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Why inflation isn't transitory and won't be easily contained

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Overview

Most Canadians have become painfully aware of the sharp increase in many prices during the pandemic. Housing prices took off soon after the pandemic began, followed quickly by auto prices due to a shortage of semiconductor chips. By late 2020, many commodity prices were surging. Since then, price pressures have become widespread as a result of worsening backlogs in the global supply chain and labour shortages here in Canada. After first insisting that higher prices were a transitory phenomenon, Bank of Canada Governor Tiff Macklem now acknowledges that inflationary pressures are "stronger and more persistent than expected."

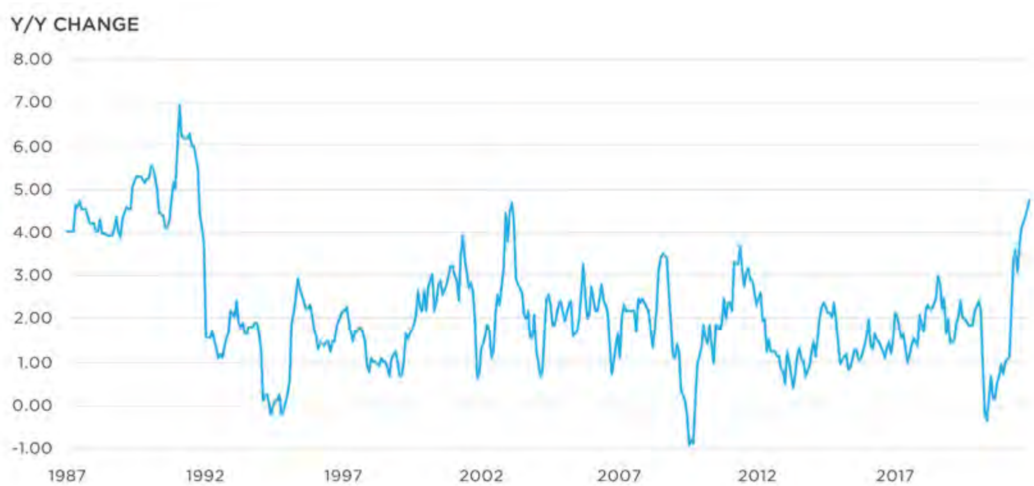
Inflation is proving to be more than transitory because government interventions in the economy during the pandemic have created distortions in personal incomes and savings as well as housing, commodity, labour, and financial markets. These distortions make inflation harder to forecast, although economists have long struggled to develop a viable theory about inflation dynamics. In particular, differing views between chartered banks and the Bank of Canada about inflationary pressures originate in disagreement about when and if the high savings households accumulated during the pandemic will be spent.

As a result, many central banks have been slow to react to inflation, a problem compounded by how long monetary policy can take to affect the economy. More fundamentally, inflation is the first manifestation of our collective inability to agree on how to pay for the massive debts incurred over the past decade and especially during the pandemic. Higher inflation in the short-term and lower potential growth in the long-term are the unintended consequences of the massive stimulus administered to the economy during the pandemic, something policy-makers are reluctant to admit.

Price increases began in housing and commodities

The headline number for inflation as measured by the Consumer Price Index (CPI) accelerated to an 18-year high of 4.7 percent (Figure 1) in October 2021, with the Bank of Canada projecting it will crest at 4.8 percent in the fourth quarter of the year. (Bank of Canada 2021, 12) However, this clearly understates the actual inflation rate being experienced by consumers in an economy increasingly plagued by shortages and stock outs. Inflation is also rising in other developed countries, reaching a 31-year high of 6.2 percent in the US and a 13-year peak of 3.4 percent in the EU.

Figure 1: Consumer price index



Source: CANSIM Table: 18-10-0004-01

The return of inflation to its highest rate in nearly two decades is significant for a number of reasons. Inflation has a clear negative impact on consumer sentiment (Rudd 2021, 15). Higher prices erode purchasing power and increase the upward pressure on interest rates, slowing the recovery from the pandemic. Higher interest rates have a significant impact on government finances after all the debt they issued during the pandemic. Laurin and Drummond (2021) conclude that "only very slight changes in assumptions of economic growth and interest rates dramatically change the course of the debt burden" (2) with every quarter point increase in interest rates adding 4.5 percentage points to governments debt as a share of GDP (10).

The first symptom of rising prices was the acceleration for housing in the summer of 2020, driven by surging demand. The volume of house sales soared by 46 percent after the pandemic began while construction rose by only 15 percent. As a result, existing home prices shot up 22 percent from before the pandemic to mid-2021 (Statistics Canada 2021e). Unlike the surge in prices after 2015, which was largely confined to Toronto and Vancouver, price increases during the pandemic were widespread across Canada. Since 2000, house prices in Canada have nearly tripled, the most of any G7 nation.[1] Record high prices pushed housing affordability to a 30-year low, even factoring in the lowest mortgage rates in history.

