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G10 Hiking and Cutting Cycles: Lessons from History (Bhushan)

- Policy rates have risen sharply this year, and investors are focusing on how much longer hiking cycles will continue and when central banks will start to cut. We document four stylized facts from 85 prior hiking and subsequent easing cycles from 1960 till 2019 across G10 economies.
- First, G10 hiking cycles lasted just over 15 months on average, and 70% of historical cycles lasted longer than a year. Cycles tend to be longer in the US but shorter in the UK, Canada, and Australia. Surprisingly, the length of hiking cycles is similar across high and low inflation episodes.
- Second, longer historical cycles did not necessarily involve much larger increases in the policy rate. In fact, the policy rate increased by 200bp in the median G10 hiking cycle, and by only 400bp in the 1970s. This largely reflects central banks front-loading, and it also suggests that central banks may turn significantly more cautious and slow down the pace if they do hike for longer. In fact, 75% of G10 hiking cycles featured a pause.
- Third, central banks tend to stop hiking when year-over-year inflation is still relatively close to its peak without necessarily having fallen significantly. On average, hiking cycles ended when year-over-year inflation was within 10% of its peak (e.g. down from 5% to 4.5%).
- Fourth, relatively large rate cuts tend to come fairly soon after the hiking cycle ends. In the median cycle, the first cut came seven months after the last hike with a cumulative 200bp of easing within the first year. Across the G10, roughly 75% of the cycles involved a first cut within a year after the last hike.
- This analysis supports our view that the hiking cycle may extend further into 2023. However, even if cycles extended deeper into next year, our findings also suggest that central banks are likely to slow the pace, such that the terminal rate does not increase too much. And there is a risk that central banks surprise markets when they turn more cautious as the bar for realized improvement in inflation could be lower than expected. Indeed, the BoC and RBA have already slowed down, and the ECB signaled a similar intent on Thursday. Finally, rate cuts could come relatively quickly after the last hike. An important caveat to these findings is that the current post-pandemic cycle remains very unique.

Jan Hatzius
+1(212)902-0394 | jan.hatzius@gs.com
Goldman Sachs & Co. LLC

Daan Struyven
+1(212)357-4172 |
daan.struyven@gs.com
Goldman Sachs & Co. LLC

Yulia Zhestkova
+1(646)446-3905 |
yulia.zhestkova@gs.com
Goldman Sachs & Co. LLC

Sid Bhushan
+44(20)7552-3779 |
sid.bhushan@gs.com
Goldman Sachs International

Devesh Kodnani
+1(917)343-9216 |
devesh.kodnani@gs.com
Goldman Sachs & Co. LLC

G10 Hiking and Cutting Cycles: Lessons from History

Policy rates have risen sharply in G10 countries this year, and investors are focusing on how much longer hiking cycles will continue and when central banks will start to cut. The September FOMC minutes clarified that the Fed aims to start cutting upon seeing "compelling evidence" of inflation falling toward 2%, suggesting that hikes could end significantly before that point. Last week, the Bank of Canada slowed its pace of hiking further, and Governor Macklem said that Canada is "getting closer to the end of the tightening", and the Reserve Bank of Australia has already stepped down to a 25bp hiking speed. In this Global Economics Analyst, we document four stylized facts from 85 prior hiking and subsequent easing cycles from 1960 till 2019 across G10 economies.[1]

