



BANK OF CANADA  
BANQUE DU CANADA

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**Remarks by Mark Carney  
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Board of Trade of Metropolitan Montreal  
Montréal, Quebec  
21 May 2013**

## Canada Works

### Introduction

It is almost six years since the start of the global financial crisis, and its dynamics still dominate the economic outlook.

In the United States, households are emerging from a painful period of deleveraging. Their economic expansion continues at a modest pace, with gradually strengthening private demand partly offset by accelerated fiscal consolidation. Despite recent progress, the U.S. economy has not yet achieved escape velocity.

Europe remains in recession, with economic activity constrained by fiscal austerity, low confidence and tight credit conditions. Deep challenges persist in its financial system. Without sustained and significant reforms, a decade of stagnation threatens.

Europe can draw lessons from Japan on the dangers of half measures. It is now more than two decades since the Japanese financial crisis erupted. To end its debilitating legacy, Japan has just embarked on a bold policy experiment. Its success or failure will have a major impact on the outlook over the coming years.

Amongst the G-7, Canada is unique. For us, the global financial crisis was an *external* rather than internal shock. When Canadian policy-makers responded quickly and forcefully, our financial system channelled credit to where it was needed and our economy adjusted smartly.

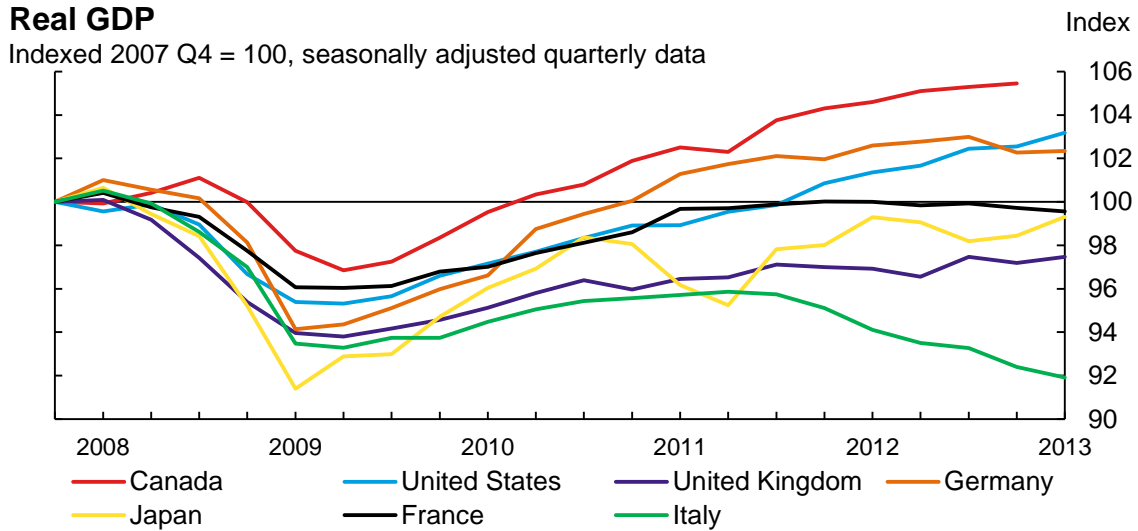
As painful as our recession was, Canada suffered less. By the start of 2011, all of the output and all of the jobs lost during the recession had been recovered (**Charts 1 and 2**). A further 480,000 jobs have been created since, with the vast majority of them full-time and in the private sector. Nearly all the new jobs are in industries that pay above-average wages.

Relative to our peers, Canada is working.

Why did we fare better? Our outperformance reflects four critical advantages:

- responsible fiscal policy,
- sound monetary policy,
- a resilient financial system, and
- a monetary union that works.

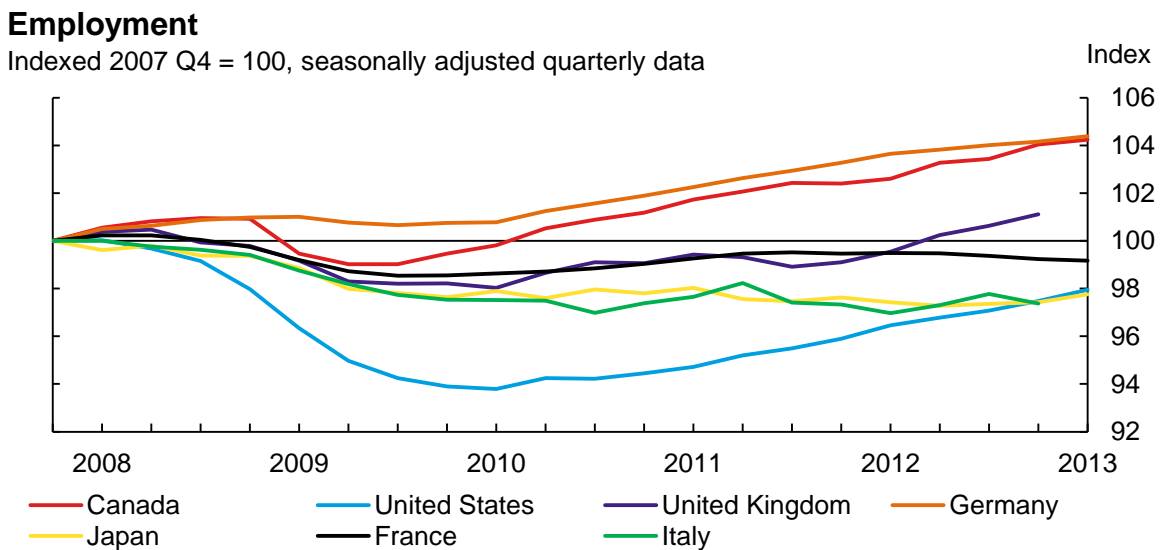
**Chart 1: Canada: First G-7 country to recover losses**



Source: Statistics Canada, U.S. Bureau of Economic Analysis, U.K. Office for National Statistics, Eurostat, Cabinet Office of Japan, and Bank of Canada calculations

Last observation: 2012Q4 CA; 2013Q1 all others

**Chart 2: Canada has more than fully recovered all jobs lost**



Note: Employment measured using national definition for each country  
Sources: Statistics Canada, U.S. Bureau of Labor Statistics, U.K. Office for National Statistics, Eurostat, Ministry of Health, Labour & Welfare of Japan, and Bank of Canada calculations

Last observation: 2012Q4 UK, IT; 2013Q1 all others

I will discuss these foundations of our prosperity in more detail, but I don't intend to oversell them. These are the cornerstones of Canada's prosperity, but lasting growth depends on what is built on this foundation through longer-term investments in infrastructure, human capital, innovation and new markets.

