

Remarks by Mark CarneyCHECK AGAINST DELIVERYGovernor of the Bank of CanadaEmpire Club of CanadaThe National Forum (Canadian Club of Toronto and Empire Club of Canada)16 December 2009

#### **Current Issues in Household Finances**

#### Introduction

As the holiday season approaches, our attention turns naturally to the home front. Accordingly, my comments this afternoon will focus on households. I would like to concentrate in particular on the implications of Canadian household finances for financial stability in our country.

I spoke here in Toronto a year ago, almost to the day. Then, the global financial sector crisis was buffeting the real economy. Businesses were postponing large investments, and households were hesitating over major purchases. It was clear then that 2009 would be a difficult year, and so it has proved. With more than 400,000 jobs lost and a \$30 billion fall in output, the Canadian economy has suffered a deep, albeit brief, recession.

Today, the outlook has improved. While significant fragilities remain, the global economic recovery is now supported by several factors. First, feedback between financial markets and the real economy has reversed direction. In most major economies, the inventory cycle has turned and housing sectors are stabilizing. In addition, considerable fiscal expansion and monetary stimulus are supporting domestic demand.

Nonetheless, the Bank expects underlying private demand in many economies to recover only slowly, as significant balance sheet and structural adjustments have yet to run their course. In particular, the rebound in U.S. consumption is projected to be more moderate than in previous cycles. This will have direct implications for Canada. While the Canadian economy will likely grow faster than the other G-7 countries next year, the Bank expects our recovery to be more protracted and more reliant on domestic demand than usual (Chart 1). In the near term, Canada will grow despite—not because of—the pace of external activity.

The behaviour of Canadian households will thus be particularly important. Before turning to that in more detail, I would like to briefly review the challenges facing U.S. households, both for their direct impact on Canada and for the insights they offer for financial stability.

#### **U.S. Household Sector**

For a generation, U.S. households increasingly "saved" through capital appreciation rather than from current income. Over the last three decades, U.S. consumer spending grew substantially faster than national income, driving the ratio of consumption to GDP from 62 per cent to a record 70 per cent (Chart 2). In the same period, the personal

savings rate fell from 11 per cent of disposable income to 1 per cent, while household debt doubled from 84 per cent of disposable income to 165 per cent.<sup>1</sup>

Financial innovations, including home equity loans and securitization, drove these trends. Initially, they increased financial system efficiency, diversified risk, and smoothed consumption. Over time, however, these financial technologies were applied increasingly indiscriminately. Prudence gave way to exuberance to the extent that the subprimemortgage market became a mainstay of the expansion.<sup>2</sup> When the U.S. housing bubble collapsed under its own weight, households with the least resilience were the hardest hit.

An important lesson of the American experience was that the costs were not confined to the most vulnerable households. In a now-familiar chain, problems in subprime quickly spread to prime mortgages, structured products in general, core funding markets, and, ultimately, the capital bases of most major financial institutions. Eventually, virtually every financial asset in the world was repriced. Financial stability is as much about linkages as it is about specific risks. Shocks can have large, unanticipated consequences.

A lengthy period of adjustment for the U.S. consumer has just begun (Chart 3). A decline of roughly 30 per cent in wealth has promoted a quadrupling of the U.S. personal savings rate to 4.5 per cent. Nonetheless, household debt levels have not fallen substantially, and consumer spending as a share of GDP actually rose to a new high of 71 per cent in the third guarter.<sup>3</sup> Given the historic declines in net worth and the need to save for retirement, it appears clear that U.S. household savings need to remain elevated for an extended period of time.

The new equilibrium for household savings will depend on multiple factors, including wealth effects, risk aversion, the evolution of the financial system, the employment outlook, and the credibility of fiscal policy.<sup>4</sup> The Bank currently projects that the U.S. personal savings rate will average around 5.5 per cent over the next two years. This judgment is consistent with ultimately stabilizing the U.S. net foreign liability position and rebuilding U.S. household wealth.<sup>5</sup>

This sustained, higher savings rate will produce a historically weak recovery in U.S. consumer spending and accounts for the Bank's relatively subdued forecast for overall U.S. economic growth (Chart 4).

