



Rhetoric and Reality:

Evaluating Canada's
Economic Record Under
the Harper Government

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This paper was prepared by the Research Department of Unifor, primary authors Jim Stanford and Jordan Brennan. The cartoons illustrating this report were prepared by B.C. cartoonist Greg Perry, and are used with permission.

Summary

It is commonly asserted that federal Conservatives have the strongest “economic credentials” among the major political parties. And the Harper government will likely emphasize economic issues in its quest for re-election this fall.

There is a growing gap, however, between these claims of good economic management, and the statistical reality of Canada’s economy: which has turned in a disappointing performance for several years, and which by early 2015 may have slipped back into outright recession. To further investigate the Conservatives’ economic claims, this paper conducts a detailed empirical examination of the economic record of each major government in Canada’s postwar history.¹ The performance of the economy under each Prime Minister is compared on the basis of 16 conventional and commonly-used indicators of economic progress and well-being. These 16 indicators fall into three broad categories, summarized as follows:

- **Work:** Job-creation, employment rate, unemployment rate, labour force participation, youth employment, and job quality.
- **Production:** Real GDP growth (absolute and per capita), business investment, exports, and productivity growth.
- **Distribution and Debt:** Real personal incomes, inequality, federal public services, personal debt, and government debt.

These indicators are all measured using annual data from 1946 through 2014, obtained from Statistics Canada and other public sources; a full statistical appendix lists all statistical sources and details. Together these 16 indicators provide a composite portrait of overall economic performance and stability under each postwar government.

For 7 of the 16 indicators, the Harper government ranks last (or tied for last) among the nine postwar Prime Ministers. In 6 more cases, it ranks (or is tied) second-last. Among the remaining 3 indicators, the Harper government never ranks higher than sixth out of nine. Considering the overall average ranking of each Prime Minister (across all 16 indicators), the Harper government ranks last among the nine postwar governments, and by a wide margin – falling well behind the second-worst government, which was the Mulroney Conservative regime of 1984-93.

The very poor economic record of the Harper government cannot be blamed on the fact that Canada experienced a recession in 2008-09. In fact, Canada experienced a total of ten recessions during the 1946-2014 period. Most governments had to grapple with recession at some point during their tenures – and some Prime Ministers had to deal with more than

¹ As explained below, Prime Ministers who served for less than one full year are excluded on grounds they did not have time to meaningfully affect Canada’s economic performance.

one. Instead, statistical evidence shows that the recovery from the 2008-09 recession has been the weakest (by far) of any Canadian recovery since the Depression. A uniquely weak recovery, not the fact that Canada experienced a recession at all, helps explain the Harper government's poor economic rating.

Further data confirms that according to appropriate population-adjusted indicators, Canada's economy has ranked well within the lower half of all OECD countries under the Harper government. Moreover, given the negative growth data recorded so far for 2015, Canada's standing among industrial countries will slip further this year. Prime Minister Harper's claim that Canada's economy is "the envy of the entire world" is sharply at odds with the international data.

In summary, there is no empirical support for the claim that Conservative governments in general – and the Harper government in particular – are the "best economic managers." To the contrary, Canada's economy has never performed worse, since the end of World War II, than under the present Conservative government. Alternative policies (emphasizing job creation, real growth, rising incomes, and equality) will be required to put Canada's economy back onto a more optimistic path.

Introduction: Canada's Economic Performance by the Numbers

The Harper government likes to boast about its economic credentials. And its supposed reputation as “good economic managers” is believed by many to be the Conservatives’ strongest asset in the upcoming federal election campaign. For example, in a speech to Conservative supporters in September 2014, Prime Minister Harper claimed: “We have emerged from the worst global economic downturn since the Great Depression with an economy that is the envy of the entire world.” His MPs use the same strong terms to argue that Conservatives should be commended (and re-elected) for their economic performance. Yet this tone of self-congratulation seems at odds with statistical reports suggesting that Canada’s performance has in fact been weak, and getting weaker. Growth projections have been repeatedly downgraded – and not solely because of falling oil prices. Canada’s economy even began to shrink in the first part of 2015, and that was after several years of sub-par expansion. Bank of Canada Governor Stephen Poloz has spoken of his “serial disappointment” with our performance, and the Bank has cut interest rates twice in 2015 out of concern for the sluggish outlook. Labour market numbers have also been discouraging, with much slower job-creation than is typical during periods of economic recovery, and the steady expansion of insecure, poorly paying precarious jobs.

Canadian households, too, know from their first-hand financial experience that economic conditions are far from optimal. While stock markets and business profits have strengthened, and the federal deficit reduced, household debt burdens have soared to record levels. Family incomes are squeezed between steadily rising consumer prices, soaring real estate costs in most cities, and stagnant incomes. So Canadians can be forgiven for questioning all this smug satisfaction about Canada’s economic record. They experience unemployment and underemployment, chronic insecurity, and record personal debt. It is hard to imagine that this is the best of all possible economic worlds for them.

How do we reconcile these contrasting portraits of Canada’s economic well-being? The best approach is to review the hard economic numbers describing concrete economic outcomes. How are Canadians working? What do they produce? And how are they sharing in the resulting flow of output and incomes? Those are the ultimate criteria on which the country’s economic performance can be judged.

This report provides a comprehensive overview of real Canadian economic performance since the Harper government was elected in 2006, and compares that overview to the

corresponding record of other governments in Canada's postwar history. When we consider the actual empirical evidence, rather than the soaring rhetoric of politicians, it turns out that the economic record of the Harper government is actually the worst of any government since World War II – and by a wide margin.

Ranking the Prime Ministers: Methodology

To evaluate the Harper government's economic record relative to those of other Canadian governments, this report adopts the following methodology.

First, we select a set of 16 core statistical measures, that together capture the crucial dimensions of economic activity and well-being of Canadians. Those 16 indicators can be grouped into three broad themes:

- **Work:** Nothing is more important to the well-being of most Canadians than the ability to support themselves through paid employment. So this set of measures captures the extent to which Canadians are able to find work. It includes the rate of job-creation, the employment rate, the unemployment rate, the labour force participation rate, youth job-creation, and a measure of the quality of jobs.
- **Production:** Economic performance also depends on the quantity and quality of goods and services that are produced by Canadians while they are on the job. This set of measures, therefore, reports the growth of output (in absolute terms, and relative to our population), the strength of business investment and exports (often considered the main engines of growth in Canada's market economy), and productivity (reflecting the efficiency of our economic activity).
- **Distribution and Debt:** Economic well-being does not depend solely on working and producing more; we must also pay attention to how the fruits of that work are distributed and ultimately used. So in this set of measures we report on the growth of Canadians' personal money incomes, and how those incomes are distributed across different income classes. We also report changes in what is often called the "social wage": that is, the real value of government programs and services that are an important component of our overall standard of living (in addition to money incomes). Finally, since many economists express concern about the sustainability of debt levels, this section also reports the evolution of personal and federal government indebtedness.

Together, these 16 measures provide a comprehensive portrait of economic performance. Each is a normal, legitimate indicator widely reported in economic analysis. Of course, different observers will have different views regarding which indicators they think are most important, and there is no agreed single set of indicators which fully sums up the state of the economy. But our list of 16 includes some measures traditionally emphasized by more business- or market-oriented analysts (including real GDP growth, job-creation, business investment, and government debt), as well as several indicators more emphasized among social advocates (such as inequality, the value of public services, and participation). In this regard, the 16 indicators are a fair representation of the most common economic concerns and priorities of Canadians from across the political spectrum.

Where the comparison is based on aggregate or per person dollar figures, all series are adjusted to account for the effects of inflation (and hence expressed in real terms). So while the inflation rate itself does not appear as a separate indicator in this analysis,² a government which attains a lower inflation rate, however, will receive higher rankings thanks to stronger performance on all these inflation-adjusted indicators (at least to the extent that lower inflation is associated with stronger real economic performance).

Data were assembled regarding Canada's performance in each of these areas, going back to the end of World War II. We begin the analysis in 1946 to try to exclude the impact of the unique demobilization of military and other government activities after the end of the war (although the effects of this demobilization were nevertheless still visible in the early postwar years³). In two cases, no data were available going all the way back to 1946: household debt (data go back to 1961) and the empirical index of job quality (which goes back to 1988). For these indicators, the rankings apply only to those Prime Ministers who served during the time period covered by the available data.

The data were then analyzed in time periods corresponding to the tenure of each of the postwar Prime Ministers. In this analysis, we excluded any Prime Minister who held power for less than one full year (on grounds that they would not have been able to significantly alter Canada's economic trajectory in such a short time in office). Using this criteria, therefore, we consider the economic record of nine Prime Ministers: Mackenzie King (from the beginning of our analysis in 1946 through 1948), Louis St.-Laurent (1948 through 1957), John Diefenbaker (1957 through 1963), Lester Pearson (1963 through 1968), Pierre Trudeau (1968 through 1984), Brian Mulroney (1984 through 1993), Jean Chrétien (1993 through 2003), Paul Martin (2003 through 2006), and Stephen Harper (2006 to the present). The analysis uses annual economic data. Where average levels are calculated for each Prime Minister, the average includes both the starting year and the ending year of their tenure (thus both the incoming and outgoing Prime Ministers can "claim credit" for the year of transition). Where period changes or average growth rates are calculated, the comparison is based on the difference between the starting year and the ending year.

The performance of each Prime Minister on each indicator is reported and ranked. Then, at the end of the paper, a summary evaluation (based on the overall performance of each Prime Minister across all 16 indicators) is provided.

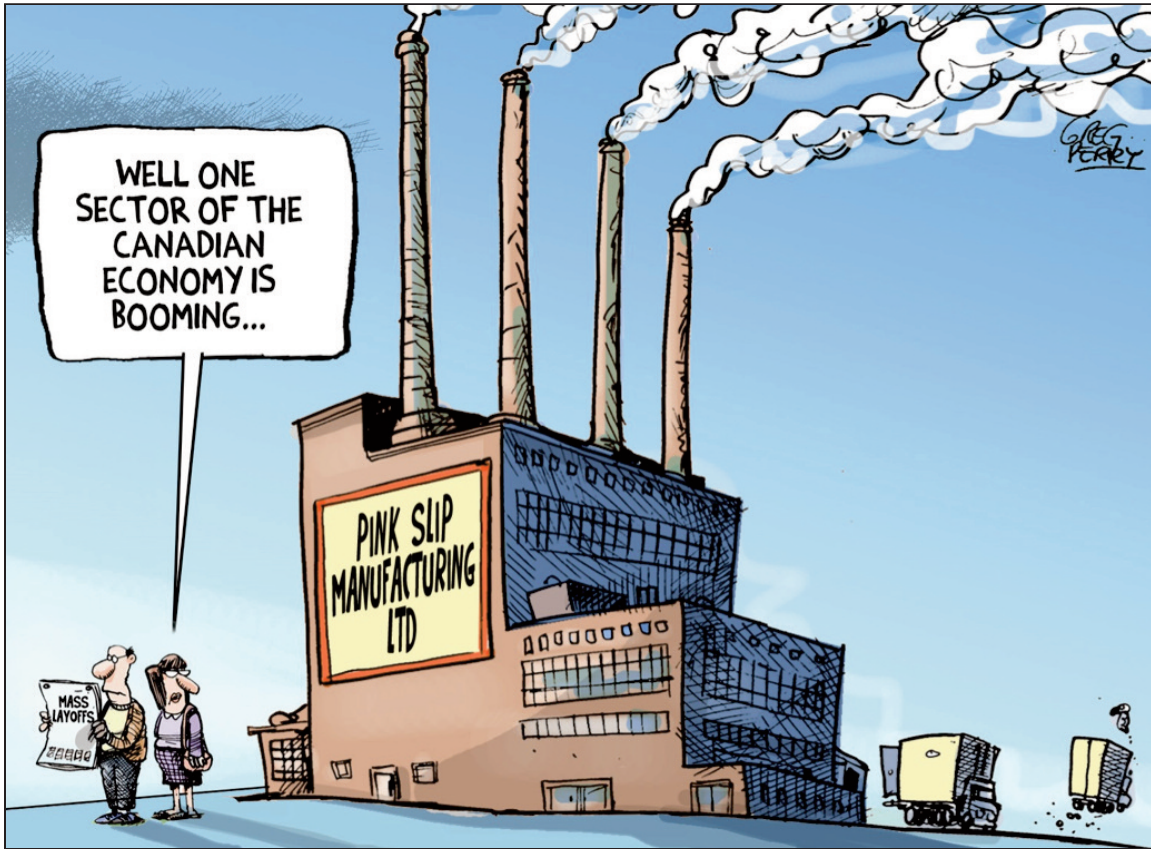
² This in part reflects current uncertainty among economists as to whether very low inflation is even "good," especially during times of demand weakness and high debts.

³ The impact of World War II is still visible in some data for 1946 and 1947 – such as in the measures of real personal incomes and real per capita program spending (both of which were affected by the discontinuation of various war-related programs, as well as by a short outbreak of postwar inflation). The evaluation of government economic policy at that time therefore should make allowance for this unique context.

The statistical appendix to this report provides all of the empirical data used to conduct the analysis, with full references to their original sources. Most of the data were obtained from Statistics Canada; a few series were obtained from other public sources. Any additional specific issues encountered in preparing each series are discussed in the notes to that appendix.

In general, no single statistical series exists providing consistent data all the way back to 1946 (due to series breaks, the discontinuation of specific surveys, changes in methodology, etc.). Most of the indicators we consider in this paper measure the growth rate or change in a variable over each Prime Minister's tenure, and it was generally possible to calculate a consistent growth or change by utilizing the most recent of whichever available data series covered the full extent of that Prime Minister's time in office. Details are discussed in the appendix.

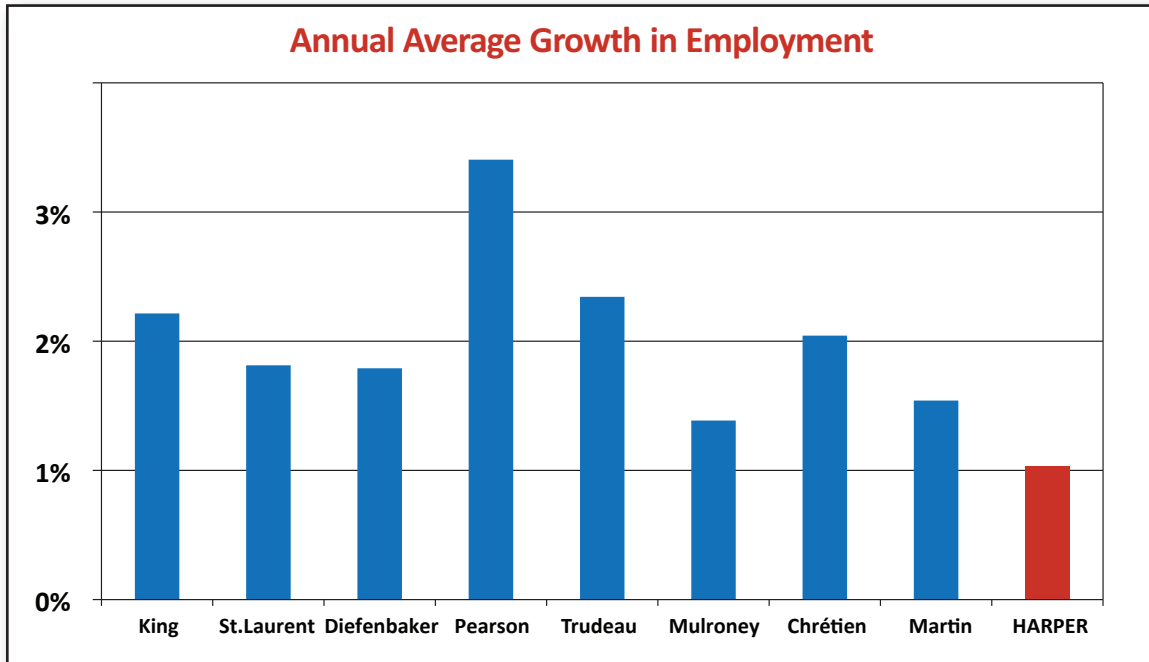
Work



Job Creation

Measure: Average Annual Growth in Employment

Nothing is more important to the prosperity of most Canadians than being able to find and keep a job. Canada's growing population requires that the labour market create hundreds of thousands of new jobs each year – just to keep up with the number of available workers. Job-creation is measured by the average annual increase in the quantity of total employment. (Of course, we must also be concerned with the quality of jobs; more on this later.)



