Mini Presentation on
Banking Output/Turnover Measures
In Canada

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Banking Turnover/Output measures in Canada – Voorburg 2009

1. Definition of the service being collected

In Canada, the banking sector is embedded in the broader finance and insurance sector which is defined as establishments primarily engaged in financial transactions (that is, transactions involving the creation, liquidation, or change in ownership of financial assets) or in facilitating financial transactions that include:

> (i) establishments that are primarily engaged in financial intermediation. They raise funds <u>by taking deposits and/or issuing securities</u>, and, in the process, incur liabilities, which they use to acquire financial assets by making loans and/or purchasing securities. Putting themselves at risk, they channel funds from lenders to borrowers and transform or repackage the funds with respect to maturity, scale and risk.
>
> (ii) establishments that are primarily engaged in the pooling of risk <u>by underwriting annuities and insurance</u>. They collect fees (insurance premiums or annuity considerations), build up reserves, invest those reserves and make contractual payments. Fees are based on the expected incidence of the insured risk and the expected return on investment.
>
> (iii) establishments that are primarily engaged in providing specialized services that facilitate or support financial intermediation, insurance and employee benefit programs.

Also in Canada, domestic banks are permitted to own life and health insurers, property and casualty insurers, investment dealers, trust companies, as well as provide employee payroll and benefit programs. To this extent, all three components of the above definition are inherent in the activity of these <u>financial corporations</u>.

<u>Definition of Banks as Financial Corporations</u>

A financial corporation is essentially an entity that provides financial services through risk management, liquidity transformation and auxiliary financial activities. These include incurring liabilities (e.g. issuing bonds), acquiring assets (e.g. common shares), using own funds to acquire assets and make loans. The evolution of financial services has seen the emergence of financial corporations issuing their own shares and investing in other's shares. As such, it is important that the use of shareholder equity to provide loans or acquire other financial assets be recognized as the provision of financial services.

For collection purposes the banking and other credit intermediation, activities are defined within the North American Industry Classification System (NAICS) sector 52 (Finance and Insurance). Banking and insurance are particularly covered under NAICS sub-sector 522 (Credit intermediation and related activities) as well as 524 (Insurance carriers). The full NAICS 52 is covered however certain industries are disseminated to the public at higher industry aggregations in order to protect respondent confidentiality. The Bank of Canada, in its role as central bank, is the monetary authority. As such it is classified as a government business entity and surveyed by Public Sector Statistics Division at Statistics Canada. NAICS 523990 "all other financial investment activities" is comprised of establishments not classified to any other industry, primarily engaged in providing on a contract or fee basis, miscellaneous financial investment services such as trust, fiduciary and custodial services and other investment services. This residual industry is published as Portfolio Management and Other Financial Investment 523A and Securities along with Commodity Exchanges and Other Financial Investment Activities 523B in the quarterly survey of financial statements. The table below presents the detailed breakdown of each sub-sector for which data is collected:

Table 1 – Scope of the financial sector

NAICS	Industry	Responsibility for collection
521	Monetary authority	Statistics Canada, Public Sector Statistics Division
522	Credit Intermediation	Statistics Canada, Industrial Organization and Finance Division
522111	Personal and commercial banking industry	Statistics Canada, Industrial Organization and Finance Division
522112	Corporate and institutional banking industry	Statistics Canada, Industrial Organization and Finance Division
522190	Other depository credit intermediation	Statistics Canada, Industrial Organization and Finance Division
523	Securities, commodity contracts and other financial investment and related activities Published as 523A and 523B	Statistics Canada, Industrial Organization and Finance Division
523990	All other financial investment activities Published as 52391 "Miscellaneous Intermediation"	Statistics Canada, Industrial Organization and Finance Division?
524	Insurance carriers	Statistics Canada, Industrial Organization and Finance Division
5241A	Life, Health and Medical Insurance Carriers	Statistics Canada, Industrial Organization and Finance Division
5242	Agencies, Brokerages and Other Insurance Related Activities	Statistics Canada, Industrial Organization and Finance Division
5241B	Property and Casualty Insurance Carriers	Statistics Canada, Industrial Organization and Finance Division
524111	Direct individual life, health and medical insurance carriers Rolls up to 5241A	Statistics Canada, Industrial Organization and Finance Division
524112	Direct group life, health and medical insurance carriers Rolls up to 5241A	Statistics Canada, Industrial Organization and Finance Division
524131	Life reinsurance carriers Rolls up to 5241A	Statistics Canada, Industrial Organization and Finance Division
524132	Accident and sickness reinsurance carriers Split between 5241A and 5241B depending on type of insurance offered	Statistics Canada, Industrial Organization and Finance Division
524134	Automobile reinsurance carriers	Statistics Canada,

