

## The Costs of Trade Uncertainty

- Trade-related uncertainty has increased dramatically since President Trump fired the first salvo in the US-China trade war and has come with sizeable economic costs.
- We estimate that the rise in trade policy uncertainty since 2018Q3 will have lowered the level of US GDP by close to 0.8 percentage points by 2020Q1 relative to an alternative with no such spike in uncertainty. In 2019 alone, the cost of trade uncertainty most likely outweighs the boost to growth coming from the 2017 fiscal package.
- Trade uncertainty is estimated to have wide and far-reaching effects on the US economy, including on the stock markets, the exchange rate, investment spending, and GDP more broadly.

### INTRODUCTION

The escalating trade war between China and the US has gripped the world economy and alarmed businesses and policymakers across the globe. Since its beginning in Q1-2018, the trade war has engulfed a progressively larger volume of bilateral trade with tariff pressure ratcheting up throughout. As the US administration imposed tariffs and other measures and China retaliated, the volume of trade between the two largest national economies collapsed. Businesses in the US are paying the price as imported inputs from China become more expensive. Given that tariffs on some consumer goods have been levied, while some are slated to take effect later this year, consumers are also likely to start paying for the trade war soon.

Additional tariffs will be coming into effect in December and there is considerable unease about the possibility of additional tariffs and non-tariff measures. The uncertainty about the future path for trade policy, as well as its impact on activity, are making it difficult for firms to plan, and this is leading to weaker business investment and activity.

### WAYS TRADE UNCERTAINTY HURTS THE US ECONOMY

Chart 1 shows that since the start of the US-China trade conflict the level of trade policy uncertainty increased substantially. Using this proxy, we introduce an explicit role for trade uncertainty in the US block of the Scotiabank Global Macroeconomic Model (SGMM). After its introduction into the model, including re-estimating most equations for the US, trade policy uncertainty directly affects:

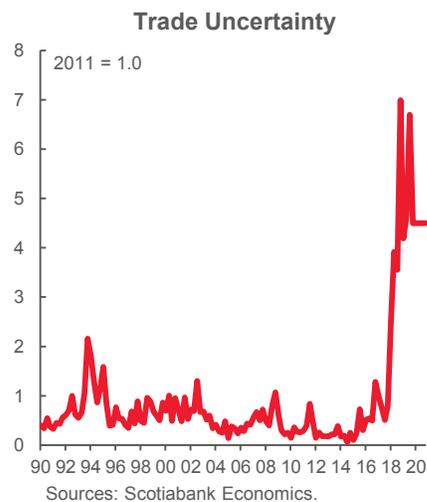
- US stock markets and financial wealth.** An increase in uncertainty reduces the values of the stock market and household financial wealth which decreases consumption through a negative wealth effect;
- US real GDP via a negative effect on investment spending.** An increase of uncertainty reduces investment decisions and therefore real GDP; and
- The VIX.** An increase in trade policy uncertainty increases the broad level of stock market volatility.

### CONTACTS

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Chart 1



In turn the VIX directly affects:

- a) **US real GDP**, with an increase in the VIX further reducing investment spending.
- b) **The US real effective exchange rate**. An increase in the volatility of the stock market leads to an appreciation of the US dollar because it induces flight to quality towards US denominated assets. This appreciation of the US dollar decreases net exports.

In summary, an increase in the trade policy uncertainty in the SGMM reduces US financial wealth, consumption, US investment and US real GDP. Furthermore, it leads to an appreciation in the US dollar and to a decrease in US net exports. The fall of aggregate demand that results opens up the output gap and inflation falls. Monetary policy reacts to both the fall of the output gap and the weaker inflation rate by reducing the policy rate.

### QUANTIFYING THE EFFECT OF UNCERTAINTY ON THE US ECONOMY SINCE 2018Q3

As shown in Chart 1, the measure of trade policy uncertainty jumped in 2018 and has been persistently higher since then. If we assume that this elevated level of uncertainty persists until the end of 2020, we can run the model to quantify the damage the uncertainty has had and is likely to have on key US aggregates like stock markets, real GDP, core inflation, policy rate and the US real effective exchange rate (see charts 2–6 on page 4).

To do so we simulate a jump in trade-related uncertainty linked to the US/China trade dispute that lasts 10 quarters (i.e. from 2018Q3 to 2020Q4) and look at the effect of this shock on the variables listed above over the 2018–2020 period relative to a scenario where uncertainty is low. The results show that this persistently elevated level of trade policy uncertainty would:

- Lead to a fall in the stock market on the order of 8 per cent (chart 2)
- Reduce the level of US real GDP by 0.8 per cent with the peak negative effect reached in the first half of 2020 (chart 3).
- Decrease core inflation by 0.2 percentage points as a result of the persistent reduction in GDP (chart 4) and push the Federal Reserve to reduce the federal funds target rate by 60 bps relative to a case without the trade uncertainty shock (chart 5).
- Motivate a flight to the safety of US assets which appreciates the US dollar by close to 6% (chart 6).

