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MORE THAN A HEALTHY HABIT

Assessing the Economic Contribution of Canada's Produce Industry.



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More Than a Healthy Habit: Assessing the Economic Contribution of Canada's Produce Industry

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Preface

This research was undertaken by The Conference Board of Canada with funding and support from the Canadian Produce Marketing Association (CPMA). In keeping with Conference Board guidelines for financed research, the design and method of research as well as the content of this report were determined solely by the Conference Board.

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EXECUTIVE SUMMARY

More Than a Healthy Habit: Assessing the Economic Contribution of Canada's Produce Industry

At a Glance

- This report focuses on the distinct economic value added of the Canadian produce sector.
- The produce sector contributed \$4.8 billion in real direct GDP to the national economy in 2013. When we included supply chain and induced impacts, the total economic footprint increased to \$11.4 billion in real GDP.
- This increase in economic activity supported 147,900 jobs in 2013, and generated \$7.6 billion increase in household income and a \$2.9 billion increase in corporate profits.

Research into the positive contribution of fruit and vegetable consumption to health and social outcomes has expanded considerably in recent years, yet the economic contribution of the Canadian produce sector is less understood. The goal of this report is to focus on that distinct economic value added. This is achieved by identifying the direct contribution associated with the consumption and export of Canadian produce, as well as measuring the indirect contribution made by the supply chain associated with the produce sector in order to determine the total economic footprint of Canada's produce sector.¹

Output in the produce sector satisfies two main activities in the Canadian economy: consumption and exports. Given that data suggest that the estimated total value of produce consumption in 2013 was \$10.1 billion, while an additional \$4 billion in produce was exported, The Conference Board of Canada estimates that the Canadian produce sector directly supported 76,700 jobs and created \$4.8 billion in direct real gross domestic product (GDP).²

- 1 We assess direct, indirect, and induced economic impacts. **Direct economic impacts** measure the value added from produce sector firms. **Indirect impacts** measure the supply chain impact and capture the value added in firms that are direct suppliers of products or services to the produce sector. **Induced impacts** measure the economic gain that results when wages and profits of the indirect and direct impact firms are spent, having broader impacts throughout the economy.
- 2 GDP is designed to measure production in a region during a specific time frame. While there are different ways to calculate GDP, perhaps the most intuitive method is the concept of value added. Value added in each industry is calculated as the difference between total revenue and the sum of expenses on parts, materials, and services used in the production process. Summing the value added across all industries in a region will yield the GDP in that region.

It can be difficult to gauge the relative size of an industry based solely on its GDP value. To facilitate the analysis, Table 1 provides real GDP data for selected industries in 2013, and demonstrates that the value of GDP directly attributable to the produce sector is slightly below GDP in air transportation—roughly on par with the printing industry and retail gasoline stations, and above such industries like clothing and textiles manufacturing, and forestry and logging.

Table 1
Real GDP in Selected Canadian Industries
(2007 \$ billions)

Clothing and textiles manufacturing	2.68
Forestry and logging	3.94
Non-metallic mining	4.49
Produce	4.79
Gasoline stations	4.84
Printing	4.76
Air transportation	5.83
Postal service, and couriers and messengers	6.91

Sources: The Conference Board of Canada; Statistics Canada.

While the produce sector has a sizable direct impact on the Canadian economy, its footprint is much larger when accounting for supply chain and induced impacts associated with the production of fruits and vegetables. When these secondary and tertiary impacts are taken into consideration, Canada's produce sector supported 147,900 net jobs in 2013 and created \$11.4 billion in real GDP (2007 dollars). This economic activity also supported the creation of \$7.5 billion in primary household income and \$2.9 billion in corporate profits, which in turn contributes directly to federal and provincial government revenues. In total, the federal government balance was improved by \$2.4 billion and aggregate provincial balances by \$1.1 billion in 2013 due to the economic activity associated with Canada's produce sector.

