council on
economic policies

GOVERNING FINANCE FOR SUSTAINABLE PROSPERITY

Alexander Barkawi
Simon Zadek

CEP DISCUSSION NOTE
April 2021

PROLOGUE

Finance impacts all aspects of our lives, from our economies to social cohesion to the ecological systems we depend on for our very survival. As a result, the implications of how we govern finance are fundamental, and ultimately existential.

Whether we succeed in improving lives, creating opportunity, strengthening communities, and protecting nature depends greatly on financial markets. Aligning the governance of finance with these objectives is critical. Alarmingly, it currently points elsewhere.

This must change. Urgently.

We must remind ourselves that the ultimate purpose of financial governance is to foster sustainable prosperity. We must ensure that the instruments central banks and financial supervisors deploy are supportive of the broader societal goals we have. We must orient the institutions governing finance accordingly. And we must recognize that the opportunities, the disruptions, as well as the continuous flow of crises we face require agility, cooperation, and action.

Now.

CONTENTS

ABBREVIATIONS

BIS	Bank for International Settlements
BoE	Bank of England
BoJ	Bank of Japan
CBDC	Central Bank Digital Currency
ECB	European Central Bank
Fed	Federal Reserve System
FSB	Financial Stability Board
G30	Group of Thirty
HKMA	Hong Kong Monetary Authority
IMF	International Monetary Fund
MAS	Monetary Authority of Singapore
NGFS	Central Banks and Supervisors Network for Greening the Financial System
PBC	People's Bank of China
SME	Small and Medium Sized Enterprise
SNB	Swiss National Bank
TLTRO	Targeted Longer-Term Refinancing Operation

AUTHORS

Alexander Barkawi
Founder and Director, Council on Economic Policies

Simon Zadek
Chair, Finance for Biodiversity; Director, Migrant Nation

ACKNOWLEDGEMENTS

The authors thank the participants of the four roundtables on governing finance that CEP hosted in 2019 and 2020, as well as the many experts and opinion leaders for all the insights and food for thought they shared in conversations over the last two years. They are grateful to the MAVA Foundation for the funding that made their work on this topic possible. They also thankfully acknowledge the warm welcome by the Institute for International Economic Policy (IIEP) at the Elliott School of International Affairs, George Washington University, who co-hosted the third roundtable with CEP. The views expressed herein are solely the authors' and do not necessarily reflect those of the Council on Economic Policies or its board.

INTRODUCTION – COMING BACK STRONGER

Finance is the lifeblood of the global economy. Its governance – the policies, regulatory frameworks and public infrastructure that underpin it – is therefore no small matter.

The financial shock of 2008, as every financial crisis before it, catalyzed a wave of debate about lessons to learn and financial governance reforms to advance. Greater emphasis on financial stability moved up policy agendas worldwide. Central bank mandates were expanded accordingly. New regulatory bodies were created. Financial supervisors raised capital and liquidity requirements, introduced stress tests and enhanced recovery and resolution planning. Reforms in derivatives and securitization rules added further safety valves. And international standard-setters enhanced global coordination.

At the same time, awareness grew that governing the financial system is not just about mitigating its booms and busts, but crucially, about the prosperity it fosters and protects. Against this background, over the last few years, the institutions governing finance, in particular central banks and financial supervisors, had already started engaging in discussions on the changing landscape they face and the broader role for sustainable prosperity they have. Their debates reflected the fact that the measures they took in response to the 2008 financial crisis went far beyond their usual playbook. They addressed questions around legitimacy, accountability and coherence with other policy fields. They touched upon the distributive effects of monetary policy and financial regulation. They explored the role they can and should play in mitigating climate change and further environmental risks. And they started accounting for a rapidly shifting context with new players, new technologies and new business models entering the field.

Then came COVID-19 and with it yet another glaring spotlight on the new normal of financial governance and the impact it has on all aspects of our lives. Whether governments had access to funding to expand healthcare capacities, whether payment systems were in place to transfer emergency cash to households in need, and whether corporations were able to secure liquidity and thus jobs to return to after lockdowns, was at the core of our ability to respond to the crisis in the past year. As a result, central banks and financial supervisors have been and continue to be at the forefront of building bridges through the economic fallout from the pandemic and safeguarding prosperity.

Ensuring that this broader purpose of sustainable prosperity becomes anchored as the compass for the institutions governing finance beyond the current crisis is critical. It is critical to secure employment as economies transform. It is essential to address the fault lines of inequity that the pandemic exposed and deepened – both within and between countries. It is vital to seize the opportunities of digitalization and address the disruption it will create. And it will determine whether we do a better job in mitigating and preparing for future threats, notably climate change and the loss of natural capital, than we did for COVID-19.

The narrative that those governing finance are exclusively focused on price and financial stability is oblivious to this challenge. It also falls short of reality. The expanded playbook of the post-2008 period was not a temporary deviation. It is here to stay, it is the new normal, and it requires a review of the governance of finance to come back stronger.

GOVERNING FINANCE – THE CORE PILLARS

The purpose of financial governance has never been set in stone. Mandates and instruments of central banks and financial supervisors have constantly evolved, as have their underpinning principles, analytical frameworks and institutional set-ups. There are no universal, timeless rights and wrongs in their functions or design. In fact, how we govern finance is highly path-dependent, with legacy ideas and experiences informing contemporary practice, and with conventional wisdom evolving to reflect new realities – often as a result of crises.[1]

«[...] monetary policy has evolved to address new challenges as they have arisen. [...] As we look back over the decade since the end of the financial crisis, we can again see fundamental economic changes that call for a reassessment of our policy framework.» – Jerome Powell; Chair, Federal Reserve[2]

The reforms to financial governance in response to the Great Depression are a case in point. In June 1934, President Roosevelt signed a bill into law that authorized the Federal Reserve System, the "Fed", to "make credit available for the purpose of supplying working capital to established industrial and commercial businesses". The bill reflected growing concerns about a credit crunch that was particularly seen to endanger the viability of small and medium sized enterprises (SMEs). In response, and in significant expansion of the emergency powers granted previously, the Federal Reserve Banks were given the right to directly lend to firms in their district for up to five years.[3] A month later, Canada, which had hitherto run its financial system without a central bank, shifted course and decided to establish the Bank of Canada.[4]

In the decades that followed, financial governance was frequently aligned with a broad set of developmental objectives. France's central bank engaged in credit allocation to support the country's industrial policy. The Bank of Japan (BoJ) was intricately involved in channelling capital flows to priority sectors and targeted infrastructure. The Bank of Korea and many others took similar roles.[5]

Leading up to the 1990s, high inflation fostered a global consensus that central banks must focus on price stability, with few if any other policy objectives. It also triggered a growing conviction of the need for central banks to have a degree of autonomy from politicians and policymaking. The Reserve Bank of New Zealand pioneered the resulting approach of inflation targeting in 1990 followed shortly thereafter by Canada (1991), the United Kingdom (1992) as well as Sweden, Finland and Australia (1993).[6]

In parallel, measures to curtail money laundering and terrorist financing moved up supervisory agendas. Published in 1990, the initial forty recommendations by the Financial Action Task Force reacted to the need to act forcefully in the fight against illicit financial flows. In 2001, in response to the attacks on the World Trade Center and the Pentagon, financial authorities were further enlisted in combatting the financing of terrorism.

The financial crisis of 2008 shifted attention yet again as it exposed severe flaws in the narrow focus on price stability that had established itself as global central bank practice. While inflation appeared under control, financial markets crashed, and economies slumped. Central banks responded with a significant extension of their toolbox and massive expansions of their balance sheets. Moving far beyond their traditional interventions through short-term interest rates, they bought trillions of dollars in public and private sector assets, offered long-term refinancing operations, expanded the set of eligible collateral, and provided forward guidance. They also had financial stability given additional emphasis in their remits to better protect economies from shock moving forward.

As the roles and powers of financial authorities expanded, the need for a reflection on their priorities, thinking and practice became increasingly acute. Their frontline role in responding to the economic fallout from COVID-19 – and the fact that what has been termed "unconventional" monetary policy has become the new normal – has further underlined the urgency for a review.

«[...] monetary policy must pay attention to both aggregates and structure. While keeping overall liquidity abundant at a reasonable level, monetary policy can, to a certain degree, be leveraged to provide support to the key areas and the weak links in our development as well as social undertakings.» – Yi Gang; Governor, People's Bank of China[7]

Such a review of financial governance is all the more important as its stewards are increasingly contending with changes to the very nature of finance itself. Today, any corner shop or global technology company might create, mobilize and channel money. Major parts of the financial system are being disintermediated, and new actors with their strongholds in the digital economy are building game-changing financial products and services. Global fintech platforms may well be subject to the mandates of, literally, hundreds of regulators. Digital disruption is thus also requiring new forms of coordination between traditional regulatory functions such as those controlled today by financial, trade, competition and data protection authorities. It will be critical to respond robustly to these changes, whilst being open and able to test new forms of governance that extend from classical regulatory approaches through to collaborative forms of corporate governance that can embrace and manage the tension between public and commercial interests.