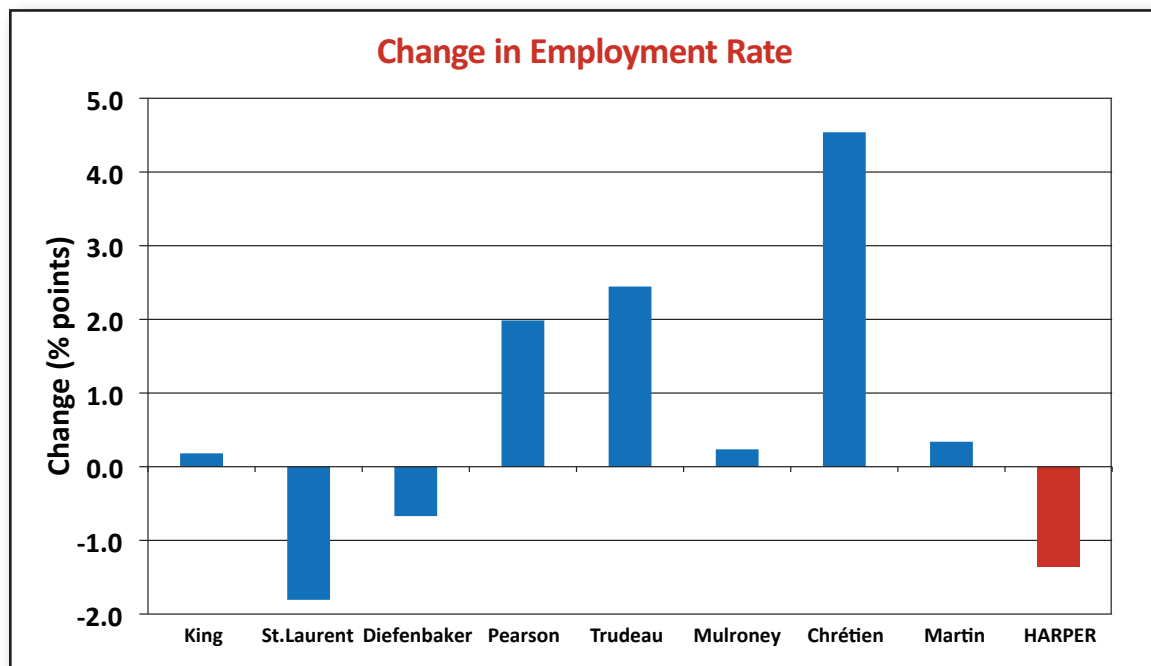
Average Annual Growth in Total Employment								
King	St-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
2.2%	1.8%	1.8%	3.4%	2.3%	1.4%	2.0%	1.5%	1.0%
Rank of Harper Government: WORST								

Since the Harper government was elected, total employment has increased at an average annual rate of just 1.0% per year. That's significantly slower than the rate of population growth. And it's the **slowest job-creation of any Prime Minister since World War II**. Yes, Canada experienced a recession in 2008-09 that hurt employment. But most other Prime Ministers endured recessions, too – yet under their leadership, employment recovered much quicker.

Employment Rate

Measure: Change in Employment as a Share of Working Age Population

Population growth affects the number of workers available to fill a job, and hence influences the supply and demand balance in the labour market. The employment rate takes this demographic context into account: it measures the proportion of working age adults who are actually employed. If jobs are being created faster than population growth, the employment rate grows. If job-creation is too slow, it falls. The employment rate is often a better indicator of labour market conditions than the unemployment rate.



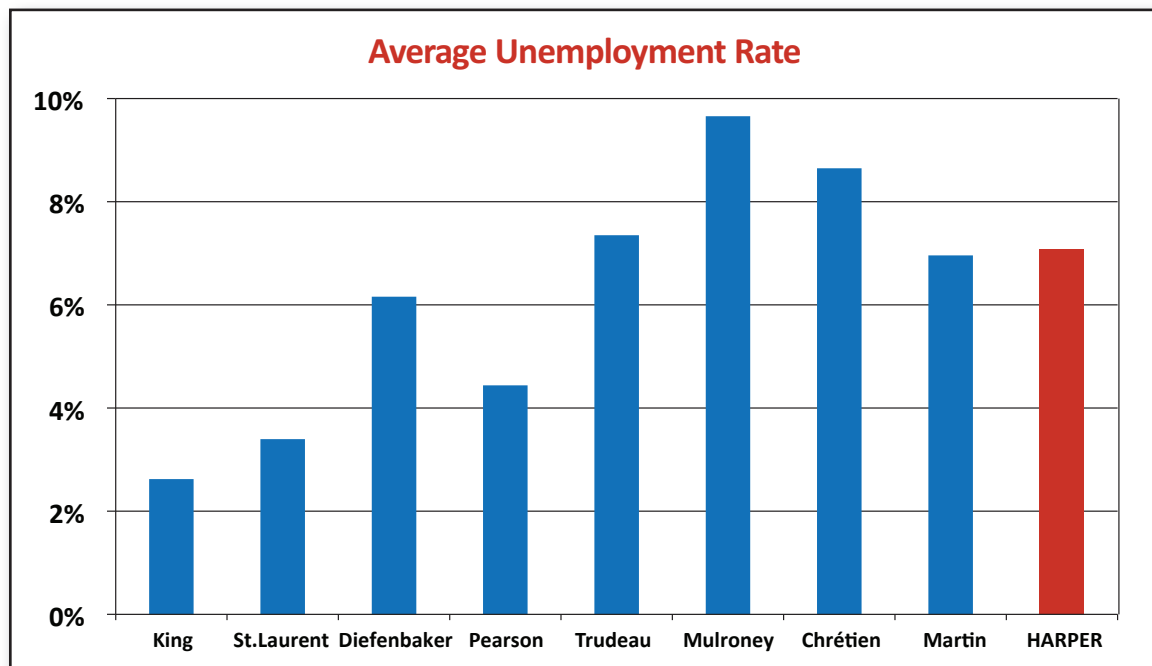
Change in Employment Rate (Percent of Working Age Population)								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
0.2 pts	-1.8 pts	-0.7 pts	2.0 pts	2.4 pts	0.2 pts	4.5 pts	0.3 pts	-1.4 pts
Rank of Harper Government: SECOND WORST								

Canada's employment rate grew over most of the postwar era, thanks to strong job-creation and women's increasing participation in paid work. One exception was the "baby boom" era of the 1950s, when women were encouraged to return home to raise children. The Harper Conservatives are the **first government since the 1950s to oversee a decline in the employment rate**. Job-creation has been too slow to keep up with population growth. The ageing of Canada's population is one factor reducing the employment rate – but not the only factor, and previous governments were able to attain higher employment rates despite demographic transition thanks to much stronger job-creation.

Unemployment

Measure: Average Annual Unemployment Rate

The official unemployment rate measures the proportion of the labour force which is actively seeking work, but cannot find it. It does not fully describe joblessness, for several reasons: it excludes people who have given up looking for work, as well as workers in part-time jobs who want and need full-time work. The unemployment rate can decline because Canadians leave the labour force (rather than because they found work). Nevertheless, the unemployment rate is an important and widely-reported labour market indicator.



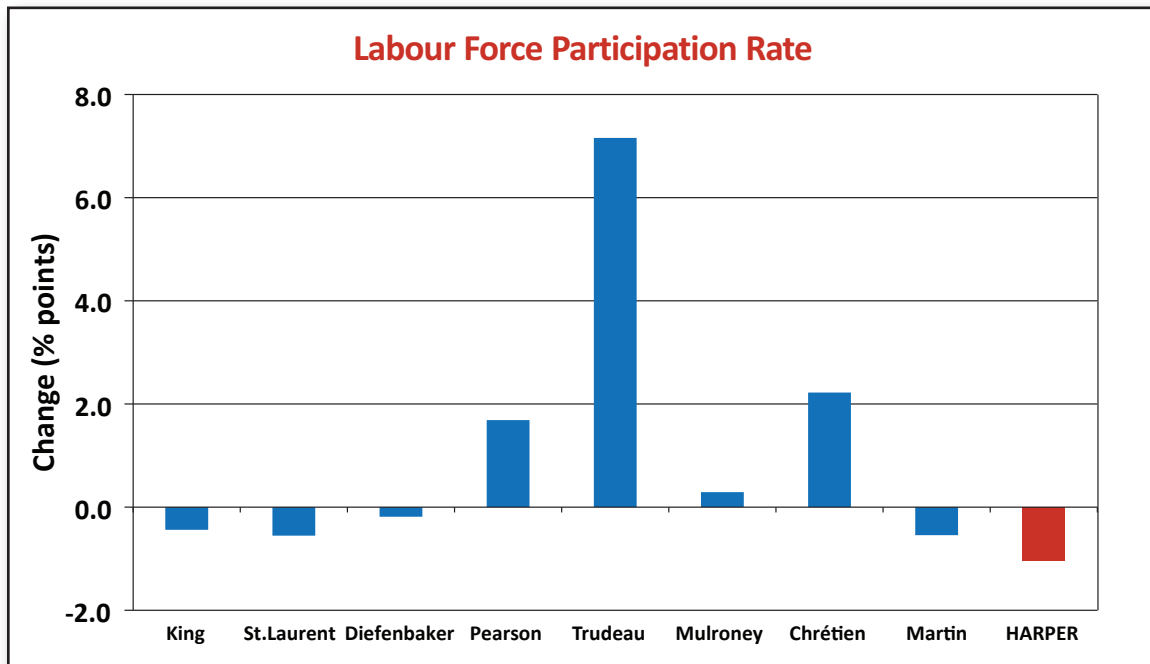
Average Unemployment Rate								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
2.6	3.4	6.2	4.4	7.4	9.7	8.6	7.0	7.1
Rank of Harper Government: SIXTH OF NINE								

The official unemployment rate has **averaged 7.1% under the Harper government**. That represents the sixth-worst among the postwar Prime Ministers. And that's the official rate, which doesn't tell the full story of joblessness. According to Statistics Canada's broader measure of unemployment (which includes discouraged workers, involuntary part-time employees, and workers waiting for a job to start), **true unemployment under the Harper government has averaged over 10%**.

Participation

Measure: Change in Labour Force Participation Rate

Labour force participation refers to the proportion of working age Canadians who are “in” the labour market: that is, either working, or actively seeking work. Participation can rise or fall for many reasons: demographic factors, the relative availability of jobs, and cultural trends (such as the increasing paid work of women, which powered a long increase in the participation rate from the 1960s to recently). Declining participation can signal a loss of hope, social isolation, and the wasting away of a jobless workers’ skills and training.



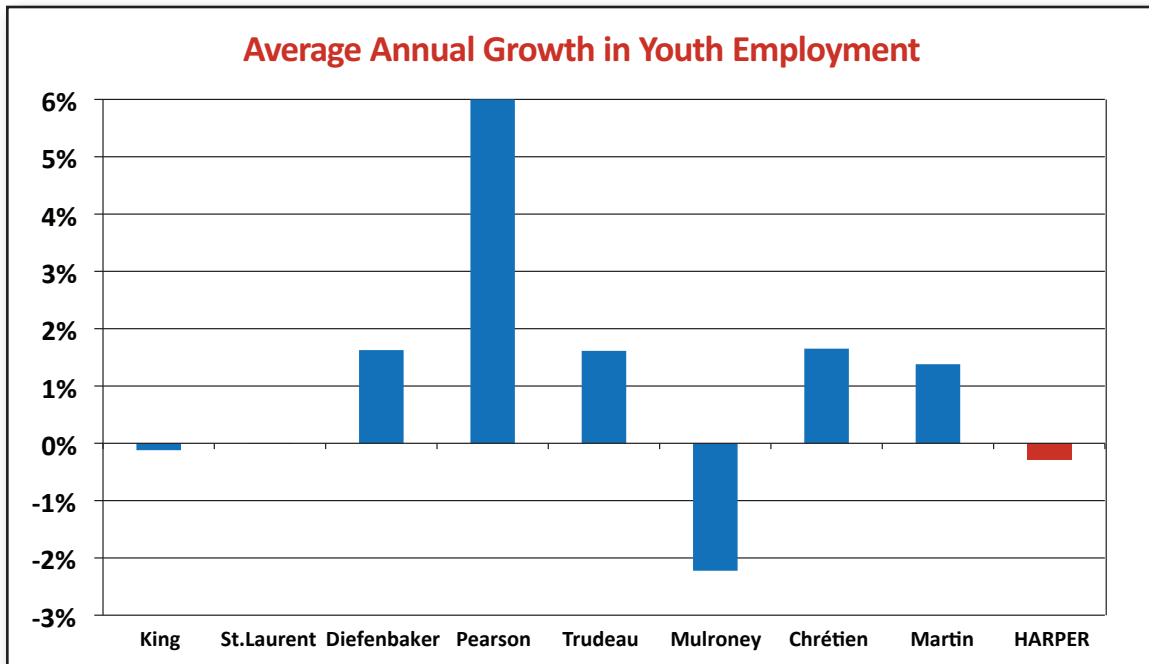
Change in Participation Rate								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
-0.4%	-0.6%	-0.2%	1.7%	7.2%	0.3%	2.2%	-0.5%	-1.0%
Rank of Harper Government: WORST								

Between 2006 and 2014 the *labour force participation rate declined by one full percentage point*. That is the *worst decline in participation experienced under any post-war government*. In the early postwar years participation declined as women were encouraged to stay at home with their children. Now it is declining again: largely because of a shortage of decent job opportunities. Again, the ageing of the population (a phenomenon which long pre-dates the Harper government’s time in power) is only part of the story (older workers are less likely to join the labour market). Lousy job prospects have also undermined participation among younger age categories, too.

Youth Employment

Measure: Average Annual Growth in Under-25 Employment

Today young people face an uphill challenge to find decent work; they tend to be among the last hired in an upswing, but the first let go in a downturn. And it isn't because of any lack of skills: today's youth are better educated than any generation in Canadian history, and Canada's overall labour force has more post-secondary education than any other industrial country. It hasn't always been this way for young Canadians: in earlier decades, youth had a better chance at finding their productive role in the economy.



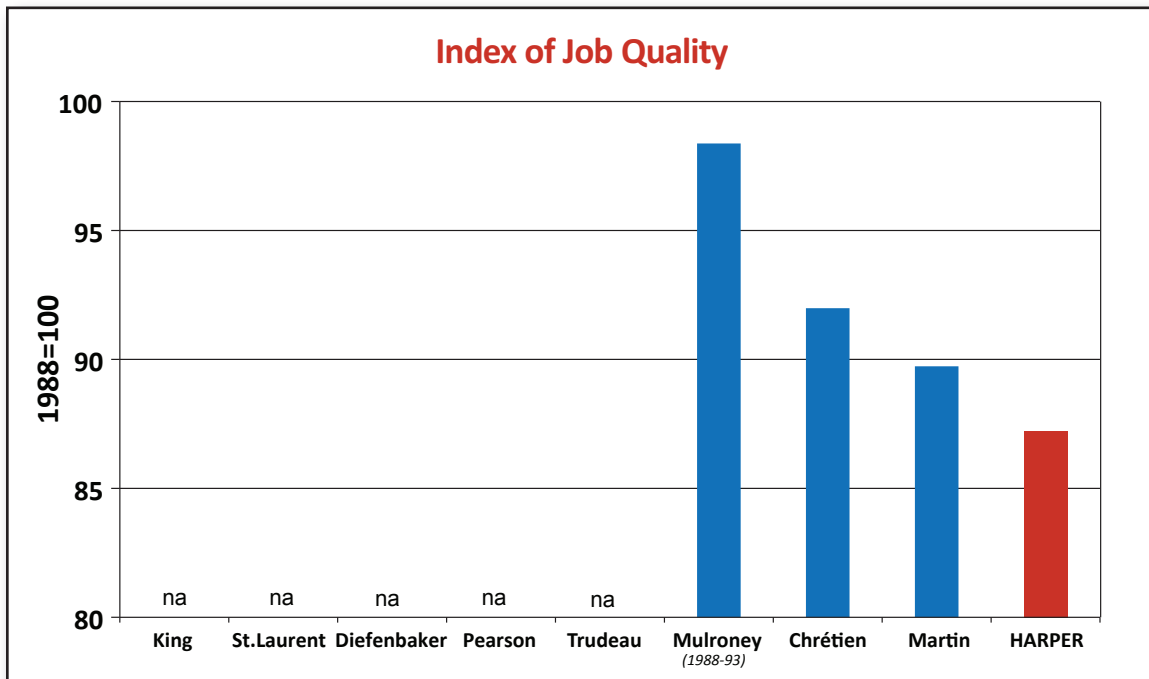
Average Annual Growth in Under 25 Employment								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
-0.1%	0.0%	1.6%	6.1%	1.6%	-2.2%	1.7%	1.4%	-0.3%
Rank of Harper Government: SECOND WORST								

There were fewer youth working in 2014 than in 2006 (when the Harper government was elected), even though the youth population grew over the same period. The **annual average decline of 0.3% in youth employment** under this government is second worst in Canada's post-war history (behind only the Conservative government of Brian Mulroney). The youth unemployment rate is about twice as high as the overall national average.

Job Quality

Measure: CIBC Index of Job Quality

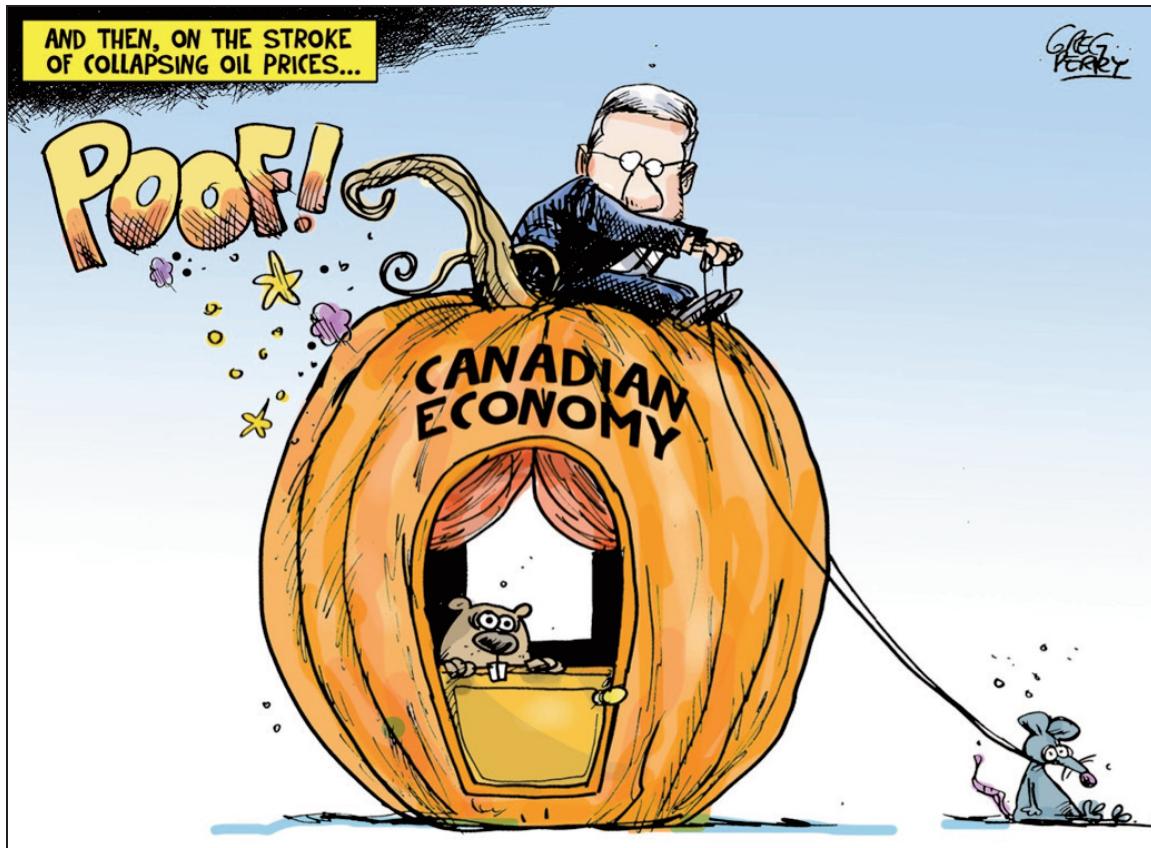
The expansion of part-time work, temporary jobs, employment agencies, independent contractors, and other forms of precarious employment has dramatically undermined the quality of work in Canada. A very weak job market allows employers to downgrade working conditions: even with sub-par hours, stability, and compensation, they can still attract willing workers. Economists at CIBC have developed a numerical index of job quality that captures all these trends in a single measure; this index begins in 1988.



