Inflation’s great disappearing act was among the bigger economic stories in Canada during the past year. After sinking like a stone in 2012, most forecasters expected Canada’s inflation to rebound this past year. Yet, defying these predictions, the rate sank even lower – to an estimated rate of only 0.9% on a Q4/Q4 basis. For 2013 as a whole, core inflation slumped to the lowest level outside of a recession since the Bank of Canada began targeting inflation in 1991 (Chart 1). These developments have raised many eyebrows, notably at the Bank of Canada, which aims to maintain trend inflation in the 1-3 per cent range. The central bank is equally concerned about inflation running too cold or too hot.

In this report, we examine the recent factors that have conspired against inflation in Canada, provide a look ahead to the next couple of years and consider some of the implications of a weak price environment. There are good reasons to believe that the second quarter of 2013 will represent the low-water mark for CPI inflation in the current cycle. Much of the recent disinflation is due to temporary factors that we don’t expect to persist, as a weaker Canadian dollar is expected to put upward pressure on inflation over the forecast horizon and stronger economic growth will also increase price pressures in the economy. However, with some of the downward pressures likely to persist, the return back to a more normal pace of 2% price growth is likely to be a gradual affair, with some components of the CPI likely to experience ongoing increases of 1% or less over the next 1-2 years.
Canada’s not alone

Chart 2 shows that Canada is not alone in experiencing declining inflation (referred to as disinflation). Furthermore, the most recent monthly indicators show that inflation pressures in most countries, including Canada, continued to ease as 2013 came to a close. In the United States and the Eurozone, CPI inflation in the last month of available data slipped to 1-1.5% or less, well below their established targets of 2-2.5%. Among the major advanced economies, only the UK is currently recording average price increases of 2%, but even there, these gains have headed lower in recent months. Japan has managed to buck the trend of disinflation among G-7 countries by seeing a modest rebound in its CPI, but the year-over-year rate of increase remains below 1%.

One of the lasting legacies of the Great Recession has been a frustratingly slow recovery in developed economies. Europe has yet to record any meaningful economic growth, while the U.S. economy had, until recently, repeatedly disappointed on GDP and employment advances. The challenging environment since 2008 has left these economies with considerable excess slack and dysfunctional banking systems. These two culprits explain much of the global disinflation trend.

While the economic perils of accelerating inflation were the focus in the 1970s and 1980s, the focus has more recently shifted to the risks associated with deflation (i.e., outright decline in the price level). Likewise, very low and falling rates of inflation are believed to share many of the same negative characteristics. At the very least, near-zero price changes leave a thin cushion to guard against an economy tipping into deflation should an unexpected shock hit. We discuss the main pitfalls in the accompanying text box (page 3). Japan’s experience is a case in point, as the economy has been caught in a deflationary trap for 20 years. Central banks, including the Bank of Japan and the U.S. Fed, have responded to this growing deflationary risk over the past few years by undertaking quantitative easing and other unconventional monetary policy measures. By flooding the banking reserve system with liquidity, the hope is that economic growth will be rejuvenated, which will ultimately lead to a return to a normalization in inflation. In Sweden, the Riksbank shifted its focus of concern away from household indebtedness to deflation and reduced its policy rate by 25 basis points in December 2013. This move only raised expectations that the Bank of Canada could follow with a rate cut of its own if Canadian inflation continues to plumb the depths.

The day inflation went away

The fact that Canada has joined the global chorus of falling inflation over the past few years is no big surprise. This country is home to a small, open economy that is heavily influenced by developments abroad. And despite avoiding many of the severe economic and banking problems of its main trading partners, Canada still endured a difficult recession and relatively subdued recovery, which has left it with excess capacity in the economy three years into the economic recovery. As Chart 3 shows, this gap in actual production relative to potential, or output gap, tends to have a tight relationship with trends in inflation.

All that being said, globalization and slack alone don’t appear to fully explain the extent to which inflation has van-
Fears of a disinflationary age

As is the case across many industrialized countries, the Bank of Canada has become increasingly concerned about the recent decline in trend inflation to around 1%. The Bank has long viewed 2% as a healthy inflation rate. Accordingly, it sets its policy rate so as to keep inflation within a target range of 1-3%, and 2% on average. While headline inflation has always bounced around from year to year, the Bank has achieved enormous success keeping its core measure (as well as inflation expectations) anchored at close to 2% -- that is, until recently.

Why is deflation so economically destructive?

The small gap between the current inflation rate and zero has raised some chatter about the potential for Japan-style deflationary episodes to break out in the U.S., Europe and Canada, especially in the event that these economies suffer an unanticipated setback. There are three major reasons why deflation, or negative inflation, is a worry.

• When people and businesses expect prices to fall, they delay consumption and investment. This delay, in turn, can lead to a self-reinforcing cycle of weakness in activity, which would hurt all components of domestic demand and living standards.