Beyond finance, our understanding of governance more broadly is undergoing a profound transformation. The dynamic complexity of the systems we live in challenges our conventional approaches to policymaking, associated rule-setting, and even enforcement. Twentieth century approaches to 'good governance', often top-down, hierarchical and focused on the control of non-state actors, has proved inadequate in effectively guiding increasingly complex, dynamic societal processes, especially markets. Many phenomena implicate multiple governing institutions that struggle to coordinate, and are often cross-border in nature, placing current forms of international cooperation under intolerable stress.

In response, a new generation of governing approaches is in play, involving more permeable, transitory, collaborative decision-making, fostering rapid feedback, learning and action. The governance of complex systems must be framed with multiple goals that in turn require difficult, often political trade-offs to be made. Technology itself, and the associated flow of data, has increasingly become part of the governance process, informing and even making de facto decisions in more rapid or even real time.

In that context, the governance of finance cannot remain oblivious to key global challenges such as inequality and climate change. Some central banks and financial supervisors have already taken first steps in engaging on these issues. Yet, their analysis and actions remain largely driven through the lens of a narrow interpretation of their goals. Climate change unchallenged, for example, will eventually destroy lives and economies. However, through a conventional frame of reference, action by central banks and financial regulators is necessitated not because of the magnitude of this challenge and their ability to make a difference, but remains tied to an assessment of whether this existential threat impacts on price and financial stability.

«We must explain much better to the general public what we are doing and why, and we must talk to people that we do not normally reach. This imperative has to cascade through all the elements of our review: our inflation aim, our inflation measure, our tools and their effectiveness, and how we take into account new challenges that people care about, like climate change or inequality.» – Christine Lagarde; President, European Central Bank[8]

Incremental changes will not fix this problem. That said, neither finance nor its governance can be changed by edicts informed by static blueprints. Rather, a framework is needed that ambitiously orients the evolution of the governance of finance. Such a framework must be widely applicable and capture the key aspects of the multi-faceted challenges set out above.

To that end, we propose three core pillars.

- **Aligning Purpose**: that the purpose of financial governance as reflected in mandates and their interpretation is to foster sustainable prosperity. Governing institutions can and should pursue instrumental goals such as price and financial stability, but these must be embedded in a broader set of objectives.
- **Aligning Instruments**: that the toolbox which the institutions governing finance deploy reflects this broader purpose as well as the changing landscape in which they operate. The use of current instruments must be grounded in a robust analysis of their effectiveness towards sustainable prosperity and, where required, be adapted accordingly. New instruments must be explored and assessed against their contribution towards societal priorities.
- **Aligning Institutions**: that the institutional approaches for the governance of finance are broadened to encompass new thinking and practice in the governance of dynamic complex systems. Institutional set-ups should reflect a greater focus on approaches that are more nimble, ensure more rapid feedback and learning, and involve a greater diversity of actors and decision-making venues, as well as ensuring broader and different capabilities, models and success criteria. They should also reflect a recognition that the stability of the rules governing finance needs to be set against a continuous flow of crises, including existential ones.

PURPOSE – FOSTERING SUSTAINABLE PROSPERITY

The financial crisis of 2008 and the responses by central banks and financial supervisors triggered a wide-ranging debate about the purpose of financial governance and its underlying assumptions. A growing number of decision makers and opinion leaders raised questions in relation to the objectives of financial authorities, as well as their capacity to deal with a world that is radically different from the days when the dominant narrative about their role was forged. Discussions on the appropriateness of the models that underpin what they do and the need for new analytical frameworks to replace the old ones moved up agendas worldwide.[9]

«As stressed by Schumpeter about 100 years ago, innovation is driven by entrepreneurs. However, the public sector can play an important role as well in tackling modern global challenges related to the [Sustainable Development Goals]. The Bank of Japan would like to contribute through taking initiatives toward the healthy development of FinTech, supporting financial institutions which contribute to regional vitalization, promoting financial literacy, as well as securing economic, price, and financial stability.» – Haruhiko Kuroda; Governor, Bank of Japan[10]

In that context, financial policymakers increasingly recognized that neither price nor financial stability were sufficient prerequisites to safeguard sustainable prosperity. High levels of unemployment and stagnating wages remained a significant obstacle to economic development. Rising inequality posed growing risks to social cohesion. And climate change as well as the loss of natural capital created environmental threats worldwide.[11] Addressing these challenges, as repeatedly highlighted by the G20, required an urgent use of all policy levers.[12] Financial governance could not be carved out from this imperative.

Then the pandemic hit. And if it had not already been obvious before, the response made clear that financial authorities were very much aware of the broader responsibilities they have. Central banks and financial supervisors reacted forcefully – not just to safeguard price and financial stability, but to protect livelihoods and mitigate the economic shock. The European Central Bank (ECB) highlighted that it "will ensure that all sectors of the economy can benefit from supportive financing conditions that enable them to absorb this shock" and that "this applies equally to families, firms, banks and governments". The BoJ pointed to the need "to prevent firms and sole proprietors from falling into difficulties in terms of financing." And the Bank of England (BoE) affirmed that its role in responding to the crisis is "to help to meet the needs of UK businesses and households in dealing with the associated economic disruption".[13]

Clearly, the governance of finance already stands at the core of much more than safeguarding price and financial stability. The prevailing narrative does not match this reality. It often also does not match actual central bank mandates which are frequently defined much more broadly than the single goal of price stability that has dominated debates in past decades would lead to believe. The Fed is tasked to conduct monetary policy with the multiple objectives of "maximum employment, stable prices, and moderate long-term interest rates". The Bank of Canada's principal role is "to promote the economic and financial welfare of Canada". The ECB has responsibility to maintain price stability and, without prejudice to the objective of price stability, to "support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union". And the goals of the Reserve Bank of Australia include "the stability of the currency [...], the maintenance of full employment [...], and the economic prosperity and welfare of the people of Australia".

While legislation often already defines central bank mandates more broadly, their interpretation over the last decades has narrowed their purpose significantly. This must change. The institutions governing finance have too vast influences on our lives as that a single objective of price stability can provide them with an adequate compass. The argument that having central banks pursue multiple objectives confronts them with insurmountable challenges stands on shaky grounds. The pursuit of multiple goals has been a reality for many central banks for a long time – both in terms of their mandates as well as their practice. Increasing emphasis on financial stability in many central bank remits over the last few years has made the notion of a single goal mandate even more of a theory that is out of touch with reality.

«The Treaties gave the ECB the – sometimes overlooked – obligation "to support the general economic policies in the Union". [...] This mandate, which is sometimes referred to as the ECB's "secondary objective", stipulates a duty, not an option, for the ECB to provide its support.» – Frank Elderson; Member of the Executive Board, European Central Bank[14]

The often-cited Tinbergen rule, i.e. that one needs a separate policy instrument for each policy goal to be pursued, is not a counter to this. The governance of finance is not a policy *instrument*, but a policy *field* with an expansive toolbox of multiple instruments. Central banks do not just set short-term policy rates, but make use of a vast array of interventions. They decide to which extent to deploy their balance sheets for asset purchases. They define what public and private assets are eligible for such purchases and how to allocate their balance sheet across them. They determine to what extent to buy sovereign and corporate bonds, asset-backed securities, exchange traded funds and other assets. They set conditions under which commercial banks can seek refinancing with them and what collateral is eligible in such operations. They provide forward guidance. In their role as financial supervisors, they also define capital and liquidity requirements and make use of a whole additional set of regulatory measures. Their involvement in international standard setting bodies such as the Financial Stability Board (FSB) adds further levers. The notion that the Tinbergen rule requires all these policy instruments to be deployed with just one single goal in mind is untenable.

Central banks and financial supervisors have already started accounting for the fact that the expansive powers they have obtained and the complex world they engage in requires them to move beyond siloed approaches. Greater emphasis on their financial stability objectives has been a first step in this direction. Growing recognition of the distributional effects of their actions, the role they play in fostering financial inclusion, their impact on infrastructure investments, as well as the contribution they can and should make in addressing environmental threats provide further illustration.[15]

A rapidly changing landscape of finance is moving additional dimensions onto their agendas. The accelerating momentum towards digital currencies and payment systems requires the institutions governing finance to deal with topics that were hitherto outside their remits. The need to safeguard data privacy as well as fair competition as big tech companies are moving into finance are cases in point.

«As we build our digital ecosystems, we must keep in view effective digital governance frameworks. [...] Rigorous evaluation of data models and their governance will be required to ensure that we do not introduce biases that inadvertently exclude the very citizens we are trying to on-board to digital ecosystems.» – Patrick Njoroge; Governor, Central Bank of Kenya[16]

As a result, the purpose of governing finance has in reality already been broadened and no longer matches the narrative of a narrow focus on price stability. Building on this momentum and further emerging practice in financial governance is critical. Central banks and financial supervisors play a vital role in fostering sustainable prosperity. Ensuring that this is made explicit and that the policies they deploy and the rules they set evolve markets towards sustainability is essential.

