How the Appreciation of the Canadian Dollar Has Affected Canadian Firms: Evidence from the Bank of Canada *Business Outlook Survey*

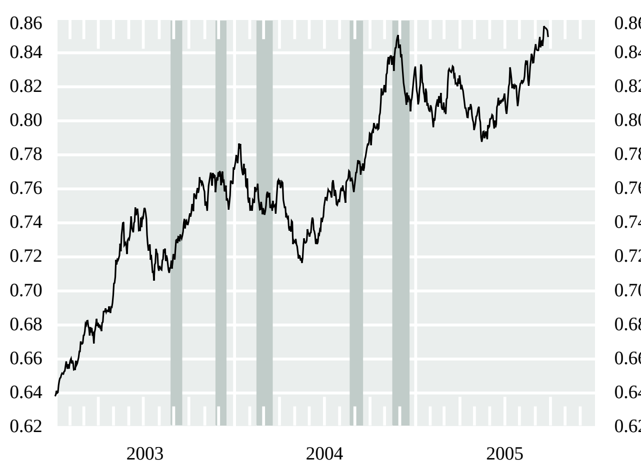
Jean Mair, Calgary Regional Office

- *About one-half of Canadian firms surveyed by the Bank of Canada's regional offices between September 2003 and December 2004 reported being adversely affected by the appreciation of the Canadian dollar. Roughly one-quarter reported a favourable impact, and the remainder said that there was no effect.*
- *The firms most adversely affected tended to be in the manufacturing sector and in primary industries. Those that benefited were largely in retail and wholesale trade and in transportation. Firms unaffected by the appreciation were predominantly in the construction, finance, insurance and real estate, and personal services sectors.*
- *The adverse impact of the appreciation stemmed largely from lower profit margins on foreign sales, since many goods are priced in U.S. dollars. In contrast, favourably affected firms generally benefited from lower input costs.*
- *Firms undertook a diverse set of actions in response to the appreciation, including measures to cut costs, increase productivity, move certain activities abroad, and reorient their activities towards more profitable products and markets. However, fully one-third of companies that were adversely affected reported no plans to respond. Typically, such firms were affected only moderately by the appreciation or were otherwise enjoying strong demand for their products.*

As part of their *Business Outlook Survey*,[1] the regional offices of the Bank of Canada asked questions to gauge the impact of the appreciation of the Canadian dollar. Asking firms how they are responding to exchange rate movements can complement empirical analysis, permitting a richer understanding of the way firms adjust to exchange rate shocks. These questions were included in quarterly surveys conducted between autumn 2003 and winter 2004–2005, except summer 2004 (Chart 1). The results

Chart 1

Movements in the Exchange Rate during Survey Periods*



* The bars denote the periods during which the *Business Outlook Survey* was conducted.

1. The *Business Outlook Survey* summarizes interviews conducted by the Bank's regional offices with the senior management of 100 firms selected in accordance with the composition of Canada's gross domestic product. The survey's purpose is to gather the perspectives of these businesses on topics of interest to the Bank of Canada (such as demand and capacity pressures) and their forward-looking views on economic activity. Details of the survey and its content are discussed in Martin (2004).

of the last four surveys were published by the Bank as a supplement to the *Business Outlook Survey*.

The purpose of this article is to assess the information compiled from the various surveys. Combining the results of all of the surveys produces a larger sample, which generates more confidence than was possible with the relatively small individual surveys. Moreover, although the questions changed somewhat from survey to survey, there is enough similarity in the questions to construct a picture of how firms responded to the appreciation over time. The small size of the individual samples, the changing group of companies in the samples, and the renewed appreciation of the Canadian dollar in late 2003 and in 2004, however, suggest a need for caution in interpreting the results.

The Survey

The questions concerning the effect of the appreciation of the Canadian dollar were asked in face-to-face discussions between Bank of Canada economists and senior company officials.[2] While the questions varied somewhat from survey to survey, they typically requested information about: (i) whether the firm was affected by the appreciation; (ii) whether the effect was favourable or adverse and whether it was significant or moderate; (iii) what the main effects of the appreciation on that firm were; and (iv) what actions the firm had taken in response to the appreciation. In the discussions, Bank interviewers sought to understand the nature of the effect and the firm's response. The interviewers then put the responses in various categories so that they could be summarized numerically. The written reports on these surveys drew on this numerical analysis, as well as on anecdotal information collected from the senior officials of the firms surveyed.