The first symptom of rising prices was the acceleration for housing in the summer of 2020.

Commodity prices began to recover soon after the shock of the pandemic's onset passed and economic growth resumed. However, some commodities are getting an added price boost from supply constraints.[2] Food prices surged early in the pandemic as households prepared meals at home more often and are likely to stay elevated because of the drought affecting much of western North America in 2021. Besides sharply reducing the harvest – crop output in 2021 is the lowest since 2003 – the drought also forced cattle farmers to liquidate more of their herd than usual. While helping to moderate meat prices this summer, it comes at the expense of smaller herds and production and therefore higher prices in the future, an effect that will persist for several years.

The upward pressure on oil and gas prices also has its origin in a sluggish supply response as well as the cyclical recovery of demand. In particular, the recovery of oil and gas reflects a rebound in demand as the pandemic recedes – given the sharp cutbacks to investment in new supplies during the pandemic, notably for shale oil in the US and natural gas in Europe. As well, the Biden administration restricted drilling on federal lands and revoked the Keystone pipeline permit, even as it urged OPEC to increase the oil supply and lower prices. The benchmark price for crude oil in North America has surged past US$85 a barrel, recouping all of its losses since 2014. The rally in natural gas to US$6 per million British thermal units (mBtu) is even more impressive after years of low prices in North America.

Some of the increase for North American natural gas prices reflects the ongoing development of an integrated global market, after decades in which prices in Europe, Asia and North America often diverged for long periods. Record prices in Europe and Asia have attracted 10 percent of US natural gas production, with exports rising 42 percent in the past year.

The US had the foresight, appetite for risk and co-operation of governments to build LNG export terminals, mostly along the Gulf coast. Meanwhile Canada dragged its feet, refusing to approve LNG export terminals in Eastern Canada while acting on only two of the 20 LNG proposals for British Columbia. Canada does profit from rising gas prices in the US, but US producers receive much higher prices in Europe (over US$20 per mBtu). If they had the export capacity, it would pay US producers to cede their entire domestic market to Canada and concentrate exclusively on supplying overseas markets.

A wide range of factors is boosting overseas natural gas prices. A shortfall of renewable power plays a key role. Drought in Asia curtailed hydro power production, while power plants shifted from coal to gas for environmental reasons. In their rush to switch to renewable energy, European countries did not ensure the reliability of supplies to replace fossil fuels. Gas production dropped in Britain and the Netherlands as nervous energy companies are reluctant to invest when green energy proponents hold sway in European politics, while calm winds reduced wind generation in northwest Europe.

Europe is hoping exports from Russia and the US will make up for the shortfall of gas supplies entering the winter months when demand naturally increases but the prospect of power shortages and outages looms large (The Economist, 2021b). The shortage of gas encourages Europe to burn more coal, the opposite of their commitment in the Paris Agreement. While some supply shortfalls can be expected to disappear within a year, and others due to the transition to new, more expensive energy sources or re-shoring, the production of critical supplies will put sustained upward pressure on prices.

Shortages are proliferating

Firms are increasingly concerned about the impact of shortages. In Statcan's Survey of Business Conditions, firms said the six largest impediments to their business were directly related to cost increases and supply shortages; just one quarter earlier, three of the six largest obstacles were demand factors related to attracting customers. Remarkably, even 60.2 percent of the accommodation and food industry reported shortages of labour despite a 15 percent drop in output since the pandemic began (Statistics Canada 2021a). In some industries, shortages are pervasive; for example, 98.5 percent of manufacturers in Quebec cited shortages, with most firms saying shortages are forcing them to pay penalties for being late or turning down new contracts because they cannot meet demand (Manufactuers et Exportateurs du Quebec 2021).

Shortages proliferated for several reasons. Some are specific to an industry, such as semiconductor chips which could not adjust output quickly to compensate for the surge in demand as a result of work and personal communications shifting online during the pandemic. The first manifestation of a shortage of computer chips was in new vehicle assemblies in 2020. Slowing production of new vehicles just as households needed autos (to avoid mass transit or to migrate to suburban and rural homes) led to a 7.2 percent increase in their prices, the most in two and a half decades. The shortfall of new autos spilled over into the used car market (for which Statcan's CPI does not collect data, one reason the CPI understates inflation). In the US, when inflation in the CPI surged to 5.4 percent in June, one-third of the increase was due to used cars alone.

More broadly, the global supply chain has become severely strained by production disruptions in Asia where both factories and ports have had to close because of COVID outbreaks (Asia has lower vaccination rates than North America and China is pursuing an extreme "COVID zero" policy of completely eradicating domestic cases of the virus).[3] Compounding the shortfall of supply from Asia, North American ports are operating at full capacity and the trucking industry has not been able to cope with the increased flow of goods in the economy because of a lack of drivers. The shortfall of truck drivers should hardly be surprising. Workers have been discouraged from joining the industry by prognosticators who for years confidently asserted these jobs would be replaced by driverless vehicles. Instead, the industry's most pressing problem is finding enough workers, while driverless vehicles remain a remote possibility.

