

**Why Did Unemployment Disappear from Official  
Macro-Economic Policy Discourse in Canada?**

by

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# ***Why Did Unemployment Disappear from Official Macro-Economic Policy Discourse in Canada?***

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IAN STEWART WAS AT THE CENTRE OF MACRO-ECONOMIC policy making in Canada from 1966 to 1982. Through most of this period, the real hourly wages and living standards of most Canadian families rose significantly – in distinct contrast to Canadians’ experiences since then. A festschrift for Ian therefore offers the opportunity to consider the appropriate objectives of macro-economic policy, and the continued relevance of his work as macro-economic analyst and policy maker.

In particular, during Ian Stewart’s period of policy-making, it was taken for granted that a major objective of modern governments was macro-economic stabilization that would minimize occasional deficiencies in aggregate demand

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1 In revising this paper from the version presented at the author’s workshop, I benefitted greatly from the comments of Gordon Betcherman, Fred Gorbet, Talan Iscan, Brian Maclean, Tim Sargent, Andrew Sharpe and other participants in the workshop. Errors remaining are my responsibility.

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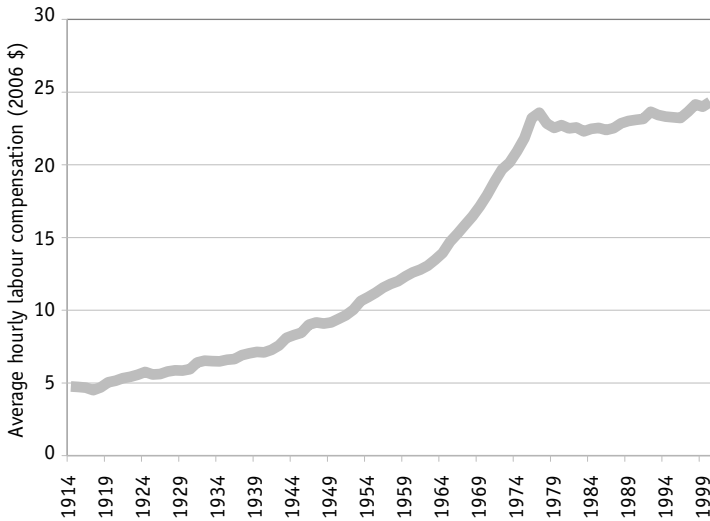
and lessen the social costs of the unemployment thereby produced. However, although unemployment has been relatively high over much of the period following Ian's departure from the Department of Finance, mention of it has virtually disappeared from macro-economic policy discourse. Since Ian's successors have been noticeably less successful in producing rising real wages and material living standards, the disappearance of unemployment from their radar screens has evidently not improved the ability of Ottawa decision makers to deliver these macro-economic policy outcomes. This essay therefore asks: why does official Ottawa now hardly mention unemployment? Is it possible that macro-economic outcomes would be better if more attention was paid to unemployment?

Section one of this essay starts by documenting the slowdown in real wage growth and family living standards of the last thirty years in Canada. Section two then contrasts the emphasis on unemployment as an important policy problem in official Canadian documents during the period before 1980 with the virtual disappearance of the issue from official documents which is characteristic of the present day. Section three surveys very briefly the evolution of economic thinking about unemployment and why macro-economic policy makers may have been educated to ignore unemployment. Section four then considers, and emphatically rejects, the possibility that unemployment is no longer discussed because economists have discovered that it is unimportant for human happiness and well-being. Section five examines briefly the evidence on the percentage of aggregate unemployment that is 'structural'. Although the macro policy levers which could produce faster real growth and lower unemployment have long been well understood, macro policy initiatives to reduce unemployment rates are considered unthinkable in official Ottawa, because low and stable inflation has become the over-riding goal of macro-economic policy and acceleration of growth is perceived to present risks of higher inflation. Section six therefore discusses whether the changing perceptions of relative risks and the incentive structure of macro-economic policy makers aligns well with the interests of most Canadians.

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## Chart 1

### Real (2000\$) Hourly Wage in Canada, 1914-2000



Source: CANSIM1 I603501 1961-2000; URQUHART 1914-1960.

### *Stagnation of Real Wages and Living Standards*

Ian Stewart earned his BA and MA from Queen's, and after attending Oxford and teaching at Queen's and Dartmouth, he received his PhD from Cornell in 1965. He joined the Bank of Canada in 1966 as a macro-economic model builder, moved to Treasury Board in 1972 and rose rapidly to become Deputy Minister of Finance for Canada between 1980 and 1982. His childhood and adult life were therefore spent in a Canada in which it was the norm for average real hourly wages to rise, year over year – and, as a professional economist, Ian participated in the policy decisions which contributed to rather rapid improvements in real living standards during the 1970s, as Chart 1 illustrates.

Chart 1 splices together (in 1961) two statistical series, the latter of which ends in 2000. Its most prominent lesson is the structural break in average real

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wage growth<sup>2</sup> at the end of the 1970s, as central banks in North America and Europe raised interest rates to dramatic heights to bring down inflation. The anti-inflation crusade succeeded in reducing consumer price inflation in Canada from an average 8.1 per cent per year between 1976 and 1980 and a peak of 12 per cent in June 1981 to an annual average 3.8 per cent between 1984 and 1988. Governor Crow's Hansen lecture of that year committed the Bank of Canada to "a path that leads towards underlying price stability". After another round of high real interest rates and the resultant induced recession, inflation in Canada reached its target range of approximately 2 per cent in January 1992. Since then, for the past twenty years, annual inflation has remained in the 1 per cent to 3 per cent range. Over the 1991-2010 period, the average annual inflation rate was 2.01 per cent.<sup>3</sup>

Chart 2 documents the time path of average real wages for salaried and hourly paid employees over that period and confirms the continued stagnation of average real wages. Between 1991 and 2010 there was some improvement in the average hourly real earnings of salaried employees (an average growth rate of 0.8 per cent per annum), but much less for hourly paid workers (0.3 per cent).

How does this performance compare with other historical episodes in Canada? During the 1951-1971 period, the inflation rate averaged 2.2 per cent., the national unemployment rate averaged 4.9 per cent and real hourly compensation more than doubled, growing at an average 3.3 per cent annually. During the 1967 to 1977 period, when concern about inflation surged because the all items Consumer Price Index rose at an average rate of 6.2 per cent, the national unemployment rate averaged 5.9 per cent, but real hourly wages were growing at a compound annual rate of 3.97 per cent. Compared to either

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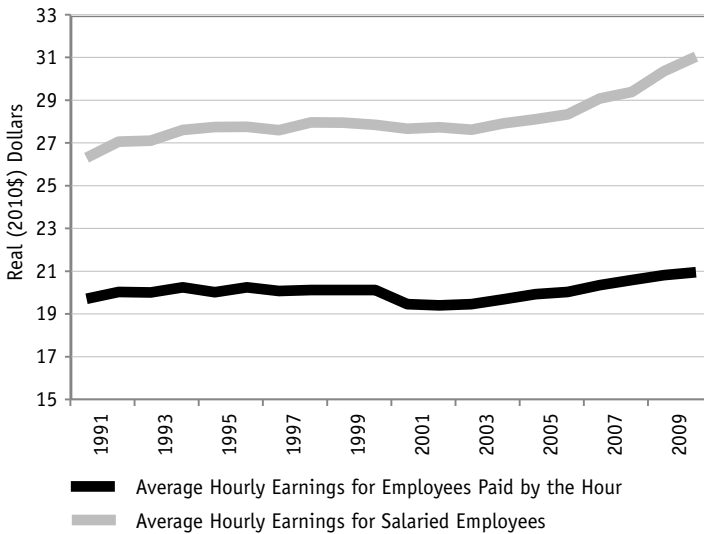
2 Throughout this paper, real wages are calculated as (nominal hourly wages) / (Consumer Price Index - CANSIM v41693271 Canada; all items). However, the wage concept underlying Chart 1 is total hourly compensation (i.e. including the cost of employer contributions to pension plans, health benefits and premiums for Employment Insurance and Workers Compensation) while Charts 2 and 3 refer just to hourly earnings, not including such costs. Sharpe *et al.* (2008) document the rising share since 1961 of Supplementary Labour Income in total hourly compensation.

