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OVERVIEW

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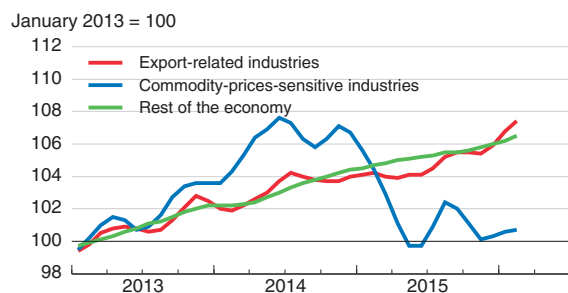
Executive summary

- *Activity is shifting from energy to non-energy sectors in response to price signals*
- *Vulnerabilities related to housing and household debt are still increasing, albeit at a slower pace*
- *Productivity growth has been weak until recently*

Activity is shifting from energy to non-energy sectors in response to price signals

Output is adjusting to lower commodity prices

Three-month moving average of real output



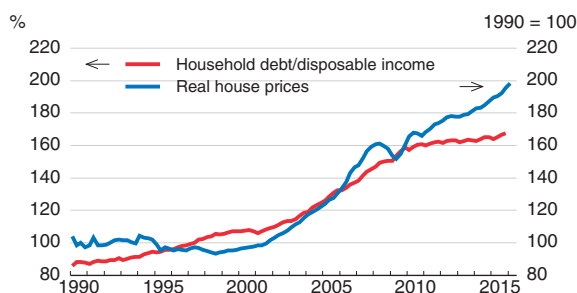
Source: Bank of Canada (2016), *Monetary Policy Report*, April; Statistics Canada, Table 379-0031.

StatLink <http://dx.doi.org/10.1787/888933370730>

The Canadian economy is adjusting to the fall in commodity prices, energy in particular. Business investment has fallen sharply in the energy sector, and employment has declined in oil-producing provinces. These factors, together with the loss of income from the fall in the terms of trade, temporarily depressed economic growth in 2015. Output has fallen sharply in industries most affected by commodity prices but has risen in the rest of the economy, especially in export-related industries, allowing new job creation to re-employ displaced workers. Exchange rate depreciation, Canada's flexible labour markets and monetary and fiscal policy are supporting the shift towards non-resource production.

Vulnerabilities related to housing and household debt are still increasing, albeit at a slower pace

Household debt and house prices are high

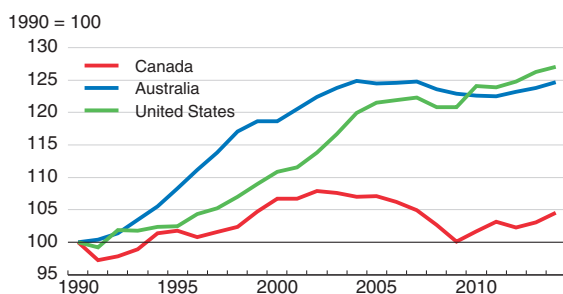


Source: Statistics Canada, Table 378-0123; OECD, *Economic Outlook* database. StatLink <http://dx.doi.org/10.1787/888933370743>

Low interest rates have encouraged further increases in household credit, with household debt continuing to edge up from already high levels. Canadian house prices have risen sharply, especially in Vancouver and Toronto, and housing investment is unusually high as a share of GDP, posing vulnerabilities and squeezing middle-class families in these high-priced markets. In response to these developments, the authorities have deployed some targeted macro-prudential measures, but further regionally focused measures should be considered.

Productivity growth has been weak until recently

Multifactor productivity has stagnated



Source: Australian Bureau of Statistics; US Bureau of Labor Statistics; Statistics Canada

StatLink <http://dx.doi.org/10.1787/888933370758>

Productivity has grown more slowly than in the best performing comparable OECD countries in recent decades, holding back living standards and well-being. This weakness in productivity growth is broad based. There are several potential explanations, although it is difficult to identify the most important. Among them are high barriers to competition in network sectors which impede innovation and productivity growth. Interprovincial non-tariff barriers hamper efficiency, particularly by reducing the scale of production. Improved small business dynamism, with higher start-up rates and strengthened "up-or-out dynamics", would speed the reallocation of resources to more productive firms and the diffusion of new technologies, raising productivity.

MAIN FINDINGS	KEY RECOMMENDATIONS
Reducing financial stability risks	
House prices, housing investment and household debt are very high, posing financial stability risks.	Continue to tighten macro-prudential measures and target them regionally, including through increasing capital requirements in regions with high house price-to-income ratios, as planned.
Making growth stronger, greener and more inclusive	
The federal government has a strong fiscal position, with room to support demand in the short term, speed resource reallocation and promote longer-term growth and inclusiveness.	Increase federal investment in physical infrastructure, social housing, education and innovation, as planned.
Canada will soon face the pressures from an ageing population and will need to use all available sources of labour, including its Indigenous Peoples, who continue to face poor social and economic outcomes.	Continue towards sharing more of the fruits of growth with Canada's Indigenous Peoples through providing more resources for their education, training, health care, housing, entrepreneurship and environmental infrastructure servicing their communities, as planned.
Carbon emissions are high both in per capita terms and relative to GDP, partly reflecting high emissions from road transportation and mining, oil and gas. Some provinces have made largely uncoordinated moves to put a price on carbon emissions.	Canadian governments should act on their recent Vancouver declaration to ensure that an adequate price is placed on carbon emissions across the country to allow Canada to meet its international commitments.
Raising productivity	
Barriers to competition in network sectors are high, which weakens competitive pressures to innovate and adopt new technologies.	Reduce foreign ownership restrictions in air transportation on a reciprocal basis and in telecoms and broadcasting, where cultural objectives could be achieved by other means.
Electricity markets are highly fragmented, with few competitive regional wholesale and retail markets, weakening efficiency.	Develop more east-west interconnections through provincial cooperation when there is an economic case to do so. Liberalise the generation and distribution segments to encourage wholesale and retail competition in jurisdictions that have not done so yet.
Non-tariff interprovincial barriers lower efficiency, particularly by reducing the scale of production. While the Agreement on Internal Trade (AIT) has reduced such barriers, weaknesses in its framework and dispute resolution mechanisms and the absence of agreements in particular sectors limit its effectiveness.	Broaden the AIT's sectoral coverage as much as possible. Seek to reconcile remaining regulatory differences (possibly via mutual recognition). Establish a pan-Canadian regulatory cooperation council. Raise monetary penalties for non-compliance, and expedite dispute resolution, which remains protracted.
Tax breaks to SMEs do not appear to address market failures efficiently and insufficiently target potentially productive firms.	Review small business taxation (e.g. in the context of the recently announced federal tax expenditure review) to identify clear market failures and the policy instruments best suited to addressing them.
Firms funded by Labour-Sponsored Venture Capital Corporations (LSVCCs) underperform those funded by private venture capital owing to less effective mentoring.	Phase out remaining federal tax credits for provincial LSVCCs, as previously planned, and explore whether to make greater use of funds that operate like private, independent, limited partnership venture capital funds, as was the case with the Venture Capital Action Plan.

Assessment and recommendations

- *Recent economic developments and near-term prospects*
- *Regional adjustments to terms-of-trade declines and policies to facilitate the sectoral shift*
- *Ensuring price and financial stability*
- *Fiscal policies to raise the incomes of all Canadians*
- *Boosting productivity and living standards*
- *Improving environmental policies to promote sustainability and productivity*

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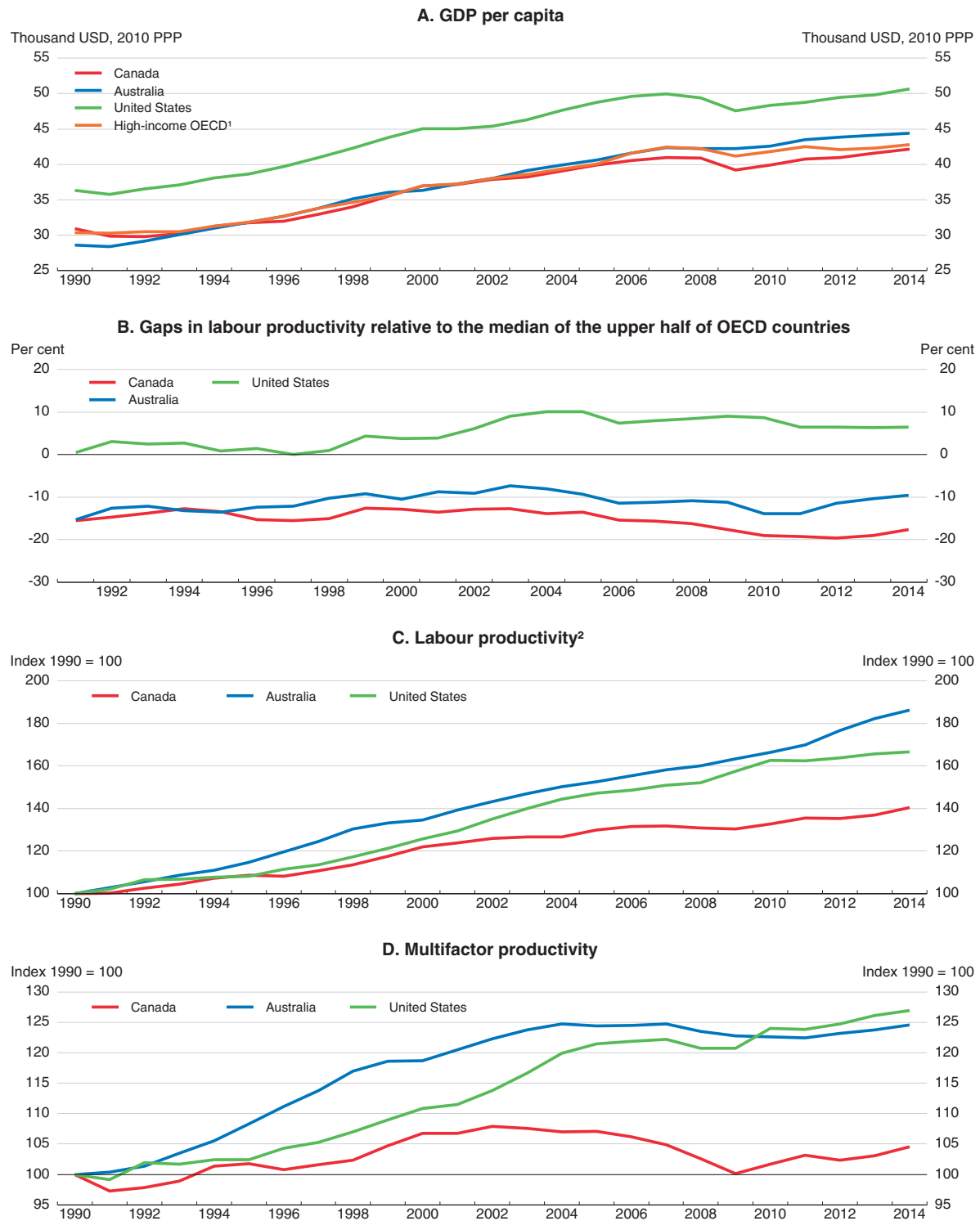
The Canadian economy has grown solidly since the turn of the century. The level and increases in GDP per capita have been similar to rates for the median of the most affluent OECD countries; labour productivity, however, remains lower in Canada (Figure 1, Panels A and B). Canada also recovered more strongly from the global financial crisis than most other OECD countries, helped by the impressive rise in commodity prices that was sustained until mid-2014, a comparatively strong recovery in the United States, Canada's main trading partner, a prudent banking system and supportive fiscal and monetary policies.

Canada has a large territory (covering nearly 10 million square kilometres), is topographically varied and sparsely populated (population density is only a tenth of the OECD average), even if a large share of the population lives in widely separated large urban centres. Its people have diverse backgrounds, with one of the world's highest shares of immigrants (nearly 20%) and a small but rapidly growing population of Indigenous Peoples (including First Nations, Métis and Inuit), who make up a further 4% of the population. Many public responsibilities are devolved to governments of the 10 provinces and three territories that comprise the confederation. The provinces' main powers are in the areas of taxation, health care, education, natural resources and energy, environment and labour market regulation.

Canada scores highly in all dimensions of the OECD's Better Life Index (Figure 2, Panel A). Household disposable income and wealth are above the OECD average, while outcomes in jobs and earnings and housing are well above average. On the non-economic dimensions, Canada does particularly well in health status but less so in work-life balance. Its scores are very similar to Australia's, another high-income commodity exporter, except in civic engagement and governance, which is lower, and are as good as or better than those of the United States in all dimensions except income. Income inequality is slightly below the OECD average, reflecting relatively low inequality in gross incomes (the reduction in income inequality through taxes and transfers is less than the OECD average), as is the poverty rate (Panel B).

A weakness in socio-economic outcomes concerns Canada's Indigenous Peoples, who currently number around 1.4 million (4.3% of the population, but as many as 16.7% in Manitoba and higher proportions still in the territories), are much younger on average than other Canadians and are growing quickly in number. They suffer from various critical social problems (Table 1). Indigenous Peoples are often poor and are more likely than other Canadians to live in sub-standard housing, to drop out of school, to take up smoking and heavy drinking, to suffer from health problems, to commit suicide and to have their children grow up in lone-parent or foster homes. They are also almost 20% less likely to be employed than their non-Indigenous counterparts. Appropriately, the new federal government has made improving outcomes for Indigenous Peoples a top priority (see below).

Figure 1. GDP per capita and labour productivity



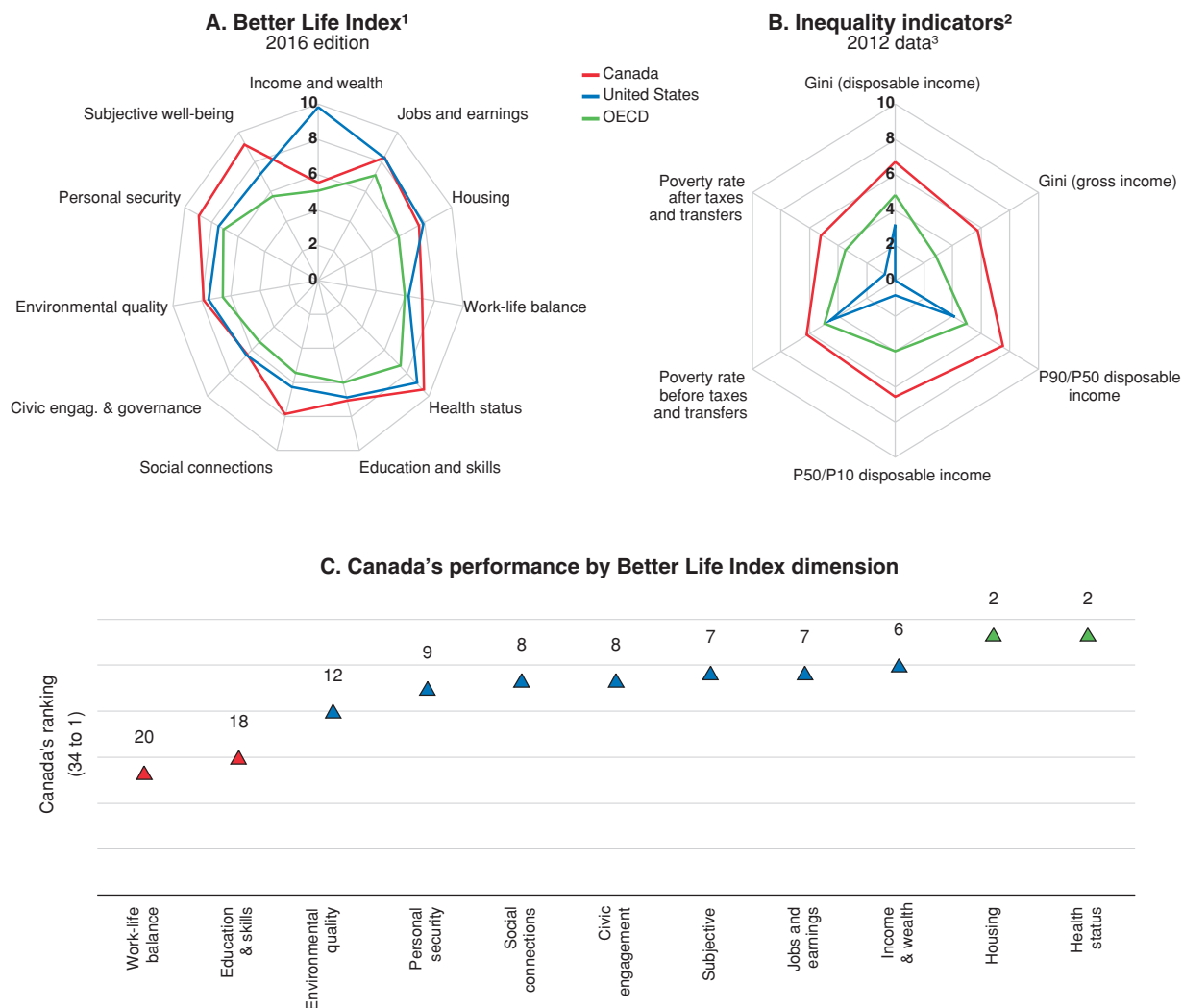
1. High-income OECD is the median of the highest 17 OECD countries.

2. In the business sector.

Source: Australian Bureau of Statistics, Cat. 5260.0.55.002; US Bureau of Labor Statistics; Statistics Canada, Table 383-0021; OECD (2016), *Economic Policy Reforms: Going for Growth 2016*.

StatLink  <http://dx.doi.org/10.1787/888933370761>

Figure 2. Measures of well-being



- Each index dimension is measured by one to four indicators from the OECD Better Life Index (BLI) set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 according to the following formula: (indicator value - minimum value) / (maximum value - minimum value) × 10. The OECD aggregate is weighted by population. Please note that the OECD does not officially rank countries in terms of their BLI performance.
- Indicators are normalised to range between 0 (highest inequality) and 10 (lowest inequality or poverty rate). The OECD aggregate is weighted by population.
- 2011 data for Canada.

Source: OECD (2016), OECD Better Life Index, www.oecdbetterlifeindex.org; OECD, Income Distribution database.

StatLink <http://dx.doi.org/10.1787/888933370779>

Canada has been used to achieving rapid economic growth: in the 15 years prior to the 2008-09 downturn, real GDP grew at an annual average rate of 3.2%. But much of that growth came from increasing labour and capital inputs, with little in the way of efficiency gains. In recent years, progress in raising living standards has been more limited, with slower growth outcomes. The recovery since the 2009 recession trough has generated gains in GDP per capita nearly a full percentage point smaller than in the aftermath of the preceding similar trough in 1992 (Table 2). Looking below the surface,

Table 1. Selected socio-economic outcome indicators for Canadian Indigenous Peoples, 2011

	Indigenous Peoples	Others
Number / % share	1.40 m (4.3%)	
<i>per memorandum</i> Indigenous in Australia	0.67 m (3.0%)	
<i>per memorandum</i> Maori in New Zealand	0.60 m (15.0%)	
Demographics		
Median age	28	41
Share of the 0- 24 years old	46.2	29.5
Children's living arrangements		
% living with 2 parents	49.6	76.0
% step children	8.5	5.8
% living with relatives	3.9	0.6
% foster children	36	0.3
% living with one parent	34.4	17.4
Housing conditions		
% in crowded dwellings	11.2	4.0
% in dwellings in need of major repair	21.5	6.8
Education		
% without a high school diploma	30	12
Skills		
PIACC literacy score, 2012	260	274
PIACC numeracy score, 2012	244	266
Employment outcomes		
% employed, 25 – 64	62.5	75.8
Income		
Median after-tax income, 2010, CAD	20 060	27 622
Health outcomes		
% self-rated excellent or very good, 12 and over	52.1	60.5
% self-rated excellent or very good, 25 – 44	52.9	67.1
% self-rated excellent or very good, 45 and over	40.6	52.7
% daily smokers	27.5	15.1
% heavy drinkers	32.7	22.5
% with moderate or severe food insecurity, off reserve only	22	7

Source: Statistics Canada.

Table 2. A comparison of the recoveries following the 1990-92 and 2007-09 recessions

Average annual percentage change

	The current recovery	The 1990s recovery	Difference
Real GDP per capita:	1.27	2.22	0.95
Hourly labour productivity	1.07	1.49	0.42
Hours worked per employed person	0.04	0.09	0.05
One minus the unemployment rate	0.26	0.54	0.28
Participation rate	0.23	-0.01	-0.24
Working-age to total population	-0.33	0.09	0.42

Source: OECD.

slower gains in hourly productivity and less favourable demographics are the leading explanatory factors, along with the smaller decline in unemployment. The worse labour productivity performance is entirely due to a deterioration in multi-factor productivity growth, as capital intensity actually rose more quickly in the recent period than in the 1990s. And the outlook is for similar trends to persist, with annual GDP growth potential already down to an estimated 1.5% or so, as Canada's population ages because of low fertility rates and rising life expectancy, given the number of immigrants that could be feasibly absorbed. In the future it will have to seek out remaining pockets of underutilised labour resources – such as women and Canadian Indigenous Peoples – and find ways of boosting productivity growth through increased competition, innovation and skills. Canada's policymakers are focusing on lifting growth in GDP per capita and productivity to the rates achieved by comparable countries that perform better, such as the United States and Australia. There is considerable scope for improvement in business-sector productivity, which, by some measures, has been flat for over two decades (Figure 1, Panel C).