• Falling prices worsen the position of borrowers by increasing the real burden of their debts. While savers might experience a corresponding gain, the economy stands to suffer as debtors are likely pressed to reduce spending when their debt burden rises while creditors aren’t likely to raise their spending by the same amount. In addition, this transfer from borrowers to lenders can hurt the lower and middle class, as their mortgage payments represents a larger share of their income.

• From a fiscal point of view, governments count on increasing revenue to finance debt service and other social obligations. Taxpayers are thus called upon to fill the void.

The Bank of Canada has landed on a 2% target rather than zero as its analysis shows that inflation that is too low or too high carries economic and financial risks. Since nominal interest rates cannot fall below zero, targeting a moderate rate of inflation would allow real (inflation-adjusted) rates to become negative at a time when highly accommodative monetary conditions are required. In addition, CPI inflation tends to overstate the increase in the true cost living, so targeting zero would be consistent with targeting an annual decrease in the true cost of living. Lastly, nominal wage rigidity allows adjustments in the labour market to occur through cuts in real wages rather than job losses.

Similarly, targeting a higher rate of inflation, say 4-5%, could also be problematic. While many analysts argue that higher inflation would “grease the wheels” of the economy, experience shows that a higher price environment tends to be more uncertain and volatile, potentially undermining expectations. Further, if money steadily loses purchasing power each year, it become less effective as a store of value.

Source: Bank of Canada
ished. Other factors must be at play. Two other important influences appear to be the lagged impact of the significant rise in the Canadian dollar during the 2010-11 period, and even more importantly, heightened competition in the retail space. In order to dig deeper into the causes of disinflation, we decompose the recent decline in Canadian CPI inflation into the key components into Table 1. We focus on changes in CPI inflation (Q4/Q4) since it peaked in 2011.

- Among the eight major categories, downward pressure on price growth since 2011 has occurred in all categories except for shelter, and alcohol and tobacco.

- Still, a look at the respective contributions reveals that the bulk of the decline has been concentrated in two areas – transportation and food – that comprise about one-third of the total index.

- Within the food category, the disinflation has been driven by food items other than fruits and vegetables (i.e., core food), where inflation has fallen from 4% in 2011 to only 0.8% in 2013. Food prices have been particularly affected by heightened competition at the retail level. This is particularly the case in Ontario, where the growth rate of square footage allocated to food store sales more than doubled in 2013. Increased price competition has also been a factor, albeit to a lesser extent, in clothing and footwear, and household operations and furnishings.

- In the transportation sector, the slowdown in price increases reflected both a decline in gasoline prices as well as reduced auto insurance premiums in Ontario.

- Another factor behind low inflation over the past two years has been health care costs. Specifically, some of the most widely prescribed drugs in Canada came off patent in 2012 (generic versions of cholesterol cutting Lipitor are available at an 80% discount versus their patent days prices). In addition, governments have worked to lower generic drug prices. Ontario, for example, moved to eliminate professional fees paid by manufacturers to pharmacies with an aim to lower prices.

- Clothing and recreational products are two areas where price pressures remain extremely subdued, but this is not a new story. Globalization, the past strength of the Canadian dollar and technological developments have been influences holding down prices. For one, the price index of computer equipment is 79% lower than it was a decade ago.

### Inflation is down but not out

Despite the recent downside surprise to inflation, we still believe the case for a gradual return to 2% in both headline and core CPI measures over the medium term remains quite iron-clad. This view is predicated on four major factors.
developments. First, we expect to see economic growth in Canada return to above its trend rate of 2% in the 2014-15 period, spurred in large part by a pickup in the pace of U.S. expansion. Indeed, economic data on balance suggest that economies on both sides of the border ended 2013 with a decent pace of momentum. This improved pace of GDP growth would slowly absorb the amount of excess capacity in the economy, and raise inflation pressures.

Second, the depreciation in the Canadian dollar is expected to exert upward pressure on retail prices in a number of categories over the next few years. A weaker Canadian dollar raises the price we pay for imported goods, and these cost increases filter through to the consumer level to varying degrees. After appreciating strongly earlier in the recovery, the Canadian dollar has fallen from above parity with the U.S. Dollar to around 91 U.S. cents at the time of writing. Over the next year, we expect the loonie to fall below 90 U.S. cents and remain there until the end of 2015. Roughly one third of the forecasted increase in inflation is due to the weaker Canadian dollar seen since the end of 2012.

Third, some of the factors that have driven inflation lower in recent months are temporary or one-time in nature, and should begin to reverse in the months ahead. In particular, there are limits to margin compression, so one would reasonably anticipate the recent fierce price wars within the food sector to ease at least to some extent over the forecast horizon.