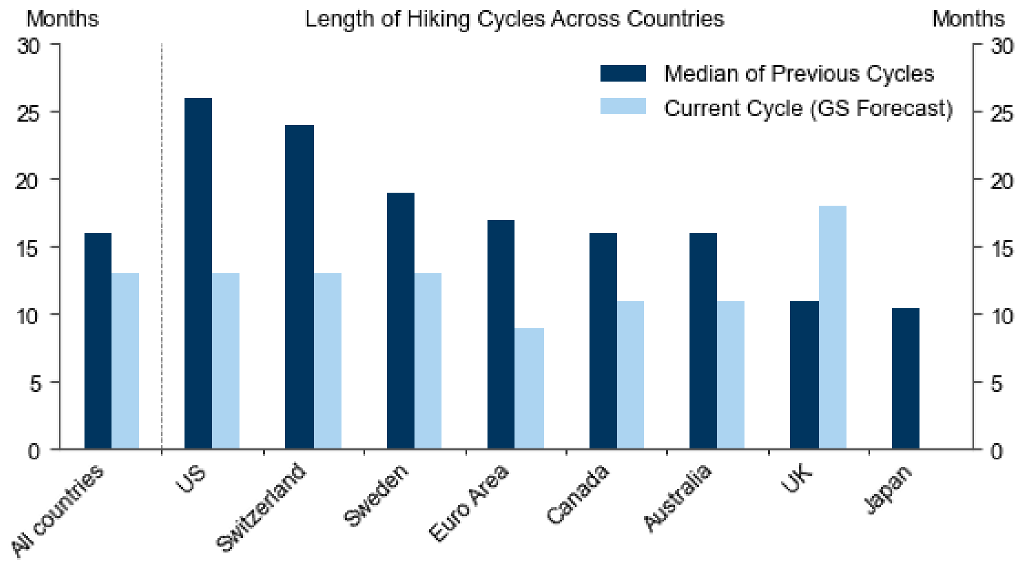
Historical Cycles Last Over a Year

First, G10 hiking cycles last just over 15 months on average and tend to be longer in the US but shorter in the UK, Canada, and Australia (Exhibit 1). We expect cycles to last roughly five months shorter on average this time, with the largest gap in the US (13 months) but a still notable 8-month gap in the Euro area.[2] We only expect this cycle to last significantly longer than a year in the UK, relative to about 70% of historical G10 cycles that have surpassed this benchmark.

[1] Our sample includes the US, UK, Switzerland, Sweden, Denmark, Canada, Australia, Japan, and Euro area (Germany used before formation of Euro area). We define cycle peaks when the policy rate is not exceeded for at least 15 months and troughs as the minimum between two peaks. We only keep cycles that last at least six months. We also make some manual adjustments to the cycle dates. In the US, we consider the 3-month moving average of the effective federal funds rate between January 1960 and August 1982. In Canada, we consider the 3-month moving average of the bank rate/overnight rate between April 1980 and January 1996. Appendix 1 shows all hiking cycles.

[2] While the gap between the previous cycles and current cycle median bar for "All countries" in Exhibit 1 is only 3 months, the median of the gaps between bars for each country (excluding Denmark and Japan) is 6 months.

Exhibit 1: Historically, Hiking Cycles Have Been Longer, Especially for the US

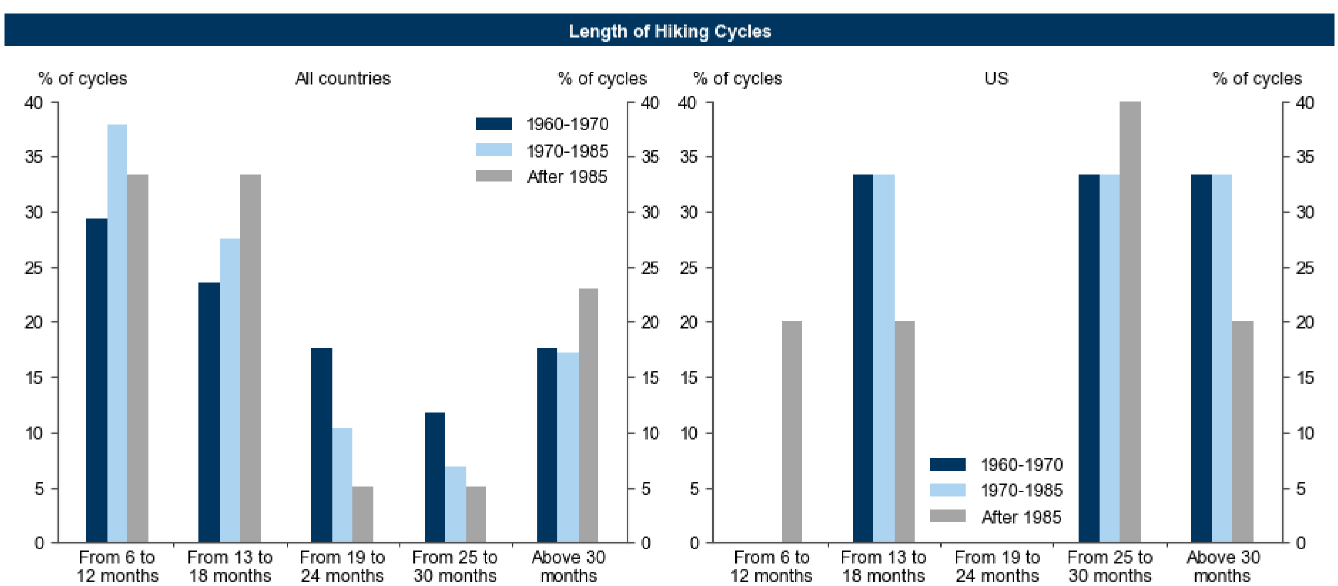


We exclude Japan and Denmark from the "All countries" median for the current cycle.

