

The US Economy: A Canadian Leading Indicator

Canada's economic soundness has garnered renewed interest amongst foreign investors. The country was fortunate to escape the economic crisis unscathed, unlike the rest of the world. It boasts one of the strongest financial systems on the globe, ranking best in the world by the World Economic Forum.

The strength of the Canadian economy was driven by a highly regulated banking system, strong public finances, and a well-diversified economy. As recent data becomes released, it looks like Canada has started to follow in the footsteps of the United States in another economic decline.

Figure 1: The Canadian Dollar vs. the US Dollar



Performance of Canadian Banks

The Canadian financial industry is considered to be one of the strongest in the world and has been relatively unaffected by liquidity constraints that other countries have faced through the recession. At the peak of the crisis, these banks were able to invest in struggling assets worldwide in the hopes of an economic recovery. Royal Bank, TD Bank, and Scotia Bank diversified their footprint through expansion beyond the saturated Canadian market.

Bank	Cash	Financial Leverage	Tier 1 Capital Ratio	Assets/Equity
ROYAL BANK OF CANADA	8,757,000,192	21.17	13.40	16.25
BANK OF NOVA SCOTIA	3,743,000,064	25.50	11.20	20.17
TORONTO-DOMINION BANK	2,628,999,936	16.12	12.00	14.18

Recent Quarterly Performance

With credit markets on the mend, three of Canada's big banks still missed analyst expectations. While operating earnings were sharply up Y/Y, they were still viewed as a disappointment. This was a result of a strong Canadian dollar, volatile capital markets, and a weaker net interest margin.

One of the bright spots for Canadian banks was their domestic banking & wealth management divisions. Earnings were up across the board, led by Scotiabank (+40%), TD (+31%), BMO (+25%), and RBC (+21%). Domestic banking accounts for approximately 55% of earnings, remaining relatively stable in recessionary times.

Wholesale banking revenues at the chartered banks have declined approximately 6% Y/Y and 13% Q/Q. This is a direct result of reduced trading revenues, which accounted for 11.4% of total revenues; down 0.5% from last quarter. These numbers are a sharp contrast from the US banks, which have been putting greater emphasis on both prop and flow trading revenues, although they prove to be very volatile.

Loan loss provisions (LLPs) have steadily increased at the largest banks, bracing for a downturn in the real estate market. At the three largest banks, total LLPs increased from CAD 1.7B to CAD 6.3B. While the CMHC insures most residential mortgage loans based on a set of criteria, banks have become more aggressive in writing down loans in the event of a crisis. Banks have recently become much more sceptical on the global economic recovery.

Bank	Total Loans	Provision Loan Loss 10	Provision Loan Loss 09	Provision Loan Loss 08
ROYAL BANK OF CANADA	286,180,999,168	2,650,000,000	1,595,000,064	791,000,000
BANK OF NOVA SCOTIA	277,934,014,464	1,683,000,000	630,000,000	270,000,000
TORONTO-DOMINION BANK	256,318,996,480	1,960,000,000	1,063,000,000	645,000,000

As seen in Figure 2, normalized share prices of Canadian banks have rebounded since the start of the crisis, reaching all-time highs at the end of 2009. Comparing Canadian banks to those south of the border, US banks have severely underperformed, as seen in figure 3.

