Investment Banking and Securities Dealing

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Outline

• Overview of financial services index development in Canada
• Performance and output measurement
• Industry structure and size
• Services
  • Investment Banking in Canada, and the Services Price Index (SPI)
  • Securities Dealing in Canada, and development of the SPI
  • Evaluation
• Conclusion
• Next steps
<table>
<thead>
<tr>
<th>Commodity</th>
<th>Banking and other depository credit intermediation</th>
<th>Non-depository credit intermediation</th>
<th>Activities related to credit intermediation</th>
<th>Financial investment, services, funds and other financial vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking and other depository credit intermediation services - explicit charges</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposit intermediation services indirectly measured (FISIM)</td>
<td>X</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Residential mortgage intermediation services indirectly measured (FISIM)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Other loan intermediation services indirectly measured (FISIM)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Non-depository credit intermediation services - explicit charges (fees)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Other services related to credit intermediation</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Investment banking services</strong></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Security brokerage and securities dealing services</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Portfolio management services (MER)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Investment counselling services</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Holding company services and other financial investment and related activities</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Trusteed pension fund services</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutual funds (cost of service) and other similar services--loads &amp; trailers</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
## ISIC to NAICS concordance

<table>
<thead>
<tr>
<th>ISIC Rev. 4</th>
<th>NAICS Canada 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Title</td>
</tr>
<tr>
<td>6499</td>
<td>Other financial service activities, except insurance and pension funding activities, n.e.c.</td>
</tr>
<tr>
<td>6499</td>
<td>Other nondepository credit issuing including pawn shops and pawn brokers, making loans based on the anticipated value of crops being grown by farmers, etc.</td>
</tr>
<tr>
<td>6499</td>
<td>Investment banking and securities dealing</td>
</tr>
<tr>
<td>6499</td>
<td>Commodity contracts dealing</td>
</tr>
<tr>
<td>6499</td>
<td>Intermediation n.e.c. (e.g., investment clubs; venture capital companies; gas and oil royalty dealers; buying and selling mortgages (rediscounting)); buying income tax refunds; viatical settlement companies; venture capital companies and own account investing</td>
</tr>
</tbody>
</table>
Performance and output measurement

**Business performance statistics:**
- Quarterly Survey of Financial Statements
  - Enterprise level program
  - Largest firms in Canada fall under NAICS 52211 – Banking

**Output:**
- **Industries:**
  1. Banking and other depository credit intermediation
  2. Financial investment, services, funds and other financial vehicles
- **Commodities:**
  1. Investment Banking
  2. Security brokerage and securities dealing services (partial coverage)
- **Data sources:**
  1. Annual Financial and Taxation Statistics
  2. Investment Industry Association of Canada (Investment Industry Regulatory Organization)
Change in industry contribution to GDP

Financial investment services, funds and other financial

Finance and insurance, as a percent of GDP

Source: Statistics Canada. Table 379-0031
**Service Lines**

**Investment Banking:**
- Underwriting new securities (IPO)
- Mergers and Acquisitions (M&A)
- Private placements
- Affiliated services

**Securities Dealing:**
- Market makers
  - Buy and sell on their own account
  - Ensure market liquidity
- ⇒ *Take title* (vs. brokering)
Investment banking deals in Canada

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;= 180 M</td>
<td>$110,242,348</td>
<td>$23,000,000</td>
<td>$237,575,585</td>
<td>$4,419,450,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>160 M to &lt; 180 M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>140 M to &lt; 160 M</td>
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<tr>
<td>120 M to &lt; 140 M</td>
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<td></td>
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<tr>
<td>100 M to &lt; 120 M</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>80 M to &lt; 100 M</td>
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<tr>
<td>60 M to &lt; 80 M</td>
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<tr>
<td>40 M to &lt; 60 M</td>
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<tr>
<td>20 M to &lt; 40 M</td>
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<tr>
<td>Less than 20 M</td>
<td></td>
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</tr>
</tbody>
</table>

