Focus

Feature Article

Four-Letter Recovery: The Shape of Things to Come

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The New New Math

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Financial markets had a strong holiday-shortened week, as volatility continued to gradually climb down the ladder and the S&P 500 headed for a double-digit advance. The TSX has quietly turned in three consecutive weeks of gains, a positive outlier. Asset prices were buoyed by news hinting at COVID reaching an apex in some key countries and regions, even as the economic news harshened, particularly on the jobs front. The daily market swings driven by virus updates may seem to be bordering on the macabre, but there is clear logic at work—**the critical issue for the economy and markets is the timeline for potential easing of the shutdowns. And that timing will be dictated by the path of the virus.**

Bank of Canada Governor Poloz indicated that making forecasts now is mostly a matter of arithmetic, to which we now turn. Drilling it down to the basics of the economic costs of the shutdown, we'll look to some rules of thumb. **Each week accounts for just under 2% of the year, and somewhere between 23% and 35% of the economy is currently locked down** (depending on the region). So, **every week of shutdown thus costs the economy between 0.5% and 0.7% of annual GDP**. With the U.S. Administration, for one, looking at a minimum of closures being in place until the end of April, that points to shutdowns of (at least) six weeks, while Ottawa has offered wage subsidies for 12 weeks. That gives us a **boundary** of as low as a 3% cut to annual GDP to as much as nearly a 9% slice. And these are just the direct costs of lost activity from the closures.

Our forecast estimates **assume a middle ground for now,** both in terms of the length of the assumed full-on closures and the weekly economic hit. And, of course, any lightening of measures will not be an on/off switch; more likely it will be a carefully staged easing, much as the U.S. is currently considering. With all of those uncertainties, we arrive at roughly a 6 percentage point direct cost to the North American economy from the shutdowns. With underlying pre-crisis growth likely headed for roughly 2% this year, that leaves GDP down 4% for all of 2020—and that is a much more important metric than some of the wild monthly and quarterly readings we are going to witness in coming days. In Canada, we see a somewhat deeper GDP drop this year (4.5%) due to the added crunch from the oil shock.

On the flip side of this deep drop in GDP, **fiscal policy has thrown the taps open** in an effort to offset the income loss. Such measures can't be viewed as stimulus so much as replacement income. In other words, if activity is cut 6%-to-7% by the shutdowns, that's a rough guide to how much extra government transfers will be needed to offset the shutdown damage. And, it just so happens that something close to 7% of GDP of direct spending measures appears to be the "right" answer that many countries are landing on. For example, Japan was the latest nation to announce a new big fiscal support package this week, and it contained almost exactly 7% of GDP in direct spending. In a similar vein, we look for Ottawa's budget deficit to rise by, roughly, 7% of GDP (from 1% to 8%), based on programs announced to-date along with automatic stabilizer costs.

Forecast Update: With those parameters as a background, we are **adjusting our forecasts for 2020 this week**. In summary:

- **Global growth** is now expected to fall 0.8% this year (from flat), with downside risks persisting, and compared to last year's sluggish 2.8%, and worse than the deep decline in 2009. We took a heavier axe to North America and some key emerging markets in particular. For now, we are maintaining our oil price forecast, at an average of $35 for WTI this year and $45 next, as a significant OPEC+ deal appears in the works. However, with WCS still desperately weak, the downside pressure remains on Canada.

- **U.S. GDP** is now expected to contract 4.0% this year (versus -2.5% previously). For perspective, that would be the worst year for the U.S. economy in the post-1950 era (2009 saw a 2.5% drop). Output will decline in Q1, and then fall at a double-digit annual rate in Q2 (now pegged at 40% annualized). We continue to expect a strong rebound in H2, and look for a robust advance for all of 2021 (perhaps as much as 6% growth).

- **Canada's GDP growth** is being cut to -4.5% this year, down from the prior call of -3.0% (and versus a 1.6% rise for all of last year). That would exceed the biggest drop in modern times; previously that was a 3.2% drop in 1982. Canada will likely take an even heavier hit due to the slump in commodity prices (especially oil), and also a still-milder boost from fiscal stimulus, at least up to this point. Here, too, we expect a big Q2 contraction (down 45%) after a 6.5% drop in Q1, but also a big rebound in H2. The downward revisions reflect the reality of closures persisting for longer than first suspected.

- **The outlook for interest rates is straightforward,** with rates now essentially at the lower boundary for both the Fed and the Bank of Canada. We expect no further rate moves right out to the end of 2021, and also no move to negative rates by either bank. But while it will now be quiet on the rate front, central banks remain extremely active on the liquidity and QE fronts—as seen by the Fed's sweeping $2.3 trillion program announced Thursday.

- **The Canadian dollar** has firmed further after buckling heavily last month, in part due to a retreat in the U.S. dollar, but with little thanks to oil prices. Even with the bounce, we see the currency remaining under pressure in the months ahead, with a possible test of the $1.45 level (or below 69 cents). We look for the loonie to settle down along with other markets by the second half, but it will be challenged to get back above the 75-cent level even in 2021.

To explain the dramatic and persistent forecast changes, we are only **building in the news on closures** as they become official and not pre-guessing those steps. Given the sweeping nature of the closures now in place, the forecasts should stabilize for a spell, until we get new information on the shutdown timelines. Notably, a consensus on the Q2 GDP hit seems to be firming (although we are looking for a bigger drop than most, and a bigger H2 bounce than others), although all forecasters are no doubt still heavily challenged by the unique nature of this downturn.

Today marks the 100th day of 2020; like most of you, it feels more like the 1000th day to me. And this day brought arguably the **single worst economic report issued by StatsCan in the post-war era**, in the form of the 1 million job loss in March (with full

expectations that April will bring even tougher news). This was coupled by yet another 6 million+ U.S. initial jobless claims in the past week.

Yet, the latest, even-worse-than-expected, jobs figures had no impact on financial markets. Seemingly, the wave of harsh news suggests the massive figures have lost their power to shock. After all, it's tough to top Alberta Premier Kenney's talk about a possible 25% jobless rate for his province. But we would stress that these **horrific job losses could and can be reversed**—to a large extent, but not completely—as the distancing measures lighten. And that potential reversal is apparently what markets are focused on, encouraged by the equally massive wave of fiscal and monetary support. (Sal explores to what extent personal income losses are being offset by fiscal measures in his Thought below; and the answer in North America is *"almost completely, for now"*.)

