RESEARCH

## **Exchange Rates**

# The Potential Impact of a Stronger Canadian Dollar on Travel to/from Canada in 2004/2005

Research report 2004-1

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# Exchange Rates: The Potential Impact of a Stronger Canadian Dollar on Travel to/from Canada in 2004/2005

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by

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## **Table of Contents**

Executive Summary	1
Introduction	5
International Travel Implications - Summary of Findings	7
International Travel Balance Implications – Summary of Findings	17
Domestic Travel Implications – Summary of Findings	19
Overall Travel Implications on Canadians – Summary of Findings	21
Summary	23

### **Executive Summary**

Looking back on 2003, it seems impossible to believe the travel industry could have sustained a worse year. Fortunately, 2003 ended with positive momentum and the industry remains hopeful that a tourism recovery in 2004 will be aided by improving economic prospects, growing consumer confidence and pent-up demand for travel. However, the continued appreciation of the Canadian dollar threatens the strength of that recovery.

Because of this risk, the CTC commissioned the Canadian Tourism Research Institute (CTRI) to estimate the impact that a further depreciation of the U.S. dollar would have on not only travel to and from Canada but also on travel within Canada for 2004 and 2005. While the scope of exchange rate scenarios is limitless, our analysis focussed on three distinct scenarios that appear to cover the most likely range of possibilities during the short-term. Specifically, the three scenarios correspond to a Canadian dollar appreciation (vis-à-vis the U.S. dollar) of 5, 10 and 15% during 2004—compared with the base-case assumption used in the preparation of the 2003 - 4<sup>th</sup> Quarter International Travel Forecast report.

The beginning, average and ending value of the Canadian dollar throughout 2004 under each scenario can be seen in Table A.

TABLE A: Canadian dollar value under each scenario – 2004 (measured against U.S. currency)

	BEGINNING 2004	AVERAGE 2004	End of 2004
Base-Case	0.762	0.742	0.735
Scenario 1 ( +5%)	0.762	0.779	0.796
Scenario 2 (+10%)	0.762	0.816	0.870
Scenario 3 (+15%)	0.762	0.853	0.944

In extending the analysis into 2005, the assumption was that the value of the Canadian dollar under each of the three scenarios would remain the same as the ending value observed in 2004 (from Table A). Considering that the gap in the exchange rate between each scenario and the base-case widens as you progress further into 2004, our assumption suggests an even larger gap would exist during 2005. The specific values used for each scenario in 2005, as well as that for the base-case, are shown in Table B.

TABLE B: Canadian dollar value under each scenario – 2005 (measured against U.S. currency)

	BEGINNING 2005	Average 2005	End of 2005
Base-Case	0.735	0.721	0.719
Scenario 1	0.796	0.796	0.796
Scenario 2	0.870	0.870	0.870
Scenario 3	0.944	0.944	0.944

#### **U.S. Travel Implications**

Table C presents our assessment of the impact of currency fluctuations on total U.S. travel expenditures in Canada. The impact has taken account of the historical sensitivity to exchange rate fluctuations of American travel to Canada, as well as the effects on travel demand of the associated reductions in economic growth and the lag between travel planning and travel realization.

TABLE C: U.S. travel receipts from same day and overnight visits to Canada (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$9,046	\$9,689	\$10,289
Scenario 1	\$9,046	\$9,628	\$10,175
Scenario 2	\$9,046	\$9,549	\$9,955
Scenario 3	\$9,046	\$9,468	\$9,977

f = forecast

Table D illustrates the estimate of the impact of currency fluctuations on the total travel payments to the U.S. under each scenario, including the base-case, for 2004 and 2005. The estimates account for the historical sensitivity to exchange rate fluctuations of Canadian travel to the U.S., as well as the effects on same-day travel demand by the changes in the retail environment in Canada.

TABLE D: U.S. travel payments by Canadian same day and overnight visitors (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$10,875	\$11,604	\$12,207
Scenario 1	\$10,875	\$11,872	\$12,798
Scenario 2	\$10,875	\$12,180	\$13,367
Scenario 3	\$10,875	\$12,576	\$14,078

f = forecast

#### Other international travel implications

The analysis also considered the impact that a further weakening in the U.S. dollar would have on other (non-U.S.) international travel receipts both to and from Canada. The premise of the analysis was that a weakening U.S. dollar (compared with our base-case forecast) would attract additional overseas visitors to the U.S. possibly at the expense of Canadian travel.

Empirical analysis suggested that further U.S. dollar depreciation has the potential to significantly dampen the overall strength of the expected rebound in Canada's other international travel markets during 2004 as well as into 2005. Table E illustrates the expected impact on total international travel receipts.

TABLE E: Total international travel receipts (excluding the U.S.)

(Millions of dollars)

	2003	2004F	2005F
Total - Base-Case	\$5,548	\$6,081	\$6,549
Scenario 1	\$5,548	\$5,964	\$6,298
Scenario 2	\$5,548	\$5,848	\$6,047
Scenario 3	\$5,548	\$5,731	\$5,796

The aggregate effect on Canadian travel demand to other international (non-U.S.) travel markets is not quite as clear-cut as the impact of travel to the U.S. Some of Canada's non-U.S. travel destinations can be expected to benefit from a further U.S. dollar depreciation, specifically the Caribbean and Mexican sunspot destinations. On the other hand, travel to Europe, Asia and other parts of the world could potentially suffer as some Canadians opt to travel to U.S. destinations or choose to visit one of the aforementioned international sunspot destinations.

