Institut du Québec

Quebec's Mutual Fund Industry

Assessing the Economic Footprint

A partnership with

The Conference Board of Canada

HEC MONTRÉAL

REPORT JUNE 2015

Quebec's Mutual Fund Industry: Assessing the Economic Footprint
Alicia Macdonald and Sonny Scarfone

About the Institut du Québec

The result of a partnership between The Conference Board of Canada and HEC Montréal, the Institut du Québec (IdQ) focuses its research and reports on the socio-economic challenges facing Quebec. The Institute provides tools to both the public and private sectors to help them make informed decisions toward building a more dynamic, competitive, and prosperous society.

Institut du Québec

A partnership with
The Conference Board of Canada
HEC MONTRÉAL

Institut du Québec
3000 chemin de la Côte-Sainte-Catherine
Montréal, Quebec H3T 2A7
institutduquebec.ca
@InstitutduQC

To cite this report: Macdonald, Alicia, and Sonny Scarfone. *Quebec's Mutual Fund Industry: Assessing the Economic Footprint*. Montréal: Institut du Québec, 2015.

CONTENTS

EXECUTIVE SUMMARY

Quebec's Mutual Fund Industry: Assessing the Economic Footprint

At a Glance

- Assets under management in Quebec's funds industry have grown substantially over the last decade despite the 2008–09 financial crisis, with average annual growth of 9.3 per cent.
- In 2013, the direct contribution to the economy from the Quebec mutual and exchange-traded funds industry was $861 million.
- In 2013, the funds industry's total economic footprint, including supply chain spinoffs and induced impacts, was $1.8 billion.
- In all, the industry supported 18,211 Quebec jobs, contributing $1.4 billion in primary household income, $235 million in industry firms' profits, and $435 million to the provincial government's coffers.

For Canada as a whole, mutual funds and exchange-traded funds went from a value of approximately $100 billion in 1993 to $1.04 trillion in 2013. Two factors—a shift toward defined contribution pension plans and a large demographic cohort that is nearing retirement—are largely responsible for the strong growth. Quebec saw similar growth; assets under management in Quebec were valued at $180.5 billion in 2013.

The Quebec funds industry's direct contribution to Quebec's economy was $861 million in 2013. When the total indirect and induced impacts are included, the industry had a total economic footprint of $1.8 billion, representing approximately 0.5 per cent of Quebec's economic activity. The industry's estimated economic multiplier is 2.1.

The equivalent multiplier for Ontario, as measured by The Conference Board of Canada, is 2.8. The difference is due primarily to the fact that many of the financial institutions that operate in Canada are headquartered in Ontario. Given that 55 per cent of the revenue from this commercial activity then passes through the institutions' head offices, industry activities performed in Quebec can have a major economic impact elsewhere in Canada, thus limiting the scope of indirect and induced impacts within the province.

Montréal is usually deemed to be a major global financial centre. Based on data provided by Investor Economics, we estimate that Montréal's funds industry is responsible for 9,129 direct jobs, more than the video game industry, and an almost equal number of indirect and induced jobs, primarily in legal and accounting services.

Assessing the Economic Footprint

Summary

- The substantial growth in funds in both Quebec and the rest of Canada is due primarily to the widespread shift from defined benefit pension funds to defined contribution pension funds.
- Assets under management in Quebec's funds industry rose from $81.4 billion to $180.5 billion over the past decade.
- We estimate that the funds industry directly contributed $860.9 million to Quebec's economy in 2013, while directly employing 9,129 full-time workers.
- The total economic footprint (including direct, indirect, and induced impacts) of Quebec's funds industry in 2013 was $1.8 billion in real GDP, helping to support over 18,000 jobs in the province.
- Through its direct, indirect, and induced effects, the industry generates $1.4 billion in personal income each year and another $235 million in corporate profits.
- In addition to contributing to federal coffers, the industry generates $435 million in tax revenues for the Quebec government.

Introduction

Over the last decade, the economic activity associated with funds[1] has grown much more quickly than the overall economy, both in Quebec and across Canada, primarily as a result of the demographic and regulatory changes that have occurred during this time. Quebec's population is aging, and older Quebecers want to build up enough savings to finance a retirement that lives up to their expectations. In Quebec, the ratio of workers to retirees will fall from more than 7 in the 1970s to nearly 2 within the next two decades. Demographic pressures are also responsible for the decline in the popularity of defined benefit pension plans in favour of defined contribution plans. Defined contribution plans shift the onus of financial planning to individuals, who must then turn to financial products, particularly those offered by dealers offered by dealers.

In Quebec, from 2009 to 2013 alone, the number of jobs in the funds industry went from 5,747 to 9,129, a substantial 59 per cent increase. In addition to the direct jobs it creates, this industry generates demand for other financial services and other industries, particularly commercial services industries, such as legal and accounting services. Every direct job in the mutual fund industry supports another job in Quebec's economy, for a total of 18,211 jobs. As financial industry jobs are usually better paid than the average job in Quebec, they help increase average weekly wages by 0.13 percentage points. All in all, this industry increases

1 Throughout this report, the term "funds" includes exchange-traded funds.

Quebec personal household income by $1.4 billion a year, raises firms' profits by $235 million, and provincial government revenues by $435 million.

Note that a source of intangible benefits we did not measure in this study is specific to activities involving management of investors' liquidities. An entire field of macroeconomics focuses on the theories that explain nations' long-term economic growth. (See "The Role of Savings and Investment in Long-Term Economic Growth" on page 9 for a brief explanation of the other spinoffs provided by the funds industry.) Given the scope of these benefits for society, it is best to assess them qualitatively.