Average Job Quality Index (CIBC, 1988=100)								
King	St-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney (1988-93)	Chrétien	Martin	Harper
na	na	na	na	na	98.4	92.0	89.7	87.2
Rank of Harper Government: WORST								

Under the Harper government, *the quality of jobs has deteriorated* steadily, to the *worst levels since this data began to be collected*. It's not just a shortage of jobs that is hurting working people. Even when they can find work, the quality of those jobs is worse than ever. Part-time work, temporary jobs, and precarious self-employment (reflecting unincorporated "own account" business ventures) have all become more common. The Harper government's attacks on collective bargaining and labour standards have also hastened the deterioration in average job quality.

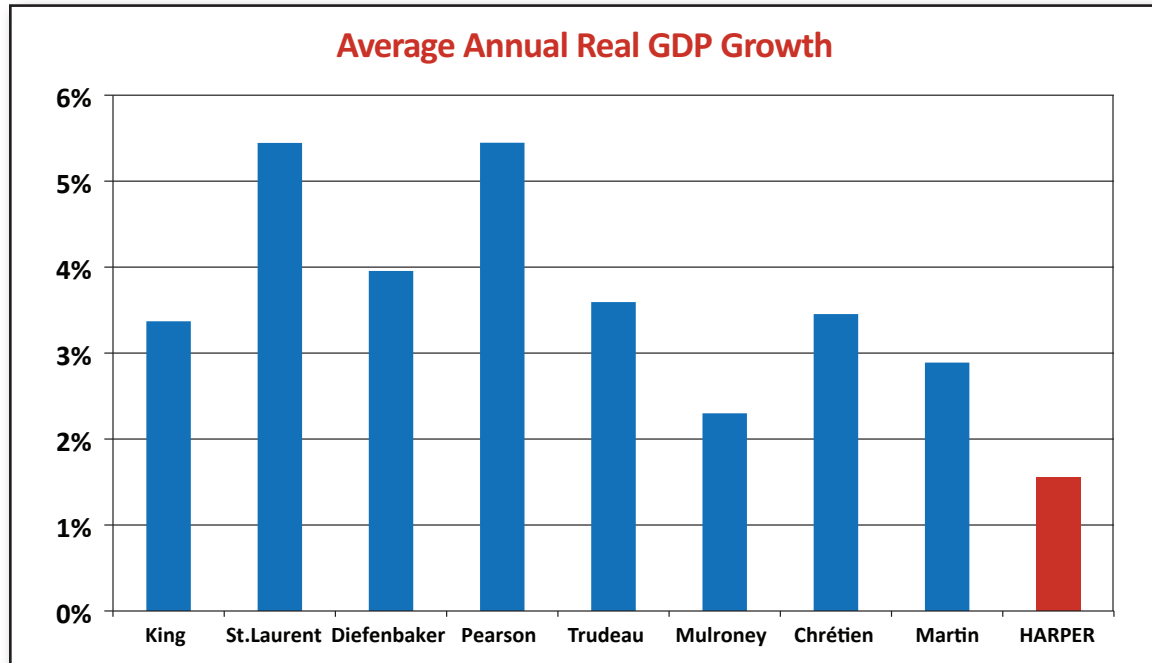
Production



Economic Growth

Measure: Average Annual Real GDP Growth

Canada's real GDP represents the total value of all the goods and services produced by workers across the country, adjusted for inflation. It is the standard measure of economic growth. When more people are working, and spending power is strong, GDP grows relatively quickly, and living standards can rise. When fewer people are working, and businesses can't sell their products, then the whole economy stagnates, and unemployment grows.



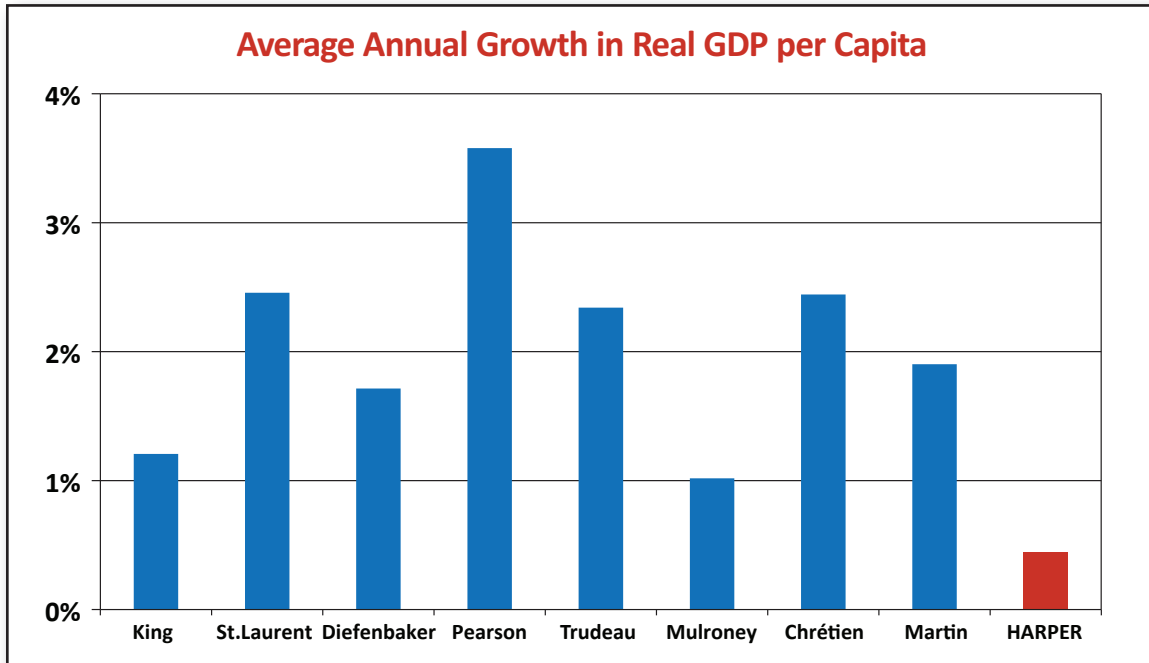
Average Annual Growth of Real GDP								
King	St-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
3.4%	5.4%	4.0%	5.4%	3.6%	2.3%	3.5%	2.9%	1.6%
Rank of Harper Government: WORST								

Under the Harper government, *real GDP grew on average by only 1.6% per year* – barely enough to keep up with population growth. And by early 2015, real GDP actually began shrinking. That's the *worst performance of any postwar Prime Minister*, by a large margin. Real GDP grew more than 3 times as fast under Prime Ministers Louis St.-Laurent and Lester Pearson.

Living Standards

Measure: Average Annual Growth in Real GDP per Capita

A common (if imperfect) measure of living standards is the level of real GDP produced in the economy for each person in Canada. If GDP is growing faster than population, then GDP per capita will increase, and there will be more wealth available to lift living standards (of course, we also have to be sure to distribute that wealth fairly).



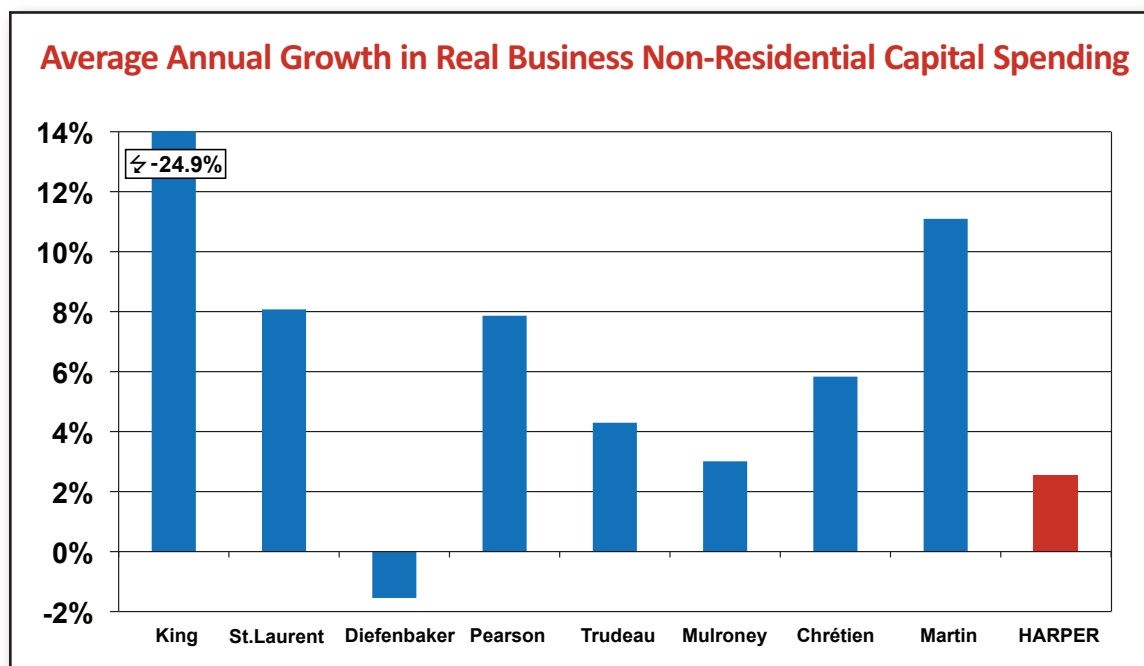
Average Annual Growth in Real GDP per Capita								
King	St-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
1.2%	2.5%	1.7%	3.6%	2.3%	1.0%	2.4%	1.9%	0.4%
Rank of Harper Government: WORST								

Under the Harper government, *real GDP per capita has hardly grown at all*: by just 0.4% per year. That's by far the worst of any postwar government. And since inequality has become so severe, most Canadians experienced no improvement in living standards at all. On 14 occasions since 1945 (3 times during Lester Pearson's term alone), real GDP per capita grew more *in a single year* than during the Harper government's *entire time in power*.

Investment

Measure: Average Annual Growth in Real Business Non-Residential Capital Spending

Investment represents the allocation of current output to projects (like machinery, structures, and technology) that will expand output further in future years. Investment is crucial for economic growth and job-creation. There are many forms of investment (including infrastructure, housing, and research); the most important for growth is business non-residential capital spending on machinery and structures. We measure investment in real terms (adjusted for changes in average prices).



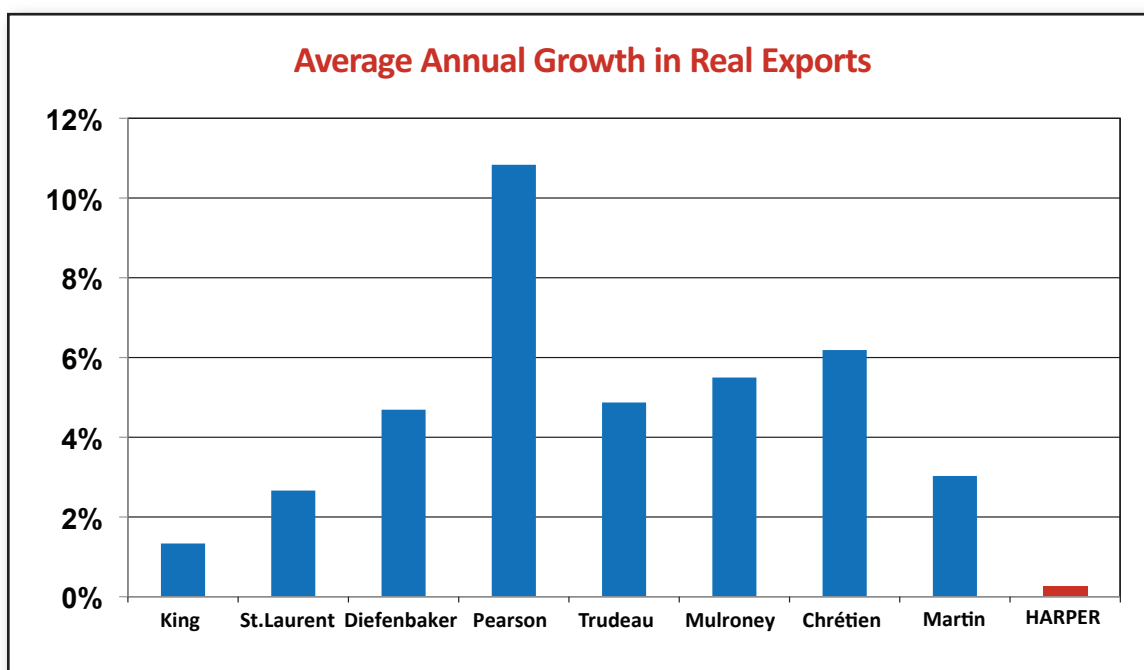
Average Annual Growth of Real Business Non-Residential Investment								
King	St-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
24.9%	8.1%	-1.5%	7.9%	4.3%	3.0%	5.8%	11.1%	2.5%
Rank of Harper Government: SECOND WORST								

The Harper government's *expensive corporate tax cuts* (which reduce federal revenue by \$15 billion per year) were supposed to lead to an investment boom. Yet *business investment grew more slowly under this government than almost any other in our post-war history*: by just 2.5% per year. (Only the Diefenbaker government had a worse record.) More recently, business capital spending has actually been shrinking outright. Canada's economy is not spending nearly enough on technology and equipment to keep up with global trends.

Exports

Measure: Average Annual Growth in Real Exports

Canada is a trading nation, and exports are a crucial source of economic growth. Our exports consist of both goods and services, and are sold around the world (though most still go to the U.S.). Our exports depend on factors such as competitive cost, innovation, quality, and marketing. We measure exports in real terms (adjusted for changes in average export prices).



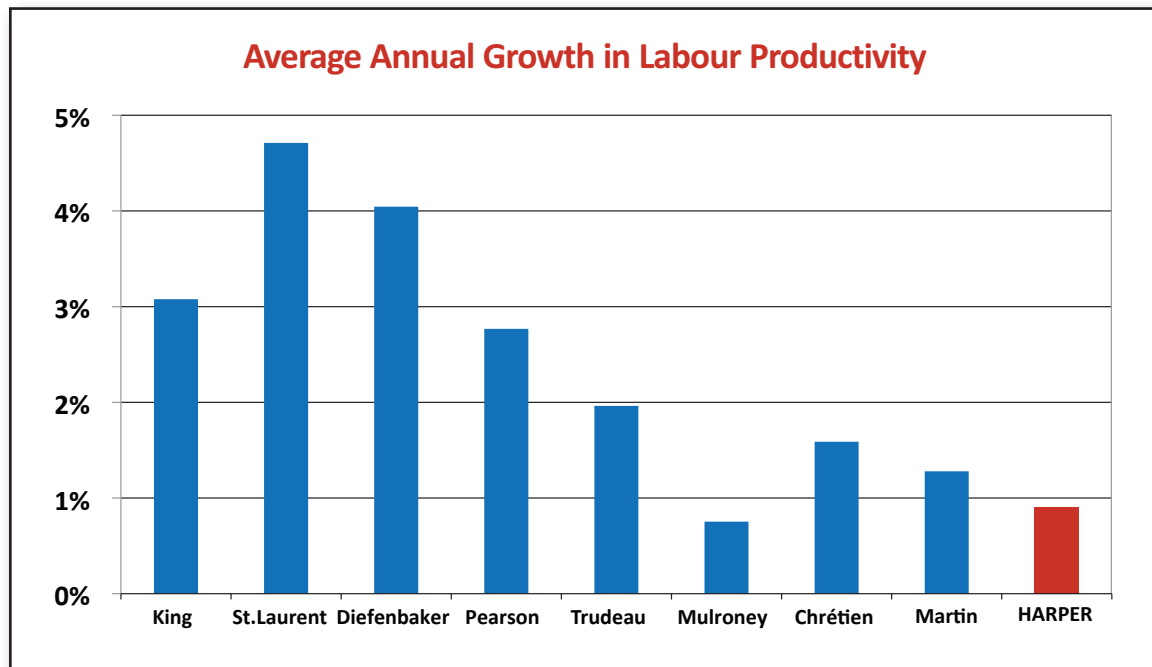
Average Annual Growth of Real Exports of Goods and Services								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
1.3%	2.7%	4.7%	10.8%	4.9%	5.5%	6.2%	3.0%	0.3%
Rank of Harper Government: WORST								

The Harper government has signed several business-friendly trade agreements, and is negotiating many more. It argues that tax cuts, deregulation, and anti-union labour laws will all help boost our exports. But *since its election in 2006, Canada's exports have hardly grown at all*: at an average rate of just 0.3% per year. That's *by far the worst in post-war history*, and Canada now experiences *large annual trade deficits* (since our imports grew much faster than our exports). Nurturing Canadian skills, value-added industries, and globally successful companies is the key to higher exports – not just signing more corporate-friendly trade deals.