3 Consumer Price Index - CANSIM v41693271 Canada; all items.

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## Chart 2

### Average Real Hourly Wages, Canada, 1991-2010



Source: Statistics Canada, CANSIM Tables 281-0030, 281-0036, and 326-0021.

period, growth in real hourly wages during the last twenty years has been pitifully small.

Chart 3 presents the real and nominal trend in the overall index<sup>4</sup> of the average hourly earnings of all employees. The steady increase in average nominal hourly wages, at approximately the rate of inflation, masks (with a slight uptick since 2006) the essential constancy of average real hourly wages. Although the unemployment rate has fluctuated significantly over the last twenty years, this has primarily been fluctuation over a range of unemployment rates that has not been so low as to produce enough demand pressures to bid up average real hourly wages. For hourly paid workers, expressed in 2010 dollars, the average hourly real wage in 2004 (\$19.68) was virtually identical to that in 1991 (\$19.71). Only when the national unemployment rate dipped below 7 per cent

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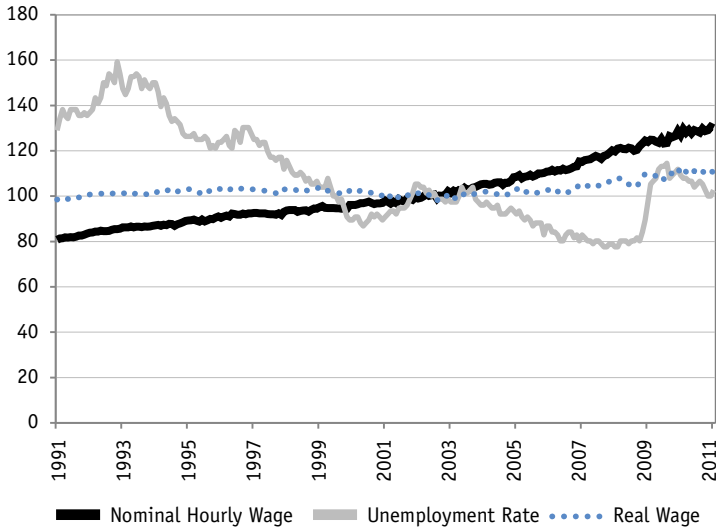
4 Chart 2 presents average hourly earnings including overtime for employees paid by the hour (salaried). Chart 3 shows the fixed weighted index of average hourly earnings for all employees (SEPH), excluding overtime. Both are derived from the Survey of Employment, Payrolls and Hours.

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### Chart 3

#### Average Hourly Wages and Unemployment (All Workers), Canada, 1991-2011

(2002=100)



Source: Statistics Canada, CANSIM series v1606080 and v2062815.

during 2005-2008 was there an appreciable tendency to rising average real hourly wages.

Real average weekly earnings in Canada did rise a bit and fall again between 1992 and 2003 before beginning a clear upward trend after 2003 – but data on weekly earnings mingle the impact of changes in the availability of paid work hours and any changes in the real price of labour time. As an indicator of the trade-off for families between paid work and household production or leisure, and the improvement of material living standards over time, the real hourly wage has clear conceptual advantages.

However, a major disadvantage of Charts 1 to 3 is their use of the mean as a sufficient summary statistic for the distribution of hourly wages. In the statistical literature, a commonly expressed opinion is: “The median is often regarded as a more appropriate measure of location than the mean when variables with a highly skewed distribution, such as income, are studied.” (Kuk and

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Mak, 1989, p. 261). It is well known that the distribution of wages has always been highly skewed, but the fact that it has become much more skewed in recent years (see Atkinson and Piketty, 2007) implies that data on average wages or earnings are increasingly misleading as indicators of trends in the living standards of most citizens.

Trends in the real income<sup>5</sup> of each income quintile between 1980 and 2005 have analyzed by Heisz (2007) and Osberg (2008). They document a clear contrast between the stagnancy of real incomes within the bottom four quintiles – i.e. the bottom 80 per cent – and the increase in the average real income of the top 20 per cent (which is actually concentrated in the top percentile). As Murphy and Wolfson (2007) and Veall (2010) have documented, income gains in Canada have been concentrated at the very top, particularly within the top 1 per cent. Income gains there have pulled up the average of the top quintile, and the average of all incomes, but have left most household's incomes unchanged.<sup>6</sup>

Hence, if one of the objectives of macro-economic management is to increase material living standards over time, and if the criterion of success is person-weighted, then it appears fairly evident that the macro-economic managers who succeeded Ian Stewart at the centre of official Ottawa have not been particularly successful.

If living standards had increased, one could of course have debated the relative importance of macro policy decisions. Over this period, the Canadian population increased substantially in education levels and the Baby Boomers aged into their most productive years – so both demographic trends and

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5 After tax equivalent income per person is the closest one can get to a measure of material standard of living, but trends in it are influenced by trends in household size and composition and by tax and transfer policy changes, as well as by the supply, demand and pay for labour of individual household members.

6 As Veall (2011) and others have noted, large increases in labour income among the top 1 per cent are an important part of their increase in aggregate income share. Such increases have pulled up the average hourly real wage of salaried workers (Chart 2) and the overall index of hourly wages (Chart 3). Because hourly paid workers are extremely unlikely to be in the top few percentiles of the wage distribution, the trends in their average real hourly earnings presented in Chart 2 have not, for this reason, changed as an indicator of the central tendency of the distribution of hourly wages for this class of workers.



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greater average levels of human capital should have produced rising average real hourly wages. As well, an increased capital/labour ratio and substantial technological change should have increased the marginal productivity of labour, and hence wages. Over the last thirty years, a long series of micro-economic reforms have also aimed at attaining great market efficiency – e.g. deregulation, free trade (FTA and NAFTA and WTO), privatization of Crown corporations, lower taxes and massive cuts to unemployment insurance and social assistance. These market-oriented reforms and improvements in inputs and technology could have claimed partial credit, had an increase in living standards for most people been observed – but it wasn't.

One possible response is to argue that “times were tough all over” – so what does Canada's macro-economic performance look like when compared to that of other affluent nations? Chart 4 presents the trends in Luxembourg Income Study (LIS) data on average annual growth rate of median real after tax equivalent household income, matched with comparably dated trends in GDP per capita.<sup>7</sup> Appendix 1 presents the same information in tabular form.

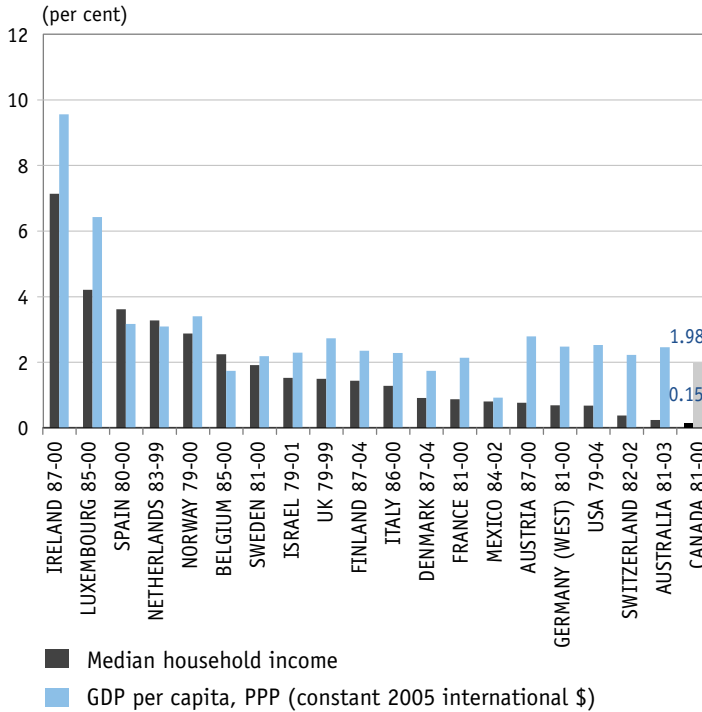
For Canadians, it is particularly notable just how bad, in comparison to other high wage nations, Canada's actual performance in raising median living standards has been.<sup>8</sup> As Chart 4 illustrates, in this group of 20 OECD nations, Canada came dead last in terms of median real income growth – by a solid

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7 Atkinson and Brandolini(2001: 771) have called the LIS “the gold standard” for household income comparisons, because of its standardization of coding of the micro-data assembled from individual country surveys. Using LIS data offers the assurance that the same income concept is being compared, and the same adjustments to money income to account for taxation and possible differentials in household size are used (see <http://www.lisproject.org/keyfigures/methods.htm>). The disadvantage, for the analysis of long term trends, is that only a few countries had high quality household surveys twenty five years ago and one must rely on data sets from individual country surveys, which are not always done in exactly the same year. GDP and GNI data taken from World Development Indicators Online (WDI).