Source: Haver Analytics, Goldman Sachs Global Investment Research

To be sure, no two cycles are the same, and the current cycle is especially unique. To stress test our findings, Exhibit 2 plots the distribution of hiking cycle lengths across different time periods and different economic environments (e.g. high inflation in the 70s, great moderation post 1985). Surprisingly, we find that the length of hiking cycles has not changed much over time, especially for the full sample of all countries.

Exhibit 2: The Length of Hiking Cycles Has Not Changed Much Over Time

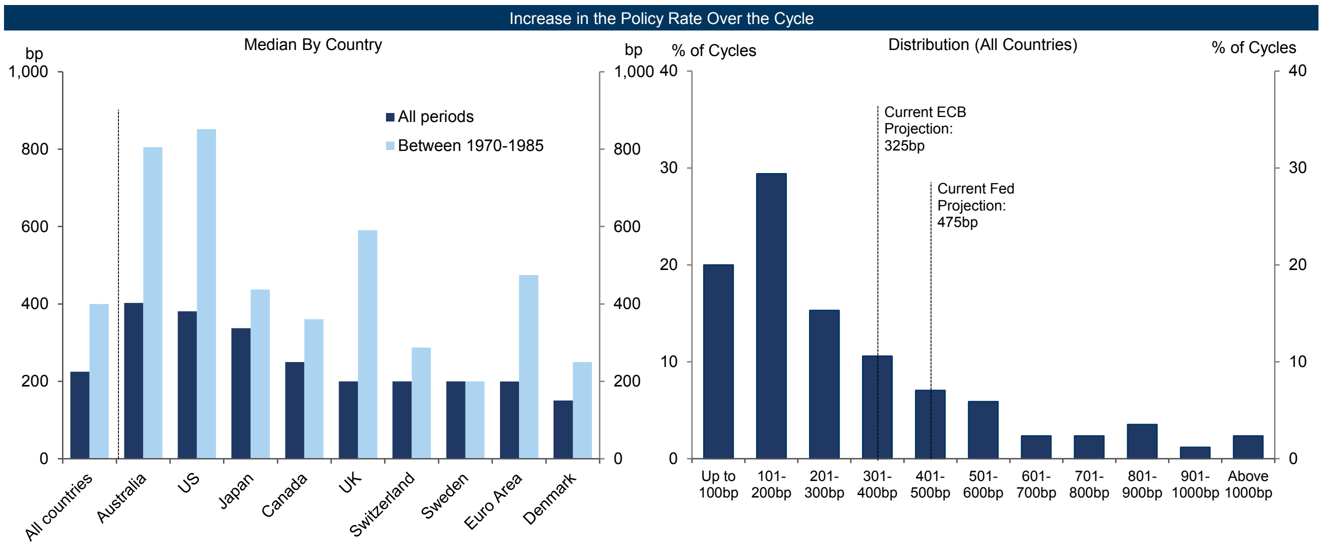


Source: Haver Analytics, Goldman Sachs Global Investment Research

The Policy Rate Increases by 200bp in an Average Cycle

Second, longer historical cycles did not necessarily involve much larger increases in the policy rate. The policy rate increase in the median G10 hiking cycle was only 200bp and our current forecasts (Fed 475bp, ECB 325bp, BoE 465bp, BoC 425bp, RBA 350bp) are at roughly the 75th percentile of the historic distribution (Exhibit 3). Even in the 1970s, the policy rate only increased by 400bp in the median cycle. Admittedly, there is considerable heterogeneity across countries and this analysis does suggest more risks of higher peaks in the US and Australia.

Exhibit 3: On Average, Policy Rates Increased Only 400bp Even in the 1970s



Source: Haver Analytics, Goldman Sachs Global Investment Research

Central bank front-loading is the main reason that historical cycles generally tend to last longer but not involve much higher terminal rates. Central banks moving significantly more cautiously as risks become more balanced, or even pausing, are another reason why longer cycles may not involve a higher terminal rate. In fact, we are already seeing financial stability concerns re-emerge among central bankers following the instability in UK financial markets this month (Exhibit 4). Defining a pause as a period of at least 3 consecutive months without a hike, 75% of historical G10 hiking cycles have featured a pause (and higher when looking at the 70s), although this tends to be more common in Europe than the US (Exhibit 5).[3]