	Rolls up to 5241B	Industrial Organization and Finance Division
524135	Liability reinsurance carriers Rolls up to 5241B	Statistics Canada, Industrial Organization and Finance Division
524139	General and other reinsurance carriers Split between 5241A and 5241B depending on type of insurance offered	Statistics Canada, Industrial Organization and Finance Division
526	Funds and other financial vehicles published by fund type	Statistics Canada, Industrial Organization and Finance Division
5269A	Mortgage Investment and Other Funds and Fin. Vehicles	Statistics Canada, Industrial Organization and Finance Division
52693	Segregated (except Pension) Funds	Statistics Canada, Industrial Organization and Finance Division
52691A	Balanced and Other Open-ended Investment Funds	Statistics Canada, Industrial Organization and Finance Division
52691	Open-End Investment Funds	Statistics Canada, Industrial Organization and Finance Division
526916	Bond & Income / Dividend Funds - Foreign	Statistics Canada, Industrial Organization and Finance Division
526915	Bond & Income / Dividend Funds - Canadian	Statistics Canada, Industrial Organization and Finance Division
526914	Money Market Funds	Statistics Canada, Industrial Organization and Finance Division
526913	Mortgage Funds	Statistics Canada, Industrial Organization and Finance Division
526912	Equity Funds - Foreign	Statistics Canada, Industrial Organization and Finance Division
526911	Equity Funds - Canadian	Statistics Canada, Industrial Organization and Finance Division

The paper will mainly focus on the NAICS sub-sectors and industries highlighted in the table 1.

2. Unit of measure to be collected

The data collected for the credit intermediation industry includes the value of the service provided which includes borrowing and lending funds, providing specialized services that facilitate or support financial intermediation, insurance, etc. Payment for all these services includes explicit and implicit charges and commissions. Implicit charges are obtained by calculating the interest received less the interest paid. All in all, Industrial Organization and Finance Division processes 336 quarterly core data points for the banking industry. This includes a comprehensive array of income statement and balance sheet accounts which enable quarterly statistics on operating revenue, operating expenses, operating profit, income statement information including revenues and expenses, balance sheets (assets, liabilities and equity), pension plan funding status and asset and liability distributions by province and territory.

Surveys

Industrial Organization and Finance Division of Statistics Canada uses 12 quarterly schedules[2] collecting booked in Canada information to populate Statistics Canada's data requirements. These surveys also populate the income statement and balance sheet information required by Industrial Organization and Finance Division in order to publish financial statistics including corporate profit measures by industry. The schedules also enable various divisions to allocate financial flows between sectors.

Box 1

F14 – Banks (composed of a dozen schedules)

- AS Non-Mortgage Loans Reports[3]
- BS Securities Report
- C2 Deposit Liabilities Classified by Institutional Sector Report
- C3 Allowance for Impairment
- D3 Capital Continuity Report
- ES Mortgage Loans Report[4]
- MS Consolidated Balance Sheet
- PS Statement of Income
- S1 Supplementary Questions Consolidated Balance Sheet
- S2 Supplementary Questions Consolidated Statement of Income
- S2* Chartered Banks - Reporting Instructions: Supplementary Questions to the consolidated statement of income
- S3 Supplementary Questions Deposit Liabilities Classified by Institutional Sector Report

The variables from these schedules are mapped into the F14 questionnaire (see Appendix 1) which represents a generic bank income statement, balance sheet, and statement of changes in financial position. This generic template facilitates cross-industry comparison. Banks are surveyed under the Quarterly Survey of Financial Statistics for Enterprises (QFS) which is a quarterly survey of the corporate sector designed to obtain information on corporate income statements (elements of revenues, expenses and profits) and balance sheets (assets, liabilities and equity).