Definitions

- **Gross domestic product (GDP):** GDP is used to measure production in a region during a specific period. Although there are various ways to calculate GDP, the concept of value-added is probably the most intuitive method.
- **Value-added:** Value-added (or net output) is established for each industry by calculating the difference between total revenue and the sum of expenses on parts, materials, and services used in the production process. Summing the value-added for all of a region's industries will yield the GDP in that region.
- **Economic footprint (or impact):** This is defined as a sector or industry's overall contribution to national economic activity. It includes the direct, indirect, and induced impacts described below.
- **Direct impact:** Direct impact measures the value added to the economy by the funds industry that is directly attributable to the sector's employees, the wages earned, and the revenue the firms generate.
- **Indirect impact:** Indirect impact measures the value-added that the "direct impact firms" generate within the economy through their demand for intermediate inputs or other support services. These purchases of goods and services from suppliers make up the supply chain.
- **Induced impact:** Induced impact is derived when employees of the aforementioned industries spend their earnings and owners spend their profits. These purchases lead to more employment, higher wages, and increased income and tax revenues, and can be felt across a wide range of industries.

The value of assets in mutual funds and exchange-traded funds (ETFs) has soared in recent years.

- **Economic multiplier:** An industry's economic multiplier corresponds to the ratio between the industry's overall impact on the economy and the economic activity it generates.

The Quebec Funds Industry

Rapid Growth in the Last Decade

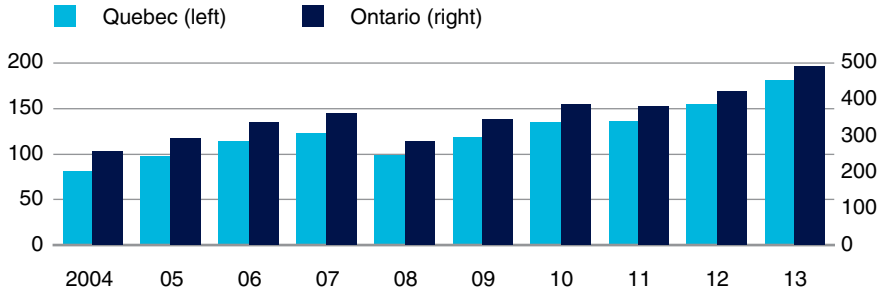
The value of assets in mutual funds and exchange-traded funds (ETFs) has soared in recent years. In Quebec, during this period, it went from $81.4 billion to $180.5 billion, or average annual growth of 9.3 per cent. By way of comparison, the Caisse de dépôt et placement du Québec (CDPQ), Quebec's public pension plans manager, managed about $200 billion in assets in 2013.

The same is true for Canada as a whole, where assets in mutual funds and ETFs grew from $529 billion in 2004 to $1.04 trillion in 2013, for an average annual increase of 7.8 per cent. Ontario—home to the country's biggest financial centre, Toronto—saw the value of its mutual funds and ETFs rise from $257 billion to $489 billion, an average annual growth rate of 7.4 per cent. The somewhat faster growth rate in Quebec took the Quebec-to-Ontario asset ratio from 0.32 to 0.37 in the last decade. (See Chart 1.)

The substantial growth in funds in both Quebec and the rest of Canada is due primarily to the widespread shift from defined benefit pension funds to defined contribution pension funds.

A defined benefit pension fund guarantees a specific level of cash flow upon retirement, while a defined contribution plan requires the employer to pay a fixed amount toward the employee's retirement with no guarantee as to the amount that employee will receive in the end. This approach prompts employees to take charge of their retirement planning and make the investment decisions required to secure an adequate standard of living once their working days are over. One

Chart 1
Relative Growth of Mutual Funds and ETFs in Quebec and Ontario
($ billions)



Sources: Investor Economics; The Conference Board of Canada.

advantage of mutual funds and ETFs is the low-cost diversification they make possible. (For more on this advantage, see "The Importance of Diversification for Investors.")

The Importance of Diversification for Investors

The growing popularity of defined contribution plans has prompted a shift in investment decisions from corporations to investors, who now have a much bigger role to play in planning a retirement that meets their expectations. However, the vast majority of workers have little knowledge of the various financial vehicles and often have few points of reference with respect to the best decisions for making their assets grow.

A widely accepted rule of thumb is that it is better to invest in several financial securities—that is, diversify—than to put all your eggs in the same basket. Therefore it is better to invest in a dozen companies in a single industry than to bet all on just one. For even more effective diversification, it is best to diversify investment in several industries and a range of geographical areas. However, diversification can be expensive for individual investors, given the transaction costs charged every time a security is bought or sold.

The trend is clearly toward more self-administered plans.

For small investors, minimizing transaction charges and relying on an expert who has an incentive to make your assets grow makes mutual funds and ETFs an attractive option. For a fee, these funds usually specialize in one sector of the economy, or they might aim to replicate market indexes, such as the NASDAQ, S&P 500, and S&P/TSX. This avoids many of the expenses associated with diversification. For example, replicating the S&P 500 index of the 500 largest cap firms on the New York Stock Exchange and eventually selling the securities would cost an individual investor $10,000 (based on a standard cost per trade of $10). This does not factor in the periodic adjustments required to reweight assets.

Some critics of the mutual fund industry stress that the fees charged by financial advisors are large enough to dilute clients' returns to the point that clients' portfolios grow more slowly than the indexed funds do. Although many studies back up this relative underperformance, others highlight the fact that investors who deal with a financial advisor tend to be more disciplined about reaching their savings goals and amass much more wealth than those who opt to manage their assets on their own. In other words, investors who pay a specialist to take care of their finances are paying a portion of their returns in exchange for an incentive to be disciplined, which, all in all, yields long-term results that are more in line with their financial goals.

