Scotiabank

GLOBAL ECONOMICS

SCOTIA FLASH

February 28, 2023

Markets Misunderstood Canadian GDP

- **Headline GDP disappointed in Q4 and December...**
- **...but masked more constructive details and temporary distortions...**
- **...with inventories dragging on GDP by the most in over four decades..**
- **...while weather, train derailments and an oil spill distorted December GDP**
- **Q1 GDP may be buoyed by a reversal of inventory-import effects & distortions**
- **Final domestic demand offered a more resilient picture**
- **Be very careful not to draw overly hasty BoC implications**

CDN GDP, q/q % SAAR, 2022Q4:
Actual: 0.0
Scotia: 1.4
Consensus: 1.6
Prior: 2.3 (revised from 2.9)

CDN GDP, m/m %, December:
Actual: -0.1
Scotia: 0.2
Consensus: 0.0
Prior: 0.1
January GDP guidance: +0.3% m/m

Canada's economy fared somewhat better than the market reaction and media coverage to headline readings suggests, though in fairness this is one of the trickiest sets of GDP figures in quite some time. The figures may set up a swing in the other direction into Q1 GDP and that serves as one reason for why one should be careful to avoid reaching overly hasty conclusions on the BoC.

I wouldn't fight the market today, but be careful going forward as a whipsaw effect may unfold. Canada's sovereign yield curve is outperforming other global curves as 2s rally by about 8–9bps post-data while CAD depreciated by about half a cent to the USD in the wake of weaker than expected GDP for Q4 and December but solid guidance for January.

I'll start by first just reporting the figures and then move to explaining why I think the figures were better than the headlines and the possible path forward.

HEADLINE READINGS....

See the tables above for the figures. GDP posted no growth in Q4 and was therefore well below consensus expectations and below the BoC's Q4 GDP forecast of 1.3% in the January MPR. December GDP fell by 0.1% m/m but was massively distorted (see below).

Early guidance for January, however, showed growth returning to the plus side of the ledger at 0.3% m/m. That's consistent with data such as the strong gain in hours worked that month. For details on January's gain we'll just have to wait until the next report a month from now because all we have to go by is loose verbal guidance. That guidance suggests that the gain was driven by mining, oil and gas, plus the professional, scientific and other technical services sector that includes everything from IT to engineering and accountants and lawyers, plus transportation and warehousing. Gains were offset by retail trade and construction in January.

Using monthly GDP accounts, the economy has grown in 10 of the 12 months during 2022 with January 2022 and December 2022 being the book-ended exceptions and growth continued into 2023. That's hardly falling off a cliff folks.

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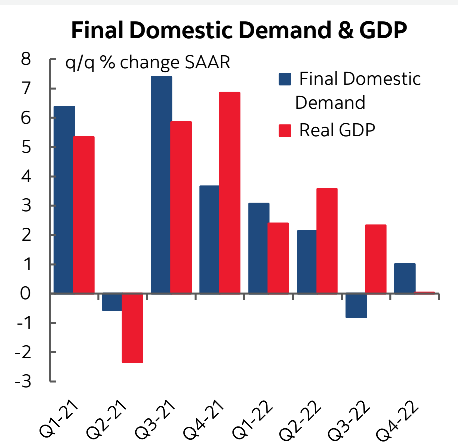
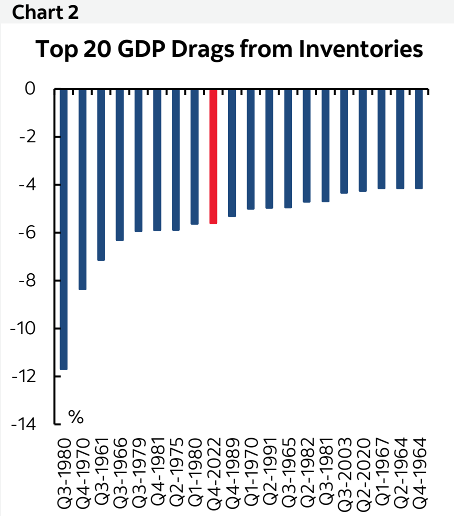
Chart 1



Sources: Scotiabank Economics, Statistics Canada.

Chart 2



Sources: Scotiabank Economics, Haver.

Using the monthly GDP accounts would suggest that GDP has about 1% m/m SAAR growth baked into Q1 based upon the Q4 average and January while assuming the rest of the quarter turns in a flat performance only so that we can focus the math on the effects of what we know so far. That is highly preliminary and could move up or down based upon how data evolves over the quarter. Monthly GDP accounting does not, however, consider how high production was achieved in January. For that, we need to look at the quarterly GDP accounts that are based upon expenditure concepts.

...DON'T TELL ALL...

