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Research Report

The case for central bank independence: A review of key issues in the international debate

ECB Occasional Paper, No. 248

Provided in Cooperation with:

European Central Bank (ECB)

Suggested Citation: Dall'Orto Mas, Rodolfo; Vonessen, Benjamin; Fehlker, Christian; Arnold, Katrin (2020) : The case for central bank independence: A review of key issues in the international debate, ECB Occasional Paper, No. 248, ISBN 978-92-899-4424-3, European Central Bank (ECB), Frankfurt a. M.,
<https://doi.org/10.2866/908675>

This Version is available at:

<https://hdl.handle.net/10419/234489>

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EUROPEAN CENTRAL BANK
EUROSYSTEM

Occasional Paper Series

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Christian Fehlker, Katrin Arnold

The case for central bank independence

A review of key issues in the international debate

No 248 / October 2020

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Abstract

This Occasional Paper analyses how significant expansions in central banks' mandates, roles and instruments can result in challenges to the independence of monetary policy. The paper reviews, in particular, some of the key challenges to central bank independence brought about by the global financial crisis (GFC) of 2007 and assesses their impact on the de jure and de facto independence of selected central banks around the world in the past few years. It finds that although the level of de jure (legal) central bank independence did not deteriorate, the level of de facto (actual) independence of the central banks of some of the largest economies in the world may have weakened. The paper presents counterarguments to the key critiques raised against central banks due to their policy response during the GFC, and concludes that the case for central bank independence is as strong as ever.

Keywords: central bank independence, central bank mandate, financial stability, global financial crisis, price stability

JEL codes: B1, B2, C4, E3, E4, E5, E6, K3, N1, N2

Executive summary

Since the late 1960s, important consensuses have been forged on the interaction between inflation and growth. It has become widely acknowledged that the negative relationship between inflation and unemployment – the Phillips curve – is a short-term relationship that does not hold in the long run. Moreover, empirical studies have found that inflation and a high variability of inflation can have a negative impact on long-term output. As a result, the notion emerged that achieving and maintaining price stability may favour higher levels of output and employment.

As the literature evolved and successful experiences of central banks such as the Deutsche Bundesbank accumulated, a consensus emerged that granting central banks instrument independence to conduct monetary policy, while holding them accountable to a well-defined and limited price stability mandate, can improve their policy efficacy by insulating them from political pressures looking to exploit short-term trade-offs between inflation and employment. As a result, the conduct of monetary policy changed dramatically between the late 1970s and the early 2000s, with almost all advanced economies and many emerging market economies adopting central bank independence, which in turn contributed to a marked improvement in macroeconomic performance around the world. In addition to instrument independence, the literature also distinguished goal independence, which is a key characteristic of some central banks.

To reduce inflation biases and insulate monetary policy from short-term political pressures and time-inconsistent policies, it is essential that the independence of central banks include a number of specific features. Typically, four features are considered critical: (i) functional and operational (underpinned by strict limits to monetary financing and by the ability to decide on foreign exchange matters), (ii) institutional, (iii) personal and (iv) financial independence. In addition, the attribution of a legal personality to the central bank can strengthen its independence.

In response to the economic and financial challenges brought about by the global financial crisis (GFC), important changes were introduced to the mandates, roles and instruments of central banks. In advanced economies, the focus on financial stability risks was strengthened in monetary policy discussions, and some central banks were given the additional task of carrying out microprudential and/or macroprudential policies. The GFC also stretched central banks' roles in crisis management operations and as lenders of last resort. Deflationary pressures and impaired transmission mechanisms prompted some of them to implement unconventional monetary policies. In those countries that were more indirectly affected by the GFC, a few central banks faced discussions on their institutional roles and whether they should actively support growth and development goals.

These rapid and unprecedented changes have contributed to reopening a debate on the precise scope and desirability of central bank independence, particularly with regard to monetary policy. Critiques question whether original accountability arrangements remain adequate given the new financial stability objectives; some call

on central banks to coordinate more with other government actors while others worry about monetary policies crossing the line into fiscal policies and about the distributional consequences from unconventional and macroprudential policies. Importantly, central banks' bold actions in response to the GFC may have created a perilous illusion that central banks are fully capable of ensuring strong growth, preserving price stability and safeguarding financial stability. The more central banks fail to meet these expectations, the more their independence will be questioned and the more difficult it will be to defend the goal of price stability.

Despite this renewed debate, traditional indices of central bank independence do not suggest a deterioration in central banks' de jure independence after the GFC. Nevertheless, a qualitative assessment of recent government pressures and changes in central bank practices in 13 central banks (whose jurisdictions account for 75% of the world's GDP) shows a more nuanced picture. This analysis finds that de facto independence may have deteriorated in almost half of the sample. The feature of independence most affected in our sample has been institutional independence, with government interferences largely focusing on pressuring monetary policy to look into growth objectives, even when this could endanger the price stability objective. Other recent studies, which are not based on the traditional indices of independence, also point to an increase in political pressure on central banks, which could put at risk their independence, credibility and policy effectiveness going forward.

These findings are a concern, as the case for keeping central banks independent to achieve a price stability objective remains strong. In particular, it should be noted that the time-inconsistency problem does not disappear when inflation is too low, as is currently the case in some parts of the world. Regarding unconventional monetary policies, it is worth mentioning that their effects on growth and inflation are similar to those from conventional policies. Therefore, there is a good case for letting central banks independently implement unconventional policies, as these policies help them achieve their price stability objective. Regarding financial stability, it has become evident that it is a condition necessary for price stability. Given central banks' expertise on banking, accumulated in the context of their monetary policy operations, there is a case for central banks to be at least partially involved in micro- and macroprudential policy decisions while preserving the independence of their monetary policy functions.

The benefits of central bank independence are currently not obvious for many citizens, given that inflation has been low and stable for close to three decades in the majority of countries. In this context, stepping up communication to explain the scope, benefits and limits of central bank policies is crucial to regain the support of the people and the politicians. Misperceptions of central banks' roles, misunderstood policy goals and instruments, and an erosion of public support for their independence may enable politicians to pressure central banks without fear of public retribution. Therefore, it is important to publically resist unnecessary mandate expansions and to emphasise the limits of policy, while calling on other relevant actors to do their part where needed.

The above-mentioned lessons and policy recommendations to safeguard central bank independence remain fully applicable to the current circumstances of the world economy being hit by the coronavirus (COVID-19) pandemic. Despite the rapid and unprecedented monetary policy response around the world, similarly to the time of the

GFC, government pressures on central banks are increasing, for example in the form of explicit calls to monetise deficits or use helicopter drops in some countries.

1 Introduction

This Occasional Paper analyses how significant expansions in central banks' mandates, roles and instruments can result in challenges to the independence of their monetary policy.¹ The paper reviews, in particular, some of the key challenges to central bank independence brought about by the global financial crisis (GFC) of 2007 and assesses their impact on the de jure and de facto independence of selected central banks around the world.² The paper stresses that the case for central bank independence is as strong as ever (even under the current global coronavirus pandemic, which, although not the focus of the paper, has many policy similarities with the GFC).

Recognising that central banks around the world perform other tasks in addition to monetary policy, this paper focuses mostly on central bank independence in monetary policy. Since the first central bank was founded in the 17th century, the degree of autonomy that central banks have had from their governments has been changing (see Box 1). The inflationary period that the world experienced from the late 1960s to the 1980s sparked an academic debate that helped forge important consensus on the long-term relationship between inflation and growth. Inflation was associated with high costs, and the view emerged that central bank independence could help achieve a better trade-off between output stabilisation and inflation. Furthermore, this trade-off could be improved further by holding central banks accountable. As a result, the conduct of monetary policy changed dramatically, with almost all advanced economies and many emerging market economies adopting monetary policy frameworks with price stability as their primary objective. To achieve it, central banks were given (instrument) independence, coupled with policy accountability. This new monetary policy framework contributed to a marked improvement in macroeconomic performance around the world – narrowly measured as healthy and stable real GDP growth with low inflation. These issues are discussed in Section 2.

The GFC put an abrupt end to this good performance, bringing about financial instability, deflationary pressures and high unemployment, particularly in advanced economies. In response, significant and rapid changes were introduced to the roles, instruments and mandates of major central banks. The unprecedented scale of this necessary policy response, however, contributed to the reopening of the debate on the precise scope and desirability of central bank independence, particularly with regard to monetary policy. In other countries, which were more indirectly affected by the GFC, a few central banks faced questions on their institutional roles and whether they should support more directly government efforts to boost growth and employment as well as to ease financial conditions. These issues are discussed in Section 3.

¹ At the outset, it is important to note that the notion of central bank independence does not preclude dialogue and international cooperation among central banks. This topic, however, is not part of the paper's focus.

² The cut-off date for the data used in this assessment is December 2019.

Despite the renewed debate on its benefits and desirability, traditional indices of central bank independence do not suggest a deterioration in central banks' de jure independence after the GFC – as illustrated in Section 4. Nonetheless, the qualitative assessment – carried out in Section 4.4 – of the changes to central bank laws and practices in 13 selected central banks (whose jurisdictions account for 75% of the world's GDP) shows a more nuanced picture. While these central banks' de jure independence remained largely stable during the years 2018-19, de facto independence may have deteriorated in almost half of the sample, while remaining broadly stable in the rest of the jurisdictions. This deterioration in the actual independence contrasts with the results obtained by the standard central bank independence indices. Based on our analysis, the feature of independence most affected in our sample of central banks has been institutional independence, with government attacks or interferences largely focusing on pressuring monetary policy to look into growth objectives.

The deterioration in the de facto independence of central banks is a concern, as the reasons that helped forge the pre-crisis consensus on central bank independence to achieve price stability remain valid today – even for those parts of the world economy currently facing a subdued price environment. Against this backdrop, in Section 5 we conclude by describing why price stability should remain the primary objective of an independent monetary policy, and we discuss the merits of having central banks in charge of unconventional monetary policies as well as being involved in financial stability deliberations. Given the degree of economic and financial integration of the world economy, we also pose the question of how global markets could react and what the implications could be for the global economy and, in particular, for smaller economies, if the independence of major central banks were put at risk.

The paper includes – in Section 6 – a compilation of selected central bank cases, which describes, within a common format, the institutional context under which these central banks operate and the recent evolution in their degree of independence.

It is important to note that, at the time of writing, a global pandemic of the coronavirus (COVID-19) is causing substantial human and economic damage in the world. Central banks in most countries have reintroduced and even expanded the tools used during the GFC in order to support the economy, ease financing constraints and ensure price stability in the medium term. Importantly, as during the GFC, instrument independence is giving central banks the flexibility to quickly develop new tools to address some of the challenges posed by this new crisis at a time when fiscal policy is responding more slowly in some jurisdictions or is constrained by sustainability concerns. The extent of central banks' responses is raising some of the same concerns voiced during the GFC. At the same time, government pressures on central banks are also increasing, as exemplified by calls to monetise deficits or use helicopter drops in some countries. The continued case for central bank independence is as strong as ever, and the lessons and policy prescriptions outlined in this paper are fully applicable to the current circumstances.

Box 1

Brief historical introduction – central bank independence until the 1970s³

The degree of autonomy that central banks have from their governments has varied over time. In the early days of their existence and, more recently, in times of relative peace, central banks have enjoyed a relatively high degree of independence. Meanwhile, during times of war or crises, central banks' independence was reduced.

Gold standard

Central banks can be traced back to 1668, when the Sveriges Riksbank – the first central bank – was founded. By 1900, however, there were only 18 central banks in the world (see Table A), and almost all of them were in Europe. These institutions, which were usually either fully privately owned or showed a mix of both public and private capital, were granted the right to issue private notes in exchange for committing themselves to buying limited amounts of government debt.

During the time of the gold standard, which was widely used in the 19th century and the early part of the 20th century, central banks focused on maintaining the convertibility of their notes by adjusting interest rates to maintain adequate levels of gold reserves. This monetary policy regime indirectly contributed to maintaining price stability. Nevertheless, monetary policy did not feature as one of the main central bank policies, nor was it used to manage the economy or directly affect price developments.

Although governments always appointed members to the governing bodies of these institutions, this period was not characterised by strong government interference in the conduct of central banks' affairs. The fact that they were privately owned meant that they also cared about maximising profit, for which they provided commercial banking services to different kinds of clients, beyond commercial banks.

Table A

Number of central banks in the world 1900-2010

Decade	Number of central banks
1900	18
1910	20
1920	23
1930	34*
1940	41
1950	59
1960	80
1970	108
1980	137
1990	161
2000	179
2010	180 (193 countries**)

Sources: Authors' elaboration using data from Capie, Goodhart and Schnadt (1994), the International Monetary Fund's Board of Governors and the directory of central banks and monetary authorities of the Bank for International Settlements and of FocusEconomics S.L.U.

* In the early 1930s, only 10 central banks were government-owned (Toniolo (1988)).

** The number of countries is indicative and equals the number of members of the United Nations in 2019.

³ Sources: Bordo (2007), Capie et al. (1994), Goodhart (2010) and Toniolo (1988).

Since the early days of their existence, however, central banks have also had the objectives of maintaining price stability – at least indirectly during the gold standard – and of safeguarding the stability of the financial system, particularly of the banking sector.

As regards financial stability, with the gradual ceasing of their commercial activities, which began in the second half of the 1800s, central banks acquired a more prominent role as lenders of last resort for the commercial banks. It was also during those years that most central banks were granted the monopoly of note issuance. Later, in the early years of the 20th century, some central banks would also be granted banking regulation and supervision responsibilities. The Federal Reserve System, for example, was charged with the supervision and regulation of its member banks when it was created in 1913.

World War period

In times of crises and wars, the balance in the relationship between governments and central banks tilted toward more government interference, irrespective of the central banks' degree of statutory or de jure independence. The outbreak of the First World War, for example, triggered the temporary suspension of the gold standard, and governments actively used central bank money to finance war and reparation spending, which in some instances resulted in hyperinflation. The negative consequences brought about by that, however, helped central banks regain some independence during the interwar period.

The deflationary consequences of the Great Depression combined with the limited (and, in some cases, inadequate) policy response that central banks were able to make under the resumed gold standard provoked substantial criticism of them. However, this did not stop the foundation of new central banks in Africa, Asia and Latin America. On the contrary, the idea that having a central bank could help ameliorate the spillovers from the Depression in developed countries gathered some support during these years. The post-Depression years, however, also coincided with the adoption of socialism in parts of the world and the rise of Keynesian economics aimed at managing aggregate demand, which led to a wave of central bank nationalisations as governments sought to have greater influence over interest rates.

The outbreak of the Second World War exacerbated this tendency. Nevertheless, in contrast to the First World War, controls on prices, credit and exchange as well as credit rationing were actively used, while interest rates were kept low to reduce public debt burdens.

Post-war period

The post-war period up until the 1970s saw these controls maintained, and the setting of interest rates became a government responsibility. In some places, such as England, this practice lasted until the late 1990s. Direct lending controls also led to disintermediation, inefficiencies in credit allocation and no banking crises between 1945 and 1971.

The Deutsche Bundesbank was perhaps one of the very few exceptions among major central banks during the post-war years, as it enjoyed a high level of independence. The memories of the hyperinflation of the early 1920s (when the Bundesbank's forerunner – the Reichsbank – had been put under the government's control) and the Allies' preferences to establish a decentralised federal banking structure in West Germany contributed to the creation of a highly independent and unaccountable central bank. Still, the debates and economic thinking of the time resulted in the Bundesbank being obliged to also support the government's overall economic policies, provided that

they did not conflict with securing price stability. In practice, the Bundesbank's room for manoeuvre was limited by the international system of fixed exchange rates that prevailed during the Bretton Woods period and by the fact that, during those years, it was the government – and not the bank – that had the responsibility to decide on the exchange rate parity.

The inflationary period that the world experienced from the late 1960s to the 1980s, which coincided with a generally peaceful period, sparked an academic debate on the long-term relationship between inflation and unemployment and the merits of granting central banks independence to achieve price stability (see Section 2).

2 The consensus on central bank independence

2.1 The relationship between inflation and growth

Since the late 1960s, important consensuses have been forged on the relationship between inflation and growth (or unemployment). First, it has become widely acknowledged that the negative relationship between inflation and unemployment – the Phillips curve – is a short-term relationship that does not hold in the long run. Second, many theoretical reasons why inflation and uncertainty about future inflation may reduce economic welfare have been established.

Theoretical models that described how, in the long run, the relationship between inflation and unemployment is non-existent garnered more attention. Friedman (1968) and Phelps (1967) showed how monetary expansions attempting to achieve an unemployment rate that is below the natural rate of unemployment could only lead to an inflation bias: higher inflation with no improvement in economic or employment growth in the long run. Workers and employers willing to keep real wages stable incorporate the anticipated inflation in their new contracts, resulting in higher nominal wages and not in increased employment. This conclusion helped forge a third consensus: that expectations matter for monetary policy outcomes (Mishkin (2006)).