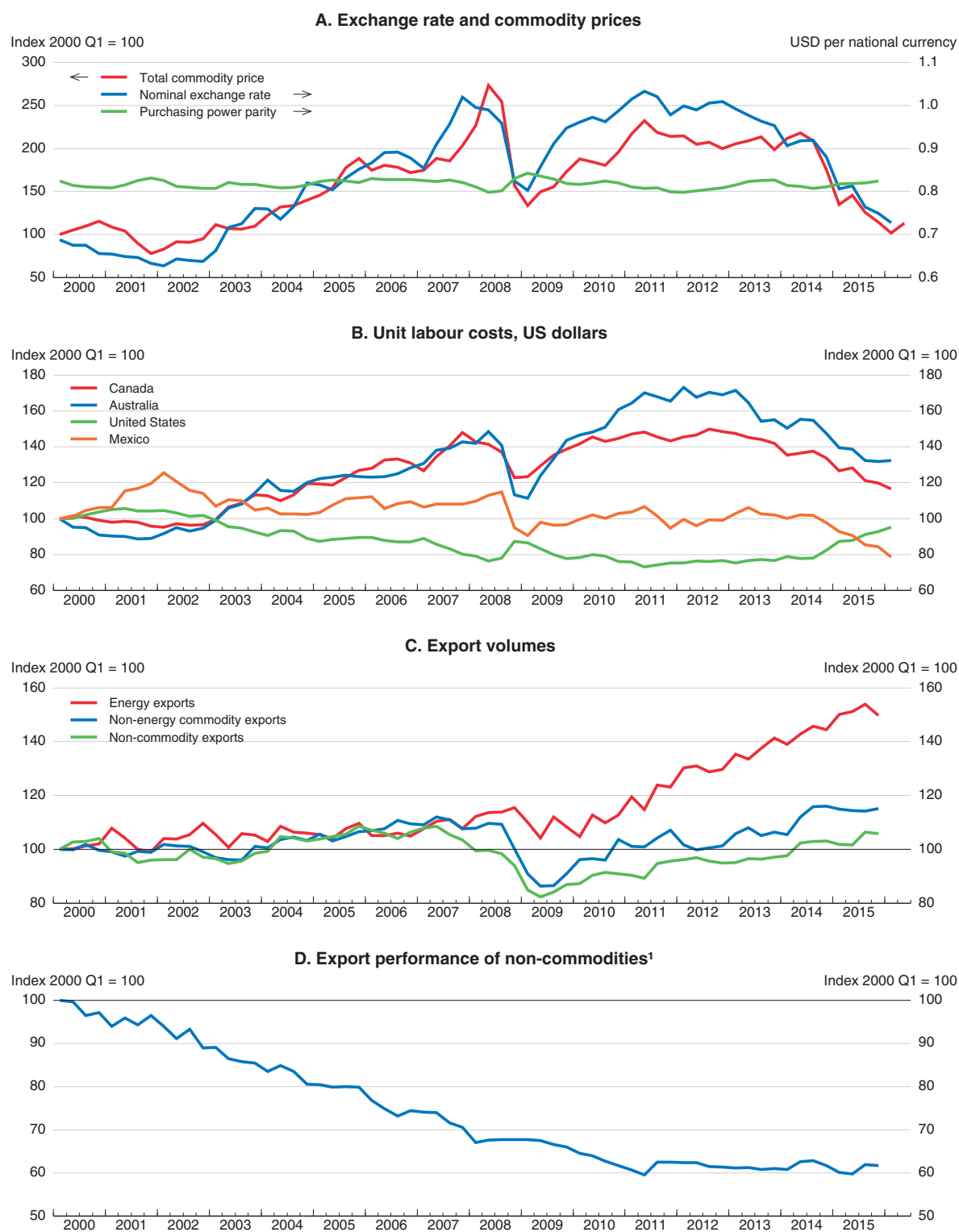
Improving outcomes is likely to be all the more challenging now that a downward phase of the commodity price cycle is underway (Figure 3, Panel A). While the earlier price run-up boosted incomes and business investment (especially in energy and mining), the fall since mid-2014 is having the opposite effect. The commodities upswing caused Canada's real exchange rate to appreciate, resulting in a large loss in cost competitiveness and a concomitant reduction in productive capacity in non-commodity tradable goods and services (Panels B, C and D). Nevertheless, the more recent exchange rate depreciation, relatively flexible economy and supportive monetary and fiscal policies will facilitate the shift in economic activity away from natural resources.

Against this background, the main messages of this *Survey* are:

- Activity is shifting from resource to non-resource sectors in response to the fall in oil and other commodity prices. This shift would be facilitated by increasing product market competition and strengthening small business dynamism.
- House prices and household debt relative to disposable incomes are high and rising in some local markets, reducing affordability and raising financial vulnerabilities.
- Productivity has been relatively weak in recent decades, in part reflecting insufficient competition in network sectors, barriers to internal trade and lacklustre small business dynamism.


Chapter 1 explores in greater detail how barriers to competition in network sectors and inter-provincial trade can be lowered. Chapter 2 provides an in-depth look at how policies can be modified to increase small business dynamism and hence productivity in the Canadian economy.

Figure 3. Key challenges for the Canadian economy



1. Export performance is export volume changes relative to export market growth. Hence, Canadian non-commodity exporters lost 40% of their market share from 2000 to 2011.

Source: OECD, Economic Outlook 99 database; Statistics Canada, Tables 380-0070 and 176-0075.

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Recent economic developments and near-term prospects

GDP declined in early 2015, led by a sharp fall in business investment in the oil and gas sector, which was hit hard by the collapse in global oil prices (Table 3; Figure 4, Panels A and B). Private consumption expenditure also slowed, albeit moderately, weighed down by losses of income and wealth associated with the deterioration in the terms of trade and falling employment growth in the energy-producing provinces (Panels A and C). Yet, after a weak first half of 2015, output began to expand more strongly outside the oil and gas sector in response to: cumulative and prospective macroeconomic policy stimulus, restored international competitiveness and the reversal of some temporary factors. Real GDP looks to have risen at about a 3% annualised rate in the first quarter of 2016. However, second-quarter output will be dragged down significantly by the weak expected starting point in

Table 3. Macroeconomic indicators and projections

Annual percentage change, volume (2007 prices)

	2012	2013	2014	2015	2016	2017
	Current prices (CAD billion)					
Gross domestic product (GDP)	1 823	2.2	2.5	1.2	1.7	2.2
Private consumption	1 021	2.4	2.5	1.9	1.7	2.1
Government consumption	385	0.3	0.3	1.4	1.5	1.7
Gross fixed capital formation	448	-0.5	0.7	-3.6	-1.5	2.7
Housing	132	-0.3	2.5	3.7	1.5	0.9
Business	240	1.3	-0.6	-9.4	-4.7	2.8
Government	75	-6.3	2.2	2.7	2.7	6.0
Final domestic demand	1 853	1.3	1.6	0.5	0.9	2.2
Stockbuilding ¹	6	0.6	-0.4	-0.2	-0.4	0.0
Total domestic demand	1 859	1.8	1.3	0.3	0.5	2.2
Exports of goods and services	551	2.8	5.3	3.0	2.1	4.6
Imports of goods and services	587	1.5	1.8	0.1	-1.5	4.4
Net exports ¹	- 36	0.4	1.0	0.9	1.1	0.0
Other indicators (growth rates, unless specified)						
Potential GDP	..	1.9	1.8	1.7	1.5	1.5
Output gap ²	..	-1.4	-0.8	-1.3	-1.1	-0.5
Employment	..	1.4	0.6	0.9	0.6	1.0
Unemployment rate ³	..	7.1	6.9	6.9	7.1	6.8
GDP deflator	..	1.6	1.8	-0.5	1.2	2.1
Consumer price index	..	0.9	1.9	1.1	1.7	2.1
Core consumer prices	..	1.2	1.8	2.2	2.0	2.1
Household saving ratio, net ⁴	..	5.1	4.0	4.3	4.3	4.3
Trade balance ⁵	..	-0.3	0.2	-1.2
Current account balance ⁵	..	-3.2	-2.3	-3.3	-3.0	-3.0
General government fiscal balance ⁵	..	-1.9	-0.5	-1.7	-2.2	-2.2
Underlying government primary fiscal balance ²	..	-0.3	0.5	0.1	-0.4	-0.9
General government gross debt ^{5, 6}	..	90.3	93.2	98.5	99.8	100.7
General government net debt ^{5, 6}	..	31.2	31.7	31.8	33.1	34.0
Three-month money market rate, average	..	1.2	1.2	0.8	0.9	1.5
Ten-year government bond yield, average	..	2.3	2.2	1.5	1.5	2.3

1. Contribution to changes in real GDP.

2. As a percentage of potential GDP.

3. As a percentage of the labour force.

4. As a percentage of household disposable income.

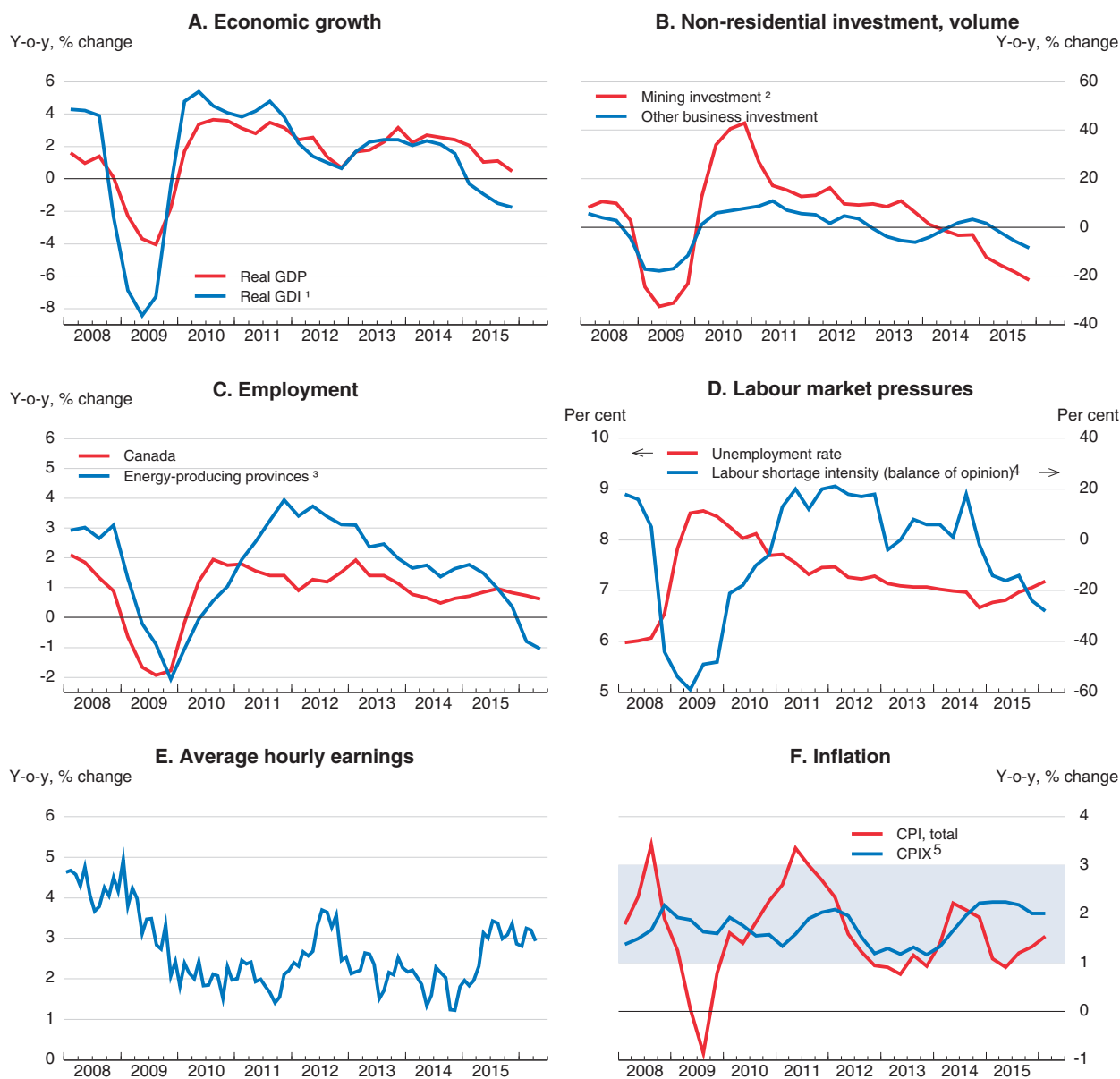
5. As a percentage of GDP.

6. SNA basis excluding unfunded liabilities of government-employee pension funds.

Source: OECD (2016), OECD Economic Outlook 99 database.


March, driven by the decline of net export volumes that month, and by the reduction in oil-sands output in Alberta in May that resulted from an unusually large forest fire that caused the complete evacuation of the town of Fort McMurray.

Figure 4. Recent macroeconomic developments



1. Real GDI equals real GDP adjusted for changes in the terms of trade.
2. Includes oil and gas. Also includes some engineering structures investment that may relate to other sectors.
3. The energy-producing provinces are Alberta, Saskatchewan, and Newfoundland and Labrador which together represented 17 per cent of total employment in 2015.
4. Percentage of firms reporting more intense labour shortages minus the percentage reporting less intense shortages.
5. The Bank of Canada monitors a set of “core” inflation measures, for example, the CPIX, which strips out eight of the most volatile CPI components and the effect of indirect taxes on the remaining components.

Source: OECD, Economic Outlook database; Statistics Canada, Tables 380-0068, 282-0087, 282-0151 and 326-0020; Bank of Canada (2016), *Business Outlook Survey – Results of the Spring 2016 Survey*, April.

StatLink  <http://dx.doi.org/10.1787/888933370796>

The unemployment rate fell sharply during the recovery from the 2008-09 recession but has edged back up over 7% (Figure 4, Panel D), reflecting a jump in energy-producing provinces. Wage growth picked up to around 3% (year-on-year) during the first half of 2015 and has since continued at this pace (Panel E). Although net job gains have been mainly in full-time positions, many have been in self-employment, which is usually associated with weak economic activity.

CPI inflation is running in the lower part of the 1-3% official target band (Figure 4, Panel F), although the Bank of Canada's core index is rising at a pace near the 2% midpoint. Renewed downward pressure from falling gasoline prices and a small degree of excess capacity in the economy are more than offsetting upward pressure from the pass-through of earlier exchange rate depreciation, which the Bank of Canada (2016a) estimates to have been worth about 0.8 to 1.0 percentage point in the year to Q1 2016.

Canada's current account was in moderate surplus from the turn of the century until the 2008 downturn, when a large fall in the terms of trade pushed the balance into deficit of around 3% of GDP, where it has since remained (except in 2014, when the deficit was 2.3% of GDP). Most of the deterioration has been in the goods component, although services and private transfers also contributed significantly. On the other hand, direct investment income has increased, reflecting higher foreign direct investment assets. Despite continued current account deficits, the net international investment position increased from negative 17.9% of GDP at end-2012 to 23.8% of GDP three years later, largely driven by the impact of the sharp depreciation in the Canadian dollar: more of Canada's assets are denominated in foreign currency than its liabilities.

Economic growth is projected to strengthen in 2016 and reach 2.2% in 2017 (Table 3). As the contraction in the resource sector slows and economic activity in the rest of the economy gains traction, the drag from falling investment and employment in the commodity-producing sector should soon peak and then fade away by late 2017. Non-energy exports should continue to benefit from the lower Canadian dollar and get a further boost from strengthening export market growth (the United States remains by far Canada's largest trading partner: it took 75.6% of Canada's merchandise exports in 2015; with China, the next largest destination, taking only 4.1% of the total). Some sectors are likely to continue to face longer-term competitiveness challenges, as there is little sign that production has moved towards higher technology industries or that capital intensity has risen. Interest rates are assumed to remain very low for an extended period, and federal fiscal policy is turning expansionary (see below). The unemployment rate is projected to edge back down to 6 ¾ per cent by late 2017. Consumer price inflation is likely to be close to 2% in 2017, assuming the exchange rate and oil prices are steady, as the pass-through from exchange rate depreciation dissipates and excess capacity is gradually eliminated.

The most important risks surrounding these projections are external. Global oil prices could fall still further, amplifying cuts in energy-sector investment and employment; but if prices continue to recover, so will these sectors. Developments in emerging markets, notably China, will have an important bearing on commodity prices and export demand. On the domestic front, the main downside risk is still a disorderly housing market correction, particularly in the high-price Toronto and Vancouver markets (see below). This would dampen residential investment and private consumption, and could threaten financial stability. In addition, the transition from commodity-producing sectors to other sectors could be more protracted than expected. The main upside risk is that the economic

expansion in the United States could be stronger than expected, lifting demand for Canadian exports. Some extreme but inherently unquantifiable potential shocks are described in Table 4.

Table 4. **Possible extreme shocks affecting the Canadian economy**

Shock	Possible impact
Financial-sector crisis starting in China	Such a crisis would lead to a sharp downturn in global growth and trade volumes, putting further downward pressure on natural resource prices and lowering Canadian incomes. These effects could be accentuated by increased risk premiums, which would increase the cost of capital for businesses and further depress investment, and by spreading protectionism abroad. The resulting real exchange rate depreciation would help to offset adverse effects on income and employment, although such beneficial effects could be slow to appear. Moreover, economic rotation towards non-commodity exports would be slowed by falling foreign demand.
House prices	A very sharp fall in house prices triggered by a shock that results in a large increase in unemployment could result in a rise in mortgage defaults and put pressure on financial stability.
European Union fragmentation	Should, for example, the United Kingdom decide to leave the European Union in the imminent referendum, there would be widespread financial market instability, including beyond Europe, with adverse economic consequences for advanced countries, including Canada.

Macro-financial vulnerabilities have generally eased since the onset of the global financial crisis (Box 1), with the exception of financial stability-related vulnerabilities and saving levels (excluding households). In particular, house price rises (measured by the Teranet-National Bank house price index) have accelerated to just over 8% in the year to April 2016, largely driven by increases in Toronto and Vancouver, and household indebtedness has continued to rise, reaching 167.6% of disposable income at the end of 2015, a historical high, placing Canada near the top of the OECD range. Yet, owner's equity has been stable as a share of the value of real estate assets at around 73%, the level of household debt represents only 17% of household assets, and net worth has risen to over eight times disposable income, an historical record. And exchange rate depreciation has contributed to a broad-based decline in external vulnerabilities.

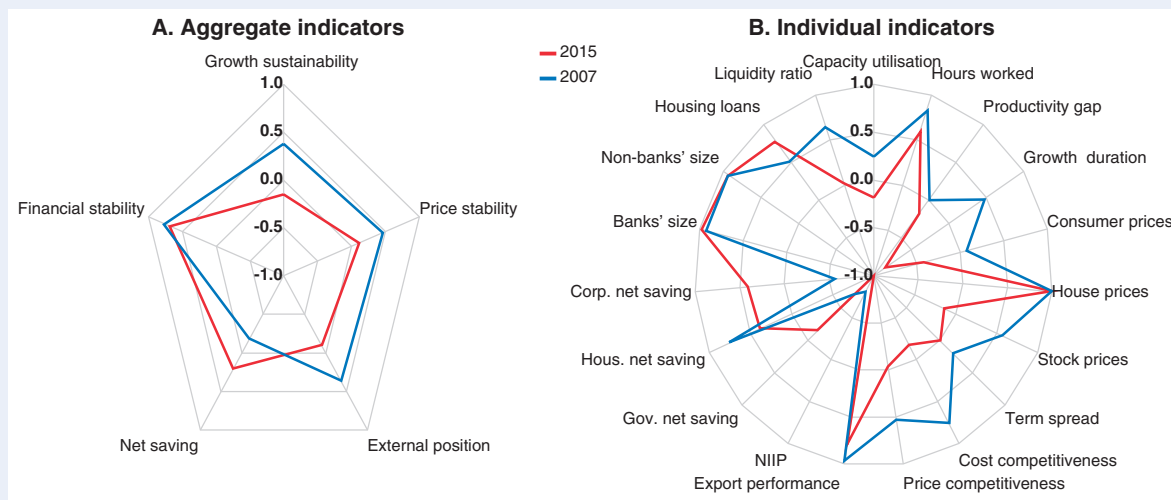
Box 1. **Assessing potential macro-financial vulnerabilities**

As in OECD (2016), potential macro-financial vulnerabilities can be mapped in terms of deviations of indicators from their long-term averages, denoted by zero in Figure 5, with the largest deviations representing the greatest potential vulnerability, denoted by +1 and -1. Selected indicators are derived from recent OECD work on vulnerability indicators (Röhn et al., 2015) and on the linkages between finance and economic growth (Cournède and Denk, 2015).

On average, Canada's potential macro-financial vulnerabilities have fallen since the crisis. The greatest improvements have been in external competitiveness indicators, partly reflecting currency depreciation since 2014. However, financial stability vulnerabilities, which were already elevated, have risen. While bank and non-bank size were already high relative to historical averages, an increased concentration of loans in the residential sector has accentuated vulnerabilities. Lower corporate saving, particularly by financial firms, and weaker government saving have pushed up saving-related vulnerabilities.

Box 1. Assessing potential macro-financial vulnerabilities (cont.)

Figure 5. Potential macro-financial vulnerabilities
Deviations of indicators from their real long-term average (0)¹



1. With the highest deviations representing the greatest potential vulnerability (+1) and the lowest deviations representing the smallest potential vulnerability (-1). Each aggregate macro-financial vulnerability indicator is calculated by aggregating (simple average) normalised individual indicators. Growth sustainability includes: total industrial capacity utilisation rate, total hours worked as a proportion of the working-age population (hours worked), difference between GDP growth and productivity growth (productivity gap), and an indicator combining the length and strength of expansion from the previous trough (growth duration). Price stability includes: an indicator combining the absolute value of the deviation of core inflation from target and the gap between total and core inflation (consumer prices), the average of the house prices-to-rent ratio and the house prices-to-income ratio (house prices), the Toronto composite share price index adjusted by nominal GDP (stock prices), and the difference between long-term and short-term government bond interest rates (term spread). External position includes: the average of unit labour cost-based real effective exchange rate (REER), and consumer price-based REER (cost competitiveness), relative prices of exported goods and services (price competitiveness), export performance and net international investment position (NIIP) as a percentage of GDP. Net saving includes: government, household and corporate net saving, all expressed as a percentage of GDP. Financial stability includes: banks' size as a percentage of GDP, non-banks' size as a percentage of GDP, housing loans as percentage of total chartered banks' loans, and liquid assets as a proportion of short-term liabilities (liquidity ratio). For the liquidity ratio, the long-term average refers to a period of 10 years only due to the unavailability of data for a longer period.

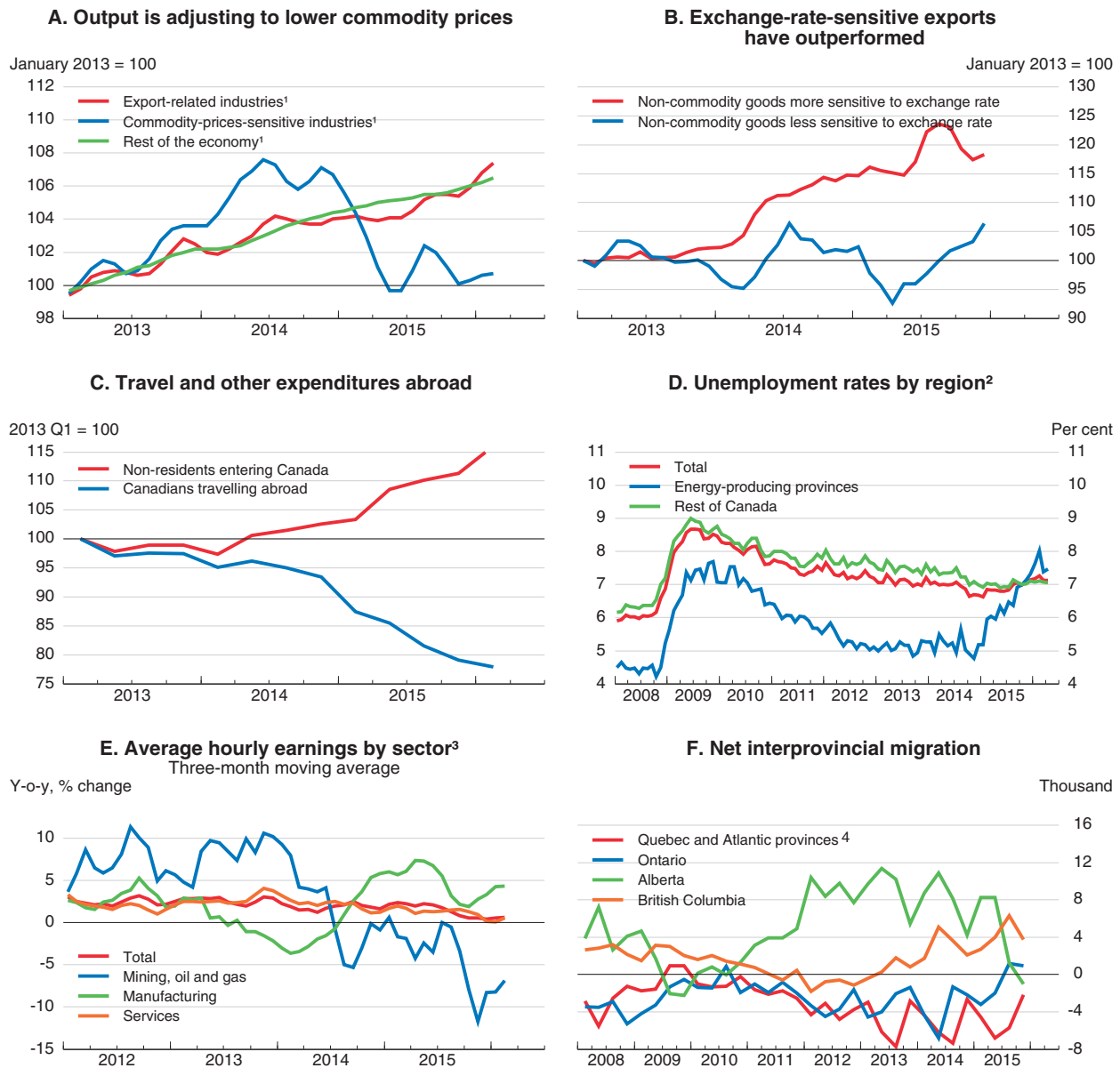
Source: OECD calculations based on IMF, Financial Soundness Indicators; OECD, Economic Outlook database; Statistics Canada; Thomson Reuters.