Figure 2: Normalized Share Prices of Canadian Banks

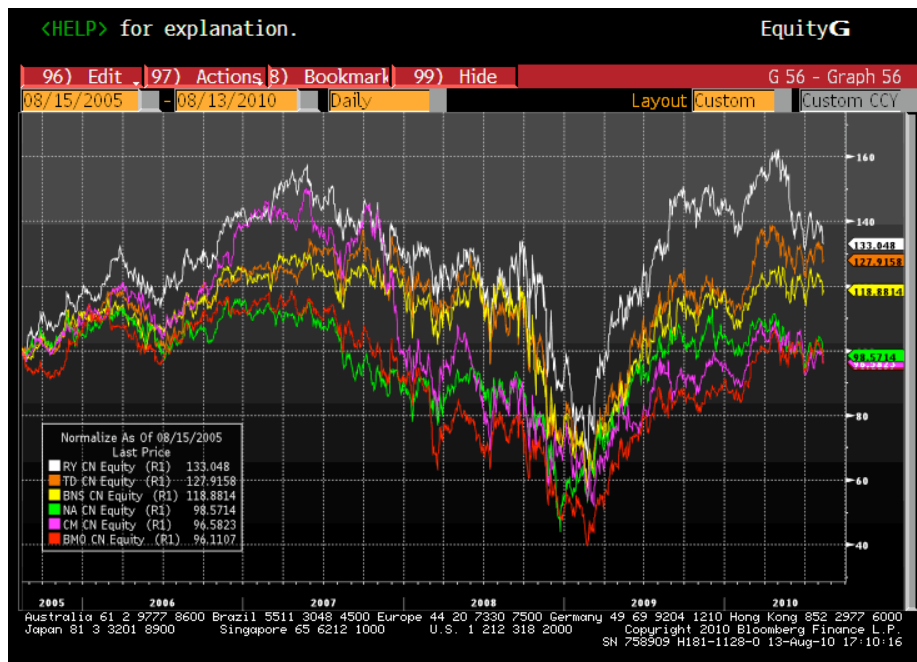
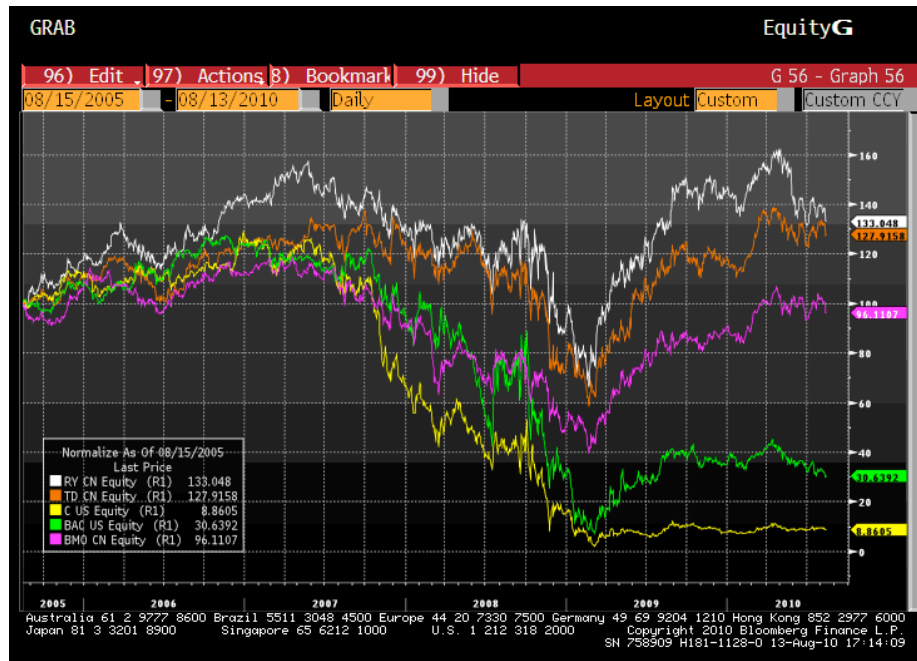


Figure 3: Normalized Share Prices of Canadian vs. US Banks



US Financial Regulatory Overhaul

The Canadian banking industry is heavily regulated by the Office of the Superintendent of Financial Institutions (OSFI), a powerful body under the federal government that focuses on conservative banking and full compliance. Currently, the Tier 1 capital requirement in Canada is 7%, with most Canadian banks now holding more than 13%. The Financial Regulatory Overhaul Bill targets banks operating within the US. While Canadian banks have been aggressively expanding into the US, acquiring failed banks, revenues are only a portion of those from domestic operations. On average, US operating revenues account for between 20%-25% of total operating revenues. With the implementation of the Volker rule, Canadian and international deposit taking and loan-making banks operating in the US will be directly impacted. However, the majority of prop trading for these banks is done north of the border.

PIIGS Exposure

As we have discussed in previous research, the European debt crisis is serious and will have devastating effects on the global financial system. Fortunately, Canadian banks have minimal exposure to PIIGS countries. CIBC has approximately \$50m in direct exposure to PIIGS sovereign debt. However, they have an addition \$620m of indirect exposure in its structured credit book. BMO disclosed exposure of \$260m, with a small portion of that allocated to Greece. Scotia Bank has approximately \$122m exposed to Ireland sovereign debt and \$102m in Spain. The other Tier 1 banks have stated minimal exposure to PIIGS.