To bring it back to the opening sentence, it was a remarkable week for both financial markets and the economy. Even in the face of incredibly tough economic news, and figures few could have fathomed two months ago, financial markets are apparently in full repair mode. As we speak, the S&P 500 is up more than 12% this week and now stands at its highest level since March 10—i.e., when the NBA and NHL were still playing before packed crowds.

Income Support Could Offset Most of the Lost Wages

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The income-support measures announced by governments on both sides of the border will go a long way toward mitigating the lost income arising from mass layoffs. This means that, even as unemployment rates are likely to surpass peaks in the Great Recession, the resulting pain for households will be less severe (albeit still very meaningful) in this epic downturn, assuming the economy and employment begin to recover by early summer. Based on a view that roughly one third of the U.S. and Canadian economies are effectively shut down, resulting in a similar loss of labour compensation, **we estimate that the lost earnings for one calendar quarter is almost $100 billion in Canada and about ten times higher in the U.S**. It's worth noting that, according to a University of Chicago study, about one third of employees can work remotely and, because they tend to work in higher-paying industries, account for 44% of all wages. As well, a good number of workers (in hospitals, delivery drivers, etc.) are continuing to work almost as usual.

In Canada, the income-support measures by the federal and provincial governments are worth about $100 billion—including wage subsidies to businesses, the $2,000 monthly payment from the Canada Emergency Response Benefit, and an increase in GST and child care payments. Given processing delays, we assume only about 80% of this support will end up in individuals' pockets in the current quarter. In addition, another $20 billion of increased employment insurance payouts will help. This brings the total direct wage support to around $100 billion, which **fully covers the estimated loss of earnings.**

The fiscal support is even larger in the U.S., where an estimated $1.0 trillion of employment earnings could vanish in the current quarter. The income support measures in the CARES Act tally about $1.6 trillion—including $1,200 payments to individuals, expanded unemployment insurance with a $600 weekly federal supplement, and forgivable loans to businesses that retain staff. For some lower-paid

workers, the enhanced UI payments could surpass previous earnings. If 80% of the income support ends up in people's pockets this quarter, then the total of $1.3 trillion will **more than offset the lost employment income by a factor of one third**.

It should also be noted that all levels of government appear eager to do even more if necessary to cushion this traumatic blow to the economy and workers' lives. Moreover, household expenses have also fallen sharply, notably on commuting costs and entertainment outlays. Weighing in the opposite direction, however, other types of income, including rents and dividends, could get clipped. Broad payments forbearance, including rent, loan and tax deferrals, will still be needed to limit the number of insolvencies for individuals who fall between the cracks of the income-support system, households that have higher debts, and small business owners who are facing hefty bills but little to no revenue.

The unprecedented fiscal support is **not a panacea for the pain inflected on workers by this self-induced recession. But it will provide a rather large cushion, allowing most workers to more quickly put the pieces of their lives back together when the economy restarts.**

U.S. Economy's Lender of Last Resort

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Being the lender of last resort to the banking system is a critical tenant of modern central banking. On Thursday, the Federal Reserve took another (expected) big step in becoming, at least temporarily, the lender of last resort for the entire U.S. economy.

Up until Thursday, the Fed's support for credit market liquidity and lending was already unprecedented. With the playbook from the Global Financial Crisis and Great Recession in hand, direct large-scale asset purchases, a.k.a. quantitative easing, were reactivated, but this time they were open ended (no total dollar amounts) with commercial mortgages supplementing purchases of Treasuries and MBS. The Fed also reestablished various special purpose vehicles to buy about $400 billion of commercial paper and asset-backed securities, along with, this time, corporate bonds and loans. Treasury kicked in $40 billion of capital to cover any losses in the SPVs.

Then came the CARES Act, with Congress approving and the President signing off on $454 billion for the Treasury to bankroll further Fed efforts to support credit market liquidity and lending. The Fed had already discussed a "Main Street Business Lending Program" to support lending to small- and medium-sized businesses along with buying loans originated under the Small Business Administration's Paycheck Protection Program. These were part of Thursday's announcement, which along with other new or expanded measures, is intended to provide up to $2.3 trillion in loans to support the economy. The Fed said: *"This funding will assist households and employers of all sizes and bolster the ability of state and local governments to deliver critical services during the coronavirus pandemic."*

- The **Paycheck Protection Program Liquidity Facility** (PPPLF) will lend to banks and take the SBA guaranteed loans as collateral (at face value). There is no set amount, but Congress gave the SBA $350 billion for the program.
- The **Main Street Lending Program** establishes two SPVs, the **Main Street New Loan Facility** (MSNLF) and the **Main Street Expanded Loan Facility** (MSELF). A business can be in only one of them. The MSNLF will purchase 95% of loans up to

$25 million with the MSELF buying those up to $150 million. The two SPVs will total up to $600 billion with Treasury kicking in $75 billion.

- The size and scope of the existing SPV, the **Primary Market Corporate Credit Facility** (PMCCF), purchasing corporate bonds and loans in the primary market, was increased and expanded. It goes from $100 billion to $500 billion, with Treasury's contribution increasing from $10 billion to $50 billion.
- The size and scope of a second existing SPV, the **Secondary Market Corporate Credit Facility** (SMCCF), purchasing corporate bonds in the secondary market, was increased and expanded. It goes from $100 billion to $250 billion, with Treasury's contribution increasing from $10 billion to $25 billion.
- The scope of a third existing SPV, the $100 billon **Term Asset-Backed Securities Loan Facility** (TALF), was expanded.
- Finally, the **Municipal Liquidity Facility** will establish an SPV to purchase up to $500 billion of notes issued by states along with larger cities and counties. Treasury will kick in $35 billion as capital.

Importantly the $2.3 trillion in financing described above reflects underlying Treasury capital commitments of $185 billion, $20 billion of which occurred before the CARES Act that apportioned a $484 billion pot. The Fed might not yet be halfway done in becoming the lender of last resort for the U.S. economy. The Fed concluded that it *"remains committed to using its full range of tools to support the flow of credit to households and businesses to counter the economic impact of the coronavirus pandemic and promote a swift recovery once the disruptions abate."* Chair Powell, in a subsequent speech, said these tools would be used *"forcefully, proactively, and aggressively until we are confident that we are solidly on the road to recovery."*

BoC Preview: Farewell Governor Poloz

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Following a wild month of March, we're a week and a half into April and we've yet to see anything new from the Bank of Canada. Next week's policy meeting has the potential to bring more measures, but the calm that's come over the market suggests the **BoC will remain patient for now**. Also note that this is Governor Poloz' final official policy announcement, with FM Morneau stating in recent weeks that a new governor will be in place on schedule for the next policy meeting on June 3.

