



# Is inflation dead or hibernating?<sup>1</sup>

By Claudio Borio
Bank for International Settlements

Keywords: Inflation, Covid-19, globalisation, debt.

Is inflation dead or hibernating? The answer will shape the future of central banking and the global economy. It requires exploring shifts in the tectonic plates of the global economy rather than developments on its surface, ie shifts in secular forces and policy regimes. Looking back, obviously central banks have been instrumental in taming the Great Inflation of the 1970s. But this cannot be the whole story: post-Great Financial Crisis, inflation has remained stubbornly below targets despite major efforts to push it up. Inflation has been very insensitive to economic slack, and inflation expectations appear to be rather backward-looking. Arguably, secular forces such as globalisation and technology have played an important complementary role. Looking forward, in the wake of the pandemic, disinflationary forces are likely to prevail in the near term, owing to excess capacity and the continued impact of the secular forces. But at some point inflation could become a problem again, if underlying economic conditions and policy regimes came to resemble more those in the 1970s: a deglobalised world; high public debt; financial repression; highly constrained central bank autonomy; and a larger role of the state in the economy. If so, the winter of hibernation will have been quite long, but just a winter nonetheless.

<sup>&</sup>lt;sup>1</sup> This Policy Brief is based on a presentation by Claudio Borio, Head of the BIS Monetary and Economic Department, at the 24th Annual Barclays Global Inflation Conference, 5 October 2020. The views expressed are those of the author and not necessarily those of the BIS.

My objective in this SUERF Policy Brief is to address one of the big economic puzzles of our time: why has inflation been so low for so long despite central banks' huge efforts to push it up? And, based on the answer, what are the prospects in the short and longer term? Fundamentally: is inflation dead or hibernating?

The question is key. It is bound to shape not only the future of central banking, but also that of the global economy.

Big puzzles are, by definition, hard to solve. Moreover, making predictions is a notoriously hazardous business – especially, as I am sure you know, "predictions about the future", as Yogi Berra would have said.

But, in order to spur discussion, I will stick my neck out. And, in order to look forward, I will first have to look back.

What is my bottom line? In order not to spoil the story, let me just say that, to understand the future, we need to go beyond recent experience, to take a historical perspective and to consider the shifts in the tectonic plates of the global economy. It is misleading simply to look at developments on its surface, tempting as it may be.

Before I elaborate, let me make one qualification. What I will be saying has very broad applicability. But a number of emerging market economies (EMEs) have never quite managed to get rid of the inflation virus – if I may use that term. In these cases, inflation remains a clear risk even in the short term, and for some of them it is not a risk, but a reality.

## I - Looking back

So, let's look back first.

To begin with, and to avoid any misunderstandings, let me state the obvious. Central banks have played a critical role in taming the Great Inflation of the 1970s. We all remember Paul Volcker's courageous efforts in the late 1970s to 1980s – efforts that set the global context in which other central banks followed suit.

But that cannot be the whole story. If it were, it would be hard to see why central banks have failed to push inflation back up to target post-Great Financial Crisis (GFC). And this despite driving nominal interest rates to unprecedented lows, sometimes into negative territory; despite keeping them there for an unusually long time; and despite pushing the size of their balance sheets to new highs. In fact, inflation-adjusted (real) interest rates have never been negative for so long, not even during the Great Inflation era or any other historical phase of which I am aware.

What has happened, then?

The first point to note is that the link between *domestic* measures of slack and inflation has proved rather weak and elusive for at least a couple of decades now. In other words, the Phillips curve has proved to be remarkably flat and difficult to estimate. Indeed, this is a recurrent theme in discussions in Basel. I recall a one-and-half-day meeting devoted to this issue as far back as the early 2000s. The elusiveness of the link is reflected in the Federal Reserve's decision to play down the concept of a natural rate of unemployment in its recent review (Powell (2020)).

Probably the most popular explanation of these developments is that central banks' greater anti-inflation credibility has weakened the link. As a result, inflation expectations have become better anchored around inflation objectives, so that wages and prices become less responsive to slack.

No doubt, there is a lot to be said for this hypothesis. Central banks' greater anti-inflation credentials have been essential. But, for the reasons I mentioned earlier, it can be only part of the story. Indeed, central banks are now concerned that expectations could drift downwards, as they seemingly have a large backward-looking component. People appear to be convinced only by facts, not by announcements.

To my mind, the globalisation of product, capital and labour markets has played a key complementary role (Borio (2017)).<sup>2</sup> Is it reasonable to believe that the inflation process should have remained immune to the entry into the global economy of the former Soviet bloc and China and to the opening-up of other EMEs? This added something like 1.6 billion lower-wage workers to the effective global labour force, drastically shrinking the share of advanced economies, by about half by 2015.

I see this as having two effects.

The first is *cyclical* and *symmetric*. One would expect both labour and firms to have become much more sensitive to global conditions. We know that workers are not just competing with fellow workers in the same country but also with those abroad. We know that, for a given nominal exchange rate, the prices of two tradable goods that are close substitutes should track each other pretty closely. And we know that exchange rates have not been fully flexible, compensating for the cost differentials.