Such a broader purpose does not rule out defining priorities within mandates and introducing distinctions between primary and secondary goals. Price and financial stability will remain key objectives for central banks worldwide. But the broader purpose of sustainable prosperity that these goals underpin must be firmly embedded in the practice of governing finance. It must also be reflected in a more granular approach and assessment of its instruments and institutions.

INSTRUMENTS – HARNESSING THE TOOLBOX

Financial governance rests on a vast and growing toolbox. The instruments at the disposal of the institutions governing finance range from the levers of monetary policy to regulatory and supervisory interventions, over to their role in combating financial crime as well as the development and maintenance of critical parts of financial market infrastructure.

«The task of monetary policy has moved from being a choice (albeit not an easy one) on a single dimension (the official interest rate) to a more multi-dimensional choice which also involves decisions on which tools to use, and which tools to develop – have "in the box" – for possible future use should the need arise.» – Andrew Bailey; Governor, Bank of England[17]

A key monetary policy lever through which central banks intervene in financial markets are the interest rates at which commercial banks can borrow money from them. Central banks usually provide such loans against collateral. To that end, they define what type and quality of collateral is eligible, and what "haircut" is subtracted from an asset's value to determine the loan amount it can be pledged for. They also frequently introduce additional criteria, e.g. in the context of the ECB's Targeted Longer-Term Refinancing Operations (TLTROs), that influence how much money and under what conditions banks can borrow from them.

While the bulk of such central bank loans are denominated in their own currency, several central banks furthermore offer refinancing operations in other key currencies. Swap lines between central banks are at the core of such offerings. They allow participating institutions to borrow foreign currency from another central bank to make foreign currency loans to financial institutions in their jurisdiction. The ongoing provision of US dollar liquidity by the BoE, the BoJ, the ECB and the Swiss National Bank (SNB) based on bilateral swap lines with the Fed are an illustration.

Central banks also expand or reduce market liquidity by outright purchasing and selling of assets through their balance sheets. In that context, they determine the overall amounts they buy and sell, the type and quality of the securities that are eligible for transactions, as well as the amounts of each security they seek to hold. While government bonds and government-backed bonds account for most of these holdings, a growing number of central banks have opened their purchasing programs to private sector securities. The ECB has been buying corporate bonds, covered bonds and asset-backed-securities, e.g. based on car loans, for several years. The BoJ holds a significant share of the Japanese equity market. The SNB has a sizable portfolio of foreign equities and corporate bonds. The BoE holds corporate bonds. And the Fed, in response to the current crisis, has launched facilities for the purchase of corporate bonds, loans as well as exchange traded funds that provide exposure to both investment grade and high-yield corporate bonds.

Central bank communication provides another important lever. The immediate reaction of financial markets to the speech in July 2012 by Mario Draghi, then President of the ECB, in which he underlined that the ECB will do "whatever it takes" to preserve the Euro, is a case in point. Increasing communication from central banks had already preceded the last financial crisis – both to address growing demand for transparency and accountability, as well as to influence market expectations and thus enhance monetary policy transmission. The expanding use over the last few years of forward guidance, i.e. central bank commitments on the future path of their policies, has further accelerated this trend.[18]

In addition to monetary policy tools, the authorities governing finance can deploy a broad array of regulatory and supervisory instruments. These range from defining criteria that must be met to obtain a license as a bank, insurance company or any other financial institution, to requirements for stocks, bonds, mutual funds and derivatives, over to the approval of new digital payment systems. They also include setting capital and liquidity requirements for banks and insurance companies, running stress tests across the financial sector, as well as the introduction of macroprudential measures such as countercyclical capital buffers and loan-to-value ratios for mortgage loans. Deposit insurance schemes provide a safety net in case of bank failure.

The governance of finance also comprises a wide portfolio of tools to prevent, detect and punish financial crimes such as market abuse and money laundering. Examples include duties for exchanges and other financial market actors to report suspicious transactions, customer due diligence responsibilities for banks and insurance firms, as well as corresponding surveillance capabilities within financial supervisors. They also include a broad set of enforcement measures such as fines, suspending or withdrawing an institution's license to operate, as well as civil and criminal prosecution.

Moreover, the institutions governing finance are frequently involved themselves in the development and maintenance of key pillars of financial market infrastructure. The role of central banks in payment systems is an example. Central banks are not only the sole authorized issuers of banknotes, but together with other financial authorities also stand at the core of electronic payments by defining and enforcing standards, licensing payment providers, as well as operating settlement platforms.[19] The involvement of financial authorities in the development of market benchmarks, such as the alternatives to interbank offered rates (IBORs) that are now provided by central banks and other organizations across the globe[20], as well as central bank engagements in building up certain market segments, such as the securitization market in the Eurozone[21], are further illustrations.

«Central banks and regulatory authorities globally have been undertaking significant and sustained efforts on interest rate benchmark reform for a number of years now.» – Jacqueline Loh; Deputy Managing Director, Monetary Authority of Singapore[22]

Evidently, this toolbox for the governance of finance is not just geared to a narrow focus on price stability. Nor should it be. Ensuring coherence of the instruments central banks and financial supervisors deploy with the broader set of policy goals of the societies they serve is critical. Frequent evaluations of every instrument's intended and unintended effects are essential in that context. Central bank lending and asset purchases may be effective in mitigating risks of deflation but may come at the expense of financial stability. They may also disproportionately benefit wealthier households and thus exacerbate inequality.[23] Depending on the assets a central bank chooses to buy or accept as collateral, it may furthermore be exposing its own balance sheet as well as the wider economy to threats from environmental risks.[24] Financial supervisors may protect consumers and financial stability by imposing loan-to-value ratios for mortgages, but may at the same time prevent young households who have not inherited wealth from buying a home.[25] Stricter compliance measures for banks may mitigate against bank failures and financial crimes, but may also make it increasingly difficult for smaller banks to compete and thus run counter to the objective of fostering effective competition. And caution in the authorization of new digital finance players may be key in safeguarding financial stability, but may also be protecting incumbents and slow down innovation. Accounting for these different effects and related trade-offs is key to harness the toolbox of governing finance for a broader sustainability agenda.

Emerging practice highlights pathways in this direction. Targeted central bank support for lending to particular segments of the economy is a case in point. In 2012, the BoE, together with HM Treasury, launched a "Funding for Lending Scheme" (FLS) to encourage lending to households and non-financial corporations. In 2013, it extended the program and added additional incentives for lending to SMEs.[26] Similarly, in 2014, the ECB introduced TLTROs to support bank lending to the real economy excluding loans for house purchases.[27] In 2018, the Hong Kong Monetary Authority (HKMA) established an Infrastructure Financing Facilitation Office and itself invested into infrastructure to promote infrastructure funding.[28] And last year, in response to the fallout from the pandemic, the Fed launched a Main Street Lending Program to expand lending to SMEs and nonprofit organizations, as well as a Municipal Liquidity Facility to support state and local governments in mitigating funding constraints.[29]

«There is so much work that needs to be done to make sure that we are fostering an equitable recovery and ensuring that everyone is able to fulfill their economic potential. That's why at the New York Fed and across the Federal Reserve System, a key area of focus is to better understand what contributes to economic inequities and to finding solutions.» – John Williams; President and Chief Executive Officer, Federal Reserve Bank of New York[31]

A growing number of central banks have also begun evaluating the distributive effects of their actions.[30] **Some have started reviewing their monetary policy accordingly.** The Fed, in August 2020, reflected its appreciation of the "benefits of a strong labor market, particularly for many in low- and moderate-income communities" in its revised longer-run goals in which, inter alia, it moved from targeting "deviations" to "shortfalls" in maximum employment.[32] The Bank of Canada has made the impact on the distribution of income and wealth an explicit criterion to evaluate alternatives in the context of the upcoming renewal of its monetary policy framework.[33]

Moreover, several central banks have embarked on accounting for sustainability criteria, in particular climate risk considerations, in the management of their balance sheets and their collateral frameworks.[34] The Swedish Riksbank announced in 2019 that it had sold its holdings of bonds from the Canadian province of Alberta as well as the Australian states of Queensland and Western Australia due to the high climate footprint of these issuers. A year later, in the context of its decision to start buying corporate bonds, the Riksbank declared that such purchases would only be made of bonds from companies "deemed to comply with international standards and norms for sustainability".[35] Shortly thereafter, the SNB published its decision to stop investing into companies who are primarily active in the mining of coal.[36] ECB President Christine Lagarde and several of her colleagues on the ECB Governing Council have indicated that they see the need for similar steps to account for climate risks on their balance sheet.[37] And most recently, in March 2021, the BoE announced that it will account for the climate impact of the issuers of corporate bonds it holds, and update its approach accordingly by Q4 2021.[39]

«Central banks must also practise what they preach. We owe it to our taxpayers to keep the financial risks that arise from our monetary policy operations in check. That's why central banks should make sure that climate-related financial risks are given due consideration in their own risk management.» – Jens Weidmann; President, Deutsche Bundesbank[38]

