

SAVING IN THE US VS ABROAD: THE NAFTA CASE **ANALYSIS AND COMMENTS**

Alberto Calva // Acus Consulting Ltd

acalva@acusconsulting.com // Twitter: @acalva

July 6, 2017

CONCLUSIONS

- a) There is not an ideal place to invest to get the most from your money. In spite of different levels of risk in each country, -therefore, different size of interest rates-, depending on when you started your investment and when you took out your money is key in the total return. The change in exchange rates in a period of time can make a difference.
- b) If you look at the two cases below, if you invested for 20 years, from 1997 to 2016, best return was in Mexico, followed by Canada and lastly the US (average annual return in each case: 3.82%, 2.40% and 2.03%). But if you invested for 10 years, from 2007 to 2016, best return was in the US, followed by Canada and lastly Mexico (average annual return in each case: 2.14%, 1.20% and -0.19%).
- c) In the long term (20 years) the results sound logical. The more risky the country, the return is slightly higher. But in shorter term (10 years) the volatility of exchange rate can significantly change the total return of your investment.

WHAT HAPPENS WHEN YOU SEND YOUR MONEY ABROAD?

When a person (an investor) decides to send its money (savings) abroad there are several things to consider:

- a) The interest rate can be different from that in the home country. The rates can be higher or lower, and this depends basically because of two reasons: inflation rate and country risk.
- b) Rates between Canada and the US should be similar. They are, but still they are not identical. It has to do with the rates of inflation that are slightly different in each country. Also, country risk is not the same. Inflation in Canada is slightly lower than in the US, but country risk in Canada is slightly higher than in the US.
- c) Rates between US and Mexico are quite different. Mexico has had higher inflation rates than US in the last 20 years (6.1% yearly average in Mexico vs 2.1% in US). Also, the country risk in Mexico is higher.
- d) Exchange rates are constantly fluctuating between countries. In the short run this can be difficult to deal with, but in the long range changes in exchange rate should compensate difference in inflation rates, but not country risk. This is, if the interest rate in Mexico is higher than in the US, part of the difference will be compensated by changes in exchange rate. But still with this adjustment interest rates in Mexico will be higher because of country risk.
- e) Should someone put its money in more risky countries to make a larger profit? It is all relative. Depends on the risk adversity attitude for each person. The more you know about a country (or the better advisors you have), the less risky it could be for you since you have better idea and information about what to do and what not to do.

HOW WE DO OUR ANALYSIS

We could do the analysis with many countries in the world, but that would be extremely expensive. So we focus on the NAFTA countries only: Canada, USA and Mexico. But, we insist, this analysis could be extended to any other country.

The variables we consider:

- a) We use the federal government short term (3 months) rates for each country. Treasury bills 3 months for Canada and the US and the Cetes 91 days for Mexico. All these rates mean low risk, basically only systemic risk and almost none unsystematic (or nonsystematic) risk.
- b) We use the rate for primary market. This is, an investor will very likely get rates slightly lower in the secondary market. So consider them just as a reference and not as a given rate for a specific investment.
- c) For simplicity for this example and analysis, we use nominal rates rather than effective rates. The difference is that nominal rates are not compounded and therefore are a little bit smaller. Once again, we do have the analysis with effective rates, but for simplicity in this paper we are using nominal rate.
- d) We use year-end exchange rates between all countries. And we only use one exchange rate as a reference. This is, we do not consider buy or sell position for each case, in which exchange rates could vary a little bit.

What we do:

- a) We do a calculation assuming that you are in a country and keep your savings in that country. You are paid a domestic interest rate for your savings.
- b) But also, that you are in a country, send your money to another country (exchange rate has an effect), get the interest rate of the other country, and after certain number of years you get it back to your country (exchange rate has an effect again).
- c) We present two cases: one for 20 years from 1997 to 2016 and a second one for 10 years from 2007 to 2016. The results are completely different and has to do with the exchange rates in each moment.