Table F illustrates the expected impact of the further appreciation of the Canadian dollar on payments to non-U.S. international destinations. Since the value of the Canadian dollar is greatest at year-end 2004, its impact has been assumed to be negligible. The impact is restricted to 2005.

TABLE F: Rest of world (non-U.S.) travel payments (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$8,019	\$8,546	\$9,035
Scenario 1	\$8,019	\$8,546 (\$0)	\$8,773 (-\$262)
Scenario 2	\$8,019	\$8,546 (\$0)	\$8,510 (-\$525)
Scenario 3	\$8,019	\$8,546 (\$0)	\$8,248 (-\$787)

f = forecast

#### International travel balance implications

We expect the overall impact of further U.S. depreciation under each of the three scenarios will be negative for Canada's world travel balance, compared to the base-case. The isolated impact on the world travel balance's bottom line could range from \$656 million in 2005 (pushing the deficit to over \$4.9 billion from \$4.3 billion) all the way to nearly \$2.2 billion under scenario 3. This would push the expected world travel deficit to over \$6.5 billion (see Table G).

TABLE G: World travel balance (Millions of dollars)

	2003	2004F	2005F
Base-Case	-\$4,300	-\$4,380	-\$4,404
Scenario 1 ( +5%)	-\$4,300	-\$4,826	-\$5,098
Scenario 2 (+10%)	-\$4,300	-\$5,329	-\$5,875
Scenario 3 (+15%)	-\$4,300	-\$5,905	-\$6,677

#### **Domestic Travel Implications**

The inverse relationship that exists between domestic travel and the U.S. exchange rate implies that as the Canadian dollar appreciates, all other things being equal, some domestic travel expenditures may be substituted for U.S. travel expenditures. Conversely, if our dollar depreciates, additional travel will occur within Canada, all other things being equal. Our own empirical analysis shows that, holding everything else constant, for every 10% increase in the value of the Canadian dollar (vis-à-vis the U.S. dollar), overnight domestic travel expenditures decline 1.5%.

Table H, presents the analysis of the impact on overnight domestic travel expenditures under each scenario as well as the base-case for 2004 and 2005. The impact incorporates both the impact of weaker economic conditions and domestic travellers sensitivity to exchange rates.

TABLE H: Overnight domestic travel expenditures (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$21,413	\$22,891	\$24,264
Scenario 1	\$21,413	\$22,465 (-\$426)	\$23,140 (-\$1,124)
Scenario 2	\$21,413	\$22,196 (\$-695)	\$22,361 (-\$1,903)
Scenario 3	\$21,413	\$21,928 (-\$963)	\$21,603 (-\$2,661)

f = forecast

The analysis clearly illustrates the dampening effect that a further U.S. dollar depreciation would have on not only Canada's capacity to increase international travel expenditures but also on expanding it's own domestic travel market.

#### Introduction

Looking back on 2003, it seems impossible to believe the travel industry could have sustained a worse year. Fortunately, 2003 ended with positive momentum and the industry remains hopeful that a tourism recovery in 2004 will be aided by improving economic prospects, growing consumer confidence and pent-up demand for travel. However, the continued appreciation of the Canadian dollar threatens the strength of that recovery.

The recent Canadian Tourism Commission's (CTC) 2003 - 4<sup>th</sup> Quarter International Travel Forecasts, produced by the Canadian Tourism Research Institute (CTRI), illustrates the expectations for travel volumes and expenditures for Canada's major international markets. However, these forecasts are based on the premise that the U.S. dollar will slowly appreciate during 2004 and as a result make-up some ground lost during 2003 against the Canadian dollar as well as many other world currencies.

On the other hand, there is a real risk that the U.S. dollar will, instead, depreciate further in 2004. Because of this risk, the CTC commissioned the Canadian Tourism Research Institute (CTRI) to estimate the impact that a further depreciation of the U.S. dollar would have on not only travel to and from Canada but also on travel within Canada for 2004 and 2005.

While the scope of exchange rate scenarios is limitless, this analysis focus on three distinct scenarios that appears to cover the most likely range of possibilities during the short-term. Specifically, the three scenarios correspond to a Canadian dollar appreciation (vis-à-vis the U.S. dollar) of 5, 10 and 15% during 2004—compared with the base-case assumption used in the preparation of the 2003 - 4<sup>th</sup> Quarter International Travel Forecast report. The beginning, average and ending value of the Canadian dollar throughout 2004 under each scenario can be seen in Table 1.

TABLE 1: Canadian dollar value under each scenario – 2004 (measured against U.S. currency)

	BEGINNING 2004	AVERAGE 2004	End of 2004
Base-Case	0.762	0.742	0.735
Scenario 1 ( +5%)	0.762	0.779	0.796
Scenario 2 (+10%)	0.762	0.816	0.870
Scenario 3 (+15%)	0.762	0.853	0.944

In extending the analysis into 2005, it is assumed that the value of the Canadian dollar under each of the three scenarios would remain the same as the ending value observed in 2004 (from Table 1). As a side note, the reader should be aware that the percentage discrepancy for each scenario, compared to our base-case, will no longer correspond to precisely 5, 10 or 15% during 2005. In fact, considering that the gap between each scenario and the base-case actually widens as we progress further into 2004, the gap observed during 2005 will tend to be much higher. The specific values used for each scenario in 2005, as well as that for the base-case, is shown in Table 2.