Shortages means inflation is under-stated

Shortages imply inflation is much higher than the official measures published by Statistics Canada and other statistical agencies. Experts agree the CPI usually slightly overstates inflation.[4] This is due to the difficulty of correcting for how consumers substitute cheaper for more expensive products as prices rise, improvements are made in quality, and new products are introduced over time (Berndt and Hulten 2007).

However, the CPI is ill-equipped to account for shortages since it was designed to measure prices in an economy where goods and services are abundant, not a Soviet-style economy of rampant shortages. Shortages are de facto price increases, whether consumers pay the cost of waiting in line for their product, face shorter business hours, are given less choice of products to buy, or must buy a more expensive product because cheaper substitutes are not available. Higher prices, longer wait times, less choice, or a lower quality of service all represent increased costs to consumers, but only list prices are incorporated into the CPI.

Statistical methodologies exist to measure the cost to consumers of less choice or longer wait times, but are costly to implement. For example, the Liberal government was quick to provide funds to measure the unequal impact of the pandemic on various visible minorities in the Labour Force Survey. However, no such financial generosity was provided to measure shortages or used car prices, even though the CPI affects all Canadians since the government's entire tax and transfer system is indexed to the CPI.

Wages have risen in response to the shortage of workers, even as pockets of long-term unemployment linger in some sectors. Total hourly compensation in Canada's business sector rose 7.3 percent between the first quarter of 2020 and the second quarter of 2021 (versus 9.7 percent in the US), or an annual rate of 4.9 percent (Statistics Canada, 2021b). Unlike wage measures such as average hourly earnings, which are rising about 2 percent, this broader measure of labour costs captures all compensation of labour, including the bonuses or other benefits employers are offering to attract or retain employees. Only part of the increase in labour compensation was offset by higher productivity, so unit labour costs rose at an annual rate of 3.1 percent since the pandemic began. The faster wages rise, the more embedded inflation becomes. While sharp reversals in commodity prices and even house prices are common, it is rare for employee wages to be cut after they have risen.

The labour shortage driving higher labour costs reflects a job vacancy rate of 6.3 percent in August, its highest on record dating back to 2015. More surprising is that the highest industry vacancy rate is 12.3 percent in accommodation and food, which is operating well below its pre-pandemic level. Arts, entertainment, and recreation also have an elevated vacancy rate despite hefty losses in demand. Vacancies are also high in construction, manufacturing, health care, and retail trade.

The persistence and worsening of shortages are leading central bankers to reconsider their initial evaluation that rising inflation was "transitory," although the time implied by transitory was never clearly defined (their forecasts of inflation implied only a few months of higher prices). The disruption to supply surprised the Bank of Canada, which in the summer of 2020 predicted "much of the initial decline in supply is likely to be relatively short-lived" (Bank of Canada 2020, 24).

However, central bankers are now hedging their forecasts. Macklem recently acknowledged price increases were more than temporary, partly because the Bank of Canada downgraded its estimate of Canada's potential annual output growth to 1.6 percent, nearly a full point below its pre-pandemic estimate. According to US Federal Reserve Chair Jerome Powell, "Supply-side constraints have gotten worse. The risks are clearly now to longer and more persistent bottlenecks, and thus to higher inflation" (quoted in Timiraos 2021). The proliferation of supply problems during the recovery from the pandemic bears out Paul Tucker's warning that the over-reliance on central banks to stimulate growth since 2008 made policy-makers complacent about undertaking initiatives to boost the supply side of the economy (Tucker 2018, 536).

Government actions have significantly distorted the economy

The fiscal and monetary policy response to the pandemic assumed the major effect of lockdowns and the disruption of global trade was greater for demand than supply. The Bank of Canada in mid-2020 asserted that "demand takes longer than supply to recover in the near term" (Bank of Canada 2020, 24). Yet it has become increasingly evident in 2021 that demand has recovered faster than supply. Simply put, the extreme policy response to the pandemic introduced numerous distortions into the economy that are persisting, and in some cases, worsening with time. These distortions are manifest in the unprecedented increase of household income during a recession, dislocations in the housing and labour markets, the mismatch of sectoral demand with industry supply, and heavy borrowing from debt markets. It is striking that economists debated whether the economy suffered structural changes (also called "hysteresis") during severe recessions such as 1981-1982 but overlooked the hysteresis resulting from the pandemic

The most striking distortion was the 12.8 percent increase in personal disposable income since the pandemic began. This is the only instance on record where household income accelerated while total income (GDP) receded. While employment, wages and salaries fell precipitously at the pandemic's onset, this drop was more than offset by massive income support from the federal government, financed by record deficits. This income support – notably, the Canada Emergency Relief Benefit (CERB) payments of up to $2000 per individual and $5000 for every post-secondary student – more than replaced income lost to shutdowns and layoffs. The outright increase in personal disposable income shows that much of the aid went to households that did not need support.

