

# The Misery Index Returns

by Jason Clemens, Milagros Palacios, and Nathaniel Li



## Summary

■ The Misery Index, a combination of inflation and unemployment rates created by economist Arthur Okun, is resurfacing as a measure of interest across developed countries as inflation rates increase and unemployment remains relatively high.

■ Canada suffered from inflation rates that were routinely above 4 percent up until 1992 when the Bank of Canada was finally able to bring inflation under control. Canadians have enjoyed low inflation rates, ranging from near zero to under 3 percent from 1992 to 2020.

■ In 2021, inflation rates increased markedly and are expected to remain at their current level throughout 2022. While many argue the current inflation rates are transitory, meaning that they are short-term in nature, there are

genuine reasons to worry that higher inflation could be longer lasting.

■ Indeed, Canadians are now rightly concerned with inflation, our Misery Index, and our comparative performance with other industrialized countries.

■ The International Monetary Fund forecasts Canada to have the 4<sup>th</sup> highest inflation rate among 35 industrialized countries in 2021 and the 8<sup>th</sup> highest unemployment rate.

■ This results in Canada having the 6<sup>th</sup> worst Misery Index score (combined rates of inflation and unemployment) in 2021 out of 35 industrialized countries.

■ Such results should prompt much greater interest in both inflation and unemployment—and policies that can respond to both—by governments, particularly the federal government.

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## Introduction

Noted American economist Arthur Okun coined the phrase and created the “Misery Index” at a time when both inflation and unemployment were high (Nessen, 2008). Okun’s aim was to synthesize these two measures, inflation and unemployment, both of which impose serious costs on citizens, into one easily understood measure. Throughout the 1960s, ’70s and ’80s, as both inflation and unemployment remained high in many western countries, the Misery Index was front and centre, an often-discussed measure of the state of the economy. Since then, there has been further research building on the misery index as an important variable that includes it as a measure in well-being.<sup>1</sup> Indeed, some economists have expanded the index to include not only inflation and unemployment but also bank lending rates in a triple measure of misery (Hanke, 2018).

Thankfully, the Misery Index all but disappeared in the early 1990s as inflation was tamed and remained low, and unemployment in most countries trended downwards. However, there are now real worries about the rise of inflation and unemployment in Canada and other industrialized countries such that the Misery Index is being discussed once again.<sup>2</sup>

This analysis provides historical context for Canada’s inflation rate as well as comparing Canada’s 2020 and projected 2021 Misery Index with that of other industrialized countries. The aim of the essay is to provide Canadians with better context and information to understand

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<sup>1</sup> See for example, Welsch (2007).

<sup>2</sup> For a recent discussion and analysis of Canada’s expected performance on the Misery Index among industrialized countries, see Di Matteo (2021). Also see Mintz (2021, December 15) and Globerman (2021, December 4).

the real risks of both high inflation and unemployment.

## The historical context

Figure 1 provides national inflation rates (annualized) for Canada going back to 1977. As illustrated, Canada experienced two distinct periods. The first was plagued by high rates of inflation ranging from just under 4.0 percent in 1988 to 12.5 percent in 1981. This period of relatively high rates of inflation lasted until 1992.

Thereafter, Canada enjoyed relatively low inflation, with rates varying between almost zero and 3.0 percent. Ottawa projects an inflation rate for 2021 of 3.3 percent, which is worrying since it’s the highest level since 1991. The most recent monthly data (November) indicate that inflation is running at a year-over-year rate of 4.7 percent (Statistics Canada, 2021a). In other words, there’s a real possibility that Ottawa’s projections for inflation underestimate its severity and perhaps its longevity. Moreover, most private sector forecasts as well as the federal government’s own projections show inflation remaining relatively high at 3.1 percent in 2022 (Canada, Department of Finance, 2021). This is an important consideration since many government officials, including central bankers, initially (and in some cases still) characterize the increase in the inflation rate as only transitory, which has proven to be incorrect as higher inflation persists (Globerman, 2021).<sup>3</sup>