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Regional adjustments to terms-of-trade declines and policies to facilitate the sectoral shift

The Canadian economy is undergoing a complex adjustment to falling commodity prices, especially for energy. This entails the withdrawal of productive factors from resource and related sectors and their re-deployment in the rest of the economy. Oil and gas and related output has fallen considerably since late 2014, and the export-related and other non resource industries (most notably finance and insurance, real estate, retail trade, transportation and warehousing, health care and social assistance, and arts, entertainment and recreation), have expanded, aided by the strengthening US economy, the weaker Canadian dollar and accommodative financial conditions (Figure 6, Panel A).

Non-commodity export sectors, which are sensitive to the exchange rate, have shown some modest improvement (Figure 6, Panel B), suggesting that adjustment is underway.

Figure 6. **The rotation from energy to non-energy sectors and regional dynamics**

1. Three-month moving average of real output. For more details on the sectoral definition, see notes in Bank of Canada (2016).

2. Data from the Labour Force Survey. Energy-producing provinces include Alberta, Saskatchewan, and Newfoundland and Labrador.

3. Data from the Survey of Employment, Payrolls and Hours.

4. Atlantic provinces include New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador.

Source: Statistics Canada, Tables 379-0031, 228-0059, 228-0063, 427-0005, 282-0087 and 051-0017; Bank of Canada (2015), *Monetary Policy Report*, October, Chart 27 updated; Bank of Canada (2016), *Monetary Policy Report*, April, Chart 9 updated.

StatLink <http://dx.doi.org/10.1787/888933370818>

Mining, and oil and gas-related investment have declined significantly since early 2014. Other business investment has also struggled (see Figure 4, Panel B), but as non-energy export demand grows, it should pick up. Survey-based indicators suggest that capacity pressures are more prevalent and investment and hiring intentions greater for non-commodity exporters than other domestically oriented firms (Bank of Canada, 2016b). The

rotation has also been reflected in tradable services: the lower dollar has encouraged increased tourism to Canada, while Canadians have reduced their foreign travel (Panel C).

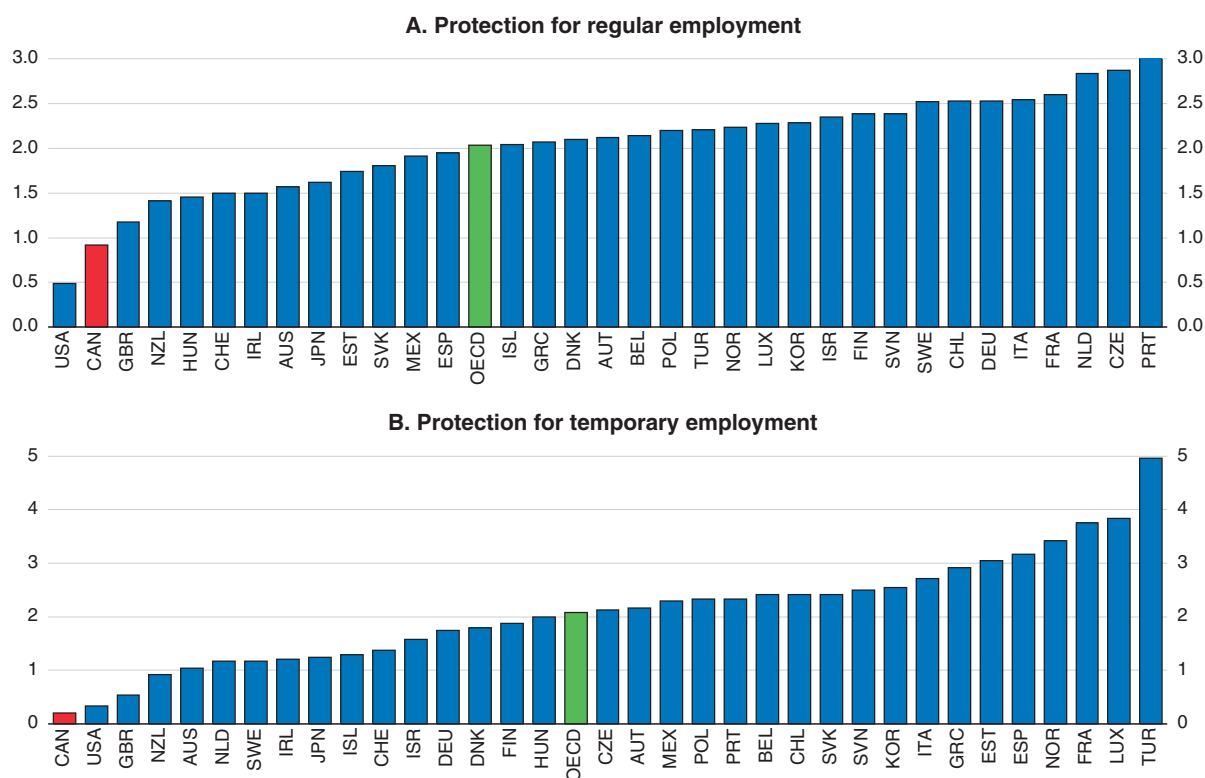
Regional labour markets have also evolved on different tracks. Employment growth has come to an abrupt halt in energy-producing provinces, but job creation mainly in Ontario and British Columbia has allowed modest growth at the national level (see Figure 4, Panel C). Unemployment in energy-producing provinces has risen sharply (Figure 6, Panel D), and average hours worked are down, but again national unemployment has risen only slightly. Nationwide hourly earnings in the mining and oil and gas sectors have fallen sharply (Panel E). Slowing activity and job prospects in Alberta have led to a decline in net inter-provincial migration, with concurrent increases seen in British Columbia and Ontario and ongoing shrinkage in the Atlantic provinces (Panel F).

Canada's labour markets are characterised by flexible employment protection legislation (EPL) (Figure 7), which increases employment rates and is associated with lower levels of long-term unemployment (OECD, 2015a). Canadians with stable work histories have good access to income support through unemployment insurance (known in Canada as Employment Insurance (EI)), which has average replacement rates but short benefit duration.

Canada's spending on training and job search is relatively low (Figure 8). Such programmes, particularly timely access to public employment services, are generally

Figure 7. **Employment protection legislation in Canada is not restrictive**

Index scale from 0 (least restrictive) to 6 (most restrictive), 2013



Source: OECD, Employment Protection Legislation database.


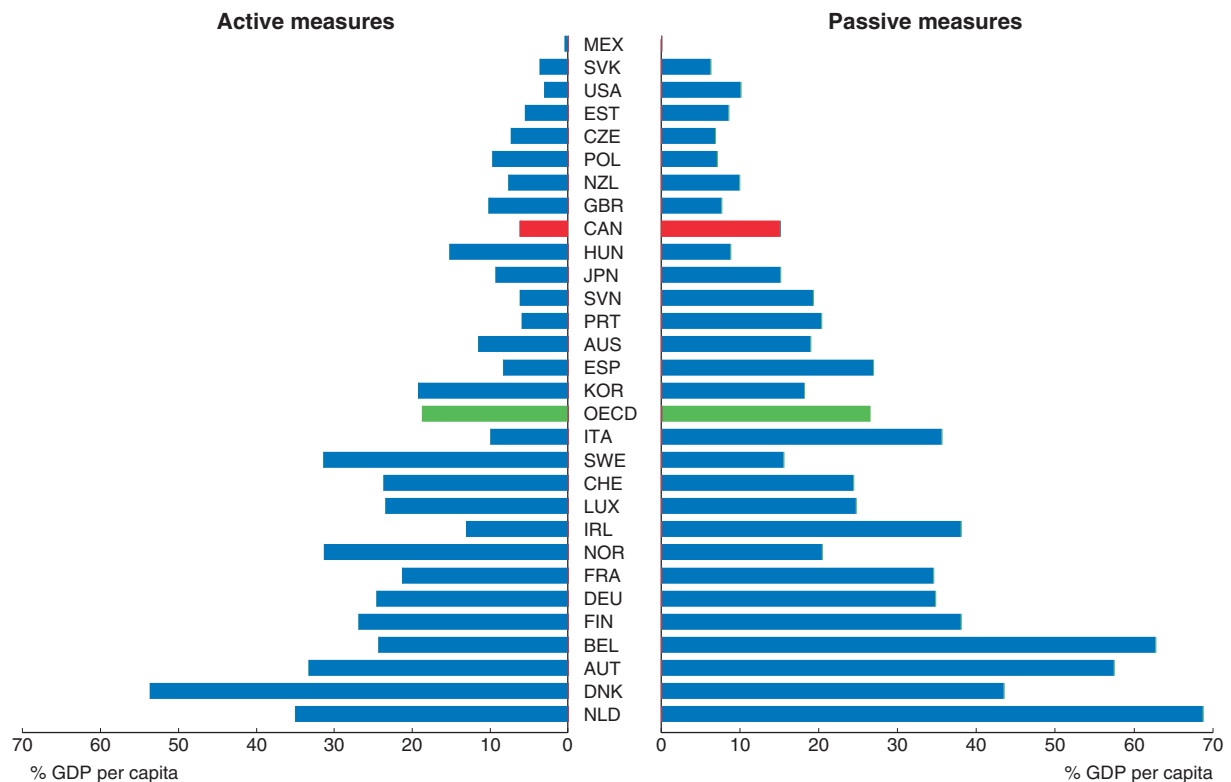

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Figure 8. **Public spending on labour market measures**¹
 Spending per unemployed, as a percentage of GDP per capita, 2012 or latest year available



1. Labour market measures include active and passive measures which refer to, respectively, Categories 1 to 7 and Categories 8 to 9 of the OECD/Eurostat Labour Market Programme Database. For more details about the categories, see Grubb and Puymoyen (2008). Countries are ranked in ascending order of the total of both active and passive measures in 2012.

Source: OECD (2015), *Back to Work – Canada*, Figure 5.6; D. Grubb and A. Puymoyen (2008), “Long-Time Series for Public Expenditure on Labour Market Programmes”, *OECD Social, Employment and Migration Working Papers*, No. 73, <http://dx.doi.org/10.1787/230128514343>.

StatLink  <http://dx.doi.org/10.1787/888933370839>

associated with a higher probability of finding a job (Cournède et al., 2016; OECD, 2015a). Access to some public employment services and training is linked to EI benefit receipt. Widening eligibility for these services could get some of the jobseekers who do not qualify for EI benefits back to work sooner. More closely linking benefit administration with employment assistance could make activation policies more effective (OECD, 2013). This could entail locating (federal) EI benefit administration services and (provincial) public employment services in the same offices.

Progress in implementing a selection of recent OECD Survey recommendations is reviewed in Box 2. Reforms to ease anti-competitive product market regulations (discussed below) are generally associated with a higher chance that jobless people are re-employed, an effect that becomes economically large four years following the reforms, resulting in lower long-term unemployment rates (Cournède et al., 2016). While internal migration already appears to be the major long-term adjustment mechanism to asymmetric labour-market shocks in Canada, as in the United States but not the euro area, and flows are similar in Canada and the United States (Bayoumi et al., 2006), there is nevertheless scope to foster more inter-provincial labour mobility. This could be done by promoting the harmonisation of labour standards and training, along with further strengthening and

Box 2. Implementation of selected past Survey recommendations

- **Tax efficiency:** The 2008 Survey recommended that remaining provincial sales taxes (PST) be replaced by value-added taxes (Harmonised Sales Taxes (HST)). Progress has been made in moving away from PST, with only a minority of the population now living in provinces with a PST. The largest province with a PST is British Columbia, which exited the HST and returned to a PST in 2013 following a referendum. There has also been some progress in reducing tax expenditures not warranted on economic or equity grounds. For example, income splitting for couples with children and tax credits for textbooks and children's fitness and art were eliminated in the 2016 federal budget. At that time the government also announced a review of tax expenditures. This needs to include all major expenditures, notably, the preferential tax regime for small companies (see below) and non-taxation of benefits from private health insurance plans (which Quebec removed many years ago) and of capital gains on principal residences.
- **Supply management:** No action has been taken to phase out supply management regimes in agriculture (notably dairy), as recommended in the 2008 Survey. These regimes sustain inefficient producers and increase prices for consumers as well as threatening Canada's potential membership in future regional free trade areas.
- **Ethanol and other biofuels:** Neither has there been any progress to reduce mandates for ethanol and other biofuels, which are not cost-effective means of reducing greenhouse gas emissions. Opposition from the agricultural sector to losing these markets lies behind the lack of progress.
- **Industrial subsidies:** Since the 2006 Survey, the OECD has recommended that Canada minimise its use of industrial subsidies, which distort product markets. The latest National Accounts data (for 2014) show Canada's recourse to subsidies to be 7th lowest in the OECD at less than 0.9% of GDP (the OECD simple average is 1.7%) and that they have been falling since 2003.
- **Employment Insurance (EI):** The 2014 Survey recommended that Canada adopt employer- or employee-targeted measures that improve the insurance and incentive basis of the programme, which provides unemployment benefits, and enhance opportunities for seasonal workers to retrain should the January 2013 EI reforms fail to cut repeat use. To date, the evidence is mixed. The share of frequent claimants in total EI regular claims has fallen only slightly. On the other hand, the share of the unemployed receiving EI benefits fell in Atlantic Canada and Québec (regions with high repeat use) following reforms, with a flat level in the rest of Canada. The 2016 federal budget announced the cancellation of these reforms.
- **Tertiary education:** To overcome barriers to equitable access to tertiary education the 2012 Survey recommended that Canada increase targeted needs-based financial assistance, improve the transparency of the aid application process and expand information on returns to education. The government now provides more information on fields of study and occupational outcomes. The 2016 federal budget announced significant investments to make post-secondary education more affordable for students from low- and middle-income families, such as increased Canada Student Grants amounts and expanded eligibility thresholds so that even more students can receive non-repayable financial assistance. In addition, Ontario will make college or university tuition free for students from families with incomes of CAD 50 000 or less, and increase tuition grants for middle-class families starting in the 2017-18 school year. These proposed changes are to be funded by eliminating the Ontario tuition and education tax credits (which are not means tested). New Brunswick has also introduced income-dependent free tuition for students.
- **National securities regulator:** A national securities regulator has been recommended to reduce duplication, speed response to financial stability concerns and reduce compliance costs. The federal government's 2011 proposal for a national regulator was judged unconstitutional. However, several provinces and territories have agreed to establish a Cooperative Capital Markets Regulatory System, along with the federal government, to harmonise and modernise capital markets in their jurisdictions.

fast-tracking dispute resolution procedures in the Agreement on Internal Trade (despite a 2015 amendment that improves them for person-to-government disputes), could facilitate labour market adjustments (see below and Chapter 1). Increasing small business dynamism would also facilitate labour market adjustment as start-ups and young firms (not small firms *per se*) contribute disproportionately to net job growth (Haltiwanger et al., 2013) (see below and Chapter 2).

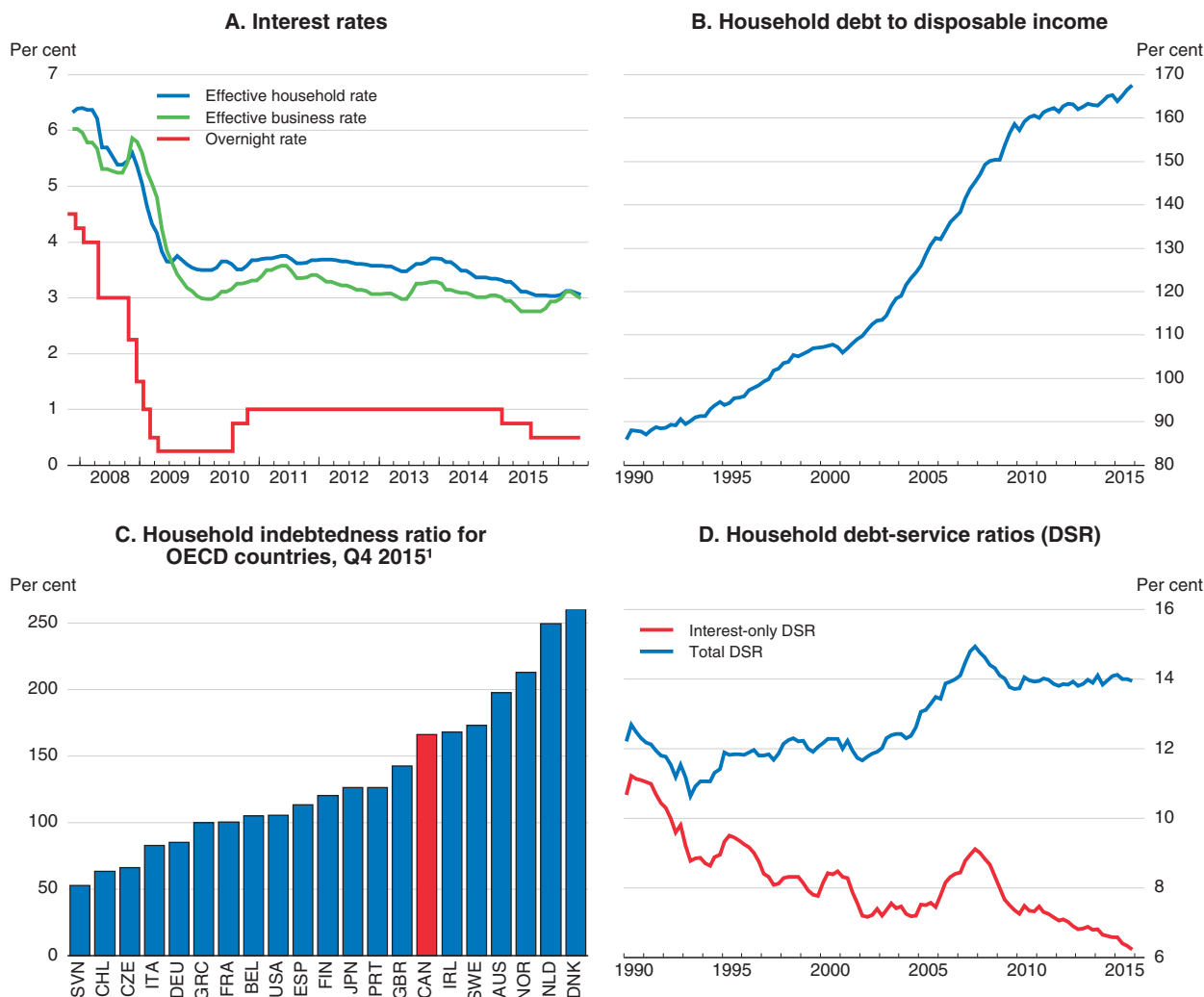
Ensuring price and financial stability

The Canadian economy suffered a major terms-of-trade shock in 2014-15 and continues to operate with significant slack and lower-than-targeted inflation. Expansionary macroeconomic policies can help to speed up the economy's return to normal operating conditions (where the economy is operating at its potential level of output). Until recently, only monetary policy has been expansionary: the discretionary stance of fiscal policy was neutral in 2014-15. With monetary policy bearing all the burden of stimulating the economy, interest rates have fallen to very low levels. This has added further fuel to already overheated housing markets in Vancouver and Toronto and encouraged Canadian households to take on even more debt, the repayment of which might be problematic. Both of these effects have increased financial stability vulnerabilities. Partly to ease the burden on monetary policy, a moderately expansionary fiscal policy stance was adopted in the 2016 federal budget (see below). This has already allowed the Bank of Canada to maintain its policy rate unchanged so far in 2016, despite developments in recent months that may have otherwise called for consideration of a rate cut. Such rebalancing of the short-term macroeconomic policy mix will result in the federal government accumulating more debt and households less, which is preferable from a financial stability perspective, as household debt is already high in relation to incomes, while the federal government's finances are in good shape (see below). An additional consideration is that while fiscal expansion normally pushes up the value of the currency, much of this effect could be offset if undertaken simultaneously by a number of OECD countries, as recommended in the latest *OECD Economic Outlook* (OECD, 2016b).


To cushion the effects of the commodity price decline on growth and inflation the Bank of Canada lowered its overnight rate by 0.5 percentage point in the first half of 2015 and has since remained on hold. Low inflation and reasonable growth prospects suggest that the current pause is appropriate. Recently, most measures of core inflation have been close to 2 per cent. Given excess supply in the economy, these measures would be lower without the impact of exchange rate pass-through. However, as noted above, very low borrowing rates (Figure 9, Panel A) have encouraged household credit growth and underpinned rising asset prices, especially for housing. Macro-prudential measures have been strengthened, but house prices continue to rise, although the ratio of household debt to income has almost levelled off.

