Financial Stability Institute | BIS

Current challenges for the banking industry: the role of public policy

Fernando Restoy[1]

Chair, Financial Stability Institute, Bank for International Settlements

Mexican Banking Association Finance and Markets Seminar 2023
Virtual, 24 November 2023

1. Introduction

Many thanks to the organiser for inviting me to take part in this event. My remarks today will focus on the challenges facing the banking industry and banking regulation against the backdrop of the significant changes of various kinds that are affecting banks' role as intermediaries for the economy's financial flows.

My speech will be structured as follows. First, I will give an overview of some important changes in the framework in which banks operate, highlighting three: first, technological developments, which affect the production processes in the financial sector, the types of services it offers and the kind of entities that participate in the different market segments; second, the configuration, based on the post-Great Financial Crisis (GFC) reforms of a new regulatory framework that is much more demanding for banks than the pre-GFC one; and third (and connected to the other two), the transition to a new competitive environment in which traditional banks must compete with other types of entities in activities which used to be reserved for commercial banking. I will then describe how these factors have affected banks' business and, in particular, altered their risk profile. I will conclude with how these developments represent new challenges for public intervention in the banking sector and point to some areas where it needs to evolve, looking at both regulatory and supervisory actions.

2. The evolution of the banking environment

Technological disruption

Technological innovations, particularly digitalisation, have affected all aspects of banking. First, they have profoundly changed the processes related to the provision of financial services. Digitalisation has changed internal information management systems, risk assessment systems

[1] I am grateful to Rodrigo Coelho, Johannes Ehrentraud, Rebeca Guerra and Marie-Christine Drexler for their assistance in the preparation of this speech.

The views expressed are my own and do not necessarily reflect the views of the BIS or the Basel-based regulatory bodies.

and interaction with clients, which now takes place mainly via virtual channels. Likewise, value chains have become more complex as banks increasingly rely on the contracting of technology services (such as cyber security, programming and cloud computing) to external providers.

The industry is now using artificial intelligence (AI) for various purposes, including customer categorisation, risk assessment models and fraud detection. While it is still too early to specify AI's practical scope, the most recent innovations (such as large language models) will undoubtedly have additional profound implications.

In addition, the recent development of distributed ledger technology (DLT) has produced different types of digital assets, such as cryptoassets or the poorly named stablecoins. DLT also facilitated the emergence of decentralised mechanisms for negotiating and settling financial transactions, reducing the role played by traditional financial intermediaries.

Finally, information technology has given rise to new financial service providers, such as fintechs and, above all, big techs. These tech firms use their ability to exploit extensive data sets to compete in markets such as payment services, credit provision or wealth management, for which a banking licence is generally not required.

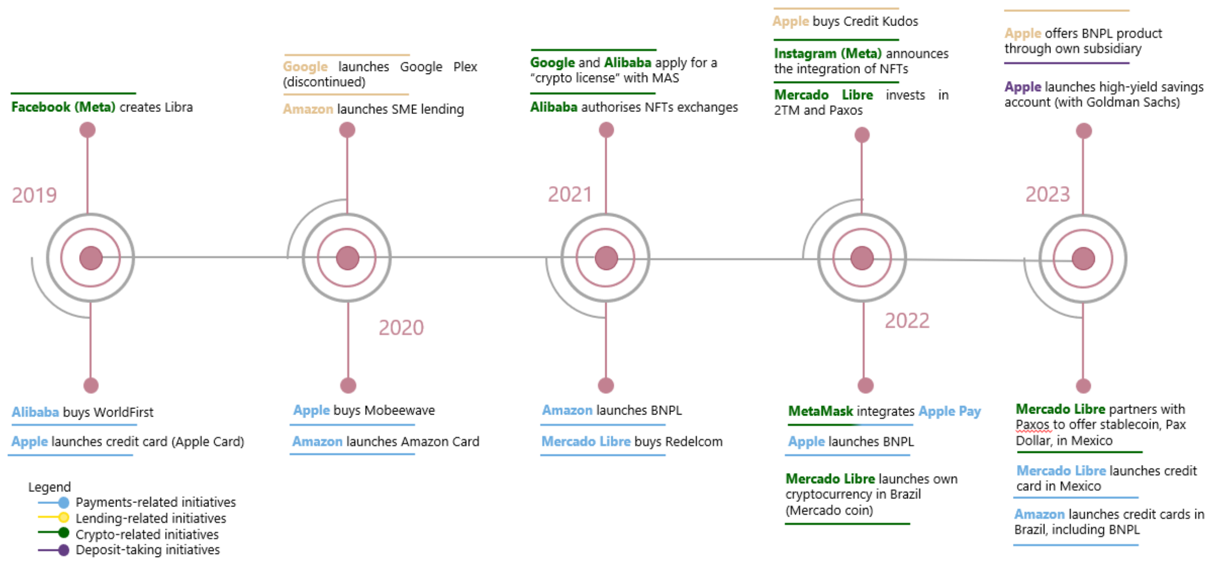
The case of big techs is particularly relevant. Firms like Amazon, Meta, Apple, Google etc, which started out by offering one particular service, soon learned to use the available data about their customers and their technological capability to offer more services. These attract more customers, who, in turn, generate more data. These data are used to continue expanding the services these companies offer, which in turn helps them to attract even more customers (BIS (2019)).

This dynamic, known in the academic literature as network effects, offers customers new products and services and facilitates their access to them. Even so, big techs' business model promotes concentration and generates incentives to adopt anti-competitive practices, as is evidenced by the numerous sanctions which various jurisdictions' competition authorities have placed on firms such as Google and Amazon.