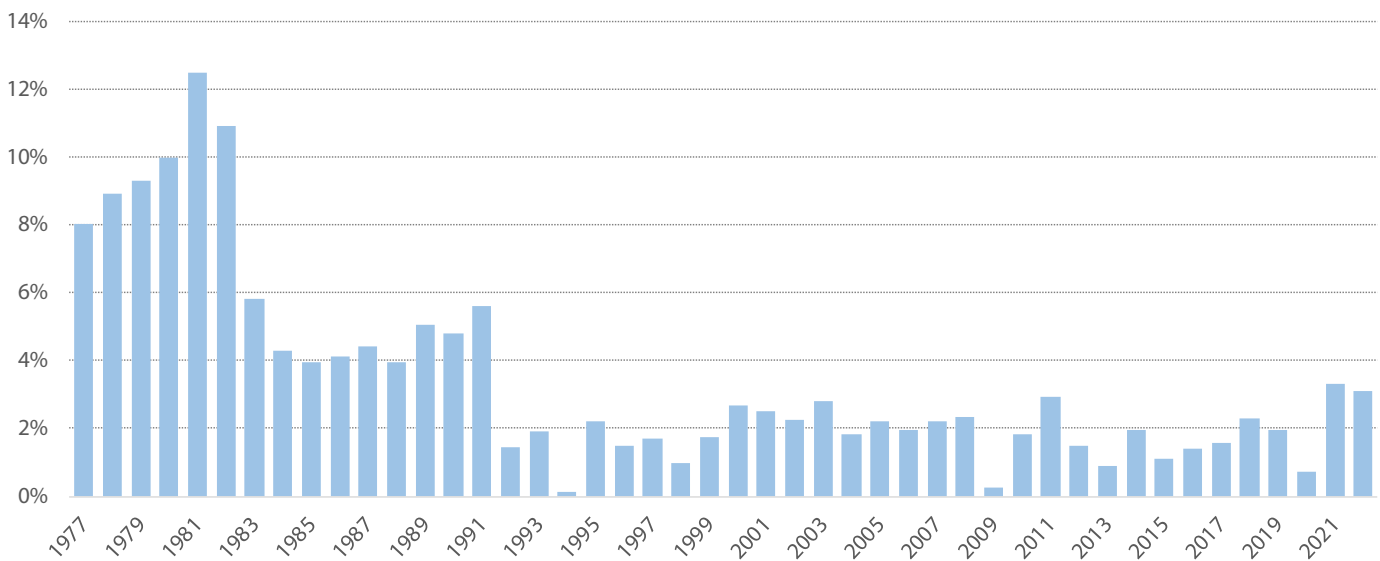
Figure 2 illustrates Canada’s Misery Index from 1977 to 2022 by combining the inflation rates shown in figure 1 with national unemployment rates. A similar pattern to figure 1 occurs—the

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<sup>3</sup> For a shorter, more concise summary of the argument made in this study, see Globerman (2021, December 4).

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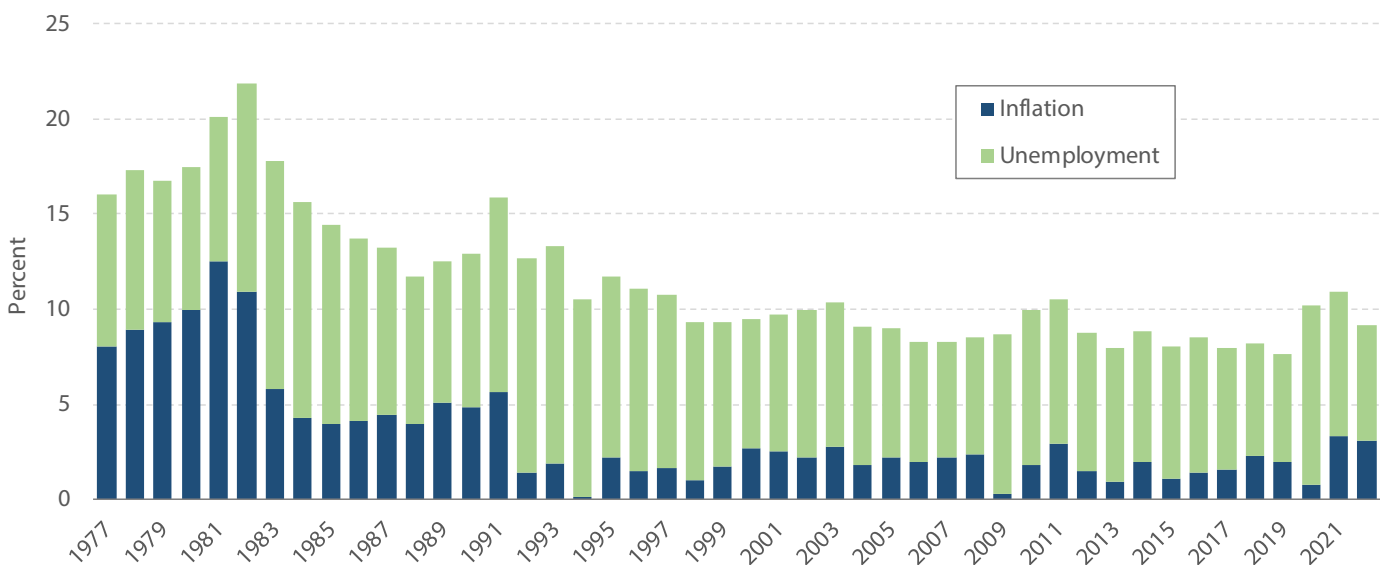
**Figure 1: Canada's Inflation Rate, 1977–2022**