Since 1990, Canadian house prices have risen sharply and relative to income and rents are now well above long-run averages; however, persistently low mortgage interest rates have offset the associated pressures on affordability (Figure 10, Panels A-D). Recently house prices have declined in energy-producing regions, continued to rise strongly in Vancouver and Toronto, and risen modestly elsewhere. According to the Canada Mortgage and Housing Corporation (CMHC, 2016), 10 of the 15 Census Metropolitan Areas it monitors have evidence of overvaluation, and seven show moderate or strong evidence of overbuilding. Overall, in its view, most markets show at least moderate evidence of

Figure 9. Interest rates and household debt



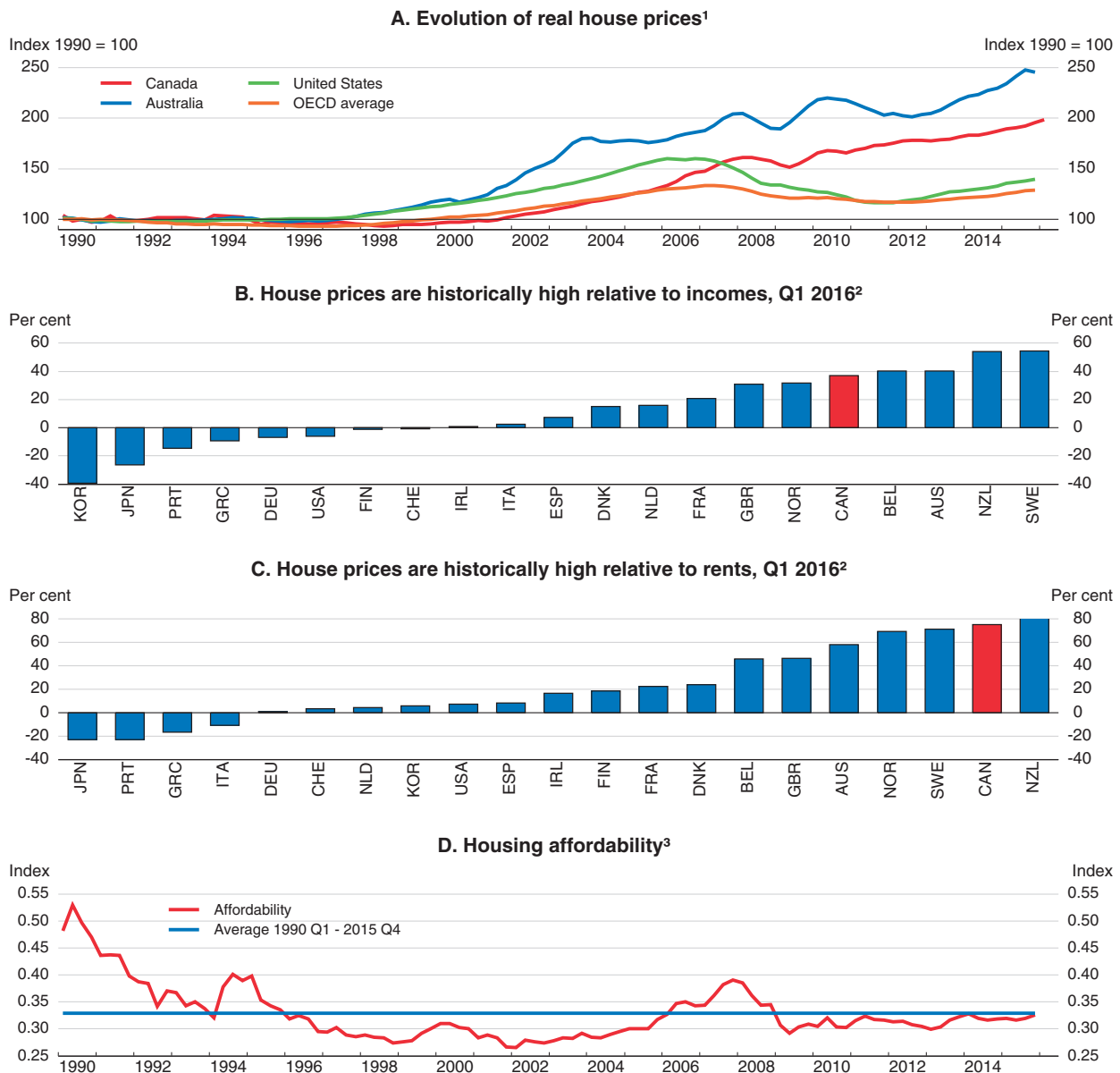
1. Total household outstanding debt as a percentage of household gross disposable income. Q4 2014 for Denmark and Q1 2015 for Japan. Source: OECD, National Accounts – Household Dashboard database; Statistics Canada, Tables 378-0123 and 380-0073; Bank of Canada, Financial Indicators, <http://credit.bankofcanada.ca/financialindicators>.

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“problematic conditions”. One factor driving market strength in Vancouver and Toronto is foreign buying. Unfortunately, limited data are available on such purchases. Fortunately, the federal government has allocated some funding for Statistics Canada to develop a methodology to gather such data.

Another factor is supply constraints: these are both physical – Vancouver is bounded by the Pacific Ocean and coastal mountains, while Toronto is bordered by Lake Ontario – and regulatory – such as Toronto’s green belt of some 800 000 hectares and Vancouver’s provincial zone of protected farmland. In both cases land is therefore limited, curbing the normal supply response to appreciating property prices. Ontario is considering whether to expand the Toronto-Hamilton greenbelt while at the same time encouraging densification, especially near public transit routes (Advisory Panel on the Coordinated Review of the Growth Plan for the Greater Golden Horseshoe, the Greenbelt Plan, the Oak Ridges Moraine

Figure 10. House prices



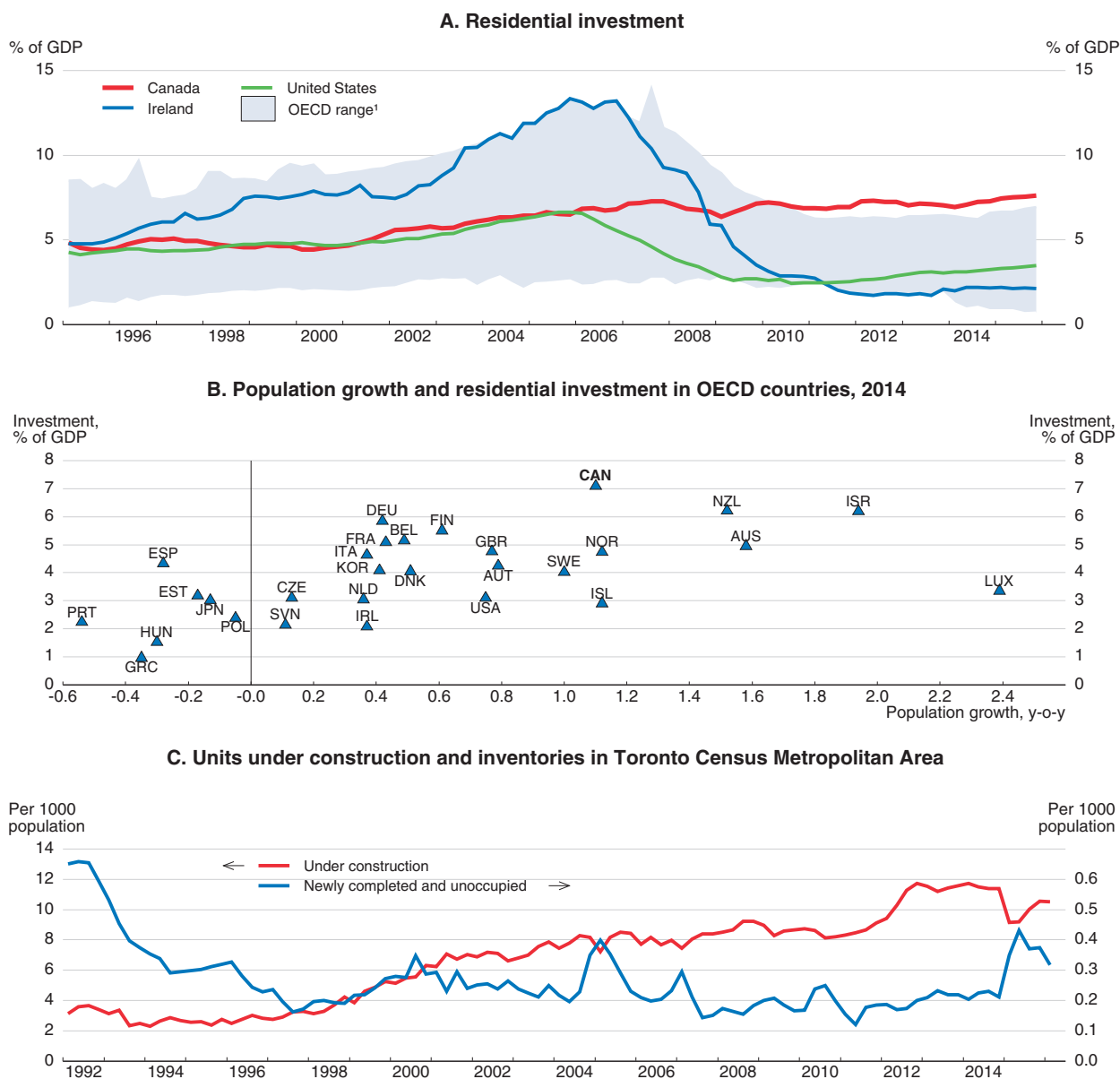
1. Nominal house prices deflated by the private consumption deflator.
2. Deviation of the ratio of nominal house prices/nominal disposable income per capita (respectively /rent prices) over the long-term average. The long-term average starts in Q1 1980 for most countries, with a few exceptions. The price-to-income ratio starts in Q1 1981 for Denmark, Q1 1986 for Korea and New Zealand, Q1 1987 for the United Kingdom, Q1 1995 for Portugal and Q1 1997 for Greece. The price-to-rent ratio begins in Q1 1986 for Korea, Q1 1988 for Portugal and Q1 1997 for Greece. The latest observation is Q4 2015/Q1 2016.
3. The affordability index provides an estimate of the share of disposable income that a representative household would put toward housing-related expenses. The measure is a ratio, where the numerator, housing-related costs, is the sum of the average quarterly mortgage payment plus utility fees and the denominator is the average household disposable income. The higher the level, the more difficult it is to afford a home.

Source: OECD, Economic Outlook database; Bank of Canada, Financial Indicators, <http://credit.bankofcanada.ca/financialindicators>.

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Conservation Plan and the Niagara Escarpment Plan, 2016). Despite these curbs on the supply response, the share of residential investment in Canada's GDP is currently the highest amongst OECD countries, but it is considerably below earlier peaks in Ireland and Spain (Figure 11; Panel A). Strong residential investment may in principle reflect robust demographic growth, but Canada's outcome appears stronger than what can be justified by underlying population increases (Panel B).

Figure 11. Residential investment



1. Excluding Canada.

Source: Statistics Canada, Tables 027-0060, 027-0047 and 051-0056; OECD, Economic Outlook database.

StatLink <http://dx.doi.org/10.1787/888933370863>

High household debt is still nevertheless an important potential vulnerability making the economy susceptible to a fall in employment and incomes, as this would weaken households' ability to service their debt. Household indebtedness has increased to high levels, both historically (Figure 9, Panel B) and compared with other OECD countries (Panel C). While low interest rates have helped to reduce interest-related obligations, broader debt-service ratios including required principal payments are above historical averages (Panel D). In addition, debt has become more concentrated in the hands of highly indebted younger households, who may be less able to cope financially with a job loss or interest rate increases (Bank of Canada, 2015).

Nevertheless, Canadian mortgages are issued on a recourse basis, and most households have plenty of equity in their homes. In addition, banks must test mortgage qualification for insured mortgages with terms less than five years or with variable interest rates against a benchmark five-year interest rate, which is currently about two percentage points above market five-year mortgage rates, affording some degree of protection. In December 2015, the Office of the Superintendent of Financial Institutions (OSFI), the financial supervisor, announced planned changes to the regulatory capital frameworks for residential mortgages for large federally regulated lenders and private mortgage insurers so that capital requirements keep pace with housing market developments and risks, such as when regional house prices are high relative to incomes. Moreover, following a series of rounds of macro-prudential measures implemented since 2008 (e.g. introducing new loan documentation standards, shortening the maximum amortisation period, setting a maximum gross debt service ratio, raising CMHC guarantee fees and capping the total amount of new CMHC securitisation programmes), the federal government boosted down-payment requirements for insured mortgages in February 2016 from 5 to 10% for the portion of each insured home priced between CAD 500 000 and CAD 1 million, which is the ceiling on availability of public mortgage insurance. Stress testing on the six large banks has been carried out regularly in the last few years, though results are not published. Common equity Tier 1 capital ratios, average Liquidity Coverage ratios and Basel III leverage ratios exceed minima required by OSFI (Bank of Canada, 2015; Table 5). Nonperforming loans (NPLs) remain low at only 0.5% of gross loans. This said, macro-prudential measures should be tightened further and targeted regionally, as in New Zealand, where the authorities imposed lower ceilings on loan-to-value ratios in 2015 in the booming Auckland market and are considering further measures. Targeted measures could go beyond planned changes by OSFI to capital guidelines in regions with high house price-to-income ratios or strong house price growth to make capital requirements more responsive to market developments and risks.

Another possible financial vulnerability is exposure, direct and indirect, to declines in the resource sector. For the Big Six banks, oil and gas lending accounts for only 2% of total loans and other mining less than 1% (Bank of Canada, 2015). However, indirect exposures through household and commercial real estate loans in oil-producing regions account for 13% of total loans (Bank of Canada, 2015). Overall, the diversity of the Canadian economy and a well-capitalised banking sector suggest that the large banks can weather such risks, although some small regional lenders (for example, credit unions) may have greater exposure and need to be actively monitored by their respective provincial supervisors.

Table 5. **Canadian financial indicators**

Ratios in per cent

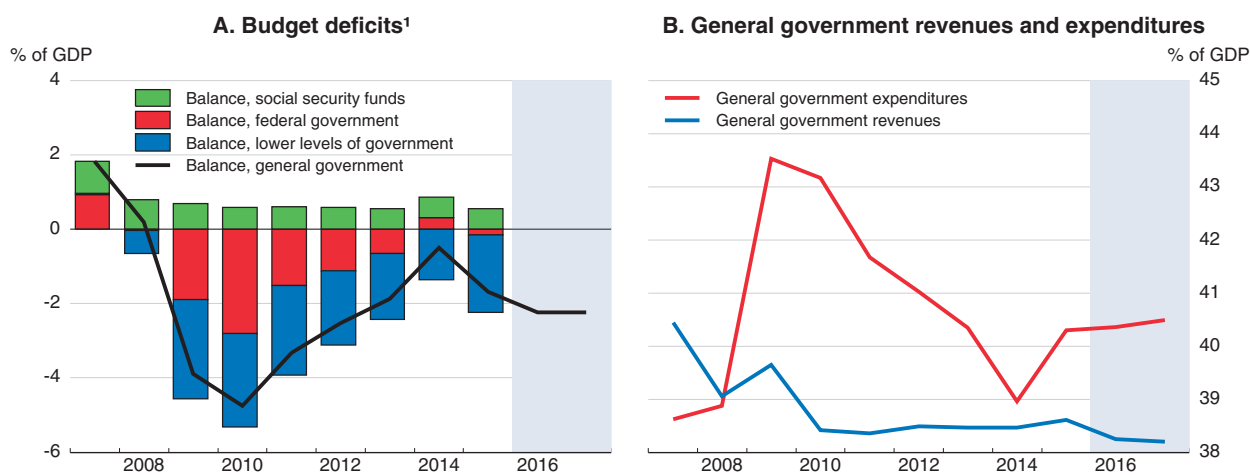
	2005	2010	2011	2012	2013	2014	2015
Regulatory capital to risk-weighted assets (total capital ratio)	15.3	15.6	15.9	16.2	14.3	14.2	14.2
Regulatory tier 1 capital to risk-weighted assets (tier 1 ratio)	11.2	13.1	13.3	13.4	11.7	11.9	12.1
Leverage ratio (tier 1 capital to assets)	4.7	5.0	5.1	4.9	4.4	4.7	4.8
Capital to assets	3.8	4.7	4.9	4.9	5.0	4.9	5.1
NPLs to gross loans	0.5	1.2	0.8	0.7	0.6	0.5	0.5
Return on assets	1.0	1.1	1.1	1.1	1.1	1.1	1.0
Return on equity	23.8	23.0	23.6	22.7	22.3	22.5	20.7
Liquid assets to total assets	12.1	15.5	15.2	11.9	11.3	11.0	11.4
Liquid assets to short-term liabilities	33.7	51.1	54.1	51.8	47.8	50.5	45.2
Foreign-currency-denominated loans to total loans	21.4	27.4	28.2	26.8	27.7	30.1	33.4
Foreign-currency-denominated liabilities to total liabilities	37.6	36.3	40.6	42.4	42.7	49.2	48.4

Source: IMF, Financial Soundness Indicators database.

Fiscal policies to raise the incomes of all Canadians

Considerable progress was made in reducing the general government budget deficit from a post-recession peak of 4.7% of GDP in 2010 to 0.5% of GDP in 2014 (Figure 12, Panel A). This reduction, which occurred mostly at the federal level, was achieved by reducing expenditure, which had shot up in the wake of the global financial crisis (Panel B). Around two-thirds of the deficit reduction is estimated to have been structural. The deficit rose to 1.7% of GDP in 2015, and most of the increase reflected deteriorating provincial public finances in oil-producing provinces, particularly Newfoundland and Labrador, and Alberta.

The new federal government has adopted a moderately expansionary fiscal policy stance to boost demand. New measures increase the budget deficit by 0.6-0.7% of GDP in the next two years and by 0.3% of GDP in 2018 and 2019 compared with an unchanged policy baseline

Figure 12. **Public finances have improved in recent years**

1. Average of the four quarters of the year.

Source: OECD, Economic Outlook 99 database; Statistics Canada, Table 378-0119.

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(Table 6). The increase in deficits reflects higher spending, including on infrastructure, which is a government priority: indeed, it expects to double infrastructure spending to CAD 120 billion over the next decade. The federal government estimates that these measures could increase the level of GDP by 0.5 per cent in 2016 and 1 per cent in 2017 (Finance Canada, 2016), but federal indebtedness will rise for some time nonetheless.

Table 6. Fiscal projections
As a percentage of GDP

Federal government							
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Budget revenues	14.3	14.6	14.4	14.5	14.5	14.5	14.5
Program expenses	12.9	13.6	14.6	14.6	14.2	13.8	13.6
Public debt charges	1.3	1.3	1.3	1.3	1.3	1.4	1.5
Budget balance	0.1	-0.3	-1.5	-1.4	-1.0	-0.8	-0.6
Federal debt	31.0	31.2	32.5	32.4	32.1	31.6	30.9
General government							
	2014	2015	2016	2017			
Budget balance	-0.5	-1.7	-2.2	-2.2			
Gross debt	93.2	98.5	99.8	100.6			
Net debt	31.7	31.8	33.1	33.0			

Source: Budget 2016 and OECD.

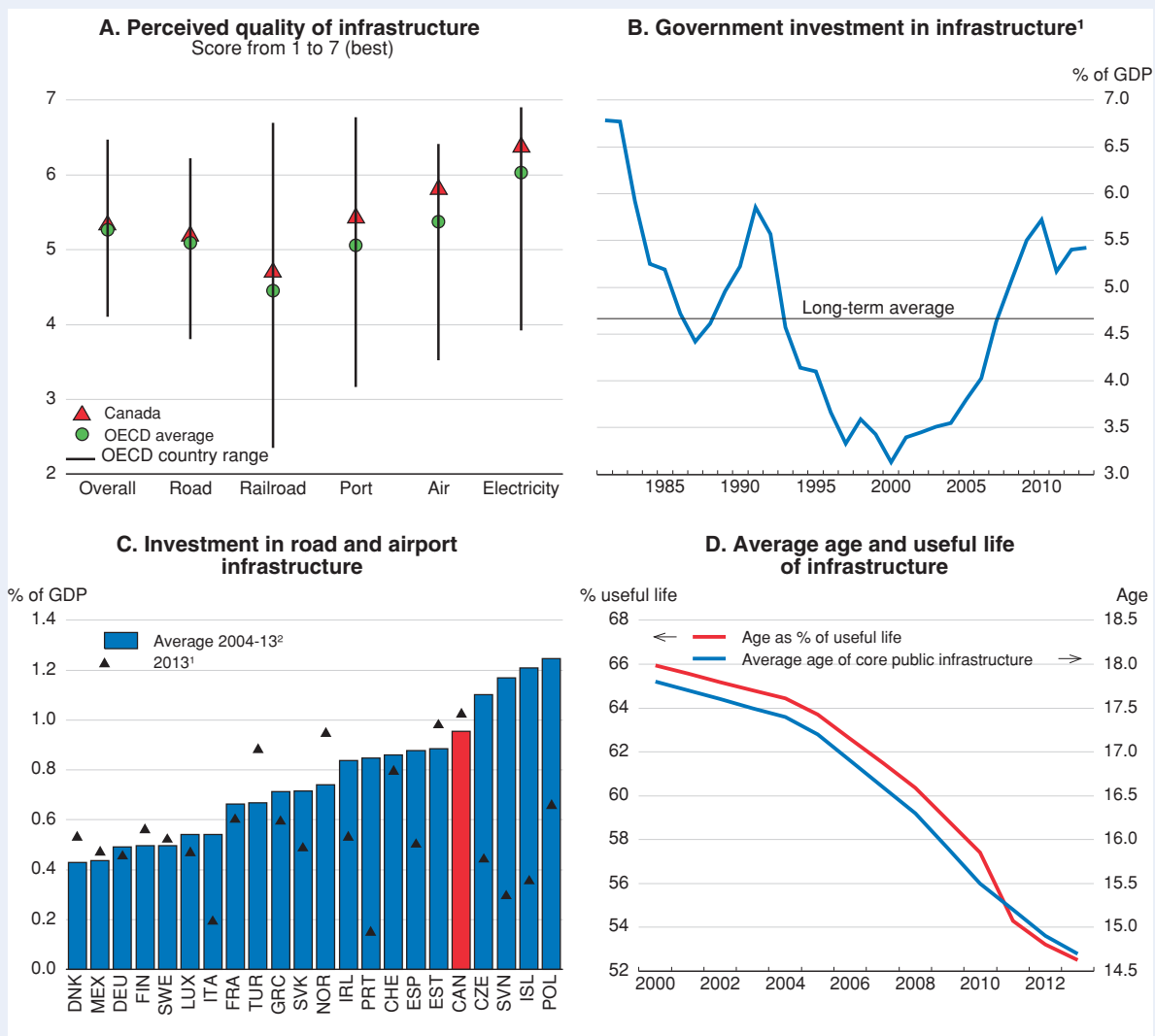
The federal government's focus on investment in physical infrastructure, social housing, education and innovation to deliver short-term stimulus and promote longer-term growth and inclusiveness is astute. Short-term fiscal multipliers are greater for infrastructure and social housing than for tax measures, for example. Finance Canada (2016) estimates fiscal multipliers for infrastructure investment measures to be 0.9 in the first year and 1.4 after two years, though these estimates are subject to considerable uncertainty. However, finding infrastructure investments with high returns is likely to be more difficult in Canada than in some other jurisdictions, because there does not appear to have been so much underinvestment in recent years (Box 3).

Box 3. Canadian infrastructure provision and the efficiency of its use

Canada's infrastructure compares favourably with OECD averages in terms of its perceived quality (Figure 13, Panel A) and investment levels. Canada's total public investment in infrastructure is above historical average (in per cent of GDP), and investment in transportation infrastructure (including roads and airports) relative to GDP appears to be higher than OECD norms (Panels B and C). While this may partly reflect weaker investment in the mid- to late-1990s, the upward trend in public investment since then has increasingly exceeded depreciation rates, leading to a decline in the average age and a lengthening of average remaining useful life (Panel D). Indeed, core public infrastructure stock per capita has increased roughly 15% since 2003 (Infrastructure Canada, 2015). While these data suggest that infrastructure deficits are low in Canada, some select or localised constraints may exist, and efficiency gains may result from improving the coordination among various transportation modes. Moreover, road congestion seems to be an issue, especially at the evening peak, in Vancouver and, to a lesser extent, Toronto (TomTom, 2016), raising logistics costs. Greater use of infrastructure pricing, such as congestion and user charges, could ensure more efficient infrastructure use.