Source: FP Infomart
Equity deals generate most commissions

Total Commission Revenue, by Product

- Corporate Debt
- Equity
- Income Trusts
- Preferred Shares
- Structured Funds

Total Proceeds, by Product

- Corporate Debt
- Equity
- Income Trusts
- Preferred Shares
- Structured Funds

Source: FP Infomart
Impact of regulation and market conditions

Percent of commissions

- Income Trusts Regulation
- Financial Crisis


Debt | Equity | Income Trust | Preferred Shares | Structured Fund

Source: FP Infomart
Investment Banking Services Price Index

Index:

• Data source: FP Infomart
• Annual price index (Laspeyres)
• Commissions raised used for weighting
• Weights updated annually
• Aggregation of 5 products, with sub-product for equity (resource/non-resource)
Investment Banking Services Price Index

**Products:**

- Corporate Ownership (Equity)
- Income Trusts
- Structured Funds
- Corporate Debt
- Preferred Shares
- Resource Industries
- Non-Resource Industries
Investment Banking Services Price Index

Price:

- Unit value – average percent commissions:

\[ P_{i,t} = \frac{C_{i,t}}{V_{i,t}} \]

\[ P_{i,t} = \frac{C_{i,t}}{V_{i,t}/(d_t/d_0)} \]

Where:

- \( P_{i,t} \) is the price for product \( i \) in period \( t \)
- \( C_{i,t} \) and \( V_{i,t} \) are total commissions and total proceeds for product \( i \) in period \( t \)
- \( d_t/d_0 \) is the ratio of the Implicit Price Index for Gross Fixed Capital Formation in period \( t \) relative to the base period
Investment Banking Services Price Index

Source(s): CANSIM table 332-0028.
Securities dealing in Canada

Trading Revenue, 2016

- Equity Trading
- Fixed Income Trading

Bond Market Secondary Trading Volume, 2016

- Government of Canada
- Crown Corp, Provincial and Municipal
- Other (Private, Maple)

Source: Investment Industry Association of Canada (IIAC)
Development of a Securities Dealing SPI

• Data sources:
  • Prices: Closing bid-ask quotes (Bloomberg)
  • Weights:
    • Annual Bond/money market secondary trading (IIAC)
    • Auction volume (Bank of Canada)

• Methodology:
  • Time series of spreads holding maturity constant
  • Price = (Ask-Bid)/Bond price

• Products: 7 representative benchmark securities
Canadian Government debt securities

- **T-bills**
  - Short-term money market instruments
  - Sold at discount, redeemed at par

- **Bonds**
  - Term and time to maturity
  - Coupon and yield
  - Auction and benchmark

<table>
<thead>
<tr>
<th>Product</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-month T-bill</td>
<td>60% of T-bill volume share</td>
</tr>
<tr>
<td>6-month T-bill</td>
<td>20% of T-bill volume share</td>
</tr>
<tr>
<td>1-year T-bill</td>
<td>20% of T-bill volume share</td>
</tr>
<tr>
<td>2-year bond</td>
<td>0-3 year bond volume share</td>
</tr>
<tr>
<td>5-year bond</td>
<td>50% of 3-10 year volume share</td>
</tr>
<tr>
<td>10-year bond</td>
<td>50% of 3-10 year volume share</td>
</tr>
<tr>
<td>30-year bond</td>
<td>10+ year share</td>
</tr>
</tbody>
</table>
Evaluation

• Price index and output coverage:
  • IBSPI: Government debt, M&A, corporate advisory
  • SDSPI: Products, capital gains/losses, brokerage

• Solutions:
  • Outreach and collaboration
  • Data, data, data
  • Disaggregation
Conclusion

• Difficult to measure industry / service lines

• Transactions:
  • IBSPI: Heterogeneity
  • SDSPI: Numerous transactions / changing characteristics

• Regulation $\Rightarrow$ administrative or alternative data

• Canadian industry is highly concentrated

• Close collaboration
Next steps

• Address limitations:
  • IBSPI:
    • Expansion to include provincial and municipal
    • Possibly developing survey to cover M&A activity
  • SDSPI:
    • Completely assessing and addressing coverage
    • Securing better sources of data for weights

• Consultation:
  • Within department on conceptual matters
  • With industry to address limitations
Investment Banking and Securities Dealing

www.statcan.gc.ca

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