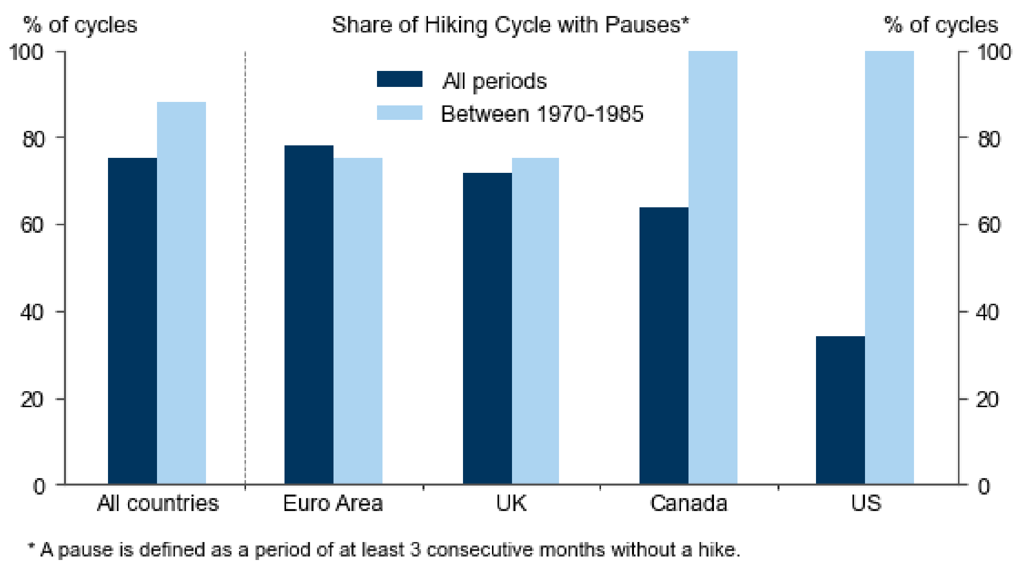
[3] This suggests that a meeting pause (for central banks that have 8 meetings per year) is more likely than a pause as we define it.

Exhibit 4: Financial Stability Concerns Are Re-Emerging Among Central Bankers

Central Bank	Date	Speaker	Quote
Fed	9/30/2022	Brainard	We are **attentive to financial vulnerabilities** that could be exacerbated by the advent of additional adverse shocks… An increase in risk premiums could kick off deleveraging dynamics as financial intermediaries de-risk.
ECB	10/14/2022	Lagarde	We are **seeing early signs of an increase in credit risk**, which warrants careful monitoring.
BoE	10/15/2022	Bailey	There may appear to be a **tension here between tightening monetary policy** as we must, including so-called Quantitative Tightening, and buying government debt to **ease a critical threat to financial stability**.
BoC	10/26/2022	Monetary Policy Report	**Financial vulnerabilities** that have been **building for some time**—including high indebtedness and stretched asset valuations— could magnify the impact of global tightening.
RBA	10/4/2022	Minutes	**Financial stability risks had increased** over preceding months.
RBNZ	10/5/2022	Policy Decision	Members noted that large movements in wholesale interest rates and exchange rates were causing a **deterioration in financial market liquidity**, which can exacerbate market volatility.

Source: Goldman Sachs Global Investment Research

Exhibit 5: A Longer Cycle May Also Involve Pauses as Central Banks Become More Cautious



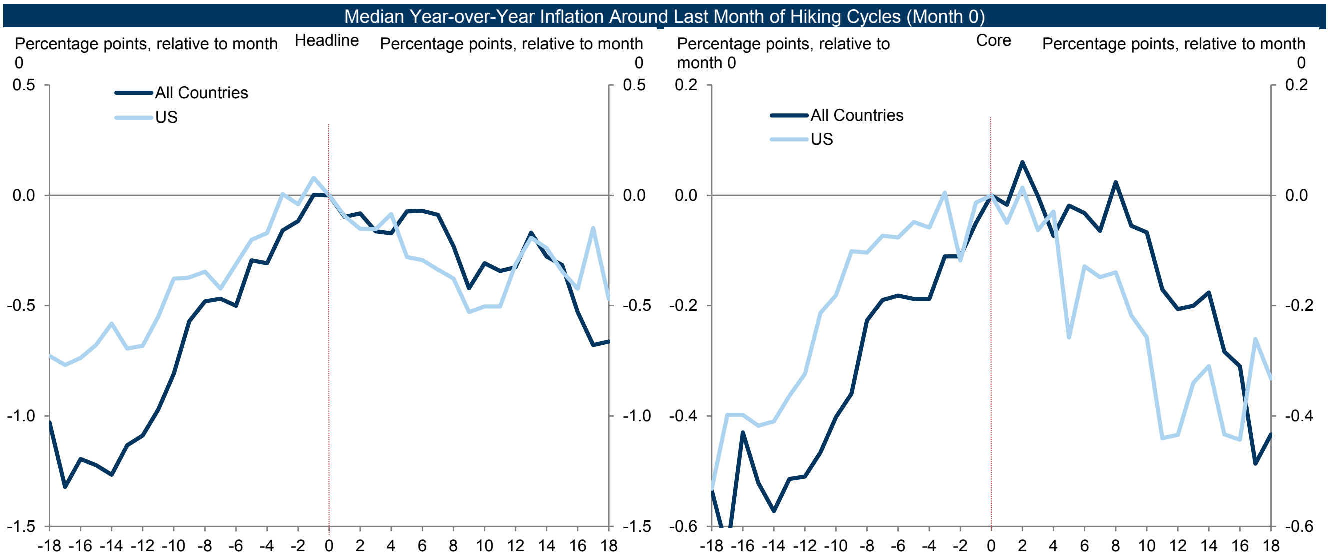
We exclude January 1960 to August 1982 for the US and April 1980 to January 1996 for Canada because the policy rate series are too noisy to identify pauses (e.g. effective rate in the US).