CASES**CASE I: INVESTMENT 20 YEARS FROM 1997 TO 2016
AS SEEN FROM SOMEONE IN THE US
RETURN IN USD (US DOLLARS)**

Canada	USA	Mexico
Exchange rate in December 1996		
USD/CAD	USD/USD	USD/MXN
1.362	1.000	7.877
You invest \$100 USD in each country, that in local currency were:		
\$136.18	\$100.00	\$787.67
The accumulated rate for 20 years (1997 to 2016) in each country:		
60.74%	52.70%	462.52%
Balance at the end of 2007 in local currency:		
\$218.90	\$152.70	\$4,430.76
Exchange rate in December 2016:		
USD/CAD	USD/USD	USD/MXN
1.333	1.000	20.514
Balance at the end of 2016 in USD:		
\$291.78	\$152.70	\$215.99
Canada	USA	Mexico
Total return in 20 years in USD:		
191.78%	52.70%	115.99%
Average annual return for 20 years in USD:		
5.50%	2.14%	3.93%

**CASE II: INVESTMENT 10 YEARS FROM 2007 TO 2016
AS SEEN FROM SOMEONE IN THE US
RETURN IN USD (US DOLLARS)**

Canada	USA	Mexico
Exchange rate in December 2006		
USD/CAD	USD/USD	USD/MXN
1.153	1.000	10.865
You invest \$100 MXN in each country, that in local currency were:		
\$115.30	\$100.00	\$1,086.50
The accumulated rate for 10 years (2007 to 2016) in each country:		
12.69%	6.87%	60.28%
Balance at the end of 2016 in local currency:		
\$129.93	\$106.87	\$1,741.41
Exchange rate in December 2016:		
USD/CAD	USD/USD	USD/MXN
1.333	1.000	20.514
Balance at the end of 2016 in USD:		
\$97.48	\$106.87	\$84.89
Canada	USA	Mexico
Total return in 10 years in USD:		
-2.52%	6.87%	-15.11%
Average annual return for 10 years in USD:		
-0.26%	0.67%	-1.62%

TABLES WITH DATA

Table I: Accumulated Interest Rates

	Canada	USA	Mexico
	T Bill 3m	T Bill 3m	Cetes 3m
1997-2016	60.74%	52.70%	462.52%
2007-2016	12.69%	6.87%	60.28%

Table II: Annual Average Interest Rates

	Canada	USA	Mexico
	T Bill 3m	T Bill 3m	Cetes 3m
1997-2016	2.40%	2.14%	9.02%
2007-2016	1.20%	0.67%	4.83%

Table III: Exchange Rates Year End

Year	USD/CAD	USD/MXN	CAD/MXN
1996	1.362	7.877	5.784
2006	1.153	10.865	9.413
2016	1.333	20.514	15.374

< E N D >

About Acus Consulting. This firm supports companies, organizations and government agencies in financial and strategic analysis, investment project evaluations, financial modeling, valuation of ongoing companies, financial planning, risk analysis and decision making. Acus Consulting works in consulting projects and offers seminars and workshops of finance for executive training. It is based in Toronto.

About Alberto Calva. His expertise field is finance and economy. He has been a business consultant for more than 20 years. He has given seminars and workshops in 8 different countries having trained with this around 10,000 executives and entrepreneurs from 20 different countries. He has a unique mix of academic, practical, entrepreneurial, hands on experience and board member background. He holds a Bachelor degree of Industrial Engineering, a Master degree of Economics and an MBA with a major of Finance.

About this report. We prepare several reports every month regarding financial, economic and business issues. These reports are sent free of any charge to our database of clients and friends. We have been preparing and sending our reports for 20 years. We send each report to around 16,000 people.

Neither Acus Consulting nor Alberto Calva are responsible for any decisions taken based on the information or comments here presented, neither for the accuracy of the figures or information.

| Alberto Calva | acalva@acusconsulting.com | acalva@acus.ca | Cell & WhatsApp +1-416-824-1924 |