The reasons why GDP is better under the hood than the headline Q4 figure suggests include:

- The core domestic economy performed decently. Final Domestic Demand—a concept that adds consumption plus investment plus government spending—was up 1% q/q at an annualized rate. That's not great, but it's better than the headline GDP donut (chart 1).
- Final Demand—a concept that takes FDD and adds gross exports—grew by about 1.3% q/q annualized as exports added a further 0.3 percentage points to GDP growth via a mild gain.
- A major reason why GDP was worse than FDD and FD was that companies reduced their investment in inventories and at this stage of the cycle that's not a bad thing. Inventories dragged on GDP growth by the most since 1981Q4. This ranks the drag effects as among history's largest since the 1960s (chart 2). This is extremely difficult to gauge in advance of the figures since much of the inventories picture is missing as we only have manufacturing and wholesale inventories on a monthly basis into the report and are missing retail and farm inventories that are a big chunk of the picture.
- An open economy like Canada that imports much of what goes in an out of inventories would be left with an incomplete picture if we didn't also consider that imports added a whopping 4.4 percentage points to GDP growth in Q4. This concept confuses a lot of clients but needlessly so. When imports fall, GDP accounting treats this as less of a leakage out of the economy and so it perversely adds to top line GDP growth.
- The two effects of inventory disinvestment and lower imports adding to growth should arguably be netted out in an economy like Canada's. Doing so reveals that inventories and imports combined to drag 1.2 percentage points off of GDP growth in Q4. If not for this effect, GDP growth could have been stronger, although we would then have to be open to how other parts of the GDP accounting could change.

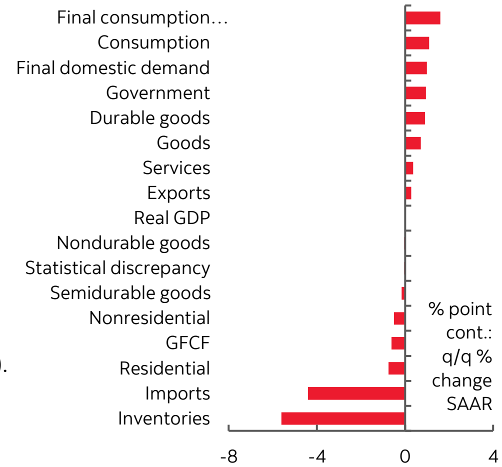
Charts 3 and 4 show the weighted contributions to quarterly GDP on an expenditure basis and monthly GDP on a sector basis.

I'll come back to the monthly figures that were distorted, but first, depleting inventories and by corollary importing less is not necessarily a bad thing at this point in the cycle. It could reflect one of two things. Either businesses are deliberately managing down their inventories in anticipation of risks that lie ahead. Or improving supply chains are first being met by selling down inventories to meet customer needs. I suspect it's a bit of both.

Chart 5 shows the economy-wide inventory-to-sales ratio. It has been rising for the better part of a couple of decades now. It has recently moved higher. Going forward, a key debate is how much of this rise will continue to be thwarted if companies shed inventories into a soft patch, versus whether they will continue to prefer higher inventories held against sales in a longer-run sense given the serial supply-side shocks they've experienced for years. That started with the 2016 US election and Brexit vote that drove trade frictions, became amplified by the pandemic and then even more so by the Ukraine war.

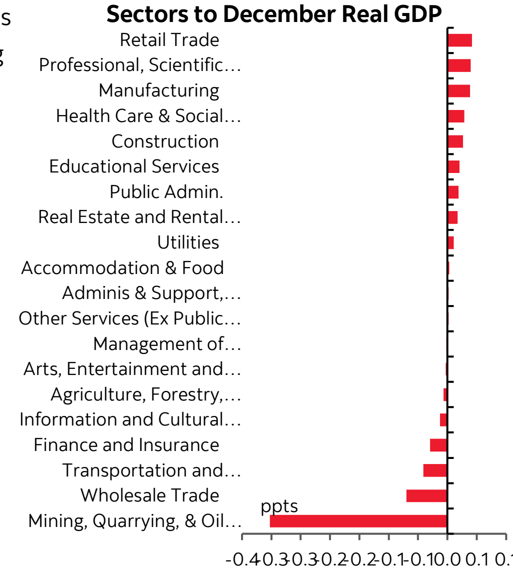
Chart 3

Contributions to Canada's Q4-2022 Real GDP



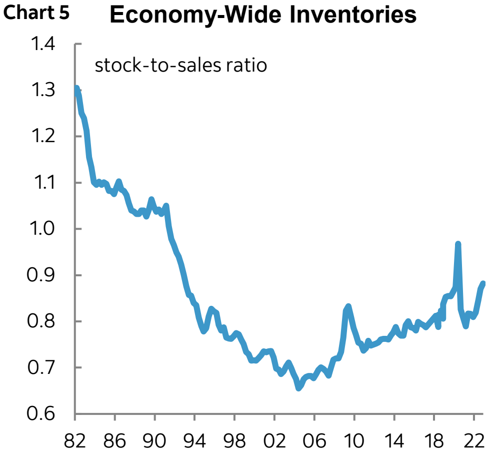
Sources: Scotiabank Economics, Statistics Canada.

Chart 4 **Weighted Contributions from Sectors to December Real GDP**



Sources: Scotiabank Economics, Statistics Canada.