Moreover, inflation was associated with high costs and reduced economic welfare. In a literature review, Briault (1995) showed how even anticipated inflation imposes economic costs. For example, it can create tax distortions where tax systems do not adjust automatically for inflation. Higher prices also constitute a cost on cash holdings and, thus, even with fully anticipated inflation, economic agents need to direct resources to avoid holding cash unnecessarily – the “shoe-leather” costs. This, in turn, affects saving and investment decisions and, ultimately, growth and potential output. Moreover, even with anticipated inflation, products would need to be re-labelled and menus would need to be re-printed regularly.⁴

When future inflation is unanticipated or uncertain, it carries additional costs. It leads to a redistribution of income and wealth from creditors to debtors, and from workers with fixed nominal incomes to employers. It also distorts relative prices, as each market adjusts prices at its own pace. These distortions, in turn, result in a misallocation of resources. Uncertainty about future price increases can encourage an excessive holding of physical assets as opposed to nominal assets, and may also discourage agents from entering into long-term contracts, potentially affecting investment. Alternatively, risk-averse creditors may demand higher real rates of return given the increased risk premium. Finally, even if current inflation is low, there could be uncertainty about future inflation if agents are unsure how the government will react,

⁴ It could be argued that technological advances make shoe-leather and menu costs less relevant now. Nevertheless, holding money in checking accounts at lower interest rates than in saving accounts incurs a cost. Similarly, menus and labels can be electronic these days, but firms still need to direct resources to regularly update prices.

for example, to external shocks or to upcoming elections. And the cost of disinflating afterward could be large if contracts cannot be adjusted promptly.

Empirical studies have not only found that inflation does not result in higher long-term output; on the contrary, it can have a negative impact. Numerous authors found a significant negative relationship between inflation and output in the long run (see, among others, Andrés and Hernando (1997), Barro (1995), Bassanini and Scarpetta (2001), Briault (1995), Fischer (1993), Grimes (1991)).⁵ Due to the uncertainty and costs outlined above, both inflation and a high variability of inflation can reduce total factor productivity, the level of investment and the accumulation of physical capital, which in turn translates into lower real GDP per capita in the long run. As a result, a fourth consensus built on the idea that achieving and maintaining price stability may favour higher levels of output and employment.

2.2 The benefits of an independent monetary policy

The natural question that then emerged was how to keep inflation in check and which institutional safeguards to use to overcome a possible inflation bias by public authorities. Faced with an election or elevated levels of public debt, for example, politicians and even monetary authorities could still be tempted to ease monetary policy more than expected by economic agents to achieve a higher output (and lower unemployment) in the short term, making this discretionary, short-term decision inconsistent with the longer-term price stability goal.⁶

Several institutional frameworks that alter policymakers' incentives were developed in the literature on rules and discretion. According to Briault et al. (1996), four of them attracted the most attention. Friedman (1959) proposed a non-contingent rule whereby the stock of money should grow at a steady rate. Barro and Gordon (1983), among others, recommended the use of reputation. Rogoff (1985) studied the benefits of appointing a conservative central banker with a greater inflation aversion than society as a whole. And Walsh (1995) and others proposed the use of optimal performance contracts whereby the central bank is penalised (rewarded) when inflation is above (below) target.

While all of these approaches can lower inflation outcomes, they lead to different results in terms of output variance. At one extreme, Friedman's non-contingent monetary growth rule involves no delegation of power (i.e. no central bank independence) and manages to eliminate the inflation bias completely. Nevertheless, since the pace of money growth does not adjust in the presence of shocks, the economy shows greater output variability. At the other end of the spectrum, a completely discretionary monetary policy could achieve lower output variance (optimal stabilisation) but with higher inflation.

⁵ Causality runs in both directions, however. Positive demand shocks can result in higher inflation. Nevertheless, studies do not find such a relationship in the long run.

⁶ This time-inconsistency problem was first formalised by Kydland and Prescott (1977).

Central bank independence, however, can help achieve a better trade-off between output stabilisation and inflation. In this context, it is useful to make a distinction between goal independence (a central bank that sets its own target) and instrument independence (a central bank that chooses its own instruments to achieve a target that is set by the government). In Rogoff's model, a conservative central banker enjoys both goal and instrument independence and is more inflation-averse than society as a whole. Although the trade-off between lower inflation and greater output variability remains, if the authorities appoint an individual with the optimal relative degree of inflation aversion, a higher welfare outcome can be secured than would be possible under a monetary rule or full monetary discretion.

Furthermore, this outcome can be improved by holding the central bank accountable. Walsh demonstrated that the inflation bias could be fully eliminated while preserving the stabilisation policy. In his model, this could be achieved with a contract between the government (the principal) and the central bank (the agent), whereby an inflation target is set by the former and the latter enjoys instrument independence to achieve said target. Importantly, under the contract, the central bank is held accountable: it is penalised (rewarded) when inflation is above (below) the target.⁷ Thus, accountability reduces the central bank's inflation bias without interfering with the stabilisation effort.⁸ In the same vein, Svensson (1995) showed how Walsh's optimal outcome could also be attained under a suitably specified and explicit inflation targeting regime, which should not be as difficult to implement as Walsh's optimal performance contract.⁹ An explicit inflation target raises the central bank's accountability in controlling inflation while, at the same time, providing a constraint on discretionary policy, thereby reducing the political pressure to pursue inflationary surprises and the likelihood of time-inconsistent policymaking (Mishkin (2006)).

Another consensus thus emerged. Granting central banks instrument independence to conduct monetary policy, while holding them accountable to a well-defined and limited price stability mandate (see Box 2), can improve their policy efficacy by insulating them from political pressures looking to exploit short-term trade-offs between inflation and employment.¹⁰

As a result of these consensuses, the conduct of monetary policy changed dramatically between the late 1970s and the early 2000s (see Chart 1). Almost all advanced economies and many emerging market economies adopted monetary policy frameworks with price stability as the primary objective (IMF (2010)). To achieve it, central banks were given (instrument and, in some cases, goal) independence, coupled with policy accountability. The simple and easily understood operating framework commonly relied on a single policy interest rate target implemented through market operations. The reform of central bank laws across the globe was a

⁷ Interestingly, some of the early central banks were taxed when they did not hold enough gold reserves as required by law to guarantee convertibility of their notes (see Capie et al. (1994)).

⁸ All of these models can be questioned on different fronts. For example, how feasible it is to appoint an individual with the right relative inflation aversion or how credible is a contract between the government and the central bank. For a full account, see Briault et al. (1996).

⁹ Another alternative to solving the inflation bias problem is to peg a country's currency to that of a country with a highly independent central bank committed to price stability (Fuhrer (1997), Mishkin (2006)).

¹⁰ Although central banks have other roles besides monetary policy (e.g. in payment systems, as bank regulators and supervisors, etc.) the literature focuses on central bank independence in monetary policy.

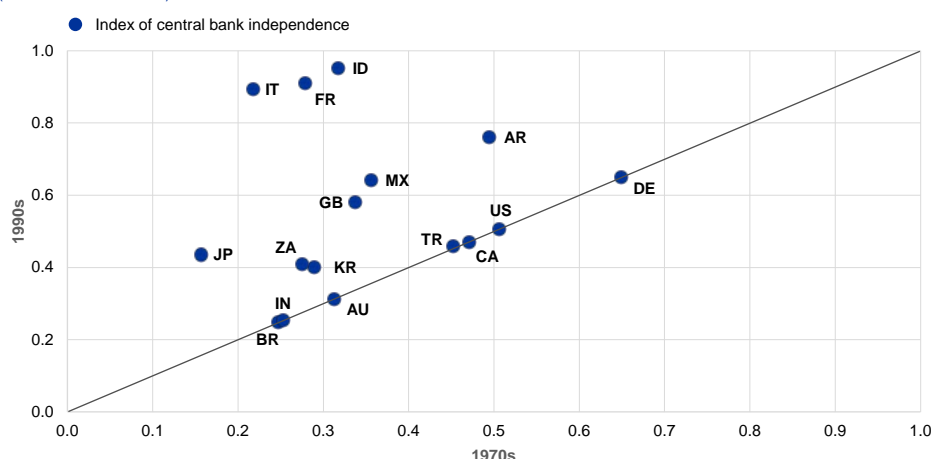
process actively supported by the International Monetary Fund (Binder (2018), Pistoresi et al. (2017)).

From a political perspective, these reforms were possible owing to specific factors. In particular, Jones (2019) observes that central bank independence rested on four principles – time inconsistency, technocratic legitimacy, epistemic community and distributive ambiguity – that helped mute the political salience of monetary policy decisions. The low political salience made it possible to leave monetary policy, with a well-defined and limited price stability objective, in the hands of independent decision-makers. At the same time, because monetary policy decisions are highly technical, the public used not to take particular interest in them and, hence, central banks could be kept out of politics. Tucker (2018) also adds that price stability underpins some important social values such as contributing to preserving freedom and, in particular, protecting people from the state abusing its monopoly powers over the issuance of money and taxing through unexpected bursts of inflation. In his view, this argument supports the case for central bank independence in monetary policy but not in other central bank responsibilities such as financial regulatory and supervision.

Chart 1

Evolution of central bank independence in G20 economies

(index value from 0 to 1)



Sources: Authors' own elaboration using the unweighted index from the data of Bodea and Hicks (2015).

Notes: Values closer to 1 indicate higher levels of independence. The central banks belong to Argentina (AR), Australia (AU), Brazil (BR), Canada (CA), France (FR), Germany (DE), India (IN), Indonesia (ID), Italy (IT), Japan (JP), Korea (KR), Mexico (MX), South Africa (ZA), Turkey (TR), the United Kingdom (BR) and the United States (US). The plotted values correspond to the maximum scores registered in the 1970s and in the 1990s. Bodea and Hicks (2015) do not report 1970s data for China, Russia and Saudi Arabia or any data for the European Central Bank, which had not yet been created.

The new monetary policy framework contributed to a marked improvement in macroeconomic performance (see Chart 2). The empirical evidence supporting this conclusion is substantial. While both legal (de jure) and actual (de facto) independence increased in most central banks in the world during the late 1980s and the 1990s (Crowe and Meade (2008), Cukierman (2008)), the levels of inflation were also reduced in many countries.¹¹ This reduction was also supported by other factors

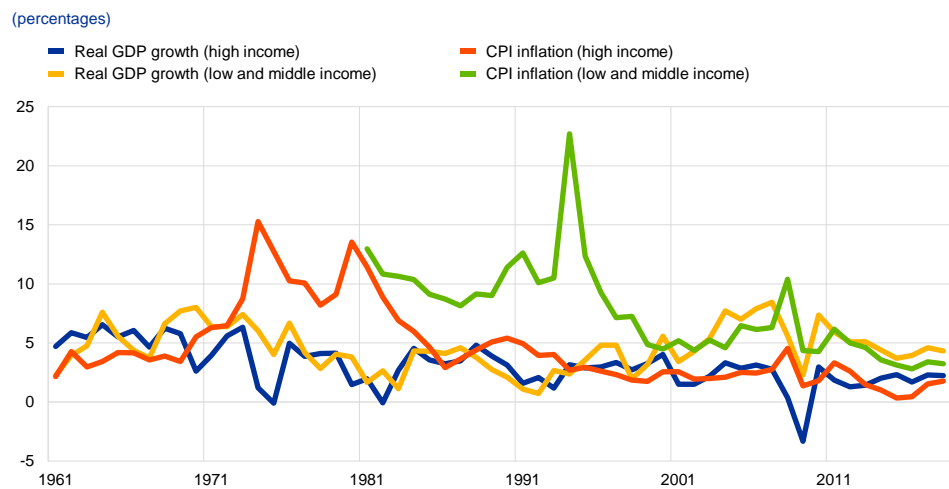
¹¹ See Sections 4.1 and 4.2 for an overview of different indices used to measure central bank independence.

such as globalisation and reforms in product and labour markets in some parts of the world.

In one of the first studies, Alesina and Summers (1993) found a near-perfect negative correlation between inflation and legal central bank independence in the 16 OECD countries included in their sample. The authors also found that central bank independence reduced inflation variability, but had neither large benefits nor costs in terms of real macroeconomic performance. These results were consistent with other studies conducted at that time (see Cukierman (2008) for an overview of 25 years of research on the topic).

For developing economies, Cukierman et al. (1992) found that actual independence – measured as the actual frequency of change of the central bank governor – was positively related to inflation. Subsequently, several other authors have found similar results for different samples of countries (see, for example, Crowe and Meade (2008) for both advanced and emerging economies, Lybek (1999) for Russia and neighbouring countries, Jácome and Vázquez (2005) for Latin America and the Caribbean).¹²

Chart 2
Real GDP growth and consumer price inflation



Sources: Authors' own elaboration using World Bank Group data retrieved through Haver Analytics, Inc.
Notes: Real GDP growth and consumer price index (CPI) inflation rates are shown for both high-income and low- and middle-income countries, as per the World Bank Group's classification. For high-income countries' inflation, inflation of OECD countries is used as proxy for the years 1961-76.

2.3 Features of central bank independence

To reduce inflation biases and to shield monetary policy from short-term political pressures and time-inconsistent policies, it is essential that central bank decision-making be independent. For the shield to be effective, it needs to include a number of specific features.

¹² Although most studies found a strong negative correlation, causality remains debatable (see Section 4).

In addition to the distinction between goal and instrument independence, four features of central bank independence are typically considered essential: (i) institutional, (ii) functional and operational, (iii) financial and (iv) personal independence.¹³ In addition, the attribution of a legal personality to the central bank can strengthen its independence.

Central banks around the world have been granted different features and, therefore, enjoy different degrees of independence. The following overview broadly follows the features of independence as attributed to the ECB.¹⁴

Institutional independence implies that both the central bank as an institution and the members of its decision-making bodies are not subject to – and must not accept – any instruction from other authorities or have other authorities participate in their decision-making. Even in situations when central banks need to coordinate with other authorities, central banks must remain independent so that they can take the necessary decisions to achieve their mandates.

Functional and operational independence requires that the objectives of the central bank be clearly spelt out¹⁵ and that the central bank have all the necessary means and instruments at its disposal to achieve these objectives. This feature works in two ways: it allows the central bank to choose and develop the most appropriate instruments to achieve its objectives while, at the same time, limits the independence of the central bank to achieving its objectives and nothing else. For example, central banks are not in charge of foreign policy and, thus, cannot claim independence in this respect.

The prohibition of monetary financing of governments is a key element that safeguards the operational independence of a central bank. By protecting the central bank from having to accept public authorities' pressures to help finance public deficits, it helps ensure that monetary policy decisions are geared toward the monetary policy goals.

Another important element underpinning operational independence is the ability of the central bank to decide on exchange rate matters and conduct foreign exchange interventions.¹⁶ In economies with fixed exchange rate regimes or in small, open economies with flexible exchange rates and subject to large capital flow movements, for example, the central bank's room for manoeuvre to achieve price stability may be

¹³ These four features have been analysed, for example, in the ECB Convergence Reports since 1998.

¹⁴ The legal foundation of central bank independence, which applies to both the ECB and the national central banks of the Member States of the European Union, is enshrined in the Treaty on the Functioning of the European Union (TFEU) (see in particular Article 130) and in the Statute of the European System of Central Banks (ESCB) and of the ECB (Mersch (2019)).

¹⁵ In the case of the ECB, while its primary objective – namely the maintenance of price stability – is defined in the Treaty in a general manner, the Court of Justice of the European Union in its Judgement ECLI:EU:C:2018:1000 of the Proceedings brought by Heinrich Weiss and Others noted that the ECB Governing Council's specification of the objective as the maintenance of inflation rates at levels below, but close to, 2% over the medium term does not appear vitiated by a manifest error of assessment nor does it go beyond the framework established by the Treaty.

¹⁶ As regards the euro area, while the Eurosystem holds and manages the official foreign reserves, the Council is competent to take a number of important exchange rate-related decisions. TFEU's Article 219 gives competence to the Council, after consulting the ECB, for concluding formal agreements on an exchange-rate system for the euro and for formulating general orientations for exchange-rate policy, which must be without prejudice to the primary objective to maintain price stability.

limited if the central bank does not have the ultimate responsibility for exchange rate decisions.

Financial independence is closely linked to functional independence. A central bank needs financial resources to perform its tasks, i.e. capital and revenue to conduct its operations, hire staff, rent office space, etc. Lower-than-optimal levels of capital may constrain monetary policy decisions and jeopardise the credibility of central banks. Thus, adequate levels of capital and profit-sharing rules are crucial to ensure that central banks always focus on price stability when taking monetary policy decisions (Bindseil et al. (2004)). Providing and safeguarding the adequate amount of financial resources further limits external influence on a central bank.

Personal independence protects the members of the central bank's decision-making bodies against external influence. Transparent appointment (and removal) processes for Board members, safeguards to avoid possible conflicts of interest and clear provisions outlining possible causes for removal from office are key in this regard.

In a democratic polity, the exercise of public power is subject to parliamentary control and the independence of public institutions is the exception. Thus, independence does not only require a strong business case (see Section 2.2), but it also needs to be balanced by accountability requirements (see Box 2).

Box 2

Accountability and transparency

In democratic jurisdictions, central bank independence is typically accompanied by accountability, which in turn is underpinned by transparency, and both can increase the effectiveness of monetary policy.