Box 3. Canadian infrastructure provision and the efficiency of its use (cont.)

Figure 13. Infrastructure provision and perceived quality



1. Includes investments in constant Canadian dollars from all levels of government including crown corporations and departmental agencies. Data for 2013 are based on forecasts. Infrastructure includes core public infrastructure assets (bridges, roads, water, wastewater, transit, culture, and recreation and sports), marine and air transportation, rail, brownfields, waste management, education, health and social assistance, energy, communication, oil and gas engineering, commercial and government and other institutional buildings, and other infrastructure.

2. Or latest available year.

Source: World Economic Forum (2015), *The Global Competitiveness Report 2015-16*; OECD, International Transport Forum database; Infrastructure Canada. StatLink <http://dx.doi.org/10.1787/888933370885>

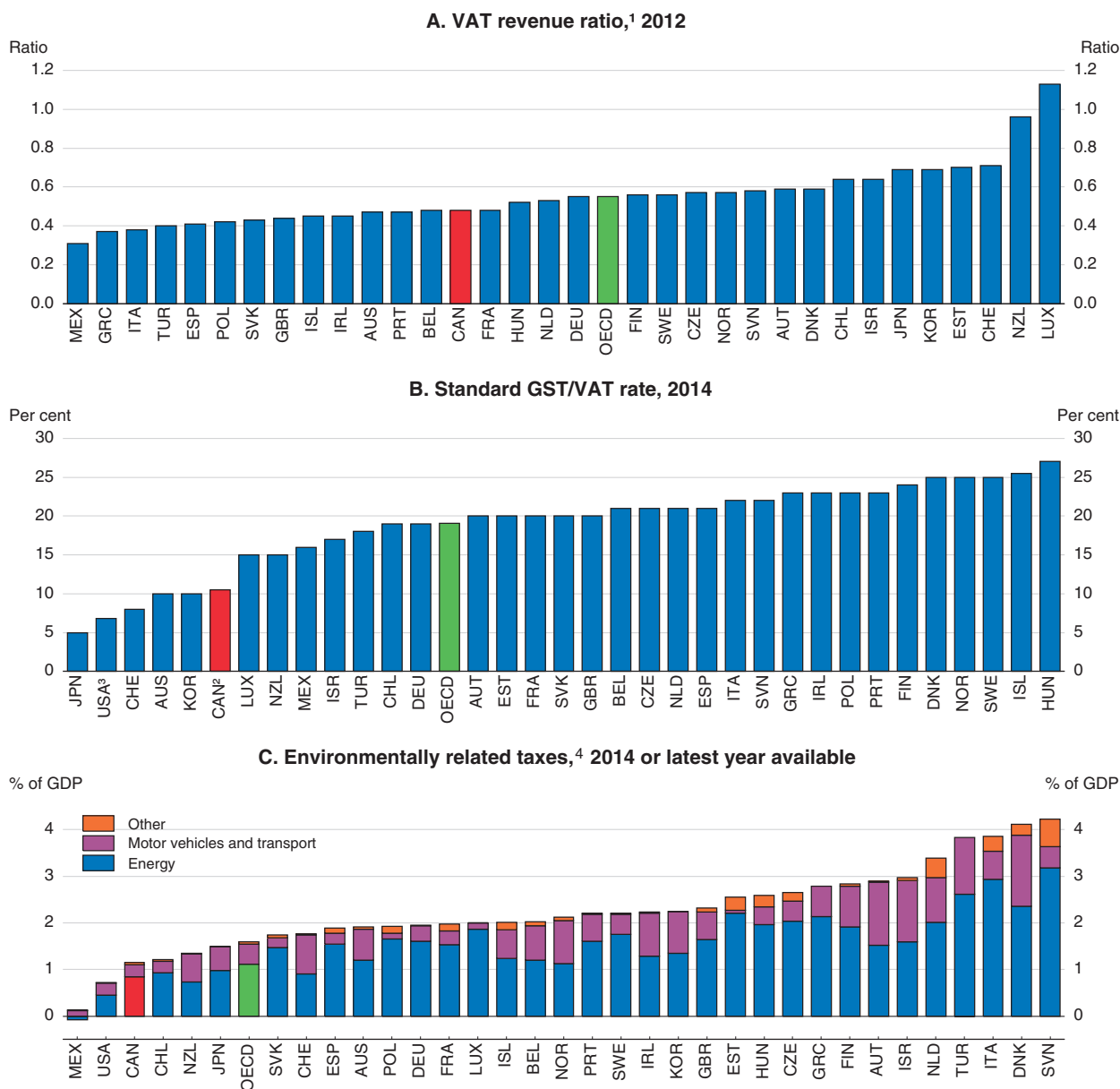
Yet, the federal government does not have clearly defined medium-term objectives in terms of the budget balance (such as getting back to balance by a certain date). It has, however, committed to reducing the federal-debt-to-GDP ratio over the five-year period ending in 2020-21. The government has also noted that it remains committed to

eventually returning to balanced budgets. General government net debt is projected only to rise moderately to 33% of GDP in 2017, which is far below the projected OECD average of 72% of GDP. In most countries gross public debt is the preferred metric for general government because government assets may be illiquid and/or poorly priced, and it is therefore imprudent to offset them fully against gross debt. However, in Canada's case such assets are mostly held by well managed pension funds, which provide pension payments for civil servants and the general public and hold only moderate amounts of non-marketable shares. In any case, the federal government should establish a medium-term debt-to-GDP target, taking into account the outlook for provincial/territorial debt, to ensure that general government finances are sustainable (see below).

The new federal policy package also includes important changes to redistribute income towards low- and middle-income households. The most significant measure is the replacement of existing programmes to help families with children, some of which are not income tested, by the Canada Child Benefit (CCB), which is income tested, as of mid-2016. Almost 90% of the cost of the CCB will be met from cancelling the existing measures.


The other main redistributive measure is a middle-class income tax cut to be financed mainly by increasing the tax rate on high incomes to an average federal-provincial combined rate of over 50%. It would have been less costly to finance this tax cut by increasing taxes with lower efficiency costs, such as Goods and Services Tax (GST) – both through broadening the base (the VAT revenue ratio, shown in Figure 14, Panel A, suggests that Canada's base may be marginally less comprehensive than the OECD average), and raising the standard rate (Panel B), although cross-border shopping possibilities restrict the extent to which rates can exceed sales tax rates in neighbouring US states) and by applying environmentally related taxes (especially taxes on energy), which are limited (Panel C).

As noted above, the 2016 federal budget also proposes a substantial increase in funding of CAD 8.4 billion over the next five years (an average of 0.1% of GDP, of which CAD 1.3 billion in 2016-17 and 1.8 billion in 2017-18) to improve the sub-standard socio-economic conditions facing Indigenous Peoples. This amounts to a 22% increase in end-of-period levels and represents a big effort at making growth more inclusive and opportunities more equal. Most of this expenditure will be on education and training (about half of the total), including upgrading of school buildings, and social and green infrastructure (housing, water and wastewater treatment and health care). A large share of the education funding is intended to be invested in primary and secondary education on reserve (including language and cultural programming), to provide special needs education so as to boost literacy and numeracy, to close the gap in high school graduation rates and to ensure greater access to tertiary education. Social infrastructure spending will seek to ensure quality housing, as well as early learning, child care, health care, cultural and recreational facilities. The green initiatives involve improving on reserve waste management, water quality and wastewater treatment. But the budget also provides some funds for improving governance by their representative organisations and for strengthening the capital base of the First Nations Financing Authority, which raises private long-term capital for economic development in their communities. It would be useful if some programme evaluation mechanisms were built in at the outset to ensure that real progress is made.

Figure 14. **GST/VAT and environmental taxes are relatively low in Canada**

1. The VAT revenue ratio is defined as the ratio of VAT revenues to household consumption expenditure excluding VAT revenues divided by the standard rate.
2. The national GST rate is estimated by adding the federal rate (5%) and rates of the provincial equivalent tax (the Harmonised Sales Tax as well as the provincially-legislated Quebec Sales Tax), weighted by household final consumption expenditure excluding sales taxes.
3. The sales tax for the United States is estimated by computing a simple average of the combined tax rate (i.e. state tax plus local tax) of those US states having a frontier or a connection with Canada: Washington, Idaho, North Dakota, Minnesota, Michigan, New York, Vermont, New Hampshire and Maine.
4. Include taxes at both central and lower levels of government.

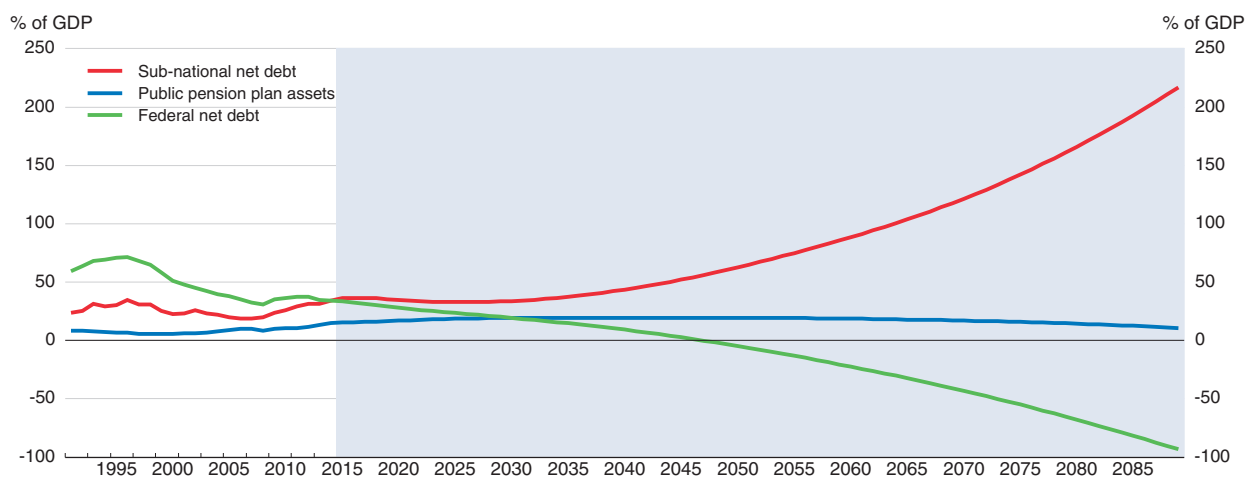
Source: OECD (2015), *Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies*, Table 6.2; OECD (2014), *Consumption Tax Trends 2014*, Table 2.A2.1 updated; OECD, Environment-Related Tax Revenue database; Statistics Canada, Table 384-0045; Canada Revenue Agency; Tax Foundation, <http://taxfoundation.org/article/state-and-local-sales-tax-rates-2014>.


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Debt sustainability

Fiscal policies for all levels of government combined appear sustainable, at least for several decades – government debt will not ultimately increase more than output under current policies. However, this outlook reflects contrasting positions between the federal and other levels of government. Based on policies in place at mid-2015, the Office of the Parliamentary Budget Officer (PBO, 2015) has recently projected that federal net debt would fall from 34.1% of GDP in 2015 to zero before 2050 and become increasingly negative thereafter, whereas net debt of sub-national governments, currently at 34.4% of GDP, would rise continuously to over 200% of GDP after 75 years (Figure 15). The qualitative nature of this outlook is robust to various alternative macroeconomic assumptions. The new government's decision not to increase the eligibility age for Old Age Security (the first-pillar pension) will not threaten long-term debt sustainability. The public second-pillar pension plans (Canada Pension Plan and Quebec Pension Plan), which are funded from employee and employer contributions, are sustainable based on projections from the Office of the Chief Actuary of Canada and also contain legislative provisions to amend the level of contributions and benefits to ensure sustainability.

Figure 15. **Government sector net debt over the long term**



Source: Office of the Parliamentary Budget Officer (2015), *Fiscal Sustainability Report 2015*, Figure 7-1, www.pbo-dpb.gc.ca/web/default/files/files/files/FSR_2015_EN.pdf. StatLink  <http://dx.doi.org/10.1787/888933370905>

The main factor accounting for the contrasting outlooks of the federal and sub-national governments is population ageing, which affects the fiscal position of sub-national governments more importantly, especially through health-care costs. The federal government partly offsets these costs, as health-care transfers are to be indexed to GDP growth, with a 3 per cent floor, starting in 2017-18. Total provincial and territorial health-care spending in Canada is projected to rise from 7.2% of GDP in 2014 to 12.5% of GDP in 2090. Slowing health-care expenditure growth is therefore likely to remain an important aspect of sub-national governments' reforms to put their finances onto a sustainable path. Sensitivity analysis by the Office of the Parliamentary Budget Officer (PBO, 2015) suggests that slower health-spending growth would significantly improve the fiscal situation of sub-national governments over the long term. The issue of health-care costs was analysed in the 2010 *Economic Survey* (OECD, 2010), which recommended reforming physician and

hospital funding, adopting joint pharmaceutical procurement, and removing tax exemptions for employer-provided private health-insurance benefits. Progress has been achieved in some of these areas (see Annex for more information).

Boosting productivity and living standards

Productivity is, in the long run, the most important source of wider personal choices and higher income, living standards and well-being for Canadians. As noted above, productivity growth has been weak in recent decades relative to rates in comparable high-income countries. It is not clear what the major causes are, but enhancing product market competition and strengthening the internal market could help to improve performance. More generally, structural reforms could make a noticeable difference to the efficiency with which inputs are used in production. For example, the former Canadian government reported on a number of detailed commitments to the G20 in 2014, which were evaluated by the OECD to be worth over a half per cent of added output if fully implemented.

The benefits of greater competition in network sectors

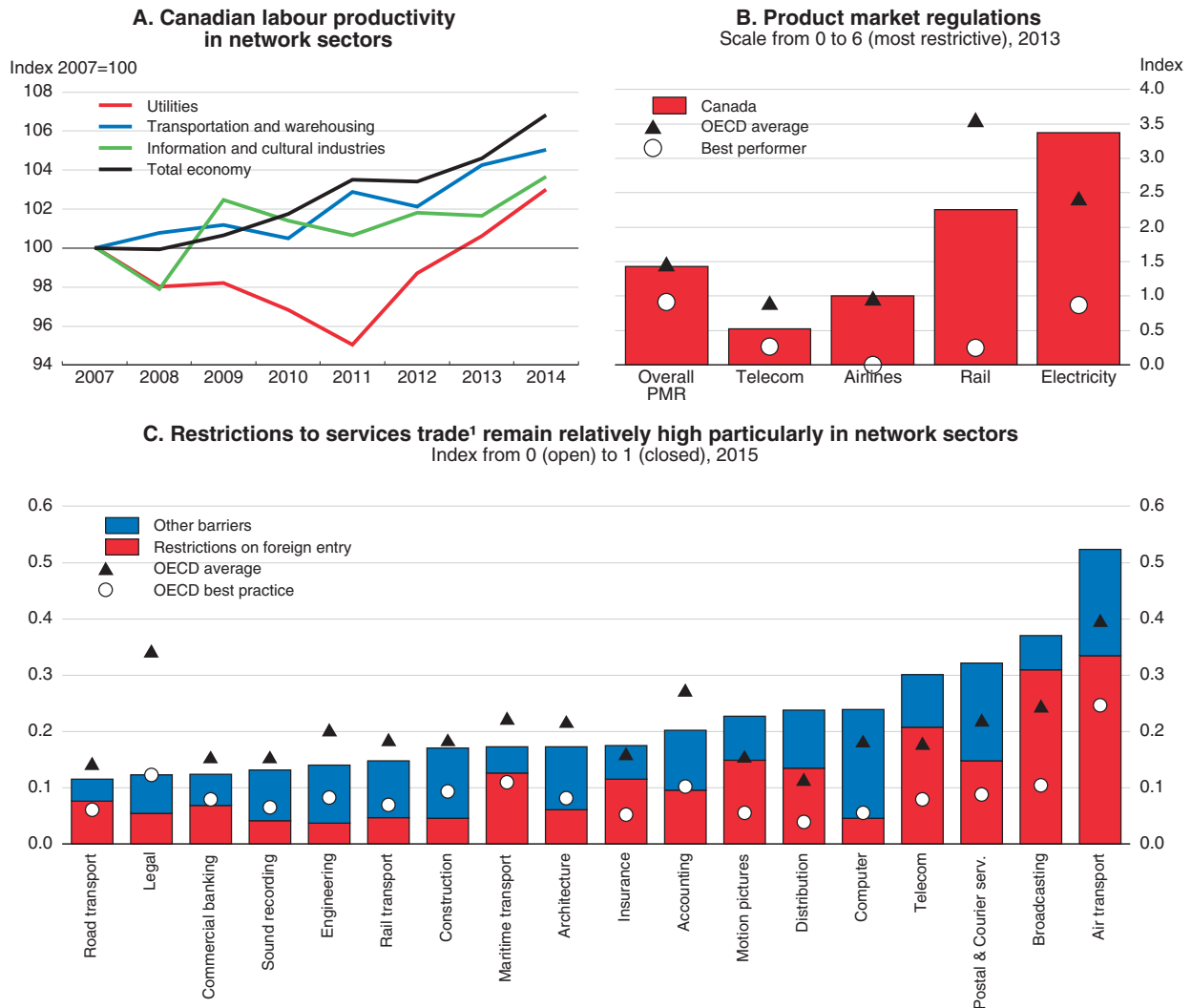
Poorly designed regulations lower productivity by weakening competitive pressures to innovate and adopt technologies and organisational arrangements used by firms at the global productivity frontier and by reducing the reallocation of resources towards the most productive firms (Andrews et al., 2015). According to Statistics Canada, labour productivity growth in Canada's network sectors has lagged the economy-wide average since 2007 (Figure 16, Panel A), Elsewhere, based on the OECD's STAN database, outcomes are mixed, depending on the sector, though productivity weakness has generally been widespread. While overall product market regulations (PMRs) in Canada are about as strict as the OECD average, those in some network sectors, especially electricity, are stricter (Panel B). This includes widespread restrictive foreign ownership limits (Panel C). The OECD has examined Canada's PMRs, and its empirical models show that if they were in all cases transformed to best practice equivalents, annual multi-factor productivity (and hence output) growth would improve by over half a percentage point per year over a ten-year horizon.

Electricity

Regulation in Canada's electricity sector is pervasive by OECD standards (Figure 17, Panels A and C). Electricity generation, transmission and distribution are controlled by vertically integrated public monopolies, except in Nova Scotia and Prince Edward Island, where the monopolies are privately owned, and Alberta where there is competition. Some provinces have limited accounting separation between generation, transmission and distribution, but competition would be enhanced if generation were fully separated from transmission and distribution, as long as generators are provided with non-discriminatory access to transmission lines.


Canadian retail electricity prices are generally regulated on a cost-of-service basis (average cost pricing). Only Alberta has fully competitive wholesale and retail electricity markets. Encouraging the other provinces to adopt competition in generation and to strengthen market pricing signals by establishing competitive wholesale markets would enhance efficiency (IEA, 2007), particularly for investment decisions. In addition, establishing retail competition would enable consumers to pick their electricity suppliers, which could incentivise the development of service offers better tailored to consumers' needs. If generation and distribution were liberalised to encourage wholesale and retail

Figure 16. Regulations and labour productivity in network sectors



1. The Services Trade Restrictiveness Index (STRI) records measures on a most-favoured-nation basis; preferential trade agreements are not taken into account. Air transport and road freight cover only commercial establishment (with accompanying movement of people). The data have been verified and peer-reviewed by OECD Members.

Source: OECD, Product Market Regulation and Services Trade Restrictiveness Index databases; Statistics Canada.

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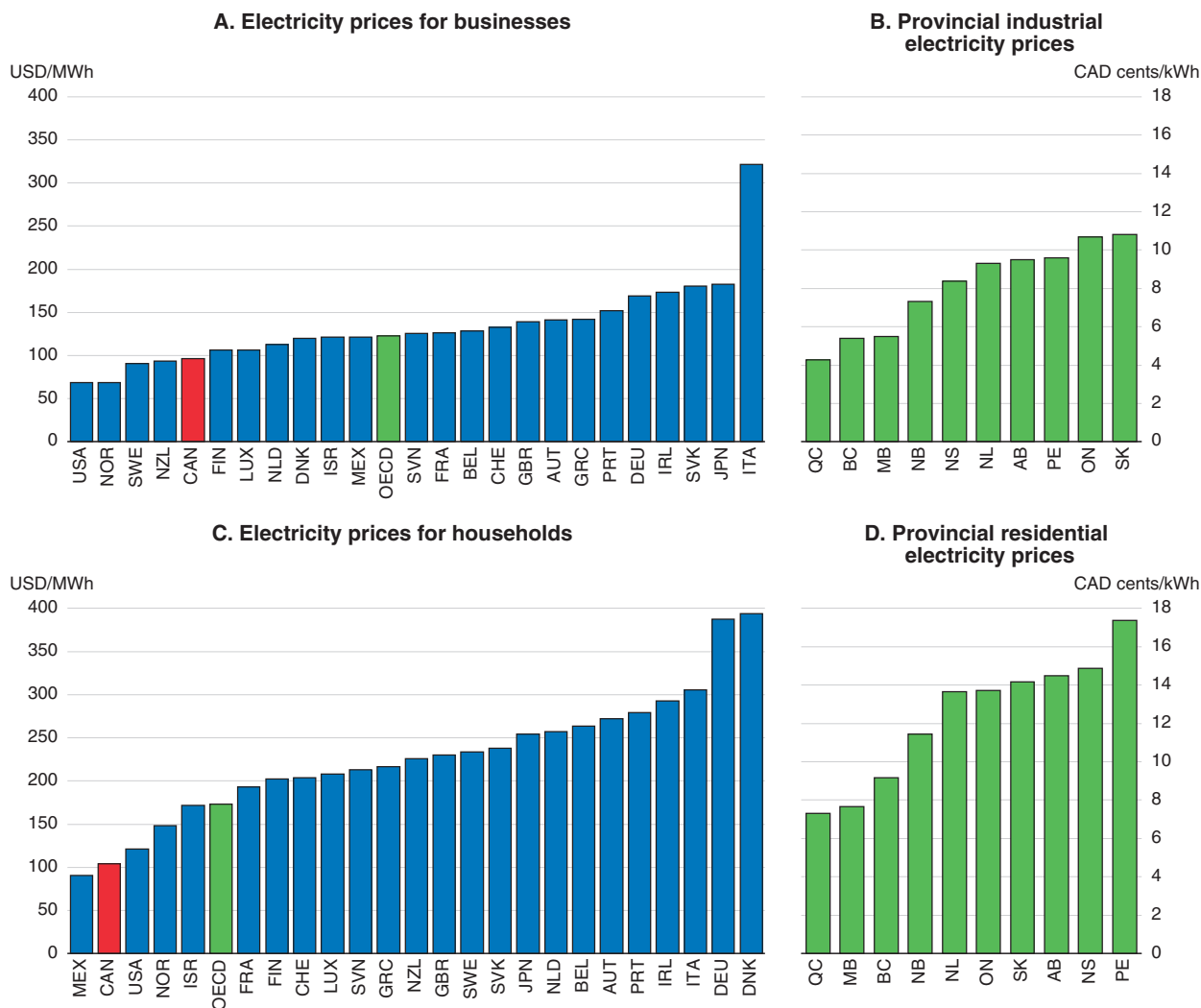
competition in all markets where there is none as yet, OECD estimates are that the level of economy-wide multi-factor productivity would rise by 0.5% within a decade.