Note: Figures for 2021 and 2022 are taken from the federal government's Fall Economic Update, released December 14, 2021 (Canada, Department of Finance, 2021).

Sources: Statistics Canada (2021b); Canada, Department of Finance (2021).

**Figure 2: Canada's Misery Index, 1977–2022**

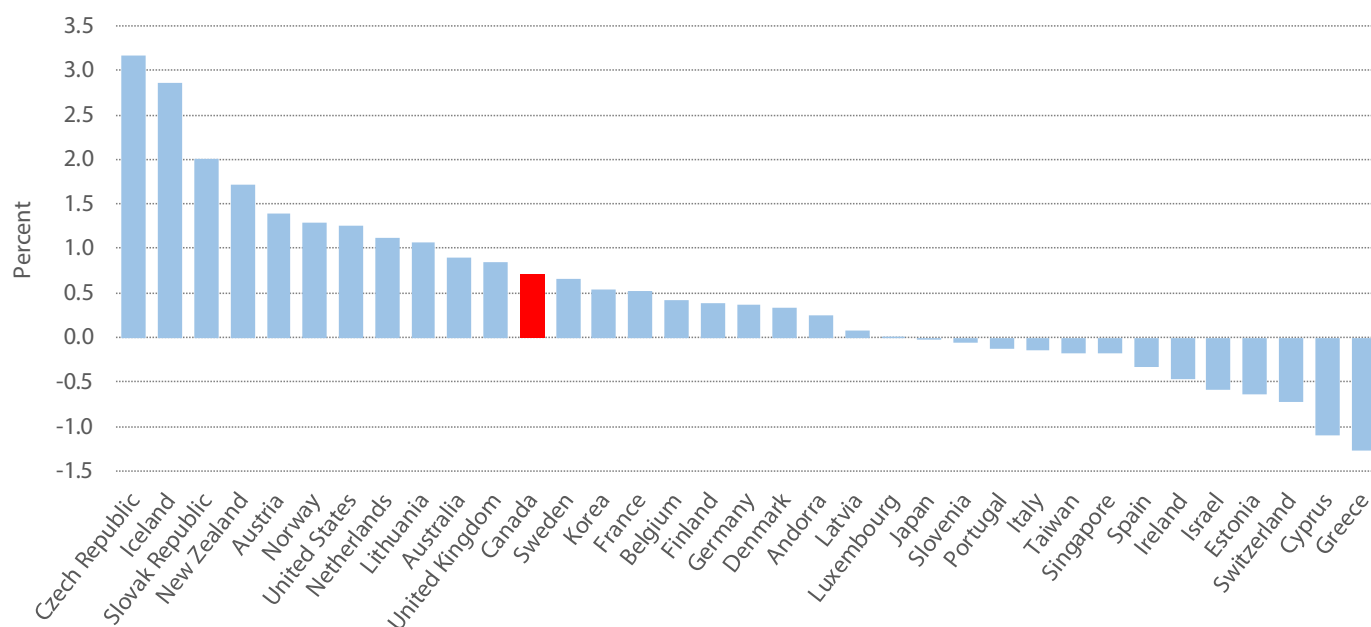


Note: Figures for 2021 and 2022 are taken from the federal government's Fall Economic Update, released December 14, 2021 (Canada, Department of Finance, 2021).