Accountability

The rationale behind holding central banks accountable is not only about policy efficacy benefits. As noted by Fisher (2015), “the power to set the short-term interest rate or the money supply is a formidable one”. Therefore, the government's quid pro quo for granting independence to a central bank is to hold it accountable (Briault et al. (1996)). Since central banks' policy decisions affect the people and businesses residing in the jurisdictions where they operate (and sometimes even beyond), accountability imposes a constraint on how central banks exercise their independence and, importantly, it is a means to reduce the democratic deficit that originates when they are made independent. Therefore, independence and accountability can be seen as two sides of the same coin.

But accountability also has important policy benefits; in particular, it reduces the central bank's inflation bias without interfering with its output stabilisation effort (Walsh (1995), Svensson (1995)). More interestingly, however, when the policy goal is not precise, a lack of formal accountability could open the door for a conservative central bank to pursue a socially excessive anti-inflationary policy (Briault et al. (1996)). Therefore, formal accountability, even in the absence of a well-defined mandate, can help achieve more benign levels of inflation.

Transparency

Transparency helps the public understand a central bank's monetary policy. Uncertainty about the central bank's inflation preferences, for example, can generate an upward bias in inflation expectations and, hence, in the inflation rate itself. Therefore, reducing this uncertainty could have the powerful effect of reducing the inflation bias and improving the economic stabilisation effort, even for central banks with a low level of independence or a poor track record in controlling inflation (Briault et al. (1996)). In these latter cases, transparency can actually be a useful tool to build credibility.

By communicating clearly and transparently in real time, or even in advance, its policies and preferences, the central bank can help the public understand its objectives, behaviour and decisions. By helping to guide the public's expectations, transparency – like accountability – can in turn increase the monetary policy's effectiveness (Fisher (2015)). Releasing forecasts of future rates, inflation and economic conditions is a way for central banks to influence, for example, long-term rates and associated private-sector decisions (Dincer and Eichengreen (2014)), but it also gives the public and the markets the ability to assess whether the central bank is serious about achieving its inflation goal (Mishkin (2006)).

In a study of more than 100 central banks, Dincer and Eichengreen (2014) found that there was a steady movement toward greater transparency and independence between the late 1990s and 2010. Moreover, on balance, it does not appear that the GFC reversed this trend, although the movement toward greater transparency did slow down. The authors also found a significant negative correlation between the variability of inflation and both central bank transparency and independence.

3 Challenges to central bank independence from expanding tasks

3.1 Expansion of central banks' roles and policies

The GFC of 2007 led to important changes to the roles, instruments and mandates of central banks, particularly in advanced economies. These changes had to be implemented rapidly, mostly without fundamentally changing central banks' laws and without necessarily changing monetary policy objectives and operational targets.

Up until the crisis, monetary policy in advanced economies had mainly focused on price stability, while financial stability was dealt with by separate micro- and macroprudential regulation and supervision authorities (Bayoumi et al. (2014), Goodhart (2010)).¹⁷ The GFC made it evident, however, that the relationship between price and financial stability had not been given due attention (Balls et al. (2018), IMF (2010)). As a result, the focus on financial stability risks was strengthened in monetary policy discussions (Yellen (2014)), and some of the central banks in advanced economies were tasked with micro- and/or macroprudential responsibilities.¹⁸ Although the debate on whether central banks should be the main institutions responsible for financial stability is still open and depends on countries' circumstances (Bayoumi et al. (2014), IMF (2010)), there is a broad consensus that central banks need to be closely involved in the implementation of microprudential and macroprudential policies given their synergies with monetary policy (Balls et al. (2018), BIS (2011), IMF (2010)).

The GFC also stretched the role of central banks in crisis management operations. Not only did central banks expand their lender of last resort facilities, but in some cases they also temporarily financed government programmes to bail out or resolve financial institutions (Balls et al. (2018)). In the case of the ECB, it participated in an advisory role in support programmes for various European countries, led by the European Commission (i.e. the executive branch of the European Union) and the IMF (Blinder et al. (2017)).

Faced with threats of deflation, an impaired transmission mechanism and a worsening economic crisis, central banks in some jurisdictions implemented unconventional monetary policies. After cutting policy interest rates aggressively, central banks resorted to new measures – forward guidance, quantitative easing, targeted longer-term refinancing operations and negative interest rates – to reverse financial fragmentation, boost economic growth, avoid a deflationary spiral and maintain price stability.

In those countries that were more indirectly affected by the GFC, a few central banks have also faced discussions on their institutional roles. These discussions have been

¹⁷ Many central banks also acted as lenders of last resort for parts of the financial sector.

¹⁸ The central banks of some emerging market economies have incorporated financial instability concerns in monetary policy decisions even before the GFC (Bayoumi et al. (2014)).

triggered in the context of broader governmental efforts to boost growth and employment as well as to ease financial conditions, and question whether central banks should support these efforts more directly. A reform of Argentina's central bank charter in March 2012, for example, mandated the bank to promote "economic development with social equity" in parallel with its objectives of monetary stability, financial stability and employment. Moreover, all these objectives must be pursued "within the framework of the policies established by the national government" (Charter of the Central Bank of the Argentine Republic, Law 24.144, Art. 3). More recently, in South Africa, there has been a debate about expanding the central bank's mandate to include economic transformation and development. Another example is Sweden, where a legislative proposal for a new Sveriges Riksbank Act would change the central bank's governance and restrict its independence compared with both the current act and EU law. In particular, the proposal would limit the bank's set of instruments and their use, and impose an upper limit on the size of equity in the balance sheet (ECB (2020), IMF (2020), Sveriges Riksbank (2020)). Section 4.4 provides additional recent cases.

3.2 Resulting challenges to central bank independence

Rapid and unprecedented expansions in central banks' roles and instruments – like the ones observed during the GFC – can blur the borders and responsibilities of monetary policy and can contribute to opening a debate on the precise scope and desirability of central bank independence. After the GFC, critiques touched on different angles, which can broadly be summarised as concerns about insufficient accountability, conflicting policy targets, risks from policy coordination and distributional concerns. All of these, and the fact that central banks are not fulfilling some overblown expectations that have been placed on them, open the door to interferences and attacks from governments and other actors.

Insufficient accountability

The need for wider accountability is one of the key consequences of expanding central banks' mandates and objectives. Delivering on their accountability requirements becomes more complex. This is particularly evident for a financial stability objective, which is more difficult to define than price stability (e.g. 2% inflation target) and where the micro- or macroprudential tools used are less understood than the plain vanilla interest rates (or exchange rates) used in monetary policy (Balls et al. (2018), BIS (2011)). This could result in insufficient accountability in case the micro- and/or macroprudential responsibilities are placed in an independent central bank (Bayoumi et al. (2014), BIS (2011)).

Conflicting policy targets (conflicts of interest)

Placing a financial stability objective within a central bank raises concerns that this new mandate may dilute the original focus on price stability. A weakened banking system, for example, could prompt a central bank to keep interest rates low, resulting in a higher-than-optimal inflation (Balls et al. (2018), BIS (2011), Eijffinger and de Haan (1996), Mersch (2017)). In fact, Bayoumi et al. (2014) showed that inflation is somewhat higher in countries where central banks have microprudential responsibilities in addition to price stability objectives.

Impact from policy coordination

Depending on countries' institutional settings, micro- and/or macroprudential responsibilities are sometimes shared with other government agencies, requiring an increased interaction between the central bank and politicians, which could blur the boundaries of the central bank's independence (Balls et al. (2018)). But even if these responsibilities were placed entirely within a central bank, a severe financial crisis could require the fiscal authority to step in to save certain financial entities, which would require effective coordination between the two authorities (Blinder (2016)).¹⁹ Such coordination might also be perceived as distracting the central bank from focusing on its core mandate.

The effectiveness of monetary policy at the effective lower bound and low levels of inflation has also been put into question, raising calls for more coordination between monetary and fiscal authorities. Since the GFC, the short-term relationship between inflation and unemployment – the Phillips curve – appears to have weakened, particularly in some advanced economies, which raises the question whether monetary policy should put more emphasis on output stabilisation rather than on price stability (Bayoumi et al. (2014)).

There are also questions on whether independent monetary policy is sufficiently powerful at the effective lower bound to maintain price stability and return the economy to full employment (Blinder (2016), Rogoff (2019)). Under this scenario, some call for a formal policy coordination mechanism between the government and the central bank (Balls et al. (2018)), which could use “helicopter drops” to finance fiscal policy in extreme circumstances (Bernanke (2016)) or place the central bank under government oversight (Feld (2016)). In most of these extreme scenarios, however, it is stressed that the ultimate decision to activate these policies should remain within the central bank so as to preserve its independence.

Transgressing the mandate

Regarding unconventional monetary policies, critics say that they made central banks cross the line into fiscal policies. In particular, they argue that the large-scale lending to

¹⁹ Noting that large lender-of-last-resort loans may become highly political, Blinder (2016) also questions the role of central banks as lenders of last resort.

banks and non-banks against low-quality collateral and the purchases of non-traditional assets (e.g. mortgage-backed securities or corporate assets) under the quantitative easing programmes can pose credit risk to the states' consolidated balance sheets and should therefore be conducted by the fiscal authorities (Balls et al. (2018), Bayoumi et al. (2014), Blinder et al. (2017), IMF (2010), Issing (2018), Rogoff (2019)). In the case of large purchases of government bonds, these policies may require effective coordination with governments' debt management agencies to guarantee (and maximise) their effectiveness, as was done by the Bank of England during the GFC (Balls et al. (2018), Issing (2018)). Crucially, the perception that these policies may offer an open promise of buying government bonds could raise the risk of fiscal dominance, particularly in those advanced economies with high public debt levels (Bayoumi et al. (2014), de Haan and Eijffinger (2016)).

Distributional concerns

Traditionally, distributional policies have been associated with fiscal and other policies that have more democratic legitimacy (Tucker (2018)). In this context, it has been argued that some of the central banks' new policies may have undesirable distributional consequences. Macroprudential policies, for example, have very targeted effects, with clear winners and losers (Bayoumi et al. (2014)), and they may overlap with other policies that seem distant from monetary and financial policies, such as housing policies (Balls et al. (2018)). Critics of unconventional monetary policies argue that these policies influence the distribution of income and wealth, subsidising the financial sector or specific corporate sectors at the expense of society as a whole (Rogoff (2019)).

Super powerful central banks

Central banks' bold actions in response to the GFC may have created a perilous illusion among markets and the public that central banks are fully equipped and solely responsible for managing the economy, restoring full employment, ensuring strong growth, preserving price stability and safeguarding financial stability (BIS (2016)). The more central banks fail to meet all these expectations, the more their independence will be called into question and the more difficult it will be to defend the goal of price stability (Issing (2018)). Moreover, faced with public attack and knowing that they will be blamed if the economy falters, central banks may want to "buy extra insurance" by easing policies further at the cost of future financial instability (Rajan (2019)).

Interferences and attacks on central banks

Any erosion of public support for central banks, given that they are not meeting all of these overblown expectations and because of the concerns outlined above, can open the door to interferences and, in some cases, attacks (see Sections 4.4 and 6).

In the 2012 Japanese election, for example, the Bank of Japan was presented as a key piece within a broader government strategy. In Europe, support has risen for populist parties that generally do not favour central bank independence and advocate a return to national currencies. Political pressures on the Reserve Bank of India allegedly led to the resignation of its Governor in 2018 and of a Deputy Governor in 2019. In Turkey, while calling for lower interest rates to fight inflation, the country's President ousted the central bank's Governor and, subsequently, several key senior members of staff were removed from office. In the United States, a variety of bills have been introduced in Congress to change the structure, powers and/or operations of the Federal Reserve (Fed), which could undermine its independence. Moreover, the US President has publically questioned the abilities of the Fed's Chair and continuously called for further monetary easing at times when inflation and the labour market remained healthy. During the recent trade disputes with China, the US President also raised the possibility of using foreign exchange interventions, which is a policy the Fed has traditionally participated in alongside the US Treasury.

More recently, central banks have been called to join the fight against climate change. Many central banks have responded positively and started discussing the financial stability and monetary policy implications of climate change. Many of them are participating, for example, in the Network of Central Banks and Supervisors for Greening the Financial System, as there is an increasing recognition that climate-related risks fall within the purview of the supervisory and financial stability mandates of central banks and supervisors. The same applies to monetary policy. Cœuré (2018) notes, for instance, that either acuter and more persistent climate-related shocks or the transition toward a low-carbon economy (to contain climate change) would have implications for the conduct of monetary policy. Similarly, Schnabel (2020a) observes that climate change poses severe risks to price stability and, as a result, central banks have to strengthen, within their traditional mandates, their efforts to support a faster transition toward a more sustainable economy. Against this backdrop, central banks will have to analyse and review their role in climate change-related issues, while being mindful of their effects on market functioning (Schnabel (2020a)) and without compromising the primary objective of monetary policy (Brunnermeier and Landau (2020)), as implementing certain financial and monetary policy measures may pose risks. Using prudential ratios to foster credit to greener sectors, for example, could expose central banks to lobbying and political pressures. Another question is whether central banks should actively use their monetary instruments to fight climate change, for example through asset purchases of green assets or favourable haircuts for green collateral. Schnabel (2020a) notes that there are two opposing views in this debate. One view is that central banks would overstep their mandate if they were to discriminate among investors. The other view is that central banks have to respond to market failures and incorporate the far-reaching risks that climate change poses to price stability when designing their policy instruments.

During the current global COVID-19 pandemic, central banks in most countries have reintroduced and even expanded the tools that they used during the GFC to support the economy, ease financing constraints and ensure price stability in the medium term. Similarly to the time of the GFC, instrument independence has given central banks the

flexibility to quickly develop new tools to address some of the challenges brought about by this new crisis. Nevertheless, pressures on central banks are increasing (BIS (2020)), for instance in the form of explicit calls from some government actors, financial market participants and academics to monetise deficits or use helicopter drops to finance the costs incurred by the pandemic (see, for example, Financial Times (2020), Galí (2020), Turner (2020), Wolf (2020), Yashiv (2020)).

4 Impact on de jure and de facto central bank independence

In view of the reopened debate on, and risks to, central bank independence, it becomes relevant to measure whether the levels of independence have remained stable, improved or weakened in recent years. Amendments to central bank laws and regulations to accommodate their new roles and mandates could have improved or weakened their legal (de jure) independence. Moreover, changes in central banks' practices and recent government pressures on some central banks could have diminished their credibility or weakened their actual (de facto) independence.

4.1 Indices of central bank independence

To measure central bank independence, different indices were developed in the literature in the late 1980s and the 1990s, when a notable increase in central bank independence was seen around the world (see for example, Bade and Parkin (1988), Alesina and Summers (1993), Cukierman et al. (1992), Grilli et al. (1991)). These indicators assessed some of the features of the de jure central bank independence and were based on information extracted from the central banks' laws (see Table 1).

Bade and Parkin (1988), for example, found no relationship between central banks' financial independence and inflation, but they did find that the average rate of inflation was significantly lower in countries with more policy-independent central banks (i.e. central banks with stronger institutional independence). Similarly, Grilli et al. (1991) found a significant negative relationship between inflation and economic independence in periods of high inflation, while political independence was significant only in the 1970s (see Table 1).²⁰ In a similar vein, Debelle and Fischer (1994) found better inflation performance in central banks where a mandate for monetary stability was combined with instrument independence.

Despite the promising results, these studies suffered from some shortcomings. The samples of countries were usually limited to a few OECD countries and the different indices, although aimed at measuring the same attribute, sometimes showed a remarkably low correlation (Eijffinger and de Haan (1996)). In addition, in most studies, causality (i.e. that more central bank independence results in lower inflation) could not be statistically established. It could be argued, for example, that it is the political will to implement sound economic policies that causes lower inflation, while at the same time granting the central bank more legal independence.

Posen (1995) found that the financial sector's opposition to inflation within a country is another factor that explains the negative relationship between central bank

²⁰ For the 2000s, Balls et al. (2018) also point out that, in advanced economies, inflation is negatively correlated with operational independence and not with political independence. The relationship between operational independence and inflation in developing and emerging economies is inconclusive.

independence and inflation. Posen (1998) also found that disinflations cost more and take longer in countries with relatively higher central bank independence. Campillo and Miron (1997) found that central bank independence and the exchange rate regime do not determine inflation rates while other characteristics, such as openness and optimal tax considerations, are statistically important in determining inflation.