Source: Haver Analytics, Goldman Sachs Global Investment Research

Central Banks Stop Hiking Before Year-Over-Year Inflation Falls Much

Third, central banks tend to stop hiking when year-over-year inflation is still relatively close to its peak without necessarily having fallen significantly. Exhibit 6 shows that central banks tend to stop hiking at roughly the same time as year-over-year headline and core inflation are peaking, and significant progress only tends to appear after six months.

Exhibit 6: Historically, Central Banks Have Stopped Hiking When Inflation Is Peaking

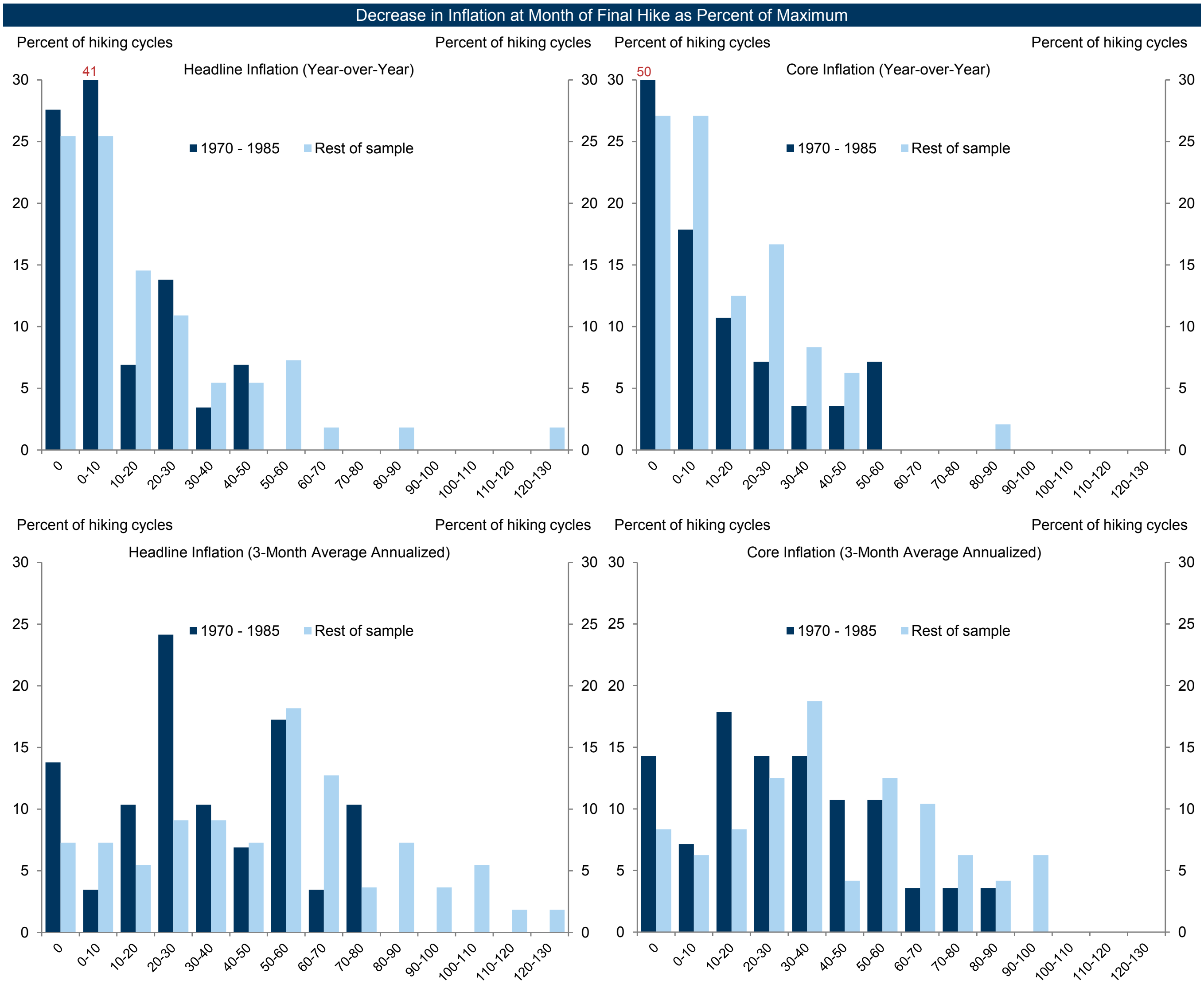


We exclude Australia as we only have quarterly inflation data.

Source: Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 7 plots the distribution of the decline in year-over-year and sequential inflation by the end of a hiking cycle relative to an 18-month trailing maximum. We see two key takeaways. First, on average, hiking cycles end when year over-year inflation is