### A Monetary Union That Works

Canada's monetary union has the essential elements of an effective currency union: an integrated economy, fiscal federalism and labour market flexibility. Allow me to elaborate.

#### An integrated economy

While the composition of provincial output varies, the Canadian economy is highly integrated. Consider the case of commodities.

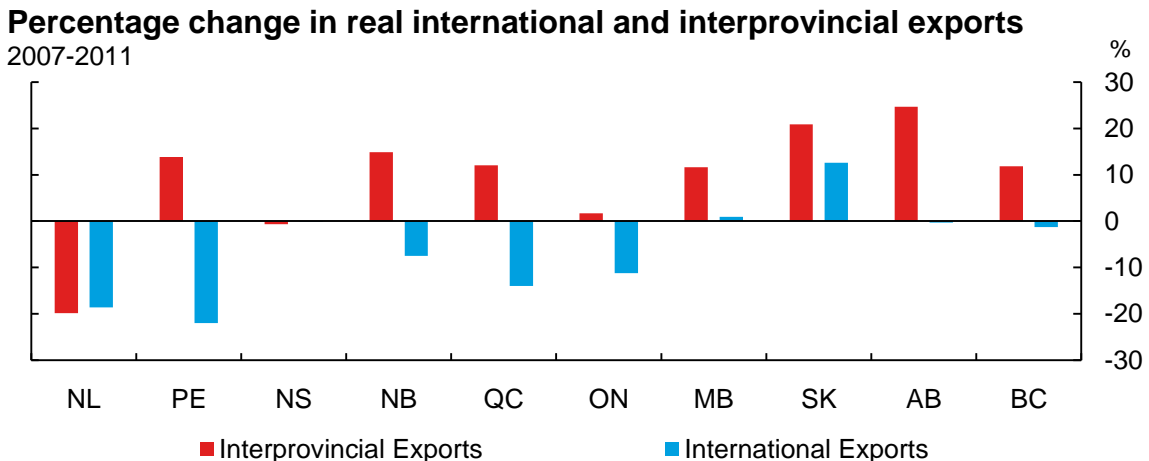
When commodity prices increase, all provinces benefit. All else equal, the Canadian dollar appreciates. Its adverse impact on our non-commodity exports is partially offset by the fact that a stronger currency reduces the cost of productivity-enhancing machinery and equipment and imported inputs to production.<sup>1</sup> Various mechanisms distribute benefits across provinces: fiscal policy; increases in personal wealth through income and ownership of stock; and movements in internal real exchange rates and interprovincial trade.<sup>2</sup>

During the recession and its aftermath, the importance of interprovincial trade was clear. For example, the increased demand from other provinces for Quebec's goods and services significantly offset lost international exports (Chart 3).

Movements in provincial real exchange rates are another important part of the adjustment process. Although there is one exchange rate for Canada as a whole (we all use Canadian dollars), price differentials across the country yield different real provincial exchange rates.

This matters.

**Chart 3: Trade between provinces helps offset weakness in international trade**



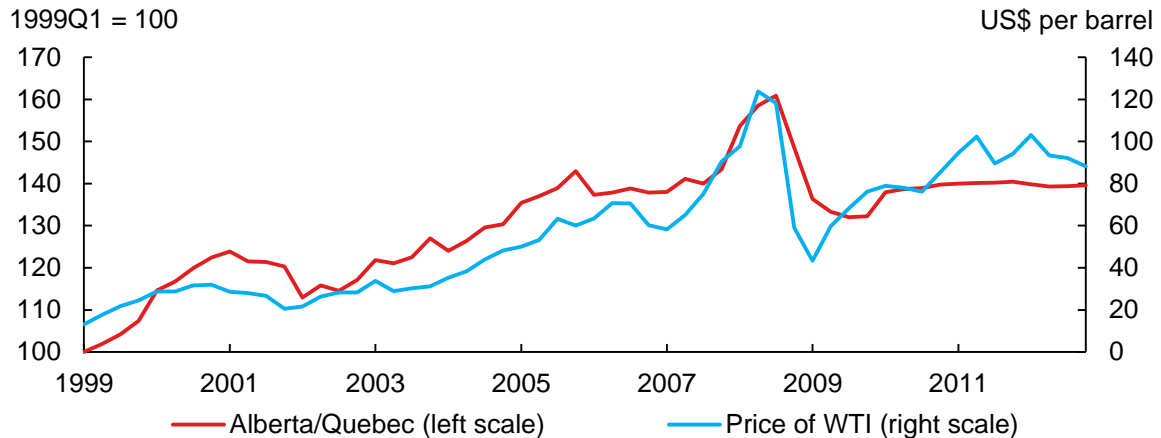
Source: Statistics Canada

Last observation: 2011

Consider the Alberta/Quebec real exchange rate (**Chart 4**). When higher energy prices stimulate production and investment in Alberta, extraction, construction and labour costs there rise. This increases the real Alberta exchange rate, making goods and services from the other provinces, including Quebec, more competitive. Interprovincial trade is boosted, spreading benefits from energy price increases throughout the economy.

**Chart 4: Alberta/Quebec real exchange rate is highly correlated with price of oil**

**Quarterly data**



Sources: Statistics Canada, Bloomberg and Bank of Canada calculations

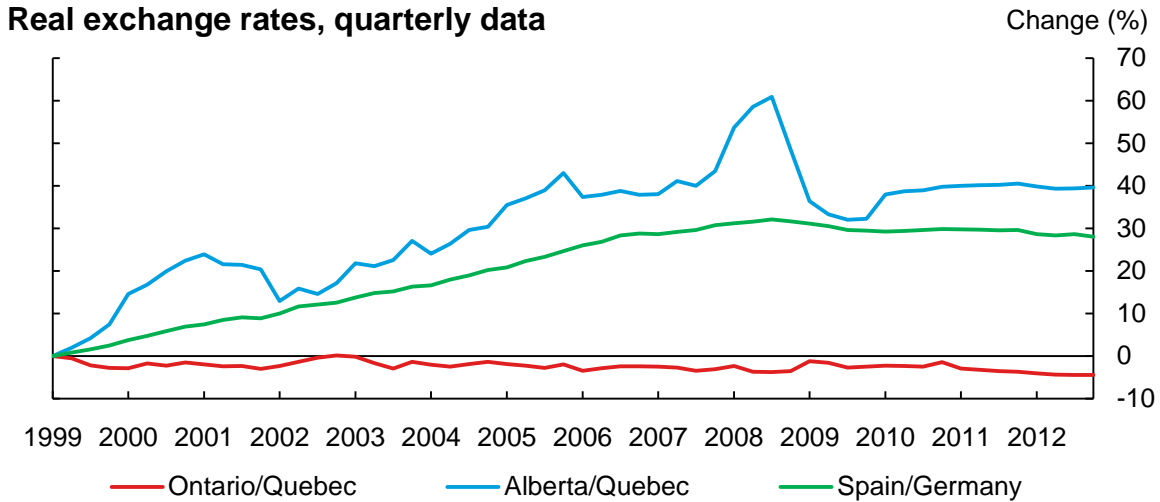
Last observation: 2012Q4

It is interesting to compare developments in the Canadian and European internal exchange rates. For example, since the euro was introduced, Spanish competitiveness (as measured by GDP deflators) has fallen by about 30 per cent relative to Germany. During the same period, the Alberta exchange rate moved even more dramatically, rising 40 per cent relative to Quebec (**Chart 5**). Intra-regional exchange rates in Canada have generally been more volatile on average than most internal exchange rates in the euro area (See [Tables 1 and 2](#), [Appendix](#)).