The huge increase in personal savings during the pandemic confirms government payments to households during the pandemic were poorly targeted. Households saved $307 billion since the first quarter of 2020, as the savings rate jumped to 25 percent in the second quarter of 2020 and remained elevated at 14.2 percent into 2021. Tellingly, savings increased the most for households with the highest incomes, symptomatic of well-off households receiving unnecessary government support. Average net savings for households in the top income quintile nearly doubled from $12,083 to $21,322 in the second quarter of 2020. Meanwhile, average household savings in the bottom two income quintiles rose by about $2000 each (Statistics Canada, 2021d). Swollen household incomes and savings had repercussions for housing, labour markets and inflation.

The housing market produced one of the first surprises for policy-makers during the pandemic. Initially, the Canada Mortgage and Housing Corporation expected a sharp decline in house sales and prices (CBC News 2020). However, the slump in sales ended quickly and by the summer of 2020 housing demand in Canada accelerated rapidly. The location of demand also shifted during to the pandemic, with people preferring the suburbs and rural areas to escape the virus (similar shifts occurred in past pandemics – both William Shakespeare and Isaac Newton wrote important works in rural England during pandemics (History Extra 2021)). The faster growth outside of city cores was encouraged by telework, with a peak of five million Canadians working from home.[5]

Supply could not keep pace with demand as government regulations limiting new construction in many areas, and house prices exploded on top of their steady increases since the Bank of Canada slashed interest rates in 2015. By early 2021, Canada was devoting more resources to housing than to all business investment, an unprecedented development that augurs poorly for our future productivity. With house prices outstripping income growth, housing demand was financed by mortgage debt as well as sizeable transfers from parents to help their offspring purchase homes.

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The government response to the pandemic created many distortions in the labour market. The most obvious distortion is the co-existence of high rates of job vacancy and unemployment. As well, large transfers of income and soaring wealth gave older workers more incentives to retire. The Canadian and American governments sent aid directly to people rather than through employers (as many European nations did). This severed the relationship between employers and employees in North America, complicating the return of many employees to their former job and aggravating the labour shortages even in industries where operations are far below pre-pandemic levels. It is notable that Europe is not experiencing severe labour shortages after it administered aid to workers through the employer by treating them as on furlough; as a result, Europe's vacancy rate of 2.0 percent is below its pre-pandemic level.[6]

Flush with substantial government assistance of up to $2000 a month under the CERB, some employees in Canada abandoned any intention of returning to their previous workplace. Many older workers retired. Younger workers may have used the money to return to school or train for jobs in areas other than restaurants or hotels, where the prospect of reopening was very uncertain. Meanwhile, the flow of immigration into Canada fell sharply as the border was closed, while inter-provincial migration plunged as provincial borders were closed and recipients of the CERB felt no pressing need to relocate to where job opportunities existed. The end result is the co-existence of pockets of long-term unemployment and record high vacancy rates, something that should not happen according to the standard Beveridge Curve trade-off between the two.

While aggregate demand and employment returned to pre-pandemic level, there were wide variations by industry. Demand soared in some industries such as real estate, retail goods, and professional services and lagged in other industries that struggle to cope with social distancing (mostly personal services). Most industries quickly adapted to the new requirements for social distancing. However, about 10 percent of industries still have lost at least 10 percent of their business since the pandemic began, notably accommodation and food, businesses that serve large office buildings (such as janitors, security guards, catering and dry cleaning), transportation (especially airlines and public transit) and arts, entertainment and recreation. Instead of quickly shifting from broad stimulus for the whole economy to these specific sectors, policy-makers continued their focus on aggregate demand. As the economist Gottfried Haberler noted in 1945, applying macroeconomic stimulus to cure unemployment in a few industries is a recipe for stagflation, which he described as "the paradox of depression and unemployment in the midst of inflation."[7]

> *Higher debt boosts growth in the short-term but lowers its long-term potential.*

All sectors of the economy borrowed massive amounts of money during the pandemic. Most obvious is the record level of government debt. Households assumed large amounts of mortgage debt to acquire increasingly expensive homes during the pandemic. Less visible is the sizeable amount of debt some businesses have acquired. Record low interest rates encouraged firms to issue a record amount of bonds. However, bonds favour large firms over small ones, which remain reliant more on short-term bank loans.

Higher debt boosts growth in the short-term but lowers its long-term potential. A study by the Bank for International Settlements examining data from 54 economies from 1990s to 2015 concluded that "household debt boosts consumption and GDP growth in the short run, mostly within one year. By contrast, a 1 percentage point increase in the household debt-to-GDP ratio tends to lower growth in the long run by 0.1 percentage points. Our results suggest that the negative long-run effects on consumption tend to intensify as the household debt-to-GDP ratio exceeds 60%. For GDP growth, that intensification seems to occur when the ratio exceeds 80%" (Lombardi, Mohanty and Shim 2017, 1). Canada's household debt to GDP ratio rose from 103.3 percent to 109.1 percent during the pandemic. Meanwhile, the debt-to-GDP ratio of governments rose from 113.6 at the onset of the pandemic to 133.3 percent (Statistics Canada, 2021c).