within 10% of its peak (e.g. down from 5% to 4.5%). Second, sequential inflation on a 3-month average basis tends to have fallen more (by roughly 50% on average for headline and 40% for core). We forecast that year-over-year inflation will have peaked by the end of the year in most G10 economies and that sequential inflation likely already peaked in the summer in most economies.

Exhibit 7: On Average, Hiking Cycles End When Year-Over-Year Inflation Is Within 10% Of Its Peak, Although Sequential Measures Tend to Have Fallen More



Note: the maximum is calculated over the preceding 18 months. If the month of the final hike is the peak (ie inflation is still rising) then this shows up in the 0 entry. In the bottom right panel, 2% of 'rest of sample' decreased by more than 130% of maximum.

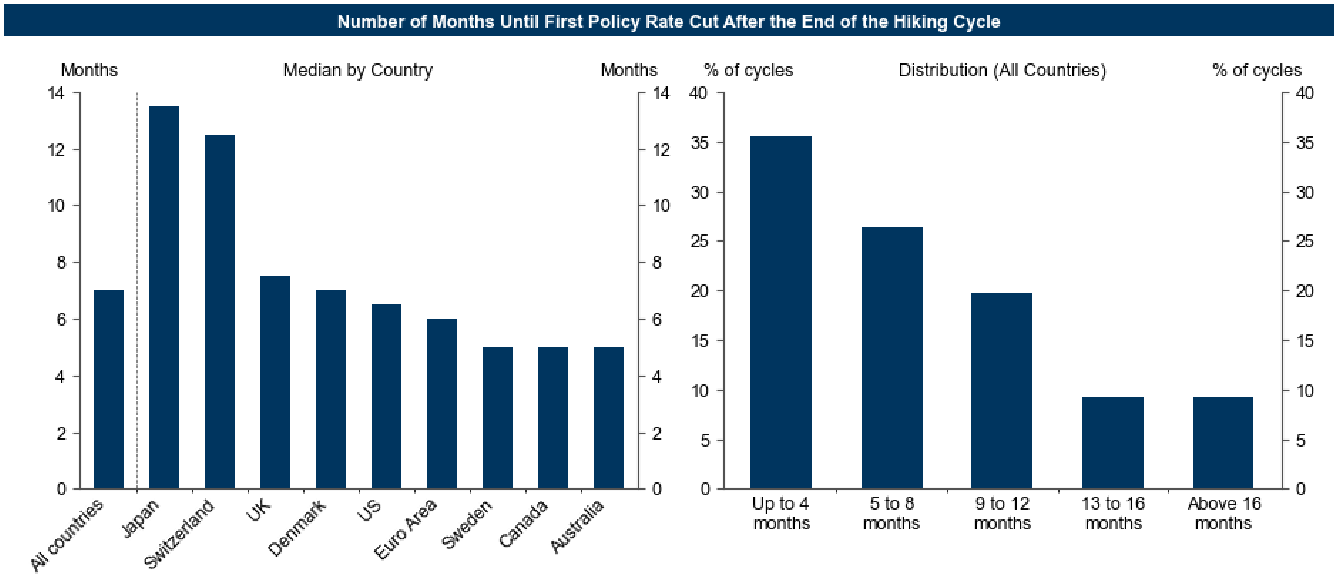
Cycles are placed in bins such that the lower limit is open while the upper limit is closed. For example, '0-10' means more than 0 and less than or equal to 10.