The BoC has already cut rates to the effective lower bound, started QE (buying Government of Canada bonds), bought a large chunk of the BA market, unveiled support for commercial paper and provided waves of liquidity for the financial system. What more can be done? The **next potential step** would likely be an **expansion of QE to CMBs** (buying bigger size than currently) and provincial bonds. However, OSFI announced regulatory changes late on Thursday which will allow banks to increase their exposure to GoCs (and potentially provincial bonds; waiting on some clarity there) as they will be excluded from leverage ratios. That might preclude the need for further BoC action for now.

This is a **Monetary Policy Report meeting**, so we'll get the Bank's latest forecasts as well. **We cut our 2020 GDP growth forecast to -4.5%** this week, accounting for the broad shutdowns that are expected to last at least into May. The BoC's regular

schedule would mean the BoC introduces its Q2 estimate in the MPR, but it might take an alternative tack. Given the likely massive decline in annualized growth in Q2, the Bank might just choose to publish annual figures in an effort not to sound too downbeat. Indeed, publishing expectations for a steep Q2 drop without also showing the expected Q3 rebound wouldn't make for good headlines. The Bank won't want to contribute to an even further drop in confidence.

Key Takeaway: We're not expecting anything new from the BoC on April 15, though expanding the QE program is on the radar. For now, the Bank is evaluating what it has already put in place. As this is Governor Poloz' final meeting, expect his successor to be announced within the next few weeks (similar timeline to seven years ago).

Europe... Mad World

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(Apologies upfront to Tears for Fears.) There was some tentatively encouraging news this week. **Some parts of Europe** (Austria, Denmark, Belgium, and Norway) are **looking to lift** some of the harsh, economy-draining **restrictions** that were necessarily imposed over the past month, but whether or not it is too soon remains to be seen. The first step is to re-open schools but some are doing it in stages, and some are splitting classes in half for more distance between students. **Not all of Europe is doing this**. France, where the number of cases edged ahead of Germany for the first time in nearly a month, introduced a new ban (no exercising outdoors during the day). In Spain, the 2nd hardest hit country in Europe, the death toll continues to rise. And the economies across the continent have been slammed, with the impact on GDP being described as "*historic*" and "*devastating*". Germany's leading economic research institutes this week reported their estimates for a 9.8% slump in Q2 GDP, or 33.8% annualized, the biggest dive since the data began in 1970. (BMO isn't far from those estimates.)

Yet, Europe's finance ministers struggled to agree on a combined fiscal stimulus plan. Yes, they agree that something must be done, but what? Issuing coronabonds is something that Italy, France and Spain are passionate about, but the idea of jointly issued debt is a definite no-no for those in Germany and the Netherlands. Using the ESM to set up credit lines for countries that need help isn't appetizing either. However, **as of Thursday afternoon, the core countries may have reached a deal**. If this is accurate, it would be very encouraging.

It would have been truly deflating it this group was unable to unite, even to fight this historic and devastating enemy. Indeed, I don't really *find it kind of funny but I do find it kind of sad. When people run in circles it's a very very mad world*.

Fear Itself

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Fear and worry abound in financial markets and on Main Street. Some indicators show unprecedented levels, while others are not quite there yet. Here is a roundup for contrarians:

Investors' Intelligence: The survey of advisors shows a net bearish outlook that, historically, we only typically see around major market lows. Indeed, it's very rare that the percentage of bears outnumbers the percentage of bulls, as it does now—think 2015, 2008, 2002, 1998. You get the idea.

Put-to-call volumes: Put volume has outweighed call volume on the CBOE by about 15% over the past month, which is pushing levels last seen in 2015 and 2011.

Conference Board: Stock price expectations over the next year in the monthly survey (as of March) was back into negative territory, but it was early in the proceedings. A net 7% of Main Street respondents were bearish in the month, versus readings around -20% in 2011 and -45% in 2008. There's probably more to come on this front.

The VIX: Implied volatility in the options market ballooned in March, with the VIX topping the 80 level, implying a roughly 23% move in the S&P 500 over the next month. That surpassed the 2008 daily high. Yikes. The index has since calmed to just above 40, but that remains historically high. Interestingly, that's right around the same level it was down to when the market finally bottomed in March 2009.

Credit spreads: Corporate bond yield spreads have come down versus long-term Treasuries after peaking in late-March. While still elevated versus cycle norms, the massive wave of central bank liquidity and support has helped.

Valuations: Forward-year earnings expectations are still under heavy review, so the forward p/e ratio might be a tad misleading still at this point. From a longer-term perspective, the cyclically-adjusted p/e ratio (Robert Shiller's metric) on the S&P 500 pulled back to around 23x. That's still meaningfully above 2009 lows (around 13x), but has blown off all of the froth that had built up pre-COVID.

Search traffic: Google trends reports that U.S. search traffic for "*stock market*" was twice 2008 levels in recent weeks, which was the previous high. Searches for "*recession*" have also topped prior highs from that period. The wide-ranging impact of this shock is probably contributing to the unprecedented search volumes.

The Bottom Line: Fear and worry abound, and the combination of above indicators is probably statistically about as bullish as you'll get. But we all know this shock is unique, and much remains to be seen on when the recovery can begin, and what it will look like.

Crude Oil Outlook: Saudi Arabia Needs a Deal

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With their backs against the wall, it seems that the world's largest oil producers are inching closer to sealing a new, enlarged OPEC+ agreement. At the time of writing, OPEC+ has tentatively agreed to cut production by 10 million barrels per day (mb/d) for May and June. The pressure will now turn to non-OPEC+ countries (Canada, Brazil, and the U.S.) to see if they will add to the cut as G20 energy ministers are set to deliberate tomorrow. Media reports suggest that non-OPEC+ countries are considering a cut of 5 mb/d.

Saudi Arabia and Russia are unsurprisingly shouldering the bulk of the OPEC+ cut as each are reportedly reducing production to 8.5 mb/d. This roughly works out to a 4.0 mb/d and 3.5 mb/d cut, respectively, compared to total output capacity. Riyadh has little choice as its economy and fiscal position are simply the weakest among the major oil producers. The International Institute of Finance (IIF) recently estimated that if Brent crude oil averaged US$30/bbl (equivalent to WTI of US$25) for 2020, Saudi Arabia's budget deficit would balloon to 17% of GDP (vs 4.3% in 2019). Riyadh could tolerate deficits of this magnitude for one or perhaps even two years, but it would

severely dent its fiscal reservoir. Note that the 'true' amount of 'liquid' fiscal reserves at Riyadh's disposal also remains a topic of debate with estimates ranging between 20% and 100% of GDP.