The Housing Bubble and CMHC

The Canadian real estate market was able to avoid a collapse thanks to the Canadian Mortgage and Housing Corporation. Some have compared it to Fannie and Freddie, as it is now the largest subprime

insurer in Canada. At one point, the CMHC was insuring 0% down 40 year mortgages as Canadian real estate prices were increasing, it is like pouring gas on a burning house.

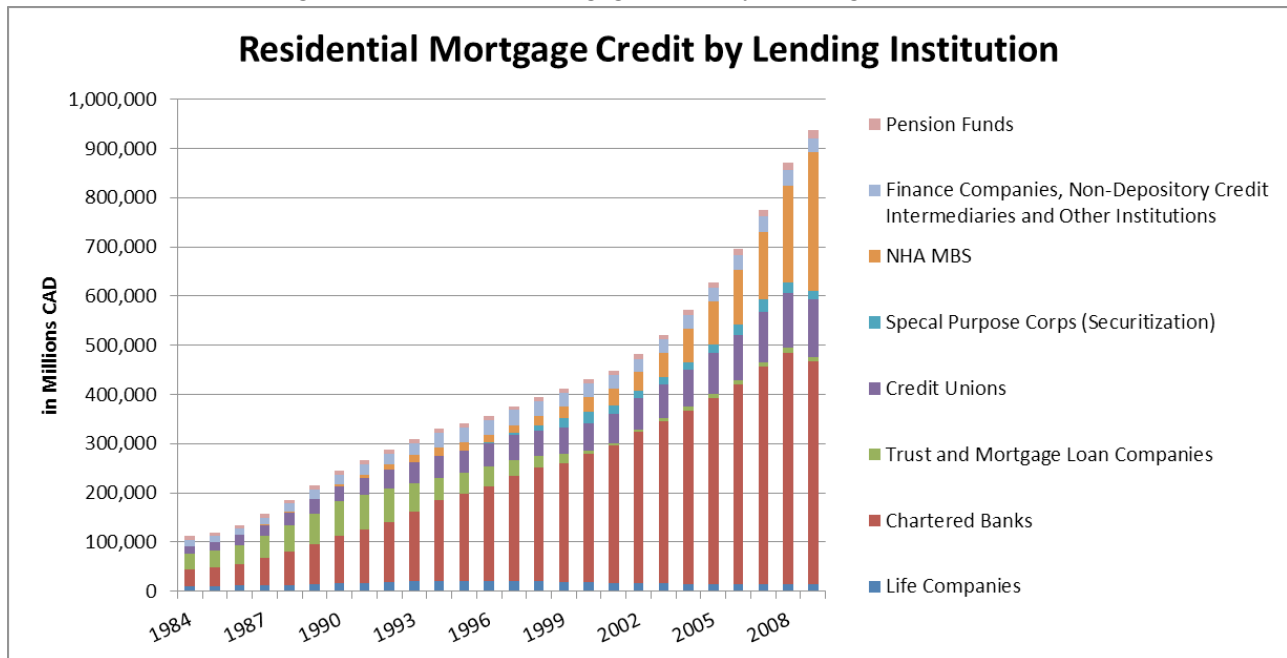
The increases in housing prices over the past 10 years, averaging 9% growth, are not justified by fundamentals. Since 2000, household mortgage debt increased from \$431B to \$920B. However, real estate prices are currently less than 5x average family income, this compares to 7.5x in Australia.

	2005	2006	2007	2008	2009
Average Home Price	249,241	277,267	307,137	304,986	320,362
Income	60,200	61,800	63,900	66,400	67,064
Ratio	4.14	4.49	4.81	4.59	4.78

*Average Income After Tax by Economic Family Types, National Average

Fannie & Freddie differ from CMHC for two reasons: F&F are private entities with government support and F&F hold mortgages that they trade to maximize profits. For F&F, this is the worst possible combination. You have institutions that have every incentive to maximize profit with guarantees from moral hazard. CMHC being a public institution does not have the private-sector incentive to maximize profits.

Figure 4: Residential Mortgage Credit by Lending Institution



According to the 2009 CMHC annual report, the firm currently insures \$473B in residential mortgages. They have set aside \$6.5B in cash for capitalization for insurance and securitization activities. Currently, CMHC maintains approximately twice the level of capital reserves recommended by OFSI, representing 1.3% of total insured mortgages.

