

Economic Contribution of the Canadian Magazine Industry

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Abeer Reza

Charles Saunders

Reviewed by:

Nancy Cebryk

Mike McCracken

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Economic Contribution of the Canadian Magazine Industry

1 Introduction

The Canadian magazine industry is an important media between the generators of Canadian information, ideas and views and the Canadian public. The industry is classified under North American Industry Classification System (NAICS) code 51112. This industry is in turn a part of the broader classification – Newspaper, Periodical, Book, and Database Publishers (NAICS 5111).

Statistics Canada's survey on the periodical industry¹ reveals that in the year 2003/04, a total of 2,383 periodicals were published in Canada, with a total circulation of 758 million copies.² Of these periodicals, 324 were for general consumers, 761 were for special interest consumers, 637 were trade magazines, 102 focused on farming, 174 were based on religious topics, and 385 were scholarly periodicals. Furthermore, of the 2,383 titles published, 1,447 periodicals were published in English (60.7 per cent), 452 in French (19.06 per cent), 342 were bilingual (14.47 per cent), and 142 publications appeared in other languages (6 per cent).

For the same year, the periodicals industry provided 6,462 full-time and 3,018 part-time jobs. Another 4,956 volunteer and unpaid jobs also contributed to the industry. In 2003/04, the industry earned \$1.5 billion in revenue, and spent \$1.4 billion in expenses.

This report aims to determine the total economic contribution of the magazine industry to the Canadian economy. The periodicals industry not only creates jobs and outputs itself, but also influences other industries by creating demand. The inputs required by the periodicals industry creates demand and generates jobs in industries that produce those specific inputs. Furthermore, jobs created by the periodicals industry, as well as industries influenced indirectly by the periodicals industry, result in disposable income for employees. Some of this disposable income may be saved, while some part of it would definitely be spent on other domestic goods and services, creating further demand, and further output. Therefore, the total contribution to the economy by the periodicals industry is different from just the amount of magazines it produces or employment it generates in isolation.

The focus of the report is to determine the total contribution of the magazine industry. The approach taken in this report is to create a counterfactual economy where there is no domestic magazine industry. In this scenario, all magazines are assumed to be imported into Canada from abroad. If we now compare the real world with this counterfactual economy, we can see the complete effects throughout all industries of having magazines produced domestically. This report describes the “impact” of creating a domestic periodicals industry in an economy where no magazine industry existed.

¹ Statistics Canada publication “Survey of Periodical Publishing, 2003/04”, catalogue no: 87F0005XIE, June 2005.

² Throughout this report, the terms “periodical” and “magazine” are used interchangeably. There is no technical difference assumed between magazine publishers and periodical publishers.

The creation of an industry can have three different types of effects on the economy. In the economic impact literature, direct effects are usually expressed through the straightforward jobs and output generated by an industry or a project. Hence, outputs (magazines), jobs and value-added provided directly by the magazine industry in isolation correspond to the “direct effects” of having the industry present.

But producing magazines requires paper, printing ink, photographic film, office supplies, etc., as well as contributions from freelance writers. Distributing magazines requires postal and courier services. Therefore, industries that provide input toward producing magazines also face higher demand due to the presence of a periodical industry. The employment and value-added provided by industries indirectly affected constitute the “indirect effects” of having a periodical industry.

Furthermore, income earned by people working for the magazine industry, or for industries that sell their output to magazine industries may be saved or spent. The demand created by the earnings that directly or indirectly results from the magazine industry may produce more output, and more jobs. These are effects “induced” by the presence of the magazine industry.

The direct, indirect and induced effects constitute the contribution of the magazine industry to the total economy. The rest of this paper describes these contributions. The exercise resulted in a counterfactual scenario for the years 1997 to 2005. The use of recent history will help the reader to scale the contribution on the current size of the industry.

2 Direct Contribution

There are many ways of describing the size of the magazine industry. One measure is the physical number of magazines produced. However, measuring through physical units has its limitations since different magazines have different prices. Gross output numbers represent the total dollar value of all periodicals produced and sold by the industry. Gross output can be measured in current and constant dollars. Constant dollar measures allow for the adding up of physical units with different base year values. If we wanted to compare magazine output in dollars for one year with output of the printing industry in a different year, we need to take into account the different inflation effects in different industries. Constant dollar measures allow us to compare output in different industries and in different years.

If all the value of the periodicals output is attributed to the magazine industry, we are crediting the industry with the embodied value of paper, printing ink, distribution services, and other purchased inputs, along with the value-added by the magazine industry through labour and profitability. To avoid double-counting contributions and comparing value-added by different industries towards producing a single good, we can look at Gross Domestic Product. GDP is a measure of total activity for an industry or economy.

Gross Domestic Product (GDP) = Gross Output (industry shipments) – purchased inputs = value-added for the (magazine) industry

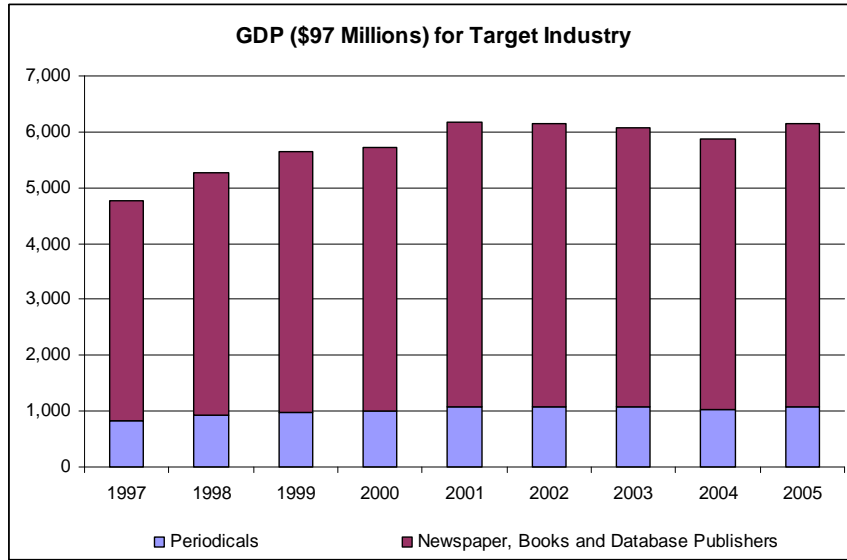
Table 1: Direct contribution of periodicals industry (levels)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
Real Gross Output (\$97 Millions)	1,063	1,133	1,192	1,242	1,266	1,288	1,281	1,323	1,355	1,238
Real GDP (\$97 Millions)	705	778	825	829	884	873	854	824	863	826
Industry Employment	7,174	8,278	8,725	9,115	9,321	9,516	9,495	9,475	9,996	9,011
Freelance Employment	646	835	868	891	911	888	972	953	1,108	897

Over the period 1997 to 2005, the periodicals industry in Canada contributed on average \$1,238 million of real gross output, of which \$826 million was value-added by the industry itself, and only \$412 million was value-added by other industries that provide inputs in the production of periodicals. Since the periodical industry adds almost 2/3 of the value of the gross output itself, the indirect effect of the industry, i.e., the demand created by the industry on other sectors of the economy, is not expected to be huge.

In the same period, the industry generated on average 9,011 jobs within the industry itself, and also created 897 equivalent jobs for freelance writers. Although freelance workers are likely to be working for multiple employers at the same time, not all of whom may be periodical publishing companies, the remuneration paid by the periodicals industry and the average wage rate for freelance writers implies that an equivalent of 897 freelance writing jobs on average were generated by the periodical publishers in the period 1997 - 2005.

Figure 1: Newspaper, periodicals, books and database publishers GDP, \$97 million



In order to provide a point of reference, it is noteworthy that in the same period, average GDP for the newspapers, periodicals, books and database publishers industry (NAICS 5111³) as a whole was \$5.7 billion, and the average GDP for the entire national economy stood at \$955 billion. From this perspective, periodicals (NAICS 5112) account for 18 per cent of the value added in the larger sector of newspapers, periodicals, books and database publishers (NAICS 5111).

³ NAICS 511 accounts for software publishers (NAICS 5112) as well.

3 Indirect Contribution

As mentioned above, only about one-third of the gross output in a Canadian magazine produced is provided by industries other than the magazine industry.⁴ Table 2 provides the major inputs used by periodical publishers, as appears in the Statistics Canada Input-Output framework.⁵

Table 2: Input-Output Tables, selected portions, Use Matrix⁶

	5111 Newspaper, Periodical, Book and Database Publishers	511110 Newspaper Publishers	511120 Periodical Publishers	511130 Book Publishers	511140 and 511190 Directory and Mailing List Publishers, and Other Publishers
Newsprint paper	376	300	0	15	61
Other paper, woodfree	98	0	59	39	0
Specialized publishing service	757	107	228	207	215
Printing & other inks	21	12	4	2	3
Photographic film & plate	50	29	9	6	6
Telephone & other telecommunications	48	28	8	6	6
Postal services AND Courier service	78	0	50	8	20
Wholesaling margins	52	30	9	6	7
Management fees of companies and enterprises	248	144	44	29	31
Non-residential rent	44	25	8	5	6
Other information services (including news synd., microfilm, record, etc.)	61	35	11	7	8
Other administrative and support services	42	24	7	5	5
Spare parts & maintenance supplies	54	31	10	6	7
Office supplies	35	20	6	4	4
Transportation margins	43	25	8	5	5
Travelling and entertainment	82	47	14	10	10
Advertising & promotion	54	31	10	6	7
<i>All other commodities not specified</i>	295	170	57	34	35
Indirect taxes on products	17	10	3	2	2
Subsidies on products	-33	-19	-6	-4	-4
Subsidies on production	-5	-3	-1	-1	-1
Indirect taxes on production	87	50	15	10	11
Wages and salaries	2250	1616	299	166	169
Supplementary labour income	273	196	36	20	21
Mixed income	12	7	1	0	4
Other operating surplus	2149	1244	379	254	272
TOTAL OUTPUT	7188	4160	1268	850	910
Value-added	4750	3101	727	448	474
Value-added as percentage of Total Output	66%	75%	57%	53%	52%

The table above describes commodities used by the magazine industry. These commodities can come from different industries. The same commodity may even be produced by multiple

⁴ Compared to the periodical industry, where almost 57 per cent of the gross output is value-added within the industry, the newspaper industry value-added makes up 75 per cent of its gross output. For book publishers, this ratio is 53 per cent.

