Counting the Cost

Impact of the Rising Loonie on Western Commodity Exports

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BUILDING THE NEW WEST

This report is part of the Canada West Foundation's **Building the New West Project,** a multi-year research and public consultation initiative focused on the strategic positioning of western Canada within the global economy.

Five key priorities emerged from an extensive research and consultation process and provide a framework for the Building the New West Project:

- the West must create the tools to attract, retain and build HUMAN CAPITAL;
- the West must continue ECONOMIC DIVERSIFICATION;
- the West must strengthen its TRANSPORTATION INFRASTRUCTURE;
- the West must promote the global competitiveness of its MAJOR CITIES; and
- the West must develop new ways of facilitating REGIONAL COORDINATION.

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Executive Summary

The strong rise in the Canadian dollar vis-à-vis the US dollar since the beginning of 2002 has created a serious challenge for many businesses that rely on international exports. Because the Canadian economy is so dependent on exports, the soaring loonie has led most economic forecasters to downward revisions for real GDP growth in 2004.

The ratio of exports-to-GDP in western Canada is close to the national average of 30 percent. But compared to the rest of Canada, the West is much more dependent on the exports of natural resource commodities—forest products, energy, base metals and agricultural products. These natural resource exports are priced and sold in U.S. dollars; in the global market, Canada is a price-taker for these commodities—that is, we can sell as much as we produce without affecting the world price.

Because of the rising loonie, export revenue for natural resources have been sharply lower throughout 2002 and 2003. Western Canada's commodity producers have foregone export revenues of nearly $10.5 billion during this period due solely to the appreciation of the Canadian dollar. In other words, if the loonie had remained at its all-time low reached in January 2002, export revenue in the West would have been greater by $10.5 billion—roughly 1.5% of western Canada's GDP—over the past two years. This does not count revenue foregone in other sectors such as manufacturing or services, or the partially offsetting benefits of less expensive imports of capital machinery, etc.

Of the western provinces, Alberta has taken the largest hit due to its volume of oil and natural gas exports. Foregone commodity export revenue in Alberta totaled nearly $6.7 billion during 2002-03. British Columbia's commodity exports were lower by almost $2.3 billion, led by losses in the forestry sector. Saskatchewan's agricultural economy suffered lower export revenues by $968 million. Manitoba—the western province least reliant on natural resource exports—experienced lower revenues by $573 million.

Introduction

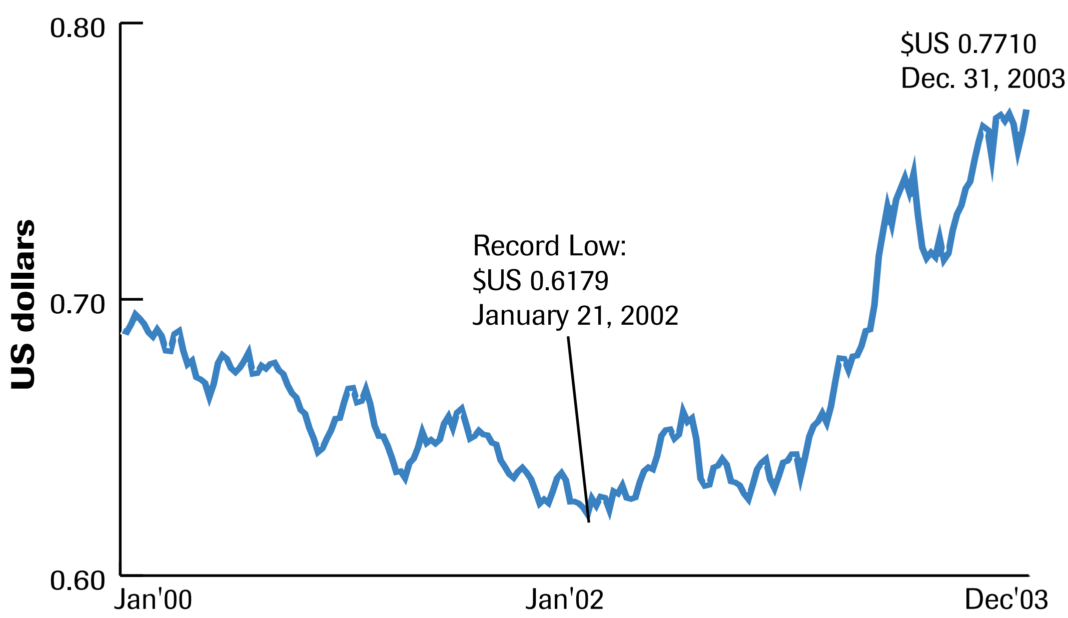
One of the most dramatic economic events in Canada over the past few years has been the rapid rise of the value of the Canadian dollar relative to the US dollar. This appreciation had been anticipated for years, though its speed and strength took most observers by surprise.