Firms affected by the appreciation

About half of the firms surveyed indicated that they were adversely affected by the appreciation of the currency (Table 1). These firms were evenly split between those that reported a significant effect and those that described it as moderate. Adversely affected firms tended to be clustered in sectors with a high exposure to trade (i.e., primary industries and manufacturing). In these two sectors, about 80 per cent of firms were adversely affected by the appreciation in the exchange rate. Approximately one-quarter of the firms surveyed, generally those from the service sector, were favourably affected by the appreciation. The retail and wholesale trade sectors benefited the most, with over half of the firms surveyed registering a favourable effect. Firms that were not affected by the appreciation were mainly in sectors focused on the domestic market, such as construction, financial institutions, and real estate.

2. For the format of these discussions, see Martin (2004, 5–6).

Table 1

Sectoral Reports of the Effects of the Canadian-Dollar Appreciation

Per cent of firms surveyed in that sector

Firms, by sector*	Adverse effect		No effect	Favourable effect		Balance of opinion**
	Significant	Moderate		Moderate	Significant	
Primary (50)	39	39	12	8	2	-68
Manufacturing (149)	51	26	6	11	5	-61
Construction (28)	0	18	71	11	0	-7
Utilities (16)	0	19	44	13	25	19
Trade: Retail and wholesale (69)	6	12	29	43	10	35
Financial institutions and real estate (61)	7	25	51	13	5	-14
Transportation (30)	13	17	27	23	20	13
Communications (17)	18	12	41	29	0	-1
Business services (47)	19	23	43	15	0	-27
Personal services (39)	0	21	49	26	5	10
Total (504)	24	23	29	18	6	-23

* Includes firms surveyed in autumn 2003, winter 2003-2004, spring and autumn 2004, and winter 2004-2005. Bracketed figures indicate the number of companies in that sector surveyed.

** The balance of opinion is the difference between the percentage of firms that reported being favourably affected by the appreciation of the Canadian dollar and the percentage that reported being adversely affected.

Adversely Affected Firms

Effects of the appreciation

The majority of adversely affected firms had significant export sales, often priced in U.S. dollars, and experienced a compression in their margins as the prices of their exports dropped in Canadian-dollar terms. Often, these firms were unable to raise their U.S.-dollar prices because of the competitive nature of their markets (many were competing with U.S. firms) or because of long-term contracts that fixed the prices of their exports in U.S. dollars.

Many primary producers, whether selling in Canada or abroad, reported being adversely affected by the appreciation of the Canadian dollar. The prices of their products are tied to the U.S.-dollar price, regardless of where the products are sold. Thus, the margins of these firms were lower than they would have been in the absence of an appreciation. Many of these firms,

Table 2

Main Effects of the Canadian-Dollar Appreciation Reported by Firms

Effect*	Adversely affected firms (%)
Lower profit margins from foreign sales	77
Lower export volumes	24
Lower margins on domestic sales	22
Lower domestic volumes	16
Other	12

* Aggregate results from surveys conducted in winter 2003–2004, spring and autumn 2004, and winter 2004–2005

however, benefited from the substantial increases in commodity prices that coincided with the dollar's appreciation (Table 2).

The majority of adversely affected firms . . . experienced a compression in their margins as the prices of their exports dropped in Canadian-dollar terms.

The severity of the effect on margins for both exporters and commodity producers depended not only on the extent to which their sales were priced in U.S. dollars, but also on the import intensity of their products. Firms whose products were made with a large proportion of imported inputs experienced significant reductions in their costs and thus were better placed to withstand the effects of the appreciation. In the autumn 2003 survey, some 40 per cent of adversely affected firms said that the effects of the appreciation were mitigated by lower input costs.

A limited number of adversely affected firms (about one-quarter) experienced a reduction in export volumes following the appreciation. Companies that price on a cost-plus basis lost contracts that they might otherwise have expected to win. Some firms found it difficult to price to market and thus were not able to lower their Canadian-dollar prices for foreign customers (e.g., firms whose clients were tourists or cross-border shoppers). Other firms reported declines in export volumes only with a delay—after they started to increase their U.S.-dollar prices.