Table 1
Selected indices of central bank independence

(main components of the indices)

Grilli, Masciandaro and Tabellini (1991)	Cukierman, Webb and Neyapti (1992)
Political independence	Legal independence
1. Governor not appointed by government	1. Chief Executive Officer (CEO):
2. Governor's term > 5 years	• term of office;
3. All Board members not appointed by government	• appointed by;
4. Board term > 5 years	• dismissed by;
5. No mandatory government representative on Board	• possibility of holding other offices in government.
6. No government approval for monetary policy formulation	2. Policy formulation
7. Statutory requirement to pursue monetary stability	• Who formulates monetary policy?
8. Provisions to strengthen the central bank in the event of conflict with the government	• Who has the final word in the resolution of conflict?
Economic independence	• Bank's role in the government's budgetary process?
1. Direct credit facility to government is:	3. The objectives of the central bank
• not automatic;	• Price stability is sole objective or one among others
• at market interest rates;	4. Limitations on lending to the government
• temporary;	• Types of lending (advances, securitised lending)
• for a limited amount.	• Terms of lending (maturity, interest, amounts)
2. Central bank does not participate in primary market for government debt	• Who controls the lending terms?
3. Discount rate is set by central bank	• Potential government borrowers
4. Banking supervision entrusted to central bank	• Limits on central bank lending to government
5. Banking supervision entrusted to central bank alone	• Bank prohibited from lending in primary markets

Sources: Grilli, Masciandaro and Tabellini (1991) and Cukierman, Webb and Neyapti (1992).

Notes: The table lists only the main components of the indices. For each variable, at least two possible answers are discerned, each of which receives a numerical value. In the case of Cukierman et al., the authors calculated a weighted average index.

Importantly, the level of de jure independence may not always reflect the true interactions between the government and the monetary authorities. Even central banks with a high level of legal independence can be influenced through the governments' appointments of Board members and threats to its independence. As a result, other indicators aimed at measuring actual (de facto) independence were developed and based either on questionnaires or the turnover rate of central bank governors (Cukierman et al. (1992)). These alternative indices have shown a negative relationship between inflation and actual central bank independence in emerging market and developing countries, but they also suffer from certain weaknesses.²¹

²¹ As with the studies using legal independence, these studies did not prove causality. It could be argued, for example, that a higher inflation could cause the dismissal of the central bank governor.

4.2 Recent updates to indices of central bank independence

The most recent updates of central bank independence indices do not suggest a deterioration in the level of independence after the GFC (see Table 2 for a subset of central banks, which is based on the central banks of G20 economies). New studies, usually based on updates of the original indices – particularly of Cukierman et al. (1992) and Grilli et al. (1991) – have measured the latest changes to central bank independence in many countries.

In a study of over 100 central banks up to 2010, Dincer and Eichengreen (2014) find a steady movement toward greater independence as well as a significant negative relationship with inflation variability. Similarly, for a sample of 31 OECD and 49 non-OECD economies, and using an index of legal central bank independence augmented by some aspects of de facto independence, Pistori et al. (2017) find no evidence that central bank independence decreased between the GFC and 2010 (the end of the analysed period).

Bodea and Hicks (2015) updated the widely used Cukierman, Webb and Neyapti index of central bank independence for 88 countries (see the index's main components in Table 1), before updating it further to cover 144 countries for the years 1972 to 2015. Their [dataset](#) codes independence annually, covering legislation changes. A central bank has more legal independence when its Governor's term in office is longer, the appointment and dismissal procedures are insulated from the government, the bank's mandate focuses solely on price stability, the monetary policy formulation is in the central bank's hands and the central bank's lending to the government is more limited. Using Bodea and Hicks's original dataset, de Haan and Eijffinger (2016) find that central bank independence increased between 2008 and 2010 in all the different country groupings. They also find that the average turnover rate of governors has not changed in all the different country categories since the GFC. As Bodea and Hicks's calculations are widely quoted in the recent literature, are publicly available and cover the time period up to the year 2015, this paper uses their updated dataset for its tables and chart analyses.

More recently, Garriga (2016) introduced a publicly available [dataset](#) of de jure independence covering 182 countries between 1970 and 2012. The author also updated the Cukierman, Webb and Neyapti index of central bank independence and, although her results are closely correlated with Bodea and Hicks's calculations (see Table 2 for a subset of central banks), her dataset differs from previous studies in three aspects. First, its coverage is larger than the updated dataset of Bodea and Hicks. Second, it includes variables that account for the existence of central bank reforms and their direction. Third, it identifies numerous reforms omitted in previous datasets, including reforms that restrict independence. As a result, her dataset registers both increases and decreases in central bank independence, as opposed to some of the previous literature. The author finds that the world's average central bank independence increased modestly after the GFC. Regarding its main components, both personnel and policy independence remained mostly stable, while financial independence exhibited a modest increase. A significant negative relationship

between inflation and central bank independence is found, while no statistical significance is found between GDP growth and central bank independence.

Table 2
Measures of central bank independence in G20 economies

(index value from 0 to 1)

Central bank of	Bodea and Hicks (2015)		Garriga (2016)	
	2005	2014	2005	2012
Argentina	0.78	0.73	0.82	0.77
Australia	0.31	0.31	0.35	0.35
Brazil	0.25	0.25	0.17	0.17
Canada	0.47	0.47	0.48	0.48
China	0.69	0.69	0.55	0.55
ECB	0.86	0.86*	0.80	0.80
India	0.25	0.25	0.26	0.26
Indonesia	0.95	0.95	0.83	0.83
Japan	0.44	0.44	0.55	0.55
Korea	0.40	0.40	0.44	0.44
Mexico	0.64	0.64	0.67	0.67
Russia	0.60	0.60	0.64	0.64
Saudi Arabia	n.a.	n.a.	0.42	0.42
South Africa	0.41	0.41	0.43	0.45
Turkey	0.80	0.80	0.86	0.86
United Kingdom	0.58	0.58	0.59	0.59
United States	0.51	0.51	0.40	0.40

Sources: Authors' own elaboration using the indices calculated by Bodea and Hicks (2015) and by Garriga (2016).
Notes: The values correspond to the unweighted indices of central bank independence. Values closer to 1 indicate higher levels of independence. France, Germany and Italy are excluded from the sample given that the ECB is included.
* Data are for 2010.

A question that is not fully explored in the literature is whether the negative relationship between inflation and central bank independence changed in the 2010s compared with the 2000s. For illustrative purposes, using the publicly available dataset of Bodea and Hicks, plots of central bank independence against CPI inflation in a subset of advanced economies and a subset of emerging market economies are presented. The sample is limited to the G20 members (Argentina, Australia, Brazil, Canada, China, India, Indonesia, Japan, Korea, Mexico, Russia, South Africa, Turkey, the United Kingdom and the United States)²² and the euro area given the size of their economies.²³ The results are preliminary and would benefit from a more formal analysis of this issue using a larger sample, which, however, is beyond the scope of this paper.

Looking at the data for G20 advanced economies, it appears that the negative relationship between inflation and central bank independence weakened in the 2010s compared with the 2000s (see Charts 3 and 4). While the level of central bank

²² Germany, France and Italy are excluded given that they are part of the euro area. Saudi Arabia is not part of the sample either, as Bodea and Hicks do not report data for it.

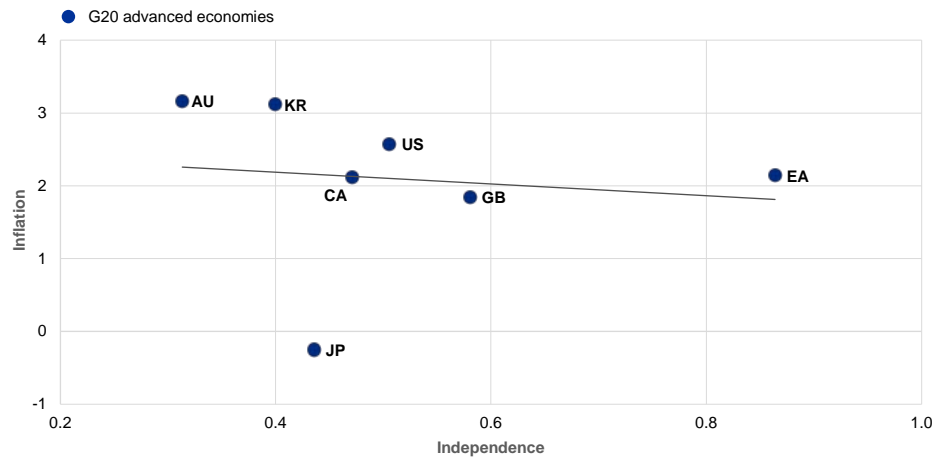
²³ G20 members account for 85% of the world economy, 75% of global trade and two thirds of the world's population.

independence remained unchanged, inflation was lower in most G20 advanced economies in the 2010s. For both decades, the relationship between central bank independence and inflation becomes more negative if Japan (which experienced deflation in the 2000s and very low inflation in the 2010s) is excluded from the sample.

Chart 3

Inflation and central bank independence in G20 advanced economies, 2000s

(average of the annual inflation in the 2000s, percentages; lowest central bank independence index in the 2000s)

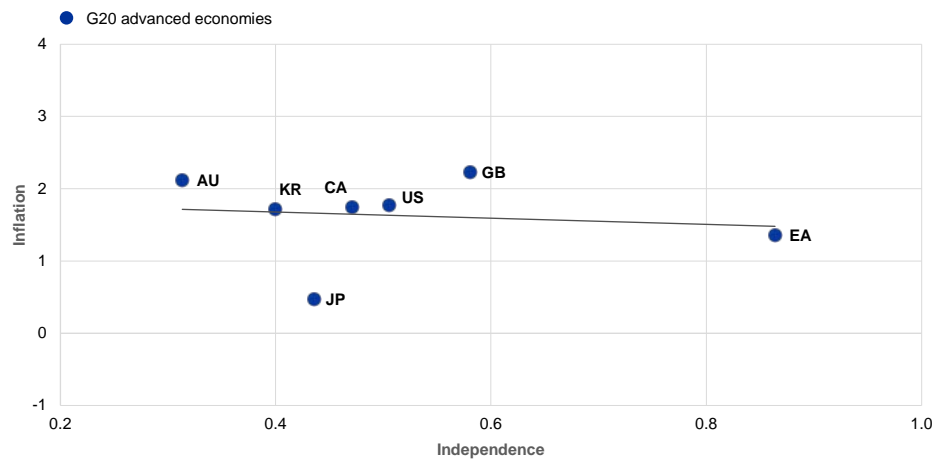


Sources: Authors' calculations using Haver Analytics, Inc. for inflation data, and Bodea and Hicks's (2015) unweighted index of central bank independence.
 Notes: Inflation is the arithmetic average of the annual CPI inflation rate in each economy over the decade. For the independence index, the lowest score in the decade is used. Values closer to 1 indicate higher levels of independence. Economies plotted comprise Australia (AU), Canada (CA), Japan (JP), Korea (KR), the United Kingdom (GB), the United States (US) and the euro area (EA), which is composed of 19 countries.

Chart 4

Inflation and central bank independence in G20 advanced economies, 2010s

(average of the annual inflation in the 2010s, percentages; lowest central bank independence index in the 2010s)



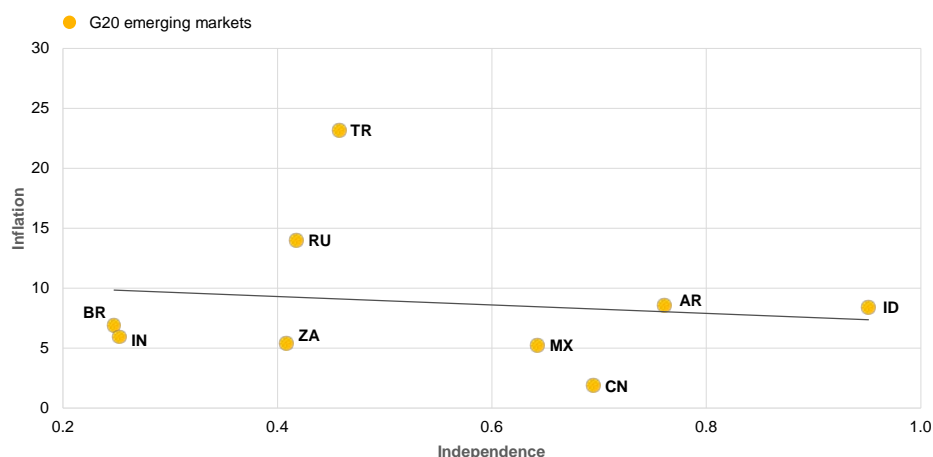
Sources: Authors' calculations using Haver Analytics, Inc. for inflation data, and Bodea and Hicks's (2015) unweighted index of central bank independence.
 Notes: Inflation is the arithmetic average of the annual CPI inflation rate in each economy over the decade. For the independence index, the lowest score in the decade is used. For the 2010s, Bodea and Hicks calculated the index for the years 2010-2014, except for the euro area, for which the index is only available for 2010. Values closer to 1 indicate higher levels of independence. Economies plotted comprise Australia (AU), Canada (CA), Japan (JP), Korea (KR), the United Kingdom (GB), the United States (US) and the euro area (EA), which is composed of 19 countries.

Meanwhile, for G20 emerging market economies, the negative relationship between inflation and central bank independence that was seen in the 2000s appears to have turned positive in the 2010s (see Charts 5 and 6). While independence improved in the central banks of Russia and Turkey in the 2010s, it decreased in the central bank of Argentina. Bodea and Hicks's calculations, however, go up to the year 2014 and do not include important changes in Turkey's central bank law that subsequently weakened its independence (see Section 4.4 and the Appendix).

Chart 5

Inflation and central bank independence in G20 emerging market economies, 2000s

(average of the annual inflation in the 2000s, percentages; lowest central bank independence index in the 2000s)



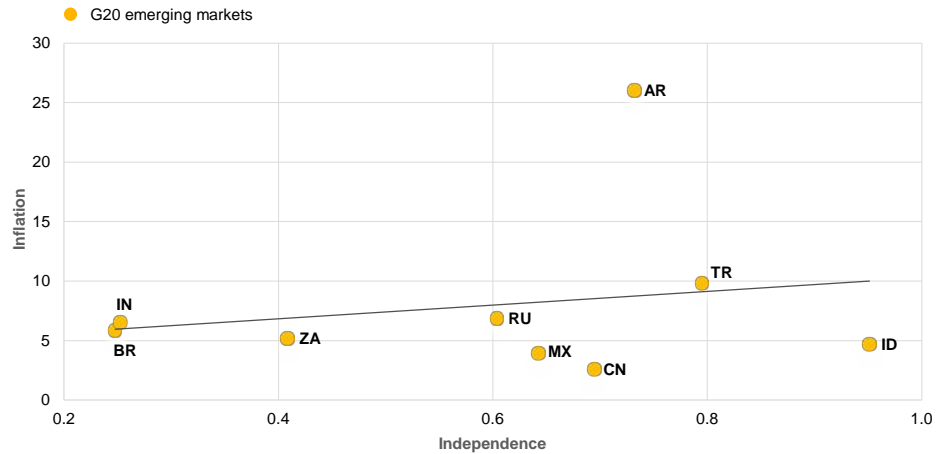
Sources: Authors' calculations using Haver Analytics, Inc. and IMF World Economic Outlook for inflation data, and Bodea and Hicks's (2015) unweighted index of central bank independence.

Notes: Inflation is the arithmetic average of the annual CPI inflation rate in each economy over the decade. In India, the CPI is available since 2001. For the independence index, the lowest score in the decade is used. Values closer to 1 indicate higher levels of independence. Economies plotted comprise Argentina (AR), Brazil (BR), China (CN), India (IN), Indonesia (ID), Mexico (MX), Russia (RU), South Africa (ZA) and Turkey (TR). Bodea and Hicks (2015) do not report data for Saudi Arabia.

Chart 6

Inflation and central bank independence in G20 emerging market economies, 2010s

(average of the annual inflation in the 2010s, percentages; lowest central bank independence index in the 2010s)



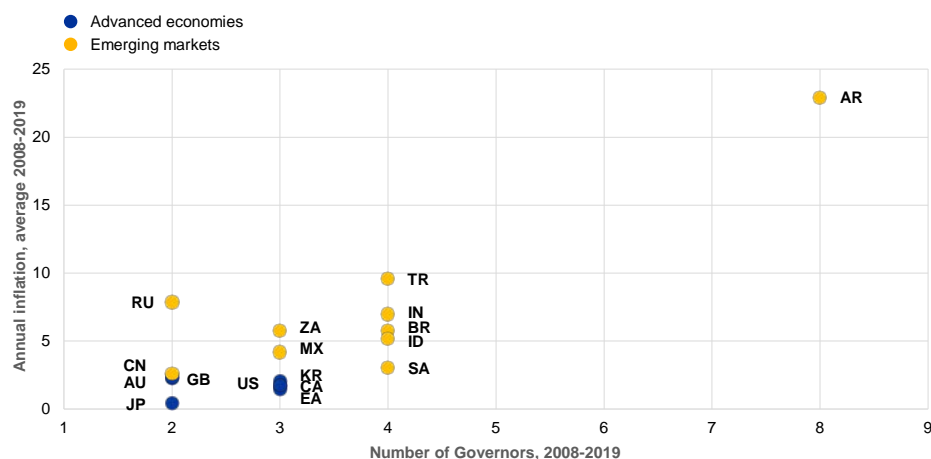
Sources: Authors' calculations using Haver Analytics, Inc. and IMF World Economic Outlook for inflation data, and Bodea and Hicks's (2015) unweighted index of central bank independence.
Notes: Inflation is the arithmetic average of the annual CPI inflation rate in each economy over the decade. For the independence index, the lowest score in the decade is used. For the 2010s, Bodea and Hicks (2015) calculated the index for the years 2010-14, except for Russia, for which the index is available up to 2015. Values closer to 1 indicate higher levels of independence. Economies shown comprise Argentina (AR), Brazil (BR), China (CN), India (IN), Indonesia (ID), Mexico (MX), Russia (RU), South Africa (ZA) and Turkey (TR). Bodea and Hicks (2015) do not report data for Saudi Arabia.