During the late 1990s, economic forecasters were constant in their prediction of a rise in the value of the loonie vis-à-vis the US greenback—only to be embarrassed by the loonie falling to new record lows. Economists kept insisting that all of the fundamentals of the Canadian economy were in place to prompt an appreciating currency: government budgets were well under control, Canada's economy was outpacing the US and other G7 nations, and resource prices were generally firm. The downward drifting loonie confounded the pundits.

After hitting a record low of $US 0.6179 on January 21, 2002, the Canadian dollar finally reversed its long descent and started to appreciate. But in spite of all the positive fundamentals in the Canadian economy at the time, the event was really a US dollar story. The combined effects of terrorist fears post-September 11, a worrying recession in the US, and America's burgeoning current account and budgetary deficits paved the way for the sharp depreciation of the US dollar throughout 2002 and 2003 against most world currencies.

Whatever the reasons—Canadian economic fundamentals, US trade and budget deficits, or a likely combination of many factors—the Canadian dollar surprised everyone with a rapid ascent from $US 0.6179 to over $US 0.77 between January 2002 and December 2003. The loonie had appreciated by nearly 25 per cent vis-à-vis the US greenback.

Figure 1:
US$-C$ Exchange Rate, January 2000 to December 2003

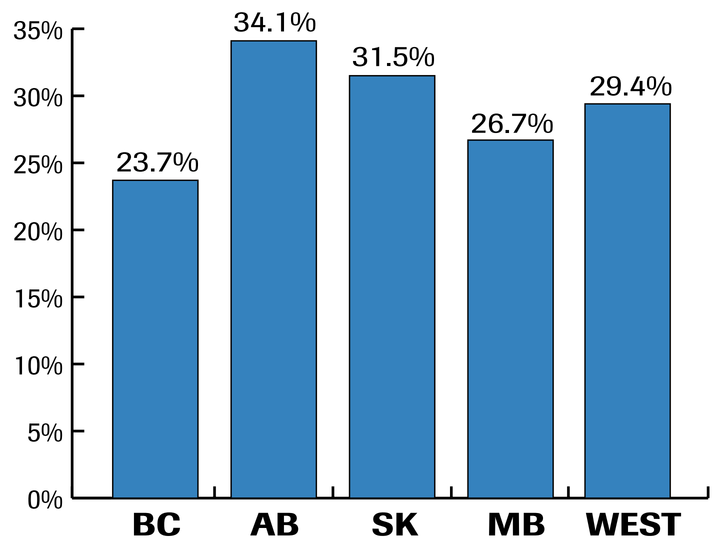


SOURCE: Bank of Canada.

The effect of the rising loonie has been a major concern for Canadian economic forecasters. Canada is clearly a nation very dependent on exports. The ratio of exports-to-GDP in western Canada is now nearly 30 per cent, spurred on by NAFTA as well as the lower-valued loonie of the 1990s. According to one estimate, Canada's exporters employ over two million Canadians directly and another three million indirectly; one in every three jobs in Canada depends on exports.[1] Simply put, what is harmful for exporters is harmful for the entire economy.

One recent report suggests that the effects of the stronger Canadian dollar will shave approximately two percentage points off real GDP growth in 2004.[2] The Bank of Canada in its most recent outlook has lowered its growth forecast for the Canadian economy in 2004, pointing to (among other things) the effects of the appreciating loonie.[3]

Figure 2: International Exports as % of GDP (2002-2003)



SOURCE: Statistics Canada and Conference Board of Canada (GDP at Basic Prices).

A study by BMO Financial Group identified several sectors of the Canadian economy that are particularly vulnerable to the rapid rise in the loonie. Among the sectors with "high" or "very high" sensitivity to the currency's appreciation are grains, mining, petroleum and natural gas, sawmills, other wood products, and pulp and paper—all sectors largely based in western Canada.[4]

Specific Impact on Natural Resource Exports

This report will examine the direct dollar-value impact that the rising Canadian currency has had on natural resource exporters in western Canada in 2002 and 2003. The specific commodities examined are:

- Forest products: lumber, pulp, newsprint, veneer/plywood, and panel board/ oriented strand board (OSB);
- Energy: crude oil, natural gas, electricity;
- Agriculture: wheat, barley, oats, canola, hogs and pork products[5]; and
- Base and precious metals: nickel, copper, zinc, aluminum, silver, gold and precious metals.