⁵ Statistics Canada only provides data up to 3-digit NAICS code level. The further division of the matrix was done by Informetrica Limited using survey data from Statistics Canada on separate industries.

⁶ The Use Matrix shows the 1997 input-output table updated using 1998 nominal values for the periodicals industry.

industries. The top ten industries in order of importance that provide inputs for the NAICS 5111 industry is listed below:

1. Support activity for printing
2. Newsprint mills
3. Information services
4. Printing
5. Management of companies and enterprises
6. Postal services
7. Paper mills
8. Newspaper, periodical, book and database publishers
9. Stationary product manufacturing
10. Grant-making, civic, professional and similar organizations

Table 3 shows the indirect contributions to some selected industries arising from the periodicals industry. One of the industries presented is newspaper, books and database publishers – the other industries that make up NAICS 5111 along with the periodicals industry. As expected, paper mills, printing, and printing support activities experience a significant effect due to the presence of a periodicals industry. Postal services and wholesale trade industries are also affected. Other chemical products manufacturing industries supply photographic paper, photographic films and plates, and printing and other inks to the magazine industry and hence are also affected indirectly.

Table 3: Indirect GDP contribution for selected industries, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	\$97 Million Impact									
Newspaper, book and database publishers	12.29	14.53	14.85	14.95	16.57	16.18	16.05	14.75	15.73	15.10
Printing	54.95	55.72	57.07	64.53	70.44	66.82	67.14	68.54	70.47	63.96
Printing support activities	60.45	52.57	49.95	55.38	71.16	64.31	71.90	69.46	68.69	62.65
Performing arts, spectator sports and related industries	47.18	50.32	54.09	56.99	57.88	61.60	60.98	63.00	64.50	57.39
Postal services	36.29	37.82	39.41	41.50	41.59	40.89	40.75	41.21	41.28	40.08
Wholesale trade	23.93	26.25	27.57	28.79	30.27	31.05	31.92	33.37	35.05	29.80
Management of companies and enterprises	23.93	26.01	25.70	27.32	31.40	32.77	33.04	33.85	34.83	29.87
Paper mills	24.98	25.17	25.87	30.25	27.80	28.50	29.10	32.34	32.72	28.53
Telecommunications	11.77	12.64	14.30	15.70	16.66	17.62	17.31	17.85	18.35	15.80
Banking and other depository credit	14.05	14.92	15.00	15.59	16.17	16.39	16.50	16.68	16.88	15.80
Other chemical products manufacturing	8.54	8.44	9.67	11.12	11.21	11.30	12.33	13.57	14.45	11.18

Freelance writers are classified under NAICS code 7115 – independent artists, writers and performers. The broader classification for this category is NAICS 711 – performing arts, spectator sports and related industries. The \$57 million real value-added in the performing arts, spectator sports and related industries in the period corresponds to output provided by freelance writers for magazines.

It is also interesting to see that newspaper, book and database publishers also experience higher activity due to the presence of a periodicals publishing industry. Although books and newspapers are not considered as major inputs for periodical publishers, the industries indirectly affected by them create demand for newspaper, book and databases, and hence that industry sees an additional \$15 million of value-added.

Table 4: Direct and indirect GDP contribution for selected industries, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
Newspaper, book and database publishers	0.30	0.32	0.31	0.31	0.31	0.31	0.31	0.29	0.30
Printing	1.47	1.47	1.46	1.44	1.44	1.43	1.43	1.44	1.44
Printing support activities	13.18	13.40	13.43	13.36	13.51	13.44	13.31	13.40	13.41
Performing arts, spectator sports and related industries	2.46	2.60	2.79	2.82	2.85	3.01	2.76	2.81	2.88
Postal services	0.78	0.79	0.79	0.79	0.79	0.79	0.78	0.78	0.77
Wholesale trade	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Management of companies and enterprises	0.43	0.44	0.44	0.43	0.43	0.43	0.42	0.42	0.42
Paper mills	1.35	1.41	1.42	1.43	1.49	1.47	1.48	1.52	1.59
Telecommunications	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07
Banking and other depository credit	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05
Other chemical products manufacturing	0.75	0.75	0.74	0.72	0.71	0.72	0.76	0.79	0.82

Impacts are often easier understood as a percentage of the total size of the industries in question. Table 4 presents the percentage impact of the magazine industry on the gross output of various supplying industries. Given the usual activities in these industries, only printing support activities industry is significantly indirectly affected by the periodicals industry. Notable affects also appear in the performing arts (due to freelance writers' outputs), printing, and paper industries.

While the above tables provide indirect GDP contributions for selected detailed industries, the following tables provide a complete picture of total contributions through direct and indirect effects for aggregate sectors in the economy. Further details are available in the data appendix (Appendix I) to this report.

Table 5: Total direct and indirect GDP contributions of the periodicals industry, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	\$97 Million Impact									
All industries	1,219	1,312	1,381	1,422	1,510	1,500	1,492	1,478	1,531	1,427
Goods industries	240	239	243	264	281	272	283	291	297	268
Service industries	979	1,072	1,139	1,158	1,229	1,228	1,208	1,187	1,234	1,159

In total, through direct and indirect effects, the periodicals industry contributed \$1.4 billion on average to the Canadian national economy for the years 1997 through 2005. Paper, printing and ink producing industries are the major goods producing industries affected by the periodicals industry and account for \$166 million out of the \$240 million total impact in the goods sector. The periodicals industry itself is the major contributor for increased services industry activity. Transportation and warehousing, trade, financial services and professional, scientific and technical services account for most of the remaining impact in the services sector. Increased activity for freelance writers also counts towards the impact in the services sector.

Table 6: Employment contribution of periodicals industry through direct and indirect effects

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	Number of jobs									
Mining, oil & gas, utilities, construction	135	141	147	153	156	155	156	156	157	151
Paper manufacturing	502	628	688	779	803	820	809	841	888	751
Printing and related support activities	2,105	2,036	2,213	2,022	2,103	2,218	2,576	2,501	2,170	2,216
Trade	229	235	248	252	252	253	249	244	242	245
Transport and warehousing	952	979	1,015	1,055	1,074	1,077	1,071	1,084	1,105	1,046
Information and cultural industries	7,174	8,278	8,725	9,115	9,321	9,516	9,495	9,475	9,996	9,011
Fin, ins, real estate and management of companies	126	122	134	129	126	140	142	138	139	133
Professional, scientific and technical services	208	224	239	249	256	262	260	264	263	247
Arts, entertainment and recreation	646	835	868	891	911	888	972	953	1,108	897

Table 6 shows employment generated by the periodical industry and industries indirectly affected by the presence of the periodical industry. The 9,011 average yearly jobs created in the information and cultural industries are all jobs in the periodicals industry. As expected, printing and paper manufacturing employment is increased by the presence of a periodical industry. Periodical publishers indirectly generate an average of 2,215 jobs per year in the printing and related support activities industry and another 751 yearly jobs in the paper manufacturing industry through the years 1997 to 2005. Periodical publishers also accounted for 1,046 postal jobs on average for the period, categorized here under the transportation and warehousing industry. The freelance writers' equivalent jobs appear under arts, entertainment and recreation. Periodical publishers also create jobs for retail and wholesale trade and professional, scientific and technical services industries.

Table 7: Employment contributions through direct and indirect impacts of the periodicals industry

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	Number of jobs									
All industries	12,576	13,866	14,384	14,967	15,406	15,558	15,556	15,546	16,229	14,899
Goods Industries	3,028	2,973	2,926	3,044	3,233	3,184	3,131	3,150	3,131	3,089
Service industries	9,549	10,895	11,458	11,923	12,174	12,373	12,426	12,396	13,099	11,810

Table 7 shows total direct and indirect employment created due to the presence of a periodicals industry in the economy. Over the years 1997 through 2005, periodical publishers directly and indirectly contributed 14,899 jobs per year on average, of which 3,089 jobs were in the goods sector and 11,810 jobs were in the services sector. Both the freelance writers' employment and the periodical publishers' direct employment are included in the services industry figure.

4 Induced Contribution

When a new industry is created or a project within an existing industry is realized, output and activity in the directly affected industry itself, as well as in other sectors that provide inputs to the directly affected industry, increase. The higher activity in directly and indirectly affected industries generates income for workers, businesses and governments. Part of this income is saved, and part of it is spent on expenditures on goods and services or on new investments. The effects of this spending are referred to as induced expenditure effects. Each of these induced expenditures may also set up their own set of direct, indirect, and induced changes in value-added, including imports and exports.

In addition, increased income and employment may lead to higher wages and unit labour costs for businesses, ushering in higher domestic prices. Just as higher income increases demand, higher prices provide incentives for lower demand. The net effect of the two offsetting demand signals from induced activity can therefore be either positive or negative depending on the situation. The total effect on the economy includes all three effects - direct, indirect and induced.

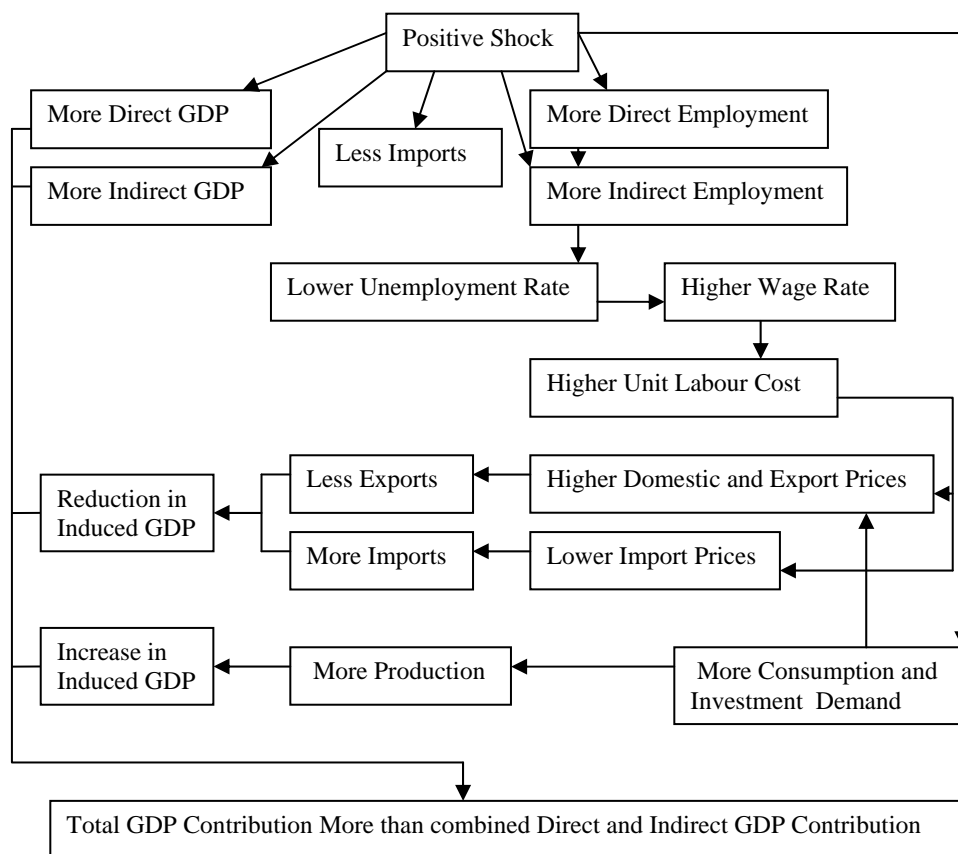
This section presents the total effects on the economy of having a periodicals industry where previously there was none. The emphasis in this section is on explaining how the induced effects work to change the direct and indirect contributions of the periodicals industry. The first part will go through a conceptual overview of what changes the induced effects bring to our previous scenario. The second part walks through major macroeconomic indicators, demonstrating our story in numbers. The third part provides numbers in an industry space. Finally, the fourth part summarizes the total contributions of the magazine industry to the national economy by introducing a tool to measure the total effect.