8 In most cases, the average rate of growth of GDP per capita has exceeded the rate of growth of median income – but not in all. Spain, the Netherlands and Belgium were exceptions.

**Chart 4**  
**Real Mean and Median Income Growth by Country**  
 Average Annual Growth Rates



Source: Statistics Canada, CANSIM series v1606080 and v2062815.

margin. If the criterion of macro-economic performance is “to contribute to (...) rising living standards for Canadians”,<sup>9</sup> median real income (adjusted for household size, after taxes and transfers) is a better indicator than GDP per capita – and by that criterion, Canada’s post-1982 performance is particularly bad, relative to both previous Canadian performance and that of other developed nations.

As Sharpe *et al.* (2008) note, changes in the average real wage over time are the sum of changes in labour productivity, labour’s share of national income

9 “The goal of monetary policy is to contribute to solid economic performance and rising living standards for Canadians by keeping inflation low, stable, and predictable.” <http://www.bank-banque-canada.ca/en/about/do.html>

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and labour's terms of trade.<sup>10</sup> In the long run, labour productivity trends are crucial, but as they point out: "the median earnings of full-time, full-year workers in Canada rose only \$53 dollars, from \$41,348 (2005 dollars) in 1980 to \$41,401 in 2005. Over the same period, total economy labour productivity gains were 37.4 per cent" (Sharpe *et al.*, 2008, p. 17). As they demonstrate, in an accounting sense, a fifth of this divergence can be explained by measurement issues and another fifth by a decline in labour's share of national income, while 27.6 per cent can be ascribed to the increase in earnings inequality and a third is accounted for by a decline in labour's terms of trade.

However, in an economic sense, these components are unlikely to be independent. Specifically, slack labour markets can be expected to produce rising inequality among workers (which increases the divergence between median and average earnings) *and* a decline in labour's share of national income and slower growth in labour productivity (since employers have less incentive to economize on a not-so-scarce input and the success of training programmes and other labour market interventions depends heavily on job availability). Although Canada's low productivity growth rate has been the target of structural reform initiatives from free trade to deregulation, the possibility remains that low unemployment may be crucial – and this policy option also provides a clear answer to the question Sharpe *et al.* ask (2008): "If most Canadians are not seeing the benefits of labour productivity growth in the form of higher real wages, why should they support policies favouring productivity growth?" (p. 26).

## *Out of Sight, Out of Mind?*

### Unemployment and the Changing Rhetoric of Canadian Public Policy

In 2011, and for some years previously, the *Monetary Policy Report (MPR)* of the Bank of Canada has presented a quarterly analysis of the key issues and prospects affecting the Canadian economy. The *MPR* analyzes international trends in interest rates, inflation rates, US household savings, US housing

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10 The ratio of the GDP deflator to the Consumer Price Index – which can be seen as the price of the output produced by workers relative to their cost of living.

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markets, global commodity prices, global financial markets, oil prices, the current account, Canadian financial conditions and much else. The *MPR* also presents forecasts of what the Bank of Canada considers to be key macro-economic variables, such as the components of GDP growth and inflation. No forecast of unemployment is presented. Indeed, unemployment is often not mentioned at all. To be precise, a word search for “unemployment” in the Fall issues of the *Monetary Policy Report* between 1995 and 2009 obtained zero ‘hits’ in 5 years, one hit in each of 9 years and two hits in one year (an average frequency of 0.73). The recession produced 11 hits in 2010. By contrast, the word “inflation” appears quite frequently – for example, 105 times in the November 1996 issue (when national unemployment was 9.6 per cent and inflation was 1.7 per cent).

Presumably, in presenting an analysis of Canada’s macro-economic situation, one discusses what one considers to be important and ignores what is unimportant. In the January, 2011 issue of *MPR*, unemployment in the United States is mentioned four times. Unemployment in Canada (then at 7.8 per cent) is mentioned only once – not as something important in itself,<sup>11</sup> but as an indicator, among others, of “the persistence of slack in the labour market”. Although this issue was published at a time when emergence from the recession continued to be unsteady, the quarterly *Monetary Policy Report* of the Bank of Canada contained forecasts of inflation, GDP growth and other economic variables, but the unemployment rate was apparently considered too unimportant an aspect of the Canadian economy to be worth predicting.

Nor is this lack of attention to unemployment unusual. In the Federal Budget of 2008, for example, the word “unemployment” appears only once. In the Economic Statement of October 2007, unemployment is mentioned twice, to congratulate the then lowest unemployment rate in 33 years (6.1 per cent), and to express the expectation that it would hold at 6.2 per cent in 2008 and 2009 and average 6.0 per cent from 2010 to 2012. By the time of the 2009 federal budget, the recession had forced some consideration of unemployment back

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11 It is an interesting commentary on the attitudes of public officials in Canada that the US unemployment rate is more frequently mentioned than the Canadian unemployment rate, in a macro-economic projection of the Government of Canada.

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onto the agenda, and in 2010, when the unemployment rate was 8.3 per cent, the budget document noted “While unemployment remains a concern, the rise in the unemployment rate has been smaller than was initially forecast by private sector forecasters.”

However, unemployment is often just not mentioned by the makers of fiscal policy. Since 1995, “Budget in Brief” has provided a concise (on average 23 pages) synopsis of the challenges facing the Canadian economy and the policy responses of the federal government – in 10 of these 16 years, the word ‘unemployment’ does not appear.<sup>12</sup>

In Canada, this disappearance of unemployment from official documents summarizing important trends in the Canadian economy has been accompanied by institutional and professional amnesia about the possibility of low unemployment. Because the Labour Force Survey was substantially expanded in scope and sample size in 1976, and it is data from the new version of the Labour Force Survey which is readily available on CANSIM,<sup>13</sup> most analysts focus on the period since 1976. Over the period 1976 to 2004, unemployment in Canada averaged 8.8 per cent, and only once fell below 7 per cent. Although researchers who are willing to look up the numbers can retrieve data from earlier periods, that takes more work and as a consequence, earlier Canadian historical experience with unemployment has mostly disappeared down the memory hole. Hence, when the national unemployment rate reaches the 7 per cent range, this can look like good times, compared to the rest of the post-1980 historical experience – macro-economic managers can then say “mission accomplished” and turn to other issues.

By contrast, when the national unemployment rate rose from 5.4 per cent in 1974 to 7.1 per cent in 1975, this followed a long period in which it had fluctuated in the 4 per cent to 7 per cent range, averaging 5.3 per cent over the 1953-1975 period. Hence, 7 per cent unemployment was then seen as “high”

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12 ‘Unemployment Insurance’ was mentioned 13 times in 1995, when it was cut back substantially – and ‘unemployment’ was mentioned four times in one year, two times in two years and one time in each of three years,

13 Larger sample size meant major improvements in geographic and demographic disaggregation became possible after 1975, but the questions defining ‘job search’ and the criterion of unemployment remained unchanged. Hence aggregate national unemployment rates are quite comparable across surveys.

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– a major national problem. In a major study, *People and Jobs*, the Economic Council of Canada discussed the meaning of the unemployment rate as an indicator of financial hardship (in the context of the 1971 revisions to Unemployment Insurance and the increasing prevalence of dual earner households) and cyclical, structural, frictional and seasonal components of its evolution over time. In government documents of the day, the wisdom of reducing the unemployment rate was certainly seen as something debatable and as a process with distinct limits—minimization of inflation and maintenance of budget balance were clearly – also issues of major importance. But even if unemployment was not the only objective of macro-economic policy, it was at least mentioned, as one item on the list of potentially desirable outcomes.