1. Canadian Manufacturers and Exporters website (www.cme-mec.ca). Obtained February 25, 2004.
2. "Loonie Tunes – Understanding the Rally in the Canadian Dollar and its Consequences." *TD Economics.* February 10, 2004.
3. See "Monetary Policy Report Update." Bank of Canada. January 2004.
4. Tim O'Neill. "Rapid Rise in C$ Raises Warning Flags." *Economic Analysis.* June 6, 2003. BMO Financial Group.
5. An obvious omission from this list is cattle and beef. For reasons related to the BSE situation and the halting of trade between Canada and the US in 2003, it would not be useful or appropriate to include cattle and beef export data.

The scope of commodities is limited to these products because they are priced and sold in global markets in US dollars, and Canada is largely a price taker for these commodities. In other words, Canada can sell as much as it produces of these products without affecting world price. Prices for these commodities would have fluctuated just as they had regardless of movements in Canada's foreign currency exchange.[6]

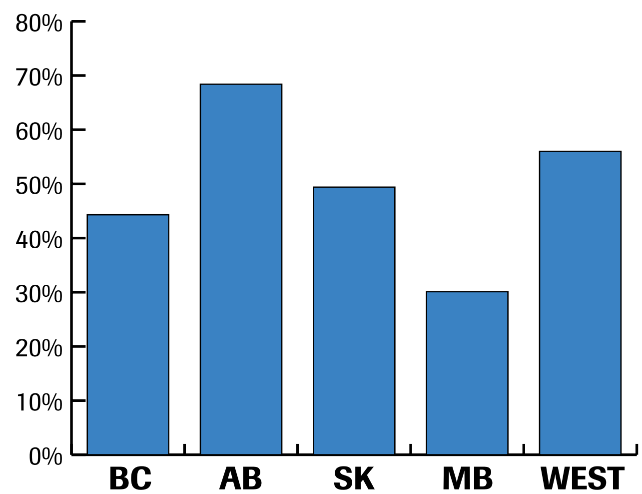
It is important to isolate and examine natural resource exports on their own because they account for such a large share of total exports from western Canada. Natural resource exports are most important for Alberta, making up over two-thirds of its total exports. Manitoba is least reliant on natural resources with commodity exports accounting for 30 per cent of total exports. For western Canada as a whole, natural resources account for 56 per cent of total exports (see Figure 3).

This report leaves for analysis elsewhere the effects of the rising Canadian dollar on non-resource sectors such as manufacturing, tourism, and other service-oriented activities. The negative impact on these sectors will certainly be severe. However, because the prices for these are often negotiated by contract or are otherwise influenced by substitution effects, it is a much more complex exercise to isolate the direct and indirect effects of rising exchange rates. Products and services in these sectors are not governed by a global US dollar market price. An analysis seeking to isolate the impact of currency exchange on non-commodities is beyond the scope of this report.

It should also be noted that the current analysis focuses only on the negative effects of the rising currency on the value of exports. It will not attempt to estimate the benefits accruing to exporters because of the stronger Canadian dollar and its positive impact on imports. Most of the natural resource exporting companies are also importers—particularly of specialized machinery, equipment, computers, etc.—and the stronger Canadian dollar has made these imports less expensive. This is particularly true of the petroleum sector, for which the benefits of less expensive imports could be substantial.

Also, most large companies carry some US-dollar denominated debt. The weaker US dollar will make servicing these debt instruments less costly. Many commodity-exporting companies rely on these US dollar debt instruments and use them intentionally as a natural hedge against erratic currency fluctuations. For simplicity's sake, this report will not attempt to calculate these offsetting benefits, but it does bear mentioning that these offsetting benefits do exist and may in some cases be significant. However, the benefits of less expensive imports will only partially offset the costs associated with falling export revenue. The net effect will still be negative.

Figure 3: Natural Resource Exports as % of Total Provincial Exports (2002-2003)



SOURCE: Derived by CWF from Statistics Canada data.
NOTE: Natural resources are those listed in this report.