And yet, the challenges of regaining competitiveness are central to the economic travails of Spain. This is because Spain is experiencing a balance of payments crisis. In the years following monetary union, Spain ran large intra-euro-area current account deficits, funded in part by foreign purchases of real estate and inflows to the Spanish banking system. When these dried up, domestic activity collapsed. There are few *institutional* mechanisms within the Economic and Monetary Union (EMU) at present to offset the shock.

In Alberta's case, a rising tide has lifted all boats. That is because the Canadian monetary union has what Europe does not: a single financial market; a flexible, national labour market; and significant fiscal transfers. These smooth the adjustments brought about by the large shifts in relative prices.

**Chart 5: Changes in selected real exchange rates since introduction of euro**



Sources: Statistics Canada, Eurostat via Haver Analytics and Bank of Canada calculations

Last observation: 2012Q4

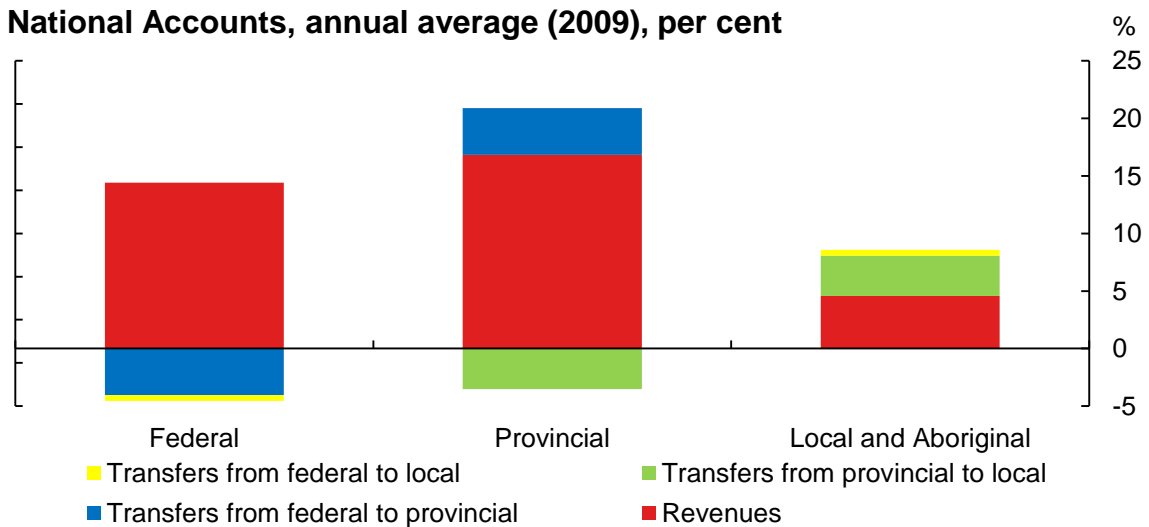
***Fiscal federalism helps to share risks***

Despite the equilibrating movement of real provincial exchange rates, shocks to our economy can still have a more significant impact on some regions than others. Since monetary policy works at an aggregate level to support aggregate demand, it cannot easily deal with such distributional consequences.

Fiscal transfers are thus an important element of a successful monetary union. They are sizeable in Canada, representing 8 per cent of GDP across all levels of government (**Charts 6 and 7**).

Canada’s equalization program helps stabilize the impact of asymmetric shocks. For example, between 2006 and 2011, federal support programs, including equalization payments and Canadian social and health transfers, grew more rapidly for provinces whose economies were hardest hit by the crisis (**Chart 8**).<sup>3</sup>

