

What does the Taylor rule say?

By Taylor Schleich & Ethan Currie

Setting monetary policy is no easy task in the best of times, but when uncertainty is elevated—like it is now—it becomes even more difficult. We often wonder if it would be more effective to simply put policy on ‘autopilot’, letting a set of pre-determined rules dictate where central bank rates go. These models of course exist, perhaps the most famous being the ‘Taylor rule’ which prescribes that monetary policy be set based on inflation (relative to target) and GDP (relative to potential). While this is an ultra-simplistic, rigid framework, it can nonetheless be an insightful tool to compare where policy is to where it ‘should’ be.

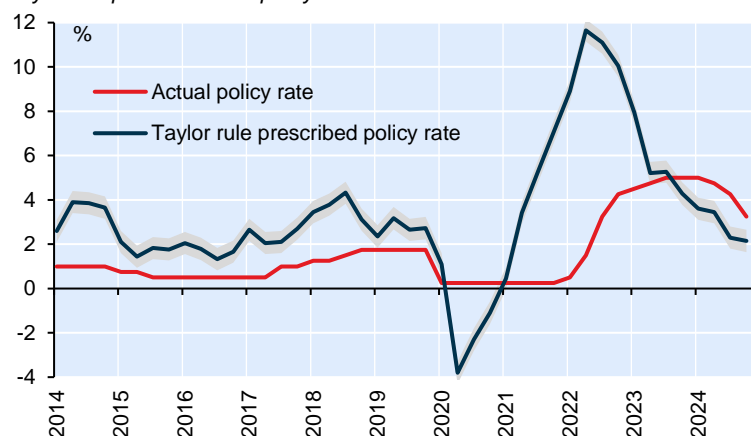
In Canada, inflation is on target and a non-trivial output gap remains, even after the healthy print (nearly 2%) expected this week. According to the Taylor rule then, the BoC ‘should’ have been in modestly stimulative territory at the end of 2024. True, if we use the Bank’s ‘preferred’ core inflation measures (CPI-Median or -Trim), a higher rate is prescribed but officials have said these are misstating underlying

inflation. A traditional core measure like ex-food and energy (which ran at 2.1% in Q4) is consistent with a lower policy rate too (~2.5%).

In the US, the situation couldn’t be more different. Inflation continues to run above 2% and GDP is comfortably above potential. As it turns out, the Taylor rule says the Fed’s policy stance was appropriately calibrated by the end of last year. If anything, core inflation suggests policy could’ve been *more* restrictive. With growth likely to remain firm in early 2025 and inflation still running too hot, this heuristic doesn’t imply there’s scope to cut anytime soon. True, federal policy uncertainty has produced a ‘growth scare’ in recent days, but we’ve seen those in the past few years, and they didn’t amount to anything. Given where U.S. inflation resides, the Fed doesn’t enjoy the same flexibility to be forward-looking like the BoC does. When thinking about policy differentials, the Taylor rule implies an already extreme BoC-Fed differential could be even wider. We expect that play out, *potentially* as soon as next month.

Chart 1: Taylor rule says BoC policy rate should be lower...

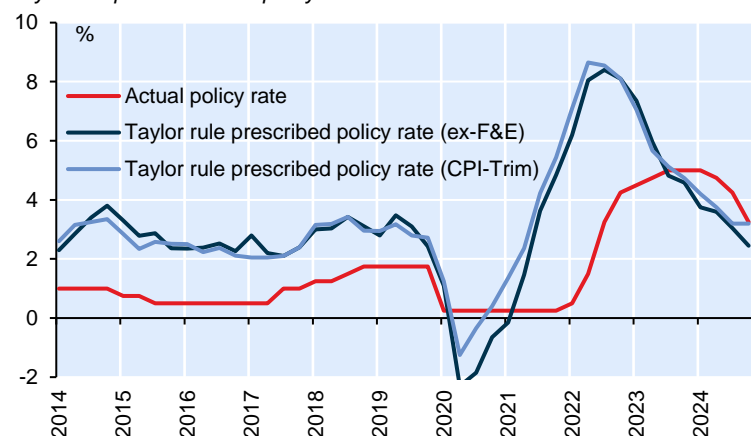
Taylor rule prescribed BoC policy rate based on all-items CPI inflation



Source: NBC, BoC, StatCan | Note: Grey range reflects estimated neutral range. Output gap per BoC and assumes Q4 = Q3. All data are quarterly. Latest data for Q4:24.

Chart 2: ...ex-F&E agrees (Trim doesn't but that may be biased)

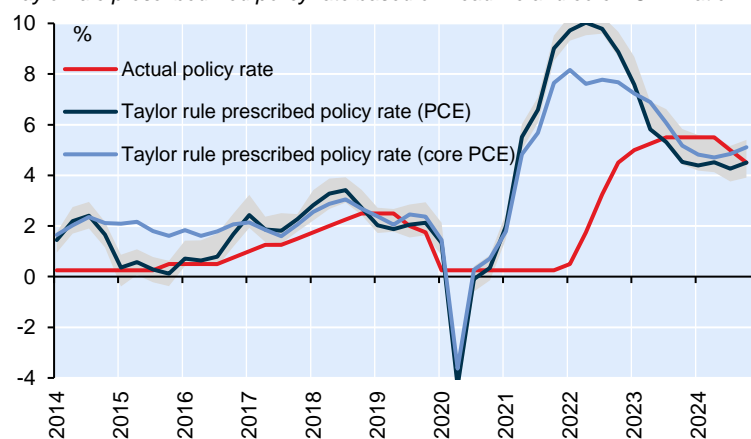
Taylor rule prescribed BoC policy rates based on ex-F&E CPI inflation & CPI-Trim



Source: NBC, BoC, StatCan | Note: Output gap per BoC and assumes Q4 output gap = Q3 output gap. All data are quarterly. Latest data for Q4:24.

Chart 3: Taylor rule says Fed policy in the ‘right’ place...

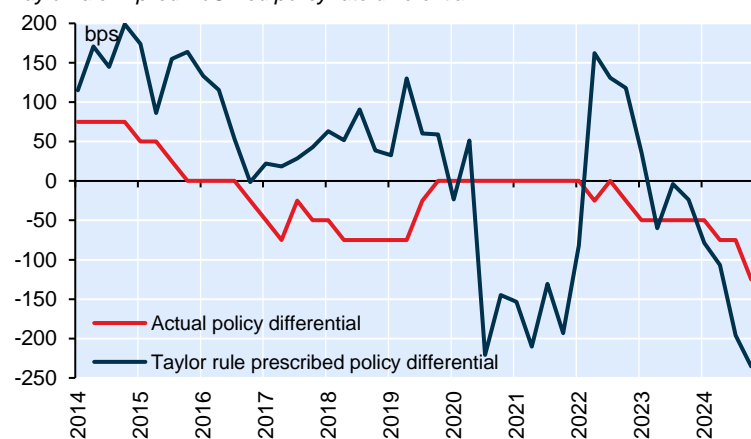
Taylor rule prescribed Fed policy rate based on headline and core PCE inflation



Source: NBC, FRB, CBO, BBG | Note: Neutral point estimate based on longer-run ‘dot’. Grey range reflects range of estimates of longer-run dot. All data are quarterly. Latest data for Q4:24.

Chart 4: ...implying the BoC-Fed policy gap should be wider

Taylor rule implied BoC-Fed policy rate differential



Source: NBC, BoC, StatCan, FRB, BBG, CBO | Note: Taylor rule calibrated with all-items CPI for Canada and headline PCE inflation for the U.S. All data are quarterly. Latest data for Q4:24.



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