Either way, a large and persistent drain on Riyadh's fiscal reserves would hurt its efforts to diversify the economy, where it is already struggling to keep its citizens employed, unlike its wealthier and less populated Gulf neighbours (Kuwait, Qatar and UAE). The unemployment rate for Saudi nationals stood at 12.3% in 2019Q3 and the pressure is set to increase further. The kingdom's population is quite young with roughly 30% currently below the age of 20.

On the flip side, the situation is less pressing in Moscow as the country's jobless rate stood at 4.6% in February. If Brent were to average US$30, the IIF estimates that Russia's 2020 budget would post a more manageable deficit of 3.3% of GDP, compared to a surplus of 1.9% in 2019. Moscow's ability to cope with lower oil prices these days can be attributed to twin decisions made since the last major oil price shock in 2014—floating its currency and implementing stricter fiscal rules. In turn, Russia has built up fiscal reserves totaling 15% of GDP.

In a nutshell, it appears Saudi Arabia and Russia have relented and decided to bear the brunt of an enlarged OPEC+ agreement. The bigger, unknown question is whether the proposed cut will be enough to correct the massive oil imbalance that is still growing rapidly. In our view, there is more work to do.

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Indications of stronger growth and a move toward price stability are ***good news*** *for the economy.*

	Good News	Bad News
Canada ▪ COVID-19 triggers record job loss with more to come ▪ BoC on deck next week		**Employment** -1,010,700 (Mar.) **Jobless Rate** +2.2 ppts to 7.8% (Mar.) **Average Hourly Wages** +6.2% y/y (Mar.)—but skewed to higher income earners **Housing Starts** -7.3% to 195,174 a.r. (Mar.) **Building Permits** -7.3% (Feb.) **BOS Indicator** -1.43 pts to -0.68 (Q1) **Ivey PMI** -28.1 pts to 26.0 (Mar.)
United States ▪ Fed provides $2.3 trln in new aid for businesses/munis ▪ Chair Powell vows to act "*forcefully*" through crisis ▪ Stocks rally to bull territory ▪ Kudlow: Economy could reopen in four to eight weeks	**Consumer Credit** +$22.3 bln (Feb.)	**Initial Claims** -261k to 6.606 mln (Apr. 4 week)—still a near record high **Producer Prices** -0.2% (Mar.) **U of M Consumer Sentiment** -18.1 pts to 71.0 (Apr. P) **NFIB Small Business Optimism** -8.1 pts to 96.4 (Mar.) **Job Openings** edged lower to 6,882k (Feb.) **Wholesale Inventories** revised down -0.7% (Feb.)
Japan ▪ State of emergency declared in seven major cities ▪ BoJ Gov. Kuroda sees "severe" economic impact from virus		**Machine Tool Orders** -40.8% y/y (Mar. P) **Household Spending** -0.3% y/y (Feb.) **Consumer Confidence** -7.4 pts to 30.9 (Mar.)
Europe ▪ EU's biggest economies strike deal on fiscal stimulus ▪ PM Johnson out of ICU after virus symptoms improve	**Germany—Industrial Production** +0.3% (Feb.) **Germany—Trade Surplus** widened to €21.6 bln (Feb.) **France—Trade Deficit** narrowed to €5.2 bln (Feb.) **Italy—Retail Sales** +0.8% (Feb.) **U.K.—Industrial Production** +0.1% (Feb.)	**Germany—Factory Orders** -1.4% (Feb.) **Italy—Industrial Production** -1.2% (Feb.) **U.K.—Monthly Real GDP** -0.1% (Feb.) **U.K.—Index of Services** unch (Feb.) **U.K.—Trade Deficit** widened to £11.5 bln (Feb.) **U.K.—Construction PMI** -13.3 pts to 39.3 (Mar.)—11-yr low
Other ▪ RBA, BoK on hold ▪ New Zealand expands LSAP ▪ OPEC+ initiates 10 mbpd output cut	**China—Foreign Reserves** steady at $3.1 trln (Mar.)	**Australia—Trade Surplus** narrowed to A$4.4 bln (Feb.)

Four-Letter Recovery: The Shape of Things to Come

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Fully recognizing that we are now in the heart of the deepest and swiftest economic downturn in modern times, attention is now turning to the shape, strength and timing of the recovery. Many are trying to assign a particular letter to the recovery, which in some sense could roughly answer all three questions in a single metric. Cutting to the conclusion, we suspect that this recovery will probably not fit neatly into any one of the four letter boxes—just as the downturn is unique, so, too, may be the recovery.

First, we need to set some ground rules. When we are talking about the shape of the recovery, **we need to distinguish between the level of activity and the growth rate**. Arguably, *every* recovery in U.S. economic history has been some form of a V, when looked at in growth terms (*Chart 1*). The only outlier was in the early 1930s, when the economy carved out a nasty W in the middle of the Great Depression, with the right hand slide even deeper than the initial drop. However, there have been plenty of U-shaped recoveries (and even one temporary L), when we instead look at the *level* of activity. As an example of how a recovery can look so different when comparing growth rates and levels, consider U.S. employment from 2007 to 2014 (*Chart 2*). While no one would consider U.S. jobs to have done anything but a lazy U in the aftermath of the financial crisis, even then the growth rates did rebound quickly, and managed to carve out something approaching a V. Since almost everyone would consider jobs to have been in a U during that episode, **we will focus on levels, not growth rates**.

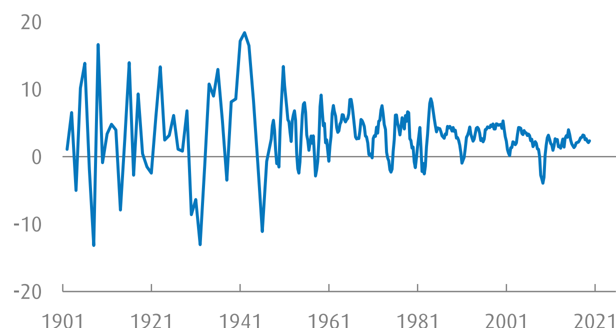
Let's consider what each one of the four letter scenarios would broadly look like, and we'll use *Chart 3* as a guide:

V-shape (35% chance): Activity bottoms in April, but shutdowns lighten sharply in May, helping activity snap back quickly. Perhaps supported by an effective mitigation drug course, as well as the wave of fiscal spending, economy-wide activity is roughly back to normal by the summer. And, by next year, losses have been recouped, and the economy is back on its long-term trend by the end of 2021.