Sources: Statistics Canada (2021b, 2021c); Canada, Department of Finance (2021).

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**Figure 3: Inflation Rates for Industrialized Countries, 2020**



Source: IMF (2021).

Misery Index is generally higher in the earlier period up to the early 1990s. The principal reason for the decline in the Misery Index after 1991 is the marked reduction in inflation rates as shown in figure 1.

Unemployment rates remained stubbornly high for most of the period covered in Figure 2. For instance, unemployment remained above 7.0 percent from 1977 through to 2013 except for 2000 and a brief period before the 2008-09 recession. Unemployment rates trended downwards beginning in 2017, however. The main reason for the decline was, and remains, demographics and the aging of the population, which reduced the labour force relative to the overall population, rather than robust private sector job creation (Clemens and Palacios, 2018).

The increase in the Misery Index in 2020 was purely a result of the higher unemployment brought about by the COVID-induced reces-

sion. The increase in the index in 2021 and its projected increase in 2022, however, is driven by both stubbornly higher unemployment and a marked increase in inflation (see figure 1). Both the numbers in 2021 and 2022 as well as the potential trend for the future should be of concern.

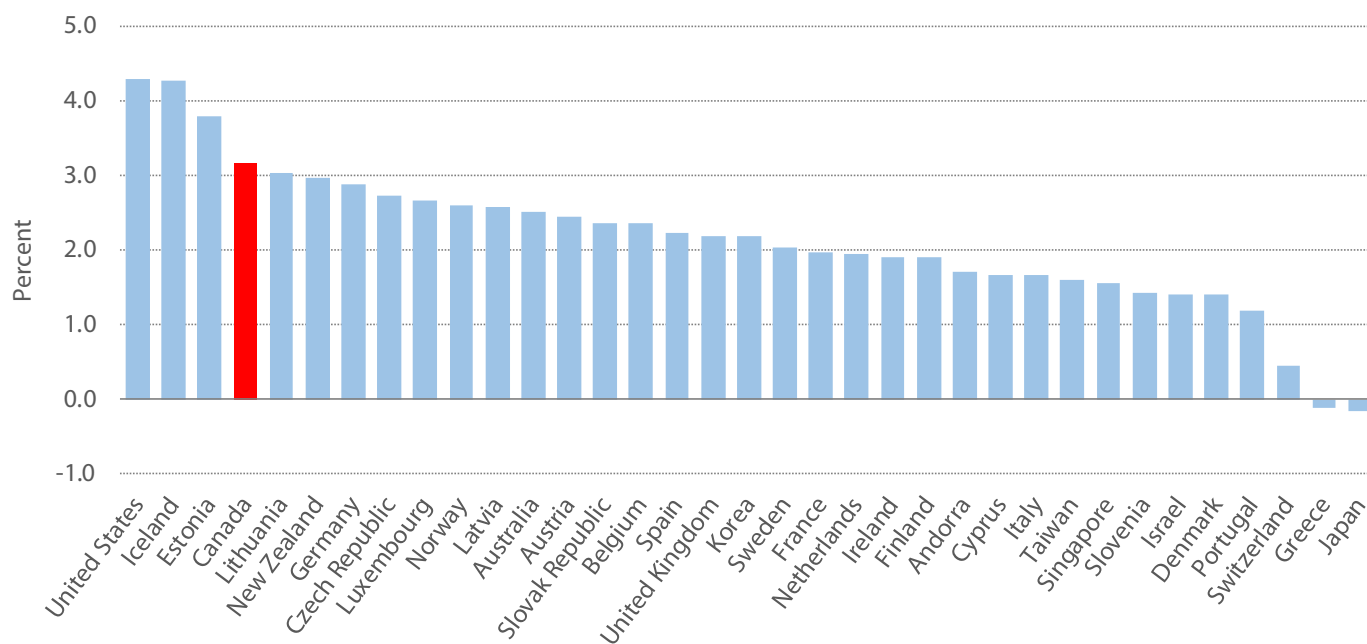
## The international context

The federal government continues to rationalize inflation as a global phenomenon, inferring that Ottawa can take only limited action to reduce it.<sup>4</sup> This section provides some context for that rationalization by examining Canada's

<sup>4</sup> See, for instance, Wherry (2021, December 2). In addition, Finance Minister Chrystia Freeland specifically referred to inflation as a global phenomenon in response to questions related to the Fall Economic Update (Solomon, 2021, December 14).