<sup>&</sup>lt;sup>1</sup> While this assumption boosts the disparity between each of the three scenarios and the base-case, it was deemed necessary because of the divergent assumptions employed in 2004.

TABLE 2: Canadian dollar value under each scenario – 2005 (measured against U.S. currency)

	BEGINNING 2005	AVERAGE 2005	End of 2005
Base-Case	0.735	0.721	0.719
Scenario 1	0.796	0.796	0.796
Scenario 2	0.870	0.870	0.870
Scenario 3	0.944	0.944	0.944

### **International Travel Implications - Summary of Findings**

The equations used to produce travel forecasts clearly illustrate that, over history, Canadian overnight travel to the U.S. has been far more sensitive to exchange rate fluctuations than overnight travel to Canada by Americans. In fact, empirical evidence suggests that, holding everything else constant, for every 10% increase in the value of the Canadian dollar (vis-à-vis the U.S. dollar), overnight Canadian travel to the U.S. increases 15-16%. Within this segment, overnight travel to the U.S. by air has historically been much less sensitive to exchange rate fluctuations than travel by other modes (primarily automobile).

On the other hand, history suggests that a 10% increase in the value of the U.S. dollar (vis-à-vis the Canadian dollar) will only solicit a 3-4% increase in overnight U.S. travel to Canada, again holding everything else constant. Furthermore, within this segment, the variation between travel by air versus travel by other modes is not nearly as pronounced as for that witnessed in Canadian travel to the U.S.

If these historical exchange rate sensitivities remain valid despite changes to other economic variables and were absolutely linear in nature, then the analysis of the three specific exchange rate scenarios could be generated by merely adjusting the base-case forecast to reflect these historical relationships. However, we believe this would not be the case.

The first challenge that needs to be overcome is that economic conditions will undoubtedly change as a result of, or in response to, changes in the exchange rate. Specifically, changes to exchange rates alter the performance of various sectors of the economy (most notably the export sector) which will impact overall economic growth. In turn, these changes to economic growth will lead to a different employment levels, disposable incomes as well as consumer and business confidence. All told, these changes could have significant implications on the performance of the tourism industry.

The other challenge to adapt to involves making use of historical exchange rate sensitivities where either the tourism product itself has changed or real physical constraints exist. Considering these factors, it becomes increasingly difficult to rely solely on historical exchange rate relationships or to assume that these relationships will hold, regardless of the level of change. Particularly when large fluctuations in exchange rates would suggest large increases in behaviour, the resulting changes may fall short due to tangible physical constraints.

On the other hand, dramatic changes in exchange rates can elevate a traveller's awareness level, if the issue becomes such a hot news item that the media attention by itself alters their inclination to travel to or choose a specific destination.

With these factors in mind, the analysis of the three Canadian dollar appreciation scenarios reflects an attempt to reasonably quantify each of these factors influence on travel behaviour.

## Implications of a stronger Canadian dollar on overnight travel from the U.S. to Canada (compared against the base-case forecast)

Under scenario 1, it is assumed that the average value of the Canadian dollar (vis-à-vis the U.S. dollar) would be 5% higher than our base-case assumption for 2004. As a result, the analysis suggests the rebound in overnight travel demand from the U.S. to soften slightly with 6.1% growth, compared to 6.8% growth in the base-case forecast (see Table 3). Under scenario 2 and 3, growth expectations are softened even further. It should be noted that under all three scenarios, the negative impact of a further Canadian dollar appreciation on travel from the U.S. is mitigated because some U.S. travellers—facing even more unfavourable exchange rates to other destinations—may switch to Canadian destinations instead.<sup>2</sup>

TABLE 3: Overnight U.S. travel to Canada – 2004 (Person-Trips-000's; percent change expected in 2004)

	2003	2004F	2004/2003 (%)
Base-Case	14,166	15,129	6.8
Scenario 1 ( +5%)	14,166	15,030	6.1
Scenario 2 (+10%)	14,166	14,888	5.1
Scenario 3 (+15%)	14,166	14,789	4.4

f = forecast

Extending the analysis into 2005, we need to keep in mind that the underlying assumption for 2005 implied that the value of the Canadian dollar (vis-à-vis the U.S. dollar) for each scenario would equal the level that it ended 2004 with. A quick reference to Table 2 illustrates the specific values. To refresh, with this being the case, each scenario represents a larger departure from the base-case forecast in 2005, compared to 2004.

Further complicating the analysis is that there is often a delayed reaction observed on the part of travellers to exchange rate fluctuations. Part of this delay is attributed to the lead time involved in planning travel, compared to when the trip actually occurs, while some of the delayed reaction is attributed to lagging travel prices, particularly in the form of packaged travel prices.

With this in mind, the recent CTC *International Travel Forecasts* suggests, under the base-case scenario, that U.S. travel to Canada can be expected to expand 4.7% in 2005, compared to 2004 visitor volumes. If, however, the exchange rates resembled the path of scenario 1, growth would be further tempered. Taken in isolation, the stronger currency, as depicted under scenario 1, would shave 1 percentage point off growth in 2005. However, combined with the impact expected in 2004, the cumulative loss in overnight visits from the U.S. over these two years would be 353,000, or 1.1%.

As illustrated in Table 4, the cumulative shortfall in overnight visits from the U.S. corresponding to scenario 2 and 3 is even larger. Specifically, we estimate the cumulative loss in visits under scenario 2 and scenario 3 over these two years to be 746,000 (or 2.4%) and 1,051,000 (or 3.4%), respectively.