4.1 Conceptual Overview of Induced Effects

Conceptually, the presence of the magazine industry causes a positive “shock” to the economy. It creates output and value-added directly and generates employment directly. The industries that produce inputs for the magazine industry experience more value-added, more activity and more employment. Hence, both direct and indirect contributions of the magazine industry to the economy are positive. But higher direct and indirect employment results in a lower unemployment rate. As workers become scarcer, wage rates increase, perhaps leading to higher unit labour costs for producers in the entire economy.⁷

⁷ If GDP increases are disproportionately higher than job increases, that would imply that each worker is producing more than before. In other words, productivity would increase. From the employers’ point of view, if workers are now more productive than before, unit labour costs (the labour cost of producing one unit of good or service) goes down. Therefore, increased productivity can provide an offsetting effect on unit labour costs. If GDP increases are disproportionately lower than job increases, the opposite is true, and the resulting lower productivity would drive up unit labour costs.

Figure 2: Conceptual overview of direct, indirect and induced contributions



Higher unit labour costs provide a supply side push on prices, pushing domestic prices up. At the same time, the additional income provided by the direct and indirectly affected industries means more money for people, companies and governments. Part of this extra income will be spent and will create more consumption and investment demand. The increased demand side pressure will also boost up domestic prices. Given higher domestic prices, goods and services produced in Canada would be more expensive for foreigners, while the relative price of imported goods would be less for people within Canada.⁸

The effect on prices would lead to higher imports and fewer exports in Canada, pointing to lower domestic economic activity. At the same time, increased income due to the presence of the magazine industry would lead to higher economic activity. Therefore, conceptually, the final effect of these two offsetting pressures on economic activity is ambiguous.

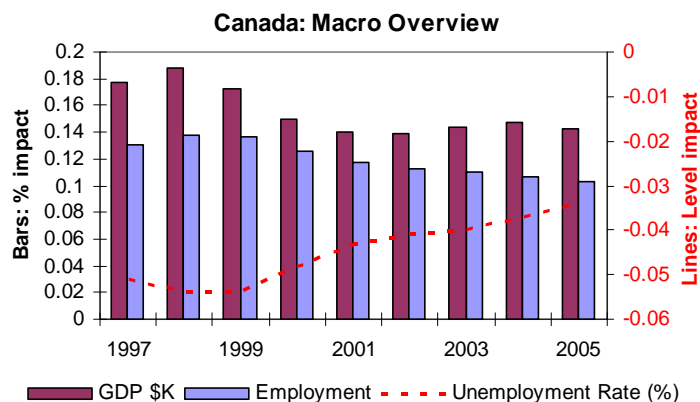
⁸ This effect of higher export prices and lower import prices follow directly from our assumption of a fixed exchange rate. The focus of this report is to look at structural changes within the current market framework. In this situation, the effects of an exchange rate change may distort, or even overwhelm, the structural analysis. Furthermore, the effect of the exchange rate on prices and output is itself a matter of debate. Therefore, to isolate the results of the structural change we are focusing on in this report, we keep the exchange rate fixed. Nonetheless, our impact results show marginal changes in exchange rates for the current scenario. This implies that even without a fixed exchange rate assumption, results would not vary much from what is presented here.

In our specific case, it turns out that the net effect is a further increase in contribution. This happens because the effect of higher prices is more than offset by the demand side push from the extra income generated by the magazine industry.

4.2 Total Contribution to the National Economy – Macro Overview

For the years 1997 through 2005, the total contribution of the magazine industry to the national economy was on average a 0.16 per cent rise in GDP per year, and a further average of 0.12 per cent rise in employment per year. Introducing a magazine industry into the economy reduces the unemployment rate due to the various direct, indirect and induced employment generated by the industry.

Figure 3: Total contribution of magazine industry – national macroeconomic indicators

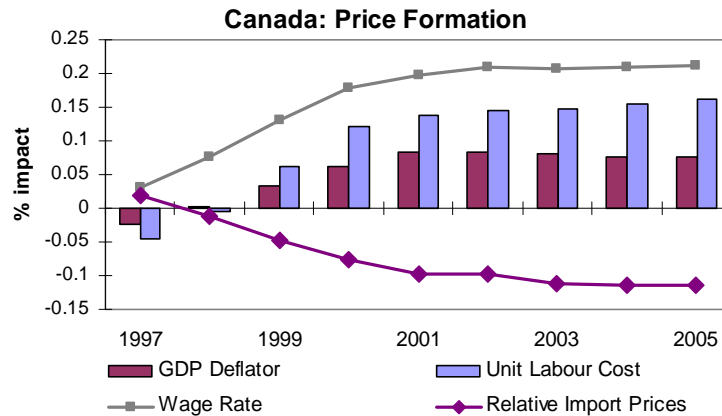


The lower unemployment level raises the wage rate and unit labour costs. In the time period considered, the economy-wide wage rate rises to a stable 0.2 per cent higher than otherwise. This brings forth a 0.15 per cent rise in unit labour costs. In other words, the employment generated directly, indirectly and through induced effects by the magazine industry means that it would cost employers 0.15 per cent more in labour costs to produce the same amount of output.⁹

Higher labour costs result in a higher price level in the economy. The GDP deflator, which is a measure of the domestic price level of an economy, indicates that prices rise by about 0.075 per cent toward the end of the period of interest. As domestic price goes up, imports seem cheaper for agents in the Canadian economy. Figure 4 shows a decline in import prices relative to the domestic consumer price index.

⁹ It is important to note that the wages and unit labour costs do not rise immediately. This is due to the “sticky wages” effect. This assumes that due to union collective agreements and other institutions in the economy, wages do not respond immediately to economic incentives, but rather, take some time in adjusting to a new equilibrium level. Since we “introduce” the magazine industry into the economy in 1996, it takes a few years before higher wage rates and unit labour costs are established.

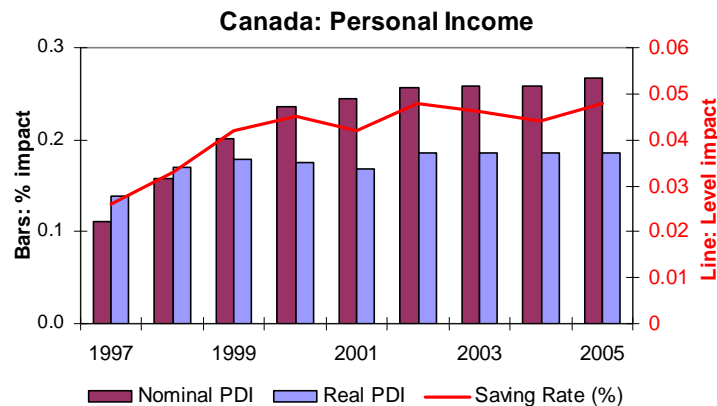
Figure 4: Total contribution of magazine industry – price formation



As mentioned earlier, increases in domestic prices and the reduction of relative import prices provide negative demand side pressure on the Canadian economy. For foreigners, higher prices of Canadian goods and services imply that Canadian exports would drop. And for the domestic market, lower import prices and higher domestic prices mean that Canadians would be more interested in buying cheaper imported goods rather than highly priced domestically produced goods. Both these aspects work towards reducing economic activity.

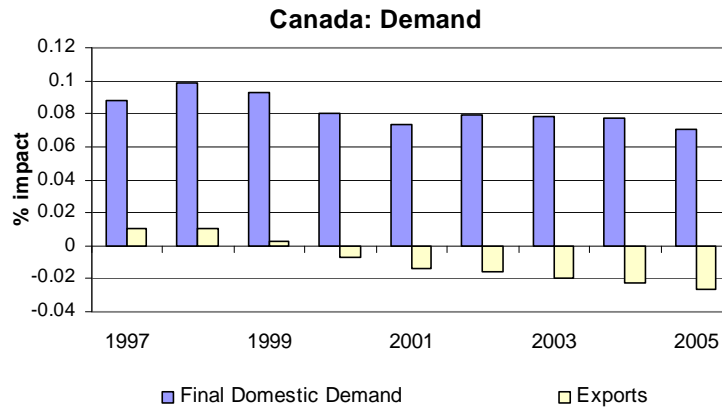
However, the total income generated by the employment contributions of the magazine industry implies higher disposable income for the Canadian consumer. Even after taking into account the price effect, disposable income (Real PDI) increases by around 0.18 per cent. In other words, the magazine industry creates 0.18 per cent more real disposable income in the economy.

Figure 5: Total contribution of magazine industry – personal income



In comparison, the saving rate goes up by only 0.05 per cent, implying that a large proportion of the income created by the magazine industry is spent on consumption and investment goods. The net result is an increase in final domestic demand of around 0.08 per cent, as shown in Figure 6. Although exports increase in the initial years, higher domestic prices lower export figures toward the end of the period.

Figure 6: Total contribution of magazine industry – domestic demand drivers



The higher income and higher final demand generated by the magazine industry mean higher revenues for the government as well. This result assumes that there is no change in government tax and transfer policies. With tax rates held constant, higher income and expenditure in the economy generates revenues for all levels of government, with the federal government gaining the most. Toward the end of the period, government balances increase more than \$1.2 billion in nominal terms.