Jim Flaherty announced changes to mortgage rules in Canada on February 16th 2010 which takes effect on April 19th, 2010. Government regulations require a minimum 5% down when purchasing a home. As well, borrowers are approved based on a 5-year fixed-rate mortgage opposed to variable rate. Those who

are investing in property must put a minimum of 20% down; this is compared to 5% previously. These changes should help stabilize the market and curb speculation.

Figure 4: CMHC Insurance Premiums

Loan-to-Value	Premium on Total Loan		Premium on Increase to Loan Amount for Portability and Refinance	
	Standard Premium	Self-Employed without 3 rd Party Income Validation	Standard Premium	Self-Employed without 3 rd Party Income Validation**
Up to and including 65%	0.50%	0.80%	0.50%	1.50%
Up to and including 75%	0.65%	1.00%	2.25%	2.60%
Up to and including 80%	1.00%	1.64%	2.75%	3.85%
Up to and including 85%	1.75%	2.90%	3.50%	5.50%
Up to and including 90%	2.00%	4.75%	4.25%	7.00%*
Up to and including 95%	2.75%	N/A	4.25%*	*
90.01% to 95% — Non-Traditional Down Payment****	2.90%	N/A	*	N/A
Extended Amortization Surcharges				
Greater than 25 years, up to and including 30 years: 0.20%				
Greater than 30 years, up to and including 35 years: 0.40%				

The implementation of HST is also playing a role in artificially slowing down the housing market; sales of existing homes have fell 6.8% in July in addition to new home sales crumbling. HST was only implemented recently so the last effects of this are unknown although we will continue to monitor these numbers as they come. Banks have already had to slash mortgage rates in an attempt to spur home buying. Since the implementation of HST, home buying has dropped by 30% nation-wide. Did the Canadian government severely miscalculate the tax at a time when economic stability was and is waning, and the consumers nation-wide are still in recovery? Following atrocious numbers like this, will the Canadian government really increase interest rates again next month?

Figure 5: Canada GDP



According to the CMHC, July housing starts came in better than expected, 189k actual vs. 186k forecasted. However, this amounted to a month-over-month decrease of 1.6%. “Housing starts moved lower in July, largely due to a decrease in urban single starts and a reduction in rural starts,” said Bob Dugan, Chief Economist at CMHC’s Market Analysis Centre. “Multiple starts partially offset this moderation.” Canada posted strong starts in urban areas, up 1.9%. This is due to strong urban multiple starts, rising 13.4% for the month though they were offset by a decline in urban single starts of 11.3%.



Employment

In July, Canada posted weaker than expected employment numbers, coming in at -9.3k vs. an expected 13.7k. The unemployment rate edged up 0.1 percentage points to 8.0%.

Figure 6: Canadian Unemployment Rate



The country experienced large full-time declines of -139,000, though partially offset by part-time gains of approximately 130,000. This shift from full-time to part-time can have negative economic effects as it decreases the job market stability. In July, employment decreased in educational services, finance, insurance, real estate and leasing. Some of these losses were offset by manufacturing and public administration. The gains in manufacturing are positive, though this may not be the trend as the Canadian dollar continues to strengthen against the USD. On a positive note, hourly wages in July were up 2.2% Y/Y.

Looking at the longer-term picture, the Canadian job market is on track for a 'real' recovery. Canada has added a total of 394,000(+2.3%) jobs over the past year. There has been an upward trend in construction, professional, scientific, and health care industries. As the US recovery fades, job losses in Canada may become the new norm as companies have run out of cost-cutting options.

Looking at figure 5, the unemployment rate has increased since the start of the US lead recession. However, it is still trailing the highs made in 1984 and 1991. The current unemployment rate in Canada is 8.1%; well below its 30 year average of 8.7%.

Government Debt and Unfunded Liabilities

The Canadian government had the foresight to pay down debt while the economic environment was strong. Before the crisis hit, Canada was able to reduce total government debt to 62% of GDP. Conservative fiscal policies were the direct cause of this. However, the crisis led the government to run massive fiscal deficits. The current debt-to-GDP ratio stands at 78%.

Figure 6: Canada's Debt-to-GDP



The government has illustrated that it wants to tighten spending and focus on tackling the deficit problem. However, the government has shown no restraint as the economic environment becomes more depressed. In 2009, the government ran a \$50B deficit, the largest in modern Canadian history. As the US economy further deteriorates, expect more stimulus or potentially quantitative easing from BoC.