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[2] The terms questionnaire, surveys, returns and schedules are used interchangeably and should be considered as such in this paper. Statistics Canada generally uses the term questionnaire to describe the collection medium. The regulatory agencies use the terms return and schedule to denote their collection vehicles

[3] This schedule will be discussed later in more detail in the section detailing turnover/output measures
[4] same note as footnote 3

In general for the quarterly financial survey, estimates are derived from two different components: a sample survey is conducted for larger businesses while the component for small businesses is derived from annual data compiled from financial statements submitted to the Canada Revenue Agency, Canada's central taxation authority. However, banks are collected as a census industry.

3. Institutional and market conditions and constraints

Institutional conditions

In Canada, there are a number of bodies that monitor the financial sector: the Office of the Superintendent of Financial Institutions (OSFI), the Canada Deposit Insurance Corporation and the Bank of Canada. OSFI regulates federally regulated financial Institutions and pension plans, safeguards policy holders, depositors and pension plan members from undue loss and administers a regulatory framework that contributes to public confidence in a competitive financial system. The office also provides actuarial services and advice to the Government of Canada.

Statistics Canada collaborates on the definition of data requirements with financial regulators through the Financial Information Committee[5]. FIC is responsible for all content specifications for the information reports to be filed by financial institutions. The committee consists of senior representatives of Finance Canada, the Office of the Superintendent of Financial Institutions (OSFI), Canada Deposit Insurance Corporation and the Bank of Canada. Recognized as a major stakeholder in the collection and production of statistics on financial institutions, Statistics Canada exercises influence on the specification of data requirements.

In order to minimize reporting burden Statistics Canada has adopted similar formats to data provided to the Office of the Superintendent of Financial Institutions (OSFI). The primary differences between Statistics Canada's data requirements and those of the regulators relate to Statistics Canada's requirement for booked in Canada and calendar quarter data, while OSFI is interested in consolidated worldwide activities and fiscal quarter data. This is a material difference since many of the large domestic banks in Canada have October 31st year ends and their production must be allocated to the calendar quarter by Statistics Canada. The issue of fiscal year reporting as opposed to calendar quarter reporting represents a small but statistically significant number of cases and relates to income statement information not balance sheet information. The latter are available monthly and collected on a calendar quarter basis. There are also certain differences between Statistics Canada's data requirements with regard to their level of granularity since Statistics Canada is concerned with the suitability of data aggregations and time series continuity. Regulators are generally concerned with operational risk assessments and adherence at an institutional level with regulatory guidelines at specific points in time.

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[4] Financial institutions become federally regulated when they operate in two or more provinces. Given the importance of financial system integrity to the Bank of Canada, the Bank of Canada needs to supplement its information base for financial institutions that are not federally regulated nor are under the Bank Act to which bank regulators are legislated.

[5] It should be noted however that Statistics Canada is not an official member of the committee as it is not a financial institution regulator. Nevertheless, this has not inhibited Statistics Canada's role in the direction of data requirements requested from banks.

Markets conditions

NAICS 52 finance and insurance represented just over 6.0% of GDP in 2006. Of this percentage, deposit-taking institutions represented 3.3% of the total gross domestic product (GDP) for Canada. To put this in perspective, this is more than the whole transportation equipment and motor vehicle manufacturing industry. This proportion has changed little since 1997. This means that the GDP contributed by these institutions generally grew along with real GDP for Canada. In 2006, deposit-taking institutions contributed just over one-half (54%) of GDP in the finance and insurance industries. NAICS 52 employs about 663,104 full time equivalents in Canada with about 351,795 in credit intermediation and 191,220 in insurance carriers.

Table 2 – Population size of the banking and credit intermediation sector in Canada

Industry Type	North American Industry Classification System	Sample size	Population size
Banking & other depository credit intermediation	522111, 522112, 522190	114	114 (census) Schedule I domestic banks 20 Schedule II foreign bank subsidiaries 24 Schedule III foreign bank branches 29 Non-bank trust 35
Local credit Unions	52213	1035	
Life, Health and Medical Insurance carriers	52411, 524131, 524132	44	91 of which 45 are foreign
Property & Casualty Insurers	52412, 524133, 524134, 524135, 524139	80	189 of which 95 are foreign
Non-depository Credit Intermediation	5222	89	200

Relating to NAICS 52 (Finance and Insurance), Industrial Organization and Finance Division collects data from approximately 2,700 respondents to represent a survey population of approximately 4,600 enterprises coded to this NAICS on Statistics Canada's Business Register. Response rates for the financial sector are robust owing to the regulatory nature of these industries and the consequent data that are requested from financial sector regulators. There is also a high degree of concentration in the financial sector so that measurement efforts on part of Statistics Canada can be expended on statistically significant units.