8 Exchange Rates

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<sup>&</sup>lt;sup>2</sup> While the analysis focuses on three scenarios of Canadian dollar appreciation vis-à-vis the U.S. dollar, as compared against the base-case, we expect the relative strength of other currencies to the Canadian dollar will be maintained. For instance, the expectation of further appreciation of the Euro, under the base-case, would be maintained in each of the three exchange rate scenarios depicted in this report.

TABLE 4: Overnight U.S. travel to Canada – 2005 (Person-Trips-000's; percent change expected in 2005)

	2004F	2005F	2005/2004 (%)
Base-Case	15,129	15,840	4.7
Scenario 1	15,030	15,586	3.7
Scenario 2	14,888	15,335	3.0
Scenario 3	14,789	15,129	2.3

This analysis also probed to uncover any disparities that may exist between U.S.-travel from border state versus travel from non-border states as a result of currency fluctuations. Empirical analysis has shown that overnight travel to Canada from U.S. border-states to be more sensitive to exchange rate fluctuations than travel from non-border states.

With a closer proximity to Canada, residents in U.S. border state are more likely to know and recognize changes in the U.S./Canada exchange rate. In addition, residents in U.S. border state are more likely to have travelled to Canada before and, if they intend on coming, are more likely to arrive by automobile. Historically, those travellers displaying these traits and characteristics, all other things being equal, generally have a higher sensitivity to exchange rates.

Despite an expected drop of 13% in 2003, the base-case forecast of overnight travel to Canada from U.S. border state suggests a solid rebound of 6.9% in 2004. However, under scenario 1, that rate of growth would slow to 5.9% (see Table 5). Under scenario 2 and 3, growth expectations for 2004 would be softened even further.

TABLE 5: Overnight U.S. travel from border states to Canada – 2004 (Person-Trips- 000's; percent change expected in 2004)

	2003	2004F	2004/2003 (%)
Base-Case	6,465	6,911	6.9
Scenario 1 ( +5%)	6,465	6,846	5.9
Scenario 2 (+10%)	6,465	6,763	4.6
Scenario 3 (+15%)	6,465	6,698	3.6

f = forecast

Extending the analysis into 2005, the base-case suggests that overnight U.S. travel from border states would be 4.6% over 2004 visitor volumes. Once again, under each of the three scenarios, the expected rate of growth would slow significantly (see Table 6). In particular, scenario 3 is expected to not only shave 3.4 percentage points off growth in 2005, compared with the base-case, but result in a cumulative loss in overnight U.S. border visits of 661,000, or 4.7%, over those two years.

TABLE 6: Overnight U.S. travel from border states to Canada – 2005 (Person-Trips- 000's; percent change expected in 2005)

	2004F	2005F	2005/2004 (%)
Base-Case	6,911	7,226	4.6
Scenario 1	6,846	7,072	3.3
Scenario 2	6,763	6,911	2.2
Scenario 3	6,698	6,778	1.2

Aside from factoring in the impact that currency fluctuations are expected to have on same-day travel, the impact on overall U.S. travel receipts follow a similar pattern to that presented for overnight U.S. visits. Table 7 illustrates the impact on U.S. travel receipts under each scenario, including the basecase, for 2004 and 2005.

TABLE 7: U.S. travel receipts from same day and overnight visits to Canada (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$9,046	\$9,689	\$10,289
Scenario 1	\$9,046	\$9,628	\$10,175
Scenario 2	\$9,046	\$9,549	\$9,955
Scenario 3	\$9,046	\$9,468	\$9,853

f = forecast

## Implications of a stronger Canadian dollar on overnight travel from Canada to the U.S. (compared against the base-case forecast)

This analysis suggests overnight travel demand by Canadians to U.S. destinations will accelerate from 6.4% growth (under the base-case forecast) to 9.1% under scenario 1 (see Table 8). While the analysis does reflect special adjustments to accommodate the factors previously discussed (i.e. physical constraints, etc.), the results still clearly convey the larger influence that exchange rates have on Canadian travel to the U.S. The results for scenario 2 and 3 also reflect special adjustments but still result in even larger changes in expected travel demand.

TABLE 8: Overnight Canadian travel to the U.S. – 2004 (Person-Trips-000's; percent change expected in 2004)

	2003	2004F	2004/2003 (%)
Base-Case	12,664	13,474	6.4
Scenario 1 ( +5%)	12,664	13,816	9.1
Scenario 2 (+10%)	12,664	14,298	12.9
Scenario 3 (+15%)	12,664	14,944	18.0

f = forecast

Once again, the results of the analysis into 2005 reflect, to some degree, the delayed reaction on the part of travellers to exchange rate fluctuations. In addition, remember that each scenario depicted in 2005 represents a larger departure from our base-case than was the case during 2004.

With this in mind, the recent CTC *International Travel Forecasts* suggests that overnight Canadian travel to the U.S. during 2005, under the base-case scenario, would expand 4% over 2004 visitor volumes. The analysis in this report suggests that if the exchange rate follows the path described in scenario 1, growth has the potential to reach 7.5% in 2005. Taken in isolation, this suggests a further 3.5 percentage points of growth in 2005, compared with the base-case. However, combined with the impact expected in 2004, the cumulative growth in overnight visits to the U.S. of scenario 1 would be 1,182,000 (or 4.3%).