Productivity

Measure: Average Annual Growth in Real Value-Added per Hour of Work

Through increased skills, greater use of technology, and the production of higher-value goods and services, labour productivity (measured by real GDP produced per hour of work) should grow steadily over time. Indeed, rising productivity is a key indicator of economic development. It creates economic space for rising living standards and increased leisure time.



Average Annual Growth of Labour Productivity (Real GDP per Hour)								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
3.1%	4.7%	4.0%	2.8%	2.0%	0.8%	1.6%	1.3%	0.9%
Rank of Harper Government: SECOND WORST								

The Harper government claimed its policies would boost productivity by “freeing” business from red tape, cutting taxes, dismantling regulations, and weakening unions. Yet productivity has grown extremely slowly under the Conservative government: by **just 0.9% per year**. That is the **second-worst productivity performance in our post-war history** (barely edged out by the Conservative government of Brian Mulroney). Perhaps a business-led “race to the bottom” is not the best way to improve productivity after all.

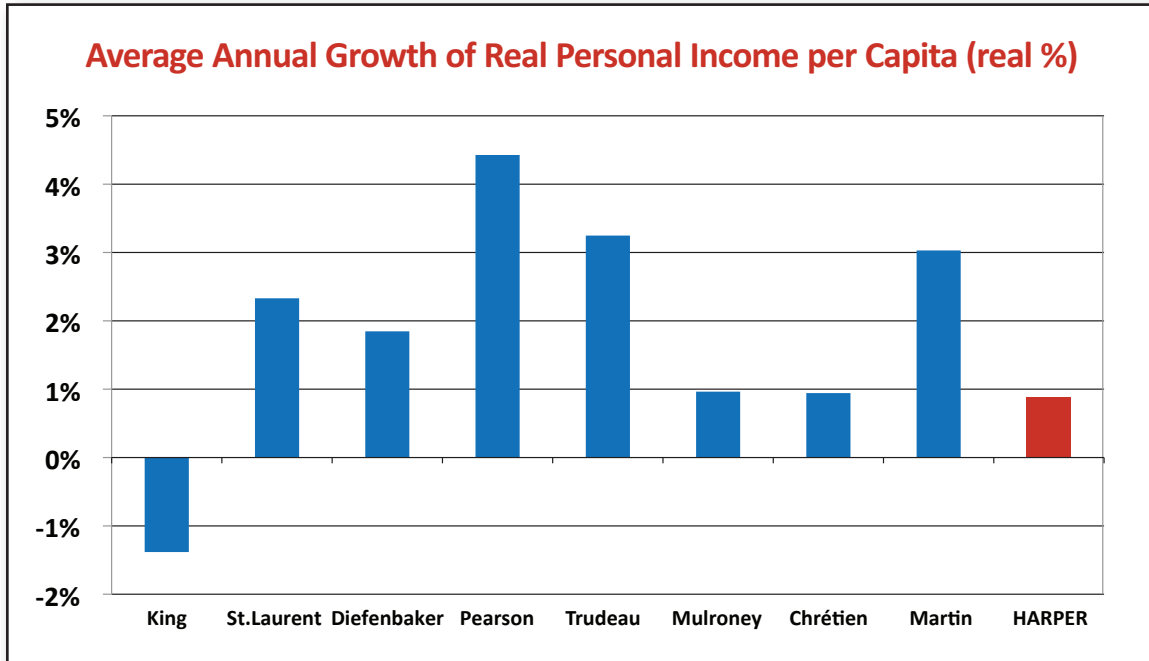
Distribution and Debt



Personal Income

Measure: Average Annual Growth in Real Personal Income per Capita

Canadians receive personal income from various sources: wages and salaries, business income, investments, pensions, and government income supports. Incomes must keep up with population growth and inflation. The growth of real per capita personal income provides a rough measure of the overall spending power of Canadian families (although this measure does not account for changes in distribution across income groups).



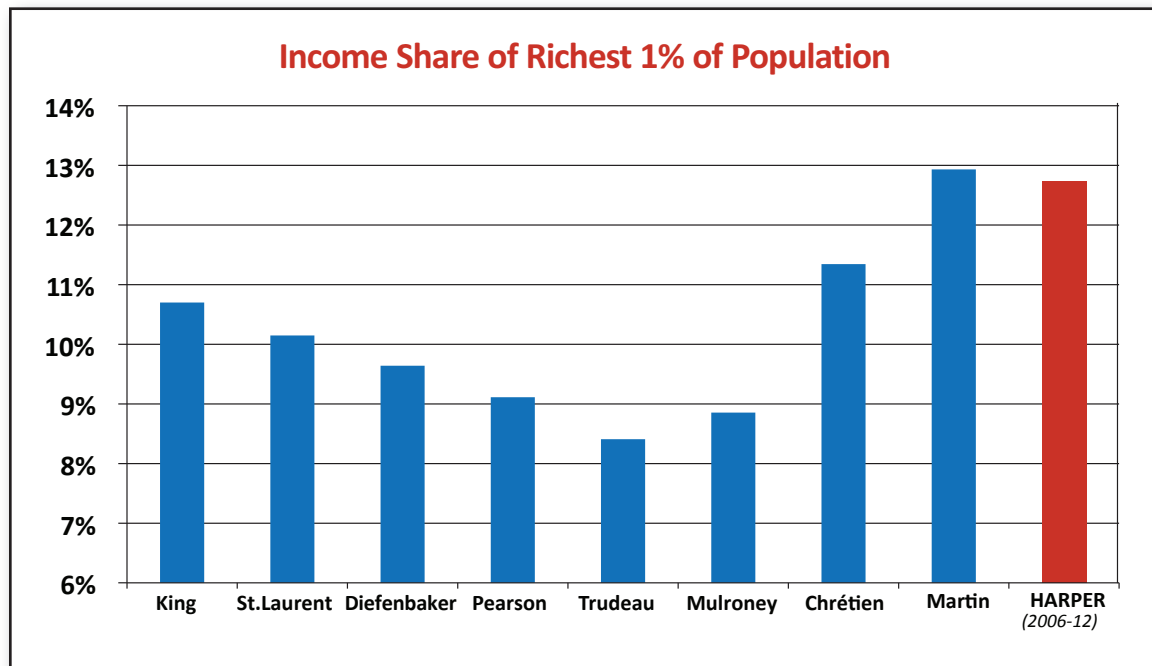
Average Annual Growth of Real Personal Income per Capita								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
-1.4%	2.3%	1.8%	4.4%	3.2%	1.0%	0.9%	3.0%	0.9%
Rank of Harper Government: SECOND WORST (TIED)								

Personal incomes have remained stagnant under the Harper government for several reasons: high unemployment, falling labour force participation, stagnant wages, and reductions in employment insurance and other income security programs. Average real incomes per capita have grown by **less than 0.9% per year** since 2006. That's tied for **second worst in Canada's postwar history**. (Real per capita incomes fell in 1946 and 1947 under Mackenzie King, due to temporary postwar inflation and the cancellation of some wartime programs.)

Inequality

Measure: Share of Richest 1% in Total Income

The increasing concentration of income at the top has undermined the cohesion of Canadian society. Strong business profits and financial gains have gone disproportionately to very well-off households. Meanwhile, working families can hardly get by. There are many ways to measure income distribution: one common method is the portion of total personal income received by the richest 1% of society. A long historical data series for this measure has been assembled by the World Top Incomes Database (but unfortunately no data is available since 2012).



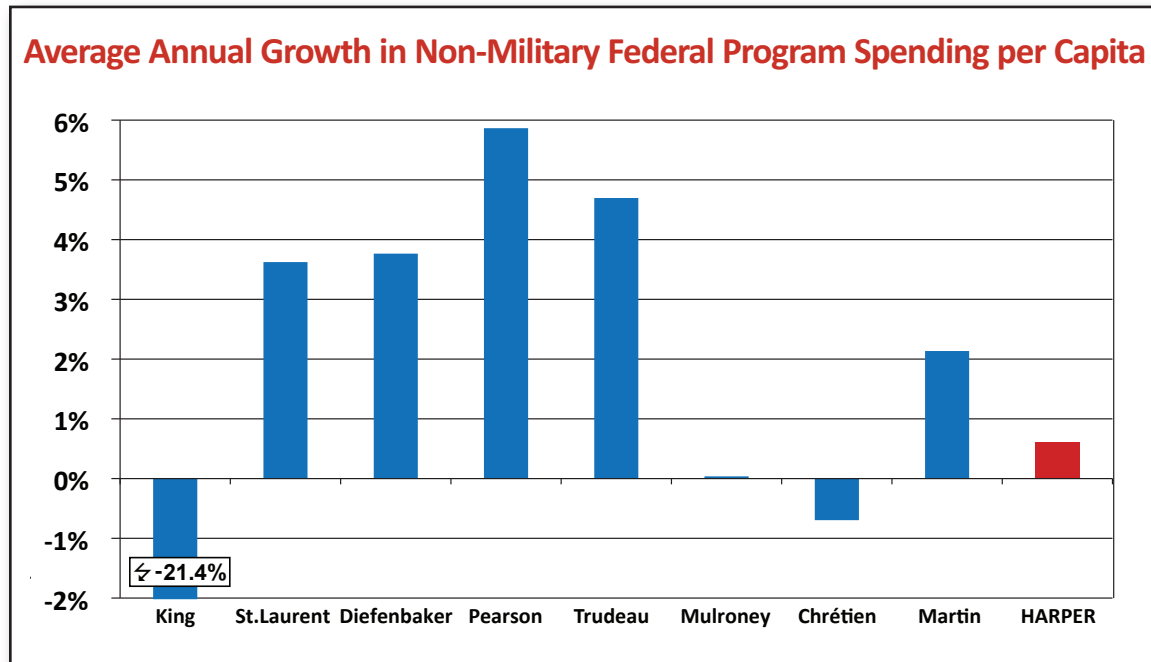
Average Share of Top 1% in Total Income (%)								
King	St-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
10.7	10.1	9.6	9.1	8.4	8.9	11.3	12.9	12.7
Rank of Harper Government: SECOND WORST								

Equality improved greatly after the war, as employment grew strongly and government expanded social programs (and the taxes to pay for them). Since the 1990s, however, the economy has been managed to favour investors, business owners, and professionals. Government tax cuts have made inequality even worse. The top 1% received their highest share ever in 2007 (just before the financial crisis hit); their share has declined slightly since then due to a weaker stock market and smaller financial gains. By this measure, average inequality under the Harper government has been the **second-worst in postwar history**. And by some other measures (such as a statistic called the “Gini coefficient”), **inequality has continued to grow under the Harper government**.

The “Social Wage”

Measure: Avg. Ann. Growth in Real Non-Military Federal Program Spending per Capita

Our standard of living does not depend solely on private consumption purchased from personal incomes. It also depends on public programs like health care, education, and other public goods (sometimes called the “social wage”). The federal government contributes to the social wage in many ways: transfers to persons (like EI or OAS), co-funding for provincial programs like health care, and direct federal programs (like safety, parks, and culture).



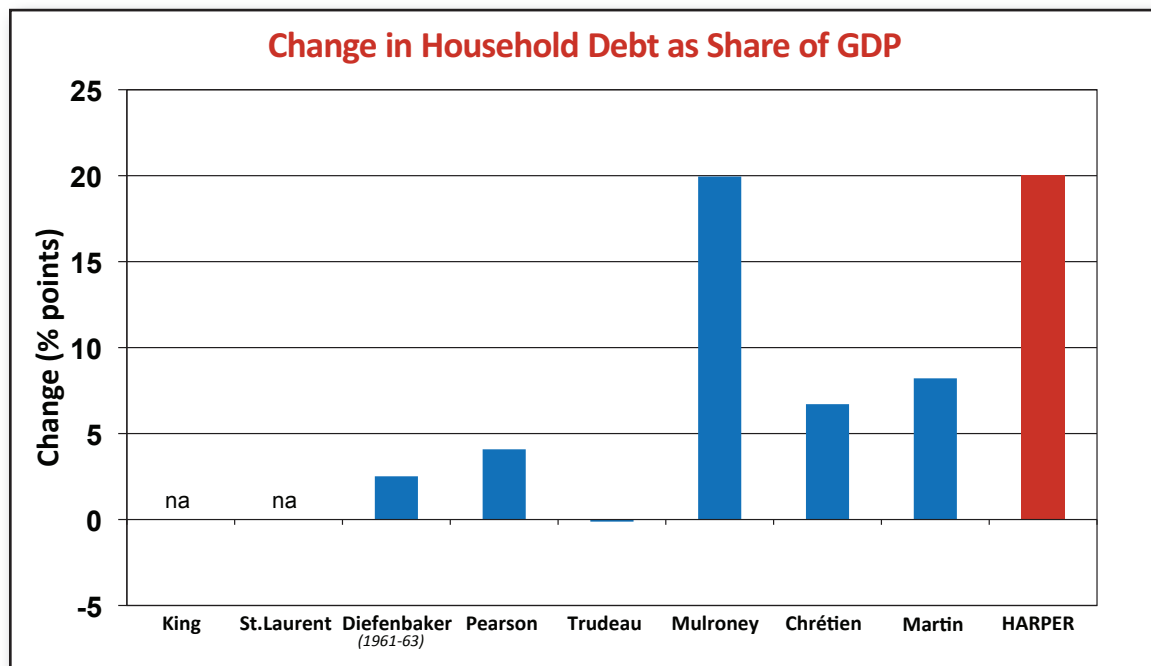
Avg. Ann. Growth Real Non-Military Federal Program Spending per Capita								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
-21.40%	3.6%	3.8%	5.9%	4.7%	0.0%	-0.7%	2.1%	0.6%
Rank of Harper Government: SIXTH OF NINE								

Real federal program spending per capita (excluding defence) has grown very slowly under the Harper government: by just 0.6% per year. That ranks *sixth out of nine postwar Prime Ministers*: better than Mulroney and Chrétien (who cut program spending deeply), and better than Mackenzie King (who oversaw the decommissioning of many wartime government programs). And the new spending which did occur under Harper was entirely in response to the recession of 2008-09. Since the government turned to austerity in 2011, this measure of the “social wage” has been *shrinking by 2.5% per year*: That’s among the sharpest spending cuts in postwar history.

Household Debt

Measure: Change in Household Financial Debt as Share of GDP

Real personal incomes in Canada have grown more slowly under the Harper government than almost any other government in postwar history. It's little wonder, then, that Canadians have become reliant on growing household debt to try to preserve their standard of living – not to mention pay for astronomical housing prices in many communities. Many financial observers have expressed concern about Canadians' high debt loads. But without an emphasis on job-creation and rising wages, the debt burden will continue to grow.



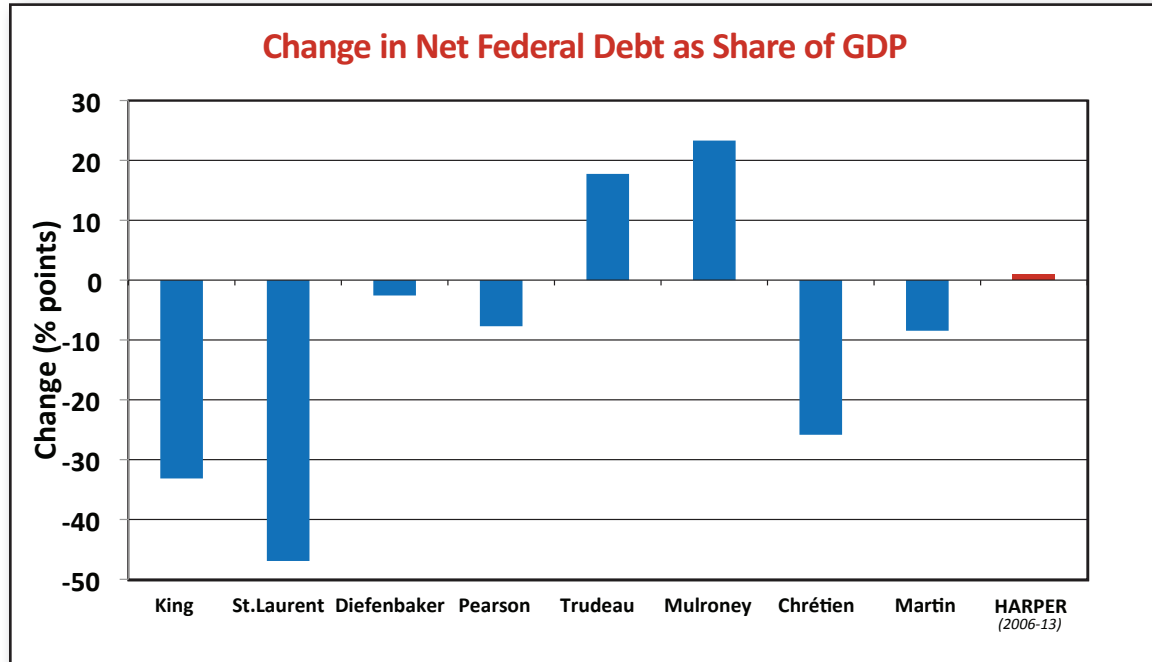
Change in Household Debt as Share of GDP								
King	St.-Laurent	Diefenbaker (1961-63)	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper
na	na	2.5%	4.1%	-0.1%	20.0%	6.7%	8.2%	20.0%
Rank of Harper Government: WORST (TIED)								

Personal debts have exploded in Canada under the Harper government: growing by 20 full points of GDP, **tied for worst of any postwar government** (with the experience under Brian Mulroney). Household debt is now three times as large as the federal government's debt – and equals **165% of household disposable income**. Government austerity (supposedly motivated by the need to reduce government debt) has only worsened this debt crisis: shifting more of the burden for health care, education, and other essential services to families, and thus making the household debt burden all the worse.