Economists have no working model of inflation

The resurgence of inflation underscores the ongoing failure of economists to understand price dynamics. Economists did not foresee the surge in prices because, in the words of former Federal Reserve Governor Daniel Tarullo, they have no working theory to explain inflation. Furthermore, macroeconomists have focused too much on short-term demand management and too little on how stimulus lowers long-term potential growth. Robert Lucas Jr, the Nobel laureate and doyen of macroeconomics, warned about exactly this problem of concentrating on short-term demand at the expense of long-term supply in his presidential address to the American Economic Association nearly two decades ago (Lucas 2003, 1)

Economists are working with theories of inflation that have proved inadequate to explain its behaviour. The oldest is the Quantity Equation theory linking prices to the money supply. While it is broadly true inflation cannot persist without being accommodated by increases in the money supply, it has proven hard to define what actually constitutes the money supply. Moreover, linking prices to the money supply assumes the velocity of money is stable, when in reality it is highly volatile in the short-term.

Another reason monetarism fell out of favour in recent decades is that non-monetary factors such as technology and globalization also helped dampen inflation. Even Milton Friedman, who led the revival of monetarism in the 1960s, conceded that non-monetary factors may "on some occasions" affect the money supply (quoted in Wapshott 2021, 127).[8] Still, monetarism proved key to quelling inflation in the 1980s; former Federal Reserves Chair Paul Volcker admitted using the public's widespread belief linking the money supply to prices as an anti-inflation tool because emphasizing the Fed's focus on the money supply "would be a way of telling the public that we mean business" (quoted in Wapshott 2021, 189).[9]

Moreover, because the money supply must expand to accommodate (if not ignite) inflation, it is noteworthy that all measures of the money supply have expanded rapidly since the pandemic spread in 2020. The version of the money supply used in the Macdonald-Laurier Institute leading economic indicator (LEI) grew 41.3 percent in the last 20 months. This contrasts with 2008-2009, when a small increase in the monetary base was quickly reversed and therefore never impacted broader measures of the money supply. This is why the money supply and inflation never took off after 2008 despite widespread suspicion over central banks "printing money" with quantitative easing.

Most economic models of inflation rely on a version of the Phillips Curve, which assumes a stable trade-off between inflation and the unemployment rate. However, economists have been befuddled by a flattening of the Phillips Curve, implying that a specific level of slack in the economy does not have a predictable impact on inflation. The blurred relationship between unemployment and inflation led some to relabel it the "Phillips Cloud" (Uhlig 2017, 187).

Attempts to improve the Phillips Curve by augmenting it with inflation expectations did little to improve its recent performance. The breakdown of the trade-off between unemployment and inflation was most evident during the recessions in 2008-2009 and 2020. Very high unemployment should have resulted in persistent price deflation according to the Phillips Curve trade-off, while in reality inflation only moderated briefly. Fed economist Jeremy Rudd calls this failure of trend inflation to subside during recessions "missing disinflation" (Rudd 2021, 10). More broadly, inflation throughout the OECD region over the past decade has shown the opposite tendency of being consistently below what the Phillips Curve would have predicted.

Central banks and inflation expectations

Part of the problem is a lack of clarity about whose inflation expectations are relevant. Three measures of expectations are available: for households, for business firms, and for professional economists (which are closely-linked to expectations in financial markets). It turns out "none is much good at predicting prices" (The Economist 2021d). Consumers routinely over-estimate inflation. Businesses on average expect lower inflation than consumers but consistently exceed the Fed's target of 2 percent, which casts doubt on whether expectations are anchored to central bank targets.

The divergence of business expectations from official targets is not surprising, since 65 percent of US business leaders were unaware (or did not respond) when asked to state the Fed's inflation target (NBER Digest 2021, 1). More importantly, firms say they set prices more based on what the market will bear than on expectations about inflation (Tarullo 2017, 12). The expectations of economists are of limited utility, since there is little evidence their consensus affects the expectations of the numerous households and firms whose actions drive economic activity, never mind explaining how expectations affect actual prices (Tarullo 2017, 11-12). In any event, forecasts by professionals are of dubious accuracy, with the Peterson Institute for International Economics concluding "Neither bond markets nor economists have a great track record forecasting inflation" (quoted in The Economist 2021a). This is hardly surprising given their inability to anticipate recessions and the absence of a working model of inflation.