Canada has seen growth in its unfunded liabilities, with programs such as the CPP and Medicare accounting for a large portion of this. According to a study released by the Fraser Institute, unfunded liabilities in Canada amount to approximately \$2.7T or \$171,032 per person.

- Canadian Pension Plan unfunded liabilities stand at \$516.3B
- Old-Age Security unfunded liabilities stand at \$470B
- Medicare unfunded liabilities stand at \$555.3B

Keep in mind that these numbers are from 2003. Medicare unfunded liabilities have been increasing at a 6.3% clip, bringing total 2010 unfunded liabilities to approximately \$850B. The provincial governments face potentially devastating unfunded liabilities as well. For example, the Workplace Safety and Insurance Board of Ontario (WSIB) has unfunded liabilities of \$11.4B. These are not included in the provincial deficit which currently stands at \$21.3B.

Figure 7: Summary of Unfunded Liabilities for Major Government Programs (\$B)

Fiscal Year	CPP	OAS	Medicare	Total
1999	483.5	372.4	432.2	1,288.1
2000	443.0	395.8	449.7	1,288.5
2001	466.1	422.1	509.0	1,397.1
2002 [a]	507.5	441.8	529.9	1,479.2
2003	516.3	470.0	555.3	1,541.6
Change, 1999–2003 (%)	6.8%	26.2%	28.5%	19.7%

Note a: 2002 figures for CPP are not available and were therefore estimated using historical data.

Sources: Office of the Chief Actuary, Office of the Superintendent of Financial Institutions Canada, Canada; calculations by authors.

Public finances from the provincial governments are abysmal. Only one province, Saskatchewan, reported a budget surplus in 2009-2010. As politicians predict an economic recovery, 2010-2011 budget numbers are not much better. Ontario is predicting a deficit of \$19.7B, Alberta at \$4.8B, and Quebec at \$4.5B. Keep in mind that these numbers do not include unfunded liabilities.

Figure 8: Provincial Deficits (\$M)

	2009-2010	2010-2011
Nova Scotia	-488	-222
Newfoundland	-295	-194
New Brunswick	-743	-749
Quebec	-4300	-4500
Ontario	-21300	-19700
Manitoba	-555	-545
Saskatchewan	425	-623
Alberta	-3620	-4750
British Columbia	-2780	-1720
Yukon	-23	3
Northwest Territories	-21	35
Nunavut	-44	0

A Country Built on Exports

Canada is a nation that is built on global trading through an export driven model. More than two-thirds of the country's GDP can be contributed to this. Looking at figure 9, Canada's largest export markets are the US, UK, and Japan. All three of these countries are facing disaster, with declining economies, poor demographics, and massive budget deficits. While the Canadian domestic economy may be recovering, global trade may come to a standstill very abruptly. It is crucial for Canada to find a way to diversify its exports.

