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Monetary policy, financial conditions
and real activity: is this time different?

Fernando Avalos, Deniz Igan, Cristina Manea and
Richhild Moessner

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Monetary policy, financial conditions and real activity: is this time different?

Key takeaways

- *During the current monetary policy tightening episode, financial conditions co-moved closely with policy rates, especially in the initial stages but with some differentiation across countries.*
- *For advanced economies, the tightening of financial conditions was stronger this time than in the past, while its full impact on real activity appears to be taking longer than usual.*
- *Financial conditions may continue tightening long after central banks stop raising policy rates, with possible implications for financial stability.*

The financial system is the first link in the monetary policy transmission chain. So far in this monetary tightening episode, how have financial conditions evolved? Has their evolution differed materially from past tightening episodes? If so, how and why? How has real activity responded to date?

This Bulletin explores these questions, and thereby serves as an input to calibrate the next steps for monetary policy. First, it documents the recent evolution of financial conditions and compares their patterns with those observed in past tightening episodes. It then turns to the response of real activity and the policy implications.

Financial conditions so far in the current monetary tightening episode

Financial conditions can be expressed in terms of a multitude of factors, such as short- and long-term interest rates, spreads, credit standards, exchange rates, asset valuations, intermediary balance sheet constraints and various quantities such as lending and bond issuance volumes. Financial conditions indices (FCIs) are a device for summarising at least some of these dimensions in a single, convenient metric.¹ These indices have known shortcomings: they rely on selected market prices, may fail to capture country-specific features of the financial structure (eg in small open economies and emerging market economies (EMEs) or the impact of global factors. Nevertheless, as a starting point, they can be useful in providing a bird's eye view.

Financial conditions have so far displayed two broad phases in the current tightening cycle.

During the first phase, which lasted until late 2022, financial conditions tightened in tandem with monetary policy (Graph 1). The rise in FCIs started from unusually easy readings. Index components moved in the expected direction in all jurisdictions. Short and long rates increased, corporate spreads widened, and equity prices fell. The US dollar appreciated sharply.

¹ See the online annex for a taxonomy of FCIs. This bulletin uses the Goldman Sachs Financial Conditions Index (GS-FCI), given its broad coverage across countries and through time, as well as a number of other indicators.

The second phase started towards the end of 2022, when the picture became more differentiated across countries, even as policy rate hikes continued. Most notably, financial conditions loosened in the United States and, until just recently, dipped back into easy territory below the historical average (Graph 1.A). Conditions also loosened in EMEs, albeit to a lesser extent, and remain below their historical norm (Graph 1.D). They tightened further in other AEs, exceeding their historical averages (Graphs 1.B and 1.C).

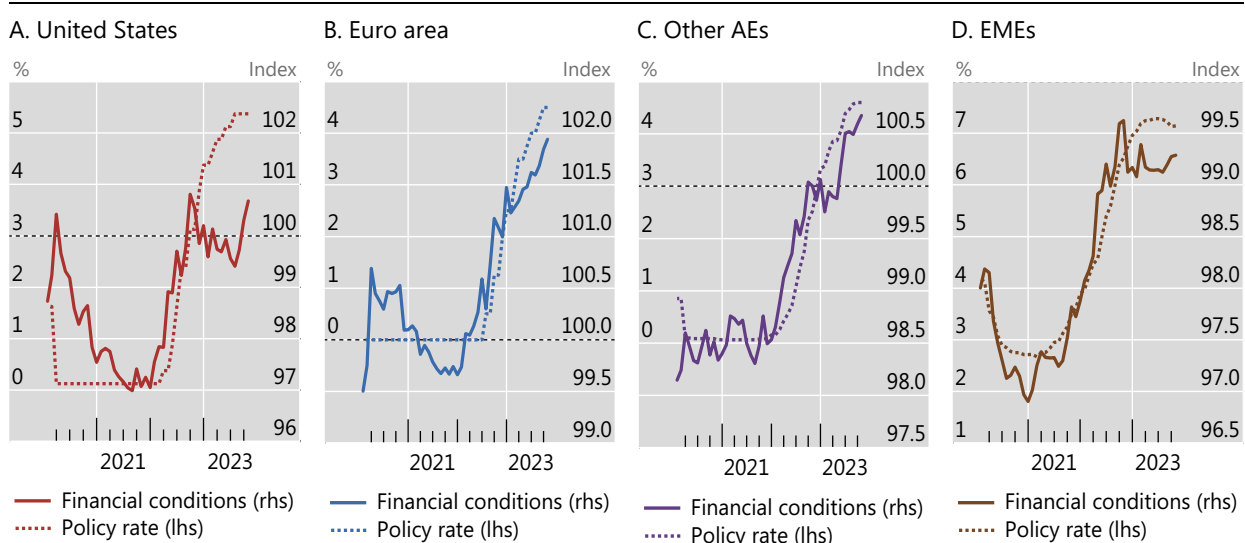
This shift broadly reflected a fall in corporate spreads and a rebound in equity prices. These indicators matter more in the United States, given the market-based nature of its financial system. For other jurisdictions, in particular the euro area, the rally in equity prices was somewhat weaker and the weight of corporate spreads and equity prices is much smaller.