6. It can be argued that the exception is nickel, for which Canada is a major world supplier. However, the significance of nickel to western Canada and the level of Canada's global dominance are both minimal enough to justify its inclusion in this analysis.

Methodology

If the loonie had remained at its all-time low reached in January 2002, how much more valuable would commodity exports have been over the past two years? These foregone revenues have been calculated by commodity group and by province, and account only for changes due to the appreciating Canadian dollar (see Figure 4).

The foregone revenues were calculated by first converting monthly Canadian dollar export values into US dollar equivalents at that month's currency exchange (average of daily noon rates). The second step was to take these U.S. dollar totals and calculate their hypothetical Canadian dollar values if the loonie had not appreciated since January 2002. The third step was to calculate the difference between the actual Canadian dollar values received and the hypothetical value they would have been worth if the dollar remained at its January 2002 low.

Figure 4:
Export Revenue Foregone due to Appreciation of Canadian Dollar, Major Commodities, 2002-2003 (Millions of $C)

	BC	AB	SK	MB	WEST
Wheat (incl. durum)	0	125	262	94	481
Barley	0	13	21	3	36
Oats	0	2	18	15	35
Canola	0	98	77	48	223
Live Hogs	1	9	4	46	61
Pork Products	7	41	6	62	116
TOTAL AGRICULTURE:	8	287	388	270	952
Copper	67	0	0	56	124
Zinc	2	0	0	0	2
Nickel	0	64	0	63	127
Aluminum	77	0	0	0	77
Silver	4	0	0	0	4
Gold and other precious metals	10	0	0	0	10
TOTAL METALS:	160	64	0	119	344
Crude Oil	0	2,549	494	87	3,130
Natural Gas	452	3,323	0	0	3,775
Electricity	56	1	7	42	105
TOTAL ENERGY:	507	5,874	500	129	7,010
Lumber	894	102	14	11	1,021
Veneer/Plywood	30	0	0	0	31
Particle Board /OSB	107	105	20	22	255
Pulp	457	201	46	1	704
Newsprint	97	20	0	22	139
TOTAL FOREST PRODUCTS:	1,586	428	80	55	2,150
TOTAL ALL COMMODITIES:	2,261	6,653	968	573	10,456

SOURCE: Derived by CWF from Statistics Canada data.
NOTE: Figures may not add due to rounding.

Loonie Up, Loonie Down—Bad News Both Ways?

For the last 30 years, Canadians bemoaned the sagging loonie. It became a national joke and was particularly disheartening to those who could remember years in the 1970s when the Canadian dollar traded above par with the US dollar. The loonie was labeled the Canadian peso and was a source of national embarrassment.

Strangely, when the loonie finally started its rapid ascension, the news coverage and economic commentary were still negative. It appeared that if the falling loonie was bad news, the rising loonie was even worse.

How can they both be bad news? Isn't there any good news? As with most economic events, it all depends. For exporting companies, a low loonie was clearly a benefit. The lower-valued Canadian dollar gave our exporters a strong price advantage in US dollar terms. This was particularly important to the key manufacturing and natural resource industries. Supporters of the floating currency viewed the sagging currency as a good thing—a natural safety net to cushion the Canadian economy in hard times. Others argued that the weak loonie was only creating an artificial crutch for Canadian producers who were falling further and further behind their American counterparts in productivity. They predicted tough times for domestic producers if and when the Canadian dollar eventually did rise.

> *"A stronger Canadian currency is consistent with the adjustments that are going to be needed in our economy, even if the speed of the recent appreciation has made these adjustments more difficult. Because it makes machinery and equipment less expensive relative to labour, a stronger currency is in line with our need to increase productivity, as well as with the future demographic pressures on our labour force."*
>
> *David Dodge*
> *Governor , Bank of Canada*
> *11 February 2004*

During the long descent of the loonie, the lower-valued currency dealt a negative blow to those industries dependent on imports such as specialized capital machinery or raw material inputs. It was also difficult for companies that paid Canadian employees in US dollars or held large amounts of US dollar denominated debt.

Now that the loonie has risen so dramatically, the media stories have again tended to focus on the negative impacts. While most people in the business community are generally in favour of a stronger loonie—after all, the value of a country's currency is partially a reflection of foreign confidence in Canada as a place to do business—it is the speed and severity of its ascent that has caused problems for Canadian businesses.