RÉSUMÉ

Plus qu'une saine habitude : L'évaluation de la contribution économique du secteur des fruits et légumes frais au Canada

Aperçu

- Ce rapport fait le point sur la valeur économique ajoutée distincte du secteur canadien des fruits et légumes frais.
- Le secteur des fruits et légumes frais a injecté 4,8 G\$ en PIB réel direct dans l'économie nationale en 2013. Lorsque l'on ajoute l'impact sur la chaîne d'approvisionnement et les retombées induites, l'empreinte économique totale atteint la somme de 11,4 G\$ au titre du PIB réel.
- Cette hausse de l'activité économique a permis de soutenir 147 900 emplois en 2013. De plus, elle a généré une hausse des revenus des ménages de l'ordre de 7,6 G\$ ainsi qu'une augmentation des bénéfices des sociétés de l'ordre de 2,9 G\$.

La portée de la recherche sur les conséquences sur le plan social et dans le domaine de la santé de l'apport positif de la consommation des fruits et des légumes, s'est considérablement élargie au cours des dernières années. Néanmoins, l'apport économique de ce secteur est mal compris. L'objectif de ce rapport est de faire le point sur la valeur économique ajoutée distincte. À cette fin, nous mesurerons l'impact de la contribution directe de la consommation et de l'exportation des fruits et légumes frais canadiens. Nous mesurerons également l'impact de la contribution indirecte de la chaîne d'approvisionnement liée au secteur des fruits et légumes frais afin de déterminer l'empreinte économique totale de ce secteur¹.

La production du secteur des fruits et légumes frais est liée à deux principales activités de l'économie canadienne : la consommation et les exportations. Compte tenu que, selon les données, la valeur totale évaluée de la consommation de fruits et légumes frais s'élevait à 10,1 G \$ en 2013 et que les exportations dans ce secteur s'élevaient à 4 G \$, le Conference

1 Nous évaluons les retombées économiques directes, indirectes et induites. **Les retombées économiques directes** mesurent la valeur ajoutée des entreprises du secteur des fruits et légumes frais. **Les retombées indirectes** mesurent l'impact de la chaîne d'approvisionnement et saisissent la valeur ajoutée produite par les entreprises qui sont des fournisseurs directs de produits ou de services dans le secteur des fruits et légumes frais. **Les retombées induites** mesurent les gains économiques qui se dégagent lorsque les salaires et les bénéfices des retombées directes et indirectes des sociétés sont dépensés, ce qui se traduit par encore plus de retombées pour l'économie.

Board du Canada estime que le secteur canadien des fruits et légumes frais a directement soutenu 76 700 emplois et créé 4,8 G \$ en produit intérieur brut (PIB) direct².

Il peut s'avérer difficile d'évaluer la taille relative d'une industrie lorsqu'on s'en tient exclusivement à la valeur de son PIB. Aux fins d'analyse, le tableau 1 expose les données réelles du PIB en 2013 pour certaines industries précises. Il démontre que la valeur du PIB directement attribuable au secteur des fruits et légumes frais, est légèrement inférieure au PIB dans le secteur du transport aérien. Il est plus ou moins au même niveau que celui de l'industrie de l'impression et celui des stations-service. Par contre, il est plus élevé que le PIB de certains secteurs, tels que le secteur de la fabrication des vêtements, les textiles, la foresterie et l'exploitation forestière.

Tableau 1

PIB réel de quelques industries canadiennes

(G\$ de 2007)

Fabrication de vêtements et de textiles	2,68
Foresterie et exploitation forestière	3,94
Extraction de minerais non métalliques	4,49
Fruits et légumes frais	4,79
Stations-service	4,84
Impression	4,76
Transport aérien	5,83
Services postaux, messageries et services de messagers	6,91

Sources : Le Conference Board du Canada; Statistique Canada.

- 2 Le PIB est conçu pour mesurer la production donnée dans une région précise dans une période de temps donnée. Bien qu'il y ait plusieurs façons de calculer le PIB, la méthode la plus intuitive est peut-être celle de reposer sur le concept de la valeur ajoutée. La valeur ajoutée dans chaque industrie est calculée comme étant la différence entre le total des revenus et la somme des dépenses relativement aux pièces, matériaux et services utilisés dans le processus de production. Le PIB d'une région donnée est donc la somme de la valeur ajoutée de l'ensemble des industries dans cette région.

