Stock A, valued at $25 per share.

    Price = 1,000 x $25 *.01 = $250
  - Countries take different approaches on these transactions

Transaction fees – Canada unit value approach

Account Value (or Trade Value) **Range ($)** **A**	**Total Fees** (or Commissions) **($000's)** **B**	**Total Value of Accounts** (or Trade) **($000's)** **C**
up to $99,999		
$100,000 - $249,999		
$250,000 - $499,999		
$500,000 - $999,999		
$1 Million - $1.9 Million		
$2 Million - $4.9Million		
$5 Million - $9.9Million		
$10 Million +		
Totals		

Transaction fees – Canada unit value approach

- Price = weighted average of total fees and commissions divided by trade value for all tiers
- Benefits
  - Companies can report this information
  - Broad representation of all transactions
  - Shows the price effect of the same set of customers moving from value-based commissions to flat fees and vice versa
- Challenges
  - Risk of changes in customer mix showing as price change
  - Flat per trade fees treated in calculation as percentage of trade value even though not charged that way
  - May miss effect of quality change (example - prices decline due to more trades being executed online without broker assistance)

Transaction fees – Japan real value of traded securities approach

- Combination of model price and percentage fees for value-based commissions
  - Base Period - Price = 1,000 shares x $25/share *.01 fee = $250
  - Later Periods – Value of trade adjusted only for changes in general price level (CPI)
  - 1 year later – Price = $25,000 x 1.02 (change in CPI) x .01 fee = $255
  - With no change in percentage fee, price change = change in general price level

Transaction fees – U.S. number of traded securities approach

- Also combination of model price and percentage fees for value-based commissions
  - Base Period - Price = 1,000 shares x $25/share *.01 fee = $250
  - Later Periods – Value of trade reflects current market price of securities
  - 1 year later – Price = 1000 shares x $30/share * .01 fee = $300
  - With no change in percentage fee, price change is change in market value of security

Transaction fees – real value of traded securities vs. number of traded securities approach

- India 2014 BSE Sensex increases ~30%, CPI increases ~4%, trading volumes virtually unchanged
- Assume value-based commissions charged on all brokered equity trades and no change in percentage fees
- Real value approach
  - Turnover for domestic equity brokerage in India increases 30%
  - SPPI for domestic equity brokerage in India increases 4%
  - Real output increases significantly
- Number of traded securities approach
  - Turnover for domestic equity brokerage in India increases 30%
  - SPPI for domestic equity brokerage in India increases 30%
  - No change in real output

India – total cost of transaction

- Total cost of transaction has both explicit and implicit components
  - Collect explicit brokerage commission, stamp fee, custody charges
  - For implicit charges:
    - Effective bid-ask spread
    - Difference between trade executed price and mid-point between quoted bid and quoted ask
    - High effective bid-ask spreads indicate that dealers are earning more on executed trades
  - Implicit and explicit charges can be aggregated to a single basis point price

Periodic fees

- Canada – unit value, similar to transaction fees
- U.S. – model pricing and percentage fee
  - Base period – Price = $1,000,000 account x .02 fee = $20,000
  - Later periods – account value is adjusted by earned rate of investment return
  - 1 year later, rate of return is 12%, percentage fee unchanged
  - Price = ($1,000,000 *1.12) x .02 = $22,400
  - Note this does not reflect the actual dollar value of the account 1 year later as it excludes the impacts of inflows and outflows
  - Changes in securities values again shown as price change, not volume change

Options brokerage

- Size of options market has grown substantially
  - Example – U.S. S&P futures market

    Daily trading volume in 2001 = $12 billion, in 2016 = $215 billion
- U.S. paper describes procedures for pricing options
- Similar methods to other security trades, but characteristics that need to be held constant change

Summary

- Limited country experience
- Canada and India pursuing innovative pilot programs
- Variation in methods related to price effect of changes in securities markets
  - No single recommendation provided
  - Consultation with national accounts and productivity is key!