Indeed, the higher loonie is likely to be a good thing for the economy in the long run. Recent comments by the Governor of the Bank of Canada suggest the higher value of the loonie is just what the economy needs to boost productivity.

Impact by Commodity

The most significant foregone export revenue is in the energy sector. Given the predominance of the oil and gas sector in western Canada, it is not surprising that this represents the largest segment of foregone export revenue. Total oil, gas and electricity exports from the West over this two-year period were $79.5 billion—almost two-thirds of the value of all natural resources from the West. Without the rise in the loonie over this period, energy exports would have been greater by $7.0 billion, or approximately 8.1 per cent.

Exporters of natural gas forewent the most revenue of all commodity exporters, with two-year exports totaling nearly $3.8 billion less than they would have if not for the ascent of the loonie. Crude oil exports were down by $3.1 billion from what they would have been otherwise. Electricity—a smaller contributor to the energy commodities group—was lower by $0.1 billion.

Exports of forest products—which in this study include lumber, plywood, particle board, pulp and newsprint—totaled $26.7 billion over the two-year period. The loss due to the appreciating loonie was $2.1 billion, or 7.4 per cent. The largest segment of the forest products sector is lumber, the exports of which were worth $1.0 billion less than they would have been otherwise.

Smaller contributors to the total value of commodity exports from the West—yet a critical resource base in much of the Prairie provinces—are grains and oilseeds. The combined value of wheat, barley, oats and canola exports was approximately $8.6 billion during the period. If not for the stronger Canadian dollar, the value of grains and oilseeds exports would have been higher by $775 million, or 9.0 per cent. Exports of hogs and pork products totaled $2.1 billion in 2002 and 2003; without the appreciating loonie, these would have been higher by $177 million, or 8.3 per cent.

Base and precious metals—which include nickel, zinc, copper, aluminum, silver, gold and other precious metals—are important resource exports for British Columbia and Manitoba. Exports of these metals totaled $4.0 billion over two years. In the absence of the rising dollar, these exports would have been worth $344 million more, or 8.7 per cent.

Impact by Province

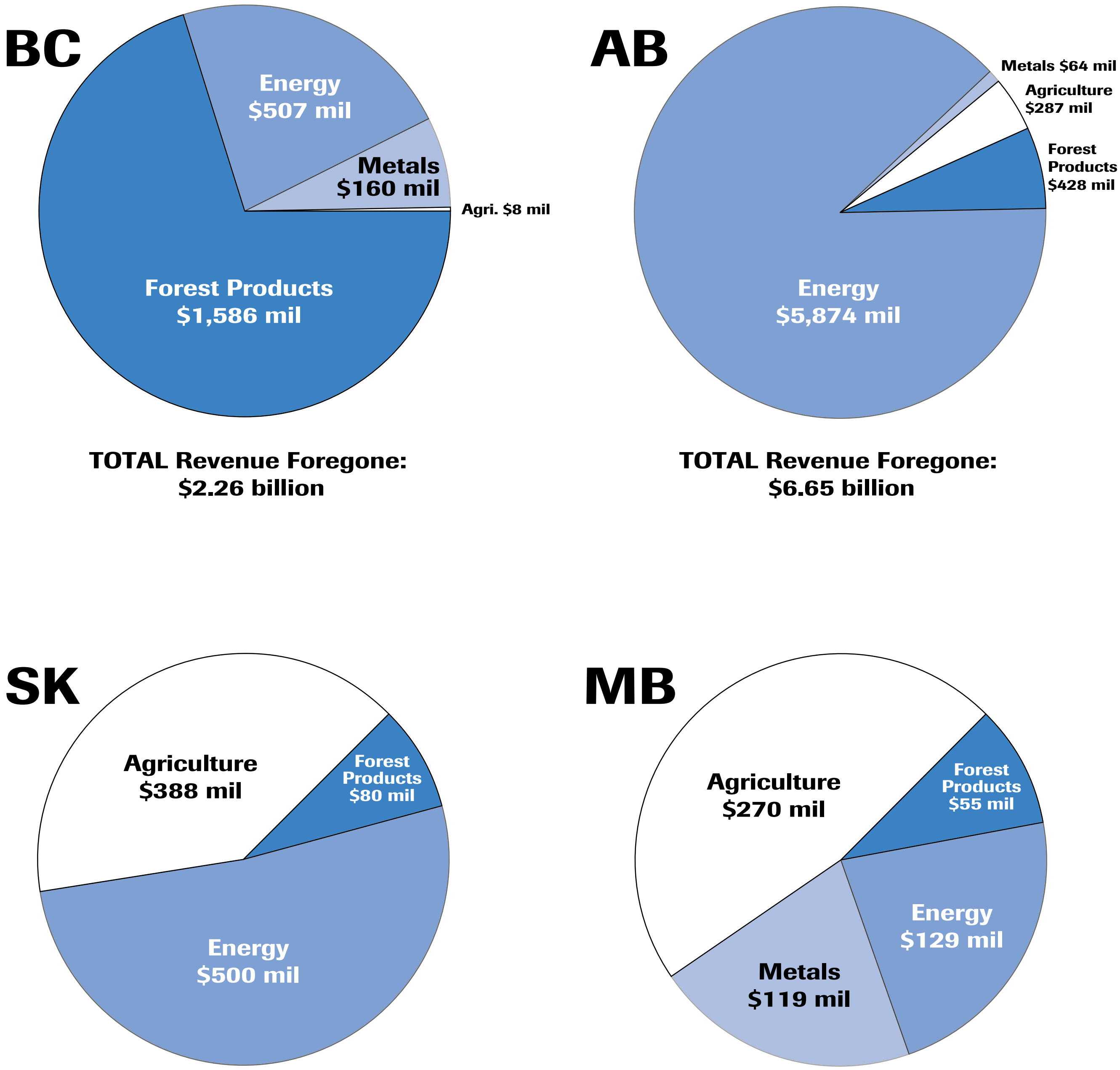
British Columbia's natural resource producers experienced lower export revenue by $2.26 billion over the two-year span. This represents a loss of approximately 7.6 per cent of total resource exports. Forest products make up the vast majority of the foregone export revenue (lower by $1.6 billion); lumber export revenue alone was lower by over $894 million.