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Figure 4: Inflation Rates for Industrialized Countries, 2021



Source: IMF (2021).

inflation and unemployment rates within the industrialized world. The International Monetary Fund (IMF) provides detailed historical, current, and projected data for both inflation and unemployment for a group of industrialized countries.<sup>5</sup>

Figure 3 shows the comparative rates of inflation for 2020 for the 35 industrialized countries covered by the IMF. Canada ranked 12<sup>th</sup> in terms of its inflation rate, though little concern was rightly expressed since at 0.7 percent it presented limited economic risks.

<sup>5</sup> Please note that Macao SAR, Hong Kong SAR, Puerto Rico, San Marino, and Malta were excluded from the group of industrialized countries covered by the IMF data due to their size and/or special democratic or economic status.

However, the IMF's expected inflation rate for Canada for 2021 of 3.2 percent<sup>6</sup> ranks us 4<sup>th</sup> of the 35 countries, behind only the United States, Iceland, and Estonia. Put differently, while inflation may well be a global problem,<sup>7</sup> Canada's inflation rate is among the very highest of any industrialized country.<sup>8</sup>

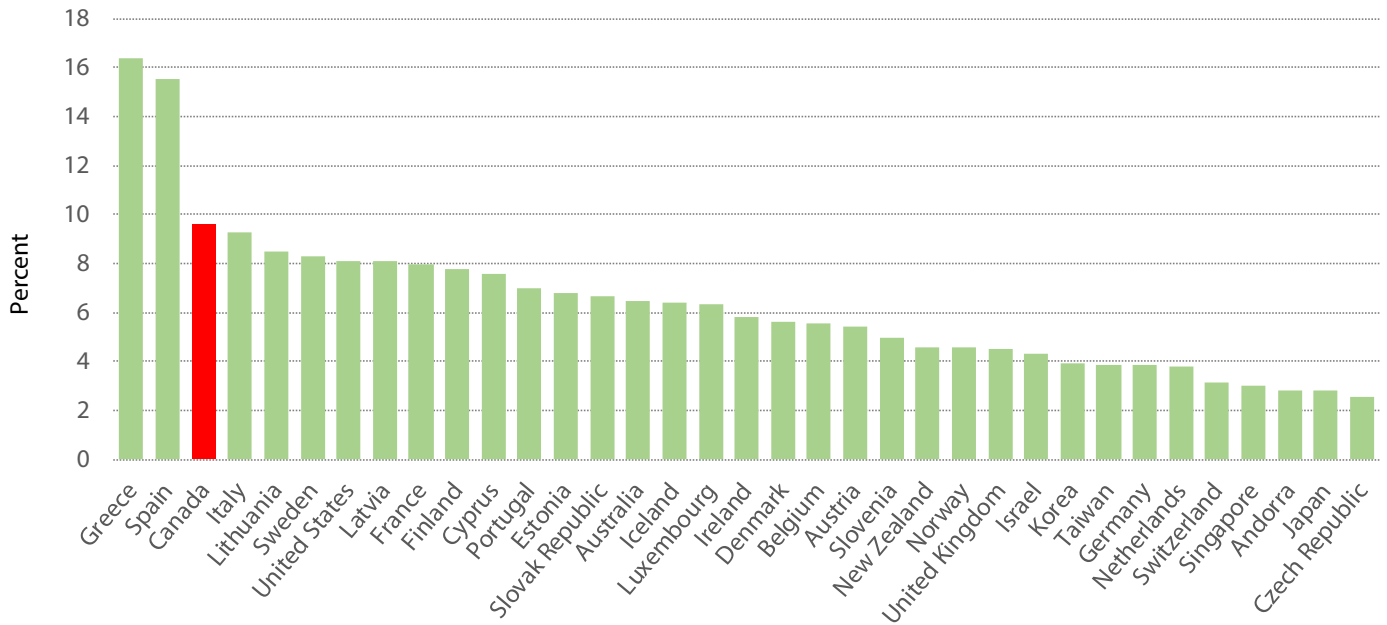
<sup>6</sup> The difference in inflation rates between this essay and the recent blog post by Professor Livio Di Matteo (2021) is that this essay uses annual average prices while Professor Di Matteo's blog uses the change of end-of-period prices.