Government Debt

Measure: Change in Federal Government Net Debt as Share of GDP

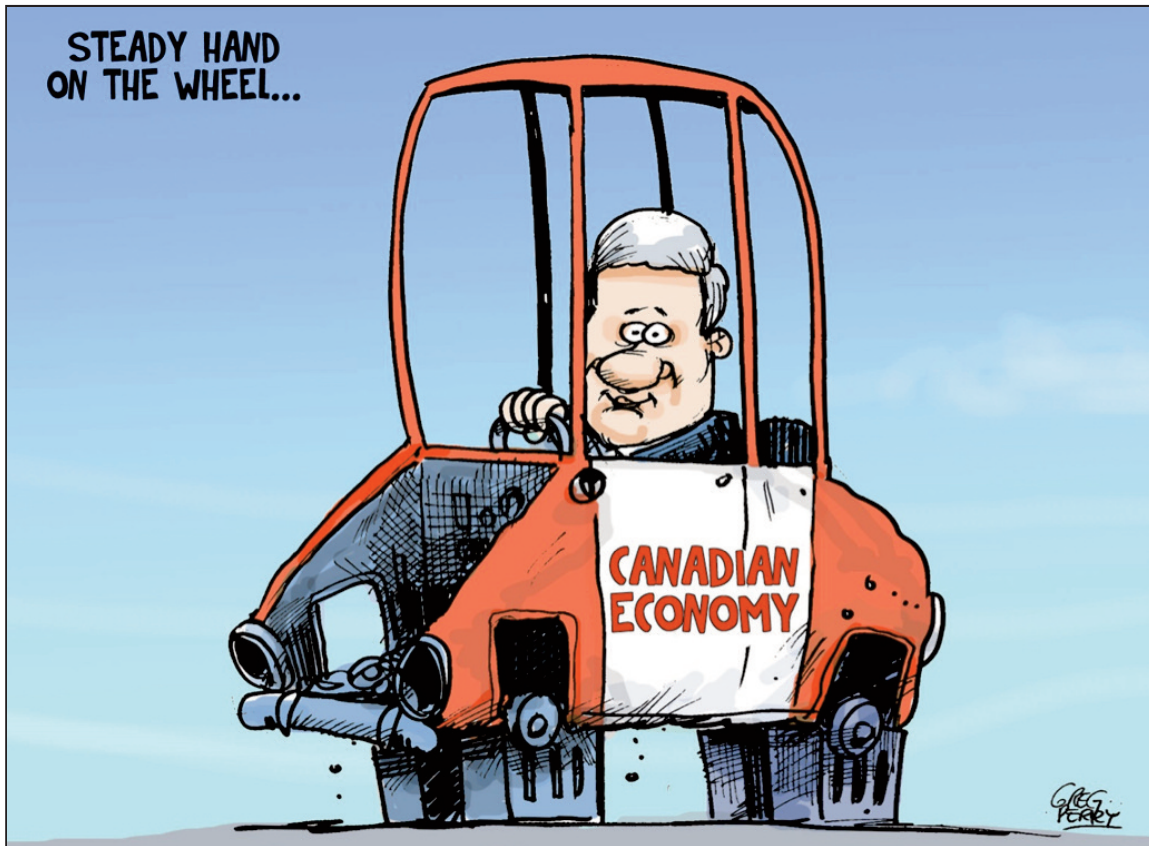
The Harper government's quest for a "balanced budget" was the defining issue of its last term in office – mostly because it "pre-promised" major tax cuts in 2011 that were contingent on the deficit being eliminated by the next election. But this single-minded obsession with eliminating a deficit is misplaced, especially during times of severe macroeconomic weakness. More important in the long-run is the government's accumulation of debt, measured as a share of GDP (that is, measured relative to the economy's ability to maintain that debt). The debt-to-GDP ratio should not grow too high.



Change in Government Debt as Share of GDP								
King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	Harper (2006-13)
-33.2%	-46.9%	-2.6%	-7.8%	17.7%	23.3%	-25.8%	-8.5%	0.9%
Rank of Harper Government: SEVENTH OF NINE								

The Harper government **added \$150 billion to federal net debt** since being elected in 2006, but that debt has remained stable as a share of GDP. Six postwar Prime Ministers reduced the federal debt relative to GDP, while two (Trudeau and Mulroney) substantially increased it. **The Harper government ranks seventh of the nine.** So despite its politically-motivated emphasis on eliminating the deficit at all costs, therefore, the Harper government's fiscal performance has lagged that of most other postwar Prime Ministers.

Analysis and Conclusions



Overall Evaluation

Of the 16 economic indicators reported above, the Harper government ranked last (or tied for last) among the postwar Prime Ministers in almost half (seven) of the cases. The Harper government ranked second worst in six more of the cases, and no higher than sixth out of nine postwar Prime Ministers in the remaining three cases. In not one of the indicators did the Harper government rank any better than sixth.

This statistical review confirms that it is far-fetched to suggest that Canada's economy has been well-managed during the Harper government's time in office. To the contrary, ***there is no other time in Canada's postwar economic history in which Canada's performance has performed worse than it did under the Harper government.***

This conclusion can be tested more formally, using the following methodology. The table below summarizes the ranking of the various governments according to each of the 16 indicators considered by this report (from 1 for best, to 9 for worst). It is then possible to calculate an average ranking for each Prime Minister.⁴

By this methodology, the average grade of the Harper government is 8.05 – almost as bad as it could be. This qualifies the Harper government as the government with the worst overall economic performance of any Canadian government since the end of World War II. Moreover, the gap between the Harper government and the next-worst government (which turns out to be the Conservative government of Brian Mulroney) is substantial: the Mulroney government's average ranking was just 6.49.

In other words, it's not even close. According to this analysis of 16 different commonly-utilized indicators of economic well-being, the Harper government definitely ranks as having delivered the worst economic performance of any Canadian government since the end of World War II. No wonder Canadians feel more pessimistic about their economic condition, and their economic prospects, than the rhetoric of our government leaders would imply. The legacy of this government for them has been unemployment, insecurity, and debt.

It is interesting to note that Canada's three postwar Conservative Prime Ministers (Diefenbaker, Mulroney, and Harper)⁵ all rank among the four worst economic performers of this era. This gives further grounds to reject the common assumption that "Conservatives are best at managing the economy." The highest average economic ranking 2.41 was attained by the Pearson government of 1963-68.

⁴ When two Prime Ministers were tied for a certain ranking, each was given the average of the two ranks they share. For two of the indicators (job quality and household debt), data was not available going back to 1946, and hence some of the Prime Ministers have no score. To prevent this from biasing the overall ranking of Prime Ministers, the numerical rankings in these cases were adjusted to ensure that equal numerical distance was preserved between the first-place and last-place Prime Ministers (which were still assigned numbers 1 and 9, respectively, for consistency with the other indicators.)

⁵ As explained above, we have excluded Prime Ministers who served less than one year in office, including two Conservatives (Joe Clark and Kim Campbell).

Table 1
Overall Ranking of Postwar Prime Ministers

		King	St.-Laurent	Diefenbaker	Pearson	Trudeau	Mulroney	Chrétien	Martin	HARPER
WORK	Job Creation	3	5.5	5.5	1	2	8	4	7	9
	Employment Rate	5.5	9	7	3	2	5.5	1	4	8
	Unemployment Rate	1	2	4	3	7	9	8	5	6
	Participation Rate	6	8	5	3	1	4	2	7	9
	Youth Job Creation	7	6	3.5	1	3.5	9	2	5	8
	Job Quality						1	3½	6½	9
PRODUCTION	GDP Growth	6	1.5	3	1.5	4	8	5	7	9
	GDP per Capita	7	2	6	1	4	8	3	5	9
	Investment	1	3	9	4	6	7	5	2	8
	Exports	8	7	5	1	4	3	2	6	9
	Productivity	3	1	2	4	5	9	6	7	8
DISTRIBUTION & DEBT	Personal Income	9	4	5	1	2	6	7.5	3	7.5
	Inequality	6	5	4	3	1	2	7	9	8
	“Social Wage”	9	4	3	1	2	7	8	5	6
	Household Debt			2½	3½	1	8½	5	6½	8½
	Government Debt	2	1	6	5	8	9	3	4	7
AVERAGE RANKING		5.25	4.21	4.69	2.41	3.50	6.49	4.51	5.54	8.05
Source: Calculations as described in text. Tie rankings are given average score. When data does not cover entire postwar era (for job quality and household debt), ranking scores are adjusted to preserve equal distance between included Prime Ministers.										

Recessions, and Other Negative Events

Some Conservatives may argue that their government’s poor economic ranking relative to previous postwar governments in Canada reflects the damage done by the 2008-09 recession. Without that negative shock, they will claim, Canada’s performance during their tenure would compare much better.

Of course, any recession will pull down period averages – but Canada’s postwar economic trajectory has been regularly interrupted by recessions. There have been ten economic downturns since 1946, during which real GDP growth and other indicators turned negative for sustained periods of time. Most of the postwar Prime Ministers considered in this study had to grapple with the economic and fiscal consequences of a recession; some Prime Ministers (including St.-Laurent and Trudeau) faced more than one. What is unique about the 2008-09 downturn is not that it occurred (although its proximate cause, rooted in global financial speculation, was certainly unprecedented). More striking, rather, was that the subsequent recovery was extremely weak, inconsistent, and incomplete. ***It is now six full years since the recession bottomed out*** (in spring 2009), yet Canada’s recovery has remained lacklustre and uncertain – and this year the country seemed to slip right back into recession.

Table 2 provides a comparison of the recoveries from Canada’s last six recessions.⁶ The table reports the quarter in which real GDP reached its minimum (the “trough” of the recession), and then the extent of cumulative growth (over the next 24 quarters of data, equivalent to six years) in real GDP and total employment.⁷

Recession	Quarterly Trough	Subsequent Growth in Real GDP (24 quarters)	Subsequent Growth in Employment (24 quarters)
1960-61	1Q 1961	42.3%	22.5%
1974-75	1Q 1975	25.8%	20.1%
1980	2Q 1980	17.9%	9.9%
1981-82	4Q 1982	29.1%	18.8%
1990-92	2Q 1992	21.1%	9.9%
2008-09	2Q 2009	15.3%	7.4%

Source: Statistics Canada, *Historical Labour Force Statistics: Actual Data, Seasonal Factors, Seasonally Adjusted Data (Catalogue 71-201)*, series D767888; CANSIM series v1992067, v62305752, and v2062811. Recession and trough dating: Philip Cross and Philippe Bergevin, *Turning Points: Business Cycles in Canada Since 1926* (Toronto: CD Howe Institute, 2012).

6 Comparable evaluation of recoveries prior to 1961 is not possible, due to an absence of quarterly data on GDP and employment that would allow a precise identification of the quarterly trough and subsequent 24-quarter recovery.

7 This table utilizes the recession and trough dating reported in Philip Cross and Philippe Bergevin, *Turning Points: Business Cycles in Canada Since 1926* (Toronto: CD Howe Institute, 2012). Note that for the recovery from the 1980 recession, the economy subsequently entered another recession (in 1981-82) before our benchmark 24-quarter recovery period had elapsed; despite this handicap, the recovery from that 1980 recession (which itself included *another* recession!) was still more robust than the recovery from the 2008-09 downturn.

Most previous postwar Prime Ministers, therefore, also had to grapple with an economic recession – but under their watch the economy recovered from those downturns more quickly and completely. Moreover, previous postwar Prime Ministers also faced a wide range of other economic shocks and challenges, which should also be considered when evaluating the economic record of our successive governments. These unique shocks include:

- The demobilization of the massive war effort at the end of World War II, and the unprecedented reallocation of both people and resources to new peacetime tasks.
- Canadian participation in the Korean War, and its impact on budgetary balances, inflation, and other key variables.
- Successive world oil price shocks in 1973 and again in 1979, with enormous increases in the price of oil and the subsequent outbreak of worldwide “stagflation.”
- The record spike in world and Canadian interest rates in 1981-82, when consumer lending rates reached over 20 percent.
- The implementation of the Canada-U.S. free trade agreement in 1989, with large adjustment costs (including the closure of hundreds of manufacturing plants).
- The introduction of inflation-targeting by the Bank of Canada in 1991, accompanied by another surge in interest rates and negative impacts on consumer and business spending in Canada.
- The terrorist attacks on the U.S. of September 11, 2001, with major impacts on cross-border trade, security concerns and costs, and other economic impacts.

It is hardly credible to suggest, therefore, that the uniquely disappointing performance of Canada’s economy under the Harper Conservatives somehow reflects uncontrollable or purely external crises or challenges. To be sure, the world economy has been unstable and troubled under Prime Minister Harper’s tenure. But in a longer historical perspective, this seems “par for the course.” Canadian governments have always had to respond to major international and domestic shocks and challenges. The real test is whether this government responded to those shocks as effectively as it could have (and as effectively as other postwar governments handled the equally-daunting challenges they faced). The hard statistical record suggests clearly that the Harper government has failed this test.

Canada's Fallen Economic Star: What Went Wrong?

In the immediate aftermath of the worldwide financial crisis and recession of 2008-09, Canada was considered by many observers to have enjoyed an outstanding economic record – and the Conservative government went to great lengths to emphasize (and claim credit for) this reputation. Suddenly, however, Canada's economic prospects have now faded dramatically. As other economies gathered momentum (including the U.S. and the U.K., both of which have shifted onto much more dynamic growth paths), Canada's recovery slowed markedly, and now seems to have shifted into reverse. How did Canada's once-impressive economic reputation become so quickly tarnished?

In retrospect, the Canadian “triumphalism” expressed after the financial crisis was always exaggerated. While we avoided the worst side-effects of the global meltdown (in particular, no Canadian banks collapsed outright during the crisis), Canada nevertheless endured a severe recession. Even then, Canada was hardly the “best”: Australia avoided the recession altogether, and several other OECD countries experienced less severe contractions in both employment and output. Moreover, we shouldn't forget that Canada's success in managing that financial crisis reflected long-standing policies that had been in place for years, or even decades, before the Harper Conservatives came to power: protections such as public deposit insurance, public mortgage guarantees (and corresponding rules on mortgage quality), restrictions on foreign investment and takeovers in Canadian banking, and modestly stronger capital requirements for banks. So to the extent that Canada did endure that financial turbulence relatively successfully, the Harper government cannot reasonably claim most of the credit.

As the worldwide recession deepened, the Harper government (like others around the world) initially took several extraordinary and important measures to re-establish stability. These included financial assistance (of up to \$200 billion) to stabilize Canadian banks, participation in the rescue and restructuring of General Motors and Chrysler, and an initial tolerance for large deficits (to support infrastructure spending and other stimulus measures). All of this helped Canada to begin recovering from the recession (which bottomed out in the summer of 2009). Then, for the next eighteen months, Canada's economy rebounded at a decent rate – although once again, several other OECD countries did better.

However, after this short-lived and partial rebound, Canada's recovery then lost its way. The turning point was 2011: not coincidentally, the year in which the Harper government received its first majority mandate. Several factors help to explain the clear downshifting of the Canadian recovery after 2011:

- Unconstrained by the politics of minority governments, the Harper majority unleashed a very hard-hitting program of fiscal austerity. Cutbacks to discretionary spending since

2011 now cumulate to \$15 billion per year,⁸ and direct employment in federal public administration has fallen by nearly 50,000 positions.⁹ This austerity sapped spending power and job-creation across the economy – not to mention badly damaging many public services (such as coastal and transportation safety, veterans’ services, federal research and statistics, and more).

- The Harper government’s emphasis on market-driven “trickle-down” policies (like business tax cuts and free trade agreements) failed to spur sustained recovery in the most strategic sectors of Canada’s private sector: business investment and exports. Capital spending and exports failed repeatedly to regain their pre-recession growth paths – and are now once again in decline. In contrast, consumer spending remained relatively resilient (helped by very low interest rates and a real estate boom). But consumer spending cannot lead growth for long: job creation is needed throughout the economy to validate and sustain higher consumer spending and indebtedness. Eventually it became clear that Canada’s recovery was lacking an “engine.”
- Under the Harper government’s management, Canada’s economy regressed badly in structural terms. The weakness of our industrial structure then came to undermine overall growth badly with the decline in world oil prices: first gradual, then (in 2014) more precipitous. Canadian manufacturing employment had already peaked even prior to the Conservatives’ election victory in 2006. However, deindustrialization intensified under the Conservatives’ watch: some 375,000 manufacturing jobs disappeared during the government’s first four years in power.¹⁰ At first the government hoped that its plan to make Canada an “energy superpower” would more than offset losses in manufacturing and other non-resource industries. Those dreams were dashed, however, and the oil price decline has exposed a huge structural weakness in our engagement with the world economy. We can’t rely on oil to pay all our bills in world trade, but our other export industries have been badly weakened by years of policy neglect.

The combined impact of these and other policy errors was a marked deceleration of economic growth after 2011. Under the Harper government’s majority mandate, job-creation has failed to even keep up with population growth, let alone be sufficient to repair the still-outstanding damage from the 2008-09 recession. (The modest decline in the unemployment rate since 2011 mostly reflects declining labour force participation – rather than strong job-creation.) Business investment, exports, and GDP growth have all slowed and reversed.

⁸ *At What Cost: The Impacts of Rushing to Balance the Budget*, by David MacDonald and Kayle Hatt (Ottawa: Canadian Centre for Policy Alternatives, 2014).

⁹ Calculated from data published by Statistics Canada’s Survey of Employment, Payrolls, and Hours, CANSIM series v1556737.

¹⁰ Calculated from data published by Statistics Canada’s Survey of Employment, Payrolls, and Hours, CANSIM series v54026392.