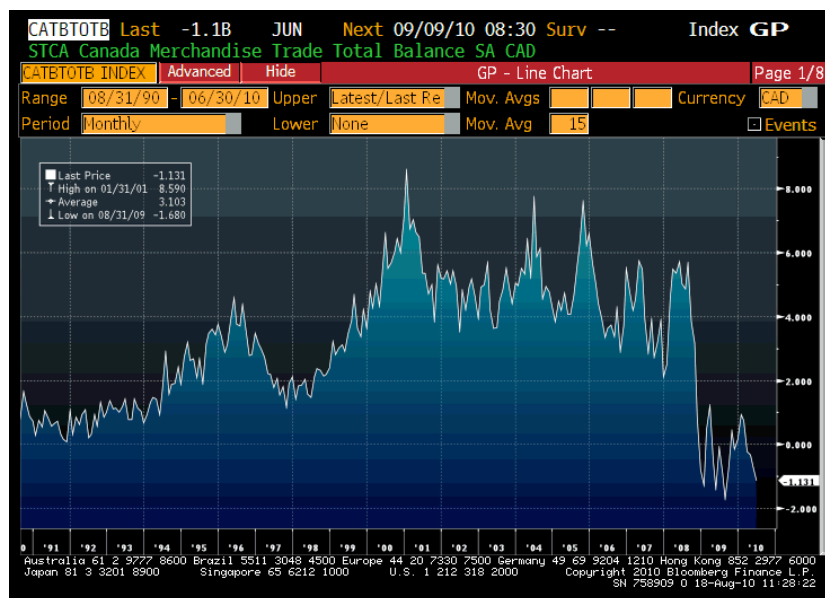
Figure 9: Canada's Top Trading Partners

Canada's Top 10 Export Markets by Country, 2008		Canada's Top 10 Import Markets by Country, 2008	
Country	% Share of Total Exports	Country	% Share of Total Imports
United States	77.7	United States	52.4
United Kingdom	2.7	China	9.8
Japan	2.3	Mexico	4.1
China	2.2	Japan	3.5
Mexico	1.2	Germany	2.9
Germany	0.9	United Kingdom	2.9
Netherlands	0.8	Algeria	1.8
South Korea	0.8	France	1.4
Belgium	0.7	Norway	1.4
France	0.7	South Korea	1.4
Total of Top 10	90.0	Total of Top 10	81.6

Source: Industry Canada, 2009 (6/2009)

Canada's trade balance has deteriorated since the start of the recession. The country had a surplus of 7.9B in 2006, but has since fallen to -1.1B. To make matters worse, commodities prices have helped mask the country's export recession. In 2008, oil spiked to a historical high of US \$147 per barrel allowing Canada to keep exports to the US artificially high. At the same time, demand for agri-food and fertilizers remained strong. As commodities prices hit a wall on speculation of a double-dip recession, Canada's exports have further diminished.

Figure 10: Canada's Trade Balance



As the global economic recovery showed some light, institutions and investors began purchasing Canadian Securities. Bloomberg reported the following in an interview with Pimco’s Bill Gross:

“Gross told the newspaper in an interview he’s “in awe” of countries such as Canada that have a low debt-to-gross-domestic-product ratio and solvent financial institutions. He said “north of the border” has become a “preferable destination” to what he sees in the U.S. Gross said he’s been raising his “exposure” to Brazilian and Canadian government bonds.”

However, as Canadian leading indicators point to a further slowdown in the economy, foreigners have been searching elsewhere for investment opportunities. After two months of heavy buying, foreigners slowed purchases of Canadian securities during the month of June, coming in at CAD 5.3B. This is well below analyst expectations of CAD 9.42B and a significant drop from the CAD 23.0B witnessed in May.

Canadian investments in foreign securities were strong for the month, reaching CAD 4B. There was significant buying activity in bonds and stocks, with total purchasing of CAD 2.6B and CAD 2.0B respectively. Canadians also reduced their holdings of foreign money market paper by \$650M, with two-thirds of that related to US federal treasury bills.

Figure 11: Canada’s International Transaction in Securities

	Apr-10	May-10	Jun-10
	\$ millions		
Foreign investment in Canadian securities	12,274	23,043	5,389
Bonds (net)	9,991	15,223	6,956
Outstanding	9,932	12,390	6,568
New issues	4,397	3,561	8,735
Retirements	-4,784	-759	-6,044
Change in interest payable	446	30	-2,303
Money market paper (net)	-436	2,662	-1,616
Government of Canada	-1,472	3,683	-2,196
Other	1,036	-1,021	580
Stocks (net)	2,720	5,158	48
Outstanding	2,559	4,826	56
Other transactions	162	332	-7
Canadian investment in foreign securities	-167	2,934	-4,008
Bonds (net)	15	5,291	-2,596
Money market paper (net)	412	-317	650
Stocks (net)	-594	-2,040	-2,061

Conclusion

While it appears that the Canadian economy remained unscathed throughout the financial crisis of 2007-2008, further deterioration of public finances combined with declining exports while commodity prices remain high may put further pressure on the Canadian economy. With the global economic recovery in doubt, Canada's resilient economy is beginning to mimic the United States in 2006-2007:

- Unemployment is now moving upwards, 170,000 full-time jobs were shed in June
- High reliance on exports to the United States, United Kingdom, and Japan
- Foreigners continue to divest of Canadian securities
- Canada's trade balance is now negative
- Public finances, including federal and provincial, are in terrible condition
- Unfunded liabilities continue to grow in Medicare, CPP, and OAS
- Home sales have begun to fall off a cliff, down 30% since implementing HST

In spite of these issues, the Canadian government continues to tighten bank regulations, increase interest rates, and focus on the growing budget deficit. While this may have negative short-term effects on GDP, I believe this will allow the country to remain structurally sound in a looming economic crisis.