Exchange rates played an important role. In EMEs, the strengthening of the dollar in 2022 put pressure on their financial conditions, as measured by this index.² This effect reversed as the dollar depreciated between late 2022 and mid-2023. The dollar's recent rally has resumed a tightening. Notably, at a global scale and in a persistent manner, the shorter-term working capital of manufacturing firms reacted immediately to tighter global financial conditions, especially to the stronger dollar.³

Positive economic news also contributed to the shift in the second phase. Activity proved to be more resilient than expected and, after the commodities-driven spike, inflation started to abate by mid-2022. This supported market expectations that monetary tightening would end sooner than anticipated.

Financial conditions tighten amid cross-country differentiation more recently¹

Graph 1



¹ Goldman Sachs Financial Conditions Index: a value of 100 indicates country-specific long-term averages; each unit above (below) 100 denotes financial conditions that are one standard deviation tighter (looser) than average. For the regions, GDP-PPP-weighted averages of nine EA members (exc. policy rate), seven other AEs (JP not included) and 15 EMEs (CN not included). End-month figures.

Sources: Bloomberg; Goldman Sachs; national data; BIS.

Other non-price indicators of financial conditions broadly confirm the two phases captured by the price indicators. Bank lending standards tightened sharply as the hiking phase started, and then stabilised in 2023. Accordingly, bank credit volumes shrank in many jurisdictions in 2022, before beginning to stabilise in 2023. Corporate bond issuance retrenched throughout 2022 and then stabilised at low levels.

² A stronger dollar is usually correlated with capital outflows and higher servicing costs for external financing. Moreover, pass-through from depreciation may put upward pressure on domestic prices and force central banks to raise domestic rates in order to counter inflationary pressures.

³ See Bruno and Shin (2023) and references therein for the effects of the dollar on manufacturing and trade.

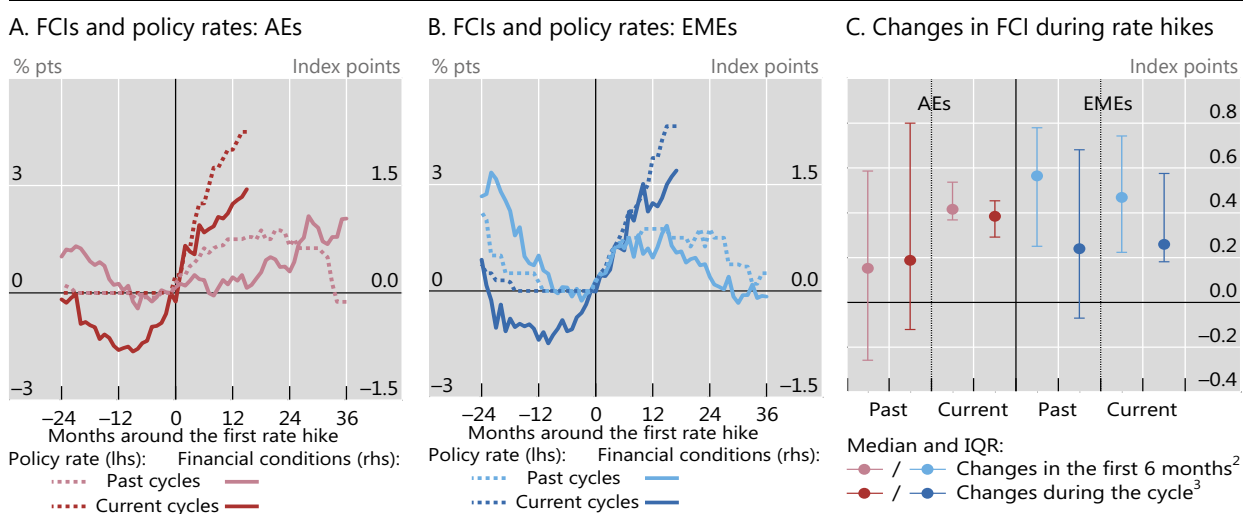
A comparison with past monetary tightening episodes

The link between policy rates and financial conditions in the current episode shares similarities with those in the past. For one, the current gap between changes in financial conditions and policy rates is similar to that observed at the same point in the past, in both AEs and EMEs (Graphs 2A and 2B). This is true when the change in financial conditions is scaled by the change in the policy rate (Graph 2.C).⁴ Even the difference across country groups is similar: the policy rate and financial conditions track each other less closely in AEs than they do in EMEs.⁵ This could partly reflect the tendency for policy rates in EMEs to respond to changes in financial conditions driven by external factors.