Chart 1
History Says V

United States (y/y % chng)

Real GDP

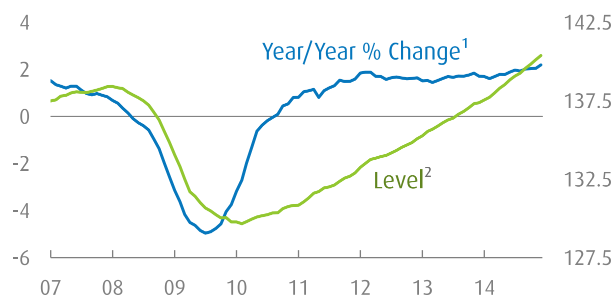


Sources: BMO Economics, Haver Analytics

Chart 2
U.S. Jobs in Great Recession: U Be the Judge

United States

Total Nonfarm Employment



[1] (lhs); [2] ex Decennial Census Temp & Intermittent (rhs : mlns)
Sources: BMO Economics, Haver Analytics

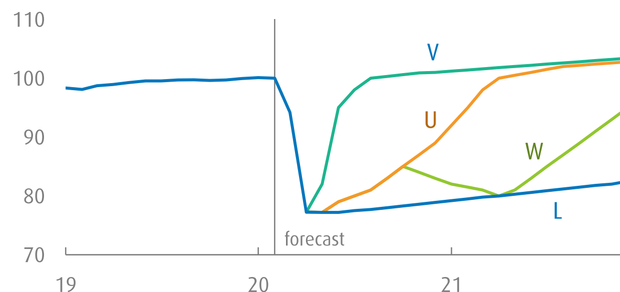
U-shape (40%): The shutdowns drag throughout May and most of June, and the longer shutdowns cause deeper, lasting damage to the economy. As a result, the recovery takes longer to gather strength, as business remains wary about rehiring and consumers remain wary about returning to stores, service vendors, and restaurants. However, the economy finally gathers some momentum by next year, and is roughly 1% below trend by the end of 2021.

W-shape (20%): A broadly similar pattern to the U-shaped recovery with one key difference—we are hit with another serious outbreak of the virus heading into the winter of 2020/21. While the shutdowns may not be as hard as the first round, and business is much better prepared to deal with such, the second outbreak causes a dispiriting slump in consumer and business sentiment. While growth does crawl back in the second half of 2021, output is still down almost 5% from pre-crisis levels even by the end of next year.

Chart 3
Four Letters of Recovery

(February 2020 = 100)

Level of Real GDP



Historical data: Canada
Sources: BMO Economics, Haver Analytics

L-shape (5%): The shutdowns remain largely in place as we go through this year, as the virus persists. Even as health conditions finally improve in 2021, damage to the economy has been so serious that business and consumer spending recovers only weakly.

We don't think the recovery will neatly fit into any one of these boxes, and thus we've assigned the corresponding probabilities. Perhaps the end result will have some characteristics of all four letters, and China's experience may provide a guide. There is **the very real probability that different sectors and regions will experience a different letter**. Some particularly affected industries could feel like an L, such as parts of the travel sector (e.g., cruise lines), while even a mild secondary outbreak could cause a W in other sectors (sports, entertainment). Some are likely to see a pretty vigorous V as soon as the shutdowns end (specifically things like education, construction, and some must-have services—think dentists, barbers). But, for the overall economy, activity will likely return somewhere between a V- and U-shaped pattern, or a somewhat lazy V. But note that such a recovery is not necessarily the same thing as suggesting everything will be back to 'normal'.

In any case, if the shutdowns lighten even slightly in the summer, almost by definition activity and growth will see a bounce in Q3. With some sectors and businesses going straight to zero in early April (i.e., the very start of Q2), it is a plain fact that activity will be firmer in Q3—and thus growth will go from massively negative in Q2 to at least a small positive in Q3, even in a dire scenario. Note that compared to the most recent consensus, we look for a much deeper drop in Q2 than other forecasters, but also see a much bigger rebound in the second half, yet are in the same range on the full-year outlook for GDP (-4% for the U.S. and -4.5% for Canada).

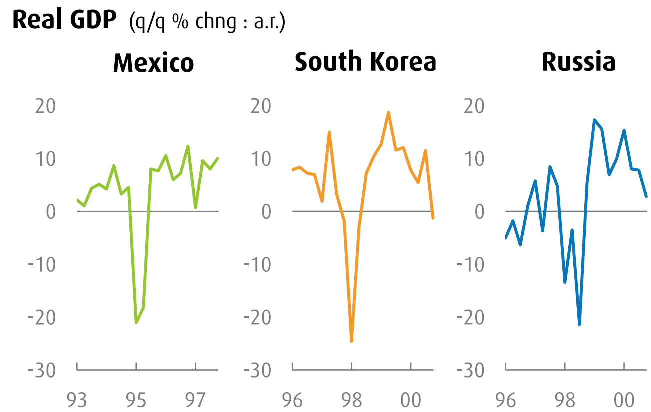
Two other key points as the data roll in: 1) The quarterly GDP figures are annualized. Even shocking estimates of something around a 45% a.r. drop translate into a 14% actual drop in activity in a quarter. 2) After a steep drop in Q2, it would take an even

more massive rebound in Q3 just to get back to pre-crisis levels. In other words, simple arithmetic shows a 45% drop in Q2 would require an 82% rebound in Q3 to offset that damage. And, we don't see Q3 offsetting Q2's drop.

More generally, while we are quite mindful that the recovery will be dictated by the path of the virus, we would not rule out a forceful recovery when it begins. Many have asserted that so much damage has been done by the shutdowns (some businesses and thus jobs lost forever), that a V-shaped recovery is just not possible for sectors like restaurants and retail. But we would point to some recent international examples of shocking economic hard stops, and how quickly they recovered. Look back to some major emerging markets in the mid-to-late 1990s that faced three different shocks that brought their economy to an abrupt halt: Mexico and the peso crisis in 1995, Korea and the Asian currency crisis in 1998, and Russia's debt default later that same year (*Chart 4*). All of those episodes almost came like a bolt from the blue and caused sudden quarterly GDP declines of more than 20% annualized. Yet, in each case, the economy came roaring back within one or two quarters from a terrifying decline. And, that was despite the fact that all three had to recover in the face of extreme external financing constraints and harsh austerity measures—the exact opposite of what most major economies will be looking at in coming quarters.