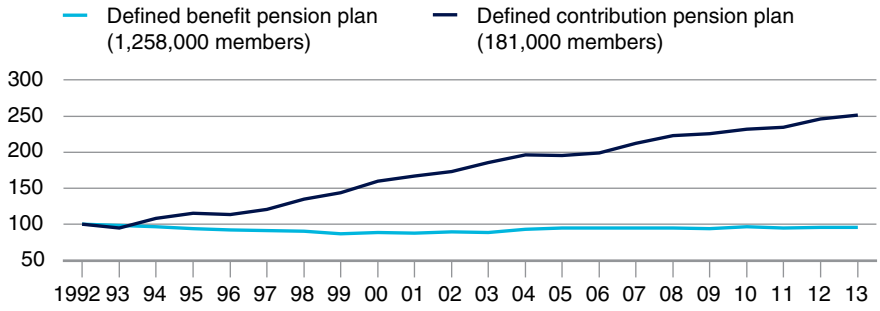
Chart 2 depicts the trends for the various pension plans. From 1992 to 2013, Quebec membership in defined contribution pension plans went from 72,000 to 181,000 (a gain of 152 per cent), while membership in defined benefit plans went from 1.31 million to 1.26 million (a drop of 4.25 per cent). Although employees with defined benefit plans vastly outnumber those with defined contribution plans, the trend is clearly toward more self-administered plans.

Other trends that have allowed funds to increase the value of their assets significantly include low interest rates (which have encouraged investors to move away from the least risky financial vehicles in search of higher returns), the demographic shift as baby boomers move into the most important years for retirement planning (many are now retired and the transition will accelerate in the coming years), and generally favourable

Chart 2

Trends in Quebec Membership in Pension Plans

(membership index, 1992 = 100)



Sources: The Conference Board of Canada; Statistics Canada.

investment conditions. Government authorities have also had a hand in promoting savings and investment. Examples include the introduction of tax-free savings accounts in 2009 and voluntary retirement savings plans.

Together, these factors go a long way to explain the surging popularity of mutual funds and ETFs. At first glance, the somewhat faster growth in Quebec in comparison to Ontario may seem surprising, but that can be explained, at least in part, by the fact that Quebec's population is comparatively older. The substantial growth of the industry has been a major contributor to the province's economic activity. The industry creates thousands of jobs, primarily in fund management and distribution, which generate income for employees, profits for firms, and tax revenues for various tiers of government (direct impacts). The additional activity generates demand in other parts of the economy, particularly in the area of legal and accounting services (indirect impacts). The income and profits generated are then largely injected back into the economy, creating employment in numerous other industries, ranging from food services to construction, wholesaling, and retailing (induced impacts).

In addition to the positive economic impact of the industry in Quebec, other provinces in Canada benefit from the supply chain effects that flow outside the province. Although the contributions flow both ways, Ontario reaps important gains because Toronto is home to the head offices of many of Canada's biggest financial institutions. Widely considered one of the top five financial centres in North America, in the last few decades, Toronto has created a financial architecture that rivals the largest centres in the world, particularly in terms of financial management. However, Canada has two other major global players—Montréal and Vancouver—that both rank in the top 20 in the latest Global Financial Centres Index rankings released by the London- and Geneva-based Z/Yen Group. (See "Montréal in the Top 20 Worldwide.")

Montréal in the Top 20 Worldwide

Despite its relatively small population and the fact that it accounts for just 2 per cent of global GDP, Canada does well in terms of the importance of its financial centres. Its three largest cities—Toronto, Montréal, and Vancouver—all rank among the top 20 most important financial centres internationally. That is just two fewer than in Europe as a whole or the United States.

Table 1
The World's Most Important Financial Centres
(ranking in the Global Financial Centres Index)

1. New York	6. Tokyo	11. Toronto	16. Frankfurt
2. London	7. Zurich	12. Chicago	17. Dubai
3. Hong Kong	8. Seoul	13. Geneva	18. Montréal
4. Singapore	9. Boston	14. Vancouver	19. Abu Dhabi
5. San Francisco	10. Washington DC	15. Luxembourg	20. Shanghai

Source: Z/Yen Group.

The contribution made by financial intermediation to quality of life in modern societies goes well beyond the economic footprint of its activities.

An Economic Contribution That Goes Well Beyond Direct Impacts

The goal of this report is to quantify the value-added from the mutual fund and ETF industry to Quebec's economy by assessing its direct, indirect, and induced contributions. It does not include any estimate of the value created by the fact that the industry facilitates savings and investment, enabling long-term productivity gains in every part of the economy. (See "The Role of Savings and Investment in Long-Term Economic Growth.")

The Role of Savings and Investment in Long-Term Economic Growth

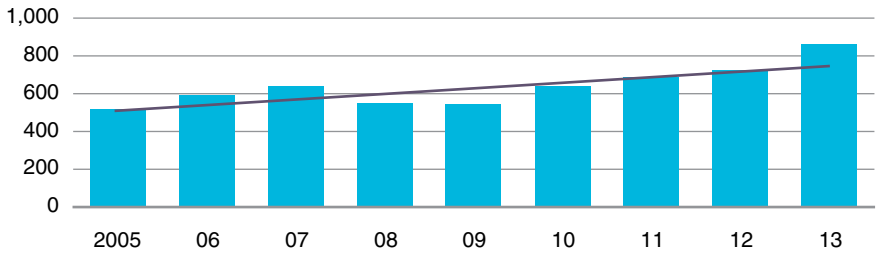
Financial intermediaries serve as a conduit, allowing the savings of those who spend less than they earn to be lent to those who need to finance various projects. The purpose of this study is to quantify the direct, indirect, and induced contributions of this activity to Quebec GDP. In addition to the revenues derived from jobs and the firms' profits that this activity creates (directly or indirectly), it also allows society to accumulate capital that leads to improved productivity in every economic sphere. This observation is widely accepted in economic circles and underlies the Solow model,[2] a core principle of economics that asserts that a society's long-term standard of living is primarily a function of a) its physical capital; b) its human capital; c) its technology; and d) the commodities at its disposal. First and foremost, those last three components require the accumulation of the first component, which is facilitated by financial institutions. The contribution made by financial intermediation to quality of life in modern societies goes well beyond the economic footprint of the sum of its activities.