Figure 7: Total contribution of magazine industry – government balances

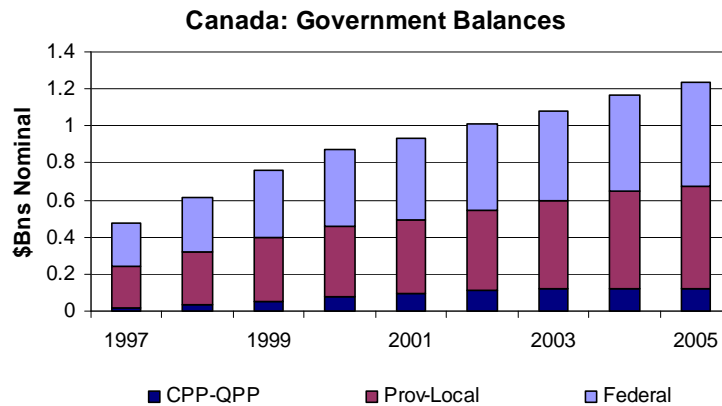


Table 8 shows detailed sources of government revenue increases due to the direct, indirect and induced effects of the magazine industry. The major source of government revenue is through higher personal and corporate income taxes. The increase in revenue from indirect taxes on production and imports are channelled through increased consumption due to indirect and induced effects of the magazine industry.

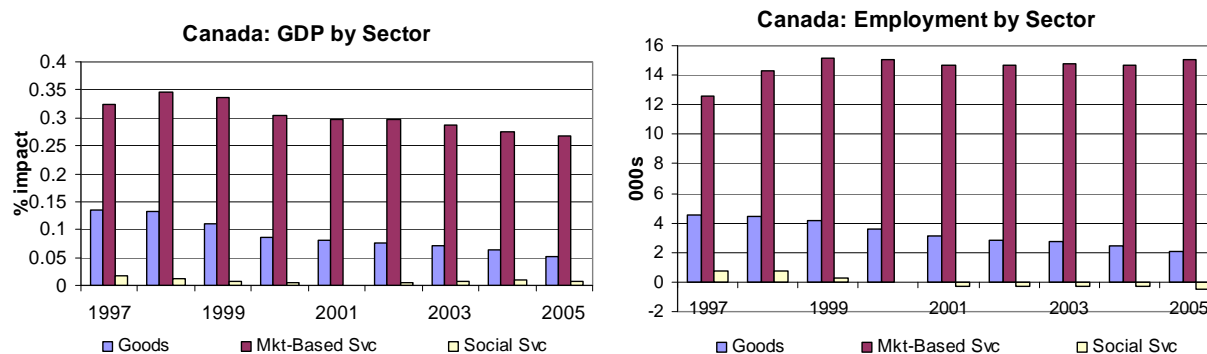
Table 8: Government revenue contribution through direct, indirect and induced effects of the magazine industry, nominal \$ millions

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
Government Revenue, \$C millions										
Federal										
Total	198	255	313	363	377	382	404	431	468	355
Direct, on Persons	81	124	165	212	228	226	229	244	278	199
Direct, on Corporations & GBE	46	41	43	36	37	35	51	64	63	46
Direct, on non-Residents	-7	-7	-9	-9	-13	-13	-14	-16	-18	-12
Contributions to Social Insurance Plans	29	36	44	48	48	49	47	45	46	44
Indirect Taxes on Production & Imports	43	55	62	69	70	77	83	86	90	71
Goods & Services Tax	30	39	48	55	58	62	68	72	75	56
Provincial										
Total	177	223	268	297	305	323	353	384	417	305
Direct, on Persons	52	76	103	127	128	132	135	146	165	118
Direct, on Corporations & GBE	28	24	23	18	18	17	24	31	32	24
WCB & Contributions to Social Insurance	3	6	9	13	16	18	21	22	24	15
Indirect Taxes	85	99	104	106	104	111	119	123	125	108
Sales Tax	27	36	44	51	52	55	60	63	65	50
Local and Municipal										
Total	26	30	27	22	22	23	23	23	22	24
Indirect Taxes	19	25	24	20	22	24	23	24	23	23
Transfers from Persons	0	0	0	0	1	1	1	1	1	0
Transfers from Federal Government	0	0	0	0	0	0	0	0	0	0
Transfers from Provincial Government	-3	-6	-8	-9	-10	-12	-12	-14	-14	-10
Total	401	508	607	682	705	728	779	838	907	684

Alongside increased revenues, government expenditure also declines to bring forth the large improvements in government balances. The major element in lowering government expenditure is lower interest expenses. Here, we implicitly assume that increased government revenues are used to pay off existing government debt. Since the debt burden becomes smaller, the amount of interest paid by the government on its debt also declines, further improving the government balance.

The increase in GDP, as explained in the direct and indirect effects sections, lies mainly in the market-based services sector, where the magazine industry is classified. Due to the indirect and induced impacts, goods sector output also increases. But, the above-mentioned induced price effects reduce exports, and lower demand. This effect is felt mostly in the goods sector. Therefore, toward the end of the period, the impact in the goods sector decreases, as higher domestic and export prices take their toll. Figure 8 demonstrates this result.

Figure 8: Total contribution of magazine industry – sectoral GDP and employment



Employment in different sectors also follows the trend in GDP closely. Market-based services employment increases by more than 14,000, while goods sector employment rises only by 2,000 to 3,000.

4.3 Total Contribution in the National Economy – Industry Overview

Table 9 presented below provides the total GDP contribution of the magazine industry for selected sectors of the economy. These figures include all three effects of the magazine industry impact – direct, indirect and induced. As expected, the biggest effect is in the newspaper, periodical, book and database publishers industry, which includes the direct effects of introducing a magazine industry into the economy as well as the indirect and induced effects on the other components of the aggregate sector. Significant effects are also realized in wholesale and retail trade industries. The magazine industry contributes an average of \$27 million in GDP every year to the banking and other depository credit institutions industry.

Table 9: Total GDP contribution for selected industries, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
\$97 millions										
Newspaper, periodical, book and database publishers	725	801	847	848	903	893	873	842	881	846
Printing	60	62	61	67	72	69	69	70	71	67
Printing support activities	61	53	50	56	71	64	72	70	69	63
Performing arts, spectator sports and related industries	49	52	56	58	59	63	63	65	66	59
Postal services	41	44	44	45	45	44	44	44	44	44
Wholesale trade	61	72	68	57	52	55	53	53	50	58
Retail Trade	69	87	87	82	79	89	88	89	88	84
Managment of companies and enterprises	28	31	29	29	33	34	34	35	35	32
Paper mills	27	27	27	31	28	29	29	32	32	29
Telecommunications	21	27	36	45	51	56	58	62	66	47
Banking and other depository credit	42	43	31	17	15	21	25	25	21	27
Other chemical products manufacturing	10	9	10	10	9	9	9	10	10	10

Printing and printing support activity GDP increases by a total of \$140 million on average every year due to the presence of a magazine industry. The magazine industry also creates an average \$52 million worth of real value-added in postal services. Freelance writers' activities increase by

\$63 million on average per year (performing arts, spectator sports and related industries GDP) due to the presence of a magazine industry.

Table 10: Total employment contribution for selected industries

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
Number of jobs										
Paper manufacturing	598	731	789	845	823	809	775	792	828	777
Printing and related support activities	2,441	2,361	2,562	2,257	2,313	2,460	2,848	2,755	2,370	2,485
Trade	988	1,062	1,251	1,182	1,012	907	958	899	863	1,014
Transport and warehousing	1,588	1,659	1,701	1,597	1,472	1,455	1,446	1,463	1,470	1,539
Information and cultural industries	7,232	8,338	8,781	9,154	9,347	9,538	9,514	9,486	9,995	9,043
Fin, ins, real estate and management of companies	583	629	774	778	654	579	591	552	507	627
Professional, scientific and technical services	505	655	757	683	640	679	642	614	520	633
Arts, entertainment recreation employment	691	854	873	873	878	895	996	987	1,140	910
Total Jobs for Selected Industries	14,626	16,289	17,488	17,369	17,139	17,322	17,770	17,548	17,693	17,027

In addition to creating employment in its own industry (shown in Table 10 under information and cultural industries), the magazine sector generates around than 2,485 jobs per year in the printing and related support activities sector, and a further 1,014 jobs in the trade sector. Around 910 jobs are created in arts, entertainment and recreation industries, which includes freelance writers. A further 1,539 transportation and warehousing jobs are generated by the magazine industry, as well as 633 jobs in the professional, scientific and technical services industry on average per year.

Table 11: Total direct, indirect and induced GDP contributions of the periodicals industry, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
\$97 Million Impact										
All industries	1,697	1,861	1,849	1,725	1,730	1,784	1,761	1,729	1,701	1,760
Goods industries	356	364	320	266	243	239	228	211	172	266
Service industries	1,342	1,498	1,530	1,459	1,487	1,545	1,533	1,518	1,528	1,493

Tables 11 and 12 provide an aggregate picture of the contributions of the magazine industry, which includes all sectors and subsectors of the economy. On average, the magazine industry contributes \$1.7 billion in GDP to the Canadian economy, and creates 17,879 jobs per year.

Table 12: Total direct, indirect and induced employment contributions of the periodicals industry

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
Number of jobs										
All industries	17,930	19,419	19,540	18,644	17,427	17,247	17,195	16,845	16,668	17,879
Goods industries	4,559	4,431	4,170	3,585	3,112	2,867	2,719	2,501	2,090	3,337
Service industries	13,370	14,989	15,370	15,060	14,314	14,381	14,478	14,345	14,579	14,543

The contributions are skewed toward the service industries, where the magazine industry itself is categorized. Of the approximately 18,000 jobs generated directly, indirectly and through induced impacts of the magazine industry, around 3,000 are located in the goods sector with the remaining 15,000 in the service industries.

4.4 Total Contribution in the National Economy – Multiplier Effects

To gain some understanding of the total effect of a project or an industry, a common measure on the expenditure side is to calculate the ratio of the increase in GDP to the initial expenditure on the project, or the gross output of the industry. This ratio is sometimes called the multiplier, or, more correctly, the expenditure multiplier. The value of the expenditure multiplier can vary between zero and a number greater than one, depending on the amount of domestically produced inputs in the expenditure, the propensity to spend of the income recipients, and the “leakages” into imports and taxes in the economy. In Canada, a multiplier value of 1.3 to 1.6 is not uncommon.