Source: Haver Analytics, Goldman Sachs Global Investment Research

Large Cuts Follow Relatively Soon

Fourth, relatively large rate cuts tend to come fairly soon after the hiking cycle ends. In the median G10 cycle, the first cut comes seven months after the last hike (Exhibit 8, left). There is not too much variation across most countries, with most central banks usually cutting five to seven months after the last hike, although Canada and Australia tend to cut sooner. In roughly 75% of cycles, there is a cut within a year of the last hike (Exhibit 8, right).

Exhibit 8: On Average, Central Banks Cut 7 Months After the Last Hike…

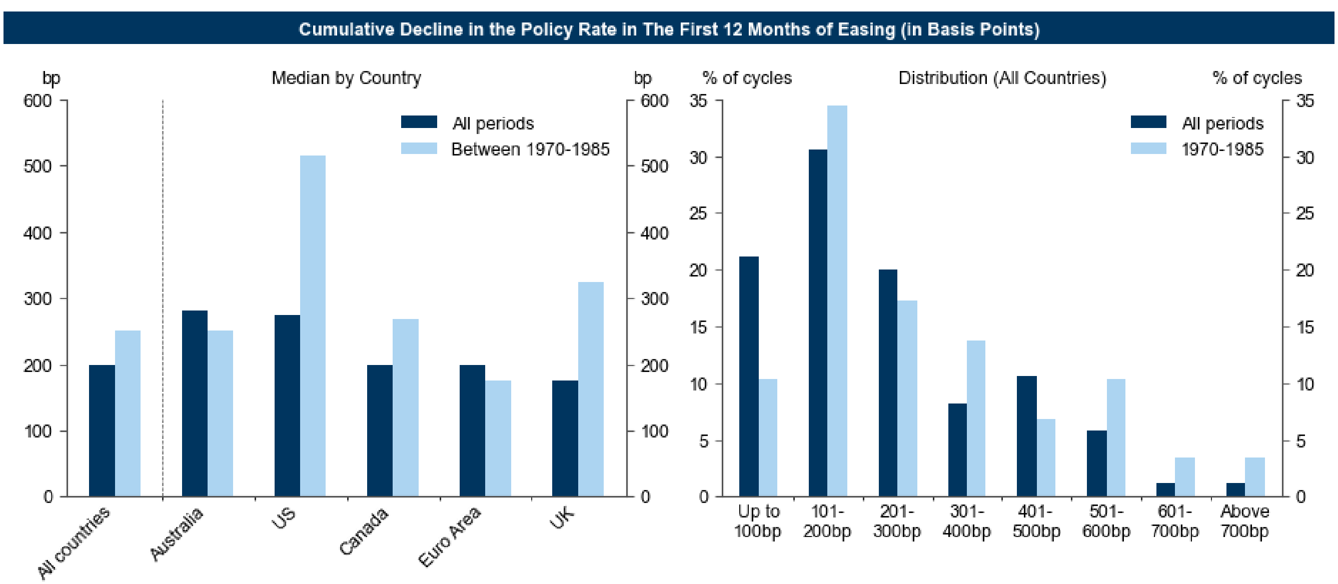


We exclude January 1960 to August 1982 for the US and April 1980 to January 1996 for Canada because the policy rate series are too noisy and so fall immediately at the peak (e.g. effective rate for the US).

Source: Haver Analytics, Goldman Sachs Global Investment Research

Once rate cuts begin, they tend to be relatively large with an average cumulative 200bp decline in the policy rate within the first year of easing (Exhibit 9, left). Interestingly, while central banks raised policy rates by 200bp more in the 70s (Exhibit 3, left), the distribution of cumulative easing in the first year is more similar across time, and was only roughly 50bp higher in that period on average (Exhibit 9, right). So even after a year of easing, policy rates tend to be higher following elevated inflation episodes than in other hiking cycles.

Exhibit 9: …And Then Cut by an Average of 200bp in the First Year of the Easing Cycle



Source: Haver Analytics, Goldman Sachs Global Investment Research

Back to the Present

This historical analysis supports our view that post-pandemic hiking cycles could possibly extend further into 2023. However, even if cycles extended deeper into next year, our findings also suggest that central banks are likely to become significantly more cautious and slow the pace, such that the terminal rate does not increase too much. And there is a risk that central banks take markets by surprise when they turn more cautious as the bar for realized improvement in inflation could be lower than market participants expect. Indeed, the BoC and RBA have already slowed down, and the ECB signaled a similar intent on Thursday. Finally, rate cuts could come relatively quickly after the last hike and could be sharp. An important caveat to these findings is that the current post-pandemic cycle remains a very unique one.