Importantly, the high level of de jure independence seen in some central banks of G20 emerging markets may mask lower levels of actual independence. Looking at inflation and the number of Governors during the years 2008-19 in G20 central banks (see Chart 7), one can observe that emerging markets had both higher inflation rates and a higher number of Governors in that period. In most of these countries, at least one Governor did not finish their term in office. This would suggest that more stable terms in office, with protection from arbitrary dismissals and isolated from the political cycle, could contribute to achieving lower levels of inflation. The example of Argentina is notorious. In Argentina, which has persistently shown double-digit inflation, it is not unusual for the central bank President to offer to resign with a change of government or the Minister of Economy (see also Cukierman et al. (1992)). At the same time, the country ranks high in the indices of de jure central bank independence (see Table 2).

Chart 7

Inflation and number of central bank Governors in G20 economies

(average of the annual inflation in the indicated period, percentages; number of Governors in the indicated period)



Sources: Authors' calculations using Haver Analytics, Inc. and IMF World Economic Outlook for CPI inflation data and central banks' websites for the number of Governors.
Notes: Advanced economies comprise Australia (AU), Canada (CA), Japan (JP), Korea (KR), the United Kingdom (GB), the United States (US) and the euro area (EA), which is composed of 19 countries. Emerging markets comprise Argentina (AR), Brazil (BR), China (CN), India (IN), Indonesia (ID), Mexico (MX), Russia (RU), Saudi Arabia (SA), South Africa (ZA) and Turkey (TR).

4.3 Other measures of central bank independence

Traditional indices of central bank independence do not do well in tracking the changes in the actual (de facto) and perceived independence of central banks, nor do they assess the outlook for central bank independence. As a result, countries with a high de jure central bank independence may show high levels of inflation if the credibility of their central banks has been undermined.

The criticism received for their crisis-fighting efforts since the GFC, the recent removal of Governors in some jurisdictions, or the government pressures to lower interest rates where inflation and inflation expectations seem at adequate (or even high) levels can undermine the independence and credibility of central banks, which constitutes a real risk. As noted by Volcker et al. (2019), even the perception that monetary policy decisions are politically motivated or respond to political pressures may lead to financial instability and bad economic outcomes.

Against this backdrop, other types of measures are needed to capture developments in the actual (de facto) and perceived independence of central banks and in the outlook for central bank independence. Binder (2018), for example, has constructed a dataset on political pressure faced by 118 central banks from 2010 to 2018. Strikingly, the author found that about 10% of central banks reportedly faced political pressure in an average year (even those with high de jure independence), usually for looser monetary policies. Importantly, stronger pressures on a central bank – rather than lower measures of de jure independence – are empirically associated with higher inflation and inflation persistence, which in turn suggests lower monetary policy credibility and higher disinflation costs. Pressures were more likely to come from left-wing or nationalist governments and in countries with few checks and balances or

weak electoral competition. These results corroborate the notion that perceived or actual pressure on central banks can have negative inflation and output outcomes.

In the same vein, a study by Bianchi et al. (2019) analysed the impact of the repeated tweets by the US President calling for lower interest rates since mid-2018 on the Federal Reserve's monetary policy. The authors found evidence that market participants believed that the central bank would succumb to the political pressure, posing a threat to the Fed's perceived independence.

Surveys have also been used to assess the current level of actual and perceived independence and the outlook for central bank independence. In line with the above-mentioned results from the updated traditional indices (see Section 4.2), Blinder et al. (2017) found that more than 90% of the central bank Governors and more than 80% of the academics that they surveyed believed that central bank independence either did not change or was reduced only "a little" during the GFC.

More interestingly, however, the authors found important contrasts between Governors' and academics' views. While 72% of the academics considered that central banks received either "a lot" or "a moderate amount" of criticism for crossing the line into politics, only 31% of the central bank Governors agreed with this view. In addition, about 37% of the academics believed that central bank independence was threatened either "a lot" or "a moderate amount" at the time of the survey, whereas only 9% of the central bankers shared that view. On the contrary, more than 60% of the central bankers, but only 13% of the academics, saw no threat at all. These results sharply contrast with a survey by Central Banking (2019), where 61% of respondents – most of whom were former central bank Governors or Board members – considered that central banks would enjoy less independence in the next 10 years. The remainder of the respondents saw no significant changes in central bank independence going forward, while no one expected an increase.

4.4 Qualitative assessment of current levels of central bank independence

As we are interested in knowing whether either the *de jure* (legal) or the *de facto* (actual) central bank independence has experienced changes in recent years, we conducted a qualitative analysis – beyond traditional indices of central bank independence – to determine whether either of these two measures has been substantially affected in recent years (see the Appendix). For this, we collected factual information – from news reports and official sources – for the years 2018 and 2019 on 13 selected central banks to assess qualitatively whether there have been improvements, no changes, or deteriorations in their independence levels (see Table 3), using as a basis for comparison the definitions of the features of independence discussed in Section 2.3.

As the evolution in the independence of key central banks in the world could influence changes in the independence of smaller central banks, our sample is limited to the central banks of some of the biggest economies in the world. We start off with the G20

members and, from them, at least one central bank from each region is selected. Since the recent literature focused mostly on the challenges to central bank independence in advanced economies, our sample includes more central banks from emerging markets, as we are more interested in assessing the independence of these central banks. Although our sample is small in terms of the number of central banks, the economies where these 13 central banks operate (Argentina, Brazil, China, India, Indonesia, Japan, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United States and the euro area) account for 75% of the world's GDP, measured in current (US) dollars.

Cross comparison of de jure independence

The degree of de jure central bank independence varies across the analysed central banks (see Table 4 for a brief overview and the Appendix for a deeper analysis). While the independence of some of them is enshrined at the constitutional level (e.g. Bank of Mexico (Banxico), Bank of Russia, ECB and South African Reserve Bank (SARB)), in most of them it is rooted in the law.

Important differences are seen, particularly, in the levels of personal independence, where, in a few instances (i.e. Central Bank of the Republic of Turkey (CBRT), Reserve Bank of India (RBI), Saudi Arabian Monetary Authority (SAMA) and SARB), the government has the sole power to appoint and dismiss the central bank Governor.

Regarding institutional independence, most monetary policy decision-making bodies are composed fully of central bankers, while a few may also allow the presence of non-voting government members (i.e. Bank of Japan, Banxico, CBRT and ECB). In contrast, two central banks have voting government members in their monetary policy decision-making bodies (i.e. RBI and The People's Bank of China (PBoC)), which could diminish their degree of independence.

Financial independence also varies. While, at one extreme, SAMA has no capital, most other central banks have their own capital and some, like the ECB, are fully financially independent.

A similar situation is observed regarding operational independence. For example, while the State Council (i.e. the Central People's Government) approves many of the PBoC's policy decisions, central banks like the ECB or the Federal Reserve System (Fed) have the final say regarding their policy decisions.

Developments in de jure and de facto independence in 2018 and 2019

In 2018 and 2019, central banks' de jure independence remained largely stable in the analysed central banks. In one country only, Turkey, there were legal changes that weakened the bank's financial independence as well as the personal independence of its Board members and the members of its monetary policy committee (see Table 3).

In all the other countries, our analysis did not identify any significant legal changes that weakened the de jure independence of the central banks. In fact, in two cases, Argentina and Brazil, the governments had submitted legal proposals to strengthen the de jure independence of their central banks.²⁴ Overall, these results are in line with the results from the updates to the traditional indices analysed in Section 4.2.

Since 2018, however, de facto independence may have deteriorated in almost half of our sample, while remaining broadly stable in the rest of the jurisdictions. This deterioration is in contrast with the results obtained by the standard independence indices and, in most cases, reflects broader government calls for monetary policy or the central bank to support financial and/or economic development and growth policies.

- In Argentina, interest rate cuts in early 2018, while inflation was running close to 30%, prompted markets to question the central bank's de facto institutional independence and led to a sharp currency depreciation. Subsequently, the central bank abandoned its inflation targeting regime and adopted monetary targeting. With the government taking office in late 2019, a new central bank President was appointed and the monetary policy committee was scrapped. Even though the Charter of the Central Bank of the Argentine Republic was not subject to major amendments during this period, the central bank had three Presidents during the years 2018-19, which reflects a low level of actual personal independence.
- In India, the government invoked, for the first time ever, articles of the Central Bank Act that allow it to influence the central bank's decisions. In particular, it asked for more favourable (i) liquidity conditions for non-banks, (ii) banks' capital requirements, (iii) lending conditions to small and medium enterprises and (iv) central bank dividend policies.²⁵ The impasse allegedly caused the then-Governor and one of the Deputy Governors to resign. Even though the RBI Act was not altered, these incidents raised doubts about the bank's actual institutional, financial and personal independence.
- In Mexico, the government that took office in 2018 publically asked the central bank to also think about growth and appointed two Deputy Governors reportedly supporting those views, which raised doubts about bank's de facto institutional and functional independence. Moreover, the government slashed the central bank salaries together with the salaries of other institutions, undermining the bank's actual financial independence and its capacity to hire the most talented staff.
- In South Africa, there has been a debate on whether the central bank should be nationalised. The government and the opposition have discussed whether or not the reform should be an opportunity to also change the central bank's mandate to include economic transformation and development – objectives that are typically pursued through fiscal and structural reforms. Although these debates have not

²⁴ At the time of writing, these proposals had not passed their respective parliaments.

²⁵ See, for example, Reuters article entitled "[India central bank board agrees to support small firms, ease capital norms](#)" from 18 November 2018.

resulted in a modification of the SARB Act, the Governor has made public statements stressing the importance of defending the central bank's independence, as these debates open the door to government interferences and could be perceived as endangering the central bank's actual institutional and functional independence.

- In Turkey, after the government weakened the de jure personal independence of its central bank, the country's President fired its Governor and several top officials were subsequently removed from their positions. The President has also publically called for interest rate cuts to lower inflation and stated that he wanted to take more responsibility for monetary policy, all of which puts into question the central bank's actual degree of institutional and functional independence. Furthermore, in 2019, a new law forced the central bank to reduce its legal (contingent) reserves and transfer to the Treasury the amounts accumulated from previous years, which would help contain the fiscal deficit, while de facto reducing the central bank's financial independence.
- In the United States, the President has repeatedly threatened to remove the Fed's Chair and voiced his intention to appoint close political allies and outspoken critics of the Fed to two seats of the central bank's Board. In addition, the President has publically and repeatedly called for lower interest rates and faster rate cuts in order to boost the economy and as a policy response to shocks arising from the country's trade disputes with China. These government interferences can put into question the Fed's degree of actual institutional and functional independence.
- In the rest of the analysed jurisdictions (Brazil, China, euro area, Indonesia, Japan, Russia and Saudi Arabia), our research could not find any substantive elements that would indicate a deterioration in the actual (de facto) independence of their central banks. Therefore, we conclude that, in these central banks, actual (de facto) independence remained relatively stable during the years 2018-19.

Based on our analysis, the feature of central bank independence most affected in almost half of our sample has been de facto institutional independence, followed by functional independence, although the other two features were also curtailed in a few central banks. Government attacks or interferences largely focused on pressuring monetary policy to look into growth objectives.

Table 3**Central banks – timeline of key events, 2018-19**

Date	Event
19 February 2018	(euro area) The Latvian Anti-Corruption Office prohibited Latvijas Banka's Governor from performing his duties and limited his ability to travel.
6 March 2018	(South Africa) After it decided in December 2017 that the central bank would be nationalised, the government withdrew a motion to debate the nationalisation in Parliament pending further consultations.
6 April 2018	(euro area) The central bank referred the case regarding the suspension of the Latvian Governor to court.
15 May 2018	(Turkey) In an interview with Bloomberg, the country's President stated that he wanted to take more responsibility for monetary policy.
14 June 2018	(Argentina) The central bank's President resigned ahead of term due to a currency crisis.
Since July 2018	(United States) Numerous tweets by the President calling for lower rates and faster rate cuts.
2 July 2018	(Turkey) A statutory decree established that the country's President could directly appoint the central bank's Governor and Deputies as well as the Monetary Policy Committee's members.
7 August 2018	(India) The government appointed two Directors to the central bank's Central Board, both of whom had close political affiliation to the government and were members of nationalist organisations.
25 September 2018	(Argentina) The central bank's President resigned after three months in office citing personal reasons.
September – October 2018	(India) The government sent several letters to the central bank's Governor seeking more favourable (i) liquidity conditions for non-banks, (ii) banks' capital requirements, (iii) lending conditions to small and medium enterprises and (iv) central bank dividend policies.
26 October 2018	(India) A Deputy Governor of the central bank delivered a speech defending central bank independence and warning of the perils of undermining it.
1 December 2018	(Mexico) The country's new President took office and cut public salaries, including those of the central bank.
10 December 2018	(India) The central bank's Governor resigned citing personal reasons.
12 December 2018	(India) The government appointed a retired civil servant and former government official as Governor.
Since January 2019	(South Africa) The country's President and top government officials publically expressed opposing views on changing the central bank's mandate to include economic transformation/development and job creation.
9 January 2019	(Mexico) The central bank and its staff turned to the Supreme Court over the salary caps.
23 January 2019	(Mexico) Congress approved the government's nomination of two Deputy Governors reported to support growth as a monetary policy objective.
6 March 2019	(South Africa) In a speech, the central bank's Governor stressed the importance of maintaining central bank independence.
22 March 2019	(United States) The President nominated a former campaign adviser and co-author of a book on "Trumponomics" for a seat at the central bank's Board. The nomination drew criticism due to the potential political affiliations and was ultimately withdrawn.
29 March 2019	(Argentina) The then-government sent to Congress a bill to enhance the central bank's independence, which was not passed.
4 April 2019	(United States) The President nominated a vocal political ally and former contender for the Republican presidential nomination for a seat on the central bank's Board. The nomination also drew criticism and was ultimately withdrawn.
11 April 2019	(Brazil) The government submitted a draft bill to strengthen the central bank's independence, which was pending Congress approval at the time of writing.
2 July 2019	(United States) The President announced his intention to nominate (i) the executive vice-president of the Federal Reserve Bank of St. Louis and (ii) the President's former economic adviser, who was an outspoken critic of the central bank's powers to set interest rates and was sympathetic to the gold standard, for the two central bank Board seats.
6 July 2019	(Turkey) The President issued a decree removing the central bank's Governor.
17 July 2019	(Turkey) A new law reduced the central bank's legal (contingent) reserves from 20% to 10% of profits. Accumulated amounts from previous years would be transferred to the Treasury to contain the deficit.
10 August 2019	(Turkey) The central bank's Chief Economist and several senior officials were removed from their positions.
9 December 2019	(Argentina) The BCRA President resigned and the new government appointed a new one. The Monetary Policy Committee (COPOM) was abolished and the targets for monetary aggregates were abandoned. An easing cycle was initiated while annual inflation was running above 50%.

Sources: News articles and official government sources.

Notes: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key positive and negative developments. See also the Appendix.