### *How has Understanding of Unemployment Changed?*

Within Canadian labour economics, perspectives on unemployment have changed enormously over time. When, for example, Stephen Peitchinis wrote *Canadian Labour Economics* in 1970, he began the chapter on unemployment by quoting Keynes: “The outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary, and inequitable, distribution of wealth and incomes” (Peitchinis, 1970, p. 229).<sup>14</sup> In Peitchinis’ view, the Canadian economy had only attained full employment during the 1947-1953 period (when the national unemployment rate averaged 2.7 per cent), so the average unemployment rate of 5.0 per cent for the 17 years since then represented a massive waste of economic potential.

All the same, when Peitchinis detailed the costs of unemployment, he stressed its socio-economic dimensions, arguing that: “The social aspects of unemployment are not fully appreciated by those who do not have the misfortune to experience unemployment. Particularly so the socio-psychological aspects – the way the man feels, as a member of society, and as a family-man with responsibilities; and the way his wife and children feel. These are subjective matters, and, therefore, cannot be appreciated through observation; they must be felt” (Peitchinis, 1970, p. 230). He then goes on to provide a lengthy

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14 The quotation itself is the opening sentence of the concluding chapter of *The General Theory of Employment, Interest and Money* – see page 372 of MacMillan edition, reprinted 1964.

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vignette of a middle class man's unemployment experience. In 1970, Peitchinis was not unusual in his condemnation of unemployment – the competing labour economics text by Donald Woods and Sylvia Ostry had begun their chapter on unemployment by describing it as “the worst scourge of a free-enterprise system” (Woods and Ostry, 1962, p. 358).<sup>15</sup>

Modern labour economics texts (e.g. Benjamin, Gunderson, Lemieux and Riddell, 2007) are shorn of any hint of moral outrage at unemployment, or empathy for the unemployed. Micro-market models of job search behaviour, implicit contracts and risk sharing, efficiency wages and monitoring are rehearsed. Structural change and sectoral reallocation of labour are discussed. Major attention is paid to the debate on how the ‘incentives’ of unemployment insurance in Canada may have influenced behaviour. The expectations-adjusted Phillips curve and the long-run vertical NAIRU hypothesis are presented.

But although modern labour economics does an excellent job explaining why there is some unemployment in all market economies, it has a harder job explaining why Canada had as much unemployment as it has had over the past twenty years. The large literature on longer job search and greater leisure preference possibly motivated by unemployment insurance incentives has to confront the implications of the fact that the system was dramatically cut back as it morphed into Employment Insurance in the mid-1990s. Now that the Sargent index of unemployment insurance generosity has returned to 1950s levels of generosity,<sup>16</sup> the question of why Canadians have not also seen a return to 1950s levels of unemployment has not been answered satisfactorily.

On balance, the micro-economic evidence also does not answer the question of why Canadian unemployment was rarely above 7 per cent from 1950 to

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15 Woods and Ostry, as one might expect, do not make the casual assumption that the unemployed worker is male, and in fact discuss the differential socio-psychological implications of unemployment for male and female workers.

16 See James *et al.* (2007:11); also Grey and L'Italien (2001) who add consideration of uncertainty in job-finding and conclude “in labour markets where the arrival rate of job offers is low, individuals will tend to adopt a strategy of accepting the first available job offer because of the high risk of exhaustion of EI/UI benefits. This means that full use of benefits may reflect inability to find employment rather than a strategy to make full use of EI/UI benefits.”

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1975 and almost continuously above it thereafter. Judicious survey of the sectoral shifts and labour market rigidities argument leaves Benjamin *et al.* (2007) concluding “there is no evidence that the sectoral reallocation of low-skilled labour is behind the increase in aggregate unemployment” (p. 553). Similarly, Sargent (2000) earlier concluded “technological change cannot be held responsible for the poor overall performance of the Canadian labour market over the 1990s” (p. S122).

Considered purely as a micro-market issue, one might have thought that some structural changes of recent decades should have reduced both frictional and structural unemployment. For example, greater use of part-time and contingent employment relationships now enables firms to match more exactly paid hours of employment and the timing of labour demand. The percentage of workers unionized is now lower and the percentage self-employed is now higher than it was in the 1960s. The advent of internet-based job search (see Kuhn and Skuterud, 2004) has increased the speed with which labour market matches can be found and tele-commuting by internet has lessened the necessity for the supply and demand for labour to be geographically matched. Cheap air travel also now enables long-distance commuting (e.g. the new-found popularity of Cape Breton/Fort McMurray travel) to supply some of the labour required for resource boom development. In many respects, Canada’s labour market has become much more flexible than it was 50 or 60 years ago – but unemployment is now substantially higher.

In analyzing unemployment, a huge amount of micro-data based economic research over the last thirty years has examined the relative probability that an individual worker of particular characteristics will enter or leave unemployment. A generation of labour economists has debated the relative size and statistical significance of coefficients on particular variables (with special attention paid to variables summarizing ‘incentives’ to job acceptance). But these models of which type of person is most likely to accept a job cannot explain the number of jobs which employers have available. Analyses of the relative individual probability of unemployment therefore cannot explain the



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aggregate level of unemployment.<sup>17</sup> And since the number of available jobs depends on the demand for labour by firms, which is in turn derived from the level of firms' sales and the demand for goods and services, there is no escaping the role of macro-economic demand management in determining the level of aggregate unemployment at any point in time.

In the 1960s, unemployment was part of the macro-economic debate, because the discussion of policy choices often started from the idea of a 'trade-off' between inflation and unemployment (see, for example, Bodkin *et al.*, 1966). Both inflation and unemployment were thought to be important policy objectives, and "Phillips Curve" estimates of their empirical relationship were often interpreted as a menu for policy choices – at least in the short-run.<sup>18</sup> However, during the 1970s the role of inflationary expectations was increasingly emphasized. Overwhelmingly, since the early 1980s the "standard view" of the options facing macro policy makers became that of "no long-run trade-offs" – that there is a unique level of potential output and unemployment driven by some variant of the expectations-augmented Phillips curve with a vertical long-run NAIRU (Non-Accelerating Inflation Rate of Unemployment). And if we are willing to ignore the short run and if there is only one possible unemployment rate in the long run and many possible inflation rates, it is understandable that policy discussion should focus on the perceived available choices (i.e. inflation).

Exhibit 1<sup>19</sup> illustrates the idea. It is drawn in (output, inflation) space to represent the presumed relationship between aggregate output and inflation. The line labelled LRAS (Long Run Aggregate Supply) in Exhibit 1 can alternatively be called "Potential Output", and macro-economic models often use the notation of referring to actual output at a point in time as  $Y$ , while potential output is  $Y^*$ . In structural models with micro-economic foundations, estimates

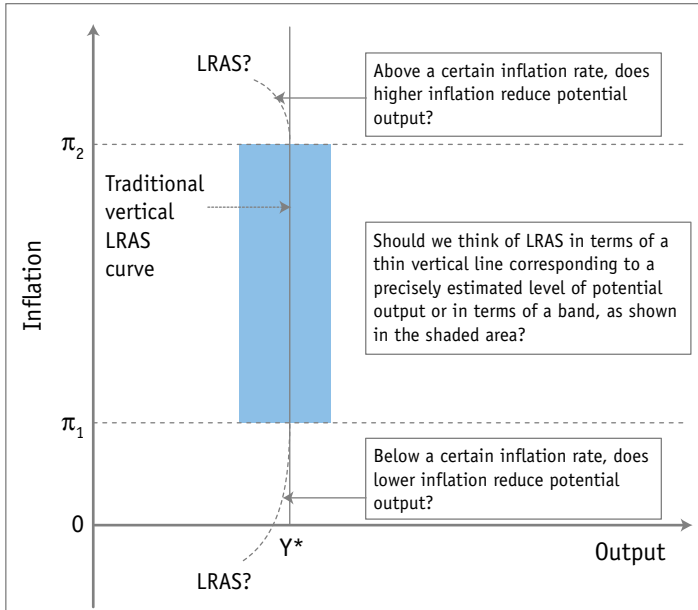
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17 Specifically, in multiple regression cross-sectional models of individual unemployment, the size of the intercept remains unexplained. Similarly, in panel data the size of the dummy for year of observation is not explained.