And finally, despite the decline in actual inflation, estimates of inflation expectations as measured by the Business Outlook Survey have remained firmly anchored at around 2%. These expectations are important in forming the basis of wage and pricing decisions in Canada, and therefore in many ways become a self-fulfilling prophecy of future inflation.

**Food prices to lead CPI higher**

In general, components that have recently exerted the largest inflationary drags will likely experience the most notable rebounds in 2014-15. In particular, food price inflation will likely rise by about 3% per year over the next two years, driven higher in part by a 5% annual rise in fruit and vegetable prices. While price competition in the food sector appears to remain intense starting 2014, this is unlikely to be sustained throughout the year, especially in light of a weaker Canadian dollar, which should exert upward pressure on prices of many imported foods.

Within the shelter component, we expect to see mortgage interest costs finally return to inflationary territory. Spurred by the run-up in bond yields since the spring, the 5-year mortgage rate grew on a year-over-year basis for the first time in four years in September 2013. Higher interest costs take a long time to show up in the CPI because the number of mortgage renewals is small compared to the stock of existing mortgages. We anticipate that the recent increase in mortgage rates will show up in the CPI by the second quarter of this year. Looking ahead, as North American bond yields likely grind moderately higher in response to the U.S. economic recovery, we see further moderate increases in interest costs. While not a part of core CPI, higher interest costs on borrowing have spillover effects to other prices, as businesses pass on these costs to consumers.

The bulk of the swing towards inflation in health and personal care stems from a slowdown in the ongoing “patent cliff”. All in all, industry insiders have pegged the value of global annual drug sales going off patent at above $250 bil-

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**TABLE 2: INFLATION FORECAST**

<table>
<thead>
<tr>
<th>Component</th>
<th>2013E</th>
<th>2014F</th>
<th>2015F</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-Items CPI</td>
<td>0.9</td>
<td>1.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Core CPI</td>
<td>1.1</td>
<td>1.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Food</td>
<td>1.0</td>
<td>2.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Shelter</td>
<td>1.6</td>
<td>2.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Household Ops. &amp; Furnishings</td>
<td>0.7</td>
<td>1.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Clothing &amp; Footwear</td>
<td>-0.5</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.3</td>
<td>0.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Health &amp; Personal Care</td>
<td>-0.6</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Recreation, Education, Reading</td>
<td>0.2</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Alcoholic Bev. &amp; Tobacco Prod.</td>
<td>2.1</td>
<td>2.5</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Source: Forecast by TD Economics as of December 2013.
lion. While there are some important labels on track to come off patent over the next two years, the overall deflationary impact compared to recent years is expected to taper off considerably. Accordingly, the downward pressure on health and personal care is likely to wane over the forecast period.

Contributing to a modest uptick in transportation inflation is the likelihood that municipalities increase fees for public transit. On the flip side, gasoline prices are likely to remain relatively flat amid prospects for crude oil prices to hold in a relatively tight range.

While we don’t forecast a breakdown between inflation in the goods and service sector, services inflation can provide some good insights into where trends in inflation may be headed as well as the risk of broad-based deflation. Over half of the CPI is made up of services you can’t buy at a big box store, such as haircuts or child care. Services prices are more closely tied to wages and the current amount of slack in the economy. Recent trends in services inflation appear to be consistent with the forecast for a gradual strengthening in CPI inflation. Year-over-year services inflation has edged up from 0.9% in the spring to 1.5% in November (Chart 6).

## Bottom Line

Low inflation is currently widespread among advanced economies and Canada is no exception. The recent softness in Canada reflects the combination of an underperforming economy relative to its potential, as well as a number of temporary factors, such as increased retail competition, the effect of past loonie appreciation and expiring patents. A number of these influences are likely to begin unwinding in the coming months, pulling CPI inflation higher. Most importantly, with the Canadian dollar more recently on a descending path, prices for an array of import-intensive retail goods are likely to experience upward pressure. Combined with spare capacity that still needs to be absorbed, and relatively flat gasoline prices which are likely to lean against the upturn in prices, inflation’s upward march should be very gradual. Indeed, it may be late 2015 or early 2016 before the Bank of Canada’s core measure of inflation reaches its 2% target.

A return of inflation back to the still-moderate 2% level would have mixed economic effects. One negative implication is that (all things equal) households would experience a moderately faster decline in their purchasing power relative to inflation running at 1% or less. However, at the very low prevailing rates, the economy is left with a thin cushion to guard against deflation in the event of an unanticipated shock. Through its research, the central bank has found that the benefits of achieving and sustaining a 2% target more than outweigh the costs.

We see sustained deflation as a low risk possibility in Canada – barring, that is, a nasty surprise that pushes the economy back into recession. Still, if inflation fails to strengthen in the coming months, further monetary policy stimulus could be forthcoming, which could weaken the Canadian dollar even further. Under this scenario of both a lower interest rate and exchange rate profile, the risk of a sharper rebound in inflation further down the road would increase.

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