Bien que le secteur des fruits et légumes frais ait des répercussions directes notables sur l'économie canadienne, son empreinte est beaucoup plus grande lorsqu'on prend en compte la chaîne d'approvisionnement et les répercussions induites liées à la production de fruits et légumes. Globalement, lorsqu'on tient compte de ces répercussions secondaires et tertiaires, le secteur des fruits et légumes frais du Canada a soutenu 147 900 emplois en 2013 et créé 11,4 G \$ en PIB réel (en dollars de 2007, selon le prix du marché). Cette activité économique a également généré 7,5 G \$ en principaux revenus des ménages et 2,9 G \$ en bénéfices des sociétés, ce qui se répercute directement sur les recettes des gouvernements fédéral et provinciaux. Au total, grâce à l'activité économique liée au secteur canadien des fruits et légumes frais, les recettes du gouvernement fédéral ont grimpé de 2,4 G \$ alors que les recettes totales des provinces ont augmenté de 1,1 G \$ en 2013.

CHAPTER 1

Introduction



The Canadian produce sector is an important determinant in the health and social welfare of the country, as it is well understood that the consumption of fruits and vegetables reduces the incidence of illness and chronic disease, both of which place severe physical and emotional demands on caregivers and have an impact on the financial stability of Canada's public health care system. While the World Health Organization recommends a daily minimum intake of 400 g of fruits and vegetables to promote health and prevent disease,¹ unfortunately, only 26 per cent of the population aged 2 years and older consume the minimum number of daily servings recommended for their respective age and gender.² Of particular concern, close to 59 per cent of children and adolescents are reported to consume less than the recommended five fruit and vegetable servings a day, and are significantly more likely to be overweight or obese as a result than those who do.³

If dietary risks can be managed more effectively, however, the incidence of chronic disease can be cut, resulting in obvious economic and social benefits for the country in the future.⁴

- 1 World Health Organization, *Diet, Nutrition and the Prevention of Chronic Diseases*.
- 2 Black and Billette, "Do Canadians Meet Canada's Food Guide's Recommendations."
- 3 Shields, "Overweight and Obesity Among Children and Youth."
- 4 The Conference Board of Canada, *Improving Health Outcomes*.

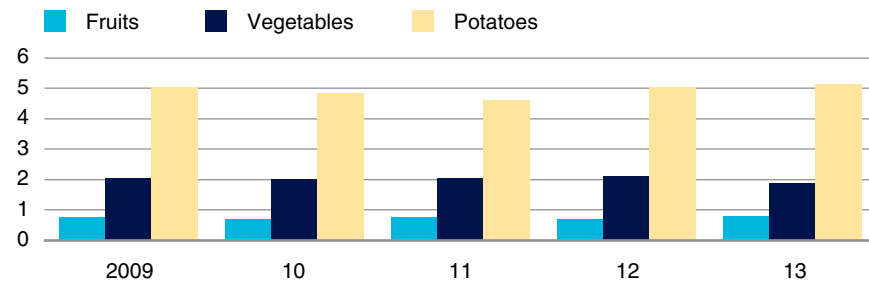
But the benefits of Canadian produce extend beyond a determinant of health outcomes—to contributing directly to the Canadian economy. In 2013, Statistics Canada estimated that the total marketed production of fruits and vegetables (excluding potatoes) totalled 2.7 million metric tonnes, in addition to an estimated 5.1 million metric tonnes of potatoes. Produce production has remained relatively stable in recent years, with current levels roughly unchanged from five years ago. (See Chart 1.) Produce also represents a sizable portion of the food budget for Canadians. In fact, Statistics Canada suggests that the average household spends roughly 16 per cent of its annual food expenditures on fruits and vegetables, which is equivalent to \$1,262 per year. As well, fresh fruit and vegetables make up some 90 per cent of this total.⁵

Going forward, the demand for produce should increase due to an increasing focus on health by an aging population and households seeking healthier alternatives.

