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Market View – So derivative…

By Warren Lovely (with help from Alexandra Ducharme on all-important virus data)

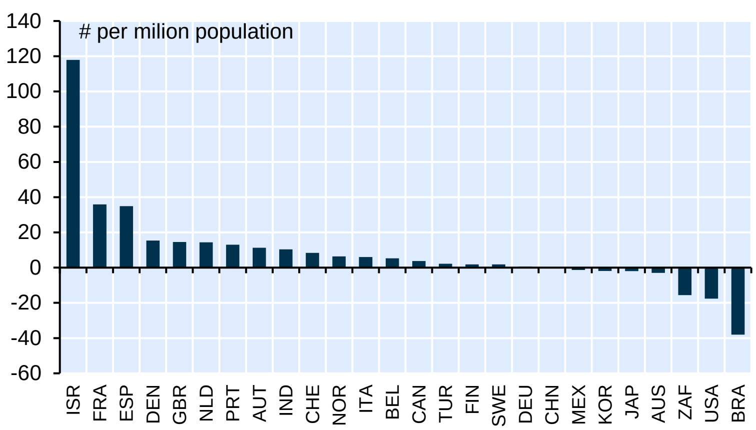
No matter how far removed you may be from high school calculus, chances are you've spent at least a little time pondering second derivatives in the past few weeks and months… and no, we're not talking about bond convexity. Rather, we're focusing on *the rate of change in the rate of change* in key macroeconomic variables and monetary/fiscal policy proxies.

In some cases, these second derivatives may be signaling a deceleration (in the recovery and overall degree of policy accommodation) which could jeopardize valuations for risk assets if a self-sustaining recovery can't be secured in a timely fashion.

Let's start at what today might be appropriately labeled ground zero: COVID-19 case counts themselves. As always, we'd direct you to our comprehensive *COVID-19 Daily Monitor* for detailed analysis of the disease's evolution. There, you'll find that the average number of new cases over the past seven days has picked up steam vs. the one-month trend in 18 of the 26 countries on our virus radar screen, most notably in Israel, France and Spain but also here in Canada (Chart 1).

Chart 1: Virus counts rising at faster rate in many countries

Change in average daily new COVID-19 cases: Last 7 days vs. 28-day trend



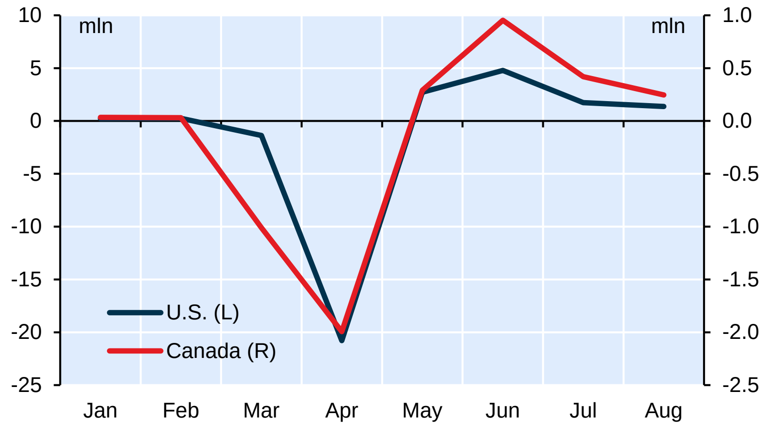
Source: NBF, John Hopkins CSSE | Note: +ve values indicate cases increasing at faster rate

This pick up in case counts need not portend a deadly second wave for the virus. As our colleagues Matthieu Arseneau and Alexandra Ducharme have argued "the recent increase in cases in the Western world has so far not resulted in an equivalently important surge in deaths", owing to technical and demographic considerations (e.g., more testing, recent skew to young people). Refer to our related *Hot Chart* here. While our baseline scenario doesn't incorporate a second wide-scale shutdown, the virus' momentum is obviously crucial to watch. Increasingly positive second derivatives here would presumably make more than health authorities a little nervous.

Second derivatives (or momentum indicators) are equally telling when it comes to the real economy. Again, a clear concession/acknowledgement: we have observed an important and welcome degree of healing in a host of key variables as economies have opened back up. Nonetheless, the pace of recovery is in some cases moderating, including it appears, in the all-important labour market (Chart 2).

Chart 2: Jobs recovery losing steam?