Some adversely affected firms found it more difficult to sell in Canada—either because of enhanced competition from U.S. companies or because their customers were exporters suffering from the appreciation. This effect seemed to become more significant as the appreciation persisted.

Another group of firms was adversely affected because they had assets or operations denominated in U.S. dollars. Although the operations of subsidiaries abroad were normally little affected by the appreciation, profits from these operations were lower in Canadian-dollar terms than they would have been in the absence of the appreciation, reducing the overall profits of the firms. Similarly, firms with U.S.-dollar assets reported a reduction in their Canadian-dollar value.

It should be noted that the appreciation of the Canadian dollar coincided with several other developments that also affected many Canadian firms, in particular, increased competition from Asian companies in many sectors and a significant increase in the prices of commodities and steel. Firms often had difficulty disentangling the effect of the appreciation from the impact of these other factors, especially as the appreciation persisted.

How firms adjusted

Firms took various measures to adjust to the appreciation, including changing their hedging behaviour, cutting costs, increasing U.S.-dollar prices, and reorienting their production and sales strategies (Table 3).

Table 3

Main Responses of Firms Adversely Affected by the Appreciation of the Canadian Dollar

As a per cent of all adversely affected firms

Response*	Autumn 2003	Winter 2003–2004	Spring 2004	Autumn 2004	Winter 2004–2005
Raise prices	7	19	20	13	21
Lower labour costs	21	30	24	30	18
Move inputs/processing abroad	n.a.	13	8	20	25
Other means to improve productivity/reduce costs	12	36	39	24	38
Reduce capital spending	n.a.	15	18	7	11
Increase hedging	14	17	n.a.	n.a.	16
Other**	48	17	29	26	32
None	38	32	31	39	41

* Responses do not sum to 100 because firms may have taken several actions.
** This category included measures to introduce new products, reorient sales strategies, and change the currency of denomination of their prices. At times, it also included reductions in capital spending, moving inputs abroad, and changes in hedging practices.

Many firms had financial or natural hedges in place before the dollar began to appreciate, thus limiting the early effects of the appreciation. Several firms initially responded by increasing their hedging in an effort to lock in more of their revenues and profits in case the movement in the exchange rate persisted. Some companies also increased hedging to protect themselves against the greater day-to-day volatility of the exchange rate that accompanied the appreciation. By the spring 2004 survey, close to 60 per cent of adversely affected companies reported using some kind of financial instrument to help them hedge their currency exposure.

Shortly after the appreciation started, firms began to explore ways to cut costs, examining, in particular, production processes, staffing, and the sources of their inputs. The earliest measures included returning to in-house production some processes that had previously been outsourced, cutting staff levels, restraining wage increases, eliminating waste, cutting back on energy use, and reducing expenditures on overhead and travel (particularly for sales trips to the United States). By the time of the autumn 2003 survey, some firms were also closing less productive factories and consolidating their operations at more productive sites. Others were pressuring suppliers for rebates or cheaper prices and were exploring the possibility of obtaining cheaper inputs from abroad. Firms also reported trying to streamline production processes, and in some cases, were starting to make investments that would permit them to produce more efficiently. Several of the severely affected firms, however, were forced to reduce their investment expenditures, sometimes to very low levels, and to delay major projects because of worsening prospects for revenues from them, or because of low cash flow and reduced access to other sources of finance. Efforts to cut costs and increase efficiency became more widespread by the time of the winter 2003–2004 survey, partly reflecting the renewed appreciation of the Canadian dollar late in the year.

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As the appreciation persisted through 2004, firms looked for additional cost-cutting measures. Some companies increased production at existing plants abroad, particularly in the United States. This did not necessarily mean that Canadian production declined: some firms simply decided to meet additional demand from U.S. plants instead of from Canada. Some opened new facilities or acquired existing companies in the United States to serve that market. Several firms began to examine the possibility of taking advantage of emerging Asian suppliers that could supply inputs at a lower cost, while others wanted to have at least some of their manufacturing done there. Often, firms moved their less complex production processes abroad, while retaining the more complicated processing, design, and sales functions in Canada. (In some cases, firms were only speeding up a process that was already under way because of increased competition from Asian suppliers.) One-quarter of the adversely affected firms and almost half of the manufacturers questioned in the winter 2004–2005 survey had increased the import content of their inputs or were doing more processing outside of Canada. Buying more inputs or finished goods abroad not only reduced costs, but made those companies less vulnerable to exchange rate movements by creating natural hedges. In fact, changes in sourcing converted more than one company surveyed from one that suffered from the appreciation into one that would benefit from it by turning the company from a net exporter into a net importer.