Given this crumbling record, Prime Minister Harper's repeated claim that Canada's economy under his leadership has been the "envy of the entire world" is incredible. To confirm this, we can compare Canada's performance under his tenure with the broader set of industrial countries: all 34 member countries of the Organization for Economic Cooperation and Development. Proper international comparisons must adjust for population size and population growth rates across countries. (A given absolute number of new jobs, for example, will be more or less "impressive" depending on whether a country's population is growing like Canada, or stagnant like Germany and Japan.) Adjusting for population growth, Canada's relative international standing on key indicators since the election of the Conservatives in 2006 has been mediocre at best. And as 2015 carries on, we are quickly becoming one of the weakest-performing major countries in the industrial world.

Table 3 reports cumulative growth between 2006 and 2014 in two key population-adjusted indicators: the 15-64 employment rate (job-creation relative to working age population¹¹) and GDP growth (also measured relative to population). The table compares Canada's performance to the average for all OECD countries, and reports our ranking among the OECD's 34 member countries. In both cases, Canada falls within the lower half of OECD countries: ranking 20th of 34 for change in the employment rate since 2006, and 18th of 34 for real GDP growth per capita. Certainly we have done better than some countries: better since 2006 than the U.S.,¹² and much better than hard-hit countries like Greece, Ireland, and Italy. But we have lagged far behind a greater number of others. For example, Germany's employment rate (for the same 15-64 age group) grew by 6.6 percentage points between 2006 and 2014 (while Canada's fell), and Germany's cumulative GDP growth per capita since 2006 was 10.5 percent – almost 3 times as fast as Canada's. In the same time South Korea's employment rate grew 1.5 points, and its GDP per capita soared over 25 percent. Several others countries also performed much better than Canada on both criteria.¹³ Worse yet, given negative results for 2015, Canada is now set to fall even further into the lower echelon of OECD countries.

In comparison to other countries, therefore, as well as in comparison to previous Prime Ministers, the Harper government's claim to "superior economic management" is increasingly far-fetched.

¹¹ Different countries use different definitions of "working age population," and hence international comparisons must be adjusted for a consistent definition. In this case we utilize the OECD's 15-64 age category. This has the added advantage of controlling our international comparison for different demographic contexts.

¹² Since 2011, however, U.S. indicators have surpassed Canada's by a considerable margin, including enjoying much stronger job-creation. The U.S. willingness to utilize stimulative policies (such as quantitative easing) and tolerate much larger budget deficits helps to explain this stronger recovery.

¹³ As indicated in Table 3, Israel enjoyed the biggest increase in the employment rate in this period, while Poland recorded the largest increase in real GDP per capita.

Table 3		
Canada's Relative International Performance Under the Harper Conservatives		
	Cumulative Change in Employment Rate, 2006-2014 (15-64 years)	Cumulative Growth in Real GDP per Capita, 2006-2014
Canada	-0.5 points	3.8%
OECD Average	-0.2 points	3.7%
OECD Leader	Israel: +10.3 points	Poland: 33.3%
Canada's Rank <i>(of 34 OECD members)</i>	20th	18th ¹
<p><i>Source: Derived from OECD.stat datasets: Short-Term Labour Market Statistics, Economic Outlook, and Historical Population Data and Projections.</i></p> <p>¹. Canada ranks in the bottom half of OECD countries, even though its cumulative GDP growth per capita slightly exceeds the OECD average, because the OECD's largest economy (the U.S.) ranks slightly below Canada (20th) and pulls down the overall OECD average.</p>		

Conclusion: We Could Have Done Better

Since the initial election of the Harper government in 2006, and especially since it attained a majority mandate in 2011, Canada's economy has consistently disappointed. Across a wide range of core indicators (job-creation, growth, productivity, incomes, indebtedness, and more), this government has presided over what has indisputably been the weakest era in Canada's postwar economic history. Not all of our economic problems can be placed at the foot of this government – but many of them can. Its failure to put Canadians to work, as the first priority of economic policy; its consistent emphasis on business-friendly policies (like tax cuts, free trade deals, and government downsizing) instead of concretely fostering real investment, exports, and growth; and the needless austerity policies adopted after 2011 have all contributed to this economic failure.

Canadians have been told so often that “Conservatives are the best economic managers” that our chronic economic underperformance during the Harper tenure may seem surprising. But from another perspective, this contrast between economic rhetoric and reality is not counter-intuitive at all. Remember, the source of economic prosperity is ultimately the work effort of Canadians: after all, our GDP is simply the sum total of the value-added through all of the work conducted by Canadians, in all regions and all sectors of the economy.¹⁴ Doing more work, working more productively, and rewarding work fully and fairly with real incomes that grow over time, are the crucial ingredients of any successful economic strategy. Today, of course, we also have to recognize the economic value we attain from the natural environment, and be sure to manage economic activity without degrading and devaluing the environment.

Yet Conservatives have consistently rejected full employment as an economic priority (emphasizing deficit-cutting, tax cuts, and government downsizing instead). Job-creation has been slower than under any other postwar government, and Conservatives have overseen the largest decline in labour force participation since World War II. Indeed, their tax policies will accelerate that disengagement (by enhancing tax and fiscal benefits for stay-at-home parents). The Employment Minister makes taxpayer-funded videos extolling the virtues of these tax cuts – yet his department cannot seem to ensure the actual expenditure of Parliament-approved funds for youth job programs.¹⁵ Moreover, for those lucky enough to have work, Conservative policies undermine the value of that work: by attacking collective bargaining and trade unions, suppressing compensation (in both the public and private sectors), and facilitating more precarious work (for example, dramatically expanding

¹⁴ And even that doesn't count the value of unpaid work performed in our households and our communities.

¹⁵ The federal government reported “lapsed funds” from its 2013-14 budget for Employment and Social Development Canada totalling almost \$100 million for 2013-14 alone, the largest portion of which was unspent (but budgeted) money from the Youth Employment Strategy. See Dean Beeby, “Harper government left \$97M unspent on social services, report shows,” CBC News, May 7, 2015.

the Temporary Foreign Worker program and permitting the expansion of unpaid internships in federally regulated industries). By overseeing the sustained deindustrialization of Canada's economy, and failing to adequately support industries that add value to our natural resources, the government further devalues both our work and our non-renewable resources. Finally, Conservative policies (most notably the failure to implement a national strategy to reduce greenhouse gas pollution) show continual disregard for the challenges of sustainability and better valuing the natural environment.

This review of the disappointing economic record of the Harper government suggests obvious directions for alternative policies that would be more successful in allowing Canadians to work, using their full productive capacities, and in a sustainable manner. We need a government which emphasizes job-creation, work, and value-added above other priorities. We need a government committed to giving every able and willing Canadian a meaningful chance to work, to the best of their abilities, and to be fairly rewarded for that work. We need a government that sees rising wages and salaries as a sign of success – not just as a cost of production – and that supplements our private incomes with a strong and modern network of public programs, income security measures, and pensions. We need a government that succeeds in truly boosting capital investment (both private and public), and assists Canada to participate fully and successfully in world trade – as a full-fledged exporter, not just a supplier of raw materials. We need a government that rises to the challenge of climate change (and other environmental constraints), establishing policies that will support our existing industries, and nurture new “green” industries, as the world evolves to a lower-carbon economy.

A government which focuses on these priorities, could ensure that Canada's economic record gets better, not weaker. It would be a welcome change from the chronic disappointment that most Canadians have experienced since 2006.

Statistical Appendix

The complete set of historical data used to evaluate the economic record of the postwar Prime Ministers is provided in the following four tables. The first table provides general input variables (including population, the Consumer Price Index, and nominal GDP levels) needed to calculate other variables in subsequent tables. The next three tables correspond to the three major categories of comparison described in the text above: Work, Production, and Distribution and Debt.

The tables list the source, specific variable number, additional notes (where relevant), and units for each of the 80 series used in the analysis. They also provide the actual data for the full period of the analysis (1946 through 2014). Each column in the tables is also assigned a column number; for variables which are calculated on the basis of other original variables, the actual formula used for that calculation is reported instead of a series number (for example, Column 12, reporting the employment rate, equals column 6, employment, divided by column 9, working age population).

The data were attained from public data sources. The sources which are used (along with the acronym used to identify that source in the appendix tables) include the following:

HSC: *Historical Statistics of Canada*, 2nd edition (Ottawa: Statistics Canada, 1983). Each series from this source includes an alpha-numeric identifier corresponding to the series numbers published in that volume.

CANSIM: Statistics Canada's CANSIM database is freely available at www.statcan.gc.ca. Each series from this source is identified with a "v-number."

HLFS: *Historical Labour Force Statistics: Actual Data, Seasonal Factors, Seasonally Adjusted Data*, Statistics Canada Catalogue 71-201, 1987. Each series from this source is identified with a "D-number."

CIBC: The economics department of CIBC publishes a regular Canadian Employment Quality Index, based on several quantitative measures of job quality. It is available through <http://research.cibcwm.com/res/Eco/EcoResearch.html>.

CSLS: The Canadian Centre for Living Standards has published a historical database of Canadian productivity variables, freely available through www.csls.ca. The series utilized in this analysis appear in its online publication, *Aggregate Income and Productivity Trends: Canada vs United States*.

WTID: The World Top Income Database is an international cooperative effort to compile consistent data series regarding several dimensions of income and wealth inequality. Series are freely available through <http://topincomes.parisschoolofeconomics.eu/>, and are identified with a series number.

FRT: *Fiscal Reference Tables* (Ottawa: Finance Canada, 2014). This reference source for government fiscal data is freely available through www.fin.gc.ca.

SC 68-212 XPB: *Public Sector Finance* (Ottawa: Statistics Canada, 1995/96). This discontinued Statistics Canada publication reported long historical series regarding government fiscal affairs.

In very few cases was a single continuous data series available covering the full period 1946 through 2014. Usually series are discontinued or redefined, and this requires the researcher to piece together a composite statistical series in order to cover the complete period. It is important to avoid any structural break in a data series falling within the tenure of a particular Prime Minister (since such a break would bias the judgment of overall change or growth during that tenure). Therefore we sought consistent series which covered entire tenures; and for each Prime Minister, we utilized the most recent series covering the entire period of that Prime Minister's term in office. The same protocol applied to our use of input variables used to calculate other variables: we always used the most recent consistent series covering each Prime Minister's entire tenure.

For two of the variables considered (job quality and household debt) data is not available going back all the way to 1946. In these cases, the analysis was confined to the period covered by the data. Prime Ministers falling outside of that period were not given a ranking for that variable. So that this incomplete data did not bias the overall ranking of Prime Ministers, for the overall evaluation summarized in Table 1 above, rank scores for Prime Ministers for whom data was available were adjusted: ranging as usual from 1 for best to 9 for worst, but with intermediate scores adjusted to preserve equidistance between the covered Prime Ministers. In Table 1, when two Prime Ministers tied for a rank (to one decimal place, as reported in the tables on pages 9-26 of the report), they were both given the average of their two scores; for example, two Prime Ministers who tied for third would receive ranking scores of 3.5 (the average of 3 and 4).¹⁶

For some of the 16 variables used in the evaluation, specific data issues were encountered. These are described below.

Labour force data: Statistics Canada changed its definition of working age population in 1975. Before that, this category included people 14 and over; after 1976, it included people 15 and over. Statistics Canada did reconstruct (going as far back as 1966) a revised data series based on the 15-and-over definition, which allowed for a consistent analysis of the tenure of Prime Minister Trudeau (whose term straddled this break in the labour force data).

¹⁶ One curious application of this rule occurs in the ranking scores assigned for the household debt variable. Prime Ministers Mulroney and Harper tied for last in that indicator, but those rankings in turn had to be adjusted for the fact that two of the Prime Ministers (King and St. Laurent) were not included. Second-last place in that ranking, therefore, would normally be given a ranking of 7½. Prime Ministers Mulroney and Harper were thus both given scores of 8½ (the average of 7½ and 9).

Top income share: The WTID is a preferred source for this data given its long coverage (dating back to the early 20th Century). Its data series on the top 1% income share, however, ends in 2010. Statistics Canada has begun publishing a similar measure (v62802587), but with non-comparable methodology, covering the period 1982-2012. The WTID top 1% series was therefore extrapolated two years (to 2012), based on the similar absolute year-to-year change reported in the Statistics Canada series for those two years.

Fiscal data: Most data on federal spending and debt is usually reported according to fiscal years (which end March 31) instead of calendar years; we applied fiscal year data to the calendar year in which the fiscal year began (and which thus contains the first three-quarters of that fiscal year). CANSIM series v52531068 and v52531092, however, are available on a calendar year basis. Year-end federal government financial statistics have not yet been reported for the 2014/15 fiscal year. To calculate the federal program spending variable, we utilized estimates of military spending reported in Table 3 of Finance Canada's *Fiscal Monitor* publication for March 2015. For federal debt, we ended the analysis in 2013 (since no robust year-end estimate is yet available for the change in debt to the end of 2014/15).

TABLE A1: INPUT VARIABLE DATA					
<i>(used to calculate other variables)</i>					
Column	1	2	3	4	5
Variable	Population	CPI	Nominal GDP		
Source	CANSIM	CANSIM	HSC	CANSIM	CANSIM
Series #	v52154496	v41693271	F32	v646937	v62305783
Units	#	2002=100	\$000000	\$	\$
1946	12516566	9.4	11885		
1947	12780298	10.3	13473		
1948	13057267	11.8	15509		
1949	13692667	12.2	16800		
1950	13962508	12.5	18491		
1951	14264934	13.8	21640		
1952	14723156	14.2	24588		
1953	15116208	14	25833		
1954	15566283	14.1	25918		
1955	15984791	14.1	28528		
1956	16374788	14.3	32058		
1957	16913453	14.8	33513		
1958	17392039	15.2	34777		
1959	17802402	15.3	36846		
1960	18196472	15.5	38359		
1961	18571195	15.7	39646	4.117E+10	
1962	18922498	15.9	42927	4.467E+10	
1963	19276856	16.1	45978	4.796E+10	
1964	19643433	16.4	50280	5.255E+10	
1965	20002882	16.8	55364	5.793E+10	
1966	20380660	17.5	61828	6.482E+10	
1967	20750292	18.1	66409	6.97E+10	
1968	21079193	18.8	72586	7.613E+10	
1969	21384673	19.7	79815	8.383E+10	
1970	21686081	20.3	85685	9.018E+10	
1971	21962032	20.9	94450	9.843E+10	
1972	22218463	21.9	105234	1.099E+11	
1973	22491777	23.6	123560	1.29E+11	
1974	22807969	26.2	147528	1.54E+11	
1975	23143275	29	165343	1.736E+11	
1976	23449808	31.1	191031	2E+11	
1977	23725843	33.6		2.21E+11	
1978	23963203	36.6		2.449E+11	
1979	24201544	40		2.796E+11	

1980	24515667	44		3.144E+11	
1981	24819915	49.5		3.605E+11	366562
1982	25116942	54.9		3.799E+11	386707
1983	25366451	58.1		4.114E+11	419409
1984	25607053	60.6		4.496E+11	458320
1985	25842116	63		4.857E+11	495622
1986	26100278	65.6		5.125E+11	521971
1987	26446601	68.5		5.589E+11	568882
1988	26791747	71.2		6.131E+11	622756
1989	27276781	74.8		6.577E+11	667349
1990	27691138	78.4		6.799E+11	690763
1991	28037420	82.8		6.854E+11	696882
1992	28371264	84		7.005E+11	713312
1993	28684764	85.6		7.272E+11	741593
1994	29000663	85.7		7.709E+11	786584
1995	29302311	87.6		8.104E+11	826214
1996	29610218	88.9		8.369E+11	854847
1997	29905948	90.4		8.827E+11	901376
1998	30155173	91.3		9.15E+11	936730
1999	30401286	92.9		9.824E+11	1001845
2000	30685730	95.4		1.077E+12	1098166
2001	31020596	97.8		1.108E+12	1134832
2002	31358418	100		1.153E+12	1180948
2003	31641630	102.8		1.213E+12	1243829
2004	31938004	104.7		1.291E+12	1324940
2005	32242364	107		1.374E+12	1410710
2006	32570505	109.1		1.45E+12	1486918
2007	32887928	111.5		1.53E+12	1565900
2008	33245773	114.1		1.603E+12	1645974
2009	33628571	114.4		1.529E+12	1567007
2010	34005274	116.5		1.625E+12	1662757
2011	34342780	119.9		1.721E+12	1770014
2012	34752128	121.7			1831228
2013	35154279	122.8			1893759
2014	35540419	125.2			1976228

TABLE A2: WORK VARIABLES									
Column	6	7	8	9	10	11	12	13	14
Variable	Employment			Working Age Pop			Employment Rate		
Source	HSC	HLFS	CANSIM	HSC	HLFS	CANSIM	Calculated	Calculated	Calculated
Series #	D139	D767888	v2461119	D136	D767867	v2461077	6/9	7/10	8/11
Note									
Units	000	000	#	000	000	#	%	%	%
1946	4666			8779			53.15%		
1947	4832			9007			53.65%		
1948	4875			9141			53.33%		
1949	4913			9268			53.01%		
1950	4976			9615			51.75%		
1951	5097			9732			52.37%		
1952	5169			9956			51.92%		
1953	5235			10164			51.51%		
1954	5243			10391			50.46%		
1955	5364			10597			50.62%		
1956	5585			10807			51.68%		
1957	5731			11123			51.52%		
1958	5706			11388			50.11%		
1959	5870			11605			50.58%		
1960	5965			11831			50.42%		
1961	6055			12053			50.24%		
1962	6225			12280			50.69%		
1963	6375			12536			50.85%		
1964	6609			12817			51.56%		
1965	6862			13128			52.27%		
1966	7152	7242		13475	13083		53.08%	55.35%	
1967	7379	7451		13874	13444		53.19%	55.42%	
1968	7537	7593		14264	13805		52.84%	55.00%	
1969	7780	7832		14638	14162		53.15%	55.30%	
1970	7879	7919		15016	14528		52.47%	54.51%	
1971	8079	8104		15388	14872		52.50%	54.49%	
1972	8329	8344		15747	15186		52.89%	54.95%	
1973	8759	8761		16125	15526		54.32%	56.43%	
1974	9137	9125		16562	15924		55.17%	57.30%	
1975	9308	9284		17019	16323		54.69%	56.88%	
1976		9477	9747500		16701	17058000		56.75%	57.14%
1977		9651	9917100		17051	17435500		56.60%	56.88%
1978		9987	10220300		17377	17778800		57.47%	57.49%
1979		10395	10668600		17702	18119400		58.72%	58.88%