**Chart 6: Total government revenue and transfers as a share of GDP**

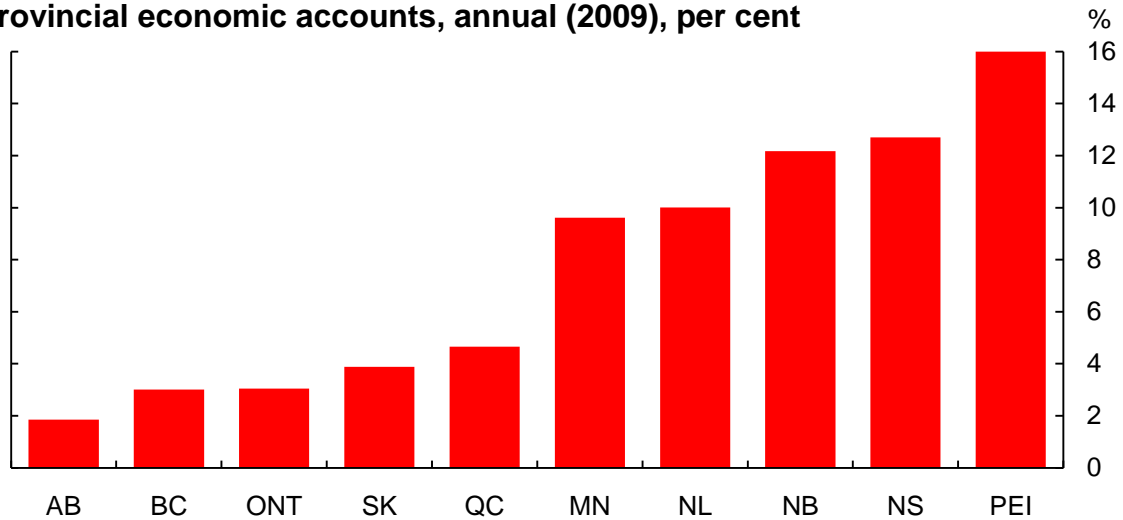


Source: Statistics Canada, Table 380-0080

Last observation: 2009

### Chart 7: Federal-provincial transfers as a share of provincial GDP

Provincial economic accounts, annual (2009), per cent

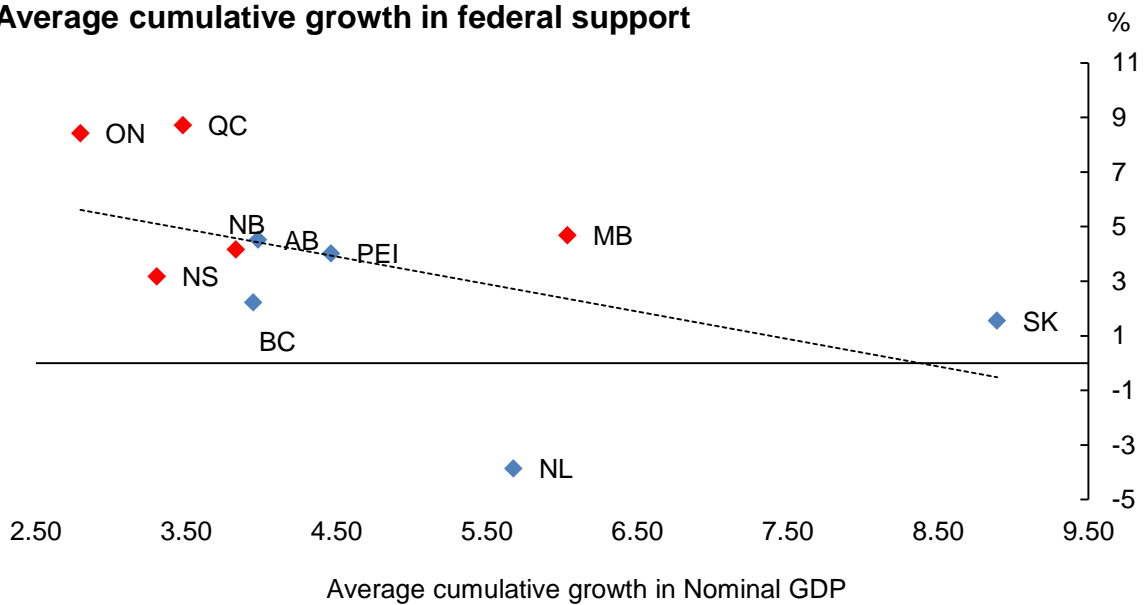


Source: Statistics Canada, Table 384-0004

Last observation: 2009

### Chart 8: Sensitivity of federal-provincial transfers to business cycle

Average cumulative growth in federal support



Note: The red squares are provinces that are receiving equalization, while the blue squares represent provinces not benefiting from equalization. Average Nominal GDP growth from 2006-2010, average support growth from 2006-07 to 2010-11

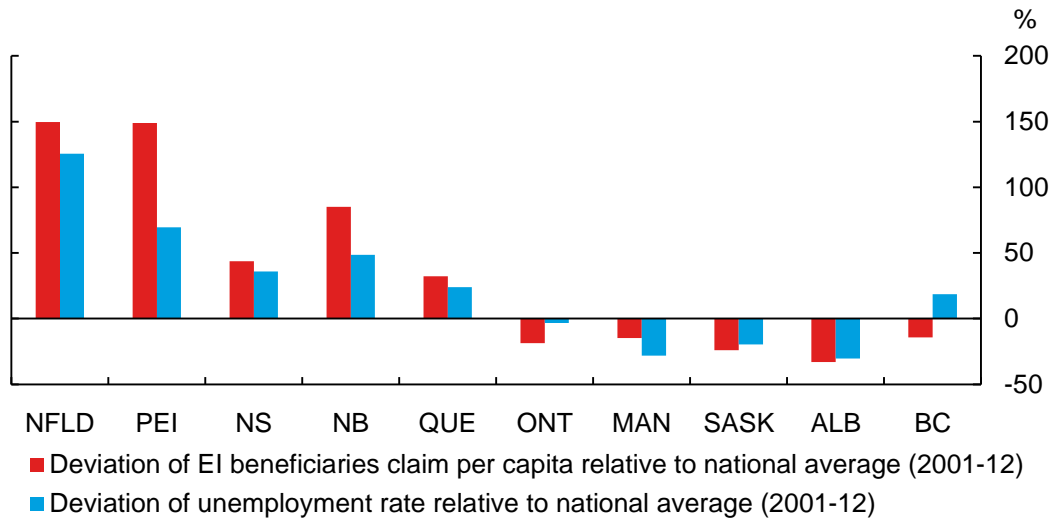
Source: Finance Canada

Last observation: 2011

The Employment Insurance program also shares risk. Through transfers to 2 per cent of the working-age population, the program particularly benefits provinces with higher unemployment rates (**Chart 9**).

In the medium term, one of the building blocks of European fiscal federalism could be a pan-European employment insurance scheme built on a common European labour market. This would reduce impediments for those looking across the continent for work, while providing a cross-country automatic stabilizer.

**Chart 9: EI program shares risks**



Source: Statistics Canada

Last observation: 2012

***Labour market flexibility***

For Canada and Canadians to work, workers must be able to move to different jobs, and wages must adjust to help maintain full employment.

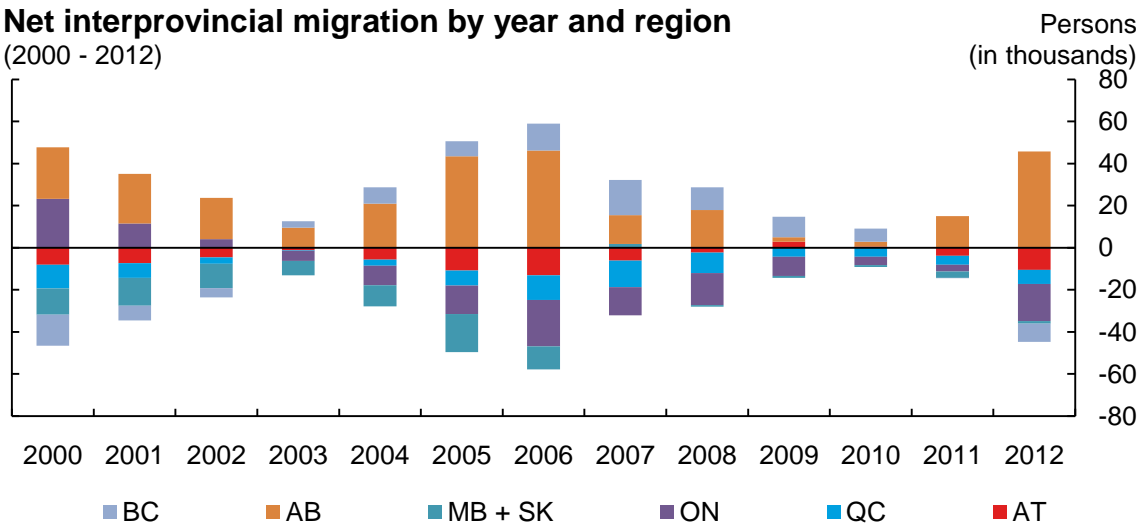
By international standards, the Canadian labour market is highly flexible, although there is still room for improvement.<sup>4</sup> Our labour mobility as a whole is similar to that in the United States. By some estimates, the Canadian labour market is almost four times as flexible as the European labour market.<sup>5</sup>

An obvious example of this flexibility is the way that Canadians have responded to the higher wages and employment opportunities in the energy sector. Last year, there was a net inflow of more than 40,000 people into Alberta from the rest of Canada, a level of mobility that approaches its previous peak (**Chart 10**).