Put differently, assuming something akin to a *global* Phillips curve, one would expect *domestic* slack to be an insufficient measure of inflationary or disinflationary pressures; global slack would matter too.

The second effect is *secular* and *asymmetric*. One would expect the entry of lower-cost producers and cheaper labour into the global economy to have put persistent *downward* pressure on inflation in advanced economies, at least until costs converge. In other words, markets should have become much more *contestable*, eroding the "pricing" power of both labour and firms and making the wage-price spirals of the past less likely.

If so, changes in costs or import prices would tend to result in one-off changes in the price level, and hence only temporary changes in inflation, rather than in permanent (or at least long-lasting) increases in inflation.

Now, what is the empirical evidence for these hypotheses?

Consider the cyclical component.

Many studies have found that the global component of inflation has tended to increase over time. But, of course, correlations tell us little about the factors behind the co-movements. For instance, the widespread adoption of inflation targeting could be at work.

<sup>&</sup>lt;sup>2</sup> Borio (2017) includes the references to the BIS studies cited below. On the role of globalisation in inflation, see Forbes (2018) for a recent overview and, for a particular take, which considers also the link to demographics, see Goodhart and Pradhan (2020). In a way, given its impact on the global labour force, the globalisation shock can be regarded as a major demographic shock as well.

There is also some more specific evidence. A number of studies, including some undertaken at the BIS, have found that global measures of slack help explain inflation over and above domestic determinants. In fact, the first such study with colleagues goes back to 2006. Other work, including with colleagues at the BIS, finds that global value chains help explain the relative importance of global and domestic measures of slack in driving domestic inflation both across countries and over time. We know that global value chains have grown substantially since the 1990s, increasing competition at all stages of production.

What about the secular and asymmetric effect? Evidence suggests that institutional indicators of the secular decline in labour's pricing power, such as employment protection, union density and coverage, help explain the decline in the responsiveness of wages to domestic slack. Globalisation is likely to have been one factor at play, as part and parcel of the broader shift towards a free-market economy.

To be sure, the economic literature is still somewhat divided over how to read the empirical evidence. Even so, the idea that globalisation has had a first-order effect on inflation has been gaining ground within the central banking community, and is often taken as a given in the business community. Just a few central bank examples: Christine Lagarde highlighted this point in her remarks at the ECB conference last week (Lagarde (2020)). Mark Carney delivered an entire speech on the topic some time ago (Carney (2017)). And going further back, Greenspan himself put it forward as the answer to the puzzle of surprisingly low inflation in 2003 (Greenspan (2005)).

What I have said so far about globalisation could also equally apply to technological change. Both operate in very similar ways and reinforce each other. Just as globalisation does, technological advances improve productivity, thereby containing cost pressures. They threaten labour's bargaining power – think robots rather than foreign workers. And they reduce incumbents' pricing power through cheaper products, as incumbents cut costs, through newer products, as advances make older products obsolete, and through more transparent prices, by facilitating shopping around.

While the evidence here is largely limited to the impact of e-commerce, I suspect that the indirect impact, through labour and product markets, is much greater, if harder to measure.

So, here we are. In a world where inflation seems to have a life of its own while evolving within a rather narrow range, stubbornly below central bank targets, and seemingly almost impervious to monetary policy stimulus. In a world in which, as evidence appears to indicate, inflation is more like the residual result of erratic or trend movements in individual prices than of a factor common to all of their movements, which is in fact how, theoretically, inflation is often defined (Reis and Watson (2015)).

Perhaps the Great Inflation phase deceived us all. What should have puzzled us is not so much why inflation is so persistently low these days, but rather why it rose so much and became so stubbornly high during the Great Inflation era in the first place. Indeed, many an economist laboured to explain this puzzle at the time, just as is happening now.

In fact, historically, high inflation in peacetime is the exception rather than the rule. Perhaps low inflation is part of the physiology of a well-functioning market economy. After all, didn't Greenspan famously define price stability as a situation where price changes do not materially influence people's behaviour (Greenspan (1994))? We seem to be pretty close to that ideal state.

But, going back to the original question: is inflation really dead or just hibernating?

## II - Looking forward

So, let's look forward and try to guess what might be in store. For this, I will also draw in the recent discussion in our latest BIS Annual Economic Report (BIS (2020)).

Here, it is important to make a distinction between the short term and the longer term. I measure the long term not so much in *calendar* time – no one has a crystal ball – but in *economic* time, ie time as marked by possible changes in policy regimes, which can fundamentally change the landscape. In other words, my "predictions" depend on whether these changes take place. Let me hasten to add that, while timing is impossible to predict, the changes I will be describing do not appear imminent.

In the short term, disinflationary pressures are likely to prevail. Granted, there could well be, and we have already seen, some cost-push pressures. Probably, there is more to come. But if the previous analysis is correct, they are more likely to generate one-off increases in prices than persistent increases in inflation: second-round effects would remain weak. By contrast, we can expect economic slack to prevail, albeit clouded by the pandemic-induced resource reallocations (Carstens (2020)). Even though economic slack has limited impact on inflation, it will definitely not be a source of higher inflation. Meanwhile, we can expect the forces of globalisation, even if naturally waning, and technology to continue exerting downward pressure on inflation for at least some time.