18 Fortin (2010, p. 6) notes that the Governors of the Bank of Canada during the 1960s were well aware of the feedback of actual inflation into inflationary expectations, market behaviours and long term equilibrium outcomes, even if their arguments were not presented in formal mathematical terms.

19 See Frank *et al.* (2009, p. 293)

## Exhibit 1



of potential output are often derived directly from some estimate of the NAIRU, so one can use the notation  $Y^* = f(\text{NAIRU})$ . An alternative perspective in macro modelling is less theory-driven and uses techniques like the Hodrick-Prescott filter to mine inflation and output data for some estimate of potential output (i.e.  $Y^* = g(X)$ ).

However, whatever the intellectual origins of a specific empirical estimate of potential output, the key idea in Exhibit 1 is the expectation that if actual output exceeds potential output for any length of time (i.e.  $Y > Y^*$ ), inflation will start to accelerate. Although unemployment will be lower than it would otherwise be as long as  $Y > Y^*$  continues, this is seen as a purely temporary benefit, which comes at the cost of accelerating inflation – an outcome which is to be avoided at all costs for a central bank whose mandate is solely to control inflation. For analysts raised in this tradition, macro-economic “risk” then comes to be seen solely as the risk of being above the inflation target. A “conservative” approach to macro-economic policy is then interpreted as minimizing

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the risk of inflation, *irrespective of real output or unemployment outcomes*. Concern about unemployment thus drops below the radar.

Although long dominant in official Ottawa, this perspective has not gone unchallenged in the wider world.

Logically speaking, one can only arrive at the long run future by going through the short run. If outcomes in the short run have long term consequences (e.g. spells of unemployment that last long enough to atrophy job skills such that the unemployed eventually become the unemployable), then even if the NAIRU is vertical in the very long run, an unemployment/inflation trade-off can last for an appreciable period of time. As Layard, Nickell and Jackman (1991) noted, the literature on “hysteresis” in aggregate unemployment was motivated by European experience of high unemployment in the 1980s and carries the implication that the costs of excess unemployment (when  $Y < Y^*$ ) may persist for many years.

In the 1990s, as low inflation became embedded in many western nations, there was also a stiff debate about whether the NAIRU was still vertical at very low inflation rates. Akerlof, Dickens, and Perry (1996) noted that if workers resist nominal wage cuts, but do not quit their jobs when the rate of inflation exceeds the rate of growth of nominal wages, then economies with higher inflation have more real wage flexibility than economies with very low inflation. This implies that potential output may be lower, in the long term, if inflation is kept low – as represented by the bend in the NAIRU in the dashed line at the bottom of Exhibit 1.<sup>20</sup> Fortin (2010) surveys the Canadian evidence and notes that such a non-linearity can explain the “missing deflation” of the early 1990s recession in Canada – when, despite continuing high unemployment, low inflation never actually turned into deflation. In general, when nominal wages are downwardly rigid for employed workers, high unemployment (i.e.  $Y < Y^*$ ) does not actually produce declining wages and prices, hence low inflation can be consistent with a range of unemployment rates.

In addition to these old debates, the financial crisis of 2008 and the subsequent recession has produced new uncertainties. In 2007, macro-economists

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20 The dashed lines at the top of Exhibit 1 are meant to indicate the possibility that hyper-inflation may have more severe costs for potential output than ‘normal’ inflation rates – but the definition of hyper-inflation is uncertain.

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may have been talking of the Great Moderation and congratulating themselves on how successful macro-economic policy had been in eliminating cyclical fluctuations, now that low and stable inflation had become the sole target of central banks in many parts of the world – but events since then have destroyed that complacency. Some influential voices in academia are now questioning the uniqueness of macro-economic equilibrium, and framing models in which any unemployment rate may be a steady-state equilibrium, since mutually consistent expectations can occur at any number of real growth rates (Farmer, 2011).

All these perspectives are theoretical critiques of the vertical NAIRU concept, and have in common the implication that, particularly in a low inflation environment, it may be more useful to think of a band of unemployment rates corresponding to a particular inflation rate, rather than a specific, uniquely defined unemployment rate unaffected by past macro-economic events or the current level of inflation.

As well, in practice policy makers have to make their decisions using *estimates* of future output, potential output and of the NAIRU. Setterfield, Gordon and Osberg (1992) demonstrated that minor changes in plausible specifications of the estimating equations implied alternative NAIRU estimates which spanned the historical range of observed unemployment rates.<sup>21</sup> Both monetary and fiscal policy decision makers know that decisions must be taken now, but will affect actual output and employment sometime in the future, with significant, and often uncertain, lags, and with the possibility of unforeseeable events (like wars, insurrections or earthquakes) occurring in the interim. If estimates of future outcomes in both inflation and unemployment are uncertain, then decision makers have to trade off *risks* of undershooting or overshooting on both dimensions.<sup>22</sup>

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21 Any given econometric estimate also has some level of statistical uncertainty surrounding estimates of parameter values – an uncertainty surrounding estimates of the location of the NAIRU which underlies the shadings of confidence interval bands around a central estimate of potential output which can occasionally be seen in the *Monetary Policy Report*.

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Hence, one way of summarizing the policy maker's problem is to ask: "How thick is the chalk with which you draw the NAIRU?"<sup>23</sup> If there is a finite range of unemployment rates consistent with non-accelerating inflation, what is the output gain associated with being at the bottom edge of that range, rather than at the top end?

Logically, potential output ( $Y^*$ ) and the NAIRU must have some finite "thickness". No theoretical framework tells the policy maker which units of measurement to use, but they do have to use forecasting models to decide if actual output is likely to exceed potential output, or not (i.e. to distinguish between  $Y=Y^*$  and  $Y \leq Y^*$ ). Although the computer output from these models can print estimates of expected future GDP to any desired number of decimal places, it would make no sense at all to pretend that one could predict future GDP to the dollar, or even to the nearest million dollars. It is hardly credible that inflation in a \$1.7 trillion economy would suddenly accelerate if aggregate demand was a million dollars (i.e. 1/1,700,000) "too high". Hence, some larger unit of measurement is inescapable, but should one think of  $Y = Y^*$  as measured to the nearest billion, or the nearest ten billion, or the nearest trillion? Correspondingly, is the NAIRU to be thought of as having seven decimal places (e.g. 5.1531472 per cent),<sup>24</sup> or one decimal place (e.g. 5.2 per cent) or as a range (e.g. 4 per cent to 6 per cent)? Although in Canada the habit is to produce unemployment statistics with one decimal place, this is nothing more than "the way it has always been done".

If the NAIRU is better thought of as a range, then there is a social benefit – in output, tax revenue and human happiness (see section 4 below) – to being at

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22 Any point estimate of future actual GDP ( $Y$ ), and any point estimate of future potential output ( $Y^*$ ) from a given model, will have associated standard errors of estimate – call them  $\epsilon$  and  $\epsilon^*$ . If one uses the subscript T to denote the "true" parameter (whatever its units of measurement), the policy maker has to work with estimates (i.e.  $Y = Y_T + \epsilon$  and  $Y^* = Y^*_T + \epsilon^*$ ), while any impact on future inflation depends on actuals (i.e.  $Y_T - Y^*_T$ ). Since choosing a policy variable that influences  $Y_T$  has implications for both actual unemployment and inflation, one cannot avoid weighing relative risks (i.e.  $\epsilon$  and  $\epsilon^*$ ).

23 I owe this phrasing to Chuck Freedman.

24 Note that even a number like 5.1531472 really summarizes a range (5.15314715 to 5.15314724).

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the bottom end of that range, and a corresponding risk (of possible inflation) to macro policy makers who probe for that end. If, on the other hand, policy makers are content with the top end of the range, the risk is that unemployment will be too high, and growth will be slower than it could have been.

How large is the range of unemployment rates consistent with stable inflation? Peach, Rich and Cororaton (2011), using US data, estimate a Threshold Philips Curve Model and demonstrate its superior fit to US inflation dynamics. They conclude that the threshold for the unemployment gap to influence inflation is approximately 1.6 percentage points, plus or minus (i.e. a range of 3.2 percentage points in the unemployment rate is consistent with stable inflation in the United States).