1980		10708	10984000		18053	18483500		59.31%	59.43%
1981		11006	11305000		18375	18814400		59.90%	60.09%
1982		10644	10943700		18664	19103400		57.03%	57.29%
1983		10734	11022000		18917	19355000		56.74%	56.95%
1984		11000	11301700		19148	19597900		57.45%	57.67%
1985		11311	11658000		19372	19842800		58.39%	58.75%
1986		11634	12008500		19594	20093200		59.38%	59.76%
1987			12333000			20348100			60.61%
1988			12709600			20612200			61.66%
1989			12996200			20898500			62.19%
1990			13086400			21214700			61.69%
1991			12857400			21533300			59.71%
1992			12730900			21820200			58.34%
1993			12792700			22092900			57.90%
1994			13058700			22367700			58.38%
1995			13295400			22660000			58.67%
1996			13420100			22959500			58.45%
1997			13708200			23246700			58.97%
1998			14047000			23515700			59.73%
1999			14402000			23781400			60.56%
2000			14760100			24089700			61.27%
2001			14932300			24419400			61.15%
2002			15291300			24768600			61.74%
2003			15660800			25079900			62.44%
2004			15915000			25408100			62.64%
2005			16123500			25754700			62.60%
2006			16396000			26115500			62.78%
2007			16769300			26461700			63.37%
2008			17010200			26824400			63.41%
2009			16727600			27202500			61.49%
2010			16964300			27573600			61.52%
2011			17221000			27913300			61.69%
2012			17438000			28283300			61.65%
2013			17691100			28647200			61.76%
2014			17802200			28980600			61.43%

TABLE A2 (cont'd): WORK VARIABLES									
Column	15	16	17	18	19	20	21	22	23
Variable	Labour Force			Unemployment Rate			Participation Rate		
Source	HSC	HLFS	CANSIM	Calculated	Calculated	Calculated	Calculated	Calculated	Calculated
Series #	D138	D767870	v2461098	(15-6)/6	(16-7)/7	(17-8)/8	15/9	16/10	17/11
Note									
Units	000	000	#	%	%	%	%	%	%
1946	4829			3.38%			55.01%		
1947	4942			2.23%			54.87%		
1948	4988			2.27%			54.57%		
1949	5055			2.81%			54.54%		
1950	5163			3.62%			53.70%		
1951	5223			2.41%			53.67%		
1952	5324			2.91%			53.48%		
1953	5397			3.00%			53.10%		
1954	5493			4.55%			52.86%		
1955	5610			4.39%			52.94%		
1956	5782			3.41%			53.50%		
1957	6008			4.61%			54.01%		
1958	6137			7.02%			53.89%		
1959	6242			5.96%			53.79%		
1960	6411			6.96%			54.19%		
1961	6521			7.15%			54.10%		
1962	6615			5.90%			53.87%		
1963	6748			5.53%			53.83%		
1964	6933			4.67%			54.09%		
1965	7141			3.91%			54.40%		
1966	7420	7493		3.61%	3.35%		55.06%	57.27%	
1967	7694	7747		4.09%	3.82%		55.46%	57.62%	
1968	7919	7951		4.82%	4.50%		55.52%	57.60%	
1969	8162	8194		4.68%	4.42%		55.76%	57.86%	
1970	8374	8395		5.91%	5.67%		55.77%	57.78%	
1971	8631	8639		6.40%	6.19%		56.09%	58.09%	
1972	8891	8897		6.32%	6.22%		56.46%	58.59%	
1973	9279	9276		5.60%	5.55%		57.54%	59.74%	
1974	9662	9639		5.43%	5.33%		58.34%	60.53%	
1975	10015	9974		7.06%	6.92%		58.54%	61.10%	
1976		10203	10491300		7.12%	7.09%		61.09%	61.50%
1977		10500	10785200		8.09%	8.05%		61.58%	61.86%
1978		10895	11154600		8.33%	8.38%		62.70%	62.74%
1979		11231	11536700		7.44%	7.52%		63.44%	63.67%

1980		11573	11879400		7.47%	7.54%		64.11%	64.27%
1981		11904	12235800		7.54%	7.61%		64.78%	65.03%
1982		11958	12301800		10.99%	11.04%		64.07%	64.40%
1983		12183	12527600		11.89%	12.02%		64.40%	64.73%
1984		12399	12747900		11.28%	11.34%		64.75%	65.05%
1985		12639	13026100		10.51%	10.50%		65.24%	65.65%
1986		12870	13282700		9.60%	9.59%		65.68%	66.11%
1987			13526000			8.82%			66.47%
1988			13779100			7.76%			66.85%
1989			14057000			7.55%			67.26%
1990			14244600			8.13%			67.14%
1991			14336300			10.32%			66.58%
1992			14336100			11.20%			65.70%
1993			14435000			11.38%			65.34%
1994			14573700			10.40%			65.16%
1995			14689200			9.49%			64.82%
1996			14848500			9.62%			64.67%
1997			15080600			9.10%			64.87%
1998			15314800			8.28%			65.13%
1999			15583700			7.58%			65.53%
2000			15841900			6.83%			65.76%
2001			16094100			7.22%			65.91%
2002			16560700			7.67%			66.86%
2003			16944200			7.57%			67.56%
2004			17147100			7.19%			67.49%
2005			17292100			6.76%			67.14%
2006			17502200			6.32%			67.02%
2007			17846500			6.04%			67.44%
2008			18122400			6.14%			67.56%
2009			18250400			8.34%			67.09%
2010			18450500			8.06%			66.91%
2011			18619600			7.51%			66.71%
2012			18809500			7.29%			66.50%
2013			19037800			7.07%			66.46%
2014			19124500			6.91%			65.99%

TABLE A2 (cont'd): WORK VARIABLES						
Column	24	25	26	27	28	29
Variable	Youth Employment					Job Quality
Source	HSC	HSC	Calculated	HLFS	CANSIM	CIBC
Series #	D175	D178	24+25	D768012	v2461120	
Note	Age 15-19	Age 20-24				
Units	000	000	000	000	#	1988=100
1946	584	660	1244			
1947	583	694	1277			
1948	540	701	1241			
1949	541	700	1241			
1950	523	700	1223			
1951	526	702	1228			
1952	512	699	1211			
1953	515	702	1217			
1954	506	684	1190			
1955	504	689	1193			
1956	531	704	1235			
1957	537	703	1240			
1958	515	693	1208			
1959	536	701	1237			
1960	545	705	1250			
1961	548	715	1263			
1962	573	739	1312			
1963	596	770	1366			
1964	628	824	1452			
1965	673	892	1565			
1966	714	976	1690	1708		
1967	740	1036	1776	1787		
1968	744	1092	1836	1838		
1969	749	1166	1915	1912		
1970	744	1179	1923	1916		
1971	764	1229	1993	1982		
1972	822	1273	2095	2070		
1973	916	1351	2267	2230		
1974	1000	1417	2417	2374		
1975	977	1443	2420	2376		
1976				2391	2533600	
1977				2413	2571300	
1978				2481	2635800	
1979				2612	2774900	

1980				2657	2836200	
1981				2668	2865000	
1982				2398	2578400	
1983				2337	2513400	
1984				2374	2537000	
1985				2389	2559800	
1986				2417	2583400	
1987					2575100	
1988					2559100	100
1989					2528100	101.4968
1990					2405300	101.0532
1991					2235400	99.1565
1992					2127100	95.52307
1993					2072300	93.00844
1994					2090000	91.19558
1995					2096900	91.35681
1996					2062100	90.41859
1997					2029600	90.50336
1998					2085400	89.41695
1999					2192300	91.73784
2000					2287400	94.11205
2001					2320700	94.99428
2002					2391200	94.00426
2003					2441200	91.11498
2004					2455000	89.69411
2005					2480400	89.589
2006					2543600	88.53212
2007					2604200	87.50438
2008					2621200	88.77558
2009					2447000	87.44648
2010					2438400	86.12294
2011					2469500	87.1268
2012					2440300	87.13756
2013					2476700	86.17487
2014					2485500	86.26397

TABLE A3: PRODUCTION VARIABLES						
Column	30	31	32	33	34	35
Variable	Real GDP			Real Per Capita		
Source	HSC	CANSIM	CANSIM	Calculated	Calculated	Calculated
Series #	F55	v3860085	v62471340	30/1*10^6	31/1	32/1
Note						
Units	\$1971	\$2002	\$2007	\$1971	\$2002	\$2007
1946	28292			2260		
1947	29498			2308		
1948	30231			2315		
1949	31388			2292		
1950	33762			2418		
1951	35450			2485		
1952	38617			2623		
1953	40605			2686		
1954	40106			2576		
1955	43891			2746		
1956	47599			2907		
1957	48718			2880		
1958	49844			2866		
1959	51737			2906		
1960	53231			2925		
1961	54741	2.64475E+11		2948	14241	
1962	58475	2.82972E+11		3090	14954	
1963	61487	2.97989E+11		3190	15458	
1964	65610	3.17283E+11		3340	16152	
1965	69981	3.37487E+11		3499	16872	
1966	74844	3.59913E+11		3672	17660	
1967	77344	3.70406E+11		3727	17851	
1968	81864	3.88481E+11		3884	18430	
1969	86225	4.08033E+11		4032	19081	
1970	88390	4.20398E+11		4076	19386	
1971	94450	4.37709E+11		4301	19930	
1972	100248	4.61546E+11		4512	20773	
1973	107812	4.93689E+11		4793	21950	
1974	111678	5.11911E+11		4896	22444	
1975	113005	5.21243E+11		4883	22522	
1976	119249	5.48344E+11		5085	23384	
1977		5.67307E+11			23911	
1978		5.89736E+11			24610	
1979		6.12175E+11			25295	

1980		6.25414E+11			25511	
1981		6.47323E+11	7.7584E+11		26081	31259
1982		6.28816E+11	7.52112E+11		25036	29944
1983		6.45906E+11	7.71944E+11		25463	30432
1984		6.83462E+11	8.16308E+11		26690	31878
1985		7.16132E+11	8.5899E+11		27712	33240
1986		7.33468E+11	8.82705E+11		28102	33820
1987		7.64664E+11	9.234E+11		28914	34916
1988		8.02702E+11	9.65523E+11		29961	36038
1989		8.23728E+11	9.89413E+11		30199	36273
1990		8.25318E+11	9.89465E+11		29804	35732
1991		8.08051E+11	9.6975E+11		28820	34588
1992		8.15123E+11	9.78229E+11		28731	34480
1993		8.34185E+11	1.00166E+12		29081	34920
1994		8.74261E+11	1.05054E+12		30146	36225
1995		8.98814E+11	1.0785E+12		30674	36806
1996		9.13364E+11	1.09617E+12		30846	37020
1997		9.51962E+11	1.14562E+12		31832	38307
1998		9.90968E+11	1.19252E+12		32862	39546
1999		1.04579E+12	1.25643E+12		34399	41328
2000		1.10052E+12	1.32438E+12		35864	43160
2001		1.12015E+12	1.3429E+12		36110	43290
2002		1.15291E+12	1.37913E+12		36765	43979
2003		1.17459E+12	1.4066E+12		37122	44454
2004		1.21124E+12	1.44972E+12		37925	45392
2005		1.24781E+12	1.49604E+12		38701	46400
2006		1.28303E+12	1.53212E+12		39392	47040
2007		1.31126E+12	1.5659E+12		39871	47613
2008		1.32029E+12	1.58315E+12		39713	47620
2009		1.28372E+12	1.53677E+12		38174	45698
2010		1.32499E+12	1.58704E+12		38964	46670
2011		1.35687E+12	1.63299E+12		39510	47550
2012			1.66311E+12			47856
2013			1.68949E+12			48059
2014			1.73270E+12			48753

TABLE A3 (cont'd): PRODUCTION VARIABLES								
Column	36	37	38	39	40	41	42	43
Variable	Real Business Non-Res Investment					Real Exports		
Source	HSC	HSC	Calculated	CANSIM	CANSIM	HSC	CANSIM	CANSIM
Series #	F41	F42	36-37	v3860072	v62471317	F51	v3860078	v62471691
Note	Total	Residential	Nonl Residential					
Units	\$1971 10^6	\$1971 10^6	\$1971 10^6	\$2002	\$2007	\$1971 10^6	\$2002	\$2007
1946	3697	1118	2579			6208		
1947	4731	1085	3646			6170		
1948	5367	1342	4025			6375		
1949	5797	1552	4245			5997		
1950	6211	1773	4438			5956		
1951	6201	1346	4855			6513		
1952	6850	1499	5351			7260		
1953	7760	1967	5793			7185		
1954	7609	2237	5372			6917		
1955	8431	2776	5655			7442		
1956	10107	2794	7313			8002		
1957	10582	2485	8097			8075		
1958	10235	3120	7115			8047		
1959	10139	3190	6949			8360		
1960	9676	2631	7045			8717		
1961	9378	2602	6776	1.999E+10		9374	4.153E+10	
1962	9625	2704	6921	2.044E+10		9744	4.34E+10	
1963	10167	2794	7373	2.182E+10		10631	4.728E+10	
1964	11898	3264	8634	2.553E+10		12058	5.376E+10	
1965	13261	3413	9848	2.91E+10		12606	5.617E+10	
1966	14716	3168	11548	3.417E+10		14315	6.38E+10	
1967	14543	3229	11314	3.341E+10		15770	7.059E+10	
1968	14537	3702	10835	3.185E+10		17727	7.907E+10	
1969	15501	4175	11326	3.314E+10		19462	8.547E+10	
1970	15581	3718	11863	3.516E+10		21223	9.339E+10	
1971	17046	4816	12230	3.626E+10		22181	9.775E+10	
1972	18183	5432	12751	3.777E+10		23655	1.062E+11	
1973	20633	5966	14667	4.329E+10		26165	1.168E+11	
1974	21737	5935	15802	4.739E+10		25620	1.115E+11	
1975	22534	5503	17031	5.177E+10		23993	1.023E+11	
1976	23537	6564	16973	5.209E+10		26225	1.102E+11	
1977				5.318E+10			1.171E+11	
1978				5.476E+10			1.288E+11	
1979				6.2E+10			1.335E+11	

1980				6.74E+10			1.347E+11	
1981				7.414E+10	5.976E+10		1.371E+11	1.32678E+11
1982				6.513E+10	5.247E+10		1.35E+11	1.31147E+11
1983				6.097E+10	4.916E+10		1.43E+11	1.38857E+11
1984				6.244E+10	4.982E+10		1.693E+11	1.64705E+11
1985				6.74E+10	5.471E+10		1.774E+11	1.73381E+11
1986				6.902E+10	5.601E+10		1.85E+11	1.82588E+11
1987				7.59E+10	6.119E+10		1.905E+11	1.89111E+11
1988				8.707E+10	7.032E+10		2.075E+11	2.06765E+11
1989				9.182E+10	7.47E+10		2.095E+11	2.09106E+11
1990				8.943E+10	7.236E+10		2.193E+11	2.18429E+11
1991				8.647E+10	7.209E+10		2.232E+11	2.22928E+11
1992				7.973E+10	6.781E+10		2.393E+11	2.40396E+11
1993				7.863E+10	6.506E+10		2.652E+11	2.66628E+11
1994				8.6E+10	6.976E+10		2.989E+11	3.01617E+11
1995				9.014E+10	7.389E+10		3.242E+11	3.29728E+11
1996				9.408E+10	7.974E+10		3.424E+11	3.49752E+11
1997				1.153E+11	9.697E+10		3.709E+11	3.81942E+11
1998				1.215E+11	1.025E+11		4.048E+11	4.18198E+11
1999				1.302E+11	1.082E+11		4.48E+11	4.61357E+11
2000				1.363E+11	1.131E+11		4.879E+11	5.05577E+11
2001				1.365E+11	1.116E+11		4.735E+11	4.87737E+11
2002				1.309E+11	1.073E+11		4.792E+11	4.92857E+11
2003				1.399E+11	1.147E+11		4.684E+11	4.85932E+11
2004				1.514E+11	1.259E+11		4.917E+11	5.14792E+11
2005				1.702E+11	1.41E+11		5.01E+11	5.26814E+11
2006				1.871E+11	1.572E+11		5.039E+11	5.31424E+11
2007				1.932E+11	1.619E+11		5.101E+11	5.37413E+11
2008				2.003E+11	1.685E+11		4.861E+11	5.13877E+11
2009				1.587E+11	1.345E+11		4.191E+11	4.46267E+11
2010				1.703E+11	1.536E+11		4.46E+11	4.74001E+11
2011				1.926E+11	1.728E+11		4.664E+11	4.96164E+11
2012					1.874E+11			5.10446E+11
2013					1.916E+11			5.17744E+11
2014					1.921E+11			5.4294E+11