**Chart 10: Alberta has had a large increase in migration**

**Net interprovincial migration by year and region**

(2000 - 2012)



Note: Total migration does not sum to zero due to the exclusion of the territories  
Source: Statistics Canada

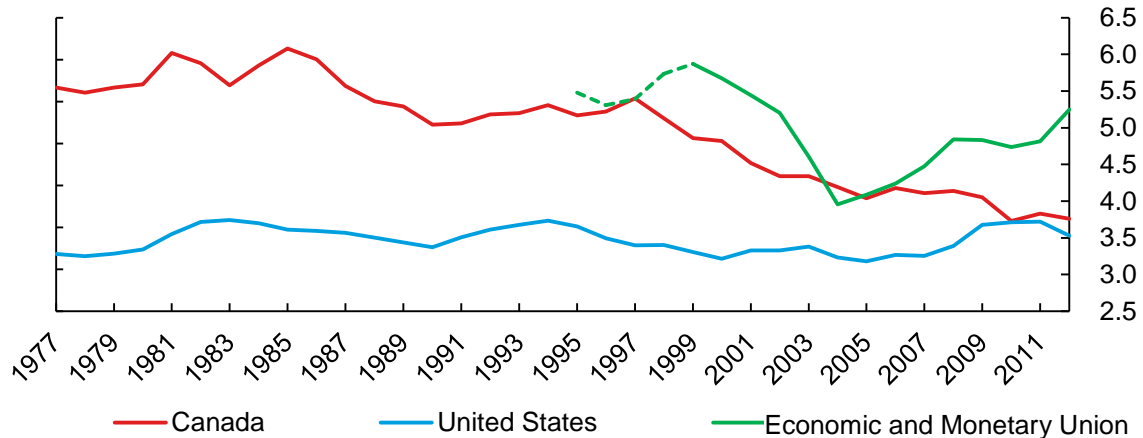
Last observation: 2012

As a consequence, labour markets are becoming more similar across the provinces. In particular, the dispersion of employment rates in Canada has fallen steadily over the past 30 years to levels comparable with those in the United States. Again the contrast with Europe, where it has risen substantially, is striking (Chart 11).

**Chart 11: Dispersion of employment rates has fallen substantially in Canada**

### Employment rate convergence in three currency areas

Mean absolute dispersion of provincial, state or country away from currency area average



Note: Data shown are average absolute dispersion of provincial employment rates away from the overall Canadian employment rate and the same for state employment rates away from the overall U.S. employment rate. The European data series is the same metric for countries in the European Union's economic and monetary union (EMU) away from overall EMU employment rate. Data for years prior to the birth of the euro are shown as a dotted line. This metric takes into account the dates at which new members joined the union.

Sources: Eurostat, Bureau of Labor Statistics, Statistics Canada

Last observation: 2012

Bank of Canada research suggests that the main reason behind these improvements has been the increased sensitivity of provincial population growth to labour market opportunities—Canadians are going where the jobs are.<sup>6</sup>

Finally, wages are flexible in Canada. Results from the Bank of Canada's wage setting survey indicate that, while firms are typically reluctant to reduce base wages, incentive pay offers a possible source of downward flexibility in total compensation.<sup>7</sup> About 90 per cent of Canadian private sector firms currently use short-term incentive pay plans.<sup>8</sup> Such risk sharing is an effective way to maintain employment and profitability during uncertain and volatile times.

## A Resilient Financial System

An important lesson from Europe's experience is the critical role that a sound financial system plays in the monetary policy transmission mechanism. It helps to ensure that changes in central bank policy are transmitted effectively to all regions to support growth and employment. When a sizeable share of a country's banking sector has (or is perceived to have) deficient capital and liquidity positions, credit doesn't flow to where it is needed.

Recent experience in Europe has shown the particular problems a monetary union faces when banks become less willing to lend across borders within the union. This fragmentation has reinforced the links between sovereign and bank



solvency. As European leaders now recognise, without major reforms to create a banking union, EMU is fundamentally weakened.

In Canada, the existence of largely centralized prudential regulation and deposit insurance pools risk across the country. When combined with a large number of national banking institutions, this greatly reduces the risk that localized economic and financial disruptions impair provincial solvency.

Since the strength of the Canadian banking system has been well documented, I will concentrate on Canada's sound regulatory framework. Its key elements are:

First, supervision is focused and proactive. Consolidated prudential supervision is not burdened by other objectives such as the promotion of home ownership or community reinvestment. The staged intervention approach of the Office of the Superintendent of Financial Institutions (OSFI) means it works with institutions to correct problems at an early stage, while they are still manageable.

Second, efforts to promote financial stability are coordinated. Federal authorities consistently share information, coordinate actions, and pool advice to the federal government on financial sector policy. Most notable in this regard has been a series of actions to slow the rate of increase in household debt. The Bank of Canada also works with provincial authorities to implement a number of global initiatives.

Third, Canada has clear and credible recovery and resolution mechanisms, including lender-of-last-resort policies, a deposit insurance scheme with risk-weighted premiums, and bridge-banking powers that enable the rapid closure of failing institutions and the swift re-opening of their viable operations. In its most recent budget, the federal government announced it will consult stakeholders on how best to implement a bail-in regime to recapitalize failing Canadian banks that are systemically important to our domestic economy through the very rapid conversion of certain bank liabilities into regulatory capital.

Fourth, bank capital regulation is prudent. Prior to the crisis, Canadian capital requirements were higher than international norms thanks to OSFI's insistence that common equity form a large share of required capital. Since the crisis, Canadian banks have become considerably stronger. Their common equity capital has increased by 80 per cent, or \$77 billion, and they already meet the new Basel III capital requirements six full years ahead of schedule.

Finally, the entire financial framework is regularly reviewed and updated, in accord with the statutory requirement to renew the federal legislative and regulatory framework for the financial system every five years. This has proven invaluable given the pace of change in the financial system. In addition, Canada's regulatory system is subject to regular, rigorous external examinations.