First, we must assess the funds industry's direct contribution to the province's economic activity. Disaggregated data on the real value-added of the funds industry is unavailable; it must therefore be estimated using

2 Solow, "A Contribution to the Theory of Economic Growth".

various data sources and subjected to an additional process.[3] After processing the data, The Conference Board of Canada estimates that the funds industry directly contributed $860.9 million to Quebec's economy in 2013, up from $518.7 million in 2005, for an average annual increase of 6.5 per cent. (See Chart 3.) This compares favourably with the economy as a whole, which saw its GDP grow 1.4 per cent per year during that time. From 2015 to 2019, the Conference Board anticipates annual growth of 2.9 per cent for the investment services and other financial vehicles sector (which includes the mutual funds industry). That is a faster pace of growth than that of Quebec's overall GDP (2.2 per cent).

Chart 3
The Quebec Funds Industry: Real GDP
(2007 $ millions)



Note: Line denotes average annual growth of 6.5 per cent.
Sources: The Conference Board of Canada; Statistics Canada; Investor Economics.

In 2013, the industry directly employed 9,129 full-time workers in Quebec, compared with 44,413 in Ontario and 67,941 nationwide. In other words, 13.4 per cent of the funds industry's direct jobs are located in Quebec, while its assets account for 17.3 per cent of the Canadian total. Simultaneously, 65 per cent of direct jobs are located in Ontario, whereas the value of their collective mutual fund assets represents

3 See Appendix A for more details on the Conference Board's provincial forecasting model.

Mutual fund management and distribution clearly has a role in maintaining employment in this sector.

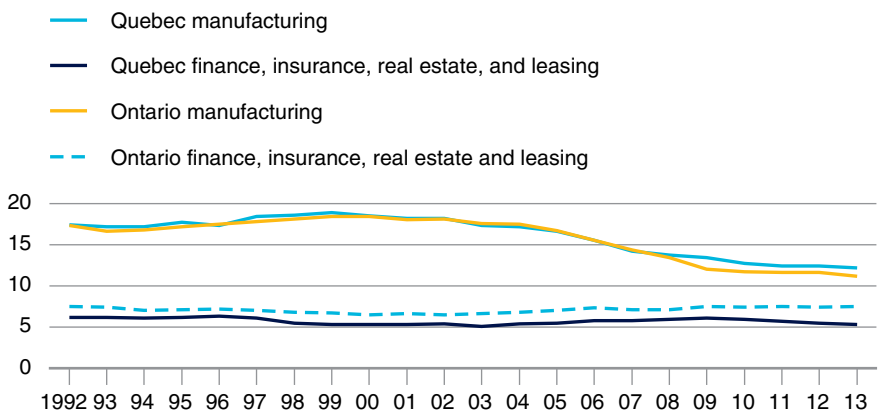
36.9 per cent of such assets in Canada. This is because most of the head offices of firms operating in this sector in Canada are located in Ontario, most of them in Toronto.

From 1992 to 2013, the finance, insurance, real estate, and leasing industry (which includes direct jobs in mutual fund and ETF management) saw the number of its Quebec-based jobs rise from 187,600 to 216,900. It now accounts for 5.3 per cent of Quebec jobs, compared with 6.2 per cent 20 years earlier. (See Chart 4, which contrasts employment in this industry with employment in manufacturing.) In Ontario, employment in the industry went from 368,600 to 510,400, while holding at 7.5 per cent of the province's total employment. Given the broad automation of the finance, insurance, real estate, and leasing industry over the last two decades, it is remarkable to note that, overall, employment in these sectors has risen at around the same pace as total employment in both provinces. Given its growing importance, mutual fund management and distribution clearly has a role in maintaining employment in this sector.

Chart 4

Share of Jobs in Manufacturing and Financial Services

(share of total employment, per cent)



Sources: The Conference Board of Canada; Statistics Canada.

At an estimated $900 million in 2013, the mutual fund industry's contribution to Quebec GDP may seem small (at 0.3 per cent) when compared with the size of the entire Quebec economy, then valued at $328 billion. However, that estimate includes only the value added by the activity itself, largely made up of the total income it generates for Quebec-based employees and the profits of the firms that manage and distribute the service. A more complete picture requires an assessment of the industry's indirect and induced impacts on the remainder of Quebec's economy. This is especially relevant, as the "financial investment services, funds, and other financial vehicles" category is generally acknowledged to have a higher economic multiplier than the vast majority of industries, including all the other subcategories of the finance, insurance, and real estate industry. (See "A Large Multiplier for Financial Management.")

A Large Multiplier for Financial Management

The investment services sector has one of the largest multipliers in the entire services industry. Table 2 compares the highest multipliers in sectors associated with services. Note that they include only direct and indirect impacts, and do not factor in induced impacts (which raise the total multiplier for Quebec from 1.9 to 2.1). More specifically, this multiplier is higher than that of the video game production sector, which is 1.35 (without induced impacts).

Table 2
Largest Type 1 Service Sector Multipliers in Quebec
(total indirect and direct GDP impact within the province relative to direct GDP)

Other information services	2,28
Motion picture and video exhibition	2,19
Non-depository credit intermediation	1,96
Financial investment services, funds and other financial vehicles	1,87
Insurance carriers	1,84
Other provincial and territorial government services	1,81

(continued ...)

National estimates obscure major differences among the provinces.

Table 2 (cont'd)

Ten Largest Type 1 Service Sector Multipliers in Quebec

(total indirect and direct GDP impact within the province relative to direct GDP)

Sound recording industries	1,77
Periodical, book and directory publishers	1,74
Offices of real estate agents and brokers and activities related to real estate	1,73

Source : Provincial Input-Output Multipliers, 2010 Quebec Worksheet Level.