Nevertheless, there appears to be one difference, visible only in AEs. At the beginning of the cycle, the link in AEs is stronger on this occasion: rates and financial conditions have moved in lock step, while in the past there was a notable lag.

Financial conditions and policy rates: current vs past tightening cycles¹

Graph 2



¹ Changes relative to the month prior to the first policy rate hike. Median and quartiles (in panel C) across economies and cycles. Past tightening cycles: for AEs, since 1980; for EMEs, since 2000; where data are available. Current tightening cycles: latest ones that started in 2020–22. The sample includes 18 AEs and 17 EMEs. End-month figures. ² Change up to t+5 in the tightening cycle, scaled by the corresponding increase in the policy rate. ³ Change to the end of the cycle, scaled by the corresponding increase in the policy rate. October 2023 is treated as the end of the current cycle.

Sources: Bloomberg; Goldman Sachs; national data; BIS.

Several factors may explain this pattern in AEs.

One factor could be monetary policy itself – in particular, the large size and the synchronisation of rate hikes. The latter amplified the global impact through financial and real spillovers. The Federal Reserve’s rapid tightening played an important role, given the US dollar’s heft in the global economy and the global financial system. Further, clear commitment to restore price stability and enhanced transparency about future policy rates may have facilitated faster pricing in of the policy rate path.⁶ In some cases, quantitative tightening reinforced the impact of higher rates on financial conditions.

⁴ Long-term rates in AEs did rise more this time. This was offset by the subdued rise in corporate spreads. Changes in equity prices and exchange rates were not significantly different from previous occasions.

⁵ Compared with the patterns shown in *calendar time* in Graph 1, Graph 2 indicates less synchronisation in the current episode *conditional on the hike*. This is because common factors drove the tightening of financial conditions independently of the stage of monetary policy tightening in a given country.

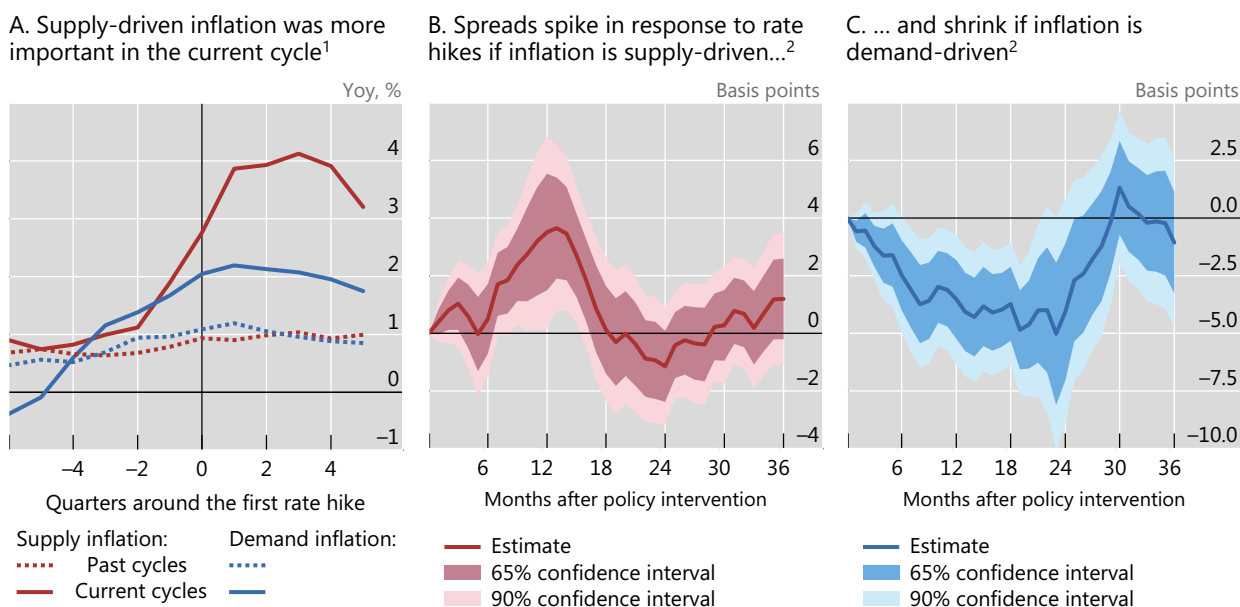
⁶ For instance, the Federal Reserve’s economic projections have a quick impact on market interest rates (Bongard et al (2021)).