Chart 4

Big Vs after Sudden Stops

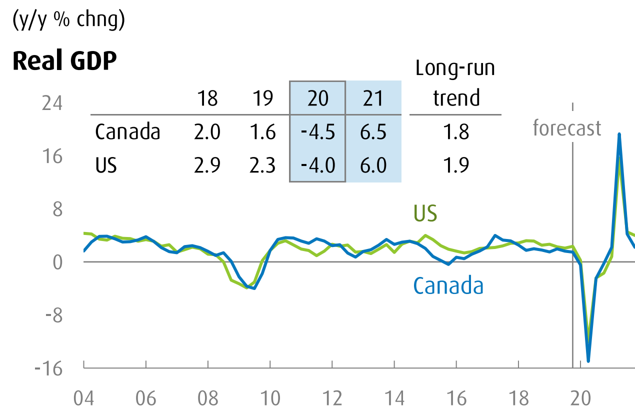


Sources: BMO Economics, Haver Analytics

Chart 5

The Bottom Line: Our Current Forecast

(y/y % chng)



Sources: BMO Economics, Haver Analytics

The Bottom Line: Assuming that shutdowns begin to ease meaningfully by June and that some industries could take years to get back to "normal", our forecast has something between a U and a V for the *level* of activity in the months ahead. However, in growth terms, we suspect that just like every other challenging environment of the past 120 years, it will ultimately look more like a V (*Chart 5*). These are all based on our best assumptions. Ultimately, the virus will dictate the shape of the recovery, as well as the policy responses, and that's something that economists and financial analysts simply cannot accurately predict.

Economic Forecast Summary for April 9, 2020

	2019				2020				Annual		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
CANADA											
Real GDP (q/q % chng : a.r.)	1.0	3.4	1.1	0.3	-6.5	-45.0 ↓	75.0 ↑	10.0 ↑	1.6	-4.5 ↓	6.5 ↑
Consumer Price Index (y/y % chng)	1.6	2.1	1.9	2.1	2.0	0.3	0.8	0.9	1.9	1.0	1.9
Unemployment Rate (percent)	5.8	5.6	5.6	5.7	6.3	11.3 ↑	7.4 ↓	7.1 ↓	5.7	8.0 ↓	7.0 ↓
Housing Starts (000s : a.r.)	187	224	223	202	207	140 ↓	190	203	209	185 ↓	225
Current Account Balance ($blns : a.r.)	-69.4	-33.7	-43.5	-35.0	-44.4 ↑	-72.7 ↑	-71.4 ↑	-67.5 ↓	-45.4	-64.0 ↑	-62.0 ↑
Interest Rates					(average for the quarter : %)						
Overnight Rate	1.75	1.75	1.75	1.75	1.25	0.25	0.25	0.25	1.75	0.50	0.25
3-month Treasury Bill	1.65	1.67	1.64	1.66	1.29	0.20	0.20	0.20	1.65	0.45	0.20
10-year Bond	1.86	1.62	1.36	1.52	1.20	0.60 ↑	0.65	0.80	1.59	0.80	1.15
Canada-U.S. Interest Rate Spreads					(average for the quarter : bps)						
90-day	-79	-68	-38	5	16	3 ↓	3	3	-45	6	3
10-year	-80	-72	-43	-28	-17	4 ↑	0	0	-56	-3 ↑	0
UNITED STATES											
Real GDP (q/q % chng : a.r.)	3.1	2.0	2.1	2.1	-5.0	-39.6 ↓	54.9 ↑	5.1 ↑	2.3	-4.0 ↓	6.0 ↑
Consumer Price Index (y/y % chng)	1.6	1.8	1.8	2.0	2.1	0.5	0.5	0.5	1.8	0.9	1.6
Unemployment Rate (percent)	3.9	3.6	3.6	3.5	3.8	11.9 ↑	8.4 ↑	6.3 ↓	3.7	7.6 ↑	5.5 ↓
Housing Starts (mlns : a.r.)	1.21	1.26	1.28	1.44	1.51 ↓	1.18 ↓	1.29 ↓	1.31 ↓	1.30	1.32 ↓	1.32 ↓
Current Account Balance ($blns : a.r.)	-548	-505	-502	-439	-429 ↓	-320 ↑	-323 ↑	-327 ↑	-498	-350 ↑	-335 ↑
Interest Rates					(average for the quarter : %)						
Fed Funds Target Rate	2.38	2.38	2.13	1.63	1.13	0.13	0.13	0.13	2.13	0.38	0.13
3-month Treasury Bill	2.44	2.35	2.02	1.61	1.13	0.15	0.20	0.20	2.10	0.40	0.20
10-year Note	2.65	2.33	1.79	1.79	1.38	0.55	0.65	0.80	2.14	0.85	1.15
EXCHANGE RATES					(average for the quarter)						
US¢/C$	75.2	74.8	75.7	75.8	74.4	69.3 ↑	69.8	71.0	75.4	71.1 ↑	72.8
C$/US$	1.33	1.34	1.32	1.32	1.34	1.44 ↓	1.43	1.41	1.33	1.41	1.37
¥/US$	110	110	107	109	109	109 ↑	110 ↑	111 ↑	109	110 ↑	113 ↑
US$/Euro	1.14	1.12	1.11	1.11	1.10	1.06	1.05	1.06	1.12	1.07	1.10
US$/£	1.30	1.29	1.23	1.29	1.28	1.20 ↑	1.21 ↑	1.22 ↑	1.28	1.23 ↑	1.26 ↑

Blocked areas mark BMO Capital Markets forecasts; up and down arrows (↑↓) indicate forecast changes; spreads may differ due to rounding

Canada

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Existing Home Sales

Wednesday, 9:00 am (expected)

		Average Prices
Mar. (e)	**+7.0% y/y**	**+12.0% y/y**
Feb.	+26.9% y/y	+15.2% y/y

MLS Home Price Index

Mar. (e)	**+6.5% y/y**
Feb.	+5.9% y/y

It was a tale of two halves for the month of March. The first half of the month was record breaking in many parts of the country, while activity slowed sharply in the second half as COVID worries proliferated and segments of the economy shutdown. Expect a deep contraction in April...as with most everything else. For March, we expect **home sales** to rise 7% y/y, led by big gains in Vancouver (off a very low base a year ago) and a solid showing in Toronto. Note though that our call would likely mean a double-digit monthly drop on a seasonally-adjusted basis. **Average prices** look to climb 12% y/y, but don't be shocked if that falls sharply in April as fewer high-priced houses trade. And, the quality-adjusted **MLS HPI** likely accelerated to +6.5% y/y. Note that the latter is a lagging indicator, quality-adjusted and smoothed, so it will take time for the pullback in activity to show up here as well.

BoC Policy Announcement & Monetary Policy Report

Wednesday, 10:00 am
Press conference at 10:30 am

See Benjamin Reitzes' Thought on page 6.