The difference in annual GDP between being at the top or the bottom of the range of unemployment rates associated with stable inflation is rather large. Standard textbook estimates (see Blanchard and Johnson, 2010, p. 218) put the Canadian “Okun’s Law” relationship between percentage point reductions in unemployment and gains in GDP at 3:1. If the Peach *et al.* (2011) estimates of the range (3.2 percentage points) of unemployment rates associated with stationary inflation can be generalized to Canada, this implies a range of approximately \$163 billion in GDP, with an associated change of over \$50 billion in tax revenue. If the Okun’s Law relationship is similar to that in the United States (2.5:1), the GDP range would be smaller (roughly \$136 billion) but still very significant.

The crucial question is: how much weight do Canadian policy makers place on the risk that unemployment will be in the top end of the corresponding Canadian range – i.e. higher than it needs to be to maintain stable inflation? In Canada, unemployment estimates are not part of the announced objectives of macro-economic policy. Thus, although any macro policy that aims at a particular future level of output will have implications for both unemployment and inflation, it is only the inflation outcome that is discussed in official Ottawa’s macro-economic discourse. Hence, discussion in Ottawa of the perceived “risk” associated with policy choices no longer mentions the possible risk that policy will produce an output level that implies excessively high unemployment.

By contrast, in the United States the mandate of the Federal Reserve has continued to include minimizing unemployment, as well as controlling infla-

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tion, and it is commonplace to discuss both objectives. A concrete example of the importance of maintaining an official interest in unemployment levels came in the mid 1990s, when US monetary policy did not shy away from probing for the potential output limits of the US economy. Although the US NAIRU had previously been estimated to be around 6 per cent, the Americans discovered that inflation did not in fact increase when Greenspan Fed maintained monetary stimulus and the unemployment rate was allowed to fall – first below 6 per cent, then below 5 per cent. Running a risk of inflation produced, in this case, substantial benefits in lower unemployment and higher output that lasted for the better part of a decade.

Whenever actual output falls short of potential output ( $Y < Y^*$ ) unemployment will be greater than otherwise, while output (and the tax revenue derived from it) will be less. But when the mandate of a central bank is limited to inflation control, it is being told explicitly that these other costs to society are *not* to be considered when making monetary policy decisions.<sup>25</sup> If the Akerlof *et al.* critique of greater real wage inflexibility at very low inflation is at all valid, these other costs to society will be greater at lower rates of target inflation.

The rise in unemployment associated with aggregate demand shortfalls may not produce declining wages and prices and a moderation in inflation. To the extent that nominal money wages are inflexible downwards, excess supply in labour markets just produces more unemployment, at roughly unchanged real wages. (i.e. if  $Y \leq Y^*$ , unemployment rises, but inflation remains unchanged). But although macro-economic policy that produces excess unemployment is costly to Canadians, those costs are not considered in inflation targeting, which is surely a large part of the reason why macro policy makers in Canada perceive no need to talk about unemployment.

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25 Inflation control mandates are typically specified as a target range – in Canada, 1 per cent to 3 per cent in ‘core’ CPI. On average, actual outcomes in Canada have been very close to the middle of that target range. In principle, the larger the target range is, the greater is the potential latitude for policy makers also to consider other policy objectives (such as unemployment), but there is no hint in Bank of Canada documents that this is done.

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## *Is Unemployment Unimportant for Individual Well-Being?*

In present day labour economics texts in Canada there is little sense that unemployment is socially destructive. This is in distinct contrast with a large literature in social psychology (e.g. Kelvin and Jarrett, 1985). As Jahoda (1979) has put it:

There are latent consequences of employment as a social institution which match human needs of an enduring kind. First among them is the fact that employment imposes a time structure on the waking day. Secondly, employment implies regularly shared experiences and contacts with people outside the family. Thirdly, employment links an individual to goals and purposes which transcend his own. Fourthly, employment defines aspects of status and identity. Finally, employment enforces activity.

It is these objective consequences of work in complex industrialized societies which help us to understand the motivation to work beyond earning a living; to understand why work is psychologically supportive, even when conditions are bad, and, by the same token, to understand why unemployment is psychologically destructive.  
(p. 423)

Economists who pride themselves on their quantitative skills have often tended to dismiss the case study and vignette description methodology of much of this social psychology literature. However, in recent years, economists have also begun to question the perspective of Peitchinis' generation that experiences of unemployment are "subjective matters, and, therefore, cannot be appreciated through observation; they must be felt". Self-reported survey responses have become increasingly accepted as valid evidence. And an explosion of articles on self-assessed 'happiness' and 'life satisfaction' in the last decade has begun to remind many economists that unemployed people are often miserably unhappy as a result. Winkelmann (2006) is representative of a large literature in saying:

... individual unemployment has a large negative effect on subjective well-being. This mirrors the well documented



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effect of unemployment on physical health and on mental health. This negative effect appears to be causal: we know from panel data estimators that the association persists once we follow the same individuals over time, and thereby control for individual specific fixed effects. Neither is it the case that unemployed people have a completely different personality, or that they anchor their responses on the well-being scale in a way that is systematically differently from the way employed persons anchor theirs. Nor does it seem that there is an instance of reversed causation, i.e., that unhappiness causes unemployment (or, for that matter, that happiness leads to idleness).

It is also clearly understood that the negative effect of unemployment on well-being goes well beyond the effect that the income loss associated with unemployment can bring about. Indeed, the non-pecuniary cost of unemployment seem to exceed the pecuniary cost by far.

(p. 1)<sup>26</sup>

Leuchinger *et al.* (2008), among others, have also noted that higher unemployment decreases the self-reported well-being of the employed, as well as the unemployed, because “increased *economic insecurity* constitutes an important welfare loss associated with high general unemployment”. This accumulation of evidence on the unpleasantness of unemployment has undermined the foundations of perspectives which saw all non-work time as essentially similar, and pleasurable, and the voluntary choice models of unemployment built on those assumptions.

Recently, Helliwell and Huang (2011) have analyzed a very large (2.3 million) US sample and used multiple measures of well-being covering self-assessments of life, mental health and emotional experience. Their bottom line is that: “local unemployment has significantly negative effects on well-being among the entire population, including those who are still employed (p. 21).” Their results confirm the findings in Winkelmann and Winkelmann

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<sup>26</sup> See also Frey and Stutzer (2002), Di Tella and MacCulloch (2003), and many others.

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(1998) that the non-pecuniary effect of becoming unemployed is much larger than the effect stemming from income losses which the unemployed experience. Specifically, they estimate that “if the direct monetary loss of the unemployed is 1, then the additional SWB (Subjective Well-Being) loss of the unemployed is 5, while at the population level the spill-over effects is 10, making the total well-being costs of unemployment fifteen times larger than those directly due to the lower incomes of the unemployed” (Helliwell and Huang, 2011, p. 24).

In general, since the vast majority of Canadian households derive their market income almost entirely from labour earnings, it might be thought to be fairly obvious that increases in the price (i.e. the real hourly wage) at which they can sell their labour time is important to the material well-being of most Canadians. Since the unemployment rate is an indicator of the relative balance of aggregate supply and demand in the labour market, it indicates both the probability of being actually able to sell labour time at the going wage now and a signal of the likelihood that the real wage will increase in future periods. Hence, the unemployment rate always has had strong reason to be thought important as a predictor of individual material well-being.

However, Helliwell and Huang argue that the impacts of higher local unemployment go well beyond this. They control for the employment status of the respondent and note that the spill-over effects of unemployment could also come from worsening social conditions and economic prospects in local areas. They also examine the Clark (2003) hypothesis that when unemployment becomes very high, social norms change such that the stigma of being unemployed is lessened and the well-being gap between the employed and the jobless disappears. Their estimates “suggest that the gap will disappear at 48.5 per cent unemployment rate in the case of life satisfaction and 48.4 per cent in the case of mental health” (Helliwell and Huang, 2011, p. 30).

Interestingly, their data “does not provide any support to the hypothesis that more generous benefits narrow the well-being gap, regardless which measure of well-being and which replacement rate are used.” As they put it,

Similar to the European study in Di Tella *et al.* (2003), we uncover no evidence to support the view that unemployment benefits have made life too easy for the unem-

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ployed. To the contrary, we find the well-being gap to be greater in states that have higher benefit replacement rates (either measured at the legal maximum or at the average).