A second factor concerns changes in the structure of the financial system. In particular, the rising role of non-banks may have expedited and strengthened the response of financial conditions.⁷

A third factor could be that the initial exceptional burst of inflation came, to a large extent, from negative supply shocks (Graph 3.A). Such shocks – in this case stemming from pandemic- and war-related disruptions – tend to have a stronger impact on financial conditions, as they weaken economic activity. Hence, for instance, the differential response of credit spreads, which tend to widen in response to a tightening during supply-driven inflation (Graph 3.B) and, if anything, narrow otherwise (Graph 3.C).

Credit spreads react more to rate hikes when inflation is supply driven

Graph 3



¹ Headline year-on-year inflation. Simple averages across countries and cycles for AU, CA, FR, GB, SE and US. Past tightening cycles since 1997. Current tightening cycles: latest ones that started in 2020–22; for AU, FR and SE, only data up to $t+1$ are available. Inflation decomposition in supply and demand factors following the methodology in Shapiro (2022). ² Effect of a 25 basis point tightening on corporate spreads in the United States. Patterns are robust across AEs.

Sources: Boissay, Collard, Manea and Shapiro (2023); Federal Reserve Bank of San Francisco; OECD; BIS.

From financial conditions to real activity

It is well known that the transmission of monetary policy to real activity works with lags. What is less clear is how long these lags are, and whether they are longer today than in the past. The range of estimates is wide. Even so, a common rule of thumb would posit that a policy rate hike of 1 percentage point shrinks GDP by approximately 0.3–1.5% over a horizon of around one and a half to two years.⁸ About half the impact occurs within the first year. As the first link in the chain and as one would expect, financial conditions respond much faster: indeed, they react immediately and the peak effect is generally reached within the first year.

While it is still too early to get definitive answers, one could reasonably believe that the peak impact in the current cycle is yet to be reached. Illustrative exercises using cross-country data shed some light on the impact of tighter financial conditions on activity. The estimates obtained using local projections are in line with those from the literature and suggest that the impact has been somewhat weaker than in the past, even as the impact of monetary policy on financial conditions themselves has been similar (Graph A1

⁷ Non-banks' balance sheets tend to be more sensitive to changes in monetary policy; see ECB (2021).

⁸ See eg Deb et al (2023) and the references therein.

in the online annex). More granular analysis based on forecast revisions points to some differentiation across countries (Graph A2 in the online annex). While the strong dollar appears to have dampened manufacturing activity and trade and hurt growth especially in EMEs, the higher costs of financing are only slowly feeding through to activity in some AEs.

Why has activity in some AEs been relatively resilient, considering the extent of the tightening? On the surface, this is puzzling given the higher levels of debt today. Several factors are relevant here.

First and foremost, real interest rates are still low by historical standards, given initial levels and the intensity of the inflation flare-up. As a result, riskier assets and expenditures may remain resilient even after the recent sharp increases in real rates.

Second, certain structural changes during the low-for-long era may have muted, or at least delayed, the impact of tightening. The share of fixed rate long-term loans has risen as debt taken on by businesses and households termed out, delaying the impact on debt service burdens (Ampudia et al (2023)). The increased importance of intangible assets may also have lessened the response of investment, as the collateral channel weakens (Döttling and Ratnovski (2023)).

Third, pandemic-related distortions have been at play. Drawing down excess savings has helped keep consumption robust. Exceptionally buoyant labour markets, in part due to subdued labour supply and labour-hoarding, have bolstered household income. As a result, consumption (especially of services given lockdown-induced pent-up demand) has held up even as interest rate- (eg construction) and dollar-sensitive activities (eg trade) have slowed.

Finally, loose fiscal policy has bolstered aggregate demand. The excess savings that households have been drawing down owe in part to pandemic-era support packages. Additional measures launched in the wake of the war in Ukraine have shielded the private sector from higher energy prices. The cyclically adjusted primary balance in AEs is estimated to have widened from 3.3% of GDP in 2022 to 3.9% in 2023.