Chart 1

Fruits, Vegetables, and Produce Production—Canada

(millions, metric tonnes)



Sources: The Conference Board of Canada; Statistics Canada.

5 The Conference Board of Canada, *Programs, Policies and Promotional Strategies for Produce Consumption*.

Setting aside the positive effect on Canadians' health, the goal of this study is to quantify the distinct economic contribution that the produce sector has on our economy. As a result, the scope of this study is limited to identifying the direct value added from the produce sector, its supply chain, and induced impacts. The sum of these discrete contributions provides the total economic footprint of Canada's produce sector. We do not attempt to quantify the benefits accruing to the Canadian economy as a result of the healthier population. The rest of this report is organized as follows: Chapter 2 presents the methodology used to quantify the sum of direct, indirect, and induced impacts associated with the produce sector; Chapter 3 presents the results of the footprint analysis; and Chapter 4 provides our conclusions.

CHAPTER 2

Methodology



The goal of this study is to quantify the total economic footprint of Canada's produce sector. The impact of an industry on the economy can be estimated using econometric models, which are used to understand how changes in the activity of one industry can have wider repercussions on the broader economy. In general, the most easily identifiable impact is the economic activity that is directly attributable to the industry in question—broadly defined as the wages of those directly employed in the industry and the profits generated by firms directly operating in the industry. In addition, an industry's normal operations generate an incremental demand for inputs from other industries (indirect impact) while the income generated as a result of the purchase of these goods and services leads to additional spending in the economy (induced impact). Each of these impacts is described in this chapter.

The first step in the footprint analysis is to determine the direct impact of the produce sector. Unfortunately, the produce sector does not fall strictly into any one group listed in the North American Industry Classification System (NAICS). For this reason, Statistics Canada does not specifically identify the GDP or employment associated with the production and export of produce in Canada. However, the Conference Board was able to identify the gross output associated with the consumption and export of produce-related commodities in the most recent iteration of Statistics Canada's national input-output tables (2010). Based on the assumption that gross output in the sector remained constant as a share of the larger food and beverage consumption and export sectors (which is tracked by Statistics Canada) over the near term, we were able to arrive at a

For this report, the footprint analysis evaluated the combined direct, indirect, and induced economic impacts.

reasonable estimate of total gross output for the produce sector for 2013. Given an estimate of gross output, the input-output coefficients were then applied to derive direct GDP and employment in Canada's produce sector. As a second step, the Conference Board then used its proprietary econometric model of the Canadian economy to assess the industry's total economic footprint.

Conducting a footprint analysis involves indentifying the key supply chain linkages, as well as quantifying their impact on key economic indicators, such as GDP, employment, income, and government revenues. For this report, the footprint analysis evaluated the combined direct, indirect, and induced economic impacts:

- **Direct impact** measures the value added¹ to the economy by the produce sector that is attributed directly to the sector's employees, the wages earned, and the firms' revenues generated.
- **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 produce sector creates demand for professional, scientific, and technical services.
- **Induced impacts** are derived when employees of these industries spend their earnings and the 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 input-output model represents the relationships in an economy and depicts the various supply chain linkages associated with the consumption and export of produce. Statistics Canada was contracted to simulate the national input-output model with an increase or decrease in a particular final demand category in the Canadian economy (for example, the consumption of produce commodities). This simulation enabled us to determine the direct and supply chain linkages associated with that activity.

1 Value added or net output is the difference between total revenue and the sum of expenses on parts, materials, and services used in the production process. Summing the value added across all industries in a region will yield the GDP in that region.

While input-output estimates can provide a detailed accounting of the supply chain linkages, the Conference Board's proprietary model had the added benefit of assessing the impact of additional income, generated through changes in wages and profits, on the economy.² It was also used to identify the impact on other key economic indicators, such as tax collections and current account balance. The Conference Board's forecasting model was used to obtain the additional induced impacts on the economy in order to estimate the economic footprint of the produce sector on the Canadian economy.