#### **Canada's Household Sector**

Canadian household finances were in better shape going into the crisis than those of Americans. The Canadian personal savings rate was higher and household debt was lower (Chart 5). The ratio of consumer spending to GDP, at 55 per cent, was below the

<sup>&</sup>lt;sup>1</sup>Household debt includes the liabilities of households, non-profit organizations and unincorporated businesses, as the debt of the latter is ultimately a claim on the household sector.

<sup>&</sup>lt;sup>2</sup> Residential investment accounted for roughly 14 per cent of GDP growth from 2003 to 2005, inclusive. Subprime mortgages accounted for 20 per cent of new mortgage originations in 2005 and more than 22 per cent in 2006.

<sup>&</sup>lt;sup>3</sup> It is worth noting that in an environment of rising unemployment, the savings rate of U.S. households that are working has risen even more sharply than the aggregate numbers suggest.

<sup>&</sup>lt;sup>4</sup> For example, Ricardian equivalence predicts that households would save more in response to higher government deficits, anticipating the future tax liabilities required to address the rising public debt.

To the 2002-2004 average over the next five years.

longer-term average in Canada. As a consequence, when the crisis struck, Canadian households were less vulnerable.

Moreover, throughout the downturn, Canadian labour and housing markets held up better (Charts 6 and 7), meaning that the incomes and net worth of Canadians were not as hard hit as those of Americans (Chart 3). So, while there is no doubt the financial crisis and accompanying recession have been painful here, Canadians have had less need to increase savings to restore their balance sheets.

Still, Canadians have saved more. The personal savings rate in this country rose to an eight-year high of 5.5 per cent in the second quarter. The Bank projects that this rate will moderate only slightly over the medium term. We view the sharp increases in household savings as largely precautionary, that is, reflecting uncertainty about the economic outlook and financial conditions.

As the economy begins to grow again and confidence is gradually restored, we expect that some of these precautionary savings will be unwound, and that some consumers will take further advantage of unusually low borrowing rates. Indeed, our current stimulative monetary policy is meant, in part, to encourage such behaviour. Stronger growth in domestic consumption will be necessary to offset weak external demand in order to restore the Canadian economy to balance and inflation to target. Recent data have been consistent with these expectations.

Going forward, there are risks, on both the upside and the downside, to this outlook for the Canadian personal savings rate. Canadian households could remain more cautious, chastened by the recent financial and economic trauma, leading to more durably elevated savings. Some of the issues brought to the fore by the crisis, such as retirement funding, could also alter household savings behaviour over the nearer term. Over the next few days, the federal, provincial, and territorial finance ministers will meet to discuss these issues, in recognition of their importance to Canadians. Finally, more protracted U.S. and global recoveries could restrain Canadian households, by affecting both the confidence and economic prospects of Canadians.

On the other hand, there is a risk that, as growth returns, the resilience of Canadian households through the crisis could lead to declines in the savings rate that are sharper, and increases in household borrowing that are larger, than the Bank has projected.

Whatever happens, the Bank's monetary policy reaction to consumer behaviour will always be driven by its implications—taken in conjunction with all other relevant factors—for inflation over the medium-term horizon.

#### Households and Financial Stability in Canada

Household finances are also important for financial system stability. As was painfully learned from the U.S. experience, a stable financial system is fundamental for the effective functioning of the economy and the financial welfare of citizens.

In this regard, there are two important considerations. First, financial and price stability share common determinants but have different time horizons. Inflation continuously reflects real shocks and/or policy responses, while financial vulnerabilities are much less predictable. They develop over time and can persist for longer than expected. Simply put, behaviour consistent with price stability over the medium term could simultaneously

build financial stresses over a longer horizon. Second, when evaluating the financial condition of Canadians, we need to look beyond the aggregate for possible changes in distribution of debt among households.

The *Financial System Review* (FSR) is a semi-annual Bank publication that examines developments in the financial system and provides an analysis of policy directions in the sector. In our most recent FSR, we judge that most of the risks to the stability of the Canadian financial system have ebbed in recent months. At the same time, our assessment of the risks related to household balance sheets is that they have increased further.