Furthermore, a growing number of financial authorities started accounting for social and environmental considerations in microprudential supervision and macroprudential policy. Promoting financial inclusion while at the same time safeguarding consumer protection and fair competition are key goals in that context. The role of the Central Bank of Kenya in fostering mobile payment services provides an illustration.[40] The energy transition stress test by the Dutch central bank in 2018, the climate stress test the BoE conducted in 2019 for UK insurance firms, as well as the inclusion of a green finance score in the bank ratings by the People's Bank of China (PBC) and ongoing work on climate risks of the Basel Committee on Banking Supervision are further cases in point.[41]

«[…] at the Basel Committee on Banking Supervision (BCBS) level we are planning to conduct a "gap analysis" to identify areas in the current Basel Framework where climate-related financial risks may not be adequately addressed or are not captured. This gap analysis will be comprehensive in nature, and will cover regulatory, supervisory and disclosure elements.» – Pablo Hernández de Cos; Governor, Banco de España; Chair, Basel Committee on Banking Supervision[43]

Finally, and crucially, monetary-fiscal coordination in response to the economic fallout from COVID-19 delineates further scope for policy alignment. Governments and central banks have cooperated closely during the last year to determine funding needs and synchronize action. The US Congress provided capital to backstop emergency funds set up by the Fed.[42] The Bank of Canada introduced a Provincial Bond Purchase Program and a Provincial Money Market Purchase Program to support funding to sub-national governments.[44] The Reserve Bank of Australia committed to keeping the 3-year yield for Australian government bonds at 0.25% and to purchasing central and state government securities to pursue this objective.[45] The ECB introduced flexibility to deviate from its capital key, i.e. the share each national central bank holds in its equity, in its government bond purchases, and waived eligibility requirements for Greek government bonds.[46] The BoE and HM Treasury jointly launched the Covid Corporate Financing Facility to use central bank reserves for the purchase of short-term commercial paper from firms that make a material contribution to the UK's economy.[47] And the SNB set up a COVID-19 Facility which operates in conjunction with a federal scheme for government-guaranteed COVID-19 loans, and which allows banks to pledge these guaranteed loans to obtain liquidity from the SNB at its current policy rate of -0.75%.[48]

Assessing opportunities and pitfalls of such monetary-fiscal coordination is critical. Strengthened alignment between the conditions of fiscal policy support for the private sector, e.g. limits on compensation, dividend payouts and share buybacks, with the criteria that underpin lending by central banks to private firms, is an essential step to take in this context. Safeguarding coherence of central bank lending to corporates with the broader policy goal of a sustainable recovery is equally vital.[49]

A closer look at past policies provides additional insights to consider in this context. In the US during World War II and the Korean War, the Fed imposed restrictions on lending growth, loan-to-value limits, and maturity limits in sectors not related to defense.[50] The Fed also repeatedly applied selective credit controls through tighter underwriting standards on consumer installment loans (Regulation W) and residential construction loans (Regulation X). In France, in the 1950s and 1960s, the Banque de France applied rediscount ceilings and credit ceilings which it partially relaxed to steer credit to specific segments of the economy.[51] In Canada, Parliament created the Industrial Development Bank (now: Business Development Bank of Canada) as a subsidiary of the central bank in 1944 to advance the restructuring of the Canadian economy.[52]

Whether such instruments fit into today's world with a markedly different global financial system is open to debate. Yet, a debate is warranted. Given the challenges and disruptions we face, a review of current instruments, the analytical models and assumptions that underpin them, as well as potential alternatives is essential. Past experience on the effectiveness of different central bank interventions, or the lack thereof, offers valuable input for that. A reassessment of core beliefs, such as the assumed linkage between unemployment and inflation as described by the Phillips curve, provides further guidance.[53] Acknowledging the economy as a complex adaptive system that will continue to be hit by crises is an additional vital step to take. A review of the appropriateness of dominating models, e.g. DSGE models, as well as the assumptions they are based on, e.g. that the economy is understandable and controllable, that markets self-equilibrate, and that financial flows and stocks can be neglected is equally warranted.[54] On all this, accounting for the different context in which financial policymakers operate – e.g. significantly lower inflation rates and high asset price inflation, negative interest rates, the expanding role of shadow banking and financial networks, as well as the emergence of fintech and new forms of governance – is critical. New data sets, such as more granular statistics on inflation and microdata on individual loans, contribute additional input to assess the effectiveness and efficiency of current instruments. [55] And proposals for an expansion of the toolkit – such as the use of direct cash transfers from central banks to households, aka helicopter money, and the integration of environmental and social obligations into the prerequisites for obtaining a bank license – give further impetus to explore alternatives.

«[...] monetary policy is currently being squeezed from two sides—the pandemic and fall in demand that is subduing inflation on the one hand, and the conditions that make it difficult to cut the rate to counteract this on the other.» – Cecilia Skingsley; Sveriges Riksbank[56]

BOX 1: GOVERNING DIGITAL FINANCE

The rise in digital finance further underlines the urgency for a review of how we choose to govern the financial system. It also puts a spotlight on the crucial broader purpose beyond price and financial stability that central banks and other authorities have.

Debates on the introduction of central bank digital currencies (CBDCs) are a case in point. The provision of "trusted money" as a public good has been part of central bank remits for a long time. Applying that role to offering a digital currency to the public may be an appropriate next step. In a world that is becoming increasingly cashless, CBDCs may foster resilience of payment systems and mitigate the risk of fragmentation as multiple private providers of digital currencies enter the market. CBDCs may also encourage financial inclusion, facilitate fiscal transfers, strengthen monetary policy transmission and support data privacy by providing a certain level of anonymity for electronic payments. At the same time, CBDCs will be required to meet the needs of the authorities engaged in fighting money laundering and other illicit financial flows. Furthermore, and crucially, they may have far-reaching consequences on financial intermediation, the structure of financial markets and thus, ultimately, capital allocation.[57] These impacts may include significant international spill-over effects and geopolitical implications with critical repercussions for the policy space of other countries. Assessing these and further considerations as well as related trade-offs purely through the lens of price and financial stability is incongruous with the task at hand.

The same holds true for an evaluation of the opportunities and risks of private digital currencies and alternative governance approaches to them. As peer-to-peer networks, start-ups, big tech companies, and incumbent financial service providers introduce new currencies, discussions on appropriate policy responses abound. They range from questions on the macro consequences of private digital currencies, including their impact on monetary policy, to their implications for market structures, illicit financial flows, and financial stability. They cover potential trade-offs between innovation and consumer protection, between convenience and privacy, and between economies of scale and scope on the one hand, and interoperability of platforms, convertibility of currencies and market concentration on the other.[58]

New digital payment systems, insurance products, lending platforms, asset management offerings, and data analytics result in further shifts in the financial landscape that require a broader governance lens. The disruptions that are under way offer significant opportunities to empower citizens as consumers, savers, lenders, borrowers, investors, and taxpayers. They open new channels for SMEs to sell their products, seek funding and obtain insurance. They provide alternative instruments for governments to strengthen social safety nets, raise funds and improve accountability. They introduce possibilities to enhance transparency through tokens and using a distributed ledger to trace capital flows through the system. And they certainly also pose risks, including cyber vulnerabilities, market concentration, and a growing digital divide.[59]

Central banks and financial supervisors are at the forefront of seizing these opportunities and mitigating the risks. They decide, together with other relevant stakeholders, whether to launch a CBDC or not. They define and enforce rules for private digital currencies. They determine whether a new payment service provider gets licensed, whether it must hold all its customer funds in reserve, whether such reserves are to be kept with a third-party custodian and whether they are subject to an annual audit. They define whether fintech start-ups can enter a regulatory "sandbox" or whether they have to follow the same rules as incumbent financial players. They regulate the safeguards that are to be built into new lending platforms. They establish frameworks for digital assets, including those that would allow giving a value to natural capital. And they play a crucial role in protecting the financial system against the growing threat from cyberattacks and increasing risks from digital fraud.[60]

As they define these frameworks and deploy their toolbox, a broader lens that strengthens the alignment of digital finance with sustainable prosperity is critical.

«The developments of our laws, rules and regulations on FinTech were just like 'feeling the stones while crossing the river'. We met some problems, learned lessons and gained experience.» – Guo Shuqing; Chairman, China Banking and Insurance Regulatory Commission; Deputy Governor, People's Bank of China[61]

INSTITUTIONS – ACCELERATING REFORMS

The evolution of the governance of finance must ultimately be anchored in its institutions – in the mandates and powers they have, the legal structures that underpin them, the processes through which decisions are taken, the actors and capacities they bring together, the beliefs and assumptions they hold, and the mechanisms to ensure transparency and accountability.