In the case of the magazine industry, the direct gross output contribution of the industry in real terms is \$1,238 million per year on average. This is the total value of magazines produced on average per year for the period concerned. The total GDP effect on the national economy due to this initial direct contribution in real terms is \$1,587 million per year on average for the years in consideration. This implies an expenditure multiplier of 1.28 for the magazine industry. This implies that for every dollar of expenditure in the magazine industry, there is another 28 cents of expenditure occurring in the rest of the economy.

5 Provincial Contributions – Ontario

Statistics Canada's survey of periodical publishing reveals that in the year 2003/04, a total of 1,162 periodicals were published in Ontario, generating a total revenue or gross output of \$918 million. In total, 3,481 full-time employees, 1,456 part-time employees and another 2,282 volunteer and unpaid staff worked for the periodicals publishing industry in Ontario for that year. Employees in the industry earned \$243 million in remuneration, including \$46 million in freelance fees. According to these figures, Ontario accounted for almost 60 per cent of national nominal gross output in the magazine sector in the year 2003/04.

This section briefly outlines the contributions of the magazine industry for the province of Ontario. Tables 13 through 15 present only direct and indirect contributions of the magazine industry in Ontario. In the provincial space, magazine publishers are categorized under "other information and culture" industries. For the time period 1997 to 2005, the magazine sector directly contributes on average \$486 million worth of GDP in Ontario per year. The aggregate sector other information and culture in Table 13 represents this number as well as an additional \$23 million worth of indirect contribution to other industries within this category.

Table 13: Direct and indirect GDP contribution for selected industries in Ontario, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	\$97 millions									
Other information and culture	431	475	505	509	544	539	529	510	534	509
Printing and related support activities	59	56	55	63	77	73	75	74	67	67
Arts, entertainment and recreation	20	21	22	23	23	25	25	26	27	23
Transportation and warehousing	24	24	25	27	28	27	27	27	27	26
Wholesale trade	11	12	13	14	14	15	15	16	16	14
Retail trade	2	2	2	2	2	2	2	2	2	2
Management of companies and enterprises	10	11	11	12	14	15	15	16	16	13
Professional, scientific, technical services	8	9	10	11	12	12	12	12	12	11
Paper manufacturing	12	11	11	13	12	12	13	13	14	12

The magazine industry indirectly accounts for \$67 million of economic value-added in the printing and related support industries of Ontario per year. Freelance writers in Ontario contribute \$23 million of value-added on average per year because of the presence of a magazine industry. Magazines also generate work in the transportation and warehousing, trade, paper manufacturing, management of companies and professional and technical services industries.

Table 14: Direct and indirect GDP contribution for Ontario, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	\$97 millions									
All industries	647	699	737	763	817	812	806	791	813	765
Goods producing industries	106	106	104	118	130	127	131	132	127	120
Service industries	541	593	633	645	687	686	675	660	686	645

The total direct and indirect contribution of the magazine industry in Ontario for the period 1997 to 2005 stood at \$765 million on average per year. The 4,711 direct jobs per year that the magazine industry generated on average in Ontario created a further 40 jobs in other industries in the information and culture sector per year within the time period considered. Because of the magazine sector, printing and support activities saw more than 1,000 additional jobs per year.

The arts and entertainment and transportation and warehousing industries also experienced job increases of 532 and 440 per year. In total, a further 2,680 jobs per year were generated indirectly in Ontario by the magazine publishers.

Table 15: Direct and indirect employment contributions for Ontario

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
Number of jobs										
All industries	6,129	6,813	7,082	7,477	7,792	7,895	7,736	7,690	7,907	7,391
Information and culture	3,750	4,359	4,656	4,865	4,973	5,057	4,952	4,941	5,213	4,752
Printing and related support activities	926	909	971	908	1,015	1,086	1,211	1,170	905	1,011
Transportation and warehousing	337	491	432	417	507	429	456	450	445	440
Trade	96	138	76	118	117	118	114	104	101	109
Fin, ins, real estate and mgt of companies	141	8	17	62	60	22	66	64	65	56
Professional, scientific, technical services	143	152	167	87	136	139	140	139	136	138
Arts, entertainment and recreation	340	450	482	507	527	582	615	607	681	532
Paper manufacturing	155	194	184	235	243	251	252	261	282	229

The indirect and direct jobs created and economic activity generated by the magazine sector contributed even more through induced effects. The overall total effects of the magazine industry stood at \$974 million worth of GDP per year in Ontario. In other words, another \$209 million worth of GDP was created through induced effects of the Ontario magazine industry. Big gainers through the induced effects were other information and cultural industries and the trade sector. In particular, retail trade saw a boost of \$34 million worth of GDP on average per year due to induced effects of the magazine sector. Professional, scientific and technical services also gained considerably through induced effects.

Table 16: Total GDP contributions for selected industries in Ontario, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
\$97 millions										
Other information and culture	453	506	541	541	569	566	558	540	561	537
Printing and related support activities	62	60	57	64	78	74	76	75	67	68
Arts, entertainment and recreation	22	23	24	24	24	26	27	27	28	25
Transportation and warehousing	36	38	38	35	34	34	32	33	32	35
Wholesale trade	32	38	38	32	30	31	30	29	27	32
Retail trade	31	39	39	36	35	39	38	37	35	37
Management of companies and enterprises	12	13	13	13	15	16	16	16	16	14
Professional, scientific, technical services	22	28	31	25	21	21	20	19	15	22
Paper manufacturing	15	14	13	14	12	13	12	13	13	13

Table 17: Total GDP contributions for Ontario, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
\$97 millions										
All industries	907	1,005	1,016	958	981	1,006	992	960	938	974
Goods producing industries	154	160	140	122	118	118	112	102	75	122
Service industries	752	845	876	836	863	889	880	858	863	851

A similar trend is visible in employment contributions of the magazine industry. Induced effects generate on average 1,997 more jobs in the Ontario economy. The trade sector is the biggest gainer in terms of induced jobs as approximately 446 jobs were generated in this sector due to induced effects of the magazine industry.

Table 18: Total employment contributions for selected industries in Ontario

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	Number of jobs									
All industries	9,119	9,894	10,032	9,785	9,492	9,292	9,228	8,963	8,693	9,389
Information and culture	3,989	4,480	4,850	5,161	5,142	5,113	5,221	5,273	5,475	4,967
Printing and related support activities	1,081	1,061	1,131	1,019	1,119	1,204	1,338	1,289	989	1,137
Transportation and warehousing	683	715	725	683	655	641	619	612	597	659
Trade	551	621	684	613	579	540	533	452	421	555
Fin, ins, real estate and mgt of companies	341	373	434	421	378	349	349	318	296	362
Professional, scientific, technical services	241	312	374	351	335	354	342	322	276	323
Arts, entertainment and recreation	375	458	440	517	549	518	588	608	703	528
Paper manufacturing	194	235	219	258	249	245	237	240	257	237

Other big gainers include finance, insurance, real estate and management of companies as well as transportation and warehousing industries. The induced effects bring the total jobs generated in the Ontario economy to an average yearly level of 9,389 for the period 1997 to 2005.

Table 19: Per cent GDP impact in Ontario vis à vis per cent GDP impact in rest of Canada

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	% impact Ontario									
All industries	0.14	0.15	0.13	0.11	0.11	0.11	0.10	0.10	0.08	0.11
Other Information and Culture	9.18	9.50	8.67	7.93	7.90	7.46	7.22	7.10	6.89	7.85
Printing and related support activities	2.89	2.74	2.62	2.51	3.04	2.93	3.04	2.99	2.91	2.86
Arts, entertainment and recreation	0.69	0.73	0.71	0.67	0.66	0.69	0.70	0.69	0.73	0.70
Transportation and warehousing	0.26	0.27	0.24	0.22	0.22	0.21	0.20	0.19	0.18	0.22
Wholesale trade	0.16	0.18	0.16	0.12	0.11	0.11	0.10	0.09	0.08	0.12
Retail Trade	0.19	0.22	0.21	0.18	0.17	0.18	0.17	0.16	0.15	0.18
Management of companies and enterprises	0.51	0.52	0.50	0.45	0.50	0.46	0.45	0.44	0.43	0.47
Professional, scientific, technical services	0.16	0.18	0.18	0.13	0.10	0.10	0.09	0.09	0.07	0.12
Paper manufacturing	0.42	0.43	0.39	0.38	0.35	0.36	0.34	0.37	0.37	0.38
	Rest of Canada									
All industries	0.11	0.11	0.10	0.08	0.07	0.08	0.08	0.08	0.07	0.08
Other Information and Culture	5.38	5.45	5.52	5.61	5.41	5.41	5.12	4.97	5.29	5.35
Printing and related support activities	2.89	2.74	2.62	2.54	2.29	2.28	2.38	2.35	2.36	2.47
Arts, entertainment and recreation	0.70	0.71	0.75	0.74	0.69	0.72	0.65	0.67	0.65	0.69
Transportation and warehousing	0.18	0.19	0.18	0.16	0.14	0.14	0.14	0.15	0.14	0.16
Wholesale trade	0.12	0.13	0.12	0.09	0.08	0.08	0.07	0.07	0.06	0.09
Retail Trade	0.15	0.18	0.17	0.15	0.13	0.14	0.14	0.14	0.14	0.15
Management of companies and enterprises	0.51	0.52	0.50	0.46	0.42	0.44	0.43	0.42	0.41	0.45
Professional, scientific, technical services	0.16	0.18	0.18	0.12	0.10	0.10	0.09	0.08	0.07	0.12
Paper manufacturing	0.44	0.47	0.42	0.41	0.41	0.40	0.39	0.42	0.43	0.42

It is important to note that the Ontario economy benefits from the presence of a magazine industry disproportionately more than the economies of the other provinces. The first part of Table 19 shows the impact of the Ontario magazine industry on the rest of the Ontario economy in percentage terms. Overall, the Ontario economy experiences GDP increases of 0.11 per cent due to the presence of a magazine industry through indirect and induced effects. The second part of the same table highlights the same measure for the rest of Canada. For the rest of Canada, the economy experiences GDP increases of only 0.08 per cent through indirect and induced effects of the magazine industry.

Ontario experiences higher benefits than the rest of the economy because most of the indirect and induced effects work through industries that are more concentrated in Ontario. Looking at individual industry impacts for selected industries, it is clear that almost all industries in Ontario experience a disproportionately higher benefit due to the presence of the magazine industry. On

average, only the professional, scientific and technical services industry experiences proportional benefits, and paper manufacturing industries in the rest of the economy benefits more than the Ontario paper industry because paper manufacturing is not concentrated in Ontario.