<sup>7</sup> Disruptions in global supply chains, which reduce or limit the ability of firms to provide goods and services in a timely manner, have no doubt affected inflation by constraining or even reducing the supply of available goods and services. For a summary of these dynamics, see Austin (2021, November 10).

<sup>8</sup> There are a number of potential explanations for why Canada's inflation rate is comparatively high,

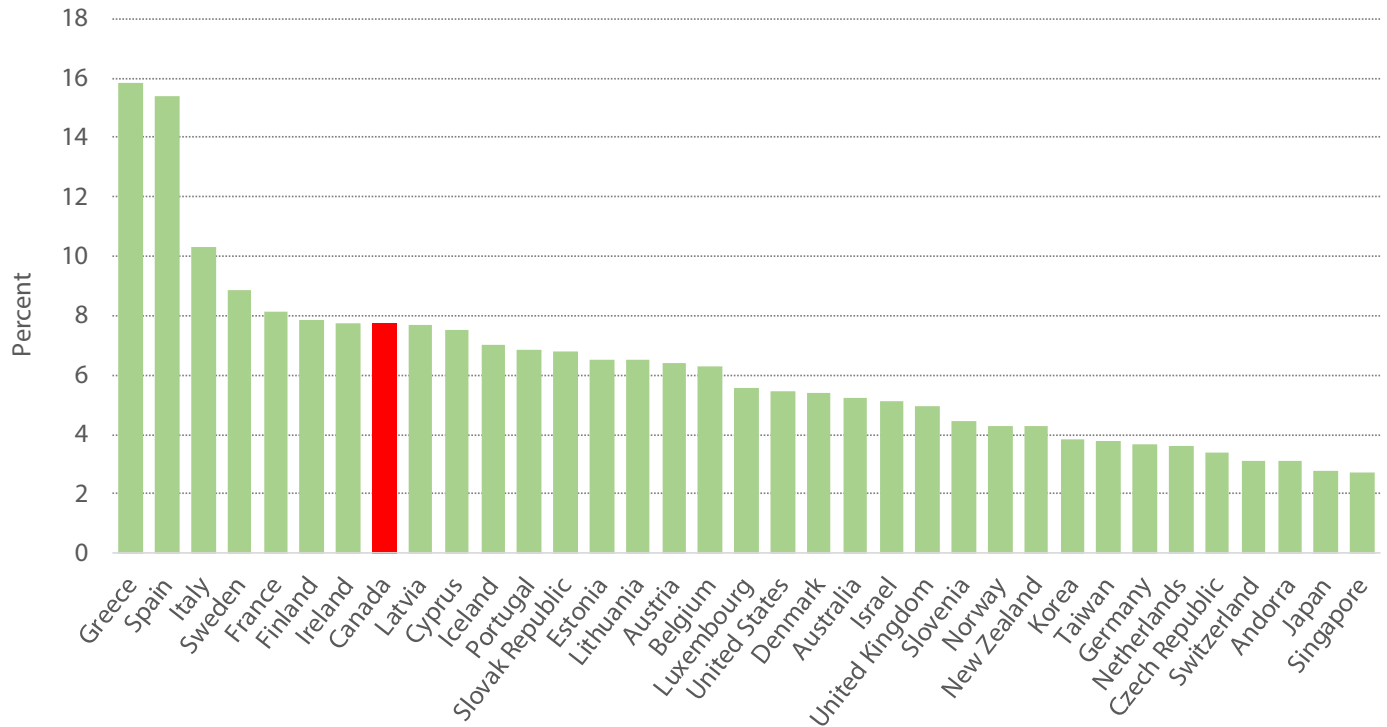
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**Figure 5: Unemployment Rates for Industrialized Countries, 2020**



Source: IMF (2021).

