

# Investment Banking and Securities Dealing

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Telling Canada's story in numbers

Lucy Opsitnik Chief, Producer Prices Division Statistics Canada

32nd Meeting of the Voorburg Group on Service Statistics New Delhi, India, October 2017

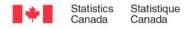






### Outline

- 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





	Industry			
Commodity	Banking and other depository credit intermediation	Non-depository credit intermediation	Activities related to credit intermediation	Financial investment, services, funds and other financial vehicles
Banking and other depository credit intermediation services - explicit charges	Х			
Deposit intermediation services indirectly measured (FISIM)	Х			
Residential mortgage intermediation services indirectly measured (FISIM)	Х	Х		
Other loan intermediation services indirectly measured (FISIM)	Х	Х		Х
Non-depository credit intermediation services - explicit charges (fees)	Х	Х		
Other services related to credit intermediation	Х		X	
Investment banking services	Х			X
Security brokerage and securities dealing services	Х			Х
Portfolio management services (MER)	Х			X
Investment counselling services				Х
Holding company services and other financial investment and related activities	Х			Х
Trusteed pension fund services				X
Mutual funds (cost of service) and other similar servicesloads & trailers				Х





#### **ISIC to NAICS concordance**

ISIC Rev. 4			NAICS Canada 2017	
Code	Title	Explanatory notes	Code	Title
6499 6499 6499 6492 6499 6499 6499 and pension funding activities, n.e.c.		Other nondepository credit issuing including pawn shops and pawn brokers, making loans based on the anticipated value of crops being grown by farmers, etc.	522299	All other non- depository credit intermediation
	Investment banking and securities dealing	523110	Investment banking and securities dealing	
	Commodity contract dealing; foreign currency dealing	523130	Commodity contracts dealing	
	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	523910	Miscellaneous intermediation	





## Performance and output measurement

#### **Business performance statistics:**

- Quarterly Survey of Financial Statements
  - Enterprise level program
  - Largest firms in Canada fall under NAICS 52211 Banking

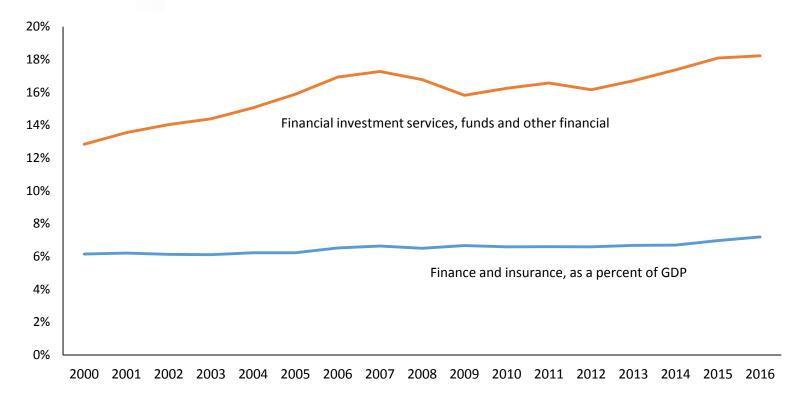
#### Output:

- 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



SOURCE: STATISTICS CANADA. TABLE 379-0031





### **Service Lines**

**Investment Banking:** 

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

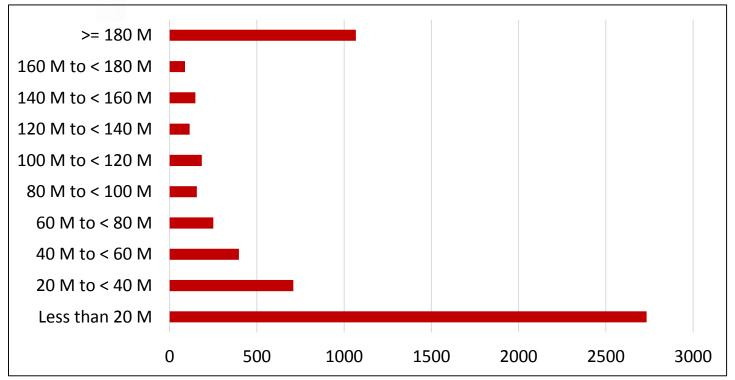
#### **Securities Dealing:**

- Market makers
  - Buy and sell on their own account
  - Ensure market liquidity
  - $\Rightarrow$  Take title (vs. brokering)