The literature on the impacts of unemployment on happiness is unanimous in finding empirically large and statistically highly significant negative impacts – Helliwell and Huang argue that their contribution is to use a very large sample of US data, a multiplicity of indicators of subjective well-being and a battery of robustness checks. Which raises the conundrum – now that we know more precisely than ever before that unemployment causes great unhappiness, why has it largely disappeared from official consciousness?

### *Is Most Unemployment Structurally Unavoidable?*

One possible reason for not talking about unemployment is that it might be unavoidable – if so, perhaps discussion of it would just add to the pain it causes. Could it be that most unemployment is “structural?”<sup>27</sup> Finance Canada has defined this as: “structural unemployment occurs when workers are unable to fill available jobs because they lack the skills, do not live where jobs are available, or are unwilling to work at the wage rate offered in the market.”

Osberg and Lin (2000, p. 141) argued that this definition implies that the number of available jobs – i.e. the number of vacancies for immediate hire from outside the firm – sets an upper bound to the extent of structural unemployment. At that time, the Workplace and Employee Survey asked a relatively small (748) sample of firms a question on vacancies, which implied that the vacancy rate was about 0.75 per cent of the labour force. Lin and Osberg also used an estimated relationship between the Help Wanted Index and the Job Vacancy Survey (which Statistics Canada discontinued in 1978) to impute a vacancy rate in 2000 of 0.45 per cent. They concluded:

The measurement of vacancies is important for micro-economic labour market policy design and macroeco-

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27 In April 2011, Michael Ignatieff, then leader of the Liberal party, in responding to a question about what a Liberal government would do for Canada’s unemployed, stated: “In Canada, there are people without jobs and jobs without people” and went on to talk about the importance of retraining. (CPAC broadcast, approx. April 7, 2011)

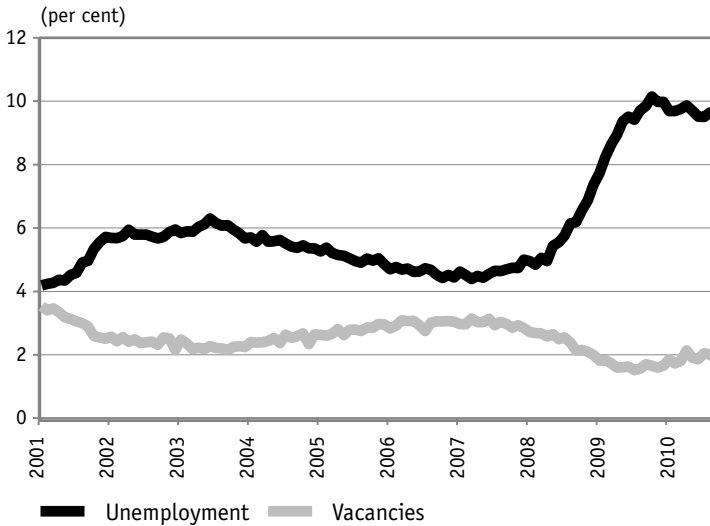
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conomic policy settings. Vacancies and the extent of structural unemployment could be systematically measured in Canada, but are not. The obvious conclusion is that perhaps it is time to get some better information on Canadian vacancies (...) Since the cost of better information is likely to be small compared to the cost of bad policy based on bad statistics, perhaps it is time to invest in some more knowledge about the extent of structural unemployment in Canada. (Osberg and Lin, 2000, p. S152)

In the United States, the Bureau of Labor Statistics has been publishing vacancy data from the Job Opening & Labor Turnover Survey (JOLTS) since January, 2001. Vacancies are defined in a manner analogous to unemployment: a position is considered a job vacancy if the firm is actively recruiting and has the funds available for immediate hire. The survey samples 16,000 business establishments nationally and asks a wide variety of questions surrounding the separation and hiring of workers. For a job to be counted as a job opening: (1) there must be a specific position and work available for that position, regardless of whether it is full-time or part-time, permanent or otherwise; (2) it must be possible for the job to start within thirty days, regardless of whether or not the firm is able to hire someone; (3) there must be active recruitment for workers outside of the firm in question.

Chart 5 is taken from Rai (2011) and plots the time path of unemployment and vacancies, both expressed as a percentage of the labour force, between 2001 and 2010. The vacancy rate in the United States is higher, as a fraction of the labour force, than the estimates of Osberg and Lin for Canada in the 1990s. In early 2001, when the US unemployment rate hovered just above 4 per cent, vacancies were relatively common, at around 3.4 per cent of the labour force. However, as one might expect, the vacancy rate has fallen sharply since 2008. In late 2010, the number of vacancies was only about a fifth of the number of unemployed people, implying that there is now significant room for expansion of employment in the US before further downward shifts in the

**Chart 5**  
**Unemployment and job vacancies as percentage of US labour force, 2001 to 2010**



Source: Rai (2011).

unemployment rate would be meaningfully constrained by ‘structural’ unemployment.<sup>28</sup>

When the US unemployment rate was similar to Canada’s current unemployment rate of 7.7 per cent, the JOLTS data indicate that the US vacancy rate was about six percentage points lower at 1.8 per cent of the labour force. Does this imply that there is now similar room for stimulative macro-economic policy in Canada? When we consider the cost/benefit ratio for retraining programs to equip unemployed workers for ‘available jobs’, how many such jobs are there? What type of jobs are these? Where are they? How much is it reasonable to invest in training? If we had good vacancy data in Canada,

<sup>28</sup> Note that the number of vacancies at any point in time includes both “structural” vacancies that cannot be filled from the local labour pool and “frictional” vacancies that will be filled by locally available workers. The vacancy rate is an *upper bound* on structural unemployment and should not be interpreted as an estimate of structural unemployment.

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we could distinguish between the demand-deficient and structural roots of unemployment and answer such policy questions with greater certainty – but such data has not been collected. When government could collect such data, but chooses not to, one has to presume that it either does not want to know or thinks the information to be of little value, because unemployment is not an important problem to analyze.

In the United Kingdom, the ONS Vacancy Survey began in April 2001 (results became National Statistics in June 2003).<sup>29</sup> On a monthly basis, rolled up to a three month moving average, it provides comprehensive estimates of the number of job vacancies across the UK economy. The survey asks employers how many job vacancies they have in total for which they are actively seeking recruits from outside their organisation, for example, by advertising or interviewing. In addition, statistics of Jobcentre vacancies, that is job openings notified by employers to Jobcentre Plus, are also collected from the Jobcentre Plus administrative system. In Australia, the Job Vacancies Survey provides vacancy data on an industry and state basis going back to 1983, and on a national basis to 1979.<sup>30</sup> The survey was briefly suspended during 2008-09, but has been continued since. The US, UK and Australian data should not be thought unusual – the OECD routinely publishes vacancy data for fifteen other countries.<sup>31</sup>

In Canada, by contrast, there has been no ongoing national survey of job vacancies since 1978. Historical data from 1971 to 1975 is available<sup>32</sup> but other data on vacancies is episodic and fragmentary. In early 2011, Statistics Canada ran a pilot survey<sup>33</sup> of 4,500 firms with questions on job vacancies that closely matched the JOLTS survey in the US. If and when an ongoing regular survey of vacancies is instituted, important data will become available. However, the data from this is, at best, some years in the future.

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29 See <http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=9390>

30 See <http://www.abs.gov.au/ausstats/abs@.nsf/mf/6354.0.55.001>

31 See OECD. Statextracts Registered Unemployed and Job Vacancies (MEI): Job Vacancies. <http://stats.oecd.org/index.aspx?queryid=250>

32 See <http://www.statcan.gc.ca/pub/11-516-x/sectiond/4057750-eng.htm>

33 See <http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDS=180&lang=en&db=imdb&adm=8&dis=2>

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If macro-economic policy makers in Canada had wanted to aim at producing national labour markets that were tight enough to produce rising real wages, but not so tight that an inflationary wage-price spiral would occur, then it would have appeared sensible to learn how tight the labour market is – how many vacancies exist – at any point in time. Many nations have found it worthwhile to collect such statistics – but for over thirty years Canada has not. Measurement of labour market tightness has evidently not been a priority, because reducing unemployment has not been an important enough policy goal.