An increasing number of firms also considered investing in machinery and equipment that would enhance productivity. In both the autumn 2004 and winter 2004–2005 surveys, about 10 per cent of the firms surveyed—all manufacturers—chose this response.

Another major type of response concerned pricing behaviour. When the dollar started to appreciate, some firms, particularly those with long-term contracts, converted the pricing of their contracts from U.S. dollars to Canadian dollars. By the second half of 2003, as the appreciation continued, many firms that had continued to denominate their prices in U.S. dollars started to consider increasing the prices of their exports. Some firms made modest changes to their product, adding features or improving service, so that they could increase prices. Many firms, however, raised prices without changing the product, with the knowledge that this might cause export volumes to be lower than they might otherwise have been. This group included several firms with longer-term contracts that had expired. A significant number of firms, however, were unable to increase their prices in U.S.-dollar terms, or delayed doing so until 2004 because of strong competition or continuing contracts.

Another course of action that firms took in response to the appreciation was to reorient their sales strategies. Companies withdrew from unprofitable product lines, focusing their resources on those that were likely to remain profitable. Sometimes this meant that firms ceased production of relatively low-priced goods and focused on more upscale products. Firms also speeded up the planned introduction of new products so that these goods could be sold at a higher margin than their traditional products. Several companies reported that they had begun to scrutinize their customer lists to determine whether revenues from some of these customers were sufficient to cover the costs of providing goods and services to them. Firms also reoriented sales efforts away from the United States towards Canada and other markets, such as Europe, where the movement in the bilateral exchange rate against the Canadian dollar had not been as large as in the US$/Can$ exchange rate. Firms recognized, however, that changes in sales efforts could take a long time to have an effect, especially if the company had to build a sales network.

Slightly more than one-third of adversely affected firms decided to make no changes in their operations in response to the appreciation.

The proportion of adversely affected firms taking actions in response to the appreciation varied considerably by sector. Some 80 per cent of adversely affected companies in the manufacturing sector, and close to 60 per cent of such companies in the resource and business service sectors, changed their operations in some way. But the proportion of firms reacting in all of the other sectors taken together was much lower—less than 40 per cent.

In total, slightly more than one-third of adversely affected firms decided to make no changes in their operations in response to the appreciation.[3] There were several reasons why firms did not respond. Many were only "moderately" affected; for example, those seeing reduced profits because of the impact of currency translation or experiencing small second-round effects. Other firms had a strong position despite being significantly affected by the appreciation: demand for their products was buoyant, they still had a cost advantage vis-à-vis competitors, and profits were robust. This group included many resource companies that were seeing lower revenues than they might have otherwise received because of the appreciation but whose revenues and profits were benefiting from the commodity boom. It also included firms that were experiencing strong demand for their products in the United States and abroad; for example, those selling technologically advanced goods for which few substitutes were available. Other firms did not respond explicitly to the appreciation, but had ongoing programs to reduce costs and increase productivity, or were adopting measures in response to other shocks (e.g., the emergence of Asian manufacturers as strong competitors) that helped to mitigate the effect of the appreciation.

Some companies in industries characterized by very large-scale investments did not react to the appreciation during the survey period. However, a number said that a continued high level of the Canadian dollar could have an impact on their decisions on where to place new large projects in the longer run.

In summary, as the appreciation began, many firms took steps to mitigate its impact through hedging activities and cost-cutting measures. As it continued, they began to review their operations thoroughly with an eye towards further reducing costs and increasing productivity. They also began to raise prices. After a year had passed, firms were taking more profound steps, including obtaining more inputs abroad, relocating some production processes to other countries, and reorienting their sales strategies.

Favourably Affected Firms

As noted above, about one-quarter of all the companies surveyed indicated that they had benefited from the appreciation. The proportion of firms favourably affected was highest in the wholesale and retail trade sectors. The favourably affected group also included transportation and utility companies, as well as some manufacturers and service companies selling primarily to the domestic market.