In addition to data as an input into the calculation of Gross Domestic Product (GDP), a major client of IOFD is the Bank of Canada (central bank). The Bank of Canada uses credit union, non-depository credit intermediaries and insurance data from Industrial Organization and Finance Division to supplement their information requirements that go beyond their coverage of federally regulated financial institutions. Provincially chartered financial institutions that operate in single provinces are not federally regulated.

Table 3 Rankings of Assets and Operating Revenues

Industry	Description	Assets ($millions)	*Rank	Operating Revenue ($millions)	*Rank
5221A	Banking and other deposit Credit Intermediations	2,212,648	1	23,995	4
55	Management of Companies and Enterprises	396,481	3	4,717	37
5241A	Life, Health and Medical Insurance Carriers	311,389	4	10,666	18
52213	Local Credit Unions	229,170	5	3,611	43
5222A	Credit Card Issuing, Sales Financing and Consumer Lending	124,732	13	5,101	34
5241B	Property and Casualty Insurance Carriers	108,597	14	9,059	22

* This ranking is based on an 80 group industry breakdown as at fourth quarter 2008 from industries that contribute most to operating revenue and assets to the least. The 80 group is the finest level of detail published in the Quarterly Survey of Financial Statements.

Legislative and regulatory changes over the last two decades in Canada have been designed to encourage competition among the various types of financial service providers. They have allowed new ownership combinations and permitted broader activities for the different institutions. In 1999, the Federal government allowed foreign-owned banks to establish full service branches in Canada, rather than restricting them to establishing subsidiary companies as in the past. Since 1999, many foreign bank subsidiaries have converted to become foreign bank branches. Some foreign banks without previous Canadian subsidiaries have also established branches in Canada. New domestic banks have also emerged, particularly servicing credit card business, online banking or industry niches. Technological change has contributed to the development of new financial services such as “virtual” banking. At the same time, the number of credit unions in the country has fallen by about half since the end of 1997, mainly due to amalgamations.

Today, the domestic banking industry includes 21 domestic banks, 25 foreign bank subsidiaries and 23 full service foreign bank branches operating in Canada, around 1,000 credit unions as well as 35 deposit-accepting trust companies which are independent of the other Institutions. It should be noted that foreign bank branches are foreign institutions that have been authorized under the Bank Act to do banking business in Canada. These branches may not accept deposits of less than $150,000 which effectively limits them to the commercial market and to higher net worth consumers in the retail market. Together foreign banks operating in Canada represent only around 11% of the total value of services produced by banks in Canada. In other words, around 90% of the banking production in Canada is held by domestic players.

4. Standard Classification Structure and Product Details/Level

The main classification of financial activity is by industry and by product classification. The quarterly financial survey is based on the definition of the financial sector under the NAICS (North American Industrial Classification System). NAICS is the agreed upon common framework for the production of comparable statistics by the statistical agencies of Canada, Mexico and the United States. The agreement divides the economy into twenty sectors. NAICS is based on a production-oriented, or supply based conceptual framework so that establishments are grouped into industries according to similarity in production processes used to produce goods and services.