In 2008, a Statistics Canada estimate put the multiplier for securities, commodity contracts, and other related financial investment activities at 2.3. Using this example, a multiplier of 2.3 means that a $1-million increase in activity in this industry would generate indirect and induced economic activity of $1.3 million, for a total economic impact of $2.3 million ($2.3 million/$1 million = 2.3; a $1-million increase in direct activity yields total real GDP growth of $2.3 million). A more recent Conference Board study[4] found that the industry's multiplier was 2.9 for Canada as a whole; therefore, a $1-million increase in activity in the mutual fund industry would raise national GDP by $2.9 million. However, such national estimates obscure major differences among the provinces in how the additional activity is recorded and the regional distribution of the indirect and induced benefits.

The section entitled "Results" details the industry's total economic impact on Quebec's economy. There, we describe the direct, indirect, and induced impacts on jobs, firms' profits, and public finances, as well as the industry's multiplier effect.

Methodology

This report quantifies the economic footprint of Quebec's funds industry. An industry's impact can be estimated by using economic models that help us understand how changes in the activity of one

4 Antunes and Macdonald, *Making Dollars and Sense of Canada's Mutual Fund Industry*.

The most apparent impact is the economic activity directly attributed to an industry (direct impact).

industry affect the entire economy. The most apparent impact is the economic activity directly attributed to an industry (direct impact), largely associated with the wages of those directly employed in the industry and profits generated by industry firms. In addition, an industry's normal operations generate demand for inputs from other industries (indirect or supply chain impact), while the income generated by the activity leads to additional spending in the economy (induced impact). Each spinoff is described in this section. (A brief description appeared earlier in "Definitions.")

Since industry data were not directly available from Statistics Canada, research firm Investor Economics was contracted to provide data on mutual fund and ETF assets in Quebec, the management expense ratio (MER), and assets managed by firms headquartered in Quebec. The Investor Economics data were compiled to focus exclusively on the mutual funds and ETF industry, and exclude labour-sponsored venture capital corporations and institutional series funds.

The first step in the economic footprint analysis was to determine the direct impact of the funds industry on Quebec. To calculate the direct GDP impact, industry revenues and the ratio of value-added to gross output were required. Revenue data are not available by province and therefore must be approximated with two estimates. The first covers the distribution and advice channel (dealer firms) and the second measures the head office/portfolio management function. The MER revenue thus needs to be split into the proportions accruing to each of these functions. The shares were determined by previous research by Investor Economics, which found that the mutual funds MER split (excluding taxes and operating expenses) was approximately 54 per cent to the head office and 46 per cent to the dealer firm.[5,6] Revenue from dealer firms is calculated by multiplying the assets under management in Quebec by the share of the MER accruing to dealer firms. The portfolio

5 Investor Economics, *Mutual Fund MERs and Cost to Customer in Canada*, 5.

6 The study focuses on the split for long-term funds, which in 2013 represented 97 per cent of fund assets under management. No separate research is available for short-term funds, which, for the purpose of this analysis, are assumed to have the same split.

management function revenue is derived by multiplying total national assets by the share of head office activity in Quebec, then multiplying the result by the proportion of MER accruing to the head office firms.[7] The sum of these two components provides an estimate of the revenue of Quebec's funds industry.

This revenue estimate is an approximation of gross industry output, as gross output roughly corresponds to the total value of sales during a given period. Statistics Canada produces provincial input-output multiplier tables that show the relationship between gross output, GDP, and employment by industry. We used the Quebec multiplier tables with data on gross output to extract estimates of direct GDP and employment in the Quebec funds industry.[8] According to our estimates, the Quebec funds industry's contribution to total GDP was 30.7 per cent of the NAICS 52A category in 2013.

With an estimate of direct GDP for Quebec's funds industry, it is possible to estimate its total economic footprint. Conducting a footprint analysis involves identifying the key supply chain linkages in the Quebec funds industry. It also entails quantifying the industry's impact on key economic indicators, such as GDP, employment, household income, firms' profits, and government revenues. The footprint analysis in this report evaluates the combined direct, indirect, and induced economic impacts, as follows:

- Direct impact measures the value added to the economy by the funds industry that is directly attributable to the sector's employees, the wages earned, and the revenue the firms generate.

7 The proportion of head office activity occurring in Quebec was based on data provided by Investor Economics, which aggregated total assets under management by firms headquartered in Quebec, as well as total assets under management Canada-wide. Head office activity accruing to Quebec was then calculated as the assets under management by firms headquartered in Quebec as a share of total assets under management nationally.

8 Statistics Canada does not produce a multiplier estimate exclusively for the mutual funds industry. The multiplier relationships used for the industry throughout this report are those for financial investment services, funds, and other financial vehicles (NAICS 52A), as the mutual funds industry is a subset of this aggregation.

The Conference Board used the results from the input-output simulation to assess the funds industry's supply chain linkages.

- Indirect impact measures the value-added that the "direct impact firms" generate within the economy through their demand for intermediate inputs or other support services. (For example, activity in the Quebec funds industry generates demand for legal and other financial services.)
- Induced impact is derived when employees of the aforementioned industries spend their earnings and owners spend their profits. (These purchases lead to more employment, higher wages, and increased income and tax revenues, and can be felt across a wide range of industries.)

To derive the indirect impact (supply chain linkages) of the funds industry on Quebec's economy, the Conference Board relied on simulation results from Statistics Canada's interprovincial input-output model to guide simulations using the Board's proprietary models. The input-output model represents the relationships in an economy and depicts the various supply chain linkages among industries and provinces. An input-output simulation is performed by asking Statistics Canada to increase or decrease output in a particular industry to measure the total direct impacts and supply chain linkages associated with that industry. For this report, Statistics Canada was contracted to increase output in Quebec's financial investment services, funds, and other financial vehicles industry. The Conference Board then used the results from the input-output simulation to assess the funds industry's supply chain linkages.

While the input-output estimates provide a very detailed account of the supply chain linkages, the Conference Board's provincial model has the benefit of assessing the impact of additional income (generated through changes in wages and profits) on the economy.[9] The Conference Board's provincial forecasting model was used to obtain the additional induced impacts on the economy to estimate the total economic footprint of the funds industry on Quebec's economy over the 2009 to 2013 time frame.