### *Incentive Alignment*

The analysis of this paper is conditioned on the evidence that “downward nominal wage rigidity is an important feature of the Canadian labour market”.<sup>34</sup> In such a context, although wages do not necessarily fall when unemployment rises, average real hourly wages are unlikely to increase appreciably until employers have to start competing for employees. Hence, the perspective underlying this paper is the hypothesis that a necessary condition for the distribution of real hourly wages to shift up over time is a reasonably ‘tight’ national labour market.<sup>35</sup>

For roughly thirty years, the average real hourly wage has hardly changed in Canada, and the national unemployment rate has simultaneously been high by historical Canadian standards. This stagnation of real hourly wages is historically unprecedented, not explicable in terms of adverse trends in productivity-related worker characteristics and is an important part of the stagnation of median household income and material living standards. It coincides with a long period in which reducing unemployment has dropped off the list of stated priorities of macro-economic policy in Canada.

By contrast, during Ian Stewart’s career as a macro-economic policy maker, as throughout the earlier 1951-1971 period, both unemployment and inflation

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34 See Stark and Sargent (2003:18), among others. In a low inflation environment, of course, the distinction between downwardly sticky real and nominal wages becomes somewhat moot.

35 In the longer term, since there are distinct limits to any possible shift in labour/capital shares of national income, labour productivity must rise if real wages are to continue to increase. “Tight” labour markets encourage innovation which economizes on the now-scarce resource of labour.

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were viewed as appropriate targets of macro-economic policy. Aggregate demand management certainly did not aim just at unemployment minimization – between 1951 and 1971, the rate of inflation in Canada averaged 2.2 per cent annually. However, although it was well appreciated at the time that inflation could always be kept low if enough slack was maintained in commodity and labour markets, low inflation was thought to be no big accomplishment on its own. The skill of macro-economic policy making was then seen as keeping labour markets tight enough to ensure low unemployment and rising real wages, but not so tight as to produce unacceptable price inflation. Canadian policy makers succeeded in this for twenty years.

In the aftermath of the Vietnam War boom in the United States and commodity price inflation globally (especially the dual oil price shocks of 1973 and 1979), inflation in Canada accelerated – and extreme policy measures were adopted to bring it under control (i.e. wage and price controls, followed by 20 per cent + nominal interest rates). Real wages continued to grow strongly in the 1970s, but the achievement of inflation targets in the late 1970s was highly unsatisfactory and discussion of inflation came to dominate the macro policy agenda.

The occasion of this festschrift in honour of Ian Stewart is a useful time to reflect that Ian's departure from Finance in 1982 was at approximately the same time as a regime shift in official Ottawa's macro policy thinking, as the conviction became established that monetary policy should focus solely on inflation control. The growth of the debt/GDP ratio during the 1980-82 recession, combined with earlier tax policy changes, left public finances highly vulnerable to any increase in debt carrying costs. Hence when, in moving from 4 per cent to 2 per cent inflation, real interest rates were massively increased by the Bank of Canada in 1988-90, the interest burden of past debt sky-rocketed. This, added to the cost of the automatic stabilizers of the recession of the early 1990s, produced a major public debt crisis (see Osberg and Fortin, 1996). The expenditure cuts of the mid-1990s succeeded in erasing the federal deficit, but discussion of federal finances came thereafter to be dominated by a rhetoric of annual budget balance.

In this new policy environment, the possibility that fiscal policy might be used to reduce unemployment slipped from official consciousness – until late



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2008. Even then, it took an unprecedented level of threat to the political survival of the government of the day and the onset of what the IMF has called the worst global recession since World War II to resurrect fiscal policy stimulus to aggregate demand. Although in substance Canada's "Economic Action Plan" was as Keynesian a policy package as one can imagine, it resolutely refuses the label. Canadians are instead promised a quick return to federal budget balance on a year by year basis – there is no mention of what future unemployment rate is envisaged.<sup>36</sup>

Meanwhile, the Bank of Canada focuses solely on inflation control and seems not to have learned from the experience of the US Federal Reserve in the 1990s that it is possible to probe for faster growth without inflation – and to find it. Given the Bank's single-valued objective, it has no interest in "risking" any possibility of tight labour markets. With monetary policy aimed solely at inflation control and fiscal policy aimed solely at year by year budget balance, the unemployment rate has dropped off Canada's macro-economic policy agenda. Given the thirty year history of high unemployment this policy stance has produced, public policy expectations have adjusted. Discussion of whether the national unemployment rate could be significantly lower – e.g. less than 6 per cent for extended periods of time – just does not happen. It is considered wildly irresponsible to even imagine the possibility that stable prices and budget balance might be achieved at a range of unemployment rates, and that, if so, there are substantial real advantages to balancing a possible risk of inflation against a risk of perpetually low growth.

When unemployment, to the extent it is considered at all, is considered to be a micro-economic problem, it can be allocated to Human Resources and Skills Development Canada (HRSDC). Inflation control, as already noted, is the sole stated objective of monetary policy makers at the Bank of Canada. Annual budget balancing is the turf of Finance. In the tidy silos of Canadian economic policy, no agency is interested in aggregate demand stimulation that might, in general, tighten up labour markets. Indeed, a cynic might think that

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36 As Fred Gorbet has noted, in principle a Keynesian macro policy would balance the government budget over the business cycle – which implies running a surplus when the economy is at full employment. Year by year budget balancing, by contrast, amplifies cyclical shocks.

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if labour markets are kept forever slack, inflation control is easier, so at least one major institutional player in Canadian economic policy is unlikely ever to rock the boat and “risk” better real outcomes.

However, it does remain something of a puzzle why the constituencies of potential support for lower unemployment are so very feeble in Canada. It is easy to understand that advocates of labour’s interests (such as the Canadian Labour Congress) are today where they have always been in Canada – outside the circle of influence. Since Canadians have adjusted their expectations of labour markets to fit the realities of the last thirty years, it is also easy to understand acquiescence in the wider body politic. Even if unemployment causes a great deal of unhappiness, and even if real hourly wages are stagnant, it is all “the new normal” – nobody is protesting much because nobody expects anything more.

Nevertheless, if the rate of growth of aggregate output could be made marginally higher the Department of Finance would find it much easier to balance the federal budget. And although lower unemployment might produce the dreaded ‘labour market shortages’ so feared by the business media,<sup>37</sup> it would also produce more sales and output growth – and more profits. Historically, Canadian capitalism did very well when unemployment was low – even if capital’s share of national income can be marginally lower when labour markets are tight, the economic pie is growing much faster, so capitalists also gain from low unemployment. The lack of advocates of growth in the business community is thus a bit surprising. All in all, the continuing absence of powerful advocates for lower unemployment remains a puzzle.

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37 In the business media, the possibility of future labour market shortages due to demographic change has often been portrayed as something terrible for “the economy”, rather than as a trend that could produce rising real wages and better job choices for that vast majority of Canadians who are labour sellers, not labour buyers.

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## Appendix 1

### Income Growth, International Comparison

Country	Period	Median household income	GDP per capita, PPP (constant 2005 international \$)
		(average annual growth rate, per cent)	
IRELAND	87-00	7.14	9.56
LUXEMBOURG	85-00	4.21	6.43
SPAIN	80-00	3.62	3.17
NETHERLANDS	83-99	3.28	3.09
NORWAY	79-00	2.88	3.40
BELGIUM	85-00	2.25	1.74
SWEDEN	81-00	1.91	2.19
ISRAEL	79-01	1.53	2.29
UK	79-99	1.50	2.73
FINLAND	87-04	1.44	2.35
ITALY	86-00	1.29	2.28
DENMARK	87-04	0.92	1.75
FRANCE	81-00	0.87	2.14
MEXICO	84-02	0.81	0.93
AUSTRIA	87-00	0.77	2.79
GERMANY (WEST)	81-00	0.69	2.48
USA	79-04	0.68	2.53
SWITZERLAND	82-02	0.38	2.22
AUSTRALIA	81-03	0.25	2.46
CANADA	81-00	0.15	1.98