2 A description of the Conference Board's national forecasting model is found in Appendix A.

CHAPTER 3

Results



Direct real GDP in the produce sector—the direct economic contribution from sales, jobs, and taxes generated by firms and sole proprietors operating in the industry—was estimated to be \$4.8 billion in 2013. The inclusion of sole proprietors in the produce sector is an important one because there are 10,000 fresh fruit and vegetable producers in Canada, of which 74 per cent operate on a small scale and have annual sales of less than \$250,000.¹

Yet, the full economic benefit of produce in Canada is much larger when one considers the supply chain benefits that are created from incremental demand for material inputs into the production and export of fruits and vegetables. Furthermore, when employees of the produce sector and those linked to it through the supply chain spend their wages on goods and services, additional induced impacts can be attributed to this sector. This is because spending creates spin-off benefits in the form of new jobs and economic activity throughout all sectors of the economy. In other words, the sum of the direct, indirect, and induced impacts represents the overall contribution—or the economic footprint—of the sector on the economy.

The Conference Board estimates that the total economic footprint of the produce sector in 2013 was \$11.4 billion in real GDP (measured at market prices), which is roughly equivalent to 0.7 per cent of the Canadian economy.² (See Table 2.) The industry had a total economic

1 IAO Actuarial Consulting Services Inc., *Feasibility Study of Private Insurance Models For Canada's Fresh Produce Industry*.

2 Statistics Canada uses two different types of prices to measure GDP: market prices and basic prices. Market prices are transaction prices and are used to measure income- and expenditure-based GDP. The GDP industry accounts are measured in basic prices, which are the amount the producer receives less taxes plus subsidies. Because the industry accounts use a different set of prices, the GDP estimates produced in those accounts differ from the GDP estimates measured with market prices.

multiplier of 2.4. This means that for every \$1 million increase in real GDP in the produce sector, the total increase in real GDP was \$2.4 million (if we account for supply chain and induced impacts).

Table 2

Key Economic Indicators, 2013

(total direct, indirect, and induced impacts)

Real GDP (2007 \$ millions)	11,408
Employment (000s)	147.9
Unemployment rate	-0.7
Primary household income (millions)	7,529
Corporate profits before taxes (millions)	2,879
Current account balance (millions)	-755
Personal income tax (millions)	1,258
Corporate income tax (millions)	840
Taxes on products (millions)	1,552
Federal govt. balance (millions)	2,382
Provincial govt. balance (millions)	1,082

Sources: The Conference Board of Canada; Statistics Canada.

The total increase in economic activity from the produce sector supported 147,900 jobs in 2013, which helped to increase primary household income by \$7.6 billion. But businesses also benefited from the produce sector, with corporate profits improving by \$2.9 billion.

The additional income in the economy that is tied to the produce industry also represents a notable source of tax revenues for governments. In 2013, \$1.3 billion in personal income taxes were collected, along with \$840 million in corporate taxes associated with Canada's produce sector and the economic activity that it supports. A further \$1.6 billion in taxes on products was also collected, the vast majority of which were general goods and services taxes collected federally and provincially.

The produce sector is estimated to have directly supported 76,900 net positions in 2013 as a result of its activities.

Overall, government balances increased slightly less than the total increase in tax collections due to the presence of subsidies in the agricultural sector—but the impact is still clearly a net positive.

Through its supply chain and induced impacts, the produce sector creates activity in a wide range of industries. Table 3 shows the total economic footprint (including direct, supply chain, and induced impacts) of the produce sector on an industry-by-industry basis. Each value in Table 3 represents the amount of economic output in a particular industry that was supported by Canada's produce sector.