Insights from past episodes going forward

The current cycle is nearing its peak. What could the future path of financial conditions look like?

The historical regularities suggest that a significant tightening could still lie ahead, *even if central banks stop raising policy rates*. In AEs and EMEs alike, in some past episodes, corporate spreads spiked and equity valuations plummeted in the second year of the cycle (Graphs 4.A and 4.B).

Such patterns are more likely to emerge when private debt is high, the inflation burst is more pronounced and asset valuations, especially property prices, are stretched – a picture not dissimilar to today's (Boissay Borio, Leonte and Shim (2023)). Consistently, a proxy for financial distress as well as loan impairments peak over a similar horizon (Graph 4.C, yellow and black lines).

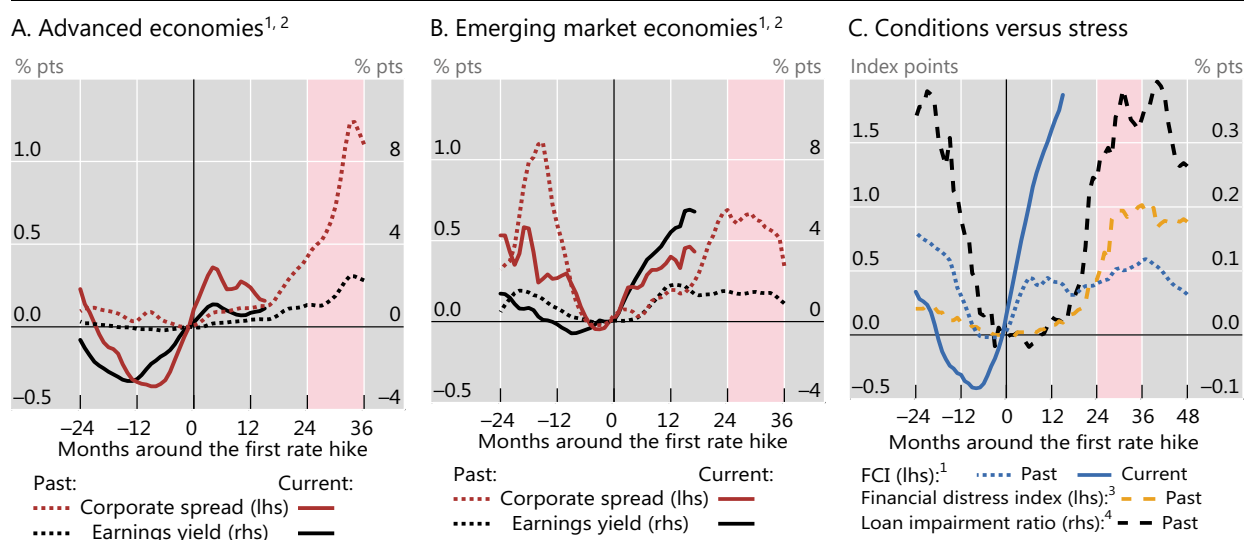
Monetary policy challenges

The pass-through of monetary policy tightening to financial conditions is in train, and the full impact of tighter monetary policy on activity and inflation appears still to lie ahead. What challenges then loom for monetary policy?

In one scenario, a soft landing is achieved. Households, firms and sovereigns adjust to higher funding costs. The buffers in place smooth the transition. Weakness in manufacturing and trade dissipates.

In an alternative scenario, tighter financial conditions bite more abruptly, probably after the buffers are depleted. Real activity slows sharply, accompanied by credit losses, defaults and bankruptcies.

The inflation path remains critical for which of these outcomes transpires. A steady disinflation would increase the probability of a soft landing. A more stubborn one would increase that of stagflation, especially if energy prices were to flare up again.



¹ Changes relative to the month prior to the first policy rate hike. Simple three-month moving averages across episodes in 18 AEs and 17 EMEs. Past tightening cycles: since 1980 for AEs and since 2000 for EMEs, where data are available. Current tightening cycles: latest ones that started in 2020–22. ² Investment grade corporate credit spreads, definitions differ among economies. Earnings yield is the inverse of the price-to-earnings ratio. ³ Romer and Romer (2019); changes relative to the month prior to the first policy rate hike; simple averages of 30 AEs and EMEs. ⁴ Change in the impaired loans/total loans ratio relative to the month prior to the first policy rate hike. Simple averages across past monetary tightening episodes since the early 1990s in 12 AEs and seven EMEs.

Sources: Romer and Romer (2019); Bank of America ML; Bloomberg; Fitch; Goldman Sachs; JPMorgan Chase; Refinitiv Datastream; BIS.

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