#### Investment banking deals in Canada



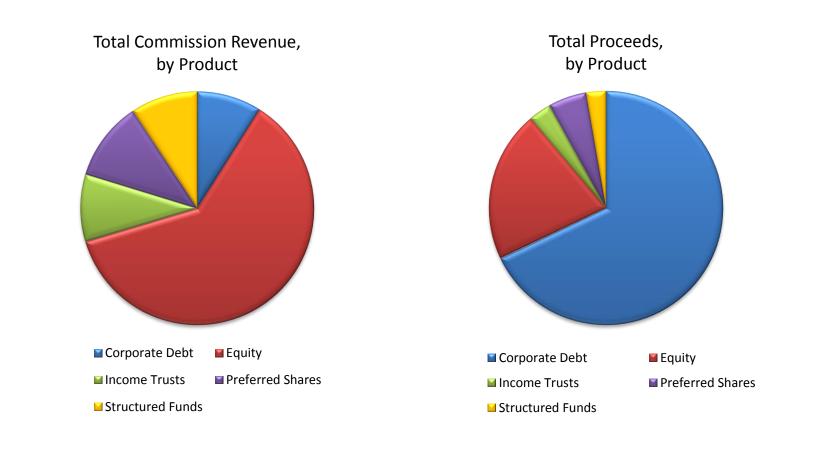
Average	Median	Standard Deviation	Max	Min
\$110,242,348	\$23,000,000	\$237,575,585	\$4,419,450,000	\$15,000

8





### Equity deals generate most commissions

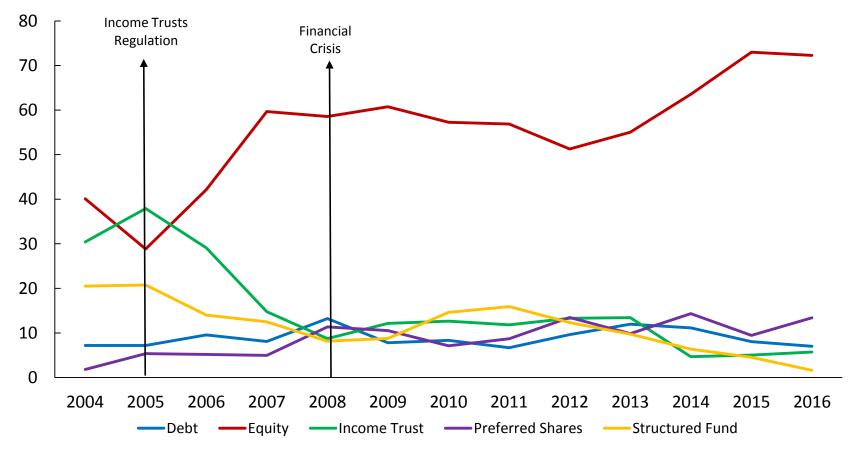






### Impact of regulation and market conditions

Percent of commissions







#### 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)









Resource

Resource Industries

Preferred

**Shares** 

Corporate

Debt





#### **Price:**

Unit value – average percent commissions:

$$P_{i,t} = \frac{C_{i,t}}{V_{i,t}}$$

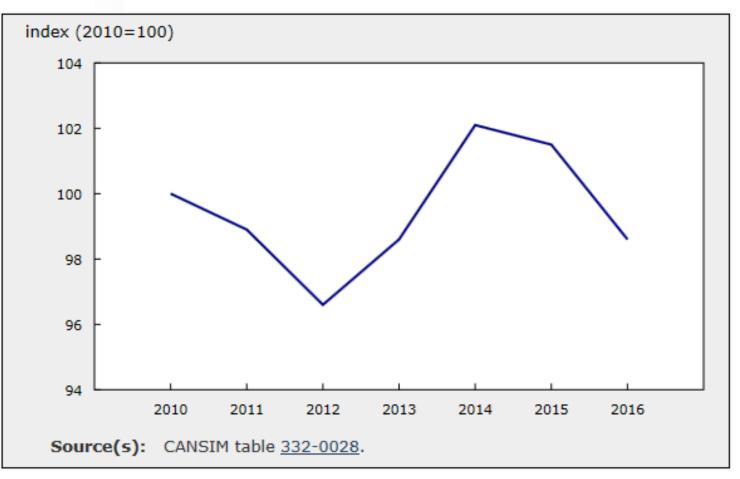
$$P_{i,t} = \frac{C_{i,t}}{V_{i,t}/(d_t/d_0)}$$

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<sub>t</sub>/d<sub>0</sub> is the ratio of the Implicit Price Index for Gross Fixed Capital Formation in period t relative to the base period



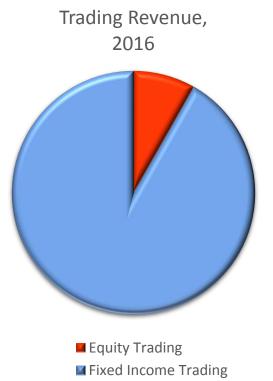




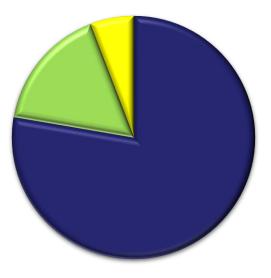




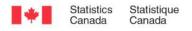




#### Bond Market Secondary Trading Volume, 2016



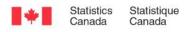
Government of Canada
Crown Corp, Provincial and Municipal
Other (Private, Maple)





# **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

Product	Weight
3-month T-bill	60% of T-bill volume share
6-month T-bill	20% of T-bill volume share
1-year T-bill	20% of T-bill volume share
2-year bond	0-3 year bond volume share
5-year bond	50% of 3-10 year volume share
10-year bond	50% of 3-10 year volume share
30-year bond	10+ year share





### **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



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