TABLE A3 (cont'd): PRODUCTION VARIABLES			
Column	44	45	46
Variable	Productivity		
Source	HSC	CSLS	CANSIM
Series #	F246	Table 4	v29509280
Note			
Units	1971=100	2007=100	2007=100
1946	35.2		
1947	36.7		
1948	37.4		
1949	38.2		
1950	41.8		
1951	44.3		
1952	47.4		
1953	49.1		
1954	48.7		
1955	53.9		
1956	56.7		
1957	56.6		
1958	59.6		
1959	61.9		
1960	63.9		
1961	65.8	45.70306	
1962	68.9	47.42882	
1963	71.8	49.14683	
1964	74.9	50.71214	
1965	77.9	52.42874	
1966	81.6	53.46049	
1967	82.9	53.66866	
1968	88.6	56.33398	
1969	92.3	57.97437	
1970	95.1	59.82833	
1971	100	61.5363	
1972	104	63.53376	
1973	107.8	65.18383	
1974	108.4	65.34562	
1975	108.5	66.22066	
1976	113.5	69.04771	
1977		70.91562	
1978		71.55796	

1979		71.40817	
1980		71.84887	
1981		72.20575	72.206
1982		73.35775	73.358
1983		75.056	75.056
1984		76.87675	76.877
1985		77.5075	77.508
1986		76.8385	76.838
1987		77.26725	77.267
1988		78.2395	78.24
1989		78.52125	78.521
1990		78.36175	78.362
1991		79.09	79.09
1992		80.66125	80.661
1993		82.245	82.245
1994		83.90825	83.908
1995		84.965	84.965
1996		84.83125	84.831
1997		86.93625	86.936
1998		88.76	88.76
1999		90.82925	90.829
2000		93.4775	93.478
2001		94.46425	94.464
2002		95.77075	95.771
2003		96.2815	96.282
2004		96.594	96.594
2005		98.94175	98.942
2006		100.0243	100.024
2007		100.001	100.001
2008		99.942	99.942
2009		100.801	100.801
2010		102.3085	102.305
2011		103.331	103.788
2012		103.333	103.988
2013		103.2883	105.106
2014		107.3578	107.474

TABLE A4: DISTRIBUTION AND DEBT VARIABLES

Column	47	48	49	50	51	52	53	54	55
Variable	Personal Income						Top 1% Share		
Source	HSC	CANSIM	CANSIM	Calculated	Calculated	Calculated	WTID	WTID	CANSIM
Series #	F81	v647016	V62306158	47/1/2*10^8	48/1/2*100	49/1/2*10^8	1110301	1110302	v62802587
Note				Real per cap	Real per cap	Real per cap			
Units	\$000000	\$	\$000000	\$2002	\$2002	\$2002	%	%	%
1946	9887			8403			10.72		
1947	10926			8300			10.99		
1948	12592			8173			10.39		
1949	13396			8019			10.68		
1950	14262			8172			10.88		
1951	16791			8530			10.03		
1952	18592			8893			9.84		
1953	19550			9238			9.88		
1954	19717			8983			10.33		
1955	21265			9435			10.19		
1956	23531			10049			9.62		
1957	25170			10055			9.64		
1958	16651			6299			9.89		
1959	28108			10320			9.74		
1960	29595			10493			9.77		
1961	30104	3.057E+10		10325	10485		9.93		
1962	32788	3.324E+10		10898	11047		9.37		
1963	34829	3.548E+10		11222	11431		9.14		
1964	37282	3.815E+10		11573	11841		9.38		
1965	41071	4.19E+10		12222	12470		9.2		
1966	46094	4.71E+10		12924	13205		8.91		
1967	50579	5.141E+10		13467	13688		9		
1968	55677	5.625E+10		14050	14195		9.04		
1969	61804	6.265E+10		14671	14871		9.01		
1970	66633	6.793E+10		15136	15431		8.97		
1971	74092	7.465E+10		16142	16263		8.87		
1972	83767	8.453E+10		17215	17373		8.75		
1973	97832	9.87E+10		18431	18594		8.8		
1974	116867	1.181E+11		19557	19770		8.81		
1975	136205	1.372E+11		20294	20448		8.74		
1976	155343	1.567E+11		21301	21487		8.08		
1977		1.737E+11			21786		7.74		
1978		1.939E+11			22111		7.6		

1979		2.183E+11			22553		7.72		
1980		2.487E+11			23053		8.06		
1981		2.908E+11	303555		23669	24708	7.8		
1982		3.218E+11	334323		23334	24245	8.46	7.87	7.1
1983		3.39E+11	349756		23003	23732	8.21	7.7	6.9
1984		3.673E+11	379105		23672	24430	8.28	7.85	7
1985		3.979E+11	409945		24438	25180	8.21	7.89	7.1
1986		4.258E+11	438171		24866	25591	8.24	8.05	7.1
1987		4.577E+11	471251		25265	26013	8.4	8.24	7.3
1988		5.025E+11	517914		26345	27150	9.34	9.17	8.1
1989		5.463E+11	565110		26777	27697	10.01	9.79	9.1
1990		5.866E+11	606745		27018	27948	9.35	9.34	8.1
1991		6.053E+11	626576		26075	26990	9.36	9.35	8
1992		6.207E+11	640863		26043	26891	9.31	9.29	7.8
1993		6.331E+11	653941		25782	26633	9.56	9.57	8
1994		6.463E+11	667749		26006	26867	9.59	9.59	8.1
1995		6.721E+11	693417		26184	27014	10	9.97	8.4
1996		6.872E+11	707588		26106	26880	10.62	10.49	8.9
1997		7.155E+11	732469		26466	27093	11.52	11.26	9.7
1998		7.483E+11	767422		27180	27874	12.18	11.78	10.2
1999		7.831E+11	803026		27726	28433	12.62	12.03	10.4
2000		8.404E+11	860570		28707	29397	13.56	12.78	11.2
2001		8.765E+11	893979		28890	29467		12.7	11.1
2002		8.988E+11	916635		28664	29231		12.35	10.8
2003		9.318E+11	951551		28646	29254		12.28	10.8
2004		9.842E+11	1002002		29432	29965		12.65	11.1
2005		1.036E+12	1056803		30018	30633		13.09	11.5
2006		1.107E+12	1136886		31148	31994		13.71	12.1
2007		1.175E+12	1209167		32034	32974		13.72	12
2008		1.228E+12	1261802		32382	33264		13.06	11.5
2009		1.229E+12	1261723		31938	32797		12.29	10.7
2010		1.28E+12	1301618		32308	32856		12.22	10.6
2011		1.332E+12	1364218		32339	33131		12.22	10.6
2012			1424297			33677		11.92	10.3
2013			1477408			34223			
2014			1527160			34321			

TABLE A4 (cont'd): DISTRIBUTION AND DEBT VARIABLES								
Column	56	57	58	59	60	61	62	63
Variable	Real Non-Mil Fed Pgm Spd per Cap							
Source	HSC	HSC	HSC	Calculated	CANSIM	CANSIM	CANSIM	Calculated
Series #	H19	H29	H34	58-57-56	v499761	v499764	v499798	60-61-62
Note	Defense	Interest	Total	Non-Mil Pgm	Total	Military	Interest	Non-Mil Pgm
Units	\$000000	\$000000	\$000000	\$000000	\$000000	\$000000	\$000000	\$000000
1946	388	477	2634	1769				
1947	196	467	2196	1533				
1948	269	475	2175	1431				
1949	387	451	2449	1611				
1950	787	439	2901	1675				
1951	1447	531	3759	1781				
1952	1959	465	4646	2222				
1953	1891	496	4722	2335				
1954	1762	502	4657	2393				
1955	1838	514	4787	2435				
1956	1830	534	5218	2854				
1957	1712	567	5482	3203				
1958	1654	648	5951	3649				
1959	1537	784	6278	3957				
1960	1538	798	6551	4215				
1961	1652	839	7145	4654	7087	1499	786	4802
1962	1606	918	7305	4781	7555	1579	865	5111
1963	1730	994	7681	4957	7733	1491	935	5307
1964	1582	1051	8104	5471	8076	1509	995	5572
1965	1555	1111	8662	5996	8556	1494	1052	6010
1966	1651	1191	9871	7029	9762	1655	1151	6956
1967	1760	1301	11260	8199	11001	1777	1245	7979
1968	1763	1480	12309	9066	12213	1793	1409	9011
1969	1791	1717	13662	10154	13224	1768	1589	9867
1970	1773	1920	15089	11396	15058	1814	1862	11382
1971	1840	2138	17046	13068	17198	1839	1974	13385
1972	1908	2321	18645	14416	19639	1891	2253	15495
1973	2236	2592	22839	18011	21844	2101	2518	17225
1974	2512	3208	29245	23525	28354	2472	2961	22921
1975	2980	3955	33979	27044	35364	2728	3705	28931
1976					38698	3141	4519	31038
1977					43458	3560	5101	34797
1978					48191	3802	6410	37979

1979					52474	3920	8080	40474
1980					60846	4626	9897	46323
1981					71722	5295	13739	52688
1982					83607	5942	16675	60990
1983					91009	6733	17463	66813
1984					102237	7698	21006	73533
1985					112318	9264	24738	78316
1986					114417	8941	26216	79260
1987					120605	9354	27883	83368
1988					128940	10119	31711	87110
1989					138470	10316	37424	90730
1990					151488	11249	41880	98359
1991					161207	10445	41053	109709
1992					164435	10843	39558	114034
1993					167186	11216	39219	116751
1994					165888	10988	40157	114743
1995					172390	10521	46254	115615
1996					166086	9990	45352	110744
1997					160069	9365	43407	107297
1998					163684	9027	43910	110747
1999					171865	9786	43632	118447
2000					179304	10398	45299	123607
2001					184470	11322	41830	131318
2002					183368	11953	36767	134648
2003					194003	11745	35169	147089
2004					196552	12385	33458	150709
2005					218016	13863	32103	172050
2006					217373	14111	32122	171140
2007					228431	15501	31543	181387
2008					243604	17731	30034	195839
2009					254275	19430	26850	207995
2010					268262	18927	27544	221791
2011					270171	19184	28225	222762
2012								
2013								
2014								

TABLE A4 (cont'd): DISTRIBUTION AND DEBT VARIABLES

Column	64	65	66	67	68	69	70
Variable	Real Non-Mil Fed Pgm Spd per Cap (cont'd)						
Source	CANSIM	CANSIM	FRT	Calculated	Calculated	Calculated	Calculated
Series #	v52531068	v52531092	Table 12	65-64-66	59/1/2*10^8	63/1/2*10^8	67/1/2*10^8
Note	Interest	Total	Military	Non-Mil Pgm	Real Per Cap	Real Per Cap	Real Per Cap
Units	\$000000	\$000000	\$000000	\$000000	\$2002	\$2002	\$2002
1946					1504		
1947					1165		
1948					929		
1949					964		
1950					960		
1951					905		
1952					1063		
1953					1103		
1954					1090		
1955					1080		
1956					1219		
1957					1280		
1958					1380		
1959					1453		
1960					1494		
1961					1596	1647	
1962					1589	1699	
1963					1597	1710	
1964					1698	1730	
1965					1784	1788	
1966					1971	1950	
1967					2183	2124	
1968					2288	2274	
1969					2410	2342	
1970					2589	2585	
1971					2847	2916	
1972					2963	3184	
1973					3393	3245	
1974					3937	3836	
1975					4029	4311	
1976						4256	
1977						4365	
1978						4330	

1979						4181	
1980						4294	
1981						4289	
1982						4423	
1983						4533	
1984						4739	
1985						4810	
1986						4629	
1987						4602	
1988						4567	
1989						4447	
1990						4531	
1991	41053	163744	10759	111932		4726	4822
1992	39558	167260	10780	116922		4785	4906
1993	39219	169812	11087	119506		4755	4867
1994	40157	168205	10580	117468		4617	4726
1995	46254	173689	9817	117618		4504	4582
1996	45352	167199	8807	113040		4207	4294
1997	43407	160435	9087	107941		3969	3993
1998	43910	164166	9308	110948		4023	4030
1999	43632	173784	10113	120039		4194	4250
2000	45299	180969	9744	125926		4222	4302
2001	41836	186631	10443	134352		4328	4428
2002	36769	184888	11803	136316		4294	4347
2003	35172	195668	12869	147627		4522	4539
2004	33462	198492	14318	150712		4507	4507
2005	32113	220090	15034	172943		4987	5013
2006	32134	219696	15732	171830		4816	4836
2007	31555	230779	17331	181893		4946	4960
2008	30037	246027	18770	197220		5163	5199
2009	26480	256054	20863	208711		5407	5425
2010	27572	272000	21273	223155		5599	5633
2011	28225	275552	22783	224544		5410	5453
2012	26547	270930	22978	221405			5235
2013	25601	274928	21511	227816			5277
2014	24146	271750	21804	225800			5075

TABLE A4 (Cont'd): DISTRIBUTION AND DEBT VARIABLES										
Column	71	72	73	74	75	76	77	78	79	80
Variable	Household Debt					Federal Net Debt				
Source	CANSIM	CANSIM	Calculated	Calculated	Calculated	SC 68-212 XPB	Calculated	FRT	Calculated	Calculated
Series #	v52229251	v62693968	71/4	71/5*10^6	72/5	Table 1.10	76/3	Table 15	78/4*10^6	78/5
Note		Q4	Share GDP	Share GDP	Share GDP		Share GDP		Share GDP	Share GDP
Units	\$	\$000000	%	%	%	\$000000	%	\$000000	%	%
1946						13421	112.92%			
1947						13048	96.85%			
1948						12372	79.77%			
1949						11776	70.10%			
1950						11645	62.98%			
1951						11433	52.83%			
1952						11188	45.50%			
1953						11162	43.21%			
1954						11116	42.89%			
1955						11263	39.48%			
1956						11280	35.19%			
1957						11008	32.85%			
1958						11046	31.76%			
1959						11678	31.69%			
1960						12089	31.52%			
1961	1.684E+10		40.91%			12437	31.37%			
1962	1.878E+10		42.04%			13228	30.82%			
1963	2.083E+10		43.42%			13920	30.28%			
1964	2.348E+10		44.68%			15070	29.97%			
1965	2.711E+10		46.79%			15529	28.05%			
1966	2.898E+10		44.70%			15101	24.42%	17708	27.32%	
1967	3.215E+10		46.13%			15560	23.43%	18750	26.90%	
1968	3.617E+10		47.50%			16385	22.57%	19417	25.50%	
1969	4.06E+10		48.43%			17025	21.33%	19277	23.00%	
1970	4.429E+10		49.12%			17788	20.76%	20293	22.50%	
1971	4.863E+10		49.41%			18361	19.44%	22079	22.43%	
1972	5.66E+10		51.49%			19150	18.20%	23980	21.82%	
1973	6.317E+10		48.99%			19955	16.15%	26191	20.31%	
1974	7.344E+10		47.67%					28416	18.45%	
1975	8.982E+10		51.73%					34620	19.94%	
1976	1.048E+11		52.38%					41517	20.76%	
1977	1.206E+11		54.56%					52396	23.71%	
1978	1.389E+11		56.72%					65425	26.72%	

1979	1.589E+11		56.84%				77392	27.68%	
1980	1.76E+11		55.97%				91948	29.25%	
1981	1.893E+11		52.52%	51.65%			107622	29.86%	29.36%
1982	1.882E+11		49.54%	48.66%			136671	35.98%	35.34%
1983	2.023E+11		49.18%	48.24%			157252	38.22%	37.49%
1984	2.13E+11		47.38%	46.48%			194419	43.24%	42.42%
1985	2.353E+11		48.44%	47.47%			227808	46.90%	45.96%
1986	2.686E+11		52.40%	51.45%			257650	50.27%	49.36%
1987	3.115E+11		55.73%	54.76%			286667	51.29%	50.39%
1988	3.512E+11		57.29%	56.40%			314614	51.32%	50.52%
1989	3.924E+11		59.67%	58.81%			343757	52.26%	51.51%
1990	4.251E+11	381481	62.53%	61.55%	55.23%		377656	55.54%	54.67%
1991	4.431E+11	399866	64.65%	63.59%	57.38%		409975	59.82%	58.83%
1992	4.673E+11	426527	66.71%	65.51%	59.80%		448994	64.10%	62.94%
1993	4.926E+11	436483	67.75%	66.43%	58.86%		487524	67.04%	65.74%
1994	5.172E+11	459704	67.09%	65.75%	58.44%		524156	68.00%	66.64%
1995	5.375E+11	476464	66.32%	65.05%	57.67%		554162	68.38%	67.07%
1996	5.639E+11	504083	67.38%	65.96%	58.97%		562881	67.26%	65.85%
1997	5.985E+11	541587	67.80%	66.39%	60.08%		559922	63.43%	62.12%
1998	6.368E+11	577504	69.60%	67.98%	61.65%		554143	60.56%	59.16%
1999	6.8E+11	623952	69.22%	67.88%	62.28%		539885	54.95%	53.89%
2000	7.203E+11	663375	66.91%	65.59%	60.41%		519994	48.30%	47.35%
2001	7.637E+11	694281	68.92%	67.30%	61.18%		511946	46.20%	45.11%
2002	8.127E+11	748802	70.49%	68.81%	63.41%		505325	43.83%	42.79%
2003	8.697E+11	815533	71.69%	69.92%	65.57%		496180	40.90%	39.89%
2004	9.451E+11	899364	73.21%	71.33%	67.88%		494717	38.32%	37.34%
2005	1.028E+12	997270	74.79%	72.84%	70.69%		481499	35.05%	34.13%
2006	1.124E+12	1097035	77.51%	75.60%	73.78%		467268	32.22%	31.43%
2007	1.238E+12	1228625	80.91%	79.03%	78.46%		457637	29.92%	29.23%
2008	1.347E+12	1343892	84.02%	81.85%	81.65%		463710	28.92%	28.17%
2009	1.436E+12	1452240	93.92%	91.64%	92.68%		519097	33.95%	33.13%
2010	1.526E+12	1534188	93.90%	91.75%	92.27%		550327	33.87%	33.10%
2011	1.617E+12	1617132	93.98%	91.37%	91.36%		583576	33.91%	32.97%
2012		1698535			92.75%		609391		33.28%
2013		1769383			93.43%		611881		32.31%
2014		1853575			93.79%				