Table 4

Key elements of central banks' governance and monetary policy frameworks, 2019

	Bank Indonesia	Bank of Japan	Bank of Mexico	Central Bank of Brazil	Central Bank of the Argentine Republic	Central Bank of the Republic of Turkey	Central Bank of the Russian Federation	European Central Bank	Federal Reserve System	Reserve Bank of India	Saudi Arabian Monetary Authority	South African Reserve Bank	The People's Bank of China
Bank's legal basis (last revision)	Law of 1999 (2009)	Law of 1997 (2011)	Constitution and Law of 1993 (2014)	Law of 1964 (2017)	Law of 1992 (2012)	Law of 1970 (2019)	Constitution and Law of 2002 (2018)	TFEU of 2007 and ESCB-ECB Statute	Act of 1913 (2015)	Act of 1934 (2019)	Royal Decree of 1957	Constitution and Law of 1998 (2003)	Law of 1995 (2003)
Governor's tenure (reappointment?)	5 years (yes)	5 years (yes)	6 years (yes)	No fixed term	6 years (yes)	4 years (yes)	5 years (yes)	8 years (no)	4 years (yes)	Max. 5 years (yes)	5 years (yes)	5 years (yes)	Practice of 5 years (yes)
Appointed solely by government?	No, with House of Represent.	No, with National Diet	No, with Senate	No, with Senate	No, with Senate (except for interim appt.)	Yes	No, with State Duma	No (a)	No, with Senate	Yes	Yes	Yes	No, with National People's Congress
Dismissed solely by government?	No	Yes	No, with Senate	Yes	No, with Senate Commission	Yes	No, with State Duma	No (b)	Unclear	Yes	Yes	Yes	Yes
Legal provisions for dismissal?	Yes (Law's Arts. 45-49)	Yes (Law's Art. 25)	Yes (Law's Art. 43)	No (Decree 91,961, Art 1)	Yes (Law's Art. 9)	Yes (Law's Arts. 27-28 and decrees)	Yes (Law's Art. 14)	Yes (Statute's Art. 11.4)	Partial (Act's Section 10.2)	Yes (Act's Arts. 10-11)	Partial (Decree's Art. 9)	Yes (Law's Section 4(5))	No (Law's Art. 10)
Accountable to	House of Represent.	Government and National Diet	Congress	National Monetary Council and Congress	Congress	Government	State Duma	EU Parliament (primarily) and the Council	Congress	Government	Government	Finance Ministry & Parliament	State Council and Congress
Bank's mandate	1,2,3	1,3,5	1*,3	1,3	1,3,4,5	1*,2,3,4	1*,2,3	1*,6	1,4	1,3	1,2,3,6	1*,2,3	1,2,3
Responsibilities	MP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MiP, MaP	MP, MaP
Monetary policy body, its size and composition; non-voting attendees	Board of Governors, 6 to 9 central bankers.	Policy Board, 9 central bankers. Two Ministers may attend without vote.	Board of Governors, 5 central bankers. Finance Minister may attend without vote.	Monetary Policy Committee, 9 central bankers.	Board of Directors, 10 central bankers. Economy Minister may attend without vote.	Monetary Policy Committee, 6 central bankers and 1 member endorsed by the Governor. Treasury Undersecret. may attend without vote.	Board of Directors, 15 central bankers.	Governing Council, 25 central bankers. The President of the Council and an EU Commission member may attend without vote.	Federal Open Market Committee, 12 central bankers. 7 non-voting central bankers attend (in rotation).	Monetary Policy Committee, 3 central bankers and 3 government appointed members.	Board of Directors, 2 central bankers and 3 non-government officials.	Monetary Policy Committee, 7 central bankers.	Monetary Policy Committee, 3 central bankers, 7 government officials, 1 bank association member and 3 academic/research experts.

	Bank Indonesia	Bank of Japan	Bank of Mexico	Central Bank of Brazil	Central Bank of the Argentine Republic	Central Bank of the Republic of Turkey	Central Bank of the Russian Federation	European Central Bank	Federal Reserve System	Reserve Bank of India	Saudi Arabian Monetary Authority	South African Reserve Bank	The People's Bank of China
May provide credit to government?	No (Law's Art. 56)	Yes, with limits (Law's Art. 34)	Yes, via Treasury current acct. (Law's Arts. 7-12, 46)	No (Art. 164 Constitution; Art. 39 Fiscal Responsib. Law)	Yes, with limits (Law's Art. 20)	No (Law's Art. 56)	No (Law's Art. 22 & Budgetary Code Art. 92)	No (TFEU's Art. 123)	No (Act's Sections 10B, 13, 14.2(b))	Yes, advances with limits (Act's Art. 17(4)&(5)) and direct purchases of government securities in exceptional situations (Section 5 Fiscal Responsib. and Budget Mngmt. Act)	No (Decree's Art. 6)	Yes, w/limits (Law's Arts. 10(f)(i), 10(g)&13(f))	No (Law's Arts. 29&30)
Measure of independence (c)	0.95	0.44	0.64	0.25	0.73	0.80	0.60	0.86	0.51	0.25	0.42	0.41	0.69
Inflation target/aim	2019: 3.5% ±1% 2020: 3% ±1%	2%	3% ±1pp	2019: 4.25% 2020: 4.00%	N/A	5% ±2%	4.0%	Below but close to 2% in medium term	2%	4% ±2%	N/A	Range of 3% to 6%	Around 3%
Main policy interest rate (December 2019)	7-day reverse repo rate 5.00%	IOER -0.1%; 10-year Gov. bond yield 0%	Overnight interbank rate 7.25%	Overnight SELIC rate 4.5%	7-day liquidity bill rate floor 58%	1-week repo rate 12.0%	1-week repo rate 6.25%	1-week main refinancing rate 0.0%	Overnight Fed rate 1.50% to 1.75%	Overnight repo rate 5.15%	Overnight repo rate 2.25%	7-day repo rate 6.50%	Rediscount rate 2.25%
Unconventional measures	FG	NR,FG,QE, YC		FG				NR,FG,QE	FG,QE			FG	
IMF exchange rate classification	Free-floating	Free-floating	Free-floating	Floating	Floating	Floating	Free-floating	Free-floating	Free-floating	Floating	Conventional peg	Floating	Crawl-like arrangement

Sources: Authors' own elaboration based on countries' constitutions, central banks' laws and websites, Jácome et al. (2012) and IMF's Detailed Assessments of Compliance of Basel Core Principles (see also the Appendix).

Notes: Mandate: 1 = price stability (* if primary), 2 = currency stability, 3 = financial stability, 4 = employment, 5 = economic development, 6 = support general economic policies.

Responsibilities: MP = monetary policy, MiP = microprudential, MaP = macroprudential.

Unconventional policies: NR = negative rates, FG = forward guidance, QE = quantitative easing, YC = yield curve control. The list of unconventional measures is only indicative and does not capture, for instance, collateral easing measures, swap lines with other central banks, and refinancing operations with extended maturities.

(a) The European Council appoints the ECB President on the basis of a Council recommendation. It also consults the European Parliament and the ECB Governing Council.

(b) The European Court of Justice may, on application by the Governing Council or the Executive Board, compulsory retire them.

(c) Shows the unweighted index of central bank independence calculated by Bodea and Hicks (2015) in their updated dataset. The values correspond to the year 2014, which is the latest available, except for the ECB and the Central Bank of the Russian Federation, for which the latest available years are 2010 and 2015, respectively. The value for the Saudi Arabian Monetary Authority is for the year 2012 and is taken from Garriga (2016), as it is unavailable in Bodea and Hicks's dataset. Values closer to 1 indicate a higher level of independence.

5 A continued strong case for central bank independence

The GFC led to significant and rapid changes to the roles, instruments and mandates of central banks, which in turn contributed to reopening a debate on the precise scope and desirability of their independence, particularly with regard to monetary policy. Despite the renewed debate, traditional indices of central bank independence do not suggest a recent deterioration in central banks' de jure independence. Nevertheless, a qualitative assessment of recent government pressures and changes in central bank practices in 13 central banks (whose jurisdictions account for 75% of the world's GDP) shows a more nuanced picture: de facto independence may have deteriorated in almost half of this sample, with institutional independence being most affected and with government interferences largely focusing on pressuring monetary policy to look into growth objectives.

These findings are a concern, as there are solid reasons to defend the pre-crisis consensus underpinning central bank independence to achieve price stability. In this context, the following counterarguments address the critiques presented in Section 3.2.

Both the literature and the empirical evidence up until the GFC showed the benefits of central bank independence to achieve price stability. Moreover, it is possible that the flattening of the Phillips curve is at least partly due to the high credibility of monetary policy, which would imply that weakening it could unanchor inflation expectations (Bayoumi et al. (2014)). If anything, the GFC highlighted the importance of well-anchored inflation expectations, which contributed to avoiding deflation spirals at that time (Bayoumi et al. (2014), Fischer (2015)). Importantly, instrument independence gave central banks the flexibility and quick adaptability to develop new tools to address some of the challenges brought about by the crisis at a time when fiscal policy was not yet responding or was constrained by sustainability concerns. Currently, while the global economy is being hit by the coronavirus (COVID-19) pandemic, most central banks have again responded quickly, using conventional tools, reintroducing and enlarging some of the unconventional instruments used during the GFC, deploying new ones, and reacting, in many instances, before national fiscal policies.

Price stability should remain the primary objective of monetary policy. As noted by Fischer (2015), the potential consequences of political interference in monetary policy remain equally valid when inflation is either too low or too high, because political horizons are typically shorter than the horizons over which the effects of monetary policy operate. In other words, the time inconsistency problem does not disappear when inflation is too low.²⁶

²⁶ Even the proposals for a new model of central bank (Balls et al. (2018)) or "helicopter drops" (Bernanke (2016)) strongly defend keeping the operational independence of monetary policy.

As Rogoff (2019) notes, if monetary policy is politicised, once inflation rises, it will be very difficult to bring it under control and to protect monetary policy from further political interference. Some recent examples of central banks where independence and credibility have been severely compromised and where inflation and interest rates have drifted away from healthy levels should serve as a useful reminder (e.g. Argentina, Turkey, Venezuela and Zimbabwe).

In emerging markets that have recently experienced inflationary episodes or where bringing inflation under control is currently a problem, it may be easier to make the case for central bank independence. These countries should take advantage of this opportunity to seek closure of legislative gaps that can help strengthen the independence of their central banks.

As for unconventional monetary policies, they have proven key in helping central banks achieve their price stability objective. In addition, the effects of these policies on growth and inflation are similar to the ones from conventional policies. Therefore, they are also subject to the time inconsistency problem and could result in an inflation bias if not implemented independently. It is also worth noting that the risk of fiscal dominance is independent of whether a central bank implements conventional or unconventional policies; governments can always decide to implement inconsistent fiscal policies (Dudley (2013)). Letting governments influence the implementation of unconventional measures could actually increase the risk of debt monetisation (Bernanke (2010)).

To deal with potential credit risk brought about by certain unconventional policies, more robust mechanisms for transferring losses to the government (such as ex ante loss-sharing arrangements) could be established without weakening the independence of monetary policy (IMF (2010)). Dudley (2013) also notes the importance of considering the broader fiscal consequences of asset purchases, which have likely promoted economic growth with higher tax revenues while at the same time keeping long-term interest rates low, thereby lowering the debt service.

Concerning distributional consequences, it is worth noting that all monetary policies – be it conventional or unconventional – have distributional outcomes. While the debate on the distributional consequences of unconventional policies is still evolving, there is research that suggests either negligible effects or even slight reductions in both income and wealth inequality as a result of quantitative easing (Bunn et al. (2018), Lenza and Slacalek (2019), Schnabel (2020)).

Regarding financial stability, it has become even more evident that it is a necessary condition for price stability. Financial instability impairs the monetary transmission mechanism, thus preventing an effective monetary policy. Given central banks' expertise on banking, accumulated in the context of their monetary policy operations, there is a case for involving them in micro- and macroprudential policies. Whether (i) central banks should be the sole responsible agency for these tasks and (ii) whether they should be granted full independence to achieve financial objectives are open questions the answers to which depend on countries' circumstances and own legal arrangements (Balls et al. (2018), Bayoumi et al. (2014), BIS (2011), Blinder (2016), Eijffinger and de Haan (1996), Fischer (2015), IMF (2010)). Nevertheless, any

arrangement must preserve the independence of monetary policy by clearly delineating and ranking objectives, and by putting the necessary safeguards in place to protect the central bank's financial position and minimise risks to monetary policy credibility and independence (for example, by establishing separate decision-making structures and effective Chinese walls, as in the Bank of England and the ECB). A high degree of accountability for the new functions and roles, as well as their transparency, would also help manage expectations. Protecting monetary policy independence should in turn help foster financial stability (Fischer (2015)). If, during crises, the participation of the ministry of finance is required to address financial instability, this could be achieved through decision escalation mechanisms that should already be in place (BIS (2011)) and that protect monetary policy independence.

As regards communication, central banks need to actively use their communication tools to be clearer with the public and politicians about the scope, benefits and limits of their policies in order to (re)gain their support. The benefits of central bank independence are currently not obvious to most citizens, given that inflation has been low and stable for close to three decades. Misperceptions of central banks' roles, misunderstood policy goals and instruments, and an erosion of public support for their independence may enable politicians to pressure central banks without fear of public retribution. Thus, explaining central banks' actions in a language that people understand becomes critical. As pointed out by Rajan (2019), the sooner people understand what the role of central banks is and what they can and cannot do, the more adequate their expectations from monetary policy will be. In this context, it becomes important to publically resist unnecessary mandate expansions and to emphasise the limits of policy, while calling on other relevant actors to do their part where needed.

Central banks have stepped up measures to safeguard their independence. Some, like the ECB, have taken successful legal actions against attempts to curtail their autonomy. Others, like the Reserve Bank of India, have delivered speeches defending their independence (Acharya (2018)), which have been echoed by former Governors (Rajan (2019) and Volcker et al. (2019)). More generally, some central banks have increased accountability, transparency and communication in recent years, aiming at restoring the public's support and increasing its understanding of their mandates and policies. The ECB, for example, has increased the frequency of its interactions with the European Parliament on monetary policy issues, allowing increased scrutiny of its policies and providing the ECB with more opportunities to explain its decisions and demonstrate that it acts in accordance with its democratic mandate (Fraccaroli et al. (2018)).

Last but not least, a sudden weakening, or even a perceived weakening, in the independence of central banks in large economies could have repercussions not only for their own economies. Trade linkages and financial integration in the global economy increased dramatically up until the GFC (see IMF et al. (2017), Lane and Milesi-Ferretti (2017)). In this more financially integrated world, monetary policy decisions in large economies, or even just their announcements, can affect interest rates, exchange rates, asset prices and monetary policy decisions in other countries.²⁷

²⁷ See for example Sahay et al. (2014) for an analysis of the lessons from the 2013 Taper Tantrum.

Therefore, it is not clear how global markets could react or what the implications could be for the global economy and, in particular, for smaller economies, if the independence of larger central banks were put at risk. Policy uncertainty may increase capital markets' volatility and affect the flow of funds to emerging markets.

6 Appendix: Central bank cases

This Appendix provides a qualitative analysis of the current institutional context and the recent evolution in the independence of 13 of the biggest central banks in the world. Its main findings are summarised in Section 4.4 and Tables 3 and 4.

As the evolution in the independence and practices of key central banks in the world could influence changes in smaller central banks, our sample is, at this stage, limited to the central banks of some of the biggest economies in the world. We start off with the G20 members and, from them, at least one central bank from each region is selected.²⁸ Moreover, since the recent literature has focused mostly on the challenges to central bank independence in advanced economies, our sample includes more central banks from emerging markets, as we are more interested in assessing the independence of these central banks. Although our sample is small in terms of the number of central banks, the economies where the selected 13 central banks operate (Argentina, Brazil, China, India, Indonesia, Japan, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United States and the euro area) account for 75% of the world's GDP, measured in current (US) dollars.

In the institutional context, aspects under analysis include the banks' institutional bases, their governors' tenures, procedures for appointment and removal, the banks' mandates and responsibilities, the type of monetary policy decision-making bodies and whether they are allowed to provide credit to the government. The assessment relies mainly on the countries' constitutions and central banks' laws and websites. As reference, the unweighted index of central bank independence (BHui) calculated by Bodea and Hicks (2015) in their updated dataset is also included for each central bank.²⁹

For the assessment of the recent evolution in independence, the analysis is based on factual information – mostly from news reports but also from official sources – covering the time from 2011 to December 2019, but focusing particularly on 2018 and 2019.

6.1 Bank Indonesia (BI)

BI's legal independence is based on legal provisions that have not changed recently. While BI is accountable to the House of Representatives, there are also formal coordination mechanisms with the government, which may potentially affect BI's de facto independence. In the absence of legal changes and public discussions, the level of BI's independence can be considered stable in recent years.

²⁸ G20 members account for 85% of the world economy, 75% of global trade and two thirds of the world's population.

²⁹ The value for the Saudi Arabian Monetary Authority is taken from the unweighted index (Gui) calculated by Garriga (2016), as it is unavailable in Bodea and Hicks's dataset.

Institutional context (BHui 2014: 0.95)

The Central Bank Act, passed in 1999, was last amended in 2009. It grants the central bank the status of an independent state institution, having its own capital and freedom from interference by the government or any other external parties (Arts. 4 and 9). The objective of BI is to achieve and maintain the stability of the rupiah (Art. 7), for which it has the task to conduct monetary policy (Art. 8) and issue its own regulations. BI is prohibited from financing the government (Art. 56 (1)).

Law No. 17 of 2003 on State Finances (Art. 21) states, however, that “the Central Government and the central bank coordinate the establishment and the implementation of the fiscal and monetary policies”. BI notes that it collaborates with many state institutions under memoranda of understanding, joint decrees and other types of formal agreements which are intended to create synergy and clarify task distribution among institutions as well as encourage effective legal enforcement.

BI adopted an inflation targeting framework in 2005. Its policy decisions are taken by the Board of Governors (BoG), which is composed of the Governor, a Senior Deputy Governor and four to seven Deputy Governors. They are all appointed for five years and may be reappointed once. The Governor is proposed and appointed by the President with the approval of the House of Representatives and may be dismissed only for the limited reasons set out in Arts. 45-49. The BoG benefits from immunity for its decisions under the central bank law if acting in good faith (Art. 45).

In December 2013, BI's microprudential supervision functions were transferred to the Financial Services Authority, while BI remained in charge of financial and monetary stability through a mixture of monetary and macroprudential instruments.