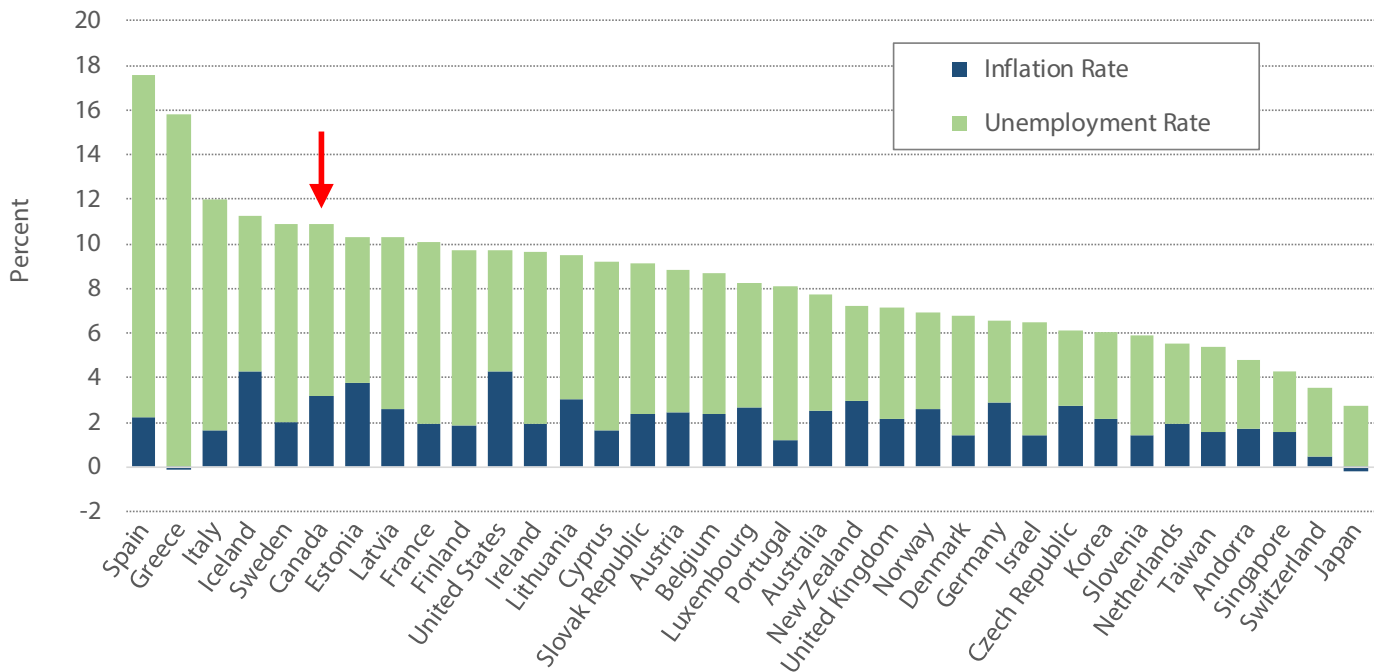
**Figure 6: Unemployment Rates for Industrialized Countries, 2021**



Source: IMF (2021).

# The Misery Index Returns

Figure 7: Misery Index for Industrialized Countries, 2021



Source: IMF (2021).

Figures 5 and 6 show Canada's comparative ranking for its unemployment rate in 2020 and the projected unemployment rate for 2021. Canada had the third highest unemployment rate (9.6 percent) in 2020 among the 35 industrialized countries covered by the IMF. While the IMF expects Canada's unemployment rate to improve to 7.7 percent in 2021, it still ranks relatively high within the industrialized world. Specifically, the IMF expects Canada's 2021 unemployment rate to be 8<sup>th</sup> highest among the 35 industrialized countries.

though such an analysis is beyond the scope of this essay. Some of the explanations, however, include Canada's comparatively high deficit, the increases to the carbon tax that raise energy costs and lead to higher costs throughout the supply chain, and potentially greater supply chain disruptions in Canada versus other countries.

The combination of Canada's higher expected inflation and higher unemployment rates for 2021 compared to other industrialized countries is illustrated in Figure 7. For 2021, Canada ranks 6<sup>th</sup> highest for its expected Misery Index at 10.9 percent.

## Conclusion

Contrary to much of the rhetoric, Canada's inflation rate has increased and looks set to remain at an elevated level for the immediate future. Moreover, Canada's inflation rate in 2020 and its projected rate for 2021 remains comparatively high amongst industrialized countries. The combination of Canada's high inflation rate and its relatively high unemployment rate mean that Canada—and more importantly Canadians—are suffering from a comparatively high Misery Index, which should be a focus of concern for government policy.



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