The longer-term picture can be quite different. It is possible that inflation could re-emerge as a policy problem if the legacy of the pandemic accelerates previous trends.

Imagine a world with much higher private and, above all, public sector debt. Debt had been growing globally before the pandemic. The pandemic has exacerbated the rise, and so might the further spread of easy monetary policy from the core of the rest of the world, as central banks respond to appreciation pressures on their currencies. Imagine a world with globalisation in full retreat. Such signs have already emerged. Imagine a world with a greater role of the state in the economy. The pandemic is working in that direction, and so has the progressive erosion of the room for policy manoeuvre.

In such a world, there would be both the *incentive* and the *ability* to generate higher but less controlled inflation. Incentive, in order to inflate the debt away. Ability, with second-round effects back at work, with the likely support of financial repression, and possibly with central bank independence under threat.

This outcome would be more likely if the political environment became more inimical to market forces and, as a reflection of the same philosophy, to central bank independence (Borio (2020)). The pandemic may well promote such a shift, exacerbating some embryonic tendencies that were already present before it broke out.

In fact, high private debt levels aside, this world is not so different from the one we saw in the 1970s. Then, too, globalisation was still to come, with the Soviet bloc and China ostensibly on a planet of their own and EMEs very much closed to the rest of the world; financial repression was widespread; the reach of the state in the economy was much greater; and central banks were not independent.

If such a world materialised again, the winter of hibernation will have been quite long – but just a winter nonetheless.

#### References

Bank for International Settlements (BIS) (2020): Annual Economic Report 2020, Basel, June.

Borio, C (2017): "Through the looking glass", OMFIF City Lecture, London, 22 September.

——— (2019): "Central banks in challenging times", SUERF Annual Lecture, Milan, 8 November, reprinted as *SUERF Policy Notes*, issue no 114; also available as *BIS Working Papers*, no 829, December 2019.

Carney, M (2017): "[De]Globalisation and inflation", IMF Michel Camdessus Central Banking Lecture, 18 September.

Carstens, A (2020): "The Great Reallocation", op-ed, Project Syndicate, 12 October.

Forbes, C (2019): "Has globalization changed the inflation process?", BIS Working Papers, no 791, June.

Goodhart, C and M Pradhan (2020): *The Great Demographic Reversal: ageing societies, waning inequality, and an inflation revival,* SpringerLink.

Greenspan, A (1994): Testimony before the Subcommittee on Economic Growth and Credit Formation of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, 22 February 1994.

——— (2005): "Globalization", remarks given at the Council on Foreign Relations, New York, New York, Federal Reserve Board,10 March.

Lagarde, C (2020): "The monetary policy strategy review: some preliminary considerations", speech at the *ECB* and Its Watchers XXI conference, Frankfurt am Main, 30 September.

Powell, J (2020): "New economic challenges and the Fed's monetary policy review", speech at the Federal Reserve Bank of Kansas City economic policy symposium *Navigating the decade ahead: implications for monetary policy*, Jackson Hole, Wyoming, 27 August.

Reis, R and M Watson (2010): "Relative goods' prices, pure inflation, and the Phillips correlation", *American Economic Journal: Macroeconomics*", vol 2, no 3, pp 128–57.

#### About the author

Claudio Borio was appointed Head of the Monetary and Economic Department on 18 November 2013. At the BIS since 1987, Mr Borio has held various positions in the Monetary and Economic Department (MED), including Deputy Head of MED and Director of Research and Statistics as well as Head of Secretariat for the Committee on the Global Financial System and the Gold and Foreign Exchange Committee (now the Markets Committee). From 1985 to 1987, he was an economist at the OECD, working in the country studies branch of the Economics and Statistics Department. Prior to that, he was Lecturer and Research Fellow at Brasenose College, Oxford University. He holds a DPhil and an MPhil in Economics and a BA in Politics, Philosophy and Economics from the same university. Claudio is author of numerous publications in the fields of monetary policy, banking, finance and issues related to financial stability.



SUERF is a network association of central bankers and regulators, academics, and practitioners in the financial sector. The focus of the association is on the analysis, discussion and understanding of financial markets and institutions, the monetary economy, the conduct of regulation, supervision and monetary policy.

SUERF's events and publications provide a unique European network for the analysis and discussion of these and related issues.

SUERF Policy Briefs (SPBs) serve to promote SUERF Members' economic views and research findings as well as economic policy-oriented analyses. They address topical issues and propose solutions to current economic and financial challenges. SPBs serve to increase the international visibility of SUERF Members' analyses and research.

The views expressed are those of the author(s) and not necessarily those of the institution(s) the author(s) is/are affiliated with.

All rights reserved.

Editorial Board
Ernest Gnan
Frank Lierman
David T. Llewellyn
Donato Masciandaro
Natacha Valla

SUERF Secretariat c/o OeNB Otto-Wagner-Platz 3 A-1090 Vienna, Austria Phone: +43-1-40420-7206 www.suerf.org • suerf@oenb.at