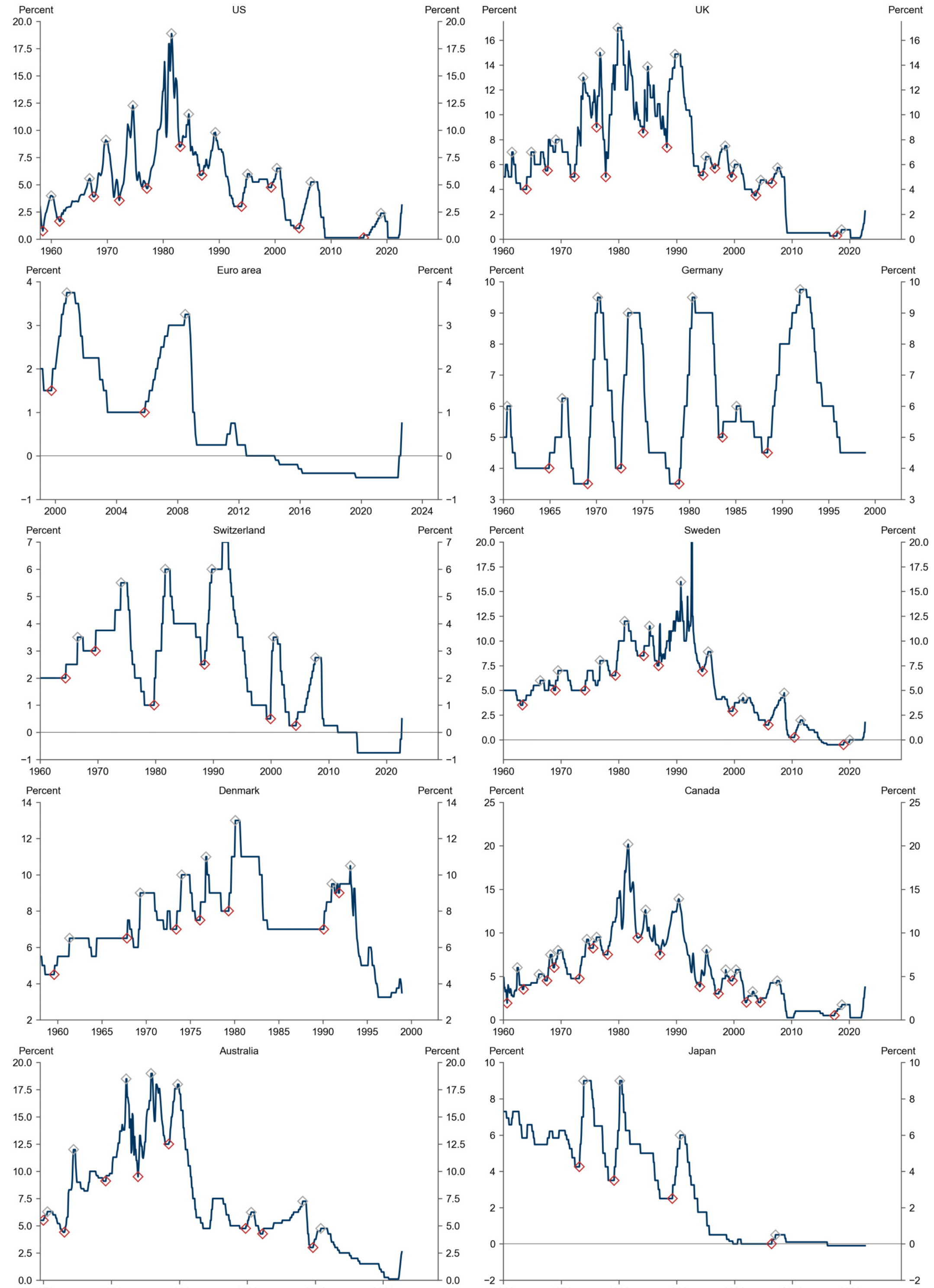
Sid Bhushan

Giovanni Pierdomenico*

**Giovanni is an analyst on the Global Economics team.*

Appendix

Policy Rate and Identified Peaks and Troughs



Red diamonds indicate the start of a cycle while grey diamonds are the end of cycle. In the US, we consider the 3-month moving average of the effective federal funds rate between January 1960 and August 1982. In Canada, we consider the 3-month moving average of the bank rate/overnight rate between April 1980 and January 1996. The Euro area sample uses Germany before the formation of the Euro area.

Source: Haver Analytics, Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

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