Table 4 Revenue, Expense, Operating Profit and Employment

Industry	Description	Operating Revenue* ($millions)	Operating Expenses* ($millions)	Operating Profit* ($millions)	Employees (full time equivalent) **
5221A	Banking and other deposit Credit Intermediation	25,497	20,751	4,746	351,795
55	Management of Companies and Enterprises	10,599	4,451	6,148	n/a
5241A	Life, Health and Medical Insurance Carriers	12,555	11,138	1,417	75,069
52213	Local Credit Unions	3,424	3,058	366	Included in 5221A
5222A	Credit Card Issuing, Sales Financing and Consumer Lending	4,147	2,830	1,317	n/a
5241B	Property and Casualty Insurance Carriers	9,451	8,914	537	116,151
523B	Securities and Commodity Exchanges and Other Financial Investment Activities	11,172	6,704	4,468	109,095
523A	Portfolio Management and Other Financial Investment Activity	6,596	5,205	1,391	76,127
5231	Securities and Commodity Contracts Intermediation and Brokerage	2,304	2,113	192	32,968

* As at first quarter 2009
**as at May 2009
N/A not available

5. Evaluation of Standard vs. Definition and Market Conditions

Two major problems are encountered in the calculation of banking output: 1. the data are consolidated and 2. Critical data for domestic banks represent global operations where output calculations for the industry require domestic operation data. The first problem results in major subsidiaries being included in the data such as investment dealers, insurance and mortgage companies. When the income statement is consolidated, it is normal procedure to “net” revenue and expenses. For example, if the rental expense of an investment dealer subsidiary is income for the parent bank, the rent would be deducted from the revenue of the bank and from the expense of the investment dealer in the consolidated statement. Unconsolidated data are not required under the Bank Act so they are not required by Bank regulators and not available to Statistics Canada.

The second way to measure bank output is to use a user cost method. In a user cost method, an opportunity cost is established to ascertain how an asset or liability contributes to the revenue or cost structure of a bank. This type of analysis is onerous and subject to variability and has not been used by Statistics Canada.

6. National Accounts Concepts and Measurement Issues for Banking and Other Credit Intermediation Activities related to the GDP

Balancing data quality and timeliness is a critical consideration of the QFS. Preliminary estimates need to be available less than six weeks after the start of collection, as they are used to prepare industrial financial statements for the Canadian business sector and also serve as input to the System of National Accounts. Revisions to these preliminary estimates are made the following quarter, at the end of a calendar year and once QFS estimates can be benchmarked to annual data. The annual data are compiled from the Canada Revenue Agency annual taxation data and quarterly survey data. In other words, when data for 3rd quarter are received, there are also likely to be revisions to the raw data for 2nd quarter. In addition, quarterly revisions may be made once a year going back 2 years, with the release of the preliminary data for the first quarter. The magnitude of these revisions needs to be minimized to maximize the relevancy of the program

A measurement challenge among statistical agencies has been how to comprehensively estimate the output of financial intermediation for those services whose price is implicit or whose cost is embedded in the intermediation function. The difficulty arises for those services for example, in banking whose prices are embedded in the interest rate charged to borrowers and the interest paid to depositors. Financial intermediation services (interest income – interest expenses) carry no explicit charge but an implicit charge is embodied in the interest spread between types of products. Non-interest income e.g. service fees present no measurement difficulty since they are explicit. An example of this is the rental of secure deposit boxes by banks. Services such these do not present any measurement problem because there are explicit fees for them. For insurers, the output lies in the value added produced between premiums collected and claims incurred.

There are three ways to value bank output: 1. double deflation, 2. user cost method and 3. the price index approach. Statistics Canada uses double deflation where the real GDP is derived by taking the difference between the industry gross output and the industry intermediate inputs at constant prices. The deflation operations are applied to the values at prices of explicit services. Input-Output tables lend themselves readily to double deflation because gross output of an industry is equal to the sum of intermediate and primary inputs. Real GDP for the sector in input-output accounts is constructed as the difference between total gross output at constant prices and the sum of intermediate inputs and taxes at constant prices. For banking an imputation is made by observing actual costs of banking services that are explicitly charged and using them as a proxy to derive financial intermediation services indirectly measured (FISIM). The output is calculated as the sum of imputed service charges, receipts for services including commissions (actual service charges) and other revenue such as rent. Imputed interest is calculated by deducting interest expense from interest and dividend income.

FISIM is not without its limitations as banking activity includes only bank loans, bank deposits, and other services that can be directly tied to one of these. It excludes all other products and services that banks provide that are not tied to loans or deposits, including, fiduciary services, brokerage, financial counselling, trusts and estate planning. FISIM also cannot capture off-balance sheet financial instrument activities such as securitization. Securitization in a narrow sense refers to the process of converting loans of various sorts into marketable securities by packaging the loans into pools. In the broader sense they refer to the development of markets for a variety of debt instruments that permit the ultimate borrower to bypass the banks and other deposit-taking institutions and to borrow directly from lenders.