9 See Appendix A for a description of the Conference Board's provincial forecasting model and Quebec sub-model used in this analysis.

Results

The funds industry contributed $861 million to Quebec's real GDP in 2013. (See Table 3.) This amount includes the value-added of all industry activities, which can be summarized as the total of sales, employment income, and taxes generated by the firms and sole proprietors operating in the industry. (Details on the distribution of the direct impacts were set out in the section entitled "The Quebec Funds Industry.")

As well as the funds industry's direct contribution, two impacts make a further contribution to Quebec's economy and together form what we call the industry's total economic footprint:

- Indirect impacts—this refers to the additional activity generated in the supply chain.
- Induced impacts—when employees in the mutual fund industry and those connected to it in the supply chain spend their wages on goods and services, this has additional economic impacts on the remainder of the economy and a larger array of industries.

The Conference Board estimates that the total economic footprint of the mutual fund industry in Quebec was $1.8 billion in 2013, or nearly 0.5 per cent of the province's total GDP. Chart 5 depicts the distribution of the various components of this assessment. (See Appendix B for the results for these components and the total economic footprint for the 2008 to 2012 period.)

The funds industry supported a total of 18,211 jobs in Quebec, including 9,129 direct jobs. The wages paid by the industry are, overall, higher than the wages paid province-wide. According to the Conference Board's estimates, they raise average weekly wages by 0.13 per cent across the province. Quebec's overall personal income from the industry, whether direct, indirect, or induced, was $1.4 billion, while the earnings of firms that participate in such activities were assessed at $235 million.

Table 3
Quebec Funds Industry Economic Footprint: Key Indicators, 2013
(total direct, indirect, and induced impacts)

Total funds industry (2007 $ millions)	861
Real GDP at basic prices (2007 $ millions)	1,838
Real GDP at market prices (2007 $ millions)	1,919
Average weekly wages industrial composite (percentage difference)	0.13
Personal income ($ millions)	1,433
Corporate profits ($ millions)	235
Jobs (number)	18,211
Total indirect taxes ($ millions)	197
Estimated federal indirect taxes ($ millions)	77
Estimated provincial indirect taxes ($ millions)	120
Personal income tax collections ($ millions)	435
Federal personal income tax collections ($ millions)	155
Provincial personal income tax collections ($ millions)	281
Corporate income taxes ($ millions)	63
Federal corporate income taxes ($ millions)	30
Provincial corporate income taxes ($ millions)	33

Sources: The Conference Board of Canada; Statistics Canada; Investor Economics.

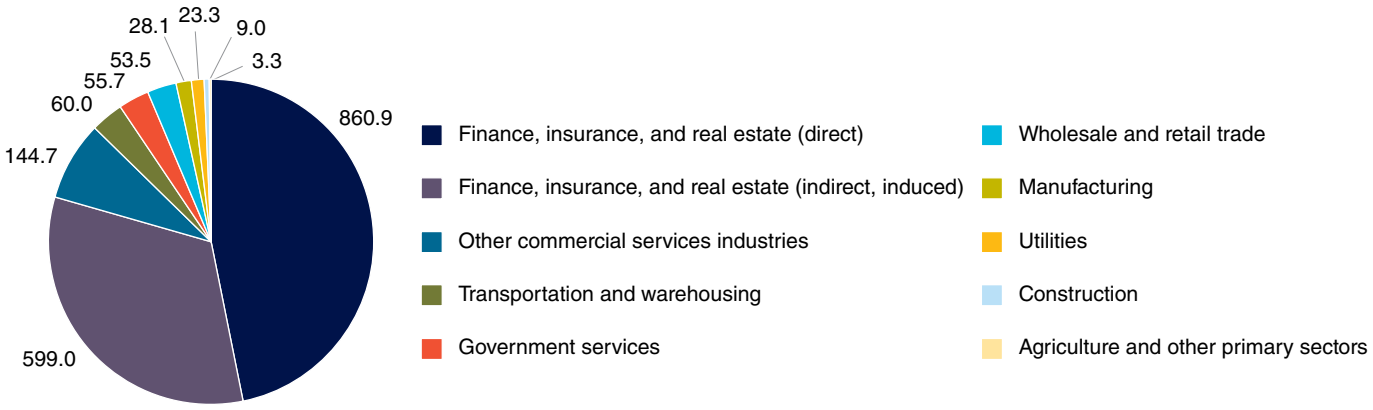
This economic impact is also a source of revenue for the various tiers of government, coming to a total of $696 million. The federal government collected an additional $262 million, while the Quebec government took in $435 million. Of this $435 million, $120 million came from indirect taxes, $281 million from personal income taxes, and $33 million from the provincial tax on corporate income.

With respect to real GDP at basic prices, which includes direct, indirect, and induced impacts ($1.8 billion), we find that the Quebec funds industry has an economic multiplier of 2.1 (with direct activity accounting for $861 million in value-added). This means that every $1-million increase in real GDP generated by the industry in 2013 contributed an additional

Chart 5

Direct, Indirect, and Induced Impacts on Quebec GDP, 2013

(2007 $ millions)



Sources: The Conference Board of Canada; Statistics Canada.

$1.1 million to GDP from the supply chain and induced impacts, for a total of $2.1 million. This multiplier is lower than the multiplier estimated for Ontario (2.8 for the same year) and Canada (2.9 for 2012), a situation that is due to the fact that the majority of firms operating in this sector of the economy are headquartered outside Quebec, primarily in Ontario. According to Conference Board of Canada estimates (as set out in the "Methodology" section), the MER split means that 54 per cent goes to the head office while 46 per cent stays with the dealer firm. As most head offices are located outside Quebec, it is normal to see some of the direct, indirect, and induced economic impacts flow to other provinces.