Monthly change in U.S. and Canadian total employment (2020)



Source: NBF, BLS, StatCan | Note: U.S. employment based on nonfarm payrolls

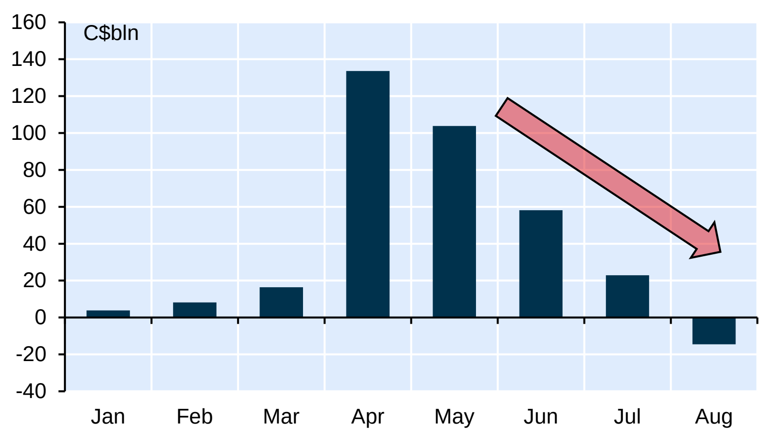
No one was really expecting the explosive gains recorded in the very first stages of reopening to be fully maintained. But increasingly, it appears like the quickest/easiest part of the rebound is behind us, making continued recovery more of a grind—a "slow and choppy" recuperation phase, to borrow from the Bank of Canada's fresh assessment. So again, watch those second derivatives or momentum indicators for earlier warnings of an economic stall out.

As for fiscal and monetary policy settings, they are a casualty and/or direct by-product of today's heavily virus-impacted economy. Fiscally, there's no question that governments the world over have aggressively fought the virus. (Say what you want about the specific tools chosen for the job or the magnitude and timeliness of the fiscal policy response.) In Canada's case, a large-scale anti-virus action plan has left a gaping hole in Ottawa's budget and record shortfalls across the provincial fiscal landscape.

We're not suggesting that Canada's fiscal response has been timid or ineffectual. But it's interesting to note that the slower pace of economic recovery cited above has coincided with a noted moderation in federal debt accumulation in recent months (Chart 3).

Chart 3: Ottawa's fiscal impulse fades (for now)

Monthly change in Government of Canada T-bills & bonds outstanding (2020)



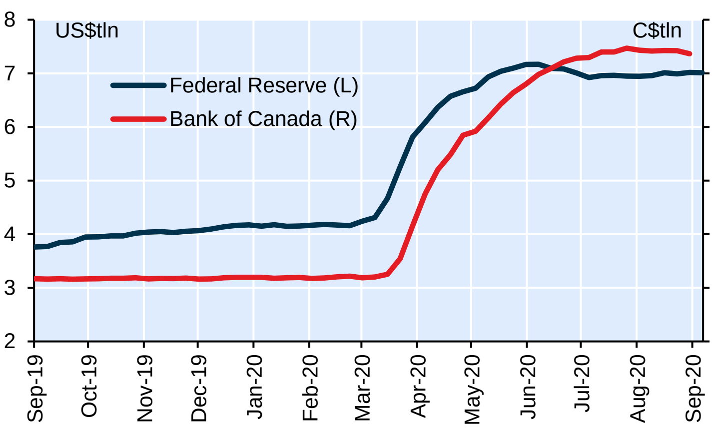
Source: NBF, BoC

In many important ways, government assistance programs were the fuel that ignited the recovery. Should fiscal stimulus burn off too quickly, we risk losing some economic heat just as the cold weather sets in. The current tortured debate over marginal income supports in U.S. is something of a cautionary tale. For Canada's federal government, there's a fresh *Speech from the Throne* around the corner, which promises to lay out the Liberal plan for moving the country forward… inclusive, one presumes, of fresh and quasi-permanent fiscal supports for the most vulnerable. A massive restatement in the federal government's expected fiscal trajectory may be jeopardizing the sovereign's credit rating, but at this juncture, significant and sustained fiscal stimulus looks to be a prerequisite to rebuilding capacity destroyed by the virus.

Turning to monetary policy… With policy interest rates at their lower effective bound (and destined to stay there for a while yet), the first and second derivative are today the same: zero. If policy rates can't get any more stimulative, curve management tools like forward guidance and balance sheet manipulation become the go-to means of driving marginal monetary support. Thus, it's important to highlight that the pace of central bank asset growth, in both the U.S. and Canada, has slowed materially in recent months (Chart 4). In fact, at the Bank of Canada, total assets have started to edge lower, which means even the *first derivative* is negative.