Table 1 shows the forecast from our Global Economic Outlook published on October 10, 2019 to compare it against a scenario without the elevated trade policy uncertainty linked to the US/China trade dispute. Absent the rise in uncertainty, the US real GDP would have grown by 2.7% in 2019 before slowing to 1.6% in 2020, compared to our current forecast of 2.2% in 2019 and 1.4% in 2020.

Stronger growth would have increased excess demand in the forecast, leaving core PCE inflation 0.1 ppts higher in 2019 and 0.2 ppts higher in 2020 (table 2). As a result, the fed funds target rate would be 50 basis points higher compared to the baseline, at 2.0% at the end of 2020 (table 3).

**Table 1. US Real GDP Growth, Annual Average, %**

Scenario	18	19f	20f
Scotiabank base case	2.9	2.2	1.4
Scotiabank base case without trade policy uncertainty shock	2.9	2.7	1.6

Source: Scotiabank Economics

**Table 2. US Core PCE Inflation, Annual Average, %**

Scenario	18	19f	20f
Scotiabank base case	1.9	1.6	1.9
Scotiabank base case without trade policy uncertainty shock	1.9	1.7	2.1

Source: Scotiabank Economics

**Table 3. Federal Funds Rate Target, eop, %**

Scenario	18	19f	20f
Scotiabank base case	2.50	1.75	1.50
Scotiabank base case without trade policy uncertainty shock	2.50	2.25	2.00

Source: Scotiabank Economics

## QUANTIFYING THE EFFECT OF TRADE UNCERTAINTY ON THE CANADIAN ECONOMY SINCE 2018Q3

In addition to its effect on the US, the uncertainty stemming from US-China trade tensions and tariffs has a significant effect on Canada via multiple channels. In our model, an increase in trade policy uncertainty would lead to the following:

- A weakening in Canadian exports, as the US economic growth declines;
- A lower path for Canadian equities, in line with weaker US stock markets;
- Higher risk premia on Canadian corporate bonds as risky spreads in the US rise and as the Canadian corporate sector's profits fall with slowing economic growth; and
- A weaker Canadian exchange rate, which would offset some of the impact of uncertainty on exports.

If we assume that this elevated level of uncertainty persists until the end of 2020, charts 7–9 on page 4 illustrate that our simulations show:

- The level of Canadian real GDP is reduced by 0.7 per cent at the trough in mid-2020 (chart 7); and
- A persistent reduction in GDP reduces core inflation by up to 0.3 percentage points (chart 8) and pushes the Bank of Canada to lower the overnight rate by 50 bps relative to a case without the trade uncertainty shock (chart 9).

Thus, absent the uncertainty spike, growth in Canada would have been slightly higher than potential, core inflation would have stayed above the 2.0% target and the overnight rate would have been at 2.00% at the end of 2019, compared to 1.50% in the base case.

## CONCLUSION

The rise in trade-related uncertainty is estimated to have dampened US growth in 2019 significantly. Weaker financial markets, stronger US dollar and weaker investment spending have combined to reduce US GDP growth by 0.5 ppts in 2019, likely offsetting any boost coming from the 2017 fiscal stimulus. Results also show that the persistent elevated trade uncertainty has a significant effect on the Canadian economy.

Given this large and negative impact on growth, it is incumbent on the US administration to prevent any further escalation in trade tensions. If instead it chooses to pour more gasoline on the fire it will likely end up burning the house: we estimate that if trade uncertainty rises to the peak previously seen in Q4-2018 and remains there persistently, the cost to the US economy is likely be large, including a possible recession in 2020.

**Table 4. Canadian Real GDP Growth Rate (Annual Average %)**

Scenario	2018	2019f	2020f
Scotiabank base case	1.9	1.6	1.8
Scotiabank base case without trade policy uncertainty shock	1.9	1.9	2.1

Source: Scotiabank Economics

**Table 5. Canadian Core Inflation (Annual Average %)**

Scenario	2018	2019f	2020f
Scotiabank base case	1.9	2.0	2.0
Scotiabank base case without trade policy uncertainty shock	1.9	2.2	2.2

Source: Scotiabank Economics

**Table 6. Overnight Rate (eop %)**

Scenario	2018	2019f	2020f
Scotiabank base case	1.75	1.50	1.25
Scotiabank base case without trade policy uncertainty shock	1.75	2.00	1.75