The implication is that while the Bank of Canada monitors all these measures of expectations, there is little evidence they are useful at signalling the trend of inflation. Firms set their prices based on actual cost and demand conditions, usually at the local level, rather than on expectations of economy-wide inflation (Rudd 2021, 9). This is probably why business leaders pay little attention to central bank inflation targets. Tarullo (2021) concludes by advising his former central bank colleagues that, in the absence of a good theory that predicts inflation accurately, they should emphasize observable data on wages and prices. Using the latest observed data as the best forecast of future prices should not be a large intellectual leap for the Bank of Canada, which already applies this approach to predict major inputs into inflation such as the price of crude oil and the exchange rate. Tarullo then recommends "once actual inflation is observed to be rising, argue for raising rates more quickly" (2017, 16). Unfortunately for the Bank of Canada, observable wages and prices show higher inflation than expected.

> *Firms set their prices based on actual cost and demand conditions, usually at the local level.*

The difficulty of forecasting inflation has led some central banks to change how they formulate policy. Instead of basing monetary policy on forecasts, the US Fed now waits for actual outcomes. This is partly a response to the Fed raising interest rates in 2015 on the expectation inflation would rise as the unemployment rate dipped below 4 percent, when in fact inflation stayed stubbornly low. The Federal Reserve Board regularly trumpets its policy as "data dependent" or "evidence-based." However, because of the lag with which monetary policy affects the economy, this implies the central bank can fall behind real world events. For this reason, Claudia Sahm, a former Fed economist who briefed Powell, said "The shift from forecast-based monetary policy decisions to outcome-based policy decisions is a radical shift" (quoted in Torres and Miller 2021). While monetary policy reacted quickly to the shock of the pandemic's onset, it has been slow to withdraw stimulus despite inflation consistently exceeding forecasts in 2021. For example, economists in the spring of 2021 forecast inflation in the US would total 1.9 percent for the whole year; in fact, prices soared 2.1 percent (or an annual rate of 8.3 percent) in just the next three months.

The Bank of Canada's monetary policy remains based more on forecasts than outcomes. It acknowledges "monetary policy must be forward-looking" because of the estimated lag of six to eight quarters it takes to fully affect the economy (Bank of Canada 2021, 1). However, if the US Fed falls behind on reining in inflation, Canada will inevitably feel the effects.

Instability reduces the accuracy of inflation forecasts

Unstable relationships among key variables are a recurring problem in macroeconomics. This paper has already discussed the instability in the Quantity Equation linking the money supply to prices, the Phillips Curve trade-off between unemployment and inflation and the Beveridge Curve relating unemployment and vacancy rates. To this list can be added the timing of the impact of fiscal stimulus. Former UK Chancellor of the Exchequer Denis Healey lamented “The fundamental concept of demand management had become unreliable…it had become impossible to discover with any accuracy how much additional demand the government should inject into the economy so as to produce full employment” (quoted in Wapshott 2021, 227).

A textbook example of the unpredictable timing of the impact of fiscal stimulus is the massive transfer of income from governments to Canadian households during the pandemic, much of which was simply saved. The question of when these savings will be spent largely explains the differing opinions held by bank executives and the Bank of Canada about the short-term path of inflation, epitomized by RBC’s CEO Dave McKay warning “there is persistent inflation building” (quoted in Bradshaw 2021). Bank executives predict the money lying in their customer’s accounts will be spent over the next year, while the Bank of Canada believes the money will remain in savings. In either scenario, there is a considerable delay between when the federal government transferred money to people and when it is spent.

Harvard Economics Professor Kenneth Rogoff concludes much of the problem economists have understanding inflation dynamics is because “controlling long-run inflation is fundamentally a political-economy challenge, not a technocratic one” (Rogoff 2021, 2). The inflation of the 1960s and 1970s originated in the soaring costs of the Vietnam War and the Great Society, creating pressure on the Federal Reserve Board to drop its guard against inflation and expand the money supply. Volcker, while head of the Federal Reserve Board, explained that persistent inflation requires examining more than the money supply: “we have to ask ourselves about the nature of the economic, social, and political forces and attitudes that seem to have aggravated the difficulties of reconciling full employment with price stability” (quoted in Wapshott 2021, 183-184). Rogoff argues one of the reasons today’s central banks have fallen behind controlling inflation is they are being asked to target additional goals such as climate change and inequality that are “far beyond their normal remit” (Rogoff 2021, 4).

More broadly, inflation is symptomatic of a society’s inability to agree on who will pay the record government debt incurred during the pandemic. Friedman elaborated that “The Federal government is the engine of inflation – the only one there is. But is has been the engine of inflation at the behest of the American public, which wants the government to spend more but not raise taxes – so encouraging resort to the hidden tax of inflation…Inflation is taxation without legislation" (quoted in Wapshott 2021, 77-78).

Friedman's quote perfectly captures the public's mindset in Canada and the US denying we all have to share the massive costs of the pandemic. The *Wall Street Journal* characterized the various proposals currently circulating in Congress to increase taxes on corporations or billionaires as the "Hunt for Money" (Rubin and Francis 2021). A similar exercise took place during Canada's recent election, where many parties proposed higher taxes on corporations or the wealthy to help pay the record federal debt. The recent global agreement on a 15 percent minimum corporate income tax is part of this attempt to shift the bill for the pandemic to the wealthy and corporations (although the agreement has not been ratified by any country and the US Senate remains a major hurdle).