It should be noted that the disruptive effects of the Canada-US softwood lumber dispute over this period are not factored into these dollar losses, which are due to currency appreciation alone. The actual impact to the lumber sector and losses incurred are in fact far worse than described here if one also takes into account trade disputes and punitive tariffs.

Alberta's economy is the most severely afflicted by the currency-induced losses, both in absolute dollars and relative terms. Because of the rise in the Canadian dollar, natural resource exports from the province were lower by $6.65 billion—or 8.1 per cent. Of the four western provinces, Alberta is the most dependent on exports. On an annual basis, Alberta's export-to-GDP ratio is around 33 per cent. Natural resource exports totaled $75.2 billion over the two-year period, and total all-goods exports were $106 billion.

Foregone oil and gas revenues made up the bulk of Alberta's lost export revenue. Foreign sales of crude oil were lower by $2.5 billion, and natural gas lower by $3.3 billion. Exports of forest products were lower by $428 million, and agriculture lower by $287 million.

Figure 5:
Natural Resource Export Revenue Foregone by Commodity



TOTAL Revenue Foregone: $2.26 billion (BC)

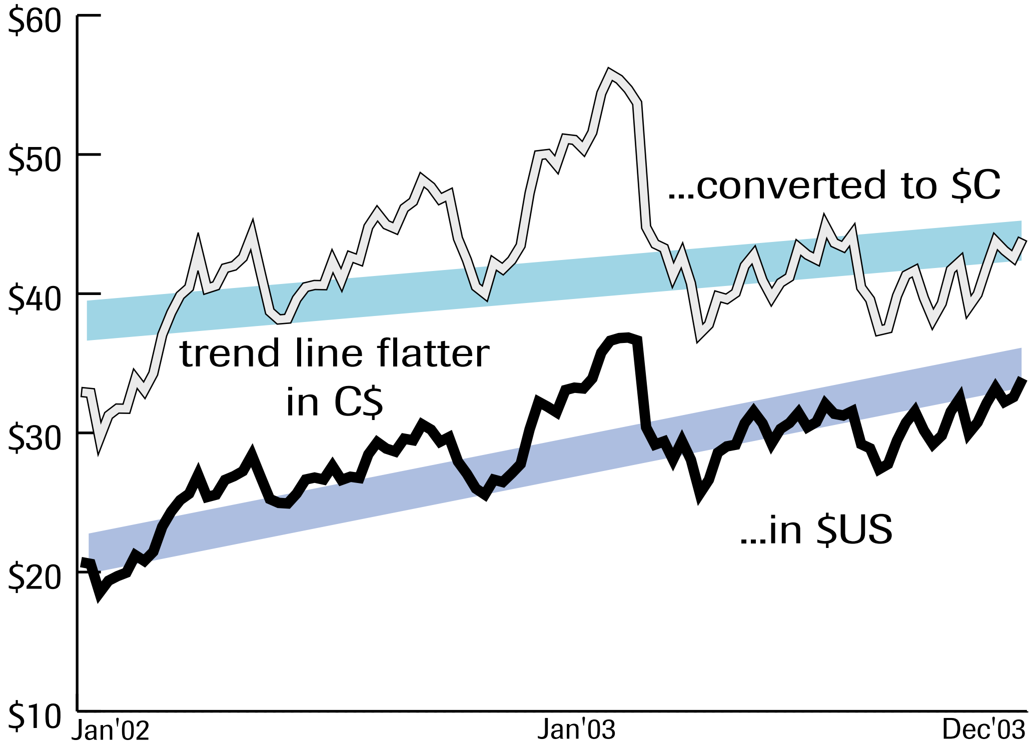
TOTAL Revenue Foregone: $6.65 billion (AB)