A study of the Ontario funds industry showed that every $100 million of direct activity in Ontario contributed $13.82 million in indirect and induced impacts to Quebec (ratio of 0.13). Overall direct activity in Quebec ($861 million) generated nearly $130 million in activity in Ontario, for a ratio of 0.15. The differential, which favours Ontario (since its ratio is just over 10 per cent higher), is due to the fact that there are more head offices in that province. Combined, the eight other provinces benefited from a $37.2-million impact from the activities of the Quebec funds industry. Alberta led with $9.6 million.

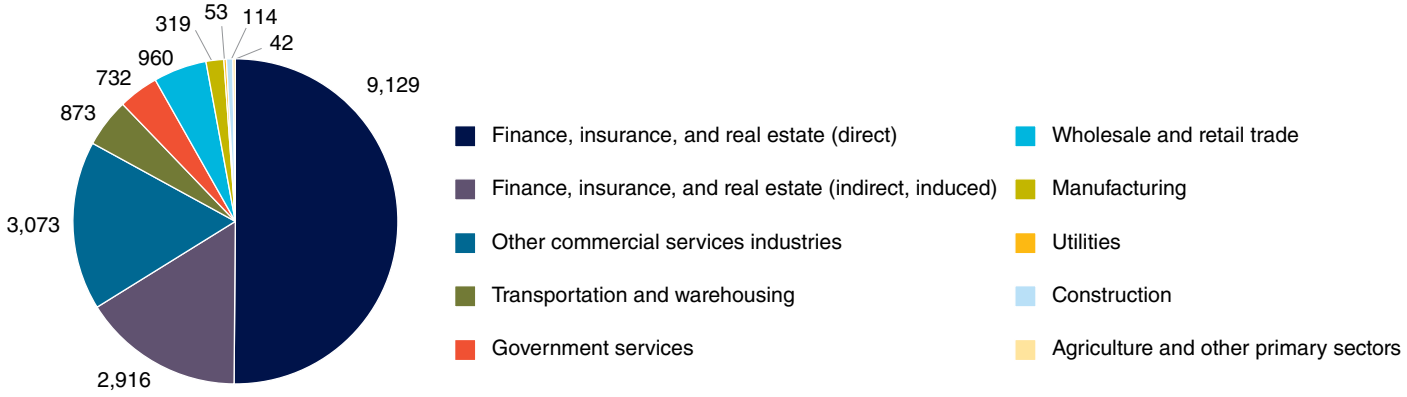
In 2013, the funds industry employed 9,129 people in Quebec. When we factor in indirect and induced impacts, it accounted for 18,211 jobs in Quebec. This means that every job created in the funds industry created another job in the economy (multiplier of 1.99). In Ontario, for the same year, the ratio was 2.7, given the heavier concentration of activities in this sector of the economy. This metric goes a long way toward explaining the disparity between the multipliers found in assessing the overall economic footprint.

Of the 9,082 additional jobs in Quebec (18,211 – 9,129), 2,916 were estimated to be in the finance, insurance, real estate and leasing industry. (See Chart 6.) Of the remainder, 3,073 were in other commercial services industries, largely in legal and accounting services. These two types of employment are an important part of the industry's supply chain. The industry indirectly created just over 2,500 jobs in wholesale and retail trade, transportation and warehousing, and government services (in relatively similar proportions). Employment gains were relatively slight in the other parts of the economy.

Chart 6

Quebec Employment Impacts, by Industry, 2013

(total direct, indirect, and induced jobs)



Sources: The Conference Board of Canada; Statistics Canada; Investor Economics.

Conclusion

The Quebec funds industry has experienced significant growth over the last 20 years. In 2013, it had $180.5 billion in assets under management. In addition to facilitating savings and investment, the industry supported more than 18,000 Quebec jobs, half of them related to the management and distribution of funds, and the other half were in other sectors of the economy, where they served to support the activity indirectly, particularly in accounting and legal services.

The Conference Board of Canada estimates that the funds industry's direct contribution to Quebec's economy in 2013 was $861 million, and that the overall indirect and induced activities it generated contributed a total of $977 million to the province's GDP, for a total economic impact of $1.8 billion and a multiplier effect of 2.1. Tax revenues collected by the Quebec government on personal income and firms' profits, as well as indirect taxes, totalled $435 million.

Given Quebec's rapidly aging population, the funds industry will continue to expand in the coming years and—with its direct, indirect, and induced impacts—contribute to economic growth.

Tell us how we're doing—rate this publication.
www.conferenceboard.ca/e-Library/abstract.aspx?did=7103

APPENDIX A

The Conference Board's Provincial Forecasting Model

The Conference Board of Canada's Provincial Medium-Term Forecasting Model (PMTFM) is a quarterly, bottom-up econometric model of the 10 provincial and 3 territorial economies combined. The model defines real GDP at basic prices and market prices, by province.

The PMTFM includes over 1,200 equations, of which roughly half are behavioural or stochastic, while others are accounting or definitional equations. Most of the exogenous variables in the model are national indicators. For each province, there are a number of simultaneous blocks of equations. These blocks include domestic demand (personal consumption, government spending, residential and non-residential business investment), and production according to industry, income, prices, and labour market blocks. The provincial model also has an endogenous provincial population block in which net interprovincial migration plays a key role in determining overall demographic growth.

The Quebec sub-model is used in this analysis. In this model, provincial expenditures determine industrial output through the use of a comprehensive input-output framework. Provincial real GDP by industry establishes labour market conditions that, in turn, influence population (through interprovincial migration), prices, and income. The labour market block includes employment, labour force, unemployment, and the unemployment rate. Employment is divided into 11 sector categories and is determined by labour productivity and the current level of output.