## **A Massive and Disciplined Policy Response**

Allow me to review. The structure of the Canadian economy, the risk sharing across the federation, labour market flexibility and financial stability together meant that Canada could adjust quickly to the shock of the global financial crisis.

It also meant that when Canadian policy-makers responded, they were able to do so swiftly and massively.

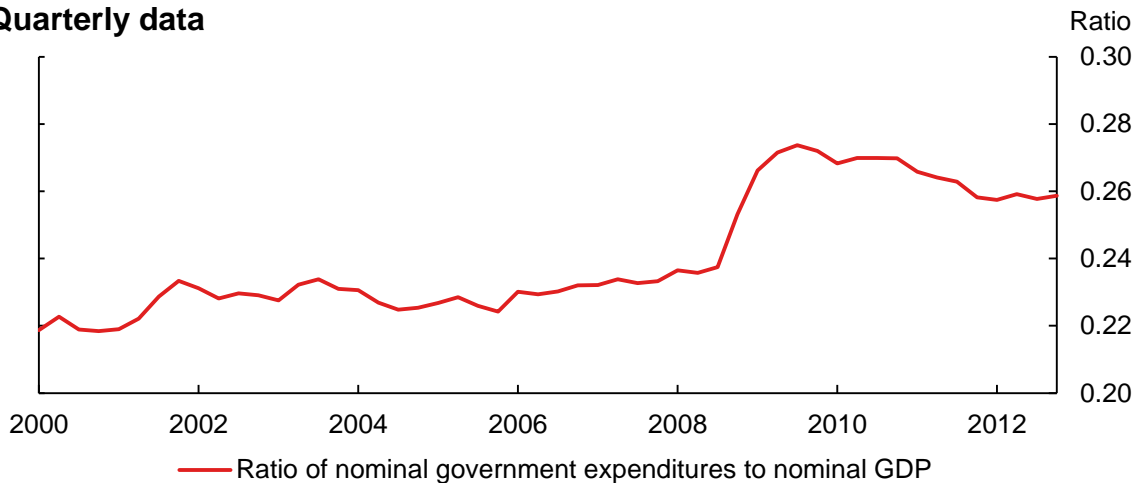
During the crisis, the Bank of Canada aggressively cut our policy rate until it reached one-quarter of one per cent, the lowest it can effectively go. The Bank then provided extraordinary guidance on the likely path of interest rates necessary to achieve the inflation target in order to maximise the monetary stimulus from its policy rate.

Canada's inflation-targeting regime was a critical anchor during those turbulent times. It gave the Bank a simple, unwavering goal to guide its policy actions. It provided financial markets and Canadians with a clear means to understand why the Bank did what it did. And that understanding kept inflation expectations well anchored around the 2 per cent target throughout the period, maximising the stimulative impact of our policies.

Although fiscal policy is always less nimble than monetary policy, it also responded aggressively. Government expenditures rose by almost 3 percentage points of GDP within a year, with government contributing about one-third of GDP growth in 2010 (**Chart 12**).

**Chart 12: Government expenditures rose rapidly during the recession**

**Quarterly data**



Source: Statistics Canada

Last observation: 2012Q4

The effectiveness of fiscal policy was underpinned by Canada's strong fiscal position.

From the mid-1990s onwards, successive governments ran more than a decade of surpluses, cutting the government debt-to-GDP ratio from almost 70 per cent in 1995 to 22 per cent in 2008. As a result, Canada's net debt relative to GDP went from being the second-highest ratio among the G-7 countries in 1995 to the lowest (**Chart 13**).

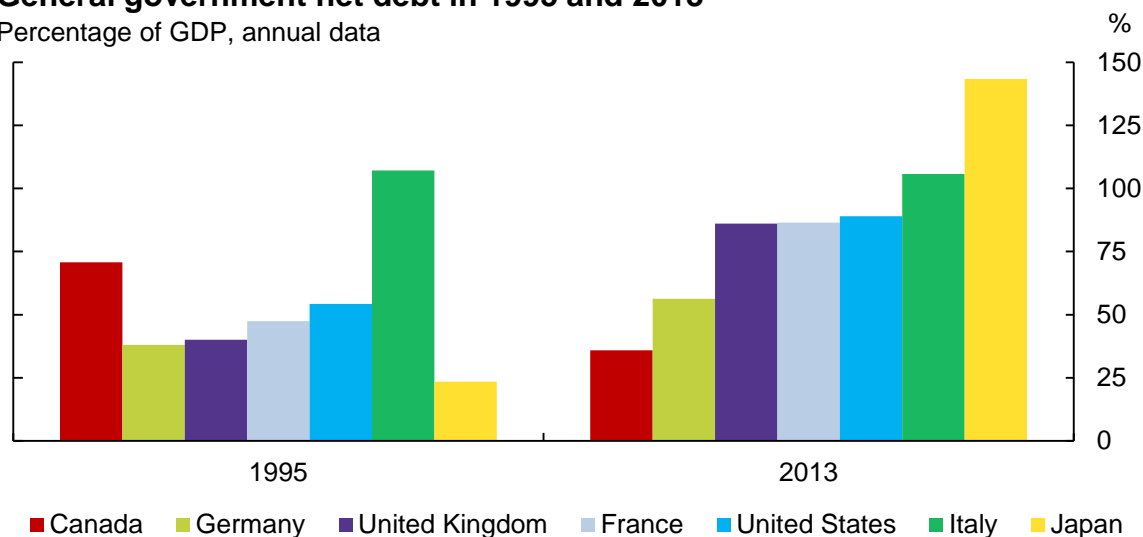
This fiscal flexibility provided leeway for governments to respond while maintaining our credit standing at the highest levels.

Having clear policy frameworks has disciplined the post-crisis response. Fiscal consolidation has begun, with the combined deficits of all levels of government falling from 4.8 per cent in 2009 to an expected 2.8 per cent this year.<sup>9</sup>

## Chart 13: Canada now has the lowest debt in the G-7

### General government net debt in 1995 and 2013

Percentage of GDP, annual data



Note: Debt figures for 2013 are IMF staff projections from *World Economic Outlook*, April 2013  
Source: IMF

Last observation: 2013

Disciplined by its inflation target and reflecting the relative strength of the economy, the Bank of Canada was the only G-7 central bank not to engage in quantitative easing, and we have been the only one to move away from emergency settings of interest rates. In addition, mindful of the risks to financial stability arising from rapid increases in household debt, the Bank has maintained a tightening bias on interest rates over the past year, in part to complement efforts of the federal government and OSFI to achieve a constructive evolution of household debt.

## Conclusion

In the immediate aftermath of the crisis, the broad economic strategy in Canada has been to grow domestic demand and to encourage Canadian businesses to retool and reorient to the new global economy.

Stimulative monetary and fiscal policies proved highly effective in supporting robust growth in domestic demand, particularly household expenditures, which grew to record levels.