As illustrated in Table 9, the growth in overnight U.S. visitation corresponding to scenario 2 and 3 is even larger. Specifically, we estimate the cumulative growth in overnight visits attributed to scenario 2 and scenario 3, compared to the base-case, to be 2,517,000 (or 9.2%) and 4,350,000 (or 15.8%), respectively.

TABLE 9: Overnight Canadian travel to the U.S. – 2005 (Person-Trips-000's; percent change expected in 2005)

	2004F	2005F	2005/2004 (%)
Base-Case	13,474	14,013	4.0
Scenario 1	13,816	14,853	7.5
Scenario 2	14,298	15,727	10.0
Scenario 3	14,944	16,886	13.0

f = forecast

In order to generate a comparable analysis concerning spending, specifically total U.S. travel payments, we need to carefully consider the impact that currency fluctuations would have on Canadian same-day travel to the U.S. Back in the early 1990's, Canadians flocked to the U.S. on same-day trips as the exchange rate hit 89 cents. However, most of the motivation was shopping related.

This is important to remember, because, today we believe the retail environment has changed considerably in Canada with the arrival of most major U.S. retailing giants including Wal-Mart, Home Depot, Costco Wholesale, Old Navy, Payless Shoes and Winners to name a few. In addition, the tremendous growth in electronic commerce over the past few years suggests that if the Canadian dollar were to further appreciate, many planned commerce-based excursions to the U.S. could be substituted by electronic means.

By considering these differences, the analysis on total U.S. payments is perhaps more conservative than historical exchange rate relationships might suggest. Table 10 illustrates the estimate of the impact of currency fluctuations on U.S. travel payments under each scenario, including the base-case, for 2004 and 2005.

TABLE 10: U.S. travel payments by Canadian same day and overnight visitors (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$10,875	\$11,604	\$12,207
Scenario 1	\$10,875	\$11,872	\$12,798
Scenario 2	\$10,875	\$12,180	\$13,367
Scenario 3	\$10,875	\$12,576	\$14,078

## Implications of a stronger Canadian dollar on overnight travel from other international (non-U.S.) countries to Canada (compared against the base-case forecast)

The analysis also considered the impact that a further weakening in the U.S. dollar would have on other (non-U.S.) international travel receipts both to and from Canada. The premise of the analysis was that a weakening U.S. dollar (compared with our base-case forecast) would attract additional overseas visitors to the U.S. possibly at the expense of Canadian travel.

To properly gauge this, the analysis focussed on those travel expenditures most at risk. We deemed those to be expenditures tied to Canadian trips for leisure purposes or to visit friends and relatives occurring during the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the year. Ultimately, substitution ratios were derived at a continental basis as well as for Canada's major international markets using the corresponding exchange rate sensitivities found in the international travel forecast model equations.

Not surprisingly, empirical analysis suggest that further U.S. dollar depreciation has the potential to significantly dampen the overall strength of the expected rebound in Canada's other international travel markets during 2004 as well as into 2005. The results for 2004 are illustrated in Table 11, while the results for 2005 are shown in Table 12.

TABLE 11: International travel receipts (excluding the U.S.) –2004 (Millions of dollars; percent change expected in 2004)

	2003	2004F	2004/2003 (%) (DIFFERENCE)
Total - Base-Case	\$5,548	\$6,081	9.4
Scenario 1 ( +5%)	\$5,548	\$5,974	7.4
Scenario 2 (+10%)	\$5,548	\$5,848	5.3
Scenario 3 (+15%)	\$5,548	\$5,731	3.2

f = forecast

TABLE 12: International travel receipts (excluding the U.S.) –2005 (Millions of dollars; percent change expected in 2005)

	2004F	2005F	2005/2004 (%) (DIFFERENCE)
Total - Base-Case	\$6,081	\$6,549	7.5
Scenario 1 ( +5%)	\$5,974	\$6,298	5.5
Scenario 2 (+10%)	\$5,848	\$6,047	3.3
Scenario 3 (+15%)	\$5,731	\$5,796	1.1

The empirical results of the analysis over 2004 and broken down by market regions, as well as for a few key market countries is illustrated in Table 13. Meanwhile, the same breakdown for 2005 is shown on Table 14.

TABLE 13: Overnight international travel receipts (excluding the U.S.) – 2004 (Millions of dollars; percent change expected in 2004)

	2003	2004F	2004/2003 (%)
Europe - Base-Case	\$2,443	\$2,631	7.7
Scenario 1 ( +5%)	\$2,443	\$2,596	6.3
Scenario 2 (+10%)	\$2,443	\$2,561	4.8
Scenario 3 (+15%)	\$2,443	\$2,526	3.4
U.K Base-Case	\$970	\$1,019	5.1
Scenario 1 ( +5%)	\$970	\$1,005	3.6
Scenario 2 (+10%)	\$970	\$990	2.1
Scenario 3 (+15%)	\$970	\$976	0.6
Germany - Base-Case	\$330	\$353	7.0
Scenario 1 ( +5%)	\$330	\$349	5.7
Scenario 2 (+10%)	\$330	\$344	4.4
Scenario 3 (+15%)	\$330	\$340	3.1
France - Base-Case	\$323	\$346	7.1
Scenario 1 ( +5%)	\$323	\$340	5.3
Scenario 2 (+10%)	\$323	\$334	3.6
Scenario 3 (+15%)	\$323	\$329	1.8
Asia/Pacific - Base-Case	\$1,543	\$1,728	12.0
Scenario 1 ( +5%)	\$1,543	\$1,682	9.0
Scenario 2 (+10%)	\$1,543	\$1,636	6.0
Scenario 3 (+15%)	\$1,543	\$1,590	3.0
Japan - Base-Case	\$402	\$494	22.9
Scenario 1 ( +5%)	\$402	\$483	20.0
Scenario 2 (+10%)	\$402	\$471	17.1
Scenario 3 (+15%)	\$402	\$459	14.2
Latin America - Base Case	\$478	\$523	9.5
Scenario 1 ( +5%)	\$478	\$513	7.5
Scenario 2 (+10%)	\$478	\$504	5.4
Scenario 3 (+15%)	\$478	\$494	3.4