As noted in the FSR, the vulnerability of Canadian households to adverse wealth and income shocks has grown in recent years. Aggregate debt levels have risen sharply relative to income. Those debt levels have continued to grow fairly rapidly this year, unusually so for a recession.<sup>6</sup> For some households, this additional indebtedness has translated into increased financial stress. Personal bankruptcies in Canada rose 41 per cent in the third quarter from the same period a year ago, leaving the number of bankruptcies as a proportion of the population at its highest level since 1991. Delinquency rates on loans have risen as well, with the proportion of mortgages with payments in arrears three months or more having increased by half over the past year.

#### **Stress Testing the Canadian Household Sector**

To understand better the vulnerability of Canadian households, and the consequences for financial stability, the Bank undertakes regular stress tests. The June FSR reported on the potential impact of a more severe economic downturn on households. The results illustrated that a hypothetical increase in unemployment could produce loan losses for financial institutions representing about 10 per cent of their Tier 1 capital.<sup>7</sup>

While the near-term risks from a further sharp deterioration in labour markets have diminished, the Bank believes that overall risks to financial stability arising from the household sector have continued to increase. In particular, the combination of sustained growth of household debt relative to income and a rising interest rate environment could increase the vulnerability of households to an adverse shock. In the current FSR, the Bank conducts stress-test scenarios to examine the potential impact of growing debt and

rising interest rates on the debt-service ratio of Canadian households (Table 1). We look at scenarios such as these, not because we think they are the most likely outcome, but rather to provide an assessment of downside risks that could potentially generate stress in the Canadian financial system.

The simulation generates a scenario indicating that, by the middle of 2012, almost one in ten (9.6 per cent) Canadian households would have a debt-service ratio greater than 40 per cent, the threshold above which households are considered financially vulnerable (Table 2).

<sup>&</sup>lt;sup>6</sup> Real consumer credit, including home equity lines of credit, has grown at a 7 per cent pace over the past year, in contrast with the outright declines during the recessions of the early 1980s and 1990s.
<sup>7</sup> This is the direct impact and excludes indirect effects from induced stress on businesses and financial

<sup>&</sup>lt;sup>7</sup> This is the direct impact and excludes indirect effects from induced stress on businesses and financial markets.

Moreover, the percentage of debt owed by these vulnerable households would almost double. Both of these metrics are well above their recent peaks.<sup>8</sup>

While these simulation results are purely illustrative, they give pause for reflection. It would not be healthy to have almost 20 per cent of household debt extended to vulnerable households. Nor is it necessary to secure our recovery.

The risks are not isolated to the most vulnerable. A shock to economic conditions could be transmitted to the broader financial system through deterioration in the credit quality of loans to households. In such an event, increased loan-loss provisions and reduced quality of the remaining loans could lead to tighter credit conditions more broadly and, in turn, to mutually reinforcing declines in real activity and in the health of the financial sector. While the broader effects are difficult to anticipate with precision, some sectors, such as retail and housing, would likely be affected more than others. Such a shock would also affect certain segments of the capital markets, such as credit card securitization. More fundamentally, strains on the household sector could also cause a more generalized rise in risk premia, with attendant negative implications for a variety of asset prices.

#### Conclusion

At present, the risks arising from the Canadian household sector are relatively low. Indeed, by some measures, Canadian household finances appear quite healthy. The current rate of mortgage arrears, for example, remains more than one-third below its peak in the early 1990s. Going into the crisis, Canadian households carried considerably less debt than their American counterparts. That remains true today. Data released Monday show that rebounding housing and financial markets increased Canadian household net worth to 589 per cent of disposable income by the end of the third quarter, above its 10year average.

While asset prices can rise and fall, debt endures. Moreover, the linkages between the real economy and the financial sector are complex, non-linear, and often opaque. That is why we cannot afford to be complacent. Indeed, one objective of using the FSR to profile risks to the Canadian financial system is to help prevent these risks from materializing. When risks are still manageable is precisely the best time to act. We must be vigilant, and all parties must fulfill their responsibilities.

Responsibility starts with the individual. Our advice to Canadians has been consistent: We have weathered a severe crisis—one that required extraordinary fiscal and monetary measures. Extraordinary measures are the means to an end: the return to the ordinary. Although we expect the recovery to be gradual and protracted, these measures are working. Ordinary times will eventually return and, with them, more normal interest rates and costs of borrowing. It is the responsibility of households now to ensure that in the future, when the recovery takes hold and extraordinary measures are unwound, they can still service their debts.