Transmission interconnections between the provinces are poor. Improving integration could raise efficiency, reduce potential overinvestment and increase the resilience of the system to potential electricity shortages, thereby facilitating market deregulation. Achieving environmental objectives could also become more affordable, and a larger base would facilitate integrating intermittent sources, which would further increase Canada's already high reliance on renewables (around 62%). As electricity market fragmentation largely reflects the provinces' central regulatory role, expanding efforts such as the Atlantic Energy Gateway, a federal-provincial-utilities collaborative effort, and establishing an energy chapter in the updated Agreement on Internal Trade (see below) would enhance efficiency. At the same time, the economic rationale for constructing an east-west electricity grid in

Canada may not be clear because of the costs of transporting electricity across large unpopulated areas. However, improving the trade opportunities between adjacent provinces, where incremental opportunities for mutual benefit exist, may be beneficial.

Electricity prices for businesses and households are generally low in Canada, although they differ considerably by province, primarily reflecting resource endowments (Figure 17, Panels B and C). Therefore, the impact of heightened competition on end-user prices will probably vary: in some provinces where prices are set below external market rates (like Quebec) a liberalised regime would actually raise them. However, increased revenues in these provinces and improved returns to capital could be used to develop other infrastructure, fund programmes with higher returns, cut the most distortionary taxes or compensate those on low incomes and fight poverty. However, given the proximity of the US market, where electricity prices are even lower, increasing electricity prices in Canada could undermine the competitiveness of energy-intensive sectors.

Figure 17. **Electricity prices in 2013**



Source: IEA, Energy Prices and Taxes database; A.J. Goulding and M. Atanasov (2014), *Power Prices in Context: Comparing Alberta Delivered Electricity Prices to other Canadian Provinces on a Level Playing Field*, London Economics International.

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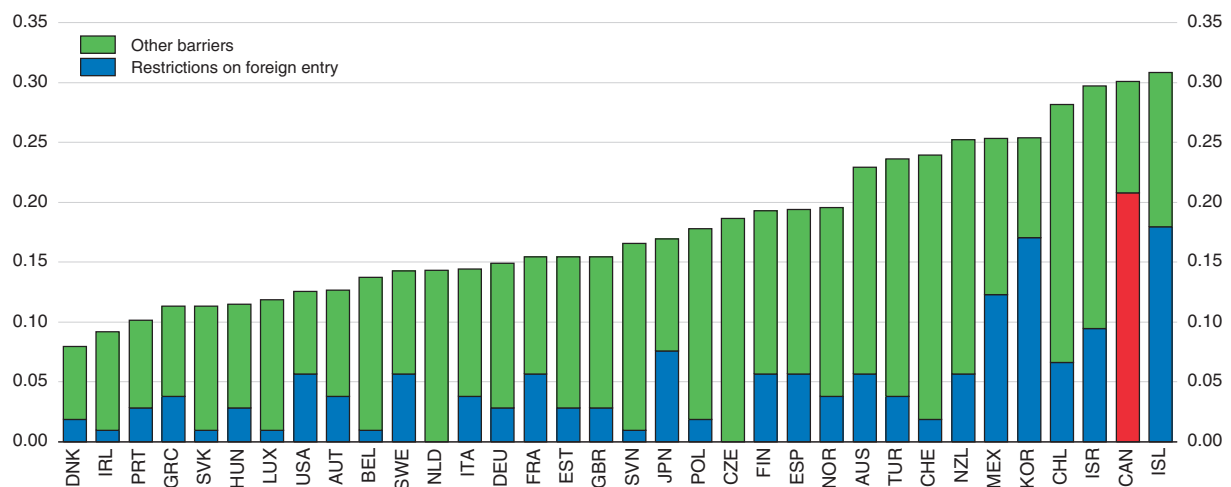
Telecoms and broadcasting

Greater competition in telecoms and broadcasting could lower prices and increase access to fast, high-quality networks, raising business efficiency by enhancing the synchronisation of goods, services and payments in the supply chain. Canadian telecommunications are of fairly high quality: for broadband this is borne out by indicators such as above-average download speeds. The number of fibre subscriptions is comparably low, despite some recent pickup (OECD, 2015b). Telecommunications services are relatively costly, but this may partly reflect higher quality. Mobile subscription numbers are fairly low, while fixed broadband adoption rates are above the OECD average (OECD, 2015b). This may reflect large geographical distances with low population density that limit the diffusion of wireless technology.

Canada has restrictive foreign ownership rules in telecoms and broadcasting (Figure 18), which are intended to support Canadian cultural objectives but which also reduce competitive pressures. Foreign interests have been generally allowed to hold no more than 46.7% of voting equity in any facilities-based telecommunications carrier or a broadcast distribution undertaking. In June 2012 the government abolished these restrictions for telecommunications companies with a market share of no more than 10%, but no such entry has taken place to date; broadcasting restrictions were unchanged. Nevertheless, Rouzet and Spinelli (2015) estimate that eliminating the ownership restrictions in telecoms could reduce price-cost margins by 2 percentage points from Canada's average of 26% for exchange-listed companies, yielding tangible gains for consumers and downstream firms. Moreover, lower trade restrictions in telecoms have been associated with increased internet subscriptions and may boost exports of services and information-intensive goods (Nordås and Rouzet, 2015). Of note, higher foreign company penetration would likely come from the United States, where prices are lower but for lower-quality services.

Figure 18. **Foreign entry restrictions in telecommunications are high in Canada**

Index from 0 (open) to 1 (closed), 2015



Source: OECD, Services Trade Restrictiveness Index database.

StatLink  <http://dx.doi.org/10.1787/888933370931>

Air transportation

Competitive and efficient transportation services are crucial for Canada's integration into the global economy, and their performance could be enhanced by improving regulation. Restrictive foreign-ownership limits are a key barrier, which probably raise financing costs and may lead to a slower adoption of new technology and know-how. To operate domestic air services, carriers are required to be no more than 25% foreign owned and controlled. Foreigners may own non-voting equity but are not permitted to own more than 25% of voting shares in any Canadian carrier. Competition could be increased and downstream cost competitiveness enhanced by lessening these restrictions. This could be done by raising the voting equity limit to 49% for carriers operating international air services (allowing more could invalidate international Air Service Agreements) and eliminating them completely in the domestic market on a reciprocal basis, including granting rights of establishment (where foreign carriers would be permitted to set up a separate carrier in Canada to operate domestic services).

Strengthening the internal market

Inter-provincial tariff barriers are forbidden by the Canadian constitution, and Canadians have the right to live and work anywhere in the country. However, non-tariff inter-provincial barriers reduce trade, labour mobility and productivity, particularly by shrinking the scale of production. While estimates vary widely, these barriers may cost the economy billions of dollars per year (Industry Canada, 2014), even though official estimates show relatively limited differences in price levels across major Canadian cities (prices are about 15% higher in Toronto than in Winnipeg and Montreal; see CANSIM Table 326-0015). These barriers arise from overlapping federal, provincial and territorial regulatory responsibility over many economic policy areas. The Agreement on Internal Trade (AIT), which took effect in July 1995, improved the flow of people and goods across borders (Public Policy Forum, 2013). However, its framework and narrow coverage, notably the absence of an energy-sector agreement, limit its effectiveness.

In particular, the current AIT includes only rules and sectors that are specified in the agreement. Moreover, some included sectors, such as agriculture, have very limited scope, allowing for various barriers to internal trade, including distortionary supply management policies (Box 2). Moving towards a framework that includes all sectors and barriers would be more dynamically efficient (as new areas would be automatically included) and transparent. Reconciliation of regulations for trade in goods and services and labour mobility (possibly through mutual recognition), as in some sub-national and international agreements abroad, could expand trade and mobility. Negotiations are underway to improve the AIT and make it into a modern trade agreement. Over time, focusing on in-depth harmonisation of legislation, standards and regulations among the provinces through a regulatory council, as in Australia, could help to further reduce inter-provincial barriers. Moreover, expediting dispute proceedings, which average 41 months (Pavlovic et al., 2015), and raising penalties may improve adherence to the AIT.

Boosting productivity through greater small business dynamism

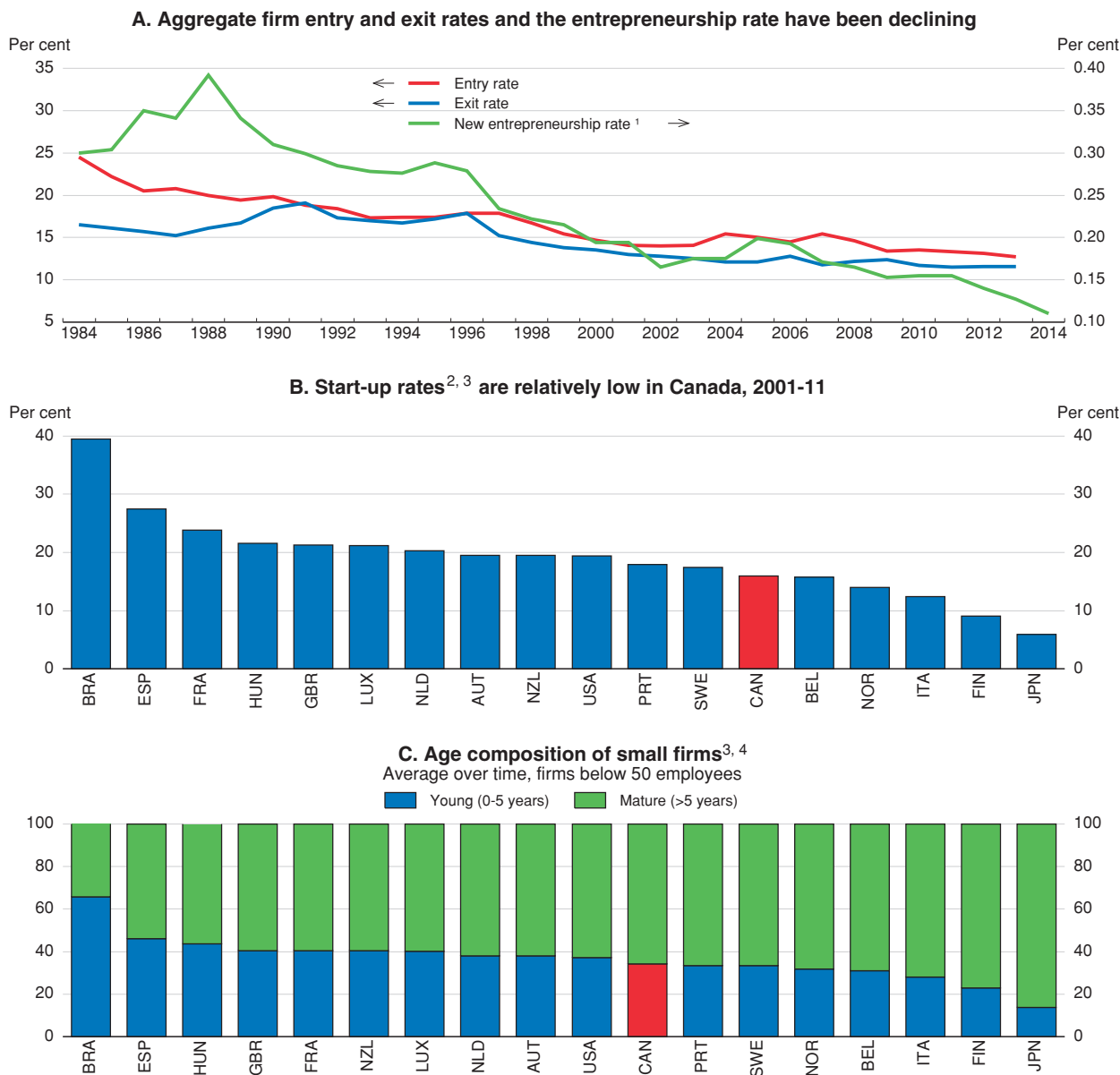
A dynamic small business sector can heighten competition and underpin productivity growth. Dynamism can be reflected in high rates of firm creation, exit and scaling up, and in relatively few stagnant, old firms – in other words, high start-up rates and strong “up-or-out” dynamics. Entry can be viewed as a form of experimentation that

introduces new ideas, business models and technologies into the marketplace while exits can be viewed as the end of unsuccessful experiments (MacDonald, 2014). High start-up rates increase both the likelihood of radical innovation and competitive pressures on incumbents to innovate and hence adopt new technologies (Andrews et al., 2014; Henderson, 1993; Baumol, 2002). More than half of multi-factor productivity growth at the industry level is attributable to new entrants in a sample of Danish firms (Lentz and Mortensen, 2008). Similarly, a recent OECD study (OECD, 2015c) finds that an increase in the share of firms younger than six years relative to firms aged 12 years and over is associated with higher multi-factor productivity growth and that this effect is mainly attributable to start-ups (i.e. firms younger than three years). It also finds that an increase in the share of employment in small firms older than five years with less than 50 employees – which indicates an absence of “up-or-out” dynamics – is associated with lower productivity growth.

Firm entry and exit rates have been falling since the early 1980s (Figure 19, Panel A), as has occurred in other countries (Criscuolo et al., 2014). It is not clear why these rates have fallen. For Canada, Cao et al. (2015) find the decline came mainly from within sectors, rather than inter-sectoral shifts, and that population ageing accounted for only a small part (20%) of the fall since 2000 (older working-age groups have lower entrepreneurship rates). The start-up rate in Canada appears to be relatively low by international comparison (Panel B). On the other hand, performance in scaling up start-ups, as indicated by the share of start-up microenterprises (1-9 employees) growing into small firms (10-19 employees) (i.e. ‘up dynamics’) after three years, appears to be average (5%) (Figure 20). This group is important as it contributes to productivity growth and accounts for a disproportionate share of start-up net job creation. There seems to be a comparatively large share of small old firms, which contribute less to productivity and employment growth (Figure 19, Panel C). However, all of these comparisons are subject to considerable uncertainty owing to differences in data collection methodologies. In particular, in contrast to other countries in the sample, data for Canada exclude spurious start-ups and exits resulting from reorganisations or mergers and acquisitions. This tends to reduce start-up and exit rates and the share of young firms in Canada relative to other countries, and to increase the share of microenterprise start-ups growing into small firms.

Sectoral excess job reallocation rates (the difference between the sum of job creation and destruction as a share of employment and net employment growth), which mainly reflect developments in small firms, are an indicator of resource reallocation and hence of small business dynamism. These fell from the early 1990s to the mid-2000s, since when no data are available (Cao and Leung, 2010). Based on the estimated coefficients for excess job reallocation in Cao and Leung (2010), the decline is estimated to have cut annual multifactor- and labour productivity growth rates by 0.7% and 1.6%, respectively.

Canada’s framework policies, such as product and labour market regulation, are generally supportive of small business dynamism, although less so than those of the United States. Labour market regulation, in particular, poses few barriers to the reallocation of labour, which is critical for a vibrant small business sector. There is, however, scope to lower barriers to product market competition, notably to trade and investment (Figure 21, Panel D). Canada has relatively high barriers to foreign direct investment, which inhibit allocative efficiency (Andrews and Cingano, 2014), and discriminates against foreign suppliers in public procurement. Regulatory protection of

Figure 19. **Small business dynamism has declined but remains in the middle of the range**

1. The number of new self-employed workers who hire employees as a fraction of the working-age population.

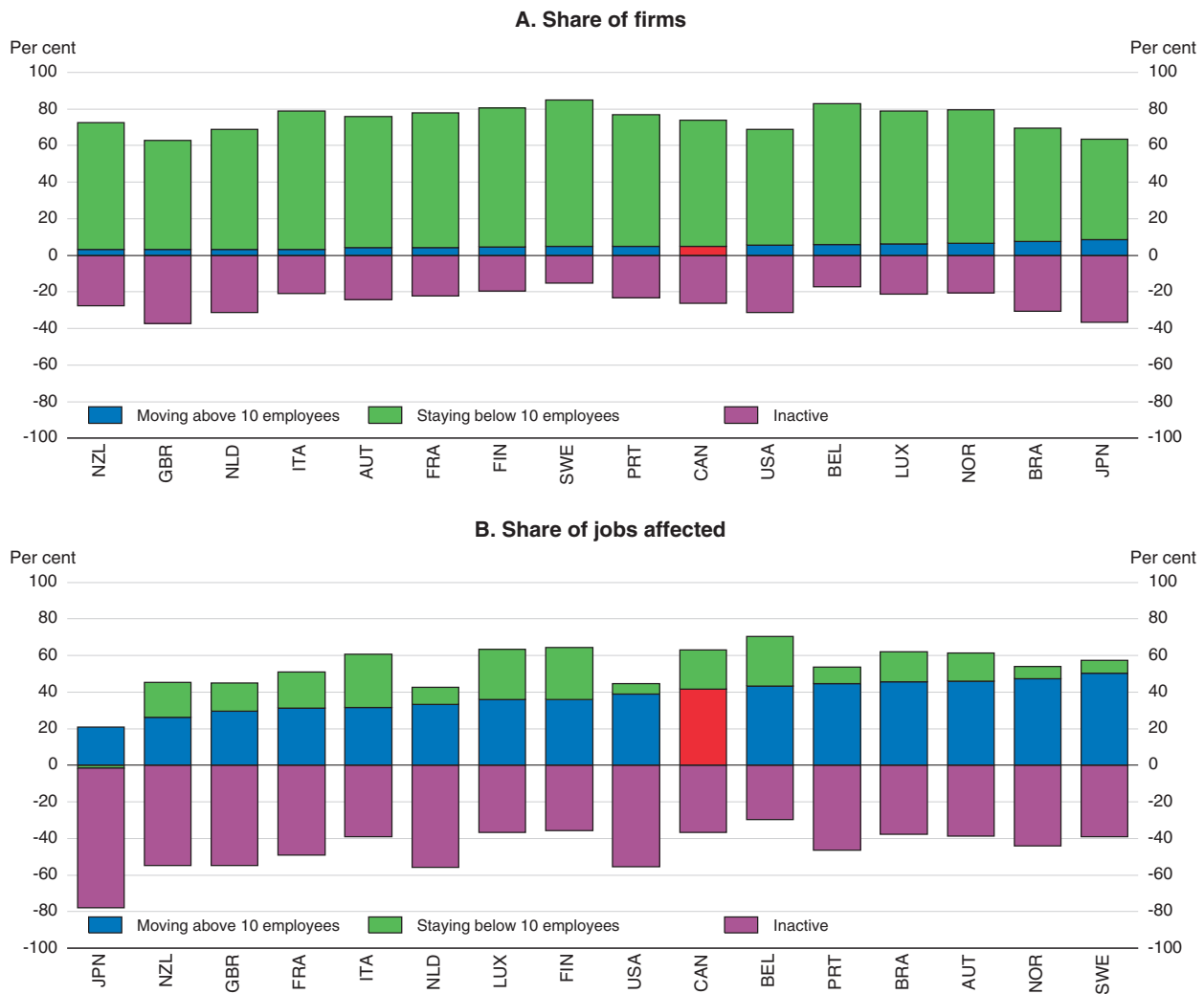
2. Start-ups are defined as those firms which are 0 to 2 years old. Start-up rates are defined as the fraction of start-ups among all firms, averaged across the indicated period. For more details, see Figure 7 in Criscuolo et al. (2014).

3. Data are preliminary. Owing to methodological differences, figures may deviate from officially published national statistics. Data for Canada refer only to organic employment changes and abstract from merger and acquisition activities.

4. Share of firms by different age groups in the total number of micro and small firms (below 50 employees) in each economy on average over 2001-11 (or available years). For more details, see Figure 6 in Criscuolo et al. (2014).

Source: S. Gao et al. (2015), "Trends in Firm Entry and New Entrepreneurship in Canada", *Bank of Canada Discussion Paper 2015-11*, October, Charts 1 and 3; C. Criscuolo, P.N. Gal and C. Menon (2014), "The Dynamics of Employment Growth: New Evidence from 18 Countries", *OECD Science, Technology and Industry Policy Papers*, No. 14, OECD Publishing, <http://dx.doi.org/10.1787/5jz417hj6hg6-en>.


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Figure 20. **Three-year survival and growth outcomes of micro start-ups**^{1, 2}

1. Refers to the group of firms that have between zero and nine employees at the beginning of each period and which are 0-2 years old. Inactive firms do not report information on employment at the end of the three-year period, either because they are temporarily inactive or because they have permanently exited. Sectors covered are: manufacturing, construction and non-financial business services. Average of the three-year periods (2001-04, 2004-07 and 2007-10). For more details, see *Source*.

2. See note 3 in Figure 19.

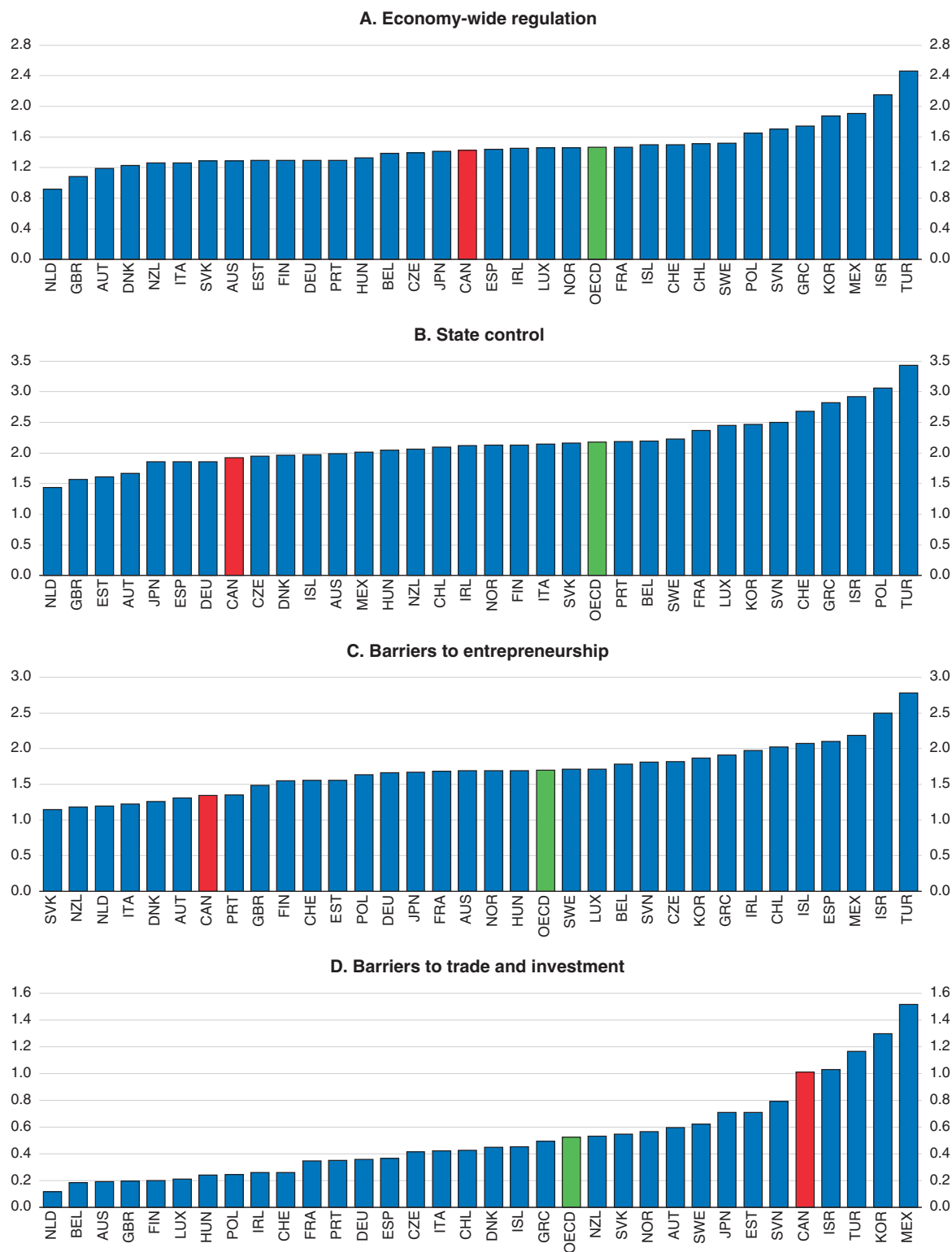
Source: C. Criscuolo, P.N. Gal and C. Menon (2014), "The Dynamics of Employment Growth: New Evidence from 18 Countries", OECD Science, Technology and Industry Policy Papers, No. 14, OECD Publishing, <http://dx.doi.org/10.1787/5jz417hj6hg6-en>.