Not surprisingly, the largest increase in GDP was in the agriculture, forestry, and fishing category—which incorporates the direct impact associated with the production of fruits and vegetables. However, industries such as wholesale and retail trade also increased significantly, as did output in the transportation and warehousing sector. This collection of industries is heavy in firms that help move fruits and vegetables from the farm gate to the consumer, whether domestic or abroad. Manufacturing also benefits heavily from produce, as fruits and vegetables are processed, repurposed, and packaged into new products that are eventually sold to the consumer. Lastly, other business services increased by \$880 million; this was largely due to an increased demand for accommodation and food services.

The produce sector is estimated to have directly supported 76,900 net positions in 2013 as a result of its activities. About 87 per cent of those positions originated in either crop production or retail trade. But when we account for the total supply chain and income effects associated with produce, the employment benefits are more widely distributed. Nearly 21,000 net positions were supported in commercial services—services such as professional, scientific, and technical; administrative support; or waste management and remediation. Manufacturing payrolls increased by 7,300 net positions, with many of those in the fruit- and vegetable-preserving and specialty foods subsector. Substantial employment was also generated in fabricated metals manufacturing; pesticide, fertilizer, and other agricultural chemical manufacturing; and machinery

Table 3

Gross Domestic Product at Basic Prices, 2013

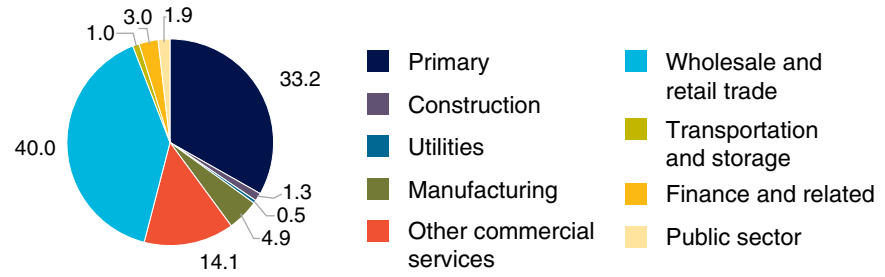
(total direct, indirect, and induced impacts, 2007 \$ millions)

Real GDP	11,562
Total goods	4,486
Agriculture, forestry, and fishing	3,042
Mining	349
Utilities	223
Construction	167
Manufacturing	704
Business services	6,840
Wholesale and retail trade	3,754
Wholesale trade	1,123
Retail trade	2,631
Transportation and warehousing	608
Information and cultural services	267
Finance, insurance, and real estate	1,225
Credit intermediation and monetary authorities	346
Insurance carriers and related activities	177
Real estate, and rental and leasing	702
Professional, scientific, and technical	109
Other business services	877
Public sector	236

Sources: The Conference Board of Canada; Statistics Canada.

manufacturing. Other notable gains were in lessors of real estate; insurance carriers; and other finance, insurance, and real estate services. (For a look at total employment related to various sectors, see Chart 2.)

Chart 2
Total Employment, 2013
(per cent)



Sources: The Conference Board of Canada; Statistics Canada.

CHAPTER 4

Conclusion



The Canadian produce sector plays two important roles for Canadians. First, it helps to promote a healthier lifestyle, which in turn lessens the burden on public social and health programs. Second, it makes a direct contribution to the Canadian economy through activities related to the production, export, and consumption of fresh fruit and vegetables.

Without taking into account the health and social benefits, the Conference Board estimates that the produce sector contributed \$4.8 billion in real direct GDP to the national economy in 2013. When we included supply chain and induced impacts, the total economic footprint increased to \$11.4 billion in real GDP, resulting in a total economic multiplier of 2.4. This means that for every \$1 of output created by the produce sector, another \$1.40 was created in spinoff benefits. This increase in economic activity supported 147,900 net jobs in 2013, and generated a \$7.6 billion increase in primary household income and a \$2.9 billion increase in corporate profits. This in turn resulted in a sizable increase in tax collections for both federal and provincial governments, with the total increase in personal income taxes, corporate income taxes, and taxes on products amounting to \$3.7 billion.