The Quebec sub-model is based on the neoclassical Keynesian synthesis and possesses many of the properties associated with the national model. Prices respond to aggregate demand conditions as well as intermediate material costs, international and interprovincial import prices, and changes in the indirect tax structure. Potential output and the output gap are fully integrated in the models. Thus, the gap and speed of gap closure are explicitly introduced into most price equations to represent supply-side feedback. Potential output and total factor productivity are derived from a Cobb-Douglas production function modelled in terms of capital and labour.

The PMTFM Database

The Conference Board of Canada has invested significantly in the construction and upkeep of the provincial database. The main data sources are the annual Provincial Economic Accounts from Statistics Canada, the quarterly Quebec economic accounts from the Institut de la statistique du Québec (ISQ), and the Quebec economic accounts from the Ministère des Finances du Québec. Statistics Canada provides full coverage of all components of real GDP at market prices and basic prices, with an approximately 12-month lag. The Conference Board renders the data quarterly and projects them to the current quarter. Monthly or quarterly series, available from Statistics Canada or other government departments or agencies, are used as proxies to convert and extend the annual data. Provincial data are constrained to ensure that they are compatible with national data. The provincial database is updated each quarter following the release of the national income accounts, and it is used extensively by governments and industries.

APPENDIX B

Detailed Economic Footprint Results

The following tables show the full economic footprint results from 2009 to 2013 for all variables. The detailed data in the tables have a 2007 base year.

Table 1

Quebec Funds Industry Economic Footprint: Key Economic Indicators

(total direct, indirect, and induced impacts)

	2009	2010	2011	2012	2013
Total funds industry (2007 $ millions)	542	639	687	723	861
Real GDP at basic prices (2007 $ millions)	1,157	1,365	1,467	1,543	1,838
Real GDP at market prices (2007 $ millions)	1,208	1,425	1,531	1,611	1,919
GDP at market prices ($ millions)	1,273	1,525	1,645	1,738	2,084
Average weekly wages industrial composite (percentage difference)	0.13	0.13	0.13	0.13	0.13
Personal income ($ millions)	813	960	1,094	1,224	1,433
Jobs	11,336	13,447	14,585	15,297	18,211
Total indirect taxes ($ millions)	120	146	164	172	197
Estimated federal indirect taxes ($ millions)	54	66	72	72	77
Estimated provincial indirect taxes ($ millions)	66	80	91	100	120
Federal personal income tax collections ($ millions)	86	101	117	132	155
Provincial personal income tax collections ($ millions)	143	187	218	247	281

(continued ...)

Table 1 (cont'd)

Quebec Funds Industry Economic Footprint: Key Economic Indicators

(total direct, indirect, and induced impacts)

	2009	2010	2011	2012	2013
Corporate profits ($ millions)	148	176	178	197	235
Corporate income taxes ($ millions)	34	44	48	53	63
Federal corporate income taxes ($ millions)	19	24	24	25	30
Provincial corporate income taxes ($ millions)	15	21	24	28	33

Sources: The Conference Board of Canada; Statistics Canada; Investor Economics.

Table 2

Quebec Fund Industry Economic Footprint: Real GDP and Jobs by Industry

(total direct, indirect, and induced impacts)

	2009	2010	2011	2012	2013
Real GDP at basic prices (2007 $ millions)	**1,157**	**1,365**	**1,467**	**1,543**	**1,838**
Agriculture and other primary sectors	2	2	3	3	3
Manufacturing	18	21	22	24	28
Construction	6	7	7	8	9
Utilities	15	17	19	20	23
Transportation and warehousing	38	45	48	50	60
Wholesale and retail trade	34	40	43	45	54
Finance, insurance, and real estate	919	1,084	1,165	1,226	1,460
Other commercial services industries	91	108	116	122	145
Government services	35	41	44	47	56
Total employment	**11,336**	**13,447**	**14,585**	**15,297**	**18,211**
Agriculture and other primary sectors	30	32	37	38	42
Manufacturing	220	241	250	271	319
Construction	64	81	87	88	114
Utilities	42	46	45	36	53
Transportation and warehousing	565	629	713	719	873
Wholesale and retail trade	649	748	795	805	960
Finance, insurance, and real estate	7,420	8,828	9,615	10,152	12,045
Other commercial services industries	1,891	2,285	2,453	2,565	3,073
Government services	456	558	590	621	732

Sources: The Conference Board of Canada; Statistics Canada; Investor Economics.

APPENDIX C

Bibliography

Antunes, Pedro, and Alicia Macdonald. *Making Dollars and Sense of Canada's Mutual Fund Industry: An Economic Impact Analysis.* Ottawa: The Conference Board of Canada, 2013.

Investor Economics. *Mutual Fund MERs and Cost to Customer in Canada.* Toronto: The Investment Funds Institute of Canada, 2012.

Solow, Robert M. "A Contribution to the Theory of Economic Growth." *Quarterly Journal of Economics* 70, no. 1 (February 1956): 65–94.

The More Enlightened Way to Make Business Decisions.

If your organization, program, or project requires expertise in economic or organizational performance or public policy, talk to us first. You'll find the expertise and knowledge you need to make more enlightened decisions with The Conference Board of Canada.

Services

Executive Networks
Exchange ideas and make new contacts on strategic issues

e-Library
Access to in-depth insights … when you need them most

The Niagara Institute
Develop leaders of the future through interactive and engaging leadership development programs

The Directors College
Canada's university-accredited corporate director development program

Custom Research
Tap into our research expertise to address your specific issues

Customized Solutions
Help your organization meet challenges and sustain performance

e-Data
Stay on top of major economic trends

Conferences, Seminars, Webinars, and Workshops
Learn from best-practice organizations and industry experts

The Conference Board of Canada | Le Conference Board du Canada

conferenceboard.ca

Institut du Québec

A partnership with

The Conference Board of Canada

HEC MONTRÉAL

3000 chemin de la Côte-Sainte-Catherine
4th Floor, Room 4.311
Montréal, Quebec H3T 2A7
Tel.: 514-340-6449
institutduquebec.ca

PUBLICATION 7103
PRICE: $0