Appendix I: Data Tables

Table 20: Direct impact, levels

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
Real Gross Output (\$97 Millions)	1,063	1,133	1,192	1,242	1,266	1,288	1,281	1,323	1,355	1,238
Real GDP (\$97 Millions)	705	778	825	829	884	873	854	824	863	826
Industry Employment	7,174	8,278	8,725	9,115	9,321	9,516	9,495	9,475	9,996	9,011
Freelance Employment	646	835	868	891	911	888	972	953	1,108	897

Table 21: Reference case employment, number of jobs

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	Number of jobs								
All industries	13,706,000	14,046,200	14,406,700	14,764,200	14,946,200	15,310,400	15,671,980	15,946,780	16,171,280
Agri, forestry, fishing, & hunting	529,250	537,930	515,760	487,350	422,910	425,510	435,890	424,930	439,550
Mining & oil & gas extraction	184,470	179,740	154,070	160,150	179,290	170,160	178,110	187,630	210,880
Utilities	115,300	114,700	114,300	114,900	124,400	131,900	130,500	133,300	125,300
Construction	721,000	731,900	766,900	810,100	824,300	865,200	906,000	951,700	1,019,500
Manufacturing	2,010,900	2,093,500	2,191,500	2,249,400	2,229,000	2,285,900	2,275,160	2,292,180	2,208,270
Service industries	10,145,100	10,388,400	10,664,300	10,942,200	11,166,200	11,431,800	11,746,390	11,957,090	12,167,840
Trade	2,106,140	2,125,390	2,218,190	2,293,290	2,363,300	2,409,350	2,467,790	2,507,120	2,575,320
Transportation & warehousing	694,600	712,700	737,000	772,300	775,800	760,700	790,900	799,400	793,600
Information & cult industries	354,150	379,350	373,980	380,490	405,930	380,250	373,770	379,840	390,900
Fin, ins, real estate & mgt of comp	865,000	847,900	859,900	857,900	876,700	895,100	917,000	960,600	987,800
Professional, scientific & tech services	777,800	849,800	900,700	932,200	986,500	987,100	1,003,600	1,018,300	1,050,000
Admin & support, waste management	441,800	478,100	504,700	537,000	537,200	579,600	608,700	630,200	654,400
Educational services	916,600	930,000	970,700	974,100	981,600	1,007,400	1,027,100	1,035,700	1,106,100
Health care & social assistance	1,388,400	1,428,500	1,436,000	1,514,000	1,540,400	1,617,300	1,679,200	1,733,400	1,734,600
Arts, entertain & recreation	249,320	236,450	256,530	281,640	303,490	334,920	340,850	358,150	344,240
Accommodation & food services	871,000	911,400	913,600	938,200	943,200	985,100	1,005,500	1,012,400	1,004,500
Other services	683,000	706,800	716,500	688,500	666,800	686,200	713,100	696,600	693,400
Public admin, all levels of govt	797,200	781,900	776,300	772,600	785,400	788,900	819,000	825,500	833,100

Table 22: Direct and indirect employment impact, number of jobs

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	Number of jobs									
All industries	12,576	13,866	14,384	14,967	15,406	15,558	15,556	15,546	16,229	14,899
Goods Industries	3,028	2,973	2,926	3,044	3,233	3,184	3,131	3,150	3,131	3,089
Agri, forestry, fishing, & hunting	56	62	57	61	55	54	55	50	50	42
Mining & oil & gas extraction	46	46	45	45	50	46	47	49	55	54
Utilities	53	55	56	56	61	64	63	65	60	60
Construction	37	40	46	52	46	44	46	42	42	41
Manufacturing	2,836	2,770	2,722	2,830	3,021	2,976	2,920	2,944	2,924	2,787
Printing & related support activities	2,105	2,036	2,213	2,022	2,103	2,218	2,576	2,501	2,170	2,204
Service industries	9,549	10,895	11,458	11,923	12,174	12,373	12,426	12,396	13,099	13,464
Trade	229	235	248	252	252	253	249	244	242	209
Transportation & warehousing	952	979	1,015	1,055	1,074	1,077	1,071	1,084	1,105	1,145
Information & cult industries	7,174	8,278	8,725	9,115	9,321	9,516	9,495	9,475	9,996	10,187
Fin, ins, real estate & mgt of comp	126	122	134	129	126	140	142	138	139	145
Professional, scientific & tech services	208	224	239	249	256	262	260	264	263	255
Admin & support, waste management	0	0	0	0	0	0	0	0	0	0
Educational services	0	0	1	1	1	1	1	1	1	1
Health care & social assistance	30	31	32	33	32	33	33	33	34	36
Arts, entertain & recreation	646	835	868	891	911	888	972	953	1,108	1,276
Accommodation & food services	105	109	113	115	116	117	117	119	121	127
Other services	54	56	58	59	60	60	59	60	60	57
Public admin, all levels of govt	24	25	25	26	26	27	26	26	29	28

Table 23: Direct, indirect and induced employment impact, number of jobs

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	Level Impact									
All industries	17,930	19,419	19,540	18,644	17,427	17,247	17,195	16,845	16,668	17,879
Goods industries	4,559	4,431	4,170	3,585	3,112	2,867	2,719	2,501	2,090	3,337
Agri, forestry, fishing, & hunting	62	56	38	25	12	7	2	-6	-12	20
Mining & oil & gas extraction	30	12	-10	-31	-50	-46	-56	-62	-65	-31
Utilities	138	159	162	149	166	188	192	198	187	171
Construction	360	392	401	331	209	111	91	39	-42	210
Manufacturing	3,969	3,812	3,579	3,111	2,775	2,607	2,490	2,332	2,022	2,966
Printing & related support activities	2,441	2,361	2,562	2,257	2,313	2,460	2,848	2,755	2,370	2,485
Service industries	13,370	14,989	15,370	15,060	14,314	14,381	14,478	14,345	14,579	14,543
Trade	988	1,062	1,251	1,182	1,012	907	958	899	863	1,014
Transportation & warehousing	1,588	1,659	1,701	1,597	1,472	1,455	1,446	1,463	1,470	1,539
Information & cult industries	7,232	8,338	8,781	9,154	9,347	9,538	9,514	9,486	9,995	9,043
Fin, ins, real estate & mgt of comp	583	629	774	778	654	579	591	552	507	627
Professional, scientific & tech services	505	655	757	683	640	679	642	614	520	633
Admin & support, waste management	0	0	0	0	0	0	0	0	0	0
Educational services	404	535	279	121	-21	-125	-170	-185	-226	68
Health care & social assistance	304	157	-42	-115	-184	6	65	166	153	57
Arts, entertain & recreation	691	854	873	873	878	895	996	987	1,140	910
Accommodation & food services	658	651	583	454	333	346	379	395	378	464
Other services	372	416	394	343	297	291	264	236	196	312
Public admin, all levels of govt	45	33	19	-10	-113	-188	-208	-268	-417	-123

Table 24: Direct and indirect employment impact, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
All industries	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Agri, forestry, fishing, & hunting	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mining & oil & gas extraction	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Utilities	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Construction	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Manufacturing	0.14	0.13	0.12	0.13	0.14	0.13	0.13	0.13	0.13
Printing & related support activities	2.32	2.21	2.10	2.13	2.28	2.21	2.29	2.26	2.23
Service industries	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.11
Trade	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Transportation & warehousing	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Information & cult industries	2.07	2.23	2.39	2.45	2.35	2.57	2.61	2.56	2.62
Fin, ins, real estate & mgt of comp	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.01
Professional, scientific & tech services	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Admin & support, waste management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Educational services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care & social assistance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arts, entertain & recreation	0.26	0.35	0.34	0.32	0.30	0.27	0.29	0.27	0.32
Accommodation & food services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Other services	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 25: Direct, indirect and induced employment impact, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
All industries	0.13	0.14	0.14	0.13	0.12	0.11	0.11	0.11	0.10
Agri, forestry, fishing, & hunting	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Mining & oil & gas extraction	0.02	0.01	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03
Utilities	0.12	0.14	0.14	0.13	0.13	0.14	0.15	0.15	0.15
Construction	0.05	0.05	0.05	0.04	0.03	0.01	0.01	0.00	0.00
Manufacturing	0.20	0.18	0.16	0.14	0.13	0.11	0.11	0.10	0.09
Printing & related support activities	2.70	2.58	2.44	2.39	2.51	2.46	2.54	2.50	2.45
Service industries	0.13	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.12
Trade	0.05	0.05	0.06	0.05	0.04	0.04	0.04	0.04	0.03
Transportation & warehousing	0.23	0.23	0.23	0.21	0.19	0.19	0.18	0.18	0.19
Information & cult industries	2.09	2.25	2.41	2.47	2.36	2.58	2.62	2.57	2.63
Fin, ins, real estate & mgt of comp	0.07	0.07	0.09	0.09	0.08	0.07	0.07	0.06	0.05
Professional, scientific & tech services	0.07	0.08	0.08	0.07	0.07	0.07	0.06	0.06	0.05
Admin & support, waste management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Educational services	0.04	0.06	0.03	0.01	0.00	-0.01	-0.02	-0.02	-0.02
Health care & social assistance	0.02	0.01	0.00	-0.01	-0.01	0.00	0.00	0.01	0.01
Arts, entertain & recreation	0.28	0.36	0.34	0.31	0.29	0.27	0.29	0.28	0.33
Accommodation & food services	0.08	0.07	0.06	0.05	0.04	0.04	0.04	0.04	0.04
Other services	0.05	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03