Chart 4: Central bank assets topped out?

Total assets at U.S. Federal Reserve & Bank of Canada (weekly)

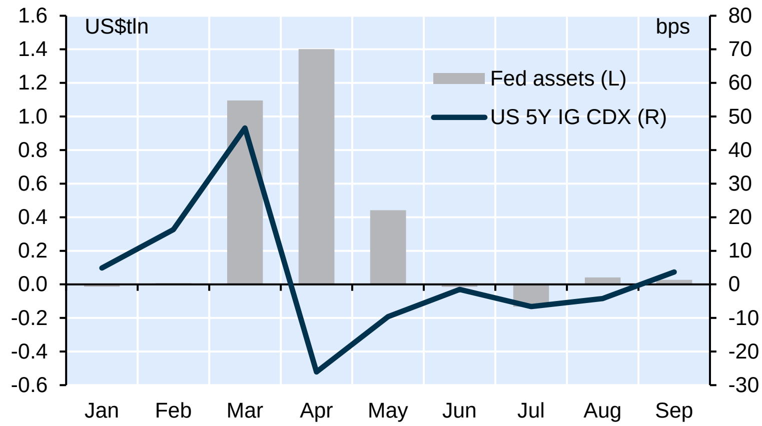


Source: NBF, FRB, BoC

Again, it may be no coincidence that the rate of credit spread narrowing has largely mirrored these broad central bank balance sheet trends (Chart 5). Another material leg lower in credit spreads might just require a marginal nudge from either fiscal or monetary authorities (or both).

Chart 5: The interplay between the Fed & credit spreads

Monthly change in Federal Reserve total assets & U.S. IG credit spreads (2020)

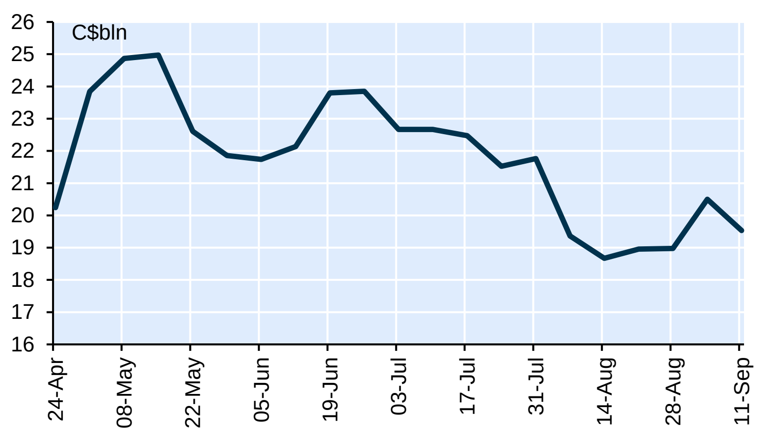


Source: NBF, FRB, Bloomberg | Note: Month end levels excl. Sep, which is latest data point

Before you criticize central banks for yanking the punch bowl away too fast, appreciate that the slower accumulation of central bank assets in part reflects the fact that ultra-short-term/liquidity lifeline measures (e.g., expanded repos in particular) aren't needed the way they were in the spring. Dig below the surface and you'll see that at the Bank of Canada, the rate of GoC bond purchases has slowed, but not that significantly (Chart 6). For the time being, the Bank's QE purchases are destined to remain in/around the C$5 billion/week mark, based on this week's renewed commitment from the BoC (as part of its interest rate decision).

Chart 6: BoC's QE program down but not out

BoC purchases of GoC bonds: 4-week rolling sum



Source: NBF, BoC

When it comes to gauging the path of longer-term interest rates in Canada, this might be the most important second derivative of all. Anxiety surrounding a prospective moderation in BoC QE purchases is entirely understandable, but perhaps misplaced (at least in the near term). Unless or until the BoC's net purchases of Government of Canada bonds really tails off, we'd see (a) less immediate scope for sustained yield curve steepening in Canada; (b) a degree of outperformance in longer-term Canada-U.S. yield differentials, as the Fed allows inflation to pick up as part of its fresh monetary policy framework; and (c) sufficient room in Canada's domestic bond market to accommodate another outsized lift by provincial borrowers in 2021, without unduly pressuring high-grade credit spreads.

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