History suggests higher corporate income taxes or wealth taxes never generate sizeable amounts of revenue and only delay the increase in broad-based taxes such as the GST or the income tax that are the sole reliable sources of significant revenues (Cross 2020). For the moment, our society wants to believe the fantasy in which the enormous bill from the pandemic can be offloaded to a few wealthy individuals or large firms – even though corporate taxes are ultimately born by the public, as firms shift the cost of new taxes to consumers via higher prices, to shareholders via lower prices, and to workers via lower wages.

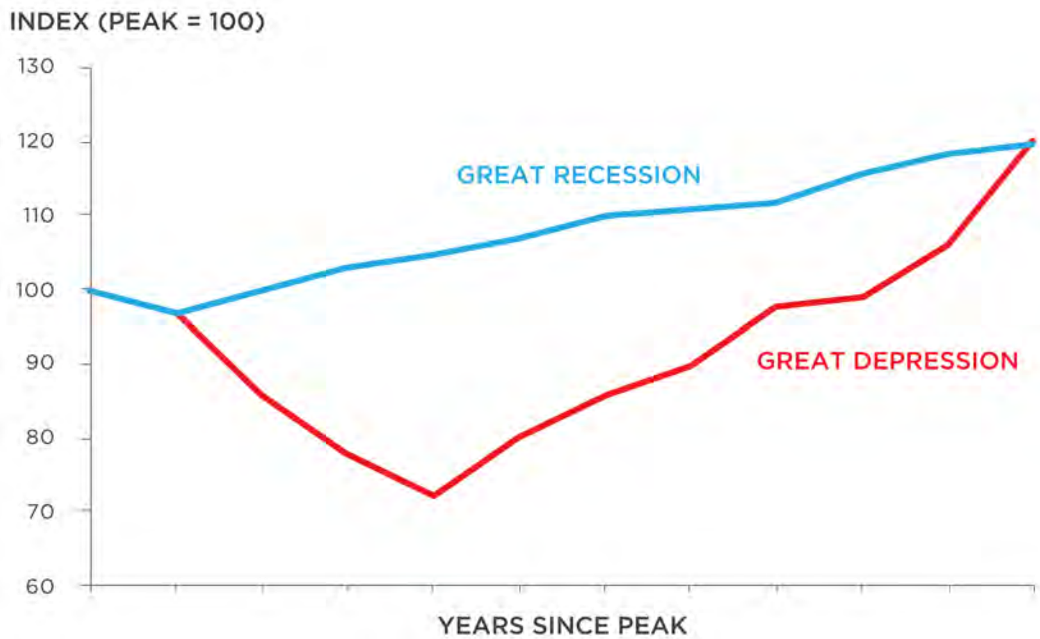
Macroeconomics fails to acknowledge short-term stimulus lowers long-term growth

Lucas famously declared that macroeconomics had succeeded because "Its central problem of depression prevention has been solved" (Lucas 2003, 1). Strictly speaking, the ability of the major Western economies to avoid a depression[10] during the 2008-2009 Great Financial Crisis and again during the 2020 lockdown suggests Lucas was right. Unfortunately, this is a hollow victory for macroeconomics. While massive monetary and fiscal stimulus prevented a slide into depression, the cost of these policies has been lower growth over the longer-term (on top of the decades-long slowdown in most Western nations).

The end result is that GDP over time is no higher than in the absence of stimulus and may even be lower. Either way represents an economic policy failure because, as former US Treasury Secretary Larry Summers summarized, "The Keynesian aspiration was not to merely reduce the amplitude of cyclical fluctuations, but also to increase overall growth" (Summers 2017, 559). Policy-makers never publicly warn the price of short-term stimulus is lower growth over the longer-term, with no net gain in GDP. Economists take pride in pointing out the unintended consequences of government actions, but this has rarely been applied to the unrelenting stimulus of macroeconomic policies since 2008.

The Great Recession of 2008-09 is a perfect example of trading short-term stimulus for less potential long-term growth with no net improvement in incomes over time. In the US, growth in the decade after the onset of the Great Recession was no better than during the Great Depression of the 1930s despite the application of much greater monetary and fiscal stimulus (Summers 2017, 558). The same is true for Canada, where 11 years after the peak of economic activity (1929 for the Great Depression and 2008 for the Great Recession), real GDP in both periods arrived at exactly the same point with a net gain of 20 percent (Figure 2). As Summers (the son of famed economist Paul Samuelson's brother) concluded, the failure of extraordinary monetary and fiscal stimulus to produce a better outcome over the past decade "should be a (if not the) principal pre-occupation of contemporary macroeconomics" (Summers 2017, 558).