Recent evolution in the BI's independence

Indonesia faced two recent episodes of exchange market pressures during which the exchange rate depreciated rapidly and capital inflows reversed sharply (the 2013 Taper Tantrum and the 2018 sell-off in emerging markets). Policy responses were considered drastic but, overall, successful in stabilising the economy, which may go some way to explaining the lack of public discussions on BI's independence. In the 2019 IMF Article IV consultation, more transparency and clarity of monetary policy were discussed.

6.2 Bank of Japan (BoJ)

The BoJ Act contains various provisions that establish the BoJ as a legally independent institution. However, the role of the government in monetary policy is relatively strong. This setting has been stable since the reform of the Bank of Japan Act in 1997, and no major changes have been observed in recent years. The most visible consequence of the close relations with the government is manifested in what

is known as “Abenomics”, which brought monetary policy within the context of a broader government strategy. The BoJ is accountable to the government and the Diet.

Institutional context (BHui 2014: 0.44)

The BoJ is a legal entity, with at least 55% of its capital provided by the government and the remainder being private. Articles 3 and 5 of the BoJ Act provide for the bank’s operational independence and autonomy regarding currency and monetary control. However, Article 5 also states that the BoJ “shall, taking into account the fact that currency and monetary control is a component of overall economic policy, always maintain close contact with the government and exchange views sufficiently, so that its currency and monetary control and the basic stance of the government’s economic policy shall be mutually compatible.” In addition, the BoJ may make uncollateralised loans to the national government and subscribe government securities, both within the limits decided by the Diet (Art. 34). The Ministry of Finance approves the BoJ’s budget (Art. 51), albeit with some limitations.

The BoJ is tasked with achieving price stability, thereby contributing to sound economic development (Art. 2). It has pursued an inflation targeting approach with a 2% target since 2013. Policy decisions are taken by a Policy Board composed of the Governor, two Deputy Governors and six Board members appointed by the Cabinet with consent of the House of Representatives and the House of Councillors. Their tenure is five years (with possible reappointment), and they can only be removed by the government in the cases specified by law. During Policy Board meetings, representatives of the ministries of finance and of economy are allowed to attend, express opinions, submit proposals or request that the Board postpone a vote on monetary control matters (but subject to the Board’s decision).

Regarding financial stability, the BoJ has both micro- and macroprudential responsibilities. Moreover, the Prime Minister and the Minister of Finance may directly request the BoJ to conduct business necessary to maintain stability of the financial system, such as providing loans to financial institutions (Art. 34).

Recent evolution in the BoJ’s independence

Key developments with regard to the BoJ’s independence took place between 2012 and 2016, with limited changes happening more recently. Following the election of Prime Minister Abe in 2012, the BoJ was urged to act, as part of a broader government strategy, against deflationary developments. In 2016, the bank reviewed its monetary stimulus programme.

Table 5**Bank of Japan – timeline of key events**

Date	Event
22 January 2013	BoJ introduced a "price stability target" of a 2% year-on-year change in the CPI and issued a joint statement with the government.
21 September 2016	A new Framework for Strengthening Monetary Easing: "Quantitative and Qualitative Monetary Easing with Yield Curve Control" was announced.
22 March 2019	BoJ published its Strategic Plan, which emphasised its mission to ensure price and financial stability.

Sources: News reports and official sources.

Note: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.3 Bank of Mexico (Banxico)

Banxico benefits from a strong de jure independence which is rooted in the Constitution. At the same time, its de facto independence is being challenged by an ongoing discussion on the policy objectives, particularly regarding a potentially stronger focus on growth. The recent appointments of Board members have been assessed by the press in this regard. The new government, elected in 2018, cut public salaries, including salaries of Banxico staff, who in turn brought the matter to the Supreme Court.

Institutional context (BHui 2014: 0.64)

The Mexican Constitution (Art. 28) establishes Banxico as "autonomous in exercising its function and administration", where "no authority may order the bank to grant financing". The bank may decide independently, however, to grant credit to the Federal Government but only through the Treasury's current account with the bank (Law of 1993, Arts. 7-12, 46). It is further stated that central bank policymakers are to hold office for the periods the duration and staggered terms of which allow for the autonomy of their functions. They may be removed by the government only for serious reasons and with the Senate's approval, and they may not hold any other employment, position or commission or be a member of a political party. The Banxico Law specifies that the President of the Republic will appoint the Governor (with the Senate's approval) for a term of six years and the Deputy Governor for eight years, both with a possibility of reappointment. Banxico is accountable to Congress.

Banxico's primary objective is to preserve the purchasing power of the currency (Constitution Art. 28). The bank's tasks are performed by a Board of Governors (BoG), which is made up of five members: the Governor and four Deputy Governors (Law Art. 28). The BoG may issue regulations in the performance of its monetary policies. The Minister of Finance may attend the meetings in a non-voting capacity (Law Art. 45). On exchange rate matters, Banxico acts on the basis of guidelines, which are set out by an Exchange Commission, composed of Banxico and government officials (Law Art. 21). Regarding financial stability, the bank has both micro- and macroprudential responsibilities.

Recent evolution in Banxico's independence

While there have been no changes either to the legal provisions or to the Constitution (which would be more difficult to amend), Banxico's de facto independence could be jeopardised due to public statements about monetary policy objectives and salary cuts applied by the government. While the Governor has spoken in favour of central bank independence, advocating price stability as the overarching monetary policy objective, the government has since 2018 called to include growth more prominently in Banxico's objectives, and the appointments of new Board members have sparked discussions in this regard.

Table 6
Bank of Mexico – timeline of key events

Date	Event
1 December 2018	A new President took office and cut public salaries, including in Banxico. Key Banxico senior officials took early retirement.
9 January 2019	Banxico and its staff turned to the Supreme Court over the salary caps. The Court temporarily suspended the law for Banxico.
23 January 2019	Congress approved the government's nomination of two Deputy Governors reported to support growth as a monetary policy objective.

Sources: News articles and official sources.

Note: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.4 Central Bank of Brazil (BCB)

The BCB has a high degree of de facto operational independence but lacks complete de jure independence, which does not guarantee protection against potential future risks. All efforts to enshrine central bank independence into law were delayed in recent years. More recently, in April 2019, the government submitted a draft legal text that would strengthen the BCB's de jure independence, but it remains unclear if and when the draft law will be passed by Congress.

Institutional context (BHui 2014: 0.25)

Created in 1964 (Banking Law No. 4,595), the BCB's main role is to ensure the stability of the purchasing power of the currency and the existence of a solid and efficient financial system. The BCB is also responsible for monetary policy, foreign exchange policies, regulating and supervising the financial system, macroprudential policies and managing the country's payment system, among other tasks.

While the National Monetary Council (NMC), which is comprised of the heads of the Finance Ministry, the Planning Ministry and the central bank, sets the inflation target, the Monetary Policy Committee (COPOM) of the BCB has been responsible for setting the target for the policy interest rate since 1996. The COPOM is composed of the bank's Governor and the eight Deputy Governors. The bank is accountable to the NMC (Art. 9) and to Congress and it cannot finance, directly or indirectly, the

government (Constitution Art. 164). The BCB may buy government securities, but only to refinance those becoming due in its portfolio.

While the BCB appears to enjoy operational independence, the legal protection for its staff is lacking. Nevertheless, in practice technical staff are not replaced with the arrival of a new administration. The Governor and Deputy Governors are appointed by the President of the Republic (with the Senate's approval) with no fixed or specific term, and they can be removed by the President for no formal reason (Decree 91.961).

Recent evolution in the BCB's independence

Recent governments have been supportive of strengthening the BCB's independence but have not followed through with legal reforms. A draft law was submitted in April 2019, but it is not clear whether it will be approved by Congress. Among other provisions, the new law would include a four- to-eight-year term for the institution's directorate, detached from the presidential mandate, and end the ministerial status currently given to the BCB's Governor. In recent years, the BCB has been relatively successful in keeping inflation close to or below its target. The institution also remained stable at a time of political volatility. This coincides with a period of improved credibility and increased efforts to formalise the bank's independence.

Table 7

Central Bank of Brazil – timeline of key events

Date	Event
2011-2016	Various calls by BCB Governors for more formal independence amid rumours of political interference in monetary policy to meet political goals.
July 2016	The then-government worked on formulating a constitutional amendment to strengthen the BCB's independence. However, a political crisis derailed this reform.
11 April 2019	The government submitted a draft bill to strengthen the BCB's independence, which is pending Congress approval.

Sources: News articles and official sources.

Note: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.5 Central Bank of the Argentine Republic (BCRA)

While the BCRA enjoys a good degree of institutional independence, its personal and functional independence are weak. It is customary for its President to resign when a new government is elected, and the President of the Board and Board members can be dismissed directly by the government in certain instances. The central bank is allowed to finance the government, and its monetary policy framework has changed frequently in recent years given the need to fulfil multiple goals. All of this has damaged the central bank's reputation and credibility and coincided with a long period of persistent double-digit inflation.

Institutional context (BHui 2014: 0.73)

The central bank's Charter (Ley No 24.144 from 1992, as amended) establishes as the BCRA's goals the promotion of "monetary stability, financial stability, employment and economic development with social equity". According to the Charter (Art. 4), the BCRA is "not subject to orders, indications or instructions from the national Executive Branch", supporting its institutional independence. The BCRA Law, however, allows the central bank to finance the government both directly and indirectly – a provision that is used often. The Board of Directors is in charge of monetary policy decisions.

There is a low degree of personal independence. The President of the Board and Board members are appointed by the Executive Branch with the Senate's approval for a term of six years. Nevertheless, Article 7 also allows for appointments on an interim basis until there is Senate approval, which has been used in the past. These interim Board members can be dismissed directly by the Executive Branch. It is also not unusual for BCRA Presidents to resign when a new Minister of Economy is appointed or when the government changes. The BCRA has had seven new Presidents since 2010. The bank is accountable to Congress.

Recent evolution in the BCRA's independence

The constant changes of BCRA's Presidents and policy frameworks, inconsistent policy decisions and the use of monetary financing of the budget have all contributed to diminishing the BCRA's credibility throughout the years.

Under the latest IMF-supported programme that the country was implementing, the then-government sent to Congress a bill to enhance the central bank's independence, which was not passed. With the election of a new government, the BCRA President resigned and an interim President was appointed in December 2019. The monetary policy committee was abolished and the targets for monetary aggregates were abandoned. The new Board of Directors cut policy rates while annual inflation remained above 50%.

Table 8**Central Bank of the Argentine Republic – timeline of key events**

Date	Event
9 and 23 January 2018	The inflation target for 2018 was loosened from 10% to 15% and the policy interest rate was cut by 150bps while inflation was running at 25% annually. The decision put the currency under pressure.
14 June 2018	The Central Bank President resigned ahead of term given the currency crisis.
20 June 2018	The IMF approved a three-year Stand-By Arrangement for Argentina, which included, among other reforms, strengthening central bank independence.
25 September 2018	The central bank President resigned after three months in office citing personal reasons.
28 September 2018	The central bank adopted a 0% growth target for the monetary base to fight inflation.
29 March 2019	The then-government sent to Congress a bill to enhance the central bank's independence, which was not passed.
9 December 2019	The BCRA President resigned and the new government appointed an interim BCRA President. The COPOM was abolished and the targets for monetary aggregates were abandoned. An easing cycle was initiated with annual inflation running above 50%.

Sources: News articles and official sources.

Note: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.6 Central Bank of the Republic of Turkey (CBRT)

The CBRT's legal independence was strengthened in 2001, allowing for autonomous policy measures that successfully led to disinflation. Under continued political pressure, however, both its de jure and de facto independence have deteriorated in recent years. Personal independence is a key concern. In addition, the complexity of CBRT's policy implementation is causing significant challenges to communicating policy measures effectively to the public. As a result, inflation and inflation expectations have remained above the central bank's target in recent years, reflecting the bank's eroded credibility.

Institutional context (BHui 2014: 0.80)

The current CBRT Law dates back to January 1970 but has been amended a few times, most recently in 2019. The amendments introduced after the 2001 crisis in the context of an IMF-supported programme increased the CBRT's independence and prohibited the financing of the government (Art. 56). The bank's primary objective is to achieve and maintain price stability, for which it enjoys instrument independence and has implemented an inflation targeting regime since 2006. Other complementary objectives include financial stability, determining the exchange rate regime (jointly with the government), issuing banknotes and establishing payment and securities settlement systems. The bank is accountable to the government.

The Monetary Policy Committee (MPC) is composed of the Governor, the Vice Governors, an elected member from the Board and a member appointed on the Governor's recommendation. The Deputy Minister of Treasury and Finance or their representative may participate in a non-voting capacity (Art. 22/A). In the event of a disagreement between the Governor and the Board, the President of the Republic acts as an arbitrator (Art. 26). Since the issuance of the Statutory Decree No. 703 of July 2018, the President can directly appoint the central bank Governor, Deputies and

MPC members for a four-year period. The former CBRT Governor was removed directly through a presidential decree.

Recent evolution in the CBRT's independence

Both the de jure and de facto independence of the CBRT have deteriorated. Although the bank maintains functional and operational independence, for several years it has been under political pressure to loosen monetary policy and, with the recent legal changes, personal independence has been curtailed. All of this has contributed to its credibility weakening. The implementation of monetary policy has become complex, giving the impression that policy tightening can only happen through secondary policy rates.

Table 9

Central Bank of the Republic of Turkey – timeline of key events

Date	Event
2014-2018	On several occasions, the country's President publically criticised Governors for not loosening monetary policy enough and for being under foreign influence.
15 May 2018	In an interview with Bloomberg, the President stated that he wanted to take more responsibility for monetary policy.
2 July 2018	A statutory decree established that the President could directly appoint the CBRT's Governor, Deputies and MPC members.
6 July 2019	The President removed the central bank Governor by a presidential decree.
7 July 2019	Speaking about the ousted Governor, the Hürriyet newspaper quoted the President as saying "We told him that the rate cut would help reduce inflation. He did not do what was necessary."
17 July 2019	A new law reduced the central bank's legal (contingent) reserves from 20% to 10% of profits. Accumulated amounts from previous years would be transferred to the Treasury to contain the deficit.
10 August 2019	The CBRT's Chief Economist and several other senior officials were removed from their positions.

Sources: News articles, IMF Article IV consultation reports, CBRT's website and legal texts.

Note: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.7 Central Bank of the Russian Federation (BoR)

The BoR's independence has not been widely discussed in recent years. While the government has abstained from publicly interfering with BoR's decisions, the President has explicitly supported central bank independence and has spoken highly of the Governor. The BoR's decisions that attracted particular attention relate to the banking sector following the closure of weak banks and tightening supervision. In monetary policy, the BoR has in recent years pursued an easing policy in an effort to stabilise the economy amid international sanctions and volatile oil prices.

Institutional context (BHui 2015: 0.60)

Regarding institutional and personal independence, the Constitution and the central bank's Law set out the BoR's status as a legal entity owned by the federal government but independent from it. The BoR is accountable to the State Duma, which appoints and dismisses the Governor (following the President's proposal) and the members of

the Board of Directors (following the Governor's proposal agreed with the President) (Law Art. 5). The Governor has a five-year term. The BoR has to be consulted on draft legislation that affects its performance, and it can defend its interests in court.

The BoR has operational independence, while the inflation target is vetted by the government and the State Duma. The principal objective of its monetary policy is to protect the stability of the currency by maintaining price stability, including for the creation of conditions for balanced and sustainable economic development (Art. 34). Operating under an inflation targeting regime, the BoR formulates the quantitative inflation target, which is submitted for consideration to the government and the State Duma. The bank is financially independent and cannot lend to the government.

The Bank of Russia has a very strong role in the financial sector. It owns 58% of Sberbank, the country's leading bank, and fully owns the country's largest re-insurance company RNRC. In 2013, it obtained far-reaching supervisory powers for all parts of the financial sector. While the BoR expanded its central bank activities also in Crimea, it has not been directly subjected to sanctions.

Recent evolution in the BoR's independence

Central bank independence seems to be observed in Russia, although it was not tested in a controversy with the government in the analysed period. In January 2015, the head of monetary policy was reportedly replaced by a person more acceptable to bankers, who had called for lower interest rates. The latest policy actions by the BoR up until December 2019 did not trigger any visible reaction from the government, although the resulting easing cycle was not likely to provoke strong opposition from the government. The high reputation of the Governor may also be seen as supporting its policy setting and decisions.

6.8 European Central Bank (ECB) and Eurosystem

The ECB and the national central banks (NCBs) participating in the Eurosystem are independent institutions, as laid down in the institutional framework for the single monetary policy in the euro area, which also shields the ECB and the NCBs from political interference. At the same time, a comprehensive framework ensures the ECB's accountability, primarily to the European Parliament. With the relatively recent inclusion of banking supervision responsibilities, the ECB's governance structure was modified without compromising the well-established independence of monetary policy.

Institutional context (BHui 2010: 0.86)

The Treaty on the Functioning of the European Union (TFEU) gives the ECB a clear and limited mandate to maintain price stability in the euro area. Without prejudice to this objective, it shall support the general economic policies in the Union. Monetary

policy decisions are taken by the Governing Council of the ECB, and the bank is prohibited from financing any government or public entity (TFEU Art. 123).