The mandates and powers as well as the legal structures of the institutions governing finance take many shapes and forms. In the US, to illustrate, the Fed comprises three key entities – the Board of Governors, twelve regional Federal Reserve Banks, and the Federal Open Market Committee (FOMC) – with responsibility for five key functions: (1) to conduct monetary policy to promote maximum employment, stable prices, and moderate long-term interest rates, (2) to help maintain the stability of the financial system, (3) to strengthen the safety and soundness of individual financial institutions, (4) to foster the safety and efficiency of payment and settlement systems, and (5) to promote consumer protection and community development. The Board of Governors, an agency of the federal government that is directly accountable to Congress, is the chief governing body of the system and oversees the Federal Reserve Banks. Its members are appointed by the President and confirmed by the Senate.[62] In contrast, for example, the members of the Governing Board of the SNB are appointed upon recommendation of the Bank Council by the country's Federal Council, i.e. its government, without the involvement of parliament. Like the Fed, the SNB conducts monetary policy and has responsibilities in safeguarding the stability of the financial system as a whole. The supervision of individual financial institutions, however, rests with a separate agency.

Mandates and powers change over time. The Dodd-Frank Act of 2010 expanded the Fed's authority for the supervision of systemically important financial institution. At the same time, it limited the Fed's emergency lending powers to be confined to programs with broad-based eligibility that must be approved by the Treasury – thus preventing it from emergency lending to a single financial company. It also created the Financial Stability Oversight Council to coordinate federal and state regulators to safeguard financial stability.[63] Similarly, in 2016, the Single Supervisory Mechanism (SSM) transferred significant additional powers to the ECB to directly supervise the largest banks and to work closely with national supervisors in the oversight of all other banks in the Eurozone and further participating EU member states.[64] Its powers, however, remained limited to banks, and thus did not comprise oversight on the shadow banking sector, wholesale markets for debt securities as well as OTC derivatives markets and derivatives clearinghouses. Moreover, the initiation and implementation of macroprudential measures remained largely with national authorities.[65] At the same time, the European Union established the Single Resolution Mechanism, comprising a Single Resolution Board and the national resolution authorities, to ensure an orderly resolution of failing banks across the countries covered by the SSM.[66] In 2017, China launched a new "Financial Stability and Development Committee" under the State Council to strengthen coordination between monetary, financial, fiscal and industrial policy and to advance financial sector reforms.[67] A few months later, the country merged its separate banking and insurance regulators to become the newly created China Banking Insurance Regulatory Commission (CBIRC) and added key responsibilities for macroprudential supervision to the mandate of the People's Bank of China.[68] In 2020, the UK government added its objective for the greening of private sector financial flows to its remit for the BoE's Financial Policy Committee (FPC) and, inter alia, tasked the FPC to support the pursuit of this goal. And a year later, in March 2021, it released an updated remit for the BoE's Monetary Policy Committee that added the goal of an environmentally sustainable and resilient net zero economy to its objectives.[69]

In addition to such changes and amendments through legislation and government policy, the definition of goals within existing mandates is also frequently subject to recalibrations by those governing finance themselves. Many financial authorities have significant degrees of discretion in the interpretation and concretization of the mandates given to them. The fact that the ECB and the Fed, among others, themselves decide on the definition of price stability – including the inflation measure, the quantitative target for that measure as well as the time horizon across which it is to be pursued – is a case in point. The ECB adopted a definition of price stability in 1998 that set its goal to be a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) in the Euro area of below 2 percent over the medium term. In 2003, as a result of the first review of its monetary policy strategy, the ECB clarified that it is targeting inflation below, *but close to*, 2%. In the context of its current strategy review, it is exploring whether this inflation aim remains appropriate.[70] The Fed adopted its first explicit inflation target, an annual increase of 2 percent in the Personal Consumption Expenditure Price Index (PCEPI), in 2012. In August 2020, it amended that definition to link it to the *average* inflation over time, so that periods where inflation is below 2 percent would likely be followed by monetary policy aiming for inflation above 2 percent and vice versa.[71]

Further ambiguity in mandates abounds. While the objective of price stability often leaves room for interpretation, it usually in its operationalization gets linked to an explicit target. In contrast, the objective of financial stability frequently remains vague. We know that the objective has been missed once we enter a financial crisis. But short of a crisis, we lack targets on the degree of financial stability we are seeking and thus the level of financial risk societies are prepared to take. We often also lack clarity on how financial authorities deal with the potential trade-offs between different objectives – e.g. those between price and financial stability, and those between safeguarding consumer protection and fostering innovation.

«If you accept the case for detailed rules being made by regulators, the next debate then is over what checks and balances are needed to give stakeholders confidence in the operation of the new framework. Might we pursue the stability of the graveyard by imposing ever more stringent rules? Or might we go the other way, becoming captured by industry and not protecting policyholders enough? Put bluntly, can we be trusted with more power?» – Sam Woods; Deputy Governor, Bank of England; Chief Executive Officer, Prudential Regulation Authority[72]

The decisions on targets and trade-offs have significant real-life repercussions. Whether a central bank focuses its inflation target exclusively on the prices of goods and services or whether it also accounts for asset price inflation in its decisions has considerable effects on the distribution of wealth.[73] Whether a central bank uses an inflation measure such as the HICP which excludes the cost of owner-occupied housing has important implications for the relevance of a key item in household expenditures.[74] Whether a central bank gives more or less emphasis to its inflation target over its financial stability goal has critical effects on credit growth and thus ultimately output and employment.[75] And whether a financial supervisor attaches more or less weight to safeguarding consumer protection in its licensing of new financial services has material consequences for the trajectory of financial innovation.[76]

The question to which degree such decisions on targets and trade-offs should be taken by those governing finance themselves – and thus what the appropriate level of "goal independence" should be – is therefore a significant one. Current approaches differ widely. While some central banks, such as the ECB, the Fed and the SNB, have discretion in defining their inflation targets, others, such as the BoE and the Reserve Bank of Australia, have the government involved in concretizing their price stability goals. HM Treasury's remits and recommendations for the BoE's monetary and financial policy committees as well as its prudential regulation committee also define the government's economic policy objectives that the BoE is mandated to support.[77]

Similarly, the decision to which extent financial authorities should have "instrument independence" and thus autonomy in deploying their policy toolkits is critical. Instrument and goal independence have been at the heart of the monetary policy function of central banks for many decades. Its key role resulted from a growing recognition in the 1970s that anchoring inflation expectations is vital for price stability and requires credible commitments to non-inflationary paths. It also reflects the view that such commitments must be shielded against pressures from policymakers seeking short-term economic gains and pre-election popularity. Against this backdrop, starting in the 1990s, central banks across the world were granted significant degrees of instrument independence – and in some cases goal independence – to pursue their monetary policy mandates.[78]

The debate whether current levels of independence are commensurate with central bank powers and the challenges ahead is moving up policy agendas worldwide. As their mandates expand, their toolboxes grow, and their impacts on societies widen, calls for a review of central bank decision-making and its coordination with other policy fields abound. Five aspects should guide these reassessments.

«Ultimately, independence is simply a means to an end; as such, it is not a right and must be earned by retaining public legitimacy. This is not just a matter of how central banks perform their tasks, namely being transparent and accountable. It is also a matter of what [...] they do and, in particular, whether they succeed in meeting expectations.» – Claudio Borio; Head of the Monetary and Economic Department, Bank for International Settlements[79]

First, central bank independence is not a binary concept, but a matter of degree. Financial authorities, like any public agency to which powers are delegated, require an adequate level of autonomy to deliver on their mandates. At the same time, they never act in a vacuum, but are subject to narrower or wider guardrails.

Second, reviewing the independence of central banks requires a clear distinction between goal and instrument independence, as well as between their role as monetary policy decision makers and other functions they may have. The case for independence in the conduct of monetary policy rests on the objective of anchoring inflation expectations. This specific rationale is not applicable to other central bank functions.[80]

Third, levels of discretion must be aligned with the instruments that are being deployed and the effects they have. A central bank that confines itself to moving a single policy rate up or down has different repercussions on society than one that also engages in asset purchases, targeted refinancing operations, and yield curve management. The decision-making process must reflect that – not only to safeguard legitimacy, but also to ensure that choices with broad societal repercussions are made with the diversity in views and expertise they require.

Fourth, a review of independence must be granular. Degrees of discretion can vary across and within different instruments. Central banks may have full autonomy in deciding on policy rates but have finance ministries involved when they act as lenders of last resort. They may independently decide on the size of their balance sheet, but have parliament define investment principles. And they may be subject to different decision-making processes for instruments they use in normal times and those they deploy during crisis.