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incumbents is high by international standards and arises primarily from an above-average use of antitrust exemptions.

Small business dynamism and productivity would also benefit from focusing small business programmes more clearly on reducing market failures. The programme with the largest budget cost, the preferential tax rate for companies under a threshold size based on taxable capital (known as the Small Business Deduction [SBD]), is not so focused. The aim of this arrangement is to leave them with more money to invest, effectively making it a financing programme. However, the economic literature on capital market failures does not establish a case for subsidising SMEs based on their size alone – such market failures

Figure 21. **Product market regulation overall is less restrictive than in most other countries**
 Index scale from 0 (least restrictive) to 6 (most restrictive), 2013



Source: OECD, Product Market Regulation database.

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can result in too much or too little finance (Boadway and Keen, 2006; Braido et al., 2011; Boadway and Sato, 1999). In the Mirrlees Review of taxation in the United Kingdom (Mirrlees et al., 2010), it was concluded that there was no evidence of any general capital market failure affecting small firms (Crawford and Freedman, 2010). Accordingly, there was no case for a reduced small business corporate tax rate – this tax preference was abolished on 1 April 2015. The principal finance gap in the United Kingdom was for new and start-up businesses (Graham, 2004) and this could be more effectively addressed through targeted measures. As mentioned above, the federal government should include preferential taxation of small companies in its planned review of tax expenditures. If the review's conclusions are similar to those of the Mirrlees Review, the 2016 federal budget decision to defer a series of scheduled increases in the SBD (reductions in the small company tax rate) will be seen as a step in the right direction. The government should also review its targeted measures and adapt them as necessary to ensure that they correct clear market failures efficiently.

The federal government is also a major player in the venture capital market. A case can be made for subsidising venture capital based on the external benefits from innovation in firms suitable for venture capital. Indeed, such benefits may be much higher than for business R&D (Lerner, 2010). The key to success is finding instruments that increase the quantity of venture capital without diminishing its quality. One promising approach is to establish funds that operate like independent, limited partnership venture capital funds, with private partners selecting investments and mentoring, while the government leverages returns for the private investors by not sharing fully in any profits but fully sharing in losses. This approach has been successful in the United States (Lerner, 1999) and Australia (Cumming, 2007). It was adopted by the federal government through the Venture Capital Action Plan. A subsidiary of the Business Development Bank of Canada, BDC Capital Inc., represents the government as an investor in the Venture Capital Action Plan.

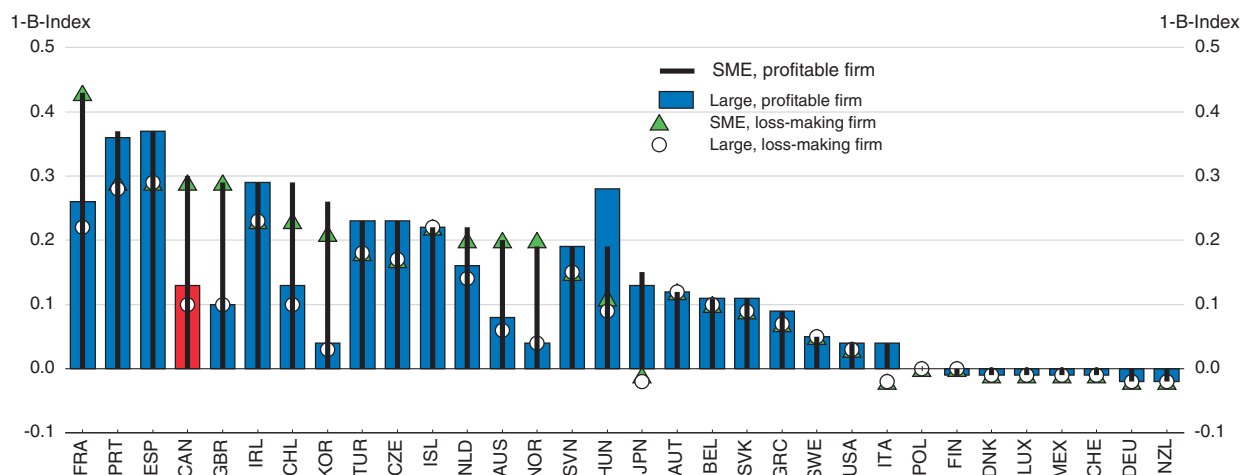
Government venture capital in Canada has underperformed private venture capital in terms of both value creation and innovation, according to a study that pre-dates the federal government's change of direction through the Venture Capital Action Plan (Brander et al., 2008). This underperformance reflects less effective mentoring and other value-adding skills, rather than lower-potential firms. In light of poor government venture capital performance based on both private and social returns, the federal Labour Sponsored Venture Capital Corporation tax subsidy should be phased out, as previously planned. In its place, more effective means of supporting venture capital, such as investments from BDC Capital Inc. in private sector-led managed funds and programmes contained in the Venture Capital Action Plan, should be explored.

Canadian governments provide enhanced (refundable) Scientific Research and Experimental Development (SR&ED) tax credits to Canadian Controlled Private Companies (CCPCs) with qualifying annual R&D expenditure up to CAD 3 million. The weighted average of combined federal and provincial enhanced credit tax rates is 43% compared with the combined standard rate of 20% on average (Lester, 2016). At the federal level alone, the SME R&D subsidy rate per marginal unit of R&D outlay and the extent to which it exceeds the standard rate are high by international comparison (Figure 22). Combined with provincial tax support, the implied R&D tax subsidy rate (as measured by one minus the B-index) can reach 40%, as in Québec, which provides one of the most generous fully refundable R&D tax credits among Canadian provinces. Yet, it is not clear whether the SME rate needs to be higher or

lower than the standard rate to correct market failures: information failures that make it more difficult for SMEs to obtain external finance for innovation support a higher rate while lower SME R&D spill-overs (Bloom et al., 2013) point in the opposite direction. To resolve this and other R&D subsidy issues, such as the appropriate balance between direct and indirect support and level for the standard tax credit rate, Canadian governments should evaluate R&D subsidy policies to ensure that they are providing value for money, as recommended in OECD (2016c). The federal government should re-examine the SR&ED tax credit (e.g. in the context of its announced tax expenditure review) and reconsider the balance between direct and indirect support for R&D.


Figure 22. **Implied tax subsidy rates¹ on R&D expenditures**

1-B-Index,² by firm size and profit scenario, 2015



1. These implied tax subsidy rates focus only on central government support and do not report provincial tax incentives, thus understating the level of Canadian tax support.
2. The B-index, a measure of the pre-tax income needed for a company to break even on a marginal, monetary unit of R&D outlay (OECD, 2013), takes into account tax relief provisions to derive implied tax subsidy rates (1 minus the B-index).

Source: OECD (2016), "R&D tax Incentives; Design and Evidence", *DSTI/IND/STP(2016)1*, Figure 1; OECD (2013), "Definition, Interpretation and Calculation of the B index", *Measuring R&D Tax Incentives*, October. www.oecd.org/sti/b-index.pdf.

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The 2016 federal budget proposes to launch a new initiative in 2016-17 to help high-impact (innovative) firms scale up and further their global competitiveness. Under this client-centred approach, firms will be able to access coordinated services (such as finance, advice and export and innovation support) tailored to their needs from the relevant federal agencies. This initiative aims to target 1 000 firms in the first few years and to expand thereafter.

There is also scope to increase female entrepreneurship. In 2011, only 15.5% of SMEs were majority-female owned, compared with 66.4% that were majority-owned by males (Industry Canada, 2015); ownership is evenly balanced between females and males in the remaining 18.1% of firms. Moreover, SMEs majority-owned by women had lower actual and expected growth rates than majority-male owned firms (Statistics Canada, 2011). Factors contributing to these gender gaps include female entrepreneurs having less management experience, less access to finance, greater childcare and eldercare responsibilities and less effective networks for accessing resources (OECD, 2016d; Hughes, 2006). To address some of these issues, recent budgets have included measures to foster networking, encourage

mentoring and championing, enhance access to international markets and provide finance (through the Business Development Bank of Canada). These measures could be built on by scaling up business development support to growth-oriented female-owned ventures. The highly successful “Grow to Greatness” accelerator programme of Alberta Women Entrepreneurs provides a role model for other jurisdictions. To increase female entry into high-technology manufacturing and knowledge-intensive service sectors, where growth opportunities tend to be stronger, more women need to obtain STEM (science, technology, engineering and mathematics) qualifications and pursue careers in these fields. For this to occur, it will be important to find ways to reduce the difference between stereotypes of successful people in these fields and of women – female gender stereotypes are incompatible with stereotypes of successful people in these fields, discouraging women from entering into them and resulting in discrimination when they do (Carli et al., 2016). Federal entrepreneurship programmes would also be more effective in increasing female entrepreneurship if they were extended to social enterprises, which tend to attract female entrepreneurs more than their male counterparts. Increasing assistance with child-care costs, which are relatively high in Canada by international comparison (OECD, 2014), could help female entrepreneurs constrained by family responsibilities to pursue more growth-oriented strategies, as do their male equivalents.

Indigenous Peoples are also underrepresented in SME ownership – only 2% of SMEs are operated by Indigenous entrepreneurs, about half of their share in the total population (Gulati, 2012). There are organisations dedicated to strengthening networks of entrepreneurs, mentoring and entrepreneurial skills, helping to develop successful role models in the process, but these efforts need to be reinforced. To promote Indigenous entrepreneurship, the top priority is to invest in education and capacity-building (Gulati and Burleton, 2015), both in Economic Development Corporations (how to set up and run one and create effective corporate governance arrangements), which are community firms that account for most Indigenous SME income, and in the Indigenous community at large (job and skills training). Indigenous firms also need better access to IT infrastructure – 20% of those in Ontario did not have an internet connection in 2013, rising to 37% for those on reserves (Canadian Council for Aboriginal Business, 2014).

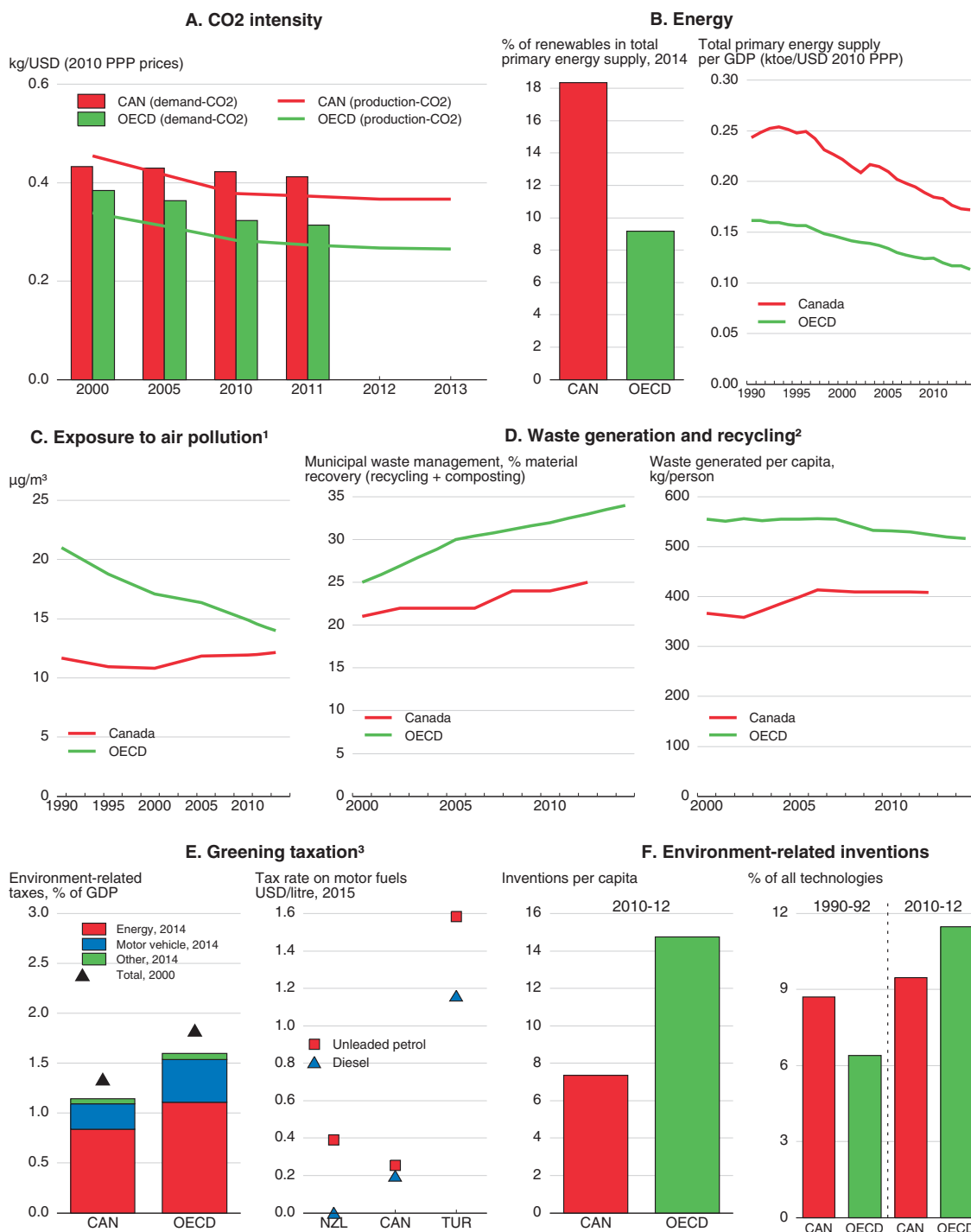
Improving environmental policies to promote sustainability and productivity

Greenhouse gas emissions

Canada’s greenhouse gas emissions (GHGs) are among the highest in the OECD, both in relation to national income and in per capita terms. Factors contributing to high per capita emissions include high incomes, high climate variability and sparse population density. Though the overall level seems to have peaked, emissions are still well above their 1990 levels. Canada’s carbon intensity has decreased over the last two decades but is nevertheless above the corresponding OECD average (Figure 23, Panel A).

While GHG emissions have fallen in recent years, declines have been much less than would have been required to meet the Copenhagen emissions-reduction target (a reduction of 17% from the 2005 level by 2020). For Canada to meet its COP21 target of reducing GHG emissions by 30% below 2005 levels by 2030, policy efforts need to be stepped up. Federal policy action on climate change under the previous government operated primarily through a sector-based regulatory approach. This included new regulations on emissions from coal-fired power stations built after 1 July 2015, effectively requiring them

Figure 23. Environmental indicators



1. Population-weighted average annual concentration of PM 2.5 (µg/m³). This indicator is calculated using concentrations estimates from the Global Burden of Disease (GBD) team based on a combination of global satellite observations and ground-based measurements.
2. OECD data are estimates and refer to municipal waste. Canadian data refer to waste from households (as proxy for municipal waste).
3. Includes taxes at both central and lower levels of government.

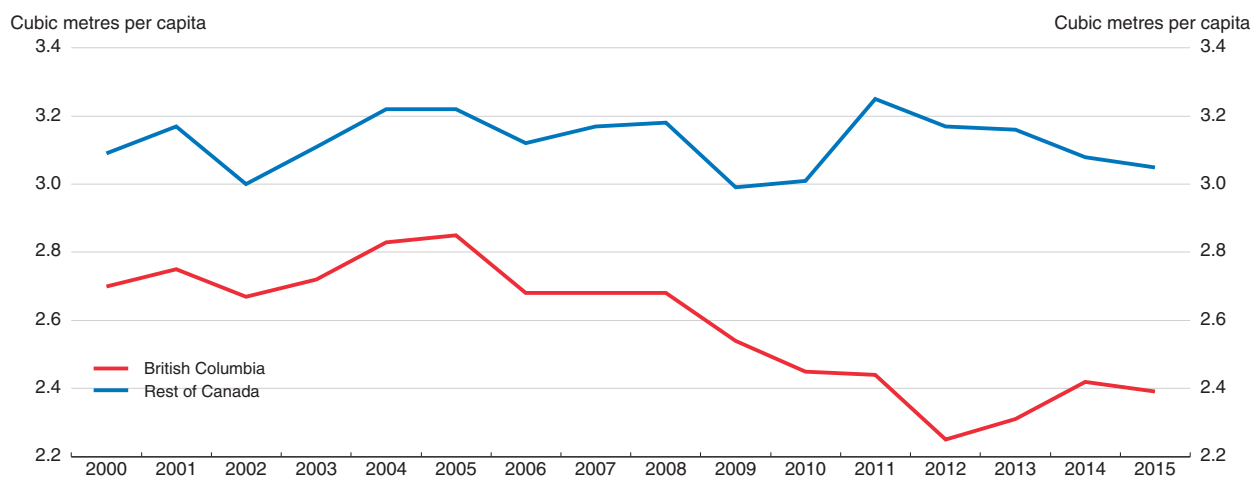
Source: OECD (2016), OECD Environment Statistics database (Green Growth Indicators, Patents: Technology Development, Municipal Waste); OECD National Accounts database; IEA (2016), IEA World Energy Statistics and Balances database; IEA Energy Prices and Taxes database; OECD calculations based on data from M. Brauer et al. (2016), "Ambient Air Pollution Exposure Estimation for the Global Burden of Disease 2013". *Environmental Science & Technology* 50 (1), pp. 79-88.

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to operate at an emission intensity level which is made possible by the use of carbon capture and storage (older installations are grandfathered until 2030). Passenger vehicles, light trucks and heavy-duty vehicles are subject to progressively tightening GHG emission standards in line with their US counterparts.


Some provinces have moved towards employing market-based instruments to address GHG emissions. British Columbia introduced its carbon tax in July 2008; it has had a noticeable impact on fuel sales (Figure 24) and has not harmed the province's overall economic performance. Québec also implemented a modest carbon levy on fuel from 2007 to 2014 and introduced a cap-and-trade system in 2013 which is now linked with California's under the Western Climate Initiative (WCI). Ontario plans to launch a similar cap-and-trade system in January 2017 while Manitoba announced plans for a cap-and-trade system for large emitters in December 2015. Ontario and Manitoba intend to join Québec and California under the WCI. Alberta has recently announced revisions to its baseline-and-credit system for large emitters and a new carbon levy on transportation and heating fuels, as well as new regulatory measures to cap emissions from the oil sands and phase out coal-fired power plants.

Figure 24. **British Columbia's carbon tax has resulted in lower petroleum-based fuel sales¹**



1. Years N start in August N-1 and finish in July N.

Source: Statistics Canada, Tables 134-0004 and 051-0001.

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Abatement costs would be reduced by coordinating provincial schemes and ensuring that carbon is adequately priced across the country to achieve the nation's abatement objectives. As agreed in the March 2016 Vancouver declaration, the federal government is working with the provinces and territories to implement a pan-Canadian framework for clean growth and climate change by early 2017, which will enable Canada to meet or exceed its international emissions targets and transition to a stronger, more resilient, low-carbon economy. Working groups to identify options for action will be created in four areas: clean technology, innovation and jobs; carbon pricing mechanisms; specific mitigation opportunities; and adaptation and climate resilience. The federal government has also recently announced CAD 2 billion for the creation of the Low Carbon Economy Fund, which will support provincial and territorial actions to address climate change. It has also

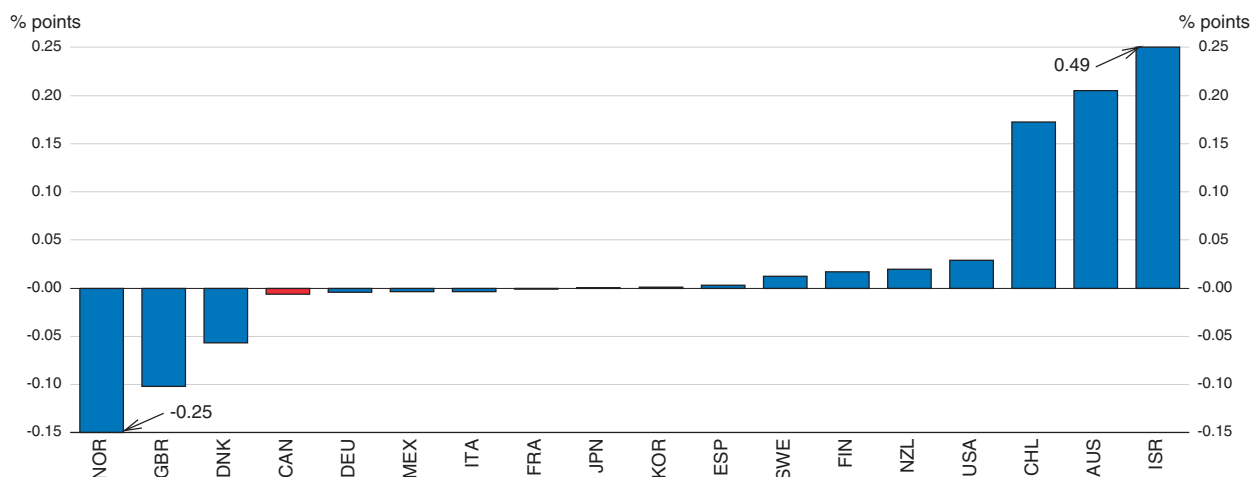
announced CAD 1 billion to support clean technologies, which are intended to play a critical role in the transition to a low-carbon economy.

In a joint statement with the United States made in March 2006, Canada committed to reducing methane emissions by 40-45% below 2012 levels by 2025 from the oil and gas sector, and to explore new opportunities for additional methane reductions. In the same joint statement, Canada and the United States also committed to reduce the use and emissions of hydrofluorocarbons (HFCs), to propose new actions on HFCs in 2016, and adopt aligned GHG emissions standards for post-2018 model year on-road heavy-duty vehicles. Canada and the United States also recently endorsed the World Bank's Zero Routine Flaring by 2030 Initiative.