The Treaty explicitly states that neither the ECB nor any NCB may seek or take instructions from any government or other body. The European Council appoints the ECB President and the members of the Executive Board for a period of eight years on the basis of a Council recommendation. It also consults the European Parliament and the ECB Governing Council. The ESCB/ECB Statute, which has Treaty status, sets out specific conditions that need to be fulfilled in order to relieve members of the ECB decision-making bodies from their duties. The Members of the Executive Board, in particular, can be relieved from their duties only by the Court of Justice of the European Union (CJEU). The ECB is also endowed with tools to protect its independence. For example, it must use its Legal Opinions to voice any concerns about measures that might impinge upon central bank independence included in any proposed EU act or draft national legislation that falls within the ECB's fields of competence. The ECB can also take direct action against national measures relieving an NCB Governor from office that are not in compliance with the requirements of Article 14.2 of the Statute. The CJEU has jurisdiction in such disputes.

Recent evolution in the ECB's independence

There have been no visible changes in either the *de jure* or actual independence of the ECB. The legal frameworks protecting the ECB's independence have been tested, and have served to establish its independence more firmly. The ECB has always made it clear that all its measures are taken in line with its price stability mandate. Comments by euro area governments on the ECB's policy decisions are unusual. Discussions have mostly focused on the limitations of the ECB's mandate and its ability to use certain monetary policy instruments. There have also been instances at NCBs where their independence has been affected, and issues have been brought to the CJEU. The CJEU has offered effective remedies in such instances.

In view of the new tasks that national legislators have assigned to the NCBs after the crisis and to avoid a violation of the monetary financing prohibition, the ECB has identified criteria to distinguish traditional central banking tasks from typical government tasks, in order to request the payment of the costs for the government tasks undertaken by the NCBs (Mersch (2018)).

Table 10**European Central Bank and Eurosystem – timeline of key events**

Date	Event
16 June 2015	The CJEU ruled that the EU Treaties permitted the European System of Central Banks to adopt a programme such as the Outright Monetary Transactions (OMT).
21 June 2016	As a result of the above-mentioned CJEU judgement, the Federal Constitutional Court of Germany (BVerfG) concluded that OMT did not "manifestly" exceed the competences given to the ECB.
18 July 2017	The BVerfG referred five questions related to the ECB's secondary markets public sector asset purchase programme (PSPP) to the CJEU for a preliminary ruling. In particular, these were concerned with whether the PSPP violated the prohibition of monetary financing.
19 February 2018	The Latvian Anti-Corruption Office prohibited Latvijas Banka's Governor from performing his duties and limited his ability to travel.
6 April 2018	The ECB referred the case regarding the suspension of the Latvian Governor to the CJEU.
11 December 2018	The CJEU ruled that the ECB's PSPP did not infringe EU law. In particular, it does not exceed the ECB's mandate, neither does it contravene the prohibition of monetary financing.*
26 February 2019	The CJEU annulled the decision that suspended the Governor of Latvijas Banka from office.

Sources: News articles; ECB, EU Commission, BVerfG and CJEU websites.

Notes: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

* Even though outside the period analysed in this paper, it should be noted that, on 5 May 2020, the BVerfG issued its judgement on the matter. In the months following the judgement, the German Federal Government, the Bundestag and the Deutsche Bundesbank deemed the requirements of the BVerfG fulfilled. The Bundesbank continues participating in purchases under the PSPP.

6.9 Federal Reserve System (Fed)

The Fed is an independent government agency, accountable to the public and the US Congress. While its long-term goals are determined by Congress, the day-to-day policy implementation is independent of short-term political objectives. For more than a year, public communication by the US President has been seen as challenging the Fed's independence without tangible action so far.

Institutional context (BHui 2014: 0.51)

Particularly since the late 1970s, the Fed has been seen as an independent and sound institution. It was created in 1913 through the Federal Reserve Act. The US President regularly appoints the members and the Chair of the Board of Governors (BoG), all of whom must be confirmed by the Senate. The Chair is appointed for four years. The competencies on dismissal or demotion have never been tested. Fed Board members enjoy relatively strong protection against arbitrary dismissal, whereas the provisions regarding a potential demotion of the Chair are less clear.

In 1977, Congress amended the Fed Act to establish three monetary policy objectives: maximising employment, stabilising prices and moderating long-term interest rates. Congress also recognised the principle of instrument independence, which was key to the Fed's ability to react flexibly during the GFC. In 1981, the provisions allowing the Fed to directly purchase government debt from the Treasury expired and only purchases in the open market remained allowed (Section 14.2(b)). The Federal Open Market Committee is responsible for open market operations, while the BoG decides on the reserve requirements and the rates of interest on required and excess reserves. The Fed also has micro- and macroprudential responsibilities.

Due to the system being decentralised, the individual Federal Reserve banks have different legal statuses, with some features of private corporations and some of federal agencies. Nationally chartered banks are required to hold stock in, and can elect some of the Board members of, the reserve bank of their region.

Recent evolution in the Fed's independence

While the Fed's de jure independence remains intact, it is under increased governmental scrutiny over its rate decisions. Under the current US administration, the first set of appointments of Board members broadly signalled a continuity of policies, while subsequent nominations have been controversially discussed in the press and coincided with the President becoming vocal on monetary policy. The President has called for lower interest rates and triggered a discussion on possibly dismissing the current Chair. Moreover, there have been a relatively high number of unfilled vacancies in recent years. Recent research by Bianchi et al. (2019) finds evidence that market participants believe that the Fed will succumb to the political pressure.

Table 11
Federal Reserve System – timeline of key events

Date	Event
November 2017	The President decided not to re-appoint Chair Janet Yellen to a second term, which was seen by some as breaking with precedent.
Since July 2018	Numerous tweets by the President calling for lower rates and questioning the Fed's decisions.
22 March 2019	The President nominated a former campaign adviser and co-author of a book on "Trumponomics" for a seat on the Fed's Board. The nomination drew criticism due to the potential political affiliations and was ultimately withdrawn.
4 April 2019	The President nominated a vocal political ally and former contender for the Republican presidential nomination for a seat on the Fed's Board. The nomination also drew criticism and was ultimately withdrawn.
2 July 2019	The President announced his intention to nominate (i) the executive vice-president of the Federal Reserve Bank of St. Louis and (ii) the President's former economic adviser, who was an outspoken critic of the central bank's powers to set interest rates and was sympathetic to the gold standard, for the two central bank Board seats.
6 August 2019	Four former Fed Chairs issued a joint statement expressing support for the Fed's independence and its ability to act without the threat of removal or demotion of leaders for political reasons.

Sources: News articles and official sources.

Note: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.10 Reserve Bank of India (RBI)

Several reforms in the past decades have fostered RBI's independence and kept it unchanged thereafter. However, various provisions still allow for a significant role of the government in the RBI's decision-making process. In addition, its actual (de facto) independence was negatively affected in 2018 after a series of policy disagreements with the government ended with the resignation of the Governor.

Institutional context (BHui 2014: 0.25)

The RBI Act of 1934 (last amended in 2019) sets out the bank's mandate as securing monetary stability and operating the currency and credit system (Act Preamble). In 2016, the Act's Preamble was amended to specify that "the primary objective of the monetary policy is to maintain price stability while keeping in mind the objective of growth". The bank also has micro- and macroprudential responsibilities. Since 2016, monetary policy decisions have been taken by a monetary policy committee, which consists of six members: the RBI Governor, a Deputy Governor, one RBI officer, and three members appointed by the central government. The Governor's and their deputy's terms in office are decided by the central government (maximum of five years). The central government has a strong role in the RBI's decision-making. It may give directions to the RBI if it considers them necessary for the public interest (Art. 7). Moreover, if the government concludes that the RBI is failing to carry out any of its obligations, it may decide to supersede the RBI by another agency as determined by the government (Art. 30). The RBI is also accountable to the central government when it fails to meet the inflation target, and the government may remove the Governor, the Deputy Governors or any Director from office (Art. 11). The bank may also make temporary and limited ways and means advances to the local, state and central governments (Art. 17) and may purchase central government securities in the primary market under exceptional circumstances (Section 5 of the Fiscal Responsibility and Budget Management Act, 2003).

Recent evolution in the RBI's independence

Although RBI's de jure independence has not changed much in recent years, its de facto independence was affected in 2018 after a series of policy disagreements with the government. Specifically, the government invoked Article 7 (see above) and sent letters to the then-Governor seeking more favourable (i) liquidity conditions for non-banks, (ii) banks' capital requirements, (iii) lending to SMEs and (iv) RBI's dividend policy. After the resignations of the Governor and a Deputy Governor, the RBI's new leadership cut interest rates and agreed to frontload and increase its dividend to the government amid an economic slowdown and general elections. As a result, RBI decisions have come under scrutiny from the markets and the media to assess whether there is an effective threat to the conduct of an independent monetary policy.

Table 12**Reserve Bank of India – timeline of key events**

Date	Event
7 August 2018	The government appointed two Directors to the RBI's Central Board, both of whom have close political affiliation to the government and are members of nationalist organisations. The appointments drew criticism from markets and the press.
September – October 2018	Invoking Article 7 of RBI's Act, the government sent several letters to the RBI Governor seeking more favourable (i) liquidity conditions for non-banks, (ii) banks' capital requirements, (iii) lending conditions to SMEs and (iv) central bank dividend policies.
26 October 2018	An RBI Deputy Governor delivered a speech defending central bank independence and warning of perils of undermining it.
10 December 2018	After strong pressures from the government to ease policies, RBI Governor resigned citing "personal reasons".
12 December 2018	The government appointed a retired civil servant and former government official as RBI Governor. In the subsequent months, RBI's MPC cut interest rates and agreed to frontload and increase its annual dividend to the government.
24 June 2019	An RBI Deputy Governor resigned six months ahead of the end of his term dissenting with the MPC's latest policy decisions.

Sources: News articles and official sources.

Note: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.11 Saudi Arabian Monetary Authority (SAMA)

While SAMA is set up as an agency with its own governance structure and its own instruments, several of its tasks require close cooperation with the government, which limits its institutional independence. In particular, the currency law and the banking law require SAMA to work closely with the government. There has been no discussion on its independence recently.

Institutional context (Gui 2012: 0.42)

SAMA's Charter dates back to 1957. It sets out SAMA's objectives: the issuance and strengthening of the currency and the stabilisation of its internal and external value (Art. 1). In addition, the bank controls the sovereign wealth fund, has micro- and macroprudential responsibilities and supports the development of the financial sector. SAMA has no capital (Art. 2) and cannot make advances to the government (Art. 6). The monetary authority is accountable to the government.

Its monetary policy is entrusted to maintain a currency peg vis-à-vis the (US) dollar, which is considered by the IMF to be a stable arrangement for the country. SAMA operates through a Board of Directors, which is composed of the Governor, the Deputy Governor and three non-government officials with experience in financial and commercial affairs. Board members are appointed by the Council of Ministers, which is led by the King, for five-year terms. They can also be removed by the Council.

Recent evolution in SAMA's independence

There are no recent decisions affecting SAMA's de jure independence, and no public discussions on the topic have been identified. Given its management of the sovereign

wealth fund and its links with Saudi Aramco, SAMA may be seen as closely linked to the government. However, it is independent in operating the currency peg, which works smoothly. Interest rates trail the US rates and attention in this area focuses more on international capital flows.

6.12 South African Reserve Bank (SARB)

The SARB enjoys a high degree of de facto independence, but faces formal limitations to its institutional, personal and functional features. Its autonomy has come under threat in the last few years, with plans to nationalise the central bank and considerations to expand its mandate that could lead to stronger government interference in the SARB's policy decisions.

Institutional context (BHui 2014: 0.41)

The SARB is privately owned and governed by the Act of 1989 (last amended in 2003). Its primary objective is to protect the value of the currency in the interest of balanced and sustainable economic growth (Act Art. 3 and Constitution Art. 224). Article 224 of the Constitution further states that “the Bank, in pursuit of its primary object, must perform its functions independently and without fear, favour or prejudice, but there must be regular consultation between the Bank and the Cabinet member responsible for national financial matters”. Together with other institutions, it plays a pivotal role in ensuring financial stability. The SARB is responsible for monetary policy, banking supervision, managing gold and foreign exchange reserves, acting as the government's banker and administering the country's remaining exchange controls.

There are limits to the SARB's institutional, functional and personal independence. The bank is managed by a Board of 14 Directors (Art. 4), seven members of which are elected by the SARB's private shareholders. However, monetary policy decisions are taken by the Monetary Policy Committee (MPC) that consists of the Governor, three Deputy Governors and three senior SARB officials. The Governor is appointed directly by the President for a five-year term. The bank is accountable to the Minister of Finance (Art. 31) and, ultimately, to Parliament (Art. 32). The Minister of Finance may make regulations relating to the election of Directors by shareholders, the conditions of appointment of Directors, and the circumstances in which a Director must vacate their office (Art. 36). The bank may lend to the government but within legal limits (Law's Arts. 10(f)(i), 10(g) and 13(f)).

Recent evolution in the SARB's independence

In late 2017, the government announced plans to nationalise the SARB, which led to intense discussions, including on potential threats to its independence and changes in its mandate. The resulting uncertainty coincided with various market tensions that subsided once the authorities defended the SARB's mandate.

Table 13**South African Reserve Bank – timeline of key events**

Date	Event
19 June 2017	During an investigation of a 1985 bank bailout, the Public Protector recommended that Parliament expand the SARB's mandate to include "ensuring that the socio-economic well-being of the citizens is protected".
15 August 2017	The SARB won a High Court case to set aside the above-mentioned Public Protector's remedial action.
20 December 2017	The government decided that the SARB should be nationalised. Subsequently, the SARB issued a warning that changing the bank's ownership structure could raise financial and economic risks and uncertainty in the country.
6 March 2018	The government withdrew a motion to debate the SARB nationalisation in Parliament pending further consultations.
17 August 2018	Lawmakers from the opposition tabled a bill seeking to nationalise the SARB (still under consideration).
Since January 2019	The President and other top government officials publicly expressed opposing views on changing the SARB's mandate to include economic transformation/development and job creation.
6 March 2019	In a speech, the Governor stressed the importance of maintaining the Reserve Bank's independence.

Sources: News articles and official sources.

Notes: This timeline does not aim to be a comprehensive collection of events but rather to illustrate key developments.

6.13 The People's Bank of China (PBoC)

Legally, the PBoC does not enjoy institutional or operational independence as it depends on the government. De facto, however, the bank seems to operate with some degree of independence, probably underpinned by the high reputation of its Governors. There are no visible discussions within China on the PBoC's independence, and its decisions are seen in the press as supporting China's international agenda (e.g. the Belt and Road Initiative, the international role of the renminbi and its inclusion in the special drawing rights (SDR) basket, etc.).

Institutional context (BHui 2014: 0.69)

The PBoC lacks institutional independence. Article 2 of the Law on The People's Bank of China (adopted in 1995 and last amended in 2003) establishes that the PBoC must, under the leadership of the State Council (i.e. the Central People's Government), formulate and implement monetary policy, prevent and resolve financial risks and maintain financial stability (supervision is conducted separately). In addition, the bank manages the country's foreign exchange reserves and the exchange rate, performs treasury functions for the government and deals with anti-money laundering issues. In addition to being under the leadership of the State Council, the bank is also accountable to the National People's Congress.

De jure operational independence is also lacking. Monetary policy decisions are prepared by a monetary policy committee, whose functions, composition and working procedures are set by the State Council (Art. 11). The monetary policy's objective is to maintain the stability of the value of the currency and thereby promote economic growth (Art. 3). The State Council approves the PBoC's decisions in matters such as the annual money supply, interest rates and foreign exchange rates (Art. 5). The central bank's financial independence is also constrained as its budget is incorporated into the central government's budget and is subject to supervision of the Fiscal

Department under the State Council (Art. 38). Nevertheless, the PBoC is prohibited from financing the government (Arts. 29 and 30).

The PBoC is headed by a Governor, who is nominated by the Premier of the State Council and decided upon by the National People's Congress. The Governor is appointed (usually for a five-year term) or removed by the President.

Recent evolution in the PBoC's independence

There have been no legal decisions recently to modify the PBoC's de jure independence, and public discussions on this topic have not been identified. Nevertheless, after the renminbi depreciated following the imposition of tariffs by the United States, China was labelled a "currency manipulator" by the US Administration. The PBoC has publicly rejected such claims.

The PBoC has several swap agreements with other central banks (including those involved in the Belt and Road Initiative), which is seen as fostering the international role of China and the renminbi, thereby supporting a policy agenda driven by the government.

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Acknowledgements

We would like to thank Ana Isabel Lima, Ana Simona Manu, Eva Katalin Polgar, Michael Ioannidis and Michel Soudan, who commented on some of the central bank cases and their tables. We would also like to thank Hans-Joachim Klöckers and Livio Stracca for their useful review, comments and discussions. We accept full responsibility for any errors or omissions; the views expressed in this paper are our own and do not necessarily reflect those of the ECB.

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PDF ISBN 978-92-899-4424-3, ISSN 1725-6534, doi:10.2866/908675, QB-AQ-20-011-EN-N