Table 26: Reference case GDP, \$97 millions

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	\$97 Million								
All industries	816,763	848,963	896,556	946,025	960,657	989,337	1,012,785	1,045,795	1,078,922
Goods industries	266,324	276,035	292,050	313,262	304,979	310,582	317,890	331,453	341,247
Agri, forestry, fishing, & hunting	20,427	21,696	23,301	22,904	20,811	19,848	21,869	23,358	23,932
Mining & oil & gas extraction	33,935	34,461	34,399	35,459	35,507	36,212	39,100	40,425	41,341
Utilities	26,685	26,140	26,409	26,502	25,533	26,808	26,228	26,342	27,491
Construction	42,995	44,348	46,415	48,833	52,367	54,920	57,883	60,527	63,344
Manufacturing	142,282	149,390	161,526	179,564	170,761	172,794	172,810	180,801	185,139
Printing & related support activities	4,325	4,304	4,384	5,002	5,562	5,281	5,371	5,424	5,562
Service industries	550,439	572,928	604,506	632,763	655,678	678,755	694,895	714,342	737,675
Trade	85,946	92,644	97,964	103,987	109,229	114,422	118,760	124,420	131,813
Transportation & warehousing	40,337	41,036	43,605	45,764	46,741	47,072	47,413	49,849	51,970
Information & cult industries	27,979	29,866	33,658	36,356	39,232	41,672	42,350	42,849	44,506
Newspapers, Magazines, Books and Other	4,766	5,266	5,641	5,727	6,173	6,157	6,082	5,863	6,143
Fin, ins, real estate & mgt of comp	161,052	166,070	174,007	181,064	187,897	194,574	199,309	205,877	212,824
Professional, scientific & tech services	30,289	34,032	37,549	41,462	42,631	43,786	44,735	45,644	46,173
Admin & support, waste management	15,386	16,418	18,328	19,083	19,988	21,802	22,640	23,146	23,898
Educational services	42,314	42,575	43,565	43,757	43,972	44,857	45,071	45,570	47,009
Health care & social assistance	51,403	51,901	53,411	55,113	56,134	57,461	59,731	60,631	61,517
Arts, entertain & recreation	7,405	7,603	7,984	8,499	8,913	9,219	9,686	9,840	9,907
Accommodation & food services	19,652	20,779	21,630	22,319	22,661	23,045	22,608	22,965	23,135
Other services	19,194	19,755	20,978	22,151	23,588	24,717	25,192	25,581	26,015
Public admin, all levels of govt	49,482	50,249	51,827	53,208	54,692	56,128	57,400	57,970	58,908

Table 27: Direct and indirect GDP impact, \$97 millions

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	\$97 Million Impact									
All industries	1,219	1,312	1,381	1,422	1,510	1,500	1,492	1,478	1,531	1,427
Goods industries	240	239	243	264	281	272	283	291	297	268
Agri, forestry, fishing, & hunting	5	5	6	6	6	6	6	6	7	6
Mining & oil & gas extraction	10	11	11	11	11	11	12	13	13	11
Utilities	13	14	14	14	14	14	14	14	15	14
Construction	4	5	5	5	5	5	5	6	6	5
Manufacturing	208	205	207	228	245	235	246	253	258	232
Service industries	979	1,072	1,139	1,158	1,229	1,228	1,208	1,187	1,234	1,159
Trade	29	32	33	35	36	37	38	40	42	36
Transportation & warehousing	57	59	62	66	67	67	67	68	70	65
Information & cult industries	738	814	864	869	927	917	897	866	907	866
Fin, ins, real estate & mgt of comp	59	64	67	70	77	79	79	81	83	73
Professional, scientific & tech services	17	19	21	23	24	25	24	25	25	22
Admin & support, waste management	13	14	16	16	17	19	19	20	20	17
Educational services	1	1	1	1	1	1	1	1	1	1
Health care & social assistance	1	1	1	1	1	1	1	1	1	1
Arts, entertain & recreation	48	51	55	58	58	62	62	64	65	58
Accommodation & food services	7	7	7	7	7	8	7	7	7	7
Other services	7	7	8	8	9	9	9	9	10	9
Public admin, all levels of govt	3	3	4	4	4	4	4	4	4	4

Table 28: Direct, indirect and induced GDP impact, \$97 millions

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 97-05
	\$97 Million Impact									
All industries	1,697	1,861	1,849	1,725	1,730	1,784	1,761	1,729	1,701	1,760
Goods industries	356	364	320	266	243	239	228	211	172	266
Agri, forestry, fishing, & hunting	10	10	8	4	2	3	2	1	0	4
Mining & oil & gas extraction	8	4	-3	-10	-13	-12	-15	-17	-18	-8
Utilities	34	37	37	32	32	37	36	37	38	36
Construction	25	25	23	15	9	4	1	-2	-10	10
Manufacturing	278	287	255	225	212	207	203	192	163	225
Service industries	1,342	1,498	1,530	1,459	1,487	1,545	1,533	1,518	1,528	1,493
Trade	130	159	155	139	131	144	141	142	138	142
Transportation & warehousing	84	90	89	84	78	78	77	81	80	82
Information & cult industries	767	854	911	916	972	968	949	921	963	914
Fin, ins, real estate & mgt of comp	150	167	155	133	144	168	181	188	177	163
Professional, scientific & tech services	48	61	65	52	42	44	40	39	31	47
Admin & support, waste management	24	26	25	18	15	16	14	14	11	18
Educational services	8	9	9	7	6	7	8	9	9	8
Health care & social assistance	13	9	2	-1	-4	3	5	8	6	4
Arts, entertain & recreation	51	54	58	60	60	65	64	66	67	60
Accommodation & food services	43	43	36	25	17	19	20	18	15	26
Other services	23	25	25	26	28	34	35	35	33	29
Public admin, all levels of govt	2	1	1	-1	-2	-1	-1	-1	-2	0

Table 29: Direct and indirect GDP impact, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005	
	% Impact									
All industries	0.15	0.16	0.15	0.15	0.16	0.15	0.15	0.14	0.14	
Goods industries	0.09	0.09	0.08	0.08	0.09	0.09	0.09	0.09	0.09	
Agri, forestry, fishing, & hunting	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	
Mining & oil & gas extraction	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Utilities	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Construction	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Manufacturing	0.15	0.14	0.13	0.13	0.14	0.14	0.14	0.14	0.14	
Service industries	0.18	0.19	0.19	0.18	0.19	0.18	0.17	0.17	0.17	
Trade	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Transportation & warehousing	0.14	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.13	
Information & cult industries	2.71	2.80	2.63	2.45	2.42	2.25	2.16	2.06	2.08	
Fin, ins, real estate & mgt of comp	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
Professional, scientific & tech services	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	
Admin & support, waste management	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.09	0.08	
Educational services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Health care & social assistance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Arts, entertain & recreation	0.65	0.67	0.69	0.68	0.66	0.68	0.64	0.65	0.66	
Accommodation & food services	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Other services	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
Public admin, all levels of govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	

Table 30: Direct, indirect and induced GDP impact, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
All industries	0.21	0.22	0.21	0.18	0.18	0.18	0.17	0.17	0.16
Goods industries	0.13	0.13	0.11	0.09	0.08	0.08	0.07	0.06	0.05
Agri, forestry, fishing, & hunting	0.05	0.05	0.03	0.02	0.01	0.01	0.01	0.00	0.00
Mining & oil & gas extraction	0.02	0.01	-0.01	-0.03	-0.04	-0.03	-0.04	-0.04	-0.04
Utilities	0.13	0.14	0.14	0.12	0.13	0.14	0.14	0.14	0.14
Construction	0.06	0.06	0.05	0.03	0.02	0.01	0.00	0.00	-0.02
Manufacturing	0.20	0.19	0.16	0.13	0.12	0.12	0.12	0.11	0.09
Service industries	0.24	0.26	0.25	0.23	0.23	0.23	0.22	0.21	0.21
Trade	0.15	0.17	0.16	0.13	0.12	0.13	0.12	0.11	0.11
Transportation & warehousing	0.21	0.22	0.21	0.18	0.17	0.17	0.16	0.16	0.16
Information & cult industries	2.82	2.94	2.78	2.58	2.54	2.38	2.29	2.20	2.21
Fin, ins, real estate & mgt of comp	0.09	0.10	0.09	0.07	0.08	0.09	0.09	0.09	0.08
Professional, scientific & tech services	0.16	0.18	0.18	0.13	0.10	0.10	0.09	0.09	0.07
Admin & support, waste management	0.16	0.16	0.13	0.10	0.08	0.07	0.06	0.06	0.05
Educational services	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02
Health care & social assistance	0.03	0.02	0.00	0.00	-0.01	0.01	0.01	0.01	0.01
Arts, entertain & recreation	0.70	0.72	0.73	0.71	0.67	0.71	0.67	0.68	0.68
Accommodation & food services	0.22	0.21	0.17	0.11	0.08	0.08	0.09	0.08	0.07
Other services	0.12	0.13	0.12	0.12	0.12	0.14	0.14	0.14	0.13
Public admin, all levels of govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 31: Direct and indirect GDP impact for Ontario, \$97 million

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	\$97 Million Impact								
All industries	647	699	737	763	817	812	806	791	813
Goods industries	106	106	104	118	130	127	131	132	127
Agri, forestry, fishing, & hunting	1	1	1	1	1	1	1	1	1
Mining & oil & gas extraction	1	1	1	1	1	1	1	1	1
Utilities	5	5	5	5	5	5	5	5	5
Construction	1	2	2	2	2	3	2	2	2
Manufacturing	99	98	96	109	121	117	122	122	117
Service industries	541	593	633	645	687	686	675	660	686
Trade	13	14	16	16	17	17	18	18	19
Transportation & warehousing	24	24	25	27	28	27	27	27	27
Information & cult industries	436	480	511	516	552	547	536	518	542
Fin, ins, real estate & mgt of comp	27	29	31	33	36	37	38	39	40
Professional, scientific & tech services	8	9	10	11	12	12	12	12	12
Admin & support, waste management	8	8	9	10	10	11	11	11	12
Educational services	0	0	0	0	0	0	0	0	0
Health care & social assistance	0	0	0	0	0	0	0	0	0
Arts, entertain & recreation	20	21	22	23	23	25	25	26	27
Accommodation & food services	2	3	3	3	3	3	3	3	3
Other services	3	3	3	3	4	4	4	4	4
Public admin, all levels of govt	1	1	1	1	2	2	1	2	2

Table 32: Direct and indirect GDP impact for Ontario, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
All industries	0.20	0.20	0.20	0.19	0.20	0.20	0.19	0.18	0.18
Goods industries	0.10	0.10	0.09	0.09	0.11	0.10	0.10	0.10	0.09
Agri, forestry, fishing, & hunting	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Mining & oil & gas extraction	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.03
Utilities	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Construction	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Manufacturing	0.14	0.13	0.12	0.12	0.14	0.13	0.14	0.13	0.12
Service industries	0.24	0.25	0.25	0.24	0.25	0.24	0.23	0.22	0.22
Trade	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
Transportation & warehousing	0.17	0.17	0.16	0.17	0.18	0.17	0.17	0.16	0.15
Information & cult industries	3.96	4.12	3.62	3.30	3.29	3.09	2.97	2.84	2.75
Fin, ins, real estate & mgt of comp	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Professional, scientific & tech services	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05
Admin & support, waste management	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10
Educational services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Health care & social assistance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arts, entertain & recreation	0.63	0.66	0.65	0.63	0.63	0.65	0.66	0.65	0.70
Accommodation & food services	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Other services	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Public admin, all levels of govt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 33: Direct and indirect employment impact for Ontario, number of jobs