Figure 2: Gross Domestic Product (constant dollars)



Source: CANSIM tables 36-10-0202-01 and Table 36-10-0369-01

The trade-off between boosting growth with short-term stimulus at the cost of diminished long-term growth was described in detail in a 2016 Macdonald-Laurier Institute paper (Cross 2016). For example, much of the stimulus from low interest rates reflects shifting purchases of big-ticket items such as houses and autos from the future into the present. This lifts aggregate demand in the short-term but at the expense of fewer purchases in the longer-term. As noted earlier, the Bank for International Settlements concluded higher debt levels, inevitably the product of fiscal stimulus, lowers an economy's long-term growth.

More broadly, the shift of spending to sectors such as housing and government inevitably lowers long-term productivity growth, notably as business investment lags. This reduction in productivity growth limits growth as the recovery proceeds. Society can rationally choose to lower the amplitude of its business cycles with milder recessions, provided it is informed this entails less growth in future years. However, policy-makers never present these trade-offs when implementing stimulus during a slowdown or recession. The recent increase in inflation is one symptom of the non-transitory effect of massive government interventions in the economy during the pandemic.

Conclusion

Canadians can remain confident the Bank of Canada eventually will react to higher inflation and take decisive actions to avoid inflation becoming embedded in higher wages and expectations. It is critical to the Bank's mission and its self-interest to do so; the most important asset central banks possess is their independence. If ever inflation resurfaces for an extended period, inevitably the legions of central bank critics who have warned about the dangers of excessive stimulus will insist on more oversight of central bank goals and methods.[11] So it is not surprising financial markets expect central banks will begin to raise interest rates substantially starting in 2022. The longer central banks delay responding, the larger will be the increase in rates, aggravating the pain to an economy that substantially raised its debt load during the pandemic.

However, containing inflation may not be a simple or short process, even if the global supply chain quickly returns to normal. Shortages of labour, shifts in housing demand, and higher food and energy prices will require more than a brief nudge to interest rates. Most fundamentally, governments must find a way to fund their debt, now that central banks are ending purchases of government debt, or the upward pressure on interest rates will intensify.

About the author

Philip Cross is a Munk Senior Fellow at the Macdonald-Laurier Institute. Prior to joining MLI, Mr. Cross spent 36 years at Statistics Canada specializing in macroeconomics. He was appointed Chief Economic Analyst in 2008 and was responsible for ensuring quality and coherency of all major economic statistics. During his career, he also wrote the "Current Economic Conditions" section of the Canadian Economic Observer, which provides Statistics Canada's view of the economy. He is a frequent commentator on the economy and interpreter of Statistics Canada reports for the media and general public. He is also a member of the CD Howe Business Cycle Dating Committee.

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Endnotes

1 House prices doubled in France and Britain, rose about 50 percent in the US, and were little changed in Italy and Japan (The Economist 2021c).

2 Unlike lumber prices where a spectacular spike in prices in the spring of 2021 was quickly reversed.

3 China's attitude is exemplified by its recent decision to close the Shanghai Disneyland and quarantine 30,000 people for testing as a result of one case of COVID.

4 Reinsdorf and Moulton (1997) conclude the empirical consensus is that the US CPI overstates inflation on average by 0.8 percent a year (431).

5 The shift from city cores to outlying areas is also evident for commercial office markets (Haider and Moranis 2021).

6 Available at eurofound.europa.eu.

7 Specifically, Harberler wrote that "there may be a large volume of unemployment that cannot be cured by increasing general expenditure. If the unemployed are concentrated in certain 'depressed' areas and industries, while there is full employment elsewhere, a general increase in expenditures would serve only to drive up prices in the full employment area, without having much effect on the depressed industries. Then the paradox of depression and unemployment in the midst of inflation would be experienced" (Harberler 1945, 107).

8 It is noteworthy that the reversal of globalization from the Trump era is accelerating due to the pandemic, as countries ensure that production of key supplies such as medicines or computer chips is done at home; this will put steady upward pressure on some prices.

9 Friedman criticized Volcker's use of monetarism, which he regarded as a smoke screen to hike interest rates instead of relinquishing the discretionary control of the money supply that Friedman maintained was the core of monetarism (Wapshott 2021, 193)

10 There is no accepted definition of a depression, which Keynes called "a chronic condition of sub-normal activity for a considerable period without any marked tendency either towards recovery or towards complete collapse" (quoted in Rickards 2016, 229). Most analysts point to a severe drop of at least 10 percent in GDP lasting over a year, frequently after a financial crisis and often accompanied by deflation. Lower prices by themselves are associated with a depression, notably the Long Depression from 1873 to 1896 in North America when agricultural prices fell but real GDP continued to expand (Desai 2015, 255). The primordial role of lower prices in a depression was reflected in the emphasis Roosevelt's New Deal placed on raising prices, even at the expense of output growth.

11 See Tucker (2018) for a discussion of the issues surrounding central bank independence.

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