Source: Scotiabank Economics

Chart 2

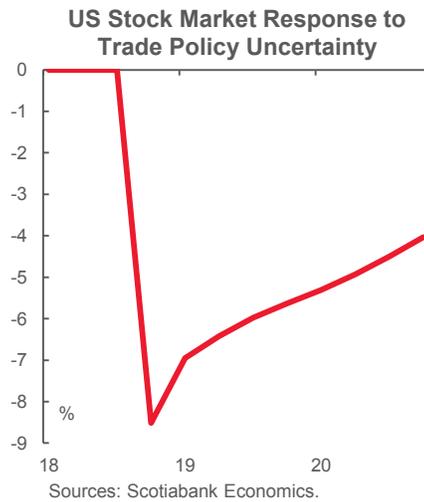


Chart 3

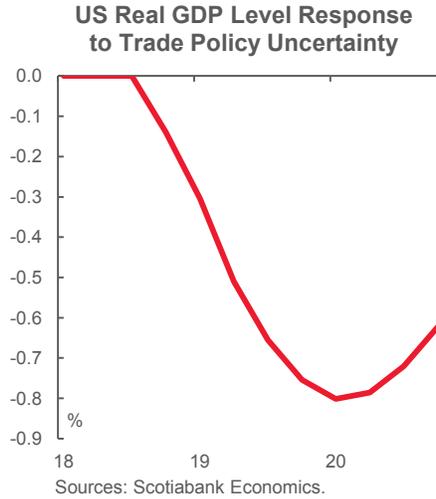


Chart 4

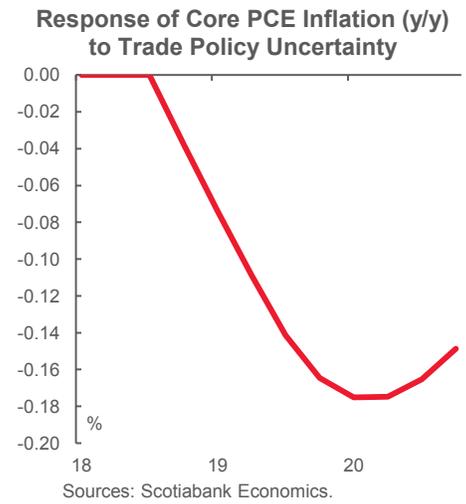


Chart 5

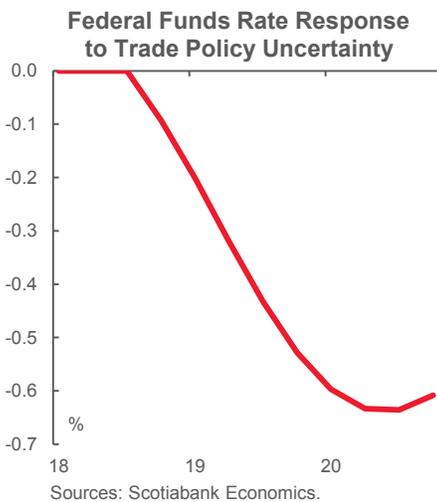


Chart 6

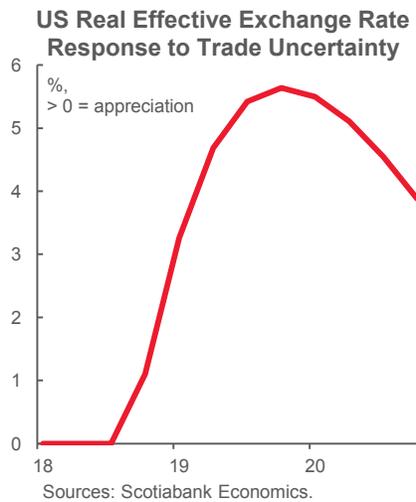


Chart 7

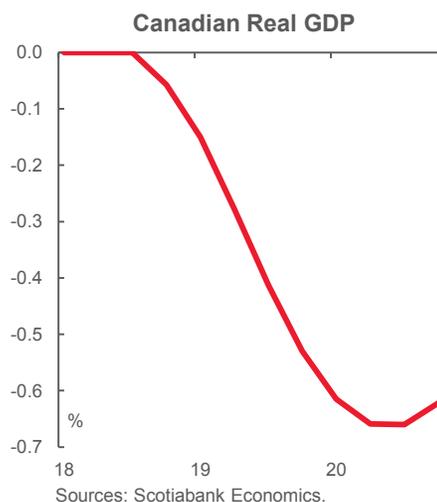


Chart 8

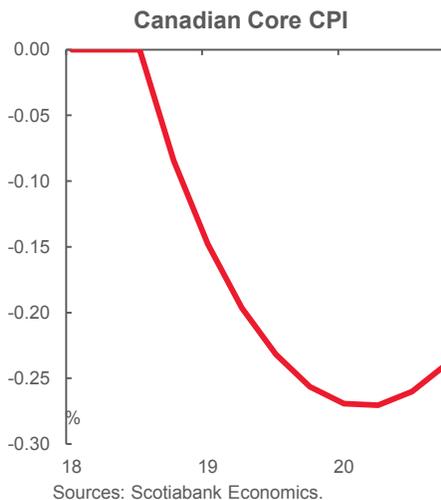
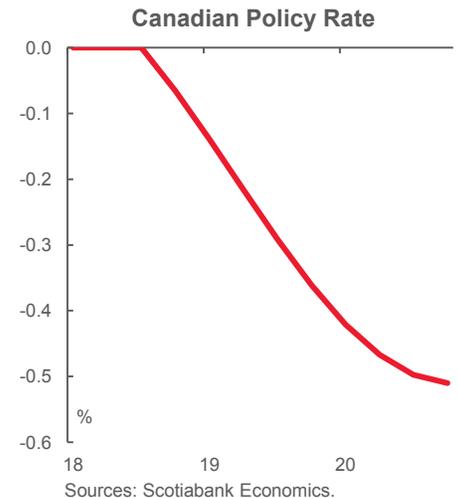


Chart 9



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