Not surprisingly, when we look at the economic impact on an industry-by-industry basis, the large benefits accrue to the agricultural sector, which is ultimately responsible for the production of domestic produce. Still, substantial benefits are derived in other industries, most notably in the retail and wholesale trade sectors, transportation and warehousing, and financial services industries.

APPENDIX A

The Conference Board of Canada's National Forecasting Model

The national forecasting model, known as the Medium-Term Forecasting Model (MTFM), is a quarterly model of the Canadian economy. It was originally designed for forecasting and simulations over the short to medium term. More recently, the notion of potential output was incorporated into the model, which meant that MTFM could be used for long-term analysis.

MTFM differs from many other quarterly macroeconomic models due to its emphasis on factors that are important for forecasting the economy's medium-term prospects. These factors include a detailed consideration of population and its age structure, and a disaggregated modelling of prices, employment, and investment expenditures. The government sector is also treated in great detail in MTFM, and it reflects the most recent institutional environment (how the public sector interacts with the private sector).

There are about 900 endogenous variables in the model, of which nearly 400 have stochastic equations. The endogenous variables refer to many of the variables in the National Income and Expenditure Accounts, as well as related indicators for productivity, wages, prices, financial markets, international capital flows, and exchange rates. Over 600 of these variables form a single, simultaneous block in the model, which reflects the significant interdependence of the various sectors. The most

MTFM incorporates
Statistic Canada's
most recent
estimates of the
industrial structure
of the Canadian
economy.

important of the 1,000 exogenous variables in the model are foreign economic indicators and variables relating to government expenditures and revenues and the demographic characteristics of the population.

Of the final demand categories, government expenditures are determined exogenously. Real disposable income, population, and real interest rates largely determine consumer spending on goods and services. Business investment is determined by the user cost of capital, corporate profits net of taxes, and overall economic activity. Real interest rates, income, and demographic factors affect investment in residential construction. Imports are largely driven by consumer spending, an investment in machinery and equipment, and relative prices. Exports are driven by relative prices and U.S. demand.

The level of detail available in MTFM's final demand breakdown (roughly 50 categories) is critical to determining production by industry through a detailed input-output block. MTFM incorporates Statistic Canada's most recent estimates of the industrial structure of the Canadian economy (2005 is currently available). The input-output block produces an industrial breakdown of over 670 industries.

Employment is modelled as a function of industrial output, labour productivity, and wages. In turn, wages are a function of employment, inflationary expectations, and lagged productivity.

In order to forecast prices, it is necessary to project potential output—in other words, to forecast the supply side. The behavioural equation for supply capacity takes the form of a Cobb-Douglas production function. Potential output depends on the factor inputs—capital, labour, and productivity—where each factor input is, in turn, determined endogenously. The labour input is a function of the natural rate of employment and the labour force. Capital stock is determined simply as the capital stock at the end of the last period, plus new investment less depreciation.

Final demand prices, including consumer spending deflators, investment, and exports, are influenced by specific industry prices as well as by the key price. The key price, represented in MTFM as the consumer

price index, is driven largely by the economy's performance relative to potential. This is the output gap. The price block also contains a detailed bottom-up stage-of-processing price model. In this block, raw material prices feed industry prices, which in turn feed final demand deflators and other associated prices. The small size and openness of the Canadian economy is such that many prices are determined on world markets, and the prices of imported commodities feed into the price block at each of the three stages of processing.

APPENDIX B

Detailed Economic Footprint Results

Table 1
Key Economic Indicators

(level difference shock minus control unless otherwise indicated)