f = forecast

TABLE 14: Overnight international travel receipts (excluding the U.S.) – 2005 (Millions of dollars; percent change expected in 2005)

	2004F	2005F	2005/2004 (%)
Europe - Base-Case	\$2,631	\$2,792	6.1
Scenario 1 ( +5%)	\$2,596	\$2,718	4.7
Scenario 2 (+10%)	\$2,561	\$2,643	3.2
Scenario 3 (+15%)	\$2,526	\$2,569	1.7
U.K Base-Case	\$1,019	\$1,072	5.2
Scenario 1 ( +5%)	\$1,005	\$1,042	3.7
Scenario 2 (+10%)	\$990	\$1,011	2.1
Scenario 3 (+15%)	\$976	\$981	0.5
Germany - Base-Case	\$353	\$374	6.1
Scenario 1 ( +5%)	\$349	\$365	4.6
Scenario 2 (+10%)	\$344	\$356	3.3
Scenario 3 (+15%)	\$340	\$347	2.0
France - Base-Case	\$346	\$368	6.6
Scenario 1 ( +5%)	\$340	\$356	4.6
Scenario 2 (+10%)	\$334	\$343	2.7
Scenario 3 (+15%)	\$329	\$331	0.8
Asia/Pacific - Base-Case	\$1,728	\$1,896	9.7
Scenario 1 ( +5%)	\$1,682	\$1,794	6.7
Scenario 2 (+10%)	\$1,636	\$1,693	3.5
Scenario 3 (+15%)	\$1,590	\$1,592	0.1
Japan - Base-Case	\$494	\$562	13.6
Scenario 1 ( +5%)	\$483	\$536	11.0
Scenario 2 (+10%)	\$471	\$509	8.2
Scenario 3 (+15%)	\$459	\$483	5.1
Latin America - Base Case	\$523	\$560	7.0
Scenario 1 ( +5%)	\$513	\$539	5.0
Scenario 2 (+10%)	\$504	\$518	2.9
Scenario 3 (+15%)	\$494	\$497	0.7

## Implications of a stronger Canadian dollar on overnight Canadian travel to other (non-U.S.) international countries (compared against the base-case forecast)

Unlike the clearly positive effect that further U.S. dollar depreciation is expected to have on Canadian travel demand for U.S. destinations, the aggregate effect towards other international (non-U.S.) travel markets is not quite as clear-cut. The reason being is that some of Canada's non-U.S. travel destinations can be expected to benefit from a further U.S. dollar depreciation, specifically the

Caribbean and Mexican sunspot destinations. On the other hand, travel to Europe, Asia and other parts of the world could potentially suffer as some Canadians opt to travel to U.S. destinations or choose to visit one of the aforementioned international sunspot destinations.

In the past, Canadian travel expenditures in the aforementioned sunspot destinations only represents approximately 25% of the total expenditures made by Canadians travelling in other parts of the world. By focusing only the expenditures encompassed by leisure trips and those to visit friends and relatives, the percentage increases but still comprises less than half. The assumptions regarding the three exchange rate scenarios proposed in this report for 2004, however, produce the biggest discrepancy (compared against the base-case) at the end of the year. At this time of year, the most important non-U.S. market is to sunspot destinations such as the Caribbean and Mexico.

Considering this, it is quite conceivable that the impact of a further U.S. dollar depreciation on Canadian payments to international (non-U.S.) markets may be, on the whole, offsetting during 2004. In this case, rather than err on one side or another, it is assumed that aggregate Canadian spending to non-U.S. international markets during 2004 will remain constant despite any changes in the exchange rate as dictated by any of the three scenarios.

This assumption will not hold for 2005. According to the assumptions, the discrepancy between each of the three exchange rate scenarios and the base-case exchange rate forecast is pretty much constant during 2005. In this case, we should expect to see the aggregate outbound expenditures made by Canadians to non-U.S. destinations to be negatively impacted. This results would support the historical relationship that, given everything else equal, a larger share of Canadian spending typically goes to regions of the world that would now be less price competitive to the U.S. rather than those others that would remain just as price competitive.

For these reasons, the analysis of the travel payments to the rest of the world under each of the three scenarios do not show any changes (as compared to baseline) in 2004 but do in 2005. Table 15 illustrates the magnitude of spending changes.