Similarly, lenders have responsibilities. Financial institutions should actively monitor risk stemming from households and not take false comfort derived from mortgage insurance

<sup>&</sup>lt;sup>8</sup> Both these metrics peaked in 2000 when 7.4 per cent of Canadian households had a debt-service ratio greater than 40 per cent, and the percentage of debt held by these households reached almost 14 per cent. Data available goes back to 1999.

and past performance of household credit. As our simulations suggest, the overall credit profile of Canadian households could well shift if debt continues to grow at current rates. The Bank expects that Canada's financial institutions will continue to apply their high standards of risk management, for which they are being justly lauded the world over.

Policy-makers and regulators, including the Bank of Canada, have responsibilities, as well. The Bank is working intensively with the Office of the Superintendent of Financial Institutions (OSFI) at the Basel Committee on the design of new international capital and liquidity standards. The Bank collaborates closely with the Department of Finance and discusses with federal agencies, as required, to monitor evolving risks and take appropriate actions. The Bank's ongoing research and analysis of the financial system, including the work I have discussed today, is an important element of our commitment to helping ensure Canada has a resilient, secure financial system that enhances the economic and financial welfare of all Canadians.

#### **APPENDIX**



#### Chart 1: The Canadian recovery should be more modest than in previous cycles Quarterly Data

## Chart 2: U.S. consumer spending is projected to converge slowly towards its long-run average



Source: U.S. Bureau of Economic Analysis, Statistics Canada, and Bank of Canada calculations

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Chart 3: The wealth shock smaller in Canada than in the United States

Canadian and U.S. household net worth over personal disposable income

**Chart 4: The U.S. economic recovery is expected to be more subdued than in the past** Comparison of U.S. Real GDP across business cycles; start of recession = 100, quarterly data



#### Chart 5: The household debt-to-income ratio is still rising in Canada

Household debt as a share of personal disposable income



## **Chart 6:** Real GDP growth in the major economies points to the start of a global recovery



Sources: Statistics Canada, U.S. Bureau of Economic Analysis, Eurostat, Japan, Statistics Bureau, and Bank of Canada calculations.

Last observation: 2009Q3



#### Chart 7: The Canadian labour market has outperformed the U.S. market



	Scenario 1		Scenario 2		Both Scenarios			
	Overnight rate (%)	Effective borrowing rate (%)	Overnight rate (%)	Effective borrowing rate (%)	Household income (annualized growth rate)	Total household credit (annualized growth rate)	Consumer credit (annualized growth rate)	Residential mortgage credit (annualized growth rate)
2009 Q3	0.25	4.27	0.25	4.27		8	8.5	7.3
2009 Q4	0.25	4.25	0.25	4.25	1			
2010 Q1	0.25	4.23	0.25	4.23		8	8.5	7.3
2010 Q2	0.25	4.21	0.25	4.21	5			
2010 Q3	0.75	4.34	0.75	4.34				
2010 Q4	1.50	4.51	1.50	4.51				
2011 Q1	2.15	4.60	2.25	4.69		8	8.5	7.3
2011 Q2	2.60	4.68	3.00	4.88	- 5			
2011 Q3	3.05	4.78	3.50	5.03				
2011 Q4	3.10	4.79	4.00	5.20				
2012 Q1	3.15	4.81	4.25	5.33	- 5	8	8.5	7.3
2012 Q2	3.20	4.82	4.50	5.41				

### Table 1: Assumptions for household stress-test simulations

# Table 2: Impact of continued growth of debt-to-income ratio in thecontext of an environment of rising interest rates on households

		Scenario 1		Scenario 2			
	1	2	3	1	2	3	
	Proportion of households with DSR > 40%	Proportion of debt owed by households with DSR > 40%	Percentage of bank losses relative to Tier 1	Proportion of households with DSR > 40%	Proportion of debt owed by households with DSR > 40%	Percentage of bank losses relative to Tier 1	
Historical peak, 2000	7.4	13.8		7.4	13.8		
2008 H2 – 2009 H1 (observed)	5.9	10.7	3.0	5.9	10.7	3.0	
2010 Q4	6.4	11.7	3.4	6.4	11.9	3.5	
2011 Q4	7.7	14.4	3.9	8.9	17.4	4.7	
2012 Q2	8.5	15.9	4.0	9.6	18.9	4.8	