TOTAL Revenue Foregone: $968 million (SK)

TOTAL Revenue Foregone: $573 million (MB)

SOURCE: Derived by CWF from Statistics Canada data.

Figure 6:
Crude Oil Prices in US and Canadian Dollars, 2002-2003



SOURCE: NYMEX prices for West Texas Intermediate crude provided by Canadian Association of Petroleum Producers.
Canadian dollar prices derived by CWF from Bank of Canada data.

Fortunately for Alberta, global energy commodity prices remained very high throughout this period, which helped cushion the blow of the falling dollar. The dampening effects of the rising Canadian dollar are more than offset by the positive effects of higher world energy prices (see Figure 6). Had oil and gas prices been low during this period—as they were during the late 1990s—the pain to Alberta's resource sector would have been much more severe.

Saskatchewan's agriculturally dependent economy was hit hard both by drought and by the rise of the Canadian dollar during this period. Total natural resource exports were lower by $968 million (8.1 per cent) due to the higher Canadian dollar. But despite the large presence of agriculture in the province, it was the energy sector that experienced the largest absolute loss of export revenue. Exports of crude oil were $500 million lower than they would have been otherwise. Agricultural exports were off by $388 million.

Manitoba—arguably the most diversified economy in the West—suffered the least in terms of the impact of the rising loonie on its natural resource sector. Total exports of commodities were down $573 million—or 7.4 per cent. Losses to exports of grains and oilseeds accounted for $160 million; losses to other natural resource exports include $109 million in hogs and pork, $87 million in crude oil, $42 million in hydro, $56 million in copper, and $63 million in nickel.

It should be kept in mind that these calculations are only for natural resources. Manitoba has also experienced a blow to its important non-resource export industries, particularly aerospace, transportation equipment, and garment manufacturing. These losses are not calculated here, but would indeed be sizable.

Conclusion

The rapidly increasing value of the Canadian dollar vis-à-vis the US dollar over the past two years has surprised many. Its most significant impact is on Canadian exporters, many of whom have been suffering the effects of stiffer international price competition, lower export revenues, and thinner profit margins.

Because natural resource commodities are priced in US dollars—and Canada is a price-taker for these goods—it is a simple exercise to calculate the precise dollar amount of export revenue foregone strictly due to the rise of the loonie. Over the period January 2002 to December 2003, western Canadian exporters of natural resources would have received $10.5 billion more in export revenue if not for the sharp appreciation of the Canadian dollar. The total economic hit is actually far worse if you count the lost exports and lower US sales in other non-commodity sectors such as manufacturing and services.

In context, $10.5 billion in foregone export revenue represents a loss of 8.0 per cent for total commodity exports, 4.8 per cent for total all-goods exports, and 1.4 per cent of western Canada's nominal GDP. While keeping in mind that there are partially offsetting benefits involved, the appreciating Canadian dollar has nonetheless created difficulties for Canadian exporters and for the resource-dependent western Canadian economy. CWF

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2004 has the potential to be a year of great change in Canada: there will be a federal election, the future of our cities is a hot topic, Canada-US relations are evolving, and the nature of our democracy is being debated.

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Through its Western Cities, Building the New West and West in Canada Projects, the **CANADA WEST FOUNDATION** is actively working to generate ideas for positive change and to make sure that the views of western Canadians are an integral part of the national debates during this time of change.

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