Statistics Canada is developing price indices for an array of services including financial services. Using a price index as a way to value bank output, the price movement is measured indirectly via a derived implicit price index where unit revenues and costs are summed to yield a service price per dollar of deposit. This may be expressed as:

Loan output = base year gross margin X deflated average dollar volume of loans

This approach has not been used since price data, interest rates and volume of services data are required. This data is not readily available from regulatory agencies and there are concerns about the ability of financial institutions to provide this level of granularity with the associated response burden.

7. Turnover/output data method(s) and criteria for choosing various output methods

The quarterly survey of financial statements is as its name suggests a quarterly program. Data are published 50 days after the quarter end. There is a lag of 8 quarters for input output tables to be published and input output tables are published annually. As for most Statistics Canada's business surveys, responding to the Quarterly Survey of Financial Statements is mandatory. Data are collected directly from survey respondents and extracted from administrative files, namely the generalized index of financial information. Data for banks are collected as a census at the statistical enterprise level and collection of the data begins approximately thirty days after the end of the calendar quarter and continues for fifteen days.

The Quarterly Financial Survey data are seasonally adjusted using the X12-ARIMA (auto-regressive integrated moving average model) program. Seasonal adjustment is performed on operating revenue, operating profit, profit before extraordinary gains and net profit. In addition, profit margin, return on equity, debt to equity as well as return on capital employed is published along with industrially aggregated income statements, balance sheets and statement of change in financial position.

In addition to balance sheet detail, IOFD collects product line information pertaining to both mortgage and non-mortgage loans. In regards to **non-mortgage loans** (AS report) Statistics Canada collects the following breakdown by resident and non-resident loan balances in foreign currency, total currency with allowances for impairments and gross impaired loans:

Non-mortgage Loan Product Lines

1. **Financial institutions**

(a) Call and other short loans to investment dealers & brokers, secured
(b) Local and Central Credit Unions
(c) Other Deposit-taking institutions
(d) Consumer and business finance companies
(e) Investment companies
(f) Insurance companies
(g) Pensions funds
(h) Other

Sub-total 1.

2. **Canadian governments**
(a) Federal government
(b) Provinces
(c) Municipalities and school corporations

Sub-total 2.

3. **Foreign governments**
4. **Lease receivables**
5. **To individuals for non-business purposes**
(a) Loans to purchase or carry
(i) Tax-sheltered plans
(ii) Securities
Sub-total 5(a)
(b) Loans to purchase consumer goods and other personal services
Private passenger vehicles
Mobile homes
Renovation of residential property
Other
Sub-total 5(b)
(c) **Credit card balances (to Individuals for on own use)**

Sub-total 5.

6. **To individuals and others for business purposes**
(a) Public
(i) Non-Financial Business Enterprises
(ii) Public Hospitals, Other Health & Social Service institutions
(iii) Public Universities & Colleges
(b) Private
(i) **Total Industrial Corporations**
(ii) **Unincorporated Businesses, Private not for profit institutions (ex. public health & education institutions)**
Subtotal 6(a) and 6(b)
7. **Own acceptances purchased**
8. **Reverse repurchase agreements with :**
(a) Financial institutions
(b) Other
(c) Unallocated

Sub-total 8.

9. **Allowance for impairment related to group allowances**

10.
Total

Memo items for which securitized non-mortgage loans are measured.

1. **Loans made under Government of Canada guaranteed loan schemes (included above)**
   (a) Home improvement loans
   (b) Small business loans
   (c) Farm improvement loans
   (d) Canada student loans
   (e) Other (please specify)
2. Loans to unincorporated business (business purposes)
3. Credit Card Balances excluding amounts recorded in section 5
4. Details on Loans to Purchase Consumer Goods & Service - Other (Section 5 (b) (iv)
   (a) i Secured Lines of Credit - HELOC
   (a) ii Secured Lines of Credit - Other
   (a) iii Unsecured Lines of Credit
   Subtotal 4(a)
   Other Loans

Please note that HELOCs refer to home equity line of credits. In Canada, these are classified as non-mortgage loans for regulatory purposes.