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Retail Sales

Wednesday, 8:30 am

		Ex. Autos
Mar. (e)	**-9.0%**	**-5.0%**
Consensus	*-6.8%*	*-3.5%*
Feb.	-0.5%	-0.4%

Retail Sales ex. Autos/Gas

Mar. (e)	**-3.0%**
Feb.	-0.2%

With most stores closed by month's end, **retail sales** look to dive 9% in March, surpassing the record slide in early 1987 (when just cars crashed—this time it's everything). New motor vehicle sales careened 33% lower last month. A double-digit dive in gasoline prices, along with much less driving to work or just about anywhere else, will slash service-station receipts. Food services will get hammered even with take-out orders. Despite retreating more recently, Johnson Redbook chain-store sales actually rose in the month due to earlier stockpiling and hoarding of food and essential household items. As well, online sales likely ramped higher even from the normal 15% y/y clip, but they account for just 10% of total retail spending. **Excluding cars and gas**, retail sales are expected to decrease 3% in March. April, of course, will see an utter collapse in sales across the board, before some social distancing measures are relaxed in May, presumably. Real consumer spending likely shrank 7% annualized in Q1 and could plunge many times that amount in Q2, before rebounding in Q3. For all of 2020, we currently see personal spending down 5%, the worst year since the 1930s. It's rare to see a full-year decline in services spending, even in a recession, but that's what will lead the way this time.

Industrial Production

Wednesday, 9:15 am

		Capacity Utilization
Mar. (e)	**-4.3%**	**73.5%**
Consensus	*-4.0%*	*73.8%*
Feb.	+0.6%	77.0%

While the services sector bore the brunt of business closings as March unfolded, many factories, including some entire manufacturing industries such as autos, also shut down. The ISM survey's production index dipped 2.6 points to 47.7, back into contraction mode, but this understates the downturn (a multi-plant firm such as GM is counted as one ISM member). Meanwhile, aggregate factory hours worked nosedived 0.9% in March, matching the weakest reading since 2009, but this was a mid-month reading taken before the auto sector shutdown (the latter alone should lop more than 2% off industrial output). Meanwhile, domestic oil production drifted down fractionally, from its recent record-high clip. Utilities output dropped owing to warmer-than-usual March weather (with the impact of less heating offsetting more cooling) and, importantly, dampened industrial demand. On balance, **industrial production** probably plummeted 4.3%, matching the worst month during the Great Recession. This will pull down sharply the capacity utilization rate from 77.0% to 73.5%.

Beige Book

Wednesday, 2:00 pm

The Fed's qualitative survey of regional business conditions was taken from February 25 until April 6, capturing the full period since Fed Chair Powell first alerted (February 28) that *"the coronavirus poses evolving risks to economic activity"*. Travel was already being restricted and events being cancelled as the month began. California was the first state to issue a "stay-at-home" order on March 19. By April 6, stay-at-home was the norm in 42 states and 3 counties/9 cities in three of the remaining eight states in which the governor has not yet made such an order, along with the District of Columbia, Puerto Rico and the Navajo Nation. At least 316 million Americans or 95% of the population are now covered. In the Beige Book, every region will be negatively affected, with the San Francisco, Chicago and New York districts painting the bleakest pictures. All sectors and industries will also be negatively affected, ranging from stifled sales activity to outright closures. The Beige Book is going to be very dark.

Housing Starts

Thursday, 8:30 am

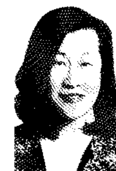
Mar. (e)	**1.42 mln a.r. (-11.5%)**
Consensus	*1.31 mln a.r. (-17.9%)*
Feb.	1.60 mln a.r. (-1.5%)

Building Permits

Mar. (e)	**1.23 mln a.r. (-15.3%)**
Consensus	*1.30 mln a.r. (-10.5%)*
Feb.	1.45 mln a.r. (-6.3%)

March **housing starts** have three strikes against them. **First**, although homebuilders reported slightly slower but still sturdy present sales activity for the month, this was more an early part of March measure. As the latter half of the month will reveal, "staying at home" and "looking for new home" are mutually exclusive activities (to be reflected in April's NAHB metric). There was likely a sharp falloff in demand during the second half of March that should pull down new home sales for the full month, which should, in turn, soften housing starts. Between the average during the first half of March and the second half average, the MBA's mortgage applications for purchases index dropped almost 20%. **Second**, housing starts have been running faster than building permits for the past three consecutive months (matching the longest streak since both were plummeting at the end of 2008). With the pending construction backlog now pared somewhat, starts should slow their pace. **Third**, last month had the fourth highest amount of precipitation for a March in the past two decades. Overall, we look for housing starts to fall 11.5% to 1.42 million units (annualized), with more in store for April.

China



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Real GDP
Friday

Q1 (e)	**-9.8%**	**-6.0% y/y**
Q4	+1.5%	+6.0% y/y

Let's face it; it's going to be bad. We will see the first **2020Q1 GDP** report next Friday, with **China** being the first out of the gate (almost always as per usual). Last year was already very weak: China's 6.1% growth rate was the slowest since 1990, thanks in large part to the trade war with the U.S. But just as things started to look better with the signing of Phase One, the mysterious coronavirus broke out. Lockdowns began in mid-January, Chinese New Year celebrations were cancelled, factories were shut down, and the rest is history. Wuhan, the epicentre of the virus, just ended its 76-day lockdown this week. Consensus looks for real GDP to take a 10% q/q dive, or 6% below a year ago. The pain will also be evident in the monthly figures, although most of the hit was in January and February, so March industrial production and retail sales, while still well below year-ago levels, will still be weak.