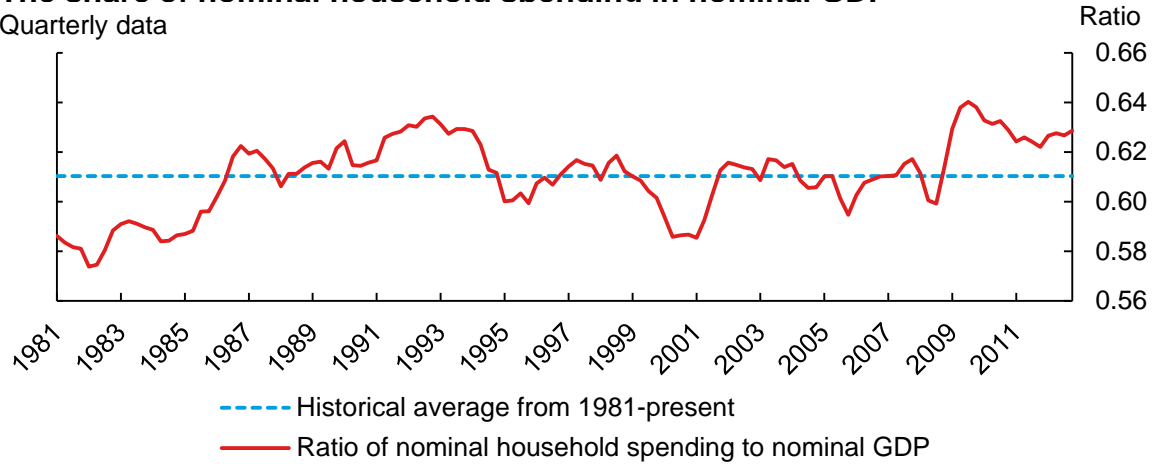
As effective as it has been, the limits of this growth model have been clear for some time. We cannot grow indefinitely by relying on Canadian households increasing their borrowing relative to income (**Chart 14**). Nor can residential investment remain near a record share of GDP, particularly given signs of overbuilding and overvaluation in segments of the real estate market.

Domestic demand, which pulled Canada out of the recession, is now slowing. Consumer spending is expected to grow at a moderate pace over the next few years. The Bank expects residential investment to decline further from historically high levels. The contribution of direct government expenditures should be modest for some time, consistent with the ongoing need to consolidate budgetary positions.

### Chart 14: Household expenditures reached a record level

#### The share of nominal household spending in nominal GDP

Quarterly data



Source: Statistics Canada

Last observation: 2012Q4

Thus, the challenge for Canada is to rotate the sources of growth toward net exports and business investment.

Exports are currently more than \$130 billion less than they would have been had this been a “typical” postwar recovery (**Chart 15**).

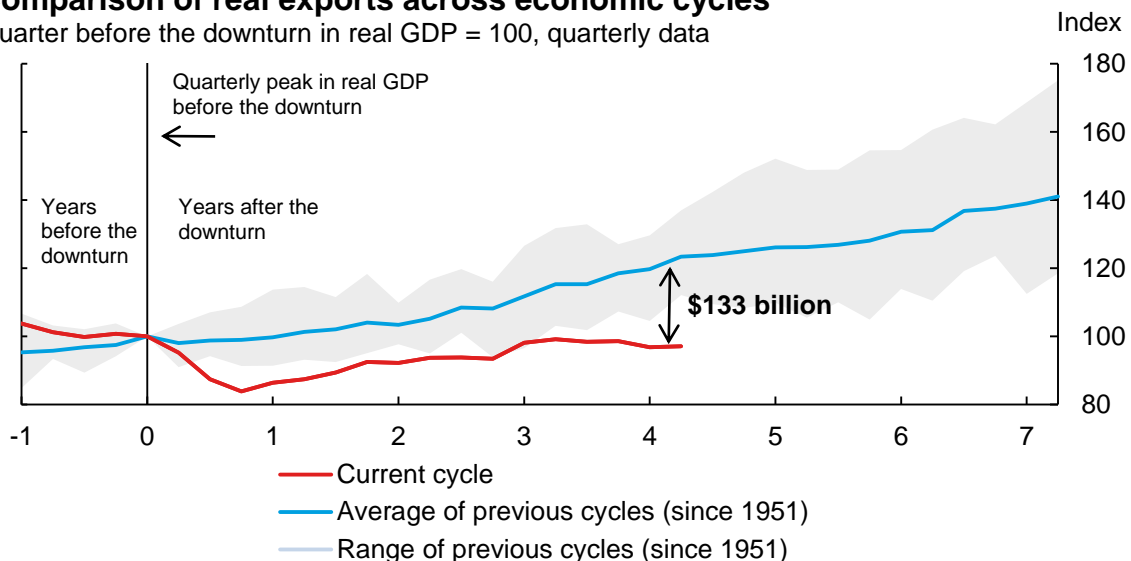
In the short term, the Bank forecasts some rebalancing and a pickup in real GDP growth. However, relative to previous cycles, investment is expected to remain below average and the contribution of net exports to be very weak (**Chart 16**).

Is that really the best we can do?

Yes, there are immense uncertainties in the world economy, but we need to focus on what we can control. We cannot save the euro or fix America’s fiscal challenges.

### Chart 15: Weakest postwar recovery in exports Comparison of real exports across economic cycles

Quarter before the downturn in real GDP = 100, quarterly data

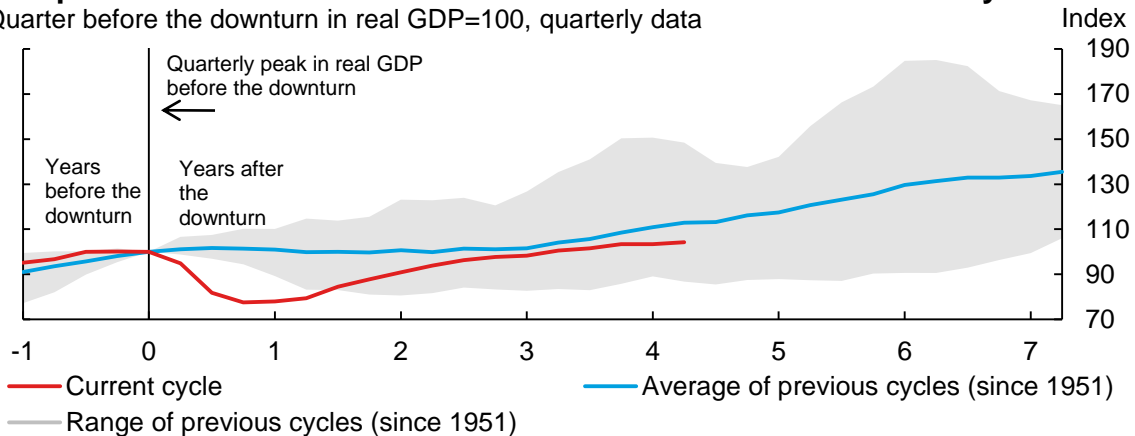


Sources: Statistics Canada and Bank of Canada calculations

## Chart 16: Business fixed investment is projected to grow at a slower pace than in the average cycle

### Comparison of real business fixed investment across economic cycles

Quarter before the downturn in real GDP=100, quarterly data



Sources: Statistics Canada and Bank of Canada calculations

Should we just wait out a decade-long deleveraging process in the rest of the G-7? Or should we control our destiny by building on our strengths in the new global environment?