Other environmental issues

The Canadian economy is one of the most energy intensive in the OECD, after Iceland and Estonia (Figure 23, Panel B). Seventy per cent of its energy is obtained from fossil fuels, below the OECD average of around 80%. The estimated contribution of natural resources to GDP, which consist mainly of energy extraction, edged down over the first years of the century (Figure 25).

Figure 25. **Contribution of domestic natural capital to GDP growth¹**
Average 2000-13²



1. The measured contribution of natural capital to output growth provides a lower bound on the contribution of the natural resources extraction industry. The contribution of the extraction industry to output growth is greater because it also includes investment in produced capital and labour force.
2. Or latest year available.

Source: OECD (2016), *Environmentally Adjusted Multifactor Productivity: Methodology and Empirical Results for OECD and G20 Countries* (forthcoming).

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The average exposure to fine particulate matter (PM_{2.5}) in Canada has edged up over the last 14 years, while the average across OECD countries has fallen closer to the level in Canada (Figure 23, Panel C). Although emissions from industrial sources, residential wood combustion and transportation have declined over this period, emissions from road dust and construction activities have increased enough to offset this decline (Environment and Climate Change Canada, 2016).

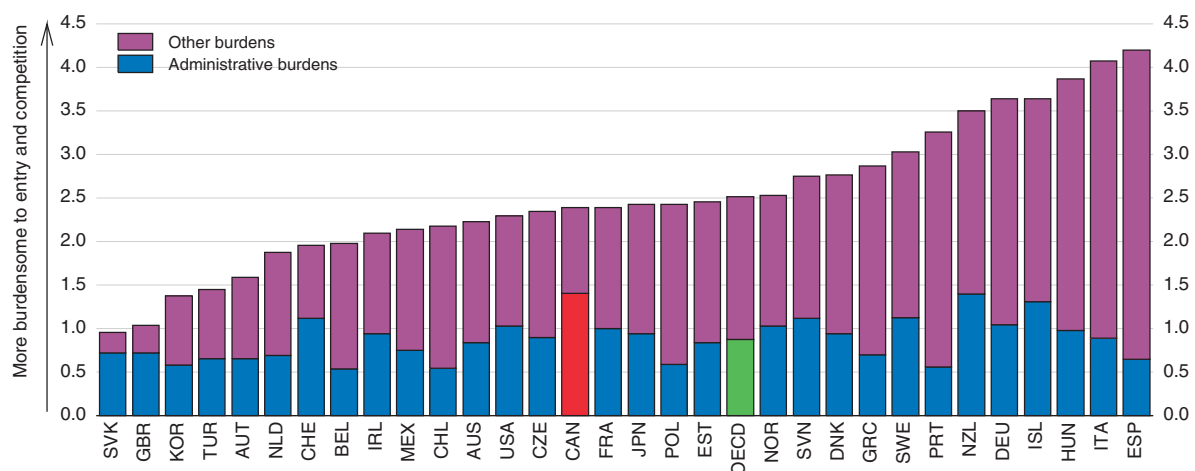
Municipal waste (proxied by household waste in Canada) generation per capita is lower than in most similar countries for which data are available (Figure 23, Panel D). Rates of material recovery from municipal waste in Canada are below the OECD average and are increasing less rapidly.

Canada has a relatively large share of the population not connected to public sewage systems, though agriculture is probably a more important source of surface water pollution. The Canada-based International Institute for Sustainable Development suggests that water quality, including possible pollution from industrial sites, including energy-related sites, is an environmental priority (IISD, 2015).

Revenues from environment-related taxes (covering all levels of government) are much lower than in other countries, largely because of low energy taxation (Figure 23, Panel E). Though higher than in the United States, the average tax rate on motor fuel is well below the level in Europe, for example. As in all other OECD and G20 countries except the United States, diesel is taxed at a lower rate than gasoline, even though its environmental externalities are higher.

While the economic costs of environmental policies in Canada are probably below the OECD average, administrative burdens are comparatively high (Figure 26). They include, for instance, a lack of single contact points (i.e. “one-stop shops” for environmental permitting), single applications and integrated permits (Kozłuk, 2014), whose absence may also be especially burdensome for SMEs. This is partially a function of the constitutional arrangements in Canada, under which environmental protection and permitting responsibilities are distributed among both national and sub-national jurisdictions, which is not the case in all OECD countries. Time limits to issue permits and licences are also generally absent. Streamlining this process could help to increase overall productivity growth by lowering the costs of doing business and easing firm entry. Moreover, making greater use of market-based environmental policy instruments would be more productivity-friendly than using non-market instruments (Albrizio et al., 2014), owing to greater flexibility in the abatement process.

Figure 26. **Burdens on the economy due to environmental policies**



Source: T. Kozłuk (2014), “The Indicators of the Economic Burdens of Environmental Policy Design – Results from the OECD Questionnaire”, OECD Economics Department Working Papers, No. 1178, OECD Publishing.

StatLink  <http://dx.doi.org/10.1787/888933371012>

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ANNEX

Progress in structural reform

This Annex reviews the measures taken in response to the recommendations from previous Economic Surveys. The recommendations that are new to the present Economic Survey are contained in the corresponding chapters.

Recommendations in previous <i>Surveys</i>	Actions taken since May 2014 and current assessment
A. Product market competition	
Lift restrictions on foreign direct investment in airlines, telecoms, broadcasting, culture and post and fulfil commitments to fully open telecoms to competition.	No actions taken since restrictions on telecoms companies with less than a 10% share of the market were lifted in 2012.
Minimise use of industrial subsidies, and scale back business assistance programmes to those that address a real market failure at minimum economic cost.	The latest National Accounts data (for 2014) show Canada's recourse to subsidies to be 7th lowest in the OECD at less than 0.9% of GDP (the OECD simple average is 1.7%) and that they have been falling trend-wise since 2003, when they reached more than 1.4% of GDP. The 2014 outcome is a post-1990 record low.
B. Financial-sector policies	
Employ further macro-prudential measures as needed if household debt ratios continue to rise.	Household debt and house prices continue to increase. Additional macro-prudential measures have been employed recently to reduce housing-related risks. The federal government increased down-payment requirements for insured mortgages from 5 to 10% for the portion of homes priced between CAD 500 000 and CAD 1 million, which is the ceiling on availability of public mortgage insurance, effective 15 February 2016. The Office of the Superintendent of Financial Institutions is also proposing changes to the capital framework of federally regulated lenders and private mortgage insurers to ensure that capital requirements keep pace with housing market developments and risks, such as when regional house prices are high relative to incomes. The Canada Mortgage and Housing Corporation is also increasing guarantee fees on National Housing Act mortgage-backed securities and Canada Mortgage Bonds, effective 1 July 2016, which could lead to modest increases in mortgage rates for consumers.
Establish a comprehensive national securities regulator, with strengthened efforts to get the consensus of all provinces.	While federal government support has been longstanding, its proposal for a national regulator in 2011 was deemed unconstitutional. Since then, the governments of British Columbia, New Brunswick, Ontario, Prince Edward Island, Saskatchewan, the Yukon and Canada have agreed to jointly establish a Cooperative Capital Markets Regulatory System. Together, they continue to invite all other provinces and territories to participate in it.
C. Fiscal policy and fiscal federalism	
Strengthen the fiscal framework by adopting a medium-term debt-to-GDP target, taking into account the outlook for provincial/territorial debt, to ensure that general government finances are sustainable, as well as the associated multi-year budgeting and spending ceilings.	In its 2016 budget, the federal government committed to reducing the federal-debt-to-GDP ratio over a five-year period, ending in 2020-21, but did not specify targets. It also noted that it remains committed to eventually returning to balanced budgets.
Factor in differences in age structure when calculating federal transfers to provinces.	No action taken.
Establish provincial budget agencies, or, better still, an agency reporting to the Council of the Federation that provide(s) independent analysis of fiscal forecasts and cost estimates for policy proposals.	Ontario has established the Financial Accountability Office.
D. Taxation	
Eliminate GST zero rating for basic groceries.	No action taken.
Switch from provincial sales taxes (PST) to value-added taxes (VAT). Change the tax mix to rely more on VAT and less on less efficient income and profit taxes.	No action taken. Manitoba, Saskatchewan and British Columbia continue to levy PSTs. These provinces represent only about 20% of GDP.
Reduce personal income tax expenditures not warranted on economic or equity grounds, notably the non-taxation of benefits from private health plans and of capital gains on principal residences and small businesses (in this case up to an indexed lifetime limit, which is currently CAD 824 176).	The 2016 federal budget promised a review of tax expenditures. It should examine them from both a tax efficiency and equity vantage point.
Continue to rationalise federal and provincial business tax preferences for small scale, Canadian owned firms.	The 2016 federal budget re-affirmed a half-percentage-point reduction in the federal small business corporate income tax rate as of 2016, increasing the gap with the standard corporate tax rate to 4.5 percentage points, which goes in the opposite direction of the recommendation. However, it was also announced in the budget that further reductions in the rate, which had been announced in 2015, had been deferred.
At the provincial level, increase taxes from non-renewable resource development, and raise the share of revenues saved.	No action taken.
Make more use of property taxes and user fees by municipalities, while easing the property tax burden on firms. As their tax base becomes more sustainable, reduce local authorities' reliance on provincial transfers by granting them more revenue-raising powers.	No action taken.

Recommendations in previous <i>Surveys</i>	Actions taken since May 2014 and current assessment
E. Social and labour market policies	
If the 2013 Employment-Insurance reforms do not clearly cut repeat use, adopt employer- or employee-targeted measures that improve the insurance and incentive basis of the programme and enhance opportunities for seasonal workers to retrain.	To date, the evidence is mixed, with only a marginal decline in the share of frequent claimants in total EI regular claims since the 2013 reforms, which occurred in large part due to a moderation in the least problematic provinces. On the other hand, the share of the unemployed receiving EI benefits fell in Atlantic Canada and Quebec (regions with high repeat use) following the reforms, with a flat level in the rest of Canada. The 2016 federal budget announced the cancellation of these reforms.
F. Health-care policies	
Eliminate zero patient cost sharing for core services by imposing co-payments and deductibles.	No action taken.
Clarify the Canada Health Act to facilitate private entry in hospital services and mixed public/private physician contracts.	No action taken.
Replace historical-based cost budgeting of Regional Health Authorities (RHAs) with a formula-based approach.	No action taken.
Devolve integrated budgets for hospital, physician and pharmaceutical services to RHAs.	No action taken.
Increase the use of capitation or salary for physician compensation and have RHAs regulate fees.	Most physicians in Canada still operate under a fee-for-service model. The 2013-14 National Physician Database indicates that the share of alternative clinical payments in total payments has remained unchanged since 2011-12 at 28.8%. Of the many types of alternative clinical payments available, the value of capitation payments increased from 2.4% in 2011-12 to 3.3% in 2013-14. However, salary payments declined from 8.3% of alternative clinical payments in 2011-12 to 4.0% in 2013-14.
Move to activity-based budgets for hospital funding, contracting with private and public hospitals on an equal footing. Adjust overall budget caps up to reward efficiency.	The three largest provinces (i.e. Ontario, Québec and British Columbia), representing over 2/3 of the population, have either implemented or announced future implementation of some activity-based hospital funding.
Revise the public core package to include essential pharmaceuticals and eventually home care, selected therapy and nursing services.	No action taken.
Regulate private health insurance (PHI) to prevent adverse selection, and remove tax exemptions for employer provided private health insurance benefits.	No action taken.
Establish a pan-Canadian independent agency to monitor and analyse health-care quality.	While an agency has not yet been established, the Canadian Institute for Health Information has increased its reporting on the performance of the health-care system, including developing a web site allowing the public to compare the performance of jurisdictions and health-care institutions on a range of quality and access indicators.
G. Tertiary education and skills shortages	
Increase access to tertiary education for disadvantaged groups by increasing targeted needs-based financial assistance. Reduce barriers for debt-averse financially disadvantaged students by making the aid application process more transparent.	The 2016 federal budget announced measures to make post-secondary education more affordable for students from low- and middle-income families, such as increased amounts and eligibility thresholds for Canada Student Grants (non-repayable financial assistance). In addition, the 2016 budget proposed to replace the current system of assessing student income and financial assets to determine eligibility for Canada Student Loans and Grants by a requirement for students to contribute a flat amount towards the costs of their education. This change will allow students to work without having to worry about a reduction in their financial assistance and will make the Canada Student Loans Program application process more predictable and transparent. Ontario will make college and university tuition free for students from families with incomes of CAD 50 000 or less and increase financial support for middle-class families as from 2017-18. These changes are to be funded by eliminating the Ontario tuition and education tax credits (which are not means tested). New Brunswick has also introduced income-dependent free tuition for students.
Increase differentiation between institutions that engage in research and those that focus primarily on teaching, as has occurred in Ontario.	No action taken.
Promote a more flexible delivery model of higher education to encourage skills upgrading by strengthening credit transfer arrangements between tertiary education institutions and provinces.	No action taken.
In provinces with constrained public finances, evaluate whether tuition policies undermine institutional quality and competitiveness.	No action taken.
Publish data on student outcomes by tertiary education institutions.	The federal government is consulting with institutions and stakeholders to strengthen the data on student outcomes of tertiary institutions.

Recommendations in previous <i>Surveys</i>	Actions taken since May 2014 and current assessment
<p>Reduce the incidence of weak numeracy or literacy skills being a barrier to post-secondary education (PSE) completion.</p> <p>Strengthen the single market for labour by making Agreement on Internal Trade Dispute Resolution Panels more accessible and expediting their procedures. Also, harmonise training and certification requirements of all apprenticeship programmes to boost apprentices' completion rates and interprovincial mobility.</p> <p>Provide a deeper occupational and regional breakdown of vacancy and unemployment data to facilitate job matching and data on recruitment intensity to strengthen surveillance of job-matching efficiency.</p>	<p>Through its Office of Literacy and Essential Skills, the federal government provides funding to a broad range of programmes that strengthen Canadians' essential skills.</p> <p>Provinces and territories are implementing the Provincial-Territorial Apprentice Mobility Agreement, which came into effect in September 2015. It provides apprentices with greater recognition of their training, work experience and examination results when moving between provinces or territories.</p> <p>Statistics Canada recently established a new annual Job Vacancy and Wage Survey (JVWS) to provide timely and detailed information on occupational demand and wages at the regional level. In addition to the number of job vacancies for which employers are recruiting externally, the new JVWS collects information on vacancies by occupation, the minimum level of education and work experience required, the wage or salary offered, whether the vacant positions are full-time, part-time, permanent, temporary or seasonal, the methods used to advertise the vacancies and the duration of recruitment efforts. The JVWS will provide a more detailed picture of the labour needs of Canadian employers than previously available.</p>

H. Innovation

<p>Improve targeting of public support for business R&D by shifting funding at the margin away from scientific research and experimental development (SR&ED) tax subsidies by lowering the small firm rate toward the large firm rate. Use the savings to reinstate capital costs in the eligible base and scale up direct grants.</p>	<p>With respect to direct support, the 2016 federal budget increases funding for the Industrial Research Assistance Program by CAD 50 million in 2016-17 (building on the CAD 110 million per year increase in the 2012 budget), pending the development of the government's Innovation Agenda in the coming year. The 2016 budget also makes available CAD 800 million in new support for innovation networks and clusters, to be allocated through the forthcoming Innovation Agenda.</p>
<p>Subject the Industrial Research Assistance Program (IRAP) and other R&D support programmes to rigorous cost-benefit evaluations.</p>	<p>A cost-benefit evaluation of IRAP was conducted as part of the 2012-13 evaluation of the programme. More generally, however, data limitations challenge the conduct of robust innovation programme evaluations. Better data should be collected by governments to evaluate interventions in a robust manner.</p>
<p>Encourage tertiary education institutions to include training in entrepreneurship and business skills in their science-based programmes.</p>	<p>No action taken.</p>
<p>Boost technology transfer from academia by adopting a research-granting process more open to business needs, best-practice models for university patenting and a system of vouchers for research contracting.</p>	<p>The federal government supports research collaborations between academia and businesses in a variety of ways, including project support through the federal granting councils and Regional Development Agencies, network support, such as the business-led Networks of Centres of Excellence Program, and graduate-level and post-doctoral industrial research and development internships delivered through Mitacs. Other than increasing support for such activities in successive federal budgets, steps have been taken in recent years to ease the administrative burden on participating firms through common application processes, open application cycles and more streamlined programming. Voucher and similar initiatives are currently being deployed in seven provinces and through federal research grants requiring no matching funds from business partners for research as well as consulting services (e.g. Engage Grants). Further to a measure in the 2014 federal budget, the Industrial Research Assistance Program recently piloted a three-year, CAD 20 million voucher programme enabling client SMEs to access business services and technical assistance from post-secondary and other publicly funded institutions. A recent evaluation found that it duplicated assistance through other programmes.</p>

I. Energy and environmental policies

<p>Continue expanding the use of market instruments to price carbon emissions, and consider introduction of a (federal) GHG emissions tax. Work with the provinces and territories to ensure coherence of their climate-change strategies with Canada's international commitments. Lower levels of government could also implement more green taxes and congestion charges.</p>	<p>Trading in GHG emission permits between Québec and California began in 2014. Ontario and Manitoba plan to implement a cap-and-trade system compatible with Québec and California's. In addition, British Columbia and Alberta have policies in place related to carbon pricing, while Alberta recently announced revisions to its policies that will expand the coverage of emissions subject to carbon pricing. As agreed in the March 2016 Vancouver declaration, the federal government is working with the provinces and territories to implement a pan-Canadian framework for clean growth and climate change by early 2017 that will include a coordinated approach to carbon pricing.</p>
<p>Regularly review water pricing and rights to ensure efficient use. Check that Alberta's water allocation and licence transfer processes reach conservation objectives.</p>	<p>No action taken.</p>

Recommendations in previous Surveys	Actions taken since May 2014 and current assessment
Liberalise electricity markets in provinces where they are still regulated. Liberalise trade in energy goods and services among provinces by finalising the energy chapter of the Agreement on Internal Trade.	No action taken.
Review the efficiency of promoting corn and cellulosic ethanol and other biofuels. Rather than imposing regulatory mandates, offer increased research subsidies or prizes for technological breakthroughs if a carbon tax or permit trading is infeasible in agriculture.	No action taken.
Review the oil-sands tenure process regularly, and remove the exploration/production requirement to make it consistent with Alberta's sustainability objectives.	No action taken.
Provide clear guidelines for resource companies on how to engage with affected Aboriginal groups so that projects bring long-term benefits to these communities.	No action taken.
Ensure that regulatory objectives for treating waste from oil-sands projects are met.	Following the Alberta government's issuance of a tailings management framework for the Athabasca oil-sands in March 2015, the Alberta Energy Regulator (AER) is in the process of developing new requirements for tailings management. It will set project-specific thresholds based on information submitted in tailings management applications. Operators must report their fluid tailings volumes annually. The AER is supposed to take appropriate compliance and enforcement action if any are exceeding their thresholds.

J. Agricultural policies

Phase out the supply management regimes by the progressive introduction of market forces, in particular, for milk and eggs.	The Senate has tasked Ernst and Young to report on the effects of supply management.
Consider the use of business risk-management tools to replace government safety-net programmes that create moral hazard and place a heavy burden on the budget.	Under the federal-provincial-territorial Growing Forward 2 2013-18 Multilateral Framework Agreement, the coverage of Business Risk Management programmes, specifically AgriStability and AgriInvest, were changed to focus government support on disasters and severe market volatility as well as to provide an opportunity to reinvest in innovation and market development.

K. Housing policies

Tighten mortgage insurance to cover only part of lenders' losses in case of mortgage default. Raise the private-sector share of the market by gradually reducing the cap on the Canada Mortgage and Housing Corporation's (CMHC) insured mortgages. Consider eventually privatising CMHC's insurance arm.	No action taken.
Expand low-cost rental housing supply and densification by adjusting zoning regulations to promote more multi-unit dwellings. Consider increasing incentives for private-sector development of affordable housing.	The 2016 federal budget announced CAD 208.3 million over five years, starting in 2016-17, for an Affordable Rental Housing Innovation Fund to test innovative business approaches to lower the costs and risks of financing affordable rental housing. Going forward, the government will also consult with stakeholders on the design of an Affordable Rental Housing Financing Initiative to provide low-cost loans to municipalities and housing developers for the construction of new affordable rental housing projects.
Undertake closer monitoring of activities in the unregulated mortgage lending sector to improve understanding of risk exposures. Increase cooperation and information sharing between federal and provincial financial regulators.	Canadian authorities are monitoring shadow-banking entities, including through participation in Financial Stability Board information-sharing exercises and regular domestic monitoring of shadow banking. Given that many prudentially unregulated mortgage lenders rely on mortgage insurance/CMHC-sponsored securitisation or loan sales to federally regulated banks to fund their mortgages, the vast majority of their mortgages must be compliant with federal rules. Nonetheless, unregulated lenders are being monitored by federal authorities.
As long-term federal subsidy agreements on public housing units expire, devote some of the savings to a renovation and energy retrofitting programme for viable social housing projects.	The 2016 federal budget announced spending of CAD 2.3 billion over two years to support affordable housing. Of this amount, CAD 573.9 million will support energy and water efficiency retrofits and renovations to existing social housing; and CAD 504.4 million will double funding under the Investment in Affordable Housing initiative, which supports the construction of new affordable rental housing units, the renovation and repair of existing affordable housing, measures to support housing affordability (such as rent supplements) and measures to foster safe, independent living. This federal funding also includes CAD 739 million to support housing in First Nations, Inuit, and northern communities.

Recommendations in previous <i>Surveys</i>	Actions taken since May 2014 and current assessment
<p>Reform development-charge regimes to ensure developers are charged the true cost of providing infrastructure to the area being developed. Make greater use of road-use charging and parking fees, and increase integration of public-transit planning with land-development decisions.</p>	<p>No action taken on making greater use of road-use charging and parking fees. Efforts to reform development-charge regimes to better account for true infrastructure costs and improve the integration of public-transit planning with land-development decisions have been mixed. Plans in Vancouver to replace area-specific development charge levies (DCLs) with a city-wide DCL may reduce opportunities to internalise the varying costs of providing infrastructure. The 2015 Ontario Smart Growth for our Communities Act will provide more funding for transit and waste diversion through development charges and may improve integrated planning.</p>
<p>Continue efforts to legalise and encourage secondary suites and laneway housing in single-family residential zones.</p>	<p>While this was already permitted in Vancouver and Toronto, it has not been expanded further in recent years to cover all single-family residential zones elsewhere.</p>
<p>Remove property tax rate differentials that disadvantage multi-unit rental properties relative to owner-occupied housing.</p>	<p>No action taken.</p>
<p>In areas of rapid house price appreciation, increase incentives for private-sector development of rental housing in appropriate areas through tools such as development charge waivers, reduced parking requirements and expedited permit processing.</p>	<p>While already available in Vancouver, which may have contributed to a pickup in purpose-built rental starts since mid-2012, such tools do not appear to have been applied in other municipalities with strong house price growth. This recommendation remains relevant for Toronto (and, to a lesser extent, Victoria), where rental vacancies (both in purpose-built rentals and the secondary market) remain low. Increased supply, along with reduced demand due to weaker commodity prices, has led to increased vacancy rates in Alberta and Saskatchewan, reducing the urgency for such actions in these markets.</p>