Mortgage Loans Product Lines

In regards to **<u>mortgage loans</u>** (ES report) mortgages by product line are distinguished as residential and non-residential insured, uninsured. Also mortgage loans destined to farms is broken out separately. Canada has a national insurance program for mortgages which is run by a government business entity known as the Canada Mortgage and Housing Corporation (CMHC). This crown corporation manages the National Housing Act and mortgage-backed securities.

Section I - Total Mortgages

1. Mortgages secured by properties located in Canada
   (a) Mortgage loans outstanding at end of previous quarter
   (b) Gross increase in mortgage loans during the quarter
      (i) Cash disbursements of principal
      (ii) Purchases of mortgages from:
         (A) Resident financial
         (B) Resident non-financial
         (C) Non-resident
      (iii) Purchase/Withdrawal from CMHC NHA MBS pool
         Of which: NHA MBS used as collateral in repurchasing transactions
      (iv) Purchase/Withdrawal from Other Securitization Vehicles
      (v) Other increases
   Total Increase
   (c) Gross decrease in mortgage loans during the quarter
      (i) Repayment of principal
      (ii) Sales of mortgages to:
         (A) Resident financial
         (B) Resident non-financial
         (C) Non-resident

(iii) Sale/Contribution to CMHC NHA MBS pool
Of which: NHA MBS used as collateral in repurchasing transactions
(iv) Sale/Contribution to Other Securitization Vehicles — Sale/Contribution to Other Securitization Vehicles
(v) Other decreases

Total Decrease

(d) Total mortgage loans secured by property located in Canada outstanding at end of the quarter

2. Total mortgage loans secured by property located outside Canada
3. Less allowance for Impairment
4. **TOTAL MORTGAGE LOANS**

Mortgage loans by type, allowance for impairment and gross mortgage loans outstanding are also collected on a quarterly basis broken down by the following:

1. Properties located in Canada
   - (a) Residential
     - (i) Single detached
     - (ii) Multiple dwellings
       - (A) Condominiums
       - (B) Other
     - **Total Residential**
   - (b) Non-residential
     - (i) Farm properties
     - (ii) Non-farm properties
     - **Total non-residential**
   - **Total properties located in Canada**
2. **Total properties located outside of Canada**
3. **General Allowances**

TOTAL MORTGAGE LOANS

8. <u>Evaluation of comparability of Turnover/output data with Price index</u>

As this paper shows, the turnover statistics program for Banking Services at Statistics Canada is quite rich in its detail, history and data products. However, corresponding price indexes do not exist, although they are well into development. Judging from their progress, the level of comparability between the SPPI and turnover data is will be high for several reasons high. First, both survey programs use the same industry classification system (NAICS, and then eventually NAPCS). Second, the SPPI sample overlaps almost exactly the sample for the turnover survey, the Quarterly Survey of Financial Statistics (QFS), so the same units are defined and covered. This frame ultimately is derived from the Business Register. Coherence analysis is conducted between the SPPI and the QFS to ensure both series are providing reasonable trends. When outliers or anomalies are found (mostly in the sample), they are confronted and discussed with the QFS analysts.

9. Summary and Future development:

As of second quarter 2007 all IOFD QFS surveys were updated to obtain data relating to the following:

- derivative asset and liability positions.
- realized and unrealized gains and losses
- other comprehensive income taxes related to other comprehensive income
- other comprehensive income and accumulated other comprehensive income
- pension expenses
- pension plan funding for trusteed pension plans
- pension plan assets, the benefit obligations and the funding status
- accrued benefits liabilities or assets
- reverse repurchase agreements and obligations related thereto
- equity securities classified as liabilities (convertible preferred shares)
- dividends paid on equity securities classified as liabilities
- stock options expense
- bad debts expenses and charitable donations
- software costs expensed

The new data requirements were in part motivated by changes in Canadian Generally Accepted Accounting Principles as well as new requirements in the Canadian System of National Accounts. IOFD is also currently evaluating the quality of this new data with a view to publishing the data that satisfy quality tests in 2010 as it is anticipated that there may be a need to further modify the questionnaires to be compliant with Canada's adoption of International Financial Reporting Standards in 2011. IOFD has launched an IFRS impact study to this end.