To find and compete in new markets will require a concerted, multi-year effort by workers, firms and governments. These efforts should be guided by three principles.

**Openness is better than protectionism.** Trade brings innovation, growth and jobs. That is why Canada is pursuing a series of bilateral trade discussions with economies such as the European Union and India, and will participate in the multilateral negotiations of the Trans-Pacific Partnership involving a number of Asian countries. Emerging-market economies do not just account for one-half of all of global import growth, they also are essential to securing Canada's positions in global supply chains.

**Economic flexibility is essential.** Markets change, industries rise and fall, exciting new products emerge and then become commoditized. In a rapidly shifting world, only sustained education, ingenuity and investment can maintain competitiveness. This means we must continuously invest in our workforce. With technology and trade transforming the workplace, the need to improve skills across the spectrum of work has never been greater.

**Sound macroeconomic policy is the cornerstone of prosperity.** Fiscal profligacy erodes economic sovereignty; price stability is paramount.

The advantages I have discussed today are self-reinforcing. Our monetary union—with its resilient, national financial system at its core—gives monetary and fiscal policy traction. A strong fiscal position means that Canadian governments have had the flexibility to respond as needed. Our principles-based macroeconomic policy frameworks help ensure that extraordinary actions do not give rise to extraordinary fears. And the discipline they instil means that stimulus will be withdrawn appropriately as threats diminish.

All of this has meant that, unlike the rest of the G-7, Canada does not need to repair.

To keep Canada working, we need to build.

## APPENDIX

### Summary Statistics on Regional Real Exchange Rates

**Table 1: Euro-era relative price levels and real exchange rates**

Canadian provincial GDP deflators

1999Q1-2013Q1	1981=100		
<b>Provincial GDP deflators</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Standard deviation</b>
NFLD/Ontario	95.5	154.1	16.7
PEI/Ontario	94.9	113.5	3.0
Nova Scotia/Ontario	97.0	110.8	2.6
New Brunswick/Ontario	89.3	102.2	2.8
Quebec/Ontario	96.7	101.4	1.1
Manitoba/Ontario	92.6	108.0	4.1
Saskatchewan/Ontario	78.1	125.9	13.9
Alberta/Ontario	70.9	118.6	10.2
BC/Ontario	89.0	103.2	2.57

**Table 2: Euro-era relative price levels and real exchange rates**

European GDP deflators

1999Q1 to 2012Q4	1981Q1=100		
<b>GDP deflators</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Standard deviation</b>
Finland/Germany	87.0	97.3	2.4
France/Germany	85.9	97.0	3.5
Greece/Germany	124.8	153.6	9.4
Ireland/Germany	110.6	143.8	8.3
Italy/Germany	108.2	127.4	6.0
Netherlands/Germany	87.6	105.2	4.5
Portugal/Germany	123.2	149.9	7.9
Spain/Germany	99.7	131.7	10.2

Notes: The primary source of the GDP-deflator data was Eurostat. Quarterly GDP-deflator data for some countries were not available back to 1981Q1. Those GDP deflators were interpolated using the growth rates of GDP deflators obtained from other official sources. Prior to 1999Q1 Deutsche-mark exchange rates were employed.

Sources: Eurostat, OECD, IMF, Federal Reserve Board of Governors, Hellenic Statistical Authority, Haver and Bank of Canada calculations.

## ENDNOTES

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<sup>1</sup> M. Carney, "Dutch Disease," a speech delivered at the Spruce Meadows Round Table, Calgary, Alberta, 7 September 2012.

<sup>2</sup> Internal trade has been supported by the removal of interprovincial barriers following the implementation of Canada's Agreement on Internal Trade in 1995.

<sup>3</sup> The amount of transfers to Alberta has been adjusted to exclude a one-time cash increase occurring in 2007–08 which resulted from a transitional change toward a per capita cost allocation. The decline in fiscal support for Newfoundland and Labrador is due to the fact that the province no longer qualifies for equalization payments (as of 2008/9).

<sup>4</sup> D. Amirault, D. de Munnik and S. Miller, "Explaining Canada's Regional Migration Patterns," *Bank of Canada Review* (Spring 2013): 16–28.

<sup>5</sup> Based on the 2006 Census, the migration rate in Canada was 4.6 per cent compared with 4.8 per cent for the United States. Bayoumi et al. (2006) find that Canadian labour markets respond in a similar manner to their U.S. counterparts and are more flexible than those in major euro-area countries, while Partridge and Rickman (2009) find little overall evidence to suggest that provincial labour markets are more sluggish or less flexible than U.S. state labour markets. A recent report by McKinsey & Company shows that cross-border labour mobility in the European Union is low (0.18 per cent in 2008). See T. Bayoumi, B. Sutton and A. Swiston, "Shocking Aspects of Canadian Labor Markets," International Monetary Fund Working Paper 06/83, March 2006; M. Partridge and D. Rickman, "Canadian Regional Labour Market Evolutions: A Long-Run Restrictions SVAR Analysis," *Applied Economics, Taylor and Francis Journals*, vol. 41(15), p. 1855–71, 2009; and F. Mattern, E. Windhagen, M. Habbel, J. Mußhoff, H-H. Kotz and W. Rall, *The Future of the Euro, An Economic Perspective on the Eurozone Crisis*, McKinsey & Co., January 2012.

<sup>6</sup> D. Leung and S. Cao, "The Changing Pace of Labour Reallocation in Canada: Causes and Consequences," *Bank of Canada Review* (Summer 2009): 31–41.

<sup>7</sup> D. Amirault, P. Fenton and T. Laflèche, "Asking About Wages: Results from the Bank of Canada's Wage Setting Survey of Canadian Companies," Bank of Canada Discussion Paper 2013–1, February 2013.

<sup>8</sup> Conference Board of Canada, *Compensation Planning Outlook 2013*, October 2012.

<sup>9</sup> International Monetary Fund, *Fiscal Monitor*, Statistical Table 1, April 2013.