

TD Economics

Observation

March 25, 2009

MORTGAGE INTEREST COSTS & CANADIAN CPI

One of the more surprising elements in Statistics Canada's February Consumer Price Index (CPI) report was the impact of shelter costs, and in particular mortgage interest costs on the rise in headline inflation. Mortgage interest costs, while accounting for 5.6% of the total basket of consumer goods measured in the CPI, accounted for 21% (0.3 percentage points) of the total 1.4 year-overyear increase in consumer prices in February. In three of the ten provinces, mortgage interest costs were the primary contributor to higher inflation in the month.¹ The increasing importance of mortgage interest costs in CPI inflation reflects the fact that other price pressures have abated significantly, leaving mortgage interest costs, which are slower to respond to market prices, with a more dominant role. While the year-over-year change in mortage interest costs fell to 5.0% from 5.8% in January, it nonetheless seems slightly curious that one of the leading contributors to price growth in the country is the cost of main-



HIGHLIGHTS

- Mortgage interest costs contributed 0.3 percentage points to the Canadian CPI inflation rate of 1.4% in February. The impact of mortgage interest costs, while waning, has become more important as other price pressures have abated.
- Mortgage interest costs have a long memory of past home price and mortgage rate increases, so even while home prices and mortgages rates have fallen in the last year, the impact of mortgage interest costs on inflation has remained positive.
- This impact will continue to wane reflecting recent home price and mortgage rate declines. We expect mortgage interest costs to subtract an average of 0.2 percentage points from CPI inflation over the course of 2010.

taining a mortgage, especially since mortgage rates have fallen by 1.5 percentage points in the last year; existing home prices are down over 9% and new home prices down over 2% from a year ago.

Housing is different

For most items in the CPI, the change in prices measured in each month is calculated from the change in the purchase price of that good or service. If one year ago we were paying \$1.15 per litre of gas and now we are paying \$0.85, the change recorded in the CPI would equal -26% a simple enough calculation to make. To calculate the impact of the change in gas prices to overall inflation, we take into account how much an average household spends out of their total budget on gasoline. In Canada, this weight is 4.92%. However, as a consumption good, housing is unique – most households will purchase a house very few times over the course of their lifetimes and their largest costs will typically be on the mortgages they take out to finance the purchase. Because of housing's unique characteristics it is treated differently in the CPI than other goods in the index.

The treatment of housing in Canada's CPI attempts to capture the user cost of housing, including both rental costs and "a selection of costs specific to homeowners," including mortgage interest costs, replacement costs, property taxes, insurance and maintenance and repair costs.² The largest single cost in the homeownership category is mortgage interest at 34.3%. The amount of mortgage interest owed by Canadian households depends both on the amount borrowed initially and interest rates at the time of purchase or when a mortgage is renegotiated. However, because at any given time the number of new homes being purchased is fairly small in comparison to the total stock of mortgages outstanding, current mortgage interest costs have a very long memory of past home price changes. In fact, home prices measured in the CPI calculation of mortgage interest costs are a weighted average of home prices over a 25 year period. The weights used are reflective of the distribution of mortgage principal by the age of mortgage, and periods further into the past are given a lower weighting reflecting the fact that older mortgages have less principal owing than more recent vintages. The interest component of mortgage interest costs also has a long memory as it changes only with the amount of newly created or renego-





tiated mortgages, which tend to be small compared to the overall stock.

Forecast for Mortgage Interest Costs

The long memory of the mortgage interest cost component of CPI explains why this component continues to contribute to the overall inflation rate even while home prices and mortgage rates are falling. While a precise forecast of mortgage interest costs would require the distribution of mortgage principal by age used by Statistics Canada, a fairly close approximation can be made using a combination of estimated weights and longer-run moving averages of home prices and mortgage rates. All told, the strong home price growth that occurred in Canada over the last five years will lead mortgage interest costs to contribute positively to the overall level of inflation through the next several months. After adding 0.3 percentage points to inflation in the first quarter mortgage interest costs will likely contribute 0.2 percentage points to headline inflation in the second quarter and have a very slight positive contribution in the third quarter. However by the fourth quarter of this year, based on our expectations for home prices and interest rates, mortgage interest costs will turn negative and should be expected to subtract an average of 0.2 percentage points from overall inflation over the course of 2010.

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Endnotes

- ¹ The Daily, March 19, 200; Statistics Canada.
- ² The consumer price index reference paper: Statistics Canada Catalogue no. 62-553.

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