Finally, independence must be understood broadly and thus not only cover levels of autonomy from government, but also the ability to take decisions without undue influence from other actors. The extent to which central banks are dependent on market participants in transmitting monetary policy, the degree to which regulatory capture affects supervisory decisions, and the constraints on financial policy space posed by the actions of other central banks and supervisors are critical dimensions to consider.[81]

A review of the capacities, beliefs and assumptions of the institutions governing finance is equally vital in this context. As objectives are recalibrated and toolboxes adapted, knowledge and expertise must be aligned accordingly. Developing in-house capabilities to engage on digital finance, to broaden analysis on the distributive consequences of monetary policy, and to deepen insights into the linkages between financial supervision and environmental goals are cases in point. Establishing processes to strengthen collaboration with other institutions and stakeholders are further steps to take. In parallel, the profound changes in the functioning of the world economy and financial markets call for a thorough reconsiderations of prevailing beliefs and assumptions. Busting through silos and building diversity in knowledge, perspectives and concerns is essential for that.[82]

Financial policymakers have already started moving in this direction. Many have expanded their research agendas and introduced broader societal questions as well as new methodologies and data to their analysis. The BoE's "One Bank Research Agenda" as well as the creation of the "Applied Critical Thinking" unit at the Federal Reserve Bank of New York are examples for that.[83] The contributions generated through the Central Banks and Supervisors Network for Greening the Financial System (NGFS) as well as its work program for 2020-2022 provide further illustrations.[84] Several central banks have also embedded a broadened scope into their strategic reviews and identified knowledge gaps to be closed.[85] Some are contributing to joint initiatives, such as the Innovation Hub of the Bank for International Settlements (BIS), to drive the generation of insights and the development of new public goods. And a few have explicitly highlighted the risk of groupthink as a challenge to tackle.[86]

Accelerating this momentum is critical. While first steps towards a broadening of expertise and perspectives have been taken, progress has been slow. Educational and professional backgrounds of central bank decision makers continue to converge on a narrow range. Gender and racial diversity remain low. The 19 national central banks in the Eurozone are exclusively presided by men. Only two out of twelve regional Federal Reserve Banks in the US are run by non-white presidents. The other ten never had a non-white president throughout the Fed's history. The advisory groups central banks engage with continue to be largely confined to market participants. And the models they rely on frequently still only reflect a narrow set of schools of thought.[87]

For financial authorities to safeguard both the capacity and legitimacy for taking decisions this must change. Talent pools must be expanded and hiring practices amended – not just in relation to gender and racial diversity, but also in terms of social, educational and professional backgrounds. Increasing inclusivity within a narrow group of those with a degree in economics falls short of the cognitive diversity that is required to reflect different views on priorities, analysis and solutions. Macroeconomists are needed, but not sufficient to deal with the highly complex world financial authorities face. New thinking and alternative views must be encouraged, and incentives adapted accordingly. Digital expertise, notably in relation to digital currencies and the increased use of technology in supervision ("suptech"), needs to be strengthened. Advisory groups should be opened up to a more diverse set of voices from government, the economy, academia, NGOs and civil society. Approaches that are more nimble, bust silos, and ensure rapid feedback as well as learning need to move up agendas. And a closer look at potential synergies with reforms to *corporate* governance – such as the introduction of public interest principles and trustees to protect them within private sector companies[89] – should receive more attention.

> *«[...] there's a growing body of research that confirms the benefits that inclusive diversity can bring to complex problem-solving, decision-making, governance, risk management, attracting talent, employee engagement and more. I believe that advancing diversity and fostering inclusion matters now more than ever.» – Gabriel Makhlouf; Governor, Central Bank of Ireland*[88]

Increased transparency and accountability in financial policymaking must accompany these changes. Ensuring objectives and quantitative targets are well defined is an essential cornerstone for that. Clarifying potential trade-offs and how to deal with them is equally critical. And seeing to it that political institutions and further stakeholders have the information they need to hold financial authorities accountable is key. Frequent in-depth dialogues between financial authorities and parliaments are one of several important pillars for that. Public speeches, listening events and engagement on social media provide further platforms. Central banks and financial supervisors should be tasked to explain the rationale for the decisions they took, the alternatives that have been evaluated, as well as the impacts their actions have on broader societal goals. They should also be asked to regularly report on their safeguards to mitigate against conflicts of interest and regulatory capture.[90] The disclosure of dissenting views as well as the rotation of key staff and the establishment of whistleblowing platforms are examples to consider in this context. Where financial authorities delegate tasks to other institutions – such as to private audit companies taking over supervisory responsibilities – mechanisms need to be put in place to expand the scope of transparency and accountability accordingly. And where central banks and supervisors use algorithms to perform their duties, accountability for the programming and outcomes of such tools must equally move into political oversight.

Across all these realms, global cooperation is critical. Coordination among central banks in their pursuit of monetary policy objectives – bilaterally as well as through the BIS, the G20, the International Monetary Fund (IMF) and other fora – is a centerpiece of the global financial architecture. International standards, such as those set through the Basel Committee on Banking Supervision and the International Organization of Securities Commissions are a further key pillar. The FSB, the Committee on Payments and Infrastructure at the BIS as well as the Financial Action Task Force provide additional venues for cooperation.

«[...] the global financial crisis was also a testimony to the fact that coordination of policies both at the global and domestic level is important for macro-financial stability. It is only through better coordination between central banks and between monetary and fiscal authorities in the domestic sphere that adverse consequences of spillovers and spillbacks could be contained.» – Shaktikanta Das; Governor, Reserve Bank of India[91]

A reassessment of the institutional set-ups as well as the power structures that underpin these venues is imperative. Global monetary policy coordination rests largely on a few particularly potent central banks – notably on the crucial role of the Fed in a global financial system dominated by the US dollar. The mandates of all of them are limited to national interests. Against this background, ensuring that a broader set of voices is heard in monetary policy coordination is vital. Reflecting international spillovers – such as those from the Fed's taper announcement in 2013 – is an equally essential aspect to advance. Recognizing the influence of geopolitical interests in central bank deliberations is a further important dimension to consider. Similarly, global financial standard setting is primarily driven by a core of actors from advanced economies. To what extent their goals and contexts align with those of the "standard-takers", to what degree the implementation of global rules can and must be balanced with the needs of individual countries, and how financial supervisors in one country can and should account for the effects of their decisions in other economies must be put under a growing spotlight.[92]

CONCLUSION – SEIZING THE OPPORTUNITY

Our current approach to the governance of finance is inadequate. The prevailing descriptions of its purpose, instruments and institutions are out of touch with reality. Central banks are not just the guardians of price stability. Their responsibilities cover a much wider range of objectives. The instruments they deploy and the choices they make have societal implications that go far beyond their impact on inflation. Their institutional set-ups are more complex than a simple reference to "independence" can capture. The influence of financial supervisors does not stop at the boundaries of financial markets. They shape all aspects of our lives.

Acknowledging the broader purpose of the governance of finance to foster sustainable prosperity is pivotal. The interpretation of this objective will differ from country to country. It will also change across time. But it provides the compass that must guide financial authorities in their decisions.

Harnessing the instruments of financial governance for this broader purpose is urgent. The challenges to social cohesion from persistent unemployment, rising inequality and growing debt levels require rapid and comprehensive responses through all policy levers – including those in the hands of financial authorities. Threats posed by climate change and environmental degradation call for sweeping global action – also from central banks and financial supervisors. And the digital disruption of finance makes concerted governance measures to seize its opportunities and mitigate the risks ever more critical.

Accelerating reforms to build the institutional capacity for this broader agenda is essential. A granular review of current institutional set-ups to ensure coherence with other policy fields and related provisions in terms of independence, accountability and transparency are an important first step in this direction. Raising cognitive diversity, developing expertise in new fields, expanding interaction with stakeholders, busting silos and establishing processes to foster rapid learning are further measures to take. Bringing new voices to global venues on financial governance and moving international spillovers up both monetary policy and financial regulatory agendas is equally essential.

We have a significant opportunity to come back stronger from the current crisis. Financial governance stands at the core of that. Aligning its purpose, instruments and institutions with the broader objective of sustainable prosperity is vital. First steps in that direction have been taken. Many more must follow. Urgently.

«In many minds, [central banks and innovation] are still somewhat at odds. That is not unreasonable. But if that describes your mind, I want to convince you otherwise.» – Benoît Cœuré, Head of the BIS Innovation Hub, Bank for International Settlements[93]