	2010	2011	2012	2013
Real GDP (2007 \$ millions)	11,054	11,061	11,157	11,408
GDP (\$ millions)	11,610	12,108	12,757	13,079
GDP deflator (percentage difference)	0.0	0.0	0.0	0.0
Consumer Price Index (percentage difference)	0.0	0.0	0.0	0.0
Average weekly wages (percentage difference)	0.0	0.0	0.0	0.0
Employment (000s)	144.4	145.9	145.2	147.9
Unemployment rate (per cent)	-0.7	-0.7	-0.7	-0.7
Primary household income (\$ millions)	6,380	6,861	7,153	7,529
Corporate profits before tax (\$ millions)	2,674	2,815	2,869	2,879
90-day Treasury bill rate (per cent)	0.2	0.3	0.3	0.3
Current account balance (\$ millions)	-463	-589	-546	-755
Personal income tax (\$ millions)	1,000	1,107	1,179	1,258
Corporate income tax (\$ millions)	718	772	833	840
Taxes on products (\$ millions)	1,347	1,399	1,550	1,552
Federal govt. balance (\$ millions)	2,524	2,401	2,411	2,382
Provincial govt. balance (\$ millions)	1,106	1,040	1,062	1,082

Sources: The Conference Board of Canada; Statistics Canada.

Table 2

Gross Domestic Product at Market Prices

(level difference shock minus control, 2007 \$ million)

	2010	2011	2012	2013
Final consumption expenditure	9,336	9,292	9,301	9,510
Household consumption expenditure	9,306	9,285	9,252	9,464
Non-profit consumption expenditure	0	0	0	0
General govt. consumption expenditure	115	93	132	131
Investment	2,092	2,184	2,178	2,280
Business investment	2,087	2,179	2,175	2,282
Residential structures	188	192	184	160
Non-residential structures	673	629	620	599
Machinery and equipment	514	569	542	680
Intellectual property products	704	810	851	893
General governments	0	0	0	0
Final domestic demand	11,383	11,435	11,443	11,750
Investment in inventories	245	231	273	272
Exports of goods and services	4,086	4,036	4,042	4,081
Less: imports of goods and services	4,262	4,215	4,148	4,226
Real net exports	-176	-179	-106	-145
GDP at market prices	11,059	11,071	11,177	11,438

Note: Totals are created using Fisher aggregation.

Sources: The Conference Board of Canada; Statistics Canada.

Table 3

Gross Domestic Product at Basic Prices

(level difference shock minus control, 2007 \$ million)

	2010	2011	2012	2013
Real GDP	11,006	11,141	11,244	11,562
Total goods	4,270	4,322	4,362	4,486
Agriculture, forestry, and fishing	2,895	2,931	2,958	3,042
Mining	332	336	340	349
Utilities	213	215	217	223
Construction	159	161	162	167
Manufacturing	670	679	685	704
Business services	6,511	6,591	6,652	6,840
Wholesale and retail trade	3,573	3,617	3,651	3,754
Wholesale trade	1,069	1,082	1,092	1,123
Retail trade	2,505	2,535	2,559	2,631
Transportation and warehousing	578	586	591	608
Information and cultural services	254	257	259	267
Finance, insurance, and real estate	1,167	1,181	1,192	1,225
Credit intermediation and monetary authorities	329	334	337	346
Insurance carriers and related activities	169	171	172	177
Real estate, and rental and leasing	669	677	683	702
Professional, scientific, and technical	103	105	106	109
Other business services	835	845	853	877
Public sector	225	228	230	236

Sources: The Conference Board of Canada; Statistics Canada.

Table 4

Labour Market

(level difference shock minus control, 000s, unless otherwise indicated)

	2010	2011	2012	2013
Total employment	144.4	145.9	145.2	147.9
Primary	48.8	48.9	49.2	49.1
Construction	1.8	1.9	1.8	1.9
Utilities	0.9	0.8	0.8	0.8
Manufacturing	7.0	7.2	7.3	7.3
Other commercial services	19.7	20.2	20.4	20.9
Wholesale and retail trade	58.5	58.2	57.1	59.1
Transportation and storage	2.0	1.4	1.2	1.4
Finance, insurance, and real estate	3.6	4.5	4.4	4.5
Public sector	2.2	2.9	2.8	2.9
Unemployed	-125.8	-129.3	-130.8	-135.0
Unemployment rate (per cent)	-0.7	-0.7	-0.7	-0.7

Sources: The Conference Board of Canada; Statistics Canada.

APPENDIX C

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