The main benefit from the appreciation was lower prices for inputs whose Canadian-dollar price was favourably affected by the appreciation. Firms benefiting from cheaper inputs included those that were importing significant quantities of inputs, as well as heavy users of commodities priced in U.S. dollars (for example, utilities and transportation companies). Many firms also benefited from a decline in the cost of

3. This result seems to be broadly consistent with much larger surveys conducted by the Export Development Corporation. See Canada (various issues).

Table 4

Main Effects Reported by Firms Favourably Affected by the Appreciation of the Canadian Dollar

Effect*	Favourably affected firms (%)
Lower input costs	80
Cheaper machinery and equipment	28
Lower Canadian-dollar value of liabilities	11
Other	11

* Aggregate results from surveys conducted in winter 2003-2004, spring and autumn 2004, and winter 2004-2005

imported machinery and equipment (particularly in the transportation sector), or from a reduction in the Canadian-dollar value of their U.S.-dollar liabilities and in the cost of servicing these debts (Table 4).

Firms experiencing lower input costs were able to earn higher Canadian-dollar profits as long as the benefit was not offset by reductions in their selling prices. Surveys conducted in late 2003 and throughout 2004 indicated that slightly less than half of these firms had reduced the prices for the goods they were selling in Canada. Some of these firms, however, had not reduced their prices fully in line with the appreciation. Indeed, about three-quarters of these firms reported increasing margins. Many of the firms not adjusting their sales prices, or not adjusting them completely, explained that they had not completely passed through the previous depreciation of the Canadian dollar, and had suffered some erosion of profit margins. Now that the dollar was appreciating, they were taking advantage of it to restore margins.

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Those firms using imported inputs that were able to maintain their domestic prices or reduce them only marginally, thereby benefiting from the appreciation, included manufacturers that were producing differentiated goods (because of a well-known brand name, for example), had European competitors in the Canadian market, or enjoyed some degree of protection in the Canadian market. Some retailers, particularly at the high end, were also able to maintain their Canadian-dollar prices unchanged. Other retailers and wholesalers, however, were forced by strong competition to pass through virtually all of the cost savings realized from the lower prices of imported goods.

Many of the favourably affected firms, especially retailers, moved very quickly to increase their imports of inputs following the appreciation. This reversed the shift to inputs from Canadian suppliers that had occurred during the depreciation of the Canadian dollar (Amirault, Kwan, and Wilkinson, forthcoming).

Very few favourably affected firms reported taking actions in response to the appreciation other than reducing their selling prices or increasing imports of inputs. Several said that they would increase the size of their firm. A few firms were increasing their investments in machinery and equipment, largely because of the appreciation.

Approximately 40 per cent of all favourably affected firms did not change their operations or pricing as a result of the appreciation. As noted above, some of these companies were using the opportunity it presented to restore profit margins eroded by the earlier depreciation of the dollar. For others, the benefit was relatively small or was offset by other factors, for example, the increase in the prices of steel and commodities.

How Lower Prices for Capital Goods Affected Investment Decisions

In the autumn 2004 and winter 2004–2005 surveys, all firms surveyed were asked how their investment decisions had been affected by the reduction in the prices of imported capital goods that resulted from the appreciation. Only a very few reported that it had a major impact on their decisions. Most firms said that investment decisions were taken for other reasons and that any reduction in the price of equipment because of the appreciation had had no impact on their investment decisions, or had only a marginal effect. A few firms reported that the appreciation had affected the timing of purchases. Others said that it had influenced decisions on where to purchase capital goods: they were now more likely to buy from U.S. suppliers. Several firms noted that, despite the appreciation of the Canadian dollar vis-à-vis the U.S. dollar, they were not finding cheaper capital equipment, either because they bought such equipment in Canada or Europe or because the effect of the appreciation had been more than offset by the increase in the price of steel.

Conclusions

The *Business Outlook Survey* provides a rich perspective through which to analyze the adjustment of firms to movements in the exchange rate. It suggests that adversely affected firms initially took steps to mitigate the impact of such movements through hedging activities and some cost-cutting before moving on to measures that require significant changes to their operations. However, many firms chose to do nothing because demand for their products remained strong despite the appreciation. Many favourably affected firms reduced their selling prices, reflecting lower input costs, and increased their imports; however, a significant proportion of favourably affected firms did not make significant changes in their operations in response to the appreciation.

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