TABLE 15: Rest of world (non-U.S.) travel payments (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$8,019	\$8,546	\$9,035
Scenario 1	\$8,019	\$8,546	\$8,773
Scenario 2	\$8,019	\$8,546	\$8,510
Scenario 3	\$8,019	\$8,546	\$8,248

f = forecast

# International Travel Balance Implications – Summary of Findings

## Implications of a stronger Canadian dollar on the U.S. travel balance (compared against the base-case forecast)

While the base-case forecast estimates that the travel balance with the U.S. will slightly worsen in 2004, the three exchange rate scenarios examined in this study all produce deeper deficit positions (see Table 16). This is perhaps not that surprising, considering the larger impact that an appreciating Canadian dollar has on outbound travel to the U.S. rather than the other way around. In fact, the resulting impact on the U.S. travel deficit shown is actually softened somewhat because of our assumptions regarding same-day travel to the U.S.

TABLE 16: U.S. travel balance (Millions of dollars; Negative numbers indicate deficit position)

	2003	2004F	2005f (Difference)
Base-Case	-\$1,829	-\$1,915	-\$1,918
Scenario 1	-\$1,829	-\$2,244	-\$2,623
Scenario 2	-\$1,829	-\$2,631	-\$3,412
Scenario 3	-\$1,829	-\$3,090	-\$4,225

f = forecast

## Implications of a stronger Canadian dollar on the rest of world travel balance (compared against the base-case forecast)

While the base-case forecast estimates that the travel balance with the rest of the world will essentially stabilize in 2004, the three exchange rate scenarios examined in this study all produce deeper deficit positions (see Table 17). Because of the assumption during 2004 regarding fixed Canadian travel payments to the rest of world, the increased deficit is attributed solely to the impact of weaker overseas travel expenditures. On the other hand, during 2005, the overall deficit position under each of the three exchange rate scenarios declines. For 2005, empirical analysis suggests that, due to the depreciating U.S. dollar, the level of tourism expenditures diverted by Canadians to U.S. destinations rather than overseas destinations outweighs the expected reduction in overseas travel expenditures made by foreigners.

TABLE 17: Rest of world travel balance (Millions of dollars; Negative numbers indicate deficit position)

	2003	2004F	2005F
Base-Case	-\$2,471	-\$2,465	-\$2,486
Scenario 1	-\$2,471	-\$2,582	-\$2,475
Scenario 2	-\$2,471	-\$2,698	-\$2,463
Scenario 3	-\$2,471	-\$2,815	-\$2,452

f = forecast

## Overall implications of a stronger Canadian dollar on Canada's world travel balance (compared against base-case forecast)

Perhaps not surprisingly, we expect the overall impact of further U.S. depreciation under each of the three scenarios will be negative, compared to the base-case, for Canada's world travel balance. Depending upon the extent to which the U.S. currency would fall against the base-case scenario, the isolated impact on the world travel balance's bottom line could range from \$694 million in 2005 (pushing the deficit to over \$5.1 billion from \$4.4 billion) all the way to nearly \$2.3 billion. Under scenario 3, this would push the expected world travel deficit to over \$6.7 billion (see Table 18).

TABLE 18: World travel balance (Millions of dollars)

	2003	2004F	2005F
Base-Case	-\$4,300	-\$4,380	-\$4,404
Scenario 1 ( +5%)	-\$4,300	-\$4,826	-\$5,098
Scenario 2 (+10%)	-\$4,300	-\$5,329	-\$5,875
Scenario 3 (+15%)	-\$4,300	-\$5,905	-\$6,677

f = forecast

## **Domestic Travel Implications – Summary of Findings**

The equations used to help produce domestic travel forecasts also illustrate that, to some extent, Canadian domestic travel decisions are influenced by exchange rates, particularly the value of the Canadian dollar vis-à-vis the U.S. dollar. Similar, to the challenges posed in estimating the implications of currency fluctuations on international travel decisions, domestic travel implications will also need to consider corresponding changes to other economic variables.

The historical analysis indicates that the value of the Canadian dollar, particularly compared against the U.S. dollar, does play a role in determining domestic travel expenditures. Perhaps not surprisingly, the overall net effect—assuming everything else is held equal—is negative. That is, if the Canadian dollar appreciates against the U.S. dollar, all things being equal, domestic travel expenditures could be expected to decline. Our own empirical analysis shows that, holding everything else constant for every 10% increase in the value of the Canadian dollar (vis-à-vis the U.S. dollar), overnight domestic travel expenditures decline 1.5%.

Ignoring, for the moment, the impact of currency fluctuations to other economic indicators, empirical analysis suggests that each of the three exchange rate scenarios has the potential to significantly dampen overall domestic tourism expenditures. In fact, using historical empirical relationships, Table 19 illustrates the extent to which overnight domestic travel expenditures could be hampered by the currency fluctuations depicted in the three scenarios. For a specific example, the assessment of the interaction suggests that if the value of the Canadian dollar soared to reach the levels depicted by scenario 3, real overnight domestic spending would be 2.3% below the base-case forecast in 2004 and 4.6% below the base-case during 2005.

TABLE 19: Implication of exchange rate only on overnight domestic travel expenditures (in constant dollars)

(Percent change from base-case forecast)

	2003	2004F	2005F
Scenario 1	0%	-0.8%	-1.6%
Scenario 2	0%	-1.5%	-3.1%
Scenario 3	0%	-2.3%	-4.6%

f = forecast

However, as indicated earlier, a realistic assessment of the implications of currency fluctuations on domestic travel can not be made with the premise of holding everything else, particularly other economic factors, equal. This is especially true in an export-oriented economy like Canada. In fact, a rule-of-thumb according to the Bank of Canada, is that for every 1% increase in the value of the Canadian dollar (vis-à-vis the U.S. dollar), one can expect a total cumulative loss of between 0.2 to 0.3% on Canada's real economic growth (GDP). The cumulative effect on the economy is expected to occur within a 2 to 3 year time horizon. Not surprisingly, a large share of the impact is expected to occur within the first year but carry-over effects will still negatively affect economic growth over the next year or two.