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	Level Impact								
All industries	6,130	6,810	7,080	7,480	7,790	7,900	7,740	7,690	7,910
Agri, forestry, fishing, & hunting	20	0	10	10	10	0	10	10	10
Mining & oil & gas extraction	10	10	10	10	10	10	10	10	10
Utilities	20	20	20	20	20	20	20	20	20
Construction	20	-20	60	60	60	150	20	20	20
Manufacturing	1,160	1,160	1,020	1,150	1,280	1,280	1,200	1,190	1,070
Service industries	4,870	5,670	6,040	6,150	6,340	6,500	6,470	6,430	6,770
Trade	100	140	80	120	120	120	110	100	100
Transportation & warehousing	340	490	430	420	510	430	460	450	450
Information & cult industries	3,750	4,360	4,660	4,870	4,970	5,060	4,950	4,940	5,210
Fin, ins, real estate & mgt of comp	140	10	20	60	60	20	70	60	70
Professional, scientific & tech services	140	150	170	90	140	140	140	140	140
Admin & support, waste management	80	90	50	60	20	60	60	50	60
Educational services	-40	-40	40	-80	0	40	0	0	0
Health care & social assistance	-20	-20	10	50	-60	10	10	10	10
Arts, entertain & recreation	340	450	480	510	530	580	620	610	680
Accommodation & food services	0	40	80	40	40	40	40	40	40
Other services	10	10	20	20	20	10	10	10	10
Public admin, all levels of govt	30	-10	10	0	10	-10	10	10	10

Table 34: Direct and indirect employment impact for Ontario, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
All industries	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12
Agri, forestry, fishing, & hunting	0.02	0.00	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Mining & oil & gas extraction	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.02
Utilities	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.04
Construction	0.01	-0.01	0.02	0.02	0.02	0.04	0.01	0.01	0.01
Manufacturing	0.12	0.12	0.10	0.11	0.12	0.12	0.11	0.11	0.10
Service industries	0.13	0.14	0.15	0.15	0.15	0.15	0.14	0.14	0.14
Trade	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Transportation & warehousing	0.14	0.19	0.17	0.15	0.19	0.15	0.16	0.15	0.15
Information & cult industries	2.59	3.01	3.11	3.08	2.96	3.39	3.36	3.31	3.25
Fin, ins, real estate & mgt of comp	0.04	0.00	0.00	0.02	0.02	0.01	0.02	0.02	0.01
Professional, scientific & tech services	0.04	0.04	0.04	0.02	0.03	0.03	0.03	0.03	0.03
Admin & support, waste management	0.04	0.04	0.02	0.02	0.01	0.03	0.02	0.02	0.02
Educational services	-0.01	-0.01	0.01	-0.02	0.00	0.01	0.00	0.00	0.00
Health care & social assistance	-0.01	0.00	0.00	0.01	-0.01	0.00	0.00	0.00	0.00
Arts, entertain & recreation	0.34	0.48	0.47	0.43	0.41	0.41	0.45	0.41	0.51
Accommodation & food services	0.00	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Other services	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Public admin, all levels of govt	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 35: Direct, indirect and induced GDP impact for Ontario, \$97 millions

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	\$97 Million Impact								
All industries	907	1,005	1,016	958	981	1,006	992	960	938
Goods industries	154	160	140	122	118	118	112	102	75
Agri, forestry, fishing, & hunting	2	2	2	1	1	1	0	0	0
Mining & oil & gas extraction	0	-1	-1	-2	-2	-2	-2	-2	-2
Utilities	15	16	16	13	14	16	15	14	14
Construction	12	11	10	8	5	3	1	-3	-5
Manufacturing	125	132	114	102	101	101	98	92	68
Service industries	752	845	876	836	863	889	880	858	863
Trade	63	78	77	68	65	71	68	66	63
Transportation & warehousing	36	38	38	35	34	34	32	33	32
Information & cult industries	463	518	558	561	592	591	584	567	590
Fin, ins, real estate & mgt of comp	84	94	88	75	82	94	99	99	94
Professional, scientific & tech services	22	28	31	25	21	21	20	19	15
Admin & support, waste management	15	17	16	13	12	12	11	11	9
Educational services	7	8	7	6	6	6	6	6	6
Health care & social assistance	10	9	6	3	3	6	6	6	5
Arts, entertain & recreation	22	23	24	24	24	26	27	27	28
Accommodation & food services	17	18	16	12	9	10	9	8	7
Other services	10	12	12	12	13	15	15	15	14
Public admin, all levels of govt	3	3	3	2	2	2	2	1	1

Table 36: Direct, indirect and induced GDP impact for Ontario, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
All industries	0.28	0.29	0.27	0.24	0.25	0.24	0.23	0.22	0.21
Goods industries	0.15	0.15	0.12	0.10	0.10	0.09	0.09	0.08	0.05
Agri, forestry, fishing, & hunting	0.05	0.05	0.04	0.02	0.01	0.01	0.01	0.00	0.00
Mining & oil & gas extraction	-0.01	-0.04	-0.05	-0.06	-0.07	-0.07	-0.07	-0.08	-0.08
Utilities	0.15	0.17	0.16	0.14	0.14	0.16	0.15	0.14	0.13
Construction	0.08	0.07	0.06	0.04	0.03	0.01	0.00	-0.01	-0.02
Manufacturing	0.18	0.17	0.14	0.11	0.12	0.11	0.11	0.10	0.07
Service industries	0.33	0.36	0.34	0.31	0.31	0.31	0.30	0.28	0.27
Trade	0.17	0.20	0.18	0.15	0.14	0.14	0.13	0.12	0.11
Transportation & warehousing	0.26	0.27	0.24	0.22	0.22	0.21	0.20	0.19	0.18
Information & cult industries	4.23	4.46	3.96	3.60	3.54	3.34	3.24	3.11	3.00
Fin, ins, real estate & mgt of comp	0.12	0.13	0.11	0.09	0.10	0.10	0.10	0.10	0.09
Professional, scientific & tech services	0.16	0.18	0.18	0.13	0.10	0.10	0.09	0.09	0.07
Admin & support, waste management	0.21	0.21	0.18	0.14	0.12	0.12	0.11	0.10	0.08
Educational services	0.04	0.04	0.04	0.03	0.03	0.04	0.04	0.03	0.03
Health care & social assistance	0.05	0.04	0.03	0.02	0.01	0.03	0.03	0.03	0.02
Arts, entertain & recreation	0.69	0.73	0.71	0.67	0.66	0.69	0.70	0.69	0.73
Accommodation & food services	0.25	0.24	0.19	0.13	0.10	0.11	0.11	0.10	0.08
Other services	0.14	0.15	0.14	0.14	0.14	0.16	0.16	0.15	0.14
Public admin, all levels of govt	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01

Table 37: Direct, indirect and induced employment effects for Ontario, number of jobs

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	Level Impact								
All industries	9,120	9,890	10,030	9,790	9,490	9,290	9,230	8,960	8,690
Agri, forestry, fishing, & hunting	10	20	10	10	10	0	0	0	0
Mining & oil & gas extraction	0	-10	-10	-10	-20	-20	-10	-20	-20
Utilities	60	70	70	60	70	80	80	80	70
Construction	210	200	190	170	130	80	50	0	-10
Manufacturing	1,540	1,460	1,280	1,100	1,050	1,010	890	820	540
Service industries	7,300	8,160	8,480	8,450	8,250	8,130	8,220	8,070	8,120
Trade	550	620	680	610	580	540	530	450	420
Transportation & warehousing	680	720	720	680	650	640	620	610	600
Information & cult industries	3,990	4,480	4,850	5,160	5,140	5,110	5,220	5,270	5,480
Fin, ins, real estate & mgt of comp	340	370	430	420	380	350	350	320	300
Professional, scientific & tech services	240	310	370	350	340	350	340	320	280
Admin & support, waste management	110	130	130	130	150	150	150	140	130
Educational services	230	290	180	100	60	20	0	-30	-50
Health care & social assistance	240	200	110	50	50	120	130	140	140
Arts, entertain & recreation	380	460	440	520	550	520	590	610	700
Accommodation & food services	300	320	300	230	200	200	200	190	180
Other services	180	200	200	160	160	160	140	120	100
Public admin, all levels of govt	60	60	50	30	0	-30	-40	-70	-150

Table 38: Direct, indirect and induced employment effects for Ontario, per cent

	1997	1998	1999	2000	2001	2002	2003	2004	2005
	% Impact								
All industries	0.17	0.18	0.18	0.17	0.16	0.15	0.15	0.14	0.14
Agri, forestry, fishing, & hunting	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Mining & oil & gas extraction	-0.01	-0.03	-0.04	-0.06	-0.06	-0.07	-0.07	-0.08	-0.07
Utilities	0.13	0.15	0.15	0.14	0.14	0.16	0.15	0.14	0.15
Construction	0.07	0.07	0.07	0.05	0.04	0.02	0.01	0.00	0.00
Manufacturing	0.17	0.15	0.12	0.10	0.10	0.09	0.08	0.08	0.05
Service industries	0.19	0.21	0.21	0.20	0.19	0.18	0.18	0.17	0.17
Trade	0.07	0.08	0.08	0.07	0.06	0.06	0.06	0.05	0.04
Transportation & warehousing	0.28	0.28	0.28	0.25	0.24	0.23	0.21	0.21	0.21
Information & cult industries	2.76	3.10	3.25	3.27	3.07	3.43	3.56	3.55	3.43
Fin, ins, real estate & mgt of comp	0.09	0.10	0.12	0.11	0.10	0.09	0.08	0.07	0.07
Professional, scientific & tech services	0.07	0.08	0.10	0.09	0.08	0.08	0.08	0.07	0.06
Admin & support, waste management	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.05	0.05
Educational services	0.07	0.08	0.05	0.03	0.02	0.01	0.00	-0.01	-0.01
Health care & social assistance	0.05	0.04	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Arts, entertain & recreation	0.38	0.49	0.43	0.44	0.43	0.36	0.43	0.41	0.52
Accommodation & food services	0.10	0.10	0.09	0.07	0.06	0.06	0.05	0.05	0.05
Other services	0.07	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.04
Public admin, all levels of govt	0.02	0.02	0.02	0.01	0.00	-0.01	-0.01	-0.02	-0.05