ENDNOTES

[1] See White, W. (2013). *Is Monetary Policy a Science? The Interaction of Theory and Practice Over the Last 50 Years*, Federal Reserve Bank of Dallas, September 2013; Braun, B. and L. Downey (2020). *Against Amnesia. Re-Imagining Central Banking*, Council on Economic Policies, January 2020; van Tilburg, R. and A. Simić (2021). *Every Avenue Available. Lessons from Monetary History for Tackling Climate Change*, Sustainable Finance Lab, February 2021.
[2] Powell, J. (2019). *Challenges for Monetary Policy*, Fed, 23 August 2019.
[3] Selgin, G. (2020). *When the Fed Tried to Save Main Street*, Cato Institute, 30 March 2020; Fettig, D. (2002). *Lender of More Than Last Resort*, Federal Reserve Bank of Minneapolis, 1 December 2002.
[4] Ryan-Collins, J. (2015). *Is Monetary Financing Inflationary? A Case Study of the Canadian Economy, 1935–75*, Levy Economics Institute, October 2015.
[5] Epstein, G. (2005). *Central Banks as Agents of Economic Development*, Political Economy Research Institute, September 2005.
[6] Roger, S. (2009). *Inflation Targeting at 20: Achievements and Challenges*, IMF, October 2009.
[7] Yi, G. (2021). *Make Full Use of China's Monetary Policy Space and Promote Green Finance*, PBC, 21 March 2021.
[8] Lagarde, C. (2020a). *The Monetary Policy Strategy Review: Some Preliminary Considerations*, ECB, 30 September 2020.
[9] See BIS (2011). *The Future of Central Banking Under Post-Crisis Mandates*, BIS, January 2011; G30 (2015). *Fundamentals of Central Banking. Lessons from the Crisis*, G30, October 2015; BoE (2015). *One Bank Research Agenda*, BoE, October 2015; Zhou, X. (2016). *Managing Multi-Objective Monetary Policy: From the Perspective of Transitioning Chinese Economy*, IMF, June 2016; Tucker, P. (2018). *Unelected Power*, Princeton University Press; Carstens, A. (2019). *The New Role of Central Banks*, BIS, 14 March 2019.
[10] Kuroda, H. (2019). *Toward Inclusive and Sustainable Development*, BoJ, 15 March 2019.
[11] See Carney, M. (2015). *Breaking the Tragedy of the Horizon. Climate Change and Financial Stability*, BoE, September 2015; Kashkari, N. (2017). *Introducing the Opportunity and Inclusive Growth Institute*, Federal Reserve Bank of Minneapolis, 18 January 2017; Shanmugaratnam, T. et al. (2018). *Making the Global Financial System Work for All*, G20 Eminent Persons Group on Global Financial Governance, October 2018.
[12] See G20 (2018). *G20 Leaders' Declaration: Building Consensus for Fair and Sustainable Development*, 1 December 2018.
[13] ECB (2020). *ECB Announces €750 Billion Pandemic Emergency Purchase Programme (PEPP)*, ECB, 18 March 2020; Kuroda, H. (2020). *Novel Coronavirus (COVID-19): Economic and Financial Developments and the Responses Taken by the Bank of Japan*, BoJ, 14 May 2020; BoE (2020). *Monetary Policy Summary for the Special Monetary Policy Committee Meeting on 19 March 2020*, BoE, 19 March 2020.
[14] Elderson, F. (2021). *Greening Monetary Policy*, ECB, 13 February 2021.
[15] See Barkawi, A. and J. Siaba Serrate (2019). *Central Banks and the G20 Agenda: Ensuring Policy Coherence*, T20, March 2019; Robins, N. et al. (2021). *Net-Zero Central Banking: A New Phase in Greening the Financial System*, London School of Economics, March 2021.
[16] Njoroge, P. (2020). *Afro-Asia Fintech Festival Nairobi Online City. Closing Remarks*, Central Bank of Kenya, 9 December 2020.
[17] Bailey, A. (2021). *Modern Challenges for the Modern Central Bank: Perspectives from the Bank of England*, BoE, 5 February 2021.

[18] See Woodford, M. (2005). *Central Bank Communication and Policy Effectiveness*, NBER, December 2005; Ernst, E. and R. Merola (2018). *Central Bank Communication: A Quantitative Assessment*, International Labour Office, August 2018; Blot, C. and P. Hubert (2018). *Central Bank Communication During Normal and Crisis Times*, European Parliament, September 2018.
[19] BIS (2020). *Central Banks and Payments in the Digital Era*, BIS, June 2020.
[20] See BIS (2019). *Beyond LIBOR: A Primer on the New Reference Rates*, BIS, March 2019.
[21] See Braun, B. (2020). *Central Banking and the Infrastructural Power of Finance: The Case of ECB Support for Repo and Securitization Markets*, Socio-Economic Review, April 2020.
[22] Loh, J. (2020). *Act Now to Transition to SORA*, MAS, 9 September 2020.
[23] See Saiki, A. and J. Frost (2019). *Unconventional Monetary Policy and Inequality – Is Japan Unique?*, Council on Economic Policies, September 2019.
[24] See Honohan, P. (2019). *Should Monetary Policy Take Inequality and Climate Change Into Account?*, Peterson Institute for International Economics, October 2019; Monnin, P. (2020). *Shifting Gears: Integrating Climate Risks in Monetary Policy Operations*, Council on Economic Policies, January 2020.
[25] See Brown, M. and K. Blickle (2016). *Liquidity Constraints, Wealth Transfers and Home Ownership*, University of St. Gallen, September 2016.
[26] BoE and HM Treasury (2013). *Bank of England and HM Treasury Announce Extension to the Funding for Lending Scheme*, BoE, 24 April 2013.
[27] ECB (2014). *ECB Announces Monetary Policy Measures to Enhance the Functioning of the Monetary Policy Transmission Mechanism*, ECB, 5 June 2014.
[28] Chan, N. (2018). *Hong Kong's Pivotal Role in Infrastructure Financing*, HKMA, 15 October 2018; Yue, E. (2018). *Exchange Fund's Investment in Infrastructure – Creating Value by Adopting a Gradual and Prudent Approach*, HKMA, 29 October 2018.
[29] Fed (2020). *Federal Reserve Takes Additional Actions to Provide up to $2.3 Trillion in Loans to Support the Economy*, Fed, 9 April 2020.
[30] See Bunn, P. et al. (2020). *Has Monetary Policy Made You Happier?*, BoE, July 2020.
[31] William, J. (2020). *Building an Equitable Future*, Federal Reserve Bank of New York, 24 September 2020.
[32] Powell, J. (2020). *New Economic Challenges and the Fed's Monetary Policy Review*, Fed, 27 August 2020. Also see Feiveson, L. et al. (2020). *Distributional Considerations for Monetary Policy Strategy*, Fed, August 2020.
[33] Wilkins, C. (2020a). *Opening Remarks – Toward the 2021 Renewal of the Monetary Policy Framework*, Bank of Canada, 26 August 2020.
[34] See NGFS (2021). *Adapting Central Bank Operations to a Hotter World: Reviewing Some Options*, NGFS, March 2021.
[35] Flodén, M. (2019). *Monetary Policy in a Changing World*, Sveriges Riksbank, 13 November 2019; Riksbank (2020). *Programme for the Riksbank's Asset Purchases for Monetary Policy Purposes in 2021*, Sveriges Riksbank, 25 November 2020.
[36] Jordan, T. (2020). *Introductory Remarks. News Conference of the Swiss National Bank*, SNB, 17 December 2020.
[37] Lagarde, C. (2020b). *Interview with France 2*, ECB, 5 June 2020; Schnabel, I. (2020). *Never Waste a Crisis: COVID-19, Climate Change and Monetary Policy*, ECB, 17 July 2020; Villeroy de Galhau, F. (2018). *The Role of Finance: Anticipating Climate Risks, Financing Transition Opportunities*, Banque de France, 28 November 2018; Weidmann, J. (2020). *How Central Banks Should Address Climate Change,* Financial Times, 19 November 2020.

[38] Weidmann (2020).
[39] BoE (2021). *MPC Remit Statement and Letter and FPC Remit Letter*, BoE, 3 March 2021.
[40] See Cook, W. and C. McKaye (2017). *Banking in the M-PESA Age. Lessons from Kenya*, Consultative Group to Assist the Poor, September 2017.
[41] DNB (2018). *An Energy Transition Risk Stress Test for the Financial System of the Netherlands*, DNB, October 2018; BoE (2019). *Insurance Stress Test 2019*, BoE, June 2019; Bloomberg Green (2020). *China Plans Quarterly Look Into Banks' Green Finance Performance*, Bloomberg, 21 July 2020; Stiroh, K. (2020). *The Basel Committee's Initiatives on Climate-Related Financial Risks*, BIS, 14 October 2020.
[42] Conti-Brown, P. (2020). *Explaining the New Fed-Treasury Emergency Fund*, Brookings, 3 April 2020.
[43] Hernández de Cos, P. (2021). *The Role of Central Banks and Banking Supervisors in Climate Action*, Banco de España, 17 March 2021.
[44] Bank of Canada (2020). *Bank of Canada to Introduce a Provincial Bond Purchase Program*, Bank of Canada, 15 April 2020.
[45] Lowe, P. (2020). *Statement by Philip Lowe, Governor: Monetary Policy Decision*, Reserve Bank of Australia, 19 March 2020.
[46] ECB (2020a). *ECB Announces €750 Billion Pandemic Emergency Purchase Programme (PEPP)*, ECB, 18 March 2020.
[47] BoE and HM Treasury (2020). *Joint HM Treasury and Bank of England Covid Corporate Financing Facility (CCFF)*, BoE, Market Notice, 18 March 2020.
[48] Jordan, T. (2020). *Introductory Remarks by Thomas Jordan*, SNB, 26 March 2020.
[49] See Monnin, P. (2020). *The ECB Response to COVID-19*, Council on Economic Policies, 27 March 2020.
[50] See Elliott, D.J., G. Feldberg and A. Lehnert (2013). *The History of Cyclical Macroprudential Policy in the United States*, Fed, May 2013.
[51] See Monnet, E. (2018). *Controlling Credit. Central Banking and the Planned Economy in Postwar France, 1948-1973*, Cambridge University Press, October 2018.
[52] Business Development Bank of Canada (2019). *BDC's History*, Business Development Bank of Canada, https://www.bdc.ca/en/about/who-we-are/pages/history.aspx, retrieved on 9 February 2021.
[53] See Dorn, J.A. (2020). *The Phillips Curve: A Poor Guide for Monetary Policy*, Cato Journal, Winter 2020.
[54] See White, W. (2019). *Changing Landscapes for Central Banks and Financial Regulators*, Council on Economic Policies, March 2019.
[55] See Chien, Y.L. and J. Bennett (2019). *Decomposing the Low PCE Inflation Rate*, Federal Reserve Bank of St. Louis, October 2019; Perrella, A. and J. Catz (2020). *Integrating Microdata for Policy Needs: The ESCB Experience*, ECB, February 2020.
[56] Skingsley, C. (2020). *Post-Pandemic Monetary Policy and the Future of the Interest Rate as a Policy Tool*, Sveriges Riksbank, 7 October 2020.
[57] See BIS (2020). *Central Bank Digital Currencies: Foundational Principles and Core Features*, BIS, October 2020; Niepelt (2020). *Digital Money and Central Bank Digital Currency: An Executive Summary for Policymakers*, VoxEU, 3 February 2020.
[58] See Brunnermeier, M. et al. (2019). *The Digitalization of Money*, Working Paper, August 2019.
[59] UNSG's Task Force on Digital Financing of the SDG (2020). *People's Money. Harnessing Digitalization to Finance a Sustainable Future*, United Nations, August 2020.

[60] See ECB (2020). *ECB Intensifies Its Work on a Digital Euro*, ECB, 2 October 2020; Vigna, P. and D. Michaels (2020). *SEC Sues Ripple Over XRP Cryptocurrency*, Wall Street Journal, 22 December 2020; Lima, M.S. and K. Wagner (2020). *Brazilian Authorities Suspend WhatsApp Payments*, Bloomberg, 24 June 2020; Jia, D. (2018). *PBOC to Raise Reserve-Funds Ratio for Third-Party Payment Firms to 100%*, Caixin, 30 June 2018; Cornelli, G. et al. (2020). *Inside the Regulatory Sandbox: Effects on Fintech Funding*, BIS, 9 November 2020; Ehrentraud, J. (2020). *Regulating Fintech Financing: Digital Banks and Fintech Platforms*, BIS, August 2020; Elliott, J. and N. Jenkinson (2020). *Cyber Risk is the New Threat to Financial Stability*, IMF, 7 December 2020.

[61] Guo, S. (2020): *FinTech Developments, Challenges and Supervision in China*, PBC, 8 December 2020.

[62] Fed (2016). *The Federal Reserve System. Purposes & Functions*, Fed, October 2016.

[63] Fed (2015). *Federal Reserve Board Approves Final Rule Specifying Its Procedures for Emergency Lending under Section 13(3) of the Federal Reserve Act*, Fed, November 2015.

[64] ECB (2014). *ECB Assumes Responsibility for Euro Area Banking Supervision*, ECB, 4 November 2014.

[65] See Constâncio, V. et al. (2019). *Macroprudential Policy at the ECB: Institutional Framework, Strategy, Analytical Tools and Policies*, ECB, July 2019; Kern, A. (2016). *The European Central Bank and Banking Supervision: The Regulatory Limits of the Single Supervisory Mechanism*, European Company and Financial Law Review, October 2016.

[66] Single Resolution Board (2015). *Banking Union – Single Resolution Board Fully Operational As of 1 January 2016*, Single Resolution Board, 30 November 2015.

[67] State Council (2017). *China Establishes Financial Stability and Development Committee*, State Council, 9 November 2017.

[68] Zhang, S. and S.Y. Lee (2018). *China to Merge Regulators, Create New Ministries in Biggest Overhaul in Years*, Reuters, 13 March 2018.

[69] Sunak, R. (2020a). *Remit and Recommendations for the Financial Policy Committee*, HM Treasury, 11 March 2020; Sunak, R. (2021). *Remit for the Monetary Policy Committee (MPC)*, HM Treasury, 3 March 2021.

[70] ECB (2003). *The ECB's Monetary Policy Strategy*, ECB, 8 May 2003; Lagarde (2020a).

[71] Powell, J. (2020). *New Economic Challenges and the Fed's Monetary Policy Review*, Fed, 27 August 2020.

[72] Woods, S. (2021). *Brave New World*, BoE, 16 March 2021.

[73] See Adam, K. and P. Tzamourani (2015). *Distributional Consequences of Asset Price Inflation in the Eurozone*, VoxEU.org, 3 December 2015.

[74] See Gros, D. (2018). *Persistent Low Inflation in the Euro Area. Mismeasurement Rather than a Cause for Concern?*, European Parliament, February 2018.

[75] See Kim, S. and A. Mehrotra (2016). *Maintaining Price and Financial Stability by Monetary and Macroprudential Policy – Evidence from Asia and the Pacific*, BIS, October 2016.

[76] See ASBA and IDB Lab (2020). *Consumer Protection in the New Environment of Financial Technological Innovation*, Association of Supervisors of Banks of the Americas, June 2020.

[77] Australian Government and RBA (2016). *Statement on the Conduct of Monetary Policy*, 19 September 2016.

[78] See Dall'Orto Mas, R. et al. (2020). *The Case for Central Bank Independence*, ECB, October 2020.

[79] Borio, C. (2019). *Central Banking in Challenging Times*, BIS, 8 November 2019.

[80] See Mersch, Y. (2017). *Central Bank Independence Revisited*, ECB, 30 March 2017.

[81] See Braun (2020); Monnet, E. et al. (2019). *Beyond Financial Repression and Regulatory Capture: The Recomposition of European Financial Ecosystems After the Crisis*, London School of Economics, September 2019; Veltropa, D. and J. de Haan (2014). *I Just Cannot Get You Out of My Head: Regulatory Capture of Financial Sector Supervisors*, De Nederlandsche Bank, January 2014; Agénor, P. and L. Pereira da Silva (2018). *Financial Spillovers, Spillbacks, and the Scope for International Macroprudential Policy Coordination*, BIS, April 2018.
[82] See Tett, G. (2015). *The Silo Effect: The Peril of Expertise and the Promise of Breaking Down Barriers*, Simon & Schuster; Florini, A. and S. Sharma (2020). *Reckoning with Systemic Hazards*, Finance & Development, June 2020.
[83] BoE (2015). *One Bank Research Agenda*, BoE, February 2015; Torres, C. (2019). *The New York Fed Has a Black Swan Hunter*, Bloomberg, 24 July 2019.
[84] See NGFS (2020). *NGFS Publishes its 2020-2022 Work Program and Announces Changes in the Governance*, Central Banks and Supervisors Network for Greening the Financial System, 3 September 2020.
[85] See Wilkins (2020b). *Closing Remarks – Toward the 2021 Renewal of the Monetary Policy Framework*, Bank of Canada, 26 August 2020.
[86] See bin Ibrahim, M. (2018). *Public Policy Perspective – Some Thoughts and Contemplations from a Central Banker*, Bank Negara Malaysia, 9 February 2018; Sibley, E. (2018). *Diversity is the Best Bulwark Against Groupthink*, ECB, 15 August 2018.
[87] See Schnabel, I. (2020). *Women are Central, Not Just in Central Banks*, ECB, 28 September 2020; OMFIF (2020). *Gender Balance Index 2020*, OMFIF; Saraiva, C. et al. (2020). *Fed's Top Ranks Dominated by White Men Despite Diversity Push*, Bloomberg, 9 July 2020; Usita, K. (2020). *Central Banks' Diversity Problem*, OMFIF, 17 June 2020; Haar, K. (2017). *Open Door for Forces of Finance at the ECB*, Corporate Europe Observatory, October 2017.
[88] Makhlouf, G. (2020). *Inclusion, Diversity, and the Pandemic*, BIS, 5 October 2020.
[89] See e.g. the "*Trust Principles*" of ThomsonReuters.
[90] See Igan, D. and T. Lambert (2019). *Bank Lobbying: Regulatory Capture and Beyond*, IMF, August 2019; Langenbucher, K. et al. (2020). *What are the Wider Supervisory Implications of the Wirecard Case?*, European Parliament, November 2020; GAO (2020). *FDIC Could Better Address Regulatory Capture Risks*, US Government Accountability Office, September 2020.
[91] Das, S. (2019). *Evolving Role of Central Banks*, Reserve Bank of India, 17 June 2019.
[92] See Ammer, J. (2016). *International Spillovers of Monetary Policy*, Fed, 8 February 2016; Ng, S. and N. Timiraos (2020). *Covid Supercharges Federal Reserve as Backup Lender to the World*, Wall Street Journal, 3 August 2020; Jones, E. and P. Knaack (2020). *Global Financial Regulation: Shortcomings and Reform Options*, Global Policy, May 2019.
[93] Cœuré, B. (2020). *Moving Fast and Not Breaking Things – Central Banks and Innovation*, BIS, 7 December 2020.