Incorporating this rule-of-thumb, Table 18 illustrates the resulting implications associated with real economic growth in Canada for 2004 and 2005 under each scenario as well as that for our base-case. For a specific example, the assessment of the interaction would suggest that if the value of the Canadian dollar soared to reach the levels depicted by scenario 3, real economic growth would slow

(compared to the base-case) to 0.7% in 2004 and 0.9% in 2005.

TABLE 20: Canada's real economic growth (GDP) (Percent change over previous year)

	2003	2004F	2005F
Base-Case	1.5%	3.0%	3.6%
Scenario 1	1.5%	2.2%	2.9%
Scenario 2	1.5%	1.5%	1.9%
Scenario 3	1.5%	0.7%	0.9%

f = forecast

By incorporating the impact that weaker economic conditions will play on overnight domestic travel along with the impact suggested by historical exchange rate sensitivities, Table 21 illustrates the aggregate impact of currency fluctuations on overnight domestic travel expenditures. Once again, the relatively larger shock associated with each scenario in 2005, compared to the base-case, illustrates not only the lagged impact associated with exchange rates in travel decisions, but perhaps more significantly, the compounding negative impact that a stronger Canadian dollar has on economic growth.

TABLE 21: Overnight domestic travel expenditures (current dollars) (Percent change over previous year)

	2003	2004F	2005F
Base-Case	-6.0%	6.9%	6.0%
Scenario 1	-6.0%	4.9%	3.0%
Scenario 2	-6.0%	3.7%	0.7%
Scenario 3	-6.0%	2.4%	-1.5%

f = forecast

Table 22, presents the current dollar estimates of overnight domestic travel expenditures of the base-case as well as the three scenarios by applying the corresponding year-over-year growth rates shown in Table 19 to our estimate for overnight domestic travel expenditures in 2003.

TABLE 22: Overnight domestic travel expenditures (current dollars)

(Millions of current dollars)

	2003	2004F	2005F
Base-Case	\$21,413	\$22,891	\$24,264
Scenario 1	\$21,413	\$22,465	\$23,140
Scenario 2	\$21,413	\$22,196	\$22,361
Scenario 3	\$21,413	\$21,928	\$21,603

f = forecast

# Overall Travel Implications on Canadians – Summary of Findings

As an interesting final perspective, we looked at the impact of a stronger Canadian dollar (compared against the base-case scenario) on the combined tourism expenditures of Canadians on domestic overnight trips, US trips and other international trips. Table 23 shows the total expenditures associated with these types of trips whereas Table 24 illustrates the relative difference of each scenario, compared against the base-case.

TABLE 23: Overall tourism expenditures - excludes domestic same-day trips (Millions of dollars)

	2003	2004F	2005F
Base-Case	\$40,307	\$43,041	\$45,506
Scenario 1 ( +5%)	\$40,307	\$42,883	\$44,711
Scenario 2 (+10%)	\$40,307	\$42,922	\$44,238
Scenario 3 (+15%)	\$40,307	\$43,050	\$44,929

f = forecast

The results in table 24 appear to suggest that a threshold does exist whereby outbound Canadian tourism expenditures increase more than the amount by which it is expected to decline within Canada. However, considering the negative effects of a stronger Canadian dollar is expected to have on the economy, this only occurs under scenario 3 and only during 2004. In 2005, the cumulative economic fallout associated with the stronger dollar is expected to reduce domestic travel expenditures by more than the expenditure increases that will be associated to Canadian outbound travel.

TABLE 24: Overall tourism expenditures - excludes domestic same-day trips (Difference from base-case in millions of dollars)

	2003	2004F	2005F
Scenario 1 (+5%)	\$0	-\$158	-\$795
Scenario 2 (+10%)	\$0	-\$119	\$1,268
Scenario 3 (+15%)	\$0	\$9	-\$1,577

f = forecast

### **Summary**

The industry remains hopeful that a tourism recovery in 2004 will be aided by improving economic prospects, growing consumer confidence and pent-up demand for travel. The recent CTC 2003 - 4<sup>th</sup> Quarter International Travel Forecasts shared much of the same positive optimism. However, some of that optimism was based on the premise that the U.S. would gradually strengthen in 2004. However, the continued appreciation of the Canadian dollar (vis-à-vis the U.S. dollar) threatened the strength of that recovery.

While this analysis chose to focus on a few distinct exchange rate scenarios, it is understood that the range of possible exchange rate scenarios is limitless. Despite this, the analysis illustrates the dampening effect that a further U.S. dollar depreciation would have on not only Canada's capacity to increase international travel expenditures but also on expanding it's own domestic travel market.

A further weakening of the U.S. dollar is also expected to lure more Canadian travellers to the U.S. as well as some other international sunspot destinations. Despite the fact that many of these trips may come at the expense of other overseas trips, the analysis shows Canada's world travel deficit would deepen.

Interestingly, the analysis suggests that there appears to be an exchange rate threshold whereby the expected increases in outbound Canadian tourism expenditures exceed the level by which domestic tourism expenditures might fall. The analysis also suggests that this trend may be short lived, particularly if the negative implications of a stronger Canadian dollar take an even larger toll on both the economy and travel decisions the following year.