	Monday April 13	Tuesday April 14	Wednesday April 15	Thursday April 16	Friday April 17
Japan					**Industrial Production** **Feb. F (e) +0.4% -4.7% y/y** Jan. +1.0% -2.3% y/y **Tertiary Industry Index** **Feb. (e) -0.5%** Jan. +0.8%
Euro Area			**FRANCE** **Consumer Price Index** **Mar. F (e) unch +0.7% y/y** Feb. unch +1.6% y/y **ITALY** **Consumer Price Index** **Mar. F (e) +2.2% +0.1% y/y** Feb. -0.5% +0.2% y/y	**EURO AREA** **Industrial Production** **Feb. (e) -0.2% -1.9% y/y** Jan. +2.3% -1.9% y/y **GERMANY** **Consumer Price Index** **Mar. F (e) +0.1% +1.3% y/y** Feb. +0.6% +1.7% y/y	**EURO AREA** **Consumer Price Index** **Mar. F (e) +0.5% +0.7% y/y** Feb. +0.2% +1.2% y/y **Core CPI** **Mar. F (e) +1.0% y/y** Feb. +1.2% y/y
U.K.	Markets Closed				
Other	**CHINA** **Aggregate Yuan Financing[D]** **Mar. (e) 2.8 trln** Feb. 0.9 trln **New Yuan Loans[D]** **Mar. (e) 1.8 trln** Feb. 0.9 trln **M2 Money Supply[D]** **Mar. (e) +8.8% y/y** Feb. +8.8% y/y **Foreign Direct Investment[D]** **Mar.** Feb. -25.6% y/y **AUSTRALIA** Markets Closed	**CHINA** **Trade Surplus[D]** **in USD in CNY** **Mar. (e) $19.4 bln 175.0 bln** Dec. $47.3 bln 329.3 bln **AUSTRALIA** **NAB Business Confidence** **Mar.** Feb. -4	**AUSTRALIA** **Westpac Consumer Confidence** **Apr.** Mar. -3.8%	**AUSTRALIA** **Employment** **Mar. (e) -30,000** Feb. +26,700 **Jobless Rate** **Mar. (e) 5.4%** Feb. 5.1%	**CHINA** **Real GDP** **Q1 (e) -9.8% -6.0% y/y** Q4 +1.5% +6.0% y/y **Industrial Production (YTD)** **Mar. (e) -8.1% y/y** Feb. -13.5% y/y **Retail Sales (YTD)** **Mar. (e) -12.3% y/y** Feb. -20.5% y/y **Fixed Asset Investment (YTD)** **Mar. (e) -15.0% y/y** Feb. -24.5% y/y

[D] = date approximate

Upcoming Policy Meetings | Bank of England: May 7, June 18, Aug. 6 | European Central Bank: Apr. 30, June 4, July 16

North American Calendar — April 13–April 17

Canada

Monday April 13

BoC Buyback: 30-year sector

Tuesday April 14

10:30 am — 3-, 6- & 12-month bill auction $25.0 bln (new cash $12.2 bln)

BoC Buyback: Under 2-year sector

Wednesday April 15

8:30 am	**Nowcast estimate of March & Q1 Real GDP (by industry)**	
8:30 am	**New Motor Vehicle Sales**[D]	
Feb. (e)	**+2.0% y/y**	
Jan.	+0.8% y/y	
9:00 am	**Existing Home Sales**[D]	**Average Prices**
Mar. (e)	**+7.0% y/y**	**+12.0% y/y**
Feb.	+26.9% y/y	+15.2% y/y
9:00 am	**MLS Home Price Index**[D]	
Mar. (e)	**+6.5% y/y**	
Feb.	+5.9% y/y	

10:00 am — BoC Policy Announcement and Monetary Policy Report; Press Conference at 10:30 am

BoC Buyback: 5-year sector

Thursday April 16

8:30 am	**Mfg. Sales**	**Mfg. New Orders**
Feb. (e)	**-0.5%**	**-0.5%**
Jan.	-0.2%	+0.8%
8:30 am	**ADP National Employment Report**	
Mar.		
Feb.	+7,185	

Noon — 3-year bond auction $4.5 bln

30-year bond auction announcement

BoC Buyback: 2-year sector

Friday April 17

BoC Buyback: 10-year sector

United States

Monday April 13

11:30 am — 13- & 26-week bill auctions

Tuesday April 14

8:30 am	**Import Prices**	
Mar. (e)	**-4.0%**	**-5.7% y/y**
Consensus	*-3.0%*	*-4.7% y/y*
Feb.	-0.5%	-1.2% y/y

Fed Speakers: St. Louis' Bullard (11:05 am); Chicago's Evans (12:30 pm)

11:00 am — 4- & 8-week bill auction announcements

Wednesday April 15

7:00 am	**MBA Mortgage Apps**	
Apr. 10		
Apr. 3	-17.9%	
8:30 am	**Retail Sales**	**Ex. Autos**
Mar. (e)	**-9.0%**	**-5.0%**
Consensus	*-6.8%*	*-3.5%*
Feb.	-0.5%	-0.4%
8:30 am	**Retail Sales ex. Autos/Gas**	
Mar. (e)	**-3.0%**	
Feb.	-0.2%	
8:30 am	**Empire State Mfg. Survey**	
Apr. (e)	**-30.0**[C]	
Mar.	-21.5	
9:15 am	**Industrial Production**	**Capacity Utilization**
Mar. (e)	**-4.3%**	**73.5%**
Consensus	*-4.0%*	*73.8%*
Feb.	+0.6%	77.0%
10:00 am	**NAHB Housing Market Index**	
Apr. (e)	**56**	
Consensus	*58*	
Mar.	72	
10:00 am	**Business Inventories**	
Feb. (e)	**-0.4%**	
Consensus	*-0.4%*	
Jan.	-0.3%	

2:00 pm — Beige Book

4:00 pm	**Net TIC Flows Total**	**Long Term**
Feb.		
Jan.	$122.9 bln	$20.9 bln

G20 Finance Ministers and Central Bank Governors Teleconference

Fed Speaker: Atlanta's Bostic (1:00 pm)

Thursday April 16

8:30 am	**Initial Claims**
Apr. 11 (e)	**6,606k (unch)**
Apr. 3	6,606k (-261k)
8:30 am	**Continuing Claims**
Apr. 3	
Mar. 29	7,455k (+4,396k)
8:30 am	**Housing Starts**
Mar. (e)	**1.42 mln a.r. (-11.5%)**
Consensus	*1.31 mln a.r. (-17.9%)*
Feb.	1.60 mln a.r. (-1.5%)
8:30 am	**Building Permits**
Mar. (e)	**1.23 mln a.r. (-15.3%)**
Consensus	*1.30 mln a.r. (-10.5%)*
Feb.	1.45 mln a.r. (-6.3%)
8:30 am	**Philadelphia Fed Index**
Apr. (e)	**-25.0**[C]
Mar.	-12.7

11:00 am — 13-, 26-, 52-week bill, 5-year TIPS auction announcements

11:30 am — 4- & 8-week bill auctions

Friday April 17

10:00 am	**Leading Indicator**
Mar. (e)	**-7.0%**[C]
Feb.	+0.1%

[C] = consensus [D] = date approximate [R] = reopening

Upcoming Policy Meetings | Bank of Canada: June 3, July 15, Sep. 9 | FOMC: Apr. 28-29, June 9-10, July 28-29

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