Chart 5 **Economy-Wide Inventories**



Source: Scotiabank Economics, Statistics Canada.

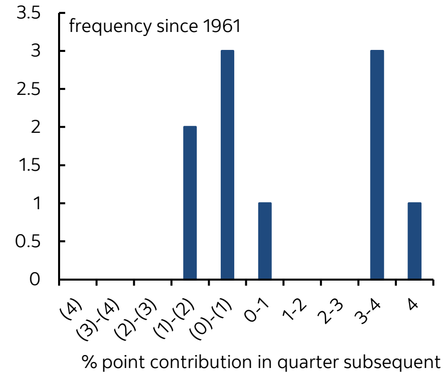
…AND COULD SET UP A Q1 REBOUND…

In a shorter-run sense, it's possible that these effects from inventories and imports may swing in the other direction in 2023Q1. Statistically it's very probable that this will happen. If that happens then watch markets swing to the other side of the ship if GDP recovers and for the same reason that they over-reacted to the Q4 softness today.

Looking into the past can help explain why this may be the case into Q1. Historically when the inventory drag in one quarter has been -5 ppts or greater, the next quarter has seen a positive inventory contribution to growth 5 out of 10 times and the others have been small drags. The magnitudes of these next-quarter inventory adjustments are shown by frequency of occurrence within ranges in chart 6. That doesn't mean it's a slam dunk, but it is pretty high odds that inventories won't be the same negative factor and may add to Q1 GDP growth. They don't have to explode either; they merely have to stabilize or build at a slightly quickened pace and that shouldn't be too hard to do given the magnitude of the drag effect in Q4.

Chart 6

Inventory Contribution the Quarter After a Big Drag



% point contribution in quarter subsequent to a big drag of at least -5%

Sources: Scotiabank Economics, Haver

As for imports, historically when imports added 4 percentage points or more to GDP growth in one quarter, the next quarter is split between import additions and contributions to GDP growth with frequency of occurrences by range of import contributions to growth shown in chart 7. That said, 9 out of 11 times since 1960 have seen the quarter after a big 4%+ import contribution to growth followed by something less than that in the next quarter.

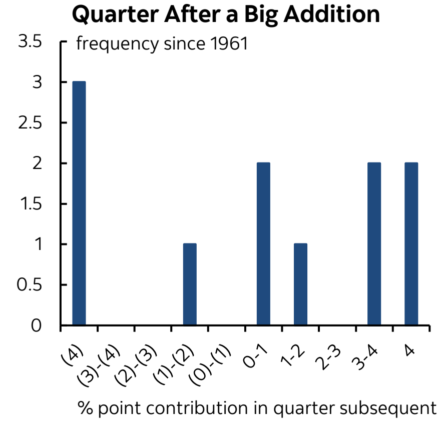
…ESPECIALLY SINCE DECEMBER GDP WAS DISTORTED BY TEMPORARY DRAG EFFECTS

Returning to the monthly figures, the reasons why December GDP disappointed are tough to gauge in advance but likely to be temporary. Statcan flagged the drag effects from unusual weather and unplanned seasonal effects. Specifically, the 4% drop in output in the mining, quarrying and oil and gas sector dragged a weighted 0.3% m/m off of GDP growth in December due to "unplanned maintenance-related events throughout the supply chain which led to lower production. This included an oil spill south of the border, in Kansas, which disrupted the supply of Canadian crude to the Keystone export pipeline." Expect this contribution to snap back into Q1 and it may lead the BoC to revise up its 0.5% q/q SAAR 2023Q1 GDP forecast.

Secondly, weather carried worse-than-usual seasonal effects on the transportation sector. Statcan flagged how weather warnings just ahead of Christmas drove air transportation down by 2.3% in December. A train derailment in Ontario on December 24th and one in Saskatchewan on December 2nd partially disrupted rail transportation that fell by 7.7% m/m for the biggest drop since September 2019. Train derailment effects will reverse in Q1 and so may air travel.

Chart 7

Import Contribution the Quarter After a Big Addition



% point contribution in quarter subsequent to a big addition of at least +4%

Sources: Scotiabank Economics, Haver

BE CAREFUL TOWARD DRAWING OVERLY HASTY BOC IMPLICATIONS

There are several reasons to be careful with respect to drawing Bank of Canada policy implications.

For one, it's just one report after a string of strong GDP gains.

Second, the composition of the report is distorted in a possibly temporary way. In the past, the BoC has tended to draw attention to occasions when final domestic demand has offered a different picture compared to GDP and I would expect them to do so in next week's statement while acknowledging the miss on GDP.

Thirdly, the economy remains in excess aggregate demand with an extremely tight labour market. A whole string of weak GDP reports will be required to open up a material amount of slack and it's premature to judge that this is happening because of one report.

Finally, 2% inflation is the BoC's mandate within a 1–3% flexible range and it has multiple drivers in a more complex world for evaluating inflation risk. I've always argued that the BoC puts too much stock in output gaps as a driver of inflation and that has been particularly true during the pandemic.

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