In recent years, big techs have considerably increased their participation in the market for financial services (Graph 1). Several of them have for some time been offering payment services (like Apple Pay or the Amazon card). More recently they have stepped up their activity in the provision of consumer credit (through eg "buy now, pay later" services), cryptoasset-related services and even banking products through collaborations with financial institutions (eg the partnership between Apple and Goldman Sachs for the launch of a high-yielding savings account). Finally, big techs like Amazon, Microsoft and Google are the main providers of information storage and cloud computing services for all types of firms, obviously including banks.

Financial Stability Institute | BIS

Big tech participation in the financial sector	Graph 1



Source: FSI.

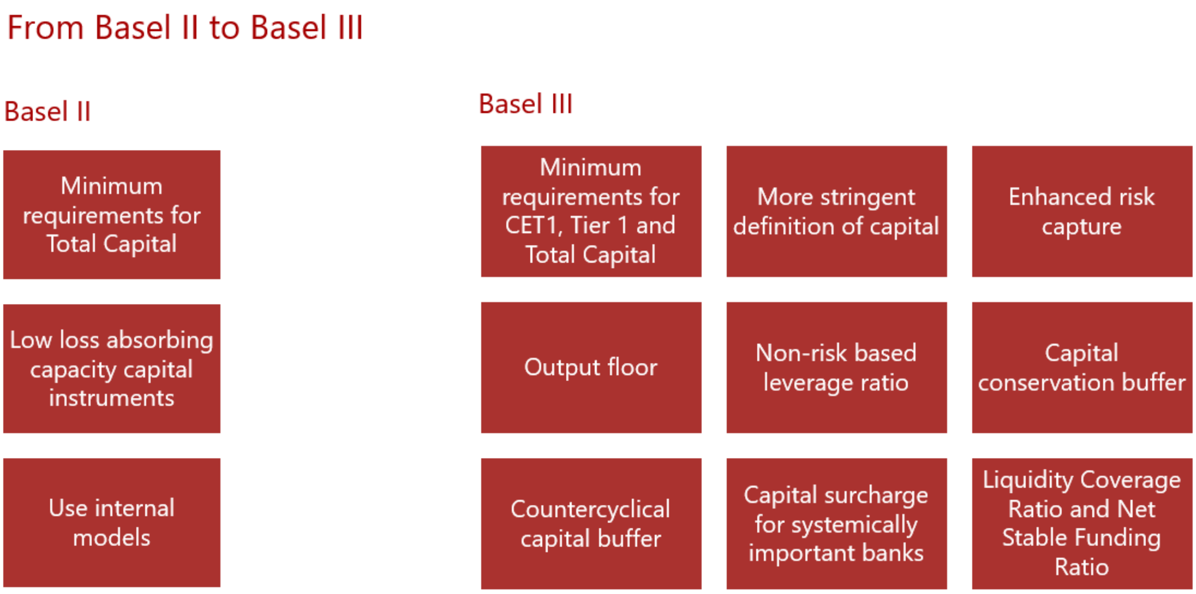
In providing financial services, big techs generally use the tech platforms and customer databases that they use in the other services they provide. This interdependence between financial and non-financial services gives rise to contagion risk among activities and the risk of loss of confidentiality of customer information, and increases the scope for the risks described before related to abuse of positions of market dominance (Crisanto et al (2020)). We will return to this later.

The new regulatory framework

The second important development that directly affects the banking sector's current situation and prospects is the considerable increase in regulatory demands in the wake of the GFC.

On the prudential level, the regulatory framework in place before the crisis, known as Basel II, implied a limited number of controls. The most significant of these consisted in the establishment of minimum loss-absorbing capacity, expressed as the ratio between available capital instruments and the bank's aggregate risk measured in terms of risk-weighted assets (Graph 2). The definition of regulatory capital permitted the inclusion of liabilities whose loss-absorbing capacity was in practice very limited. Additionally, for the computation of risk-weighted assets sophisticated banks were allowed to intensively use internal models, which helped them to significantly reduce their capital requirements.

The new regulatory framework Graph 2



Source: FSI.

The post-crisis regulatory reform has substantially modified the prudential framework The new regulations have increased minimum capital requirements, introduced specific obligations for the availability of the highest-quality capital instruments (such as ordinary shares). Moreover, limits have been introduced on regulatory capital savings from the use of internal models.

Prudential controls have been greatly expanded by adding minimum capital to risk-weighted asset ratios, capital to total asset requirements, liquidity controls, limits on large exposures, capital surcharges for systemic institutions etc.

In addition, new obligations have been introduced for banks considered to be systemically important to facilitate their orderly resolution in case of non-viability without the use of significant public funds. These requirements include developing resolution plans and maintaining of a minimum amount of liabilities that can be automatically converted into capital in the event the bank is declared non-viable by the supervisor.

The experience of the last few years shows that all these reforms have effectively contributed to preserving financial stability. In particular, the resilience demonstrated by the financial sector in the face of the enormous impact of the pandemic is often cited as evidence of the effectiveness of the post-GFC reforms. In fact, in contrast to what occurred in previous crises, rather than being part of the problem, the banking sector helped to solve it, facilitating the continuity of credit flows to the real economy.

Even so, the greater regulatory demands inevitably imply costs for banks. These take the form of both greater restrictions on their activity and the need to dedicate more resources to regulatory compliance. And, although definitive evidence is still lacking, the new regulatory framework could be affecting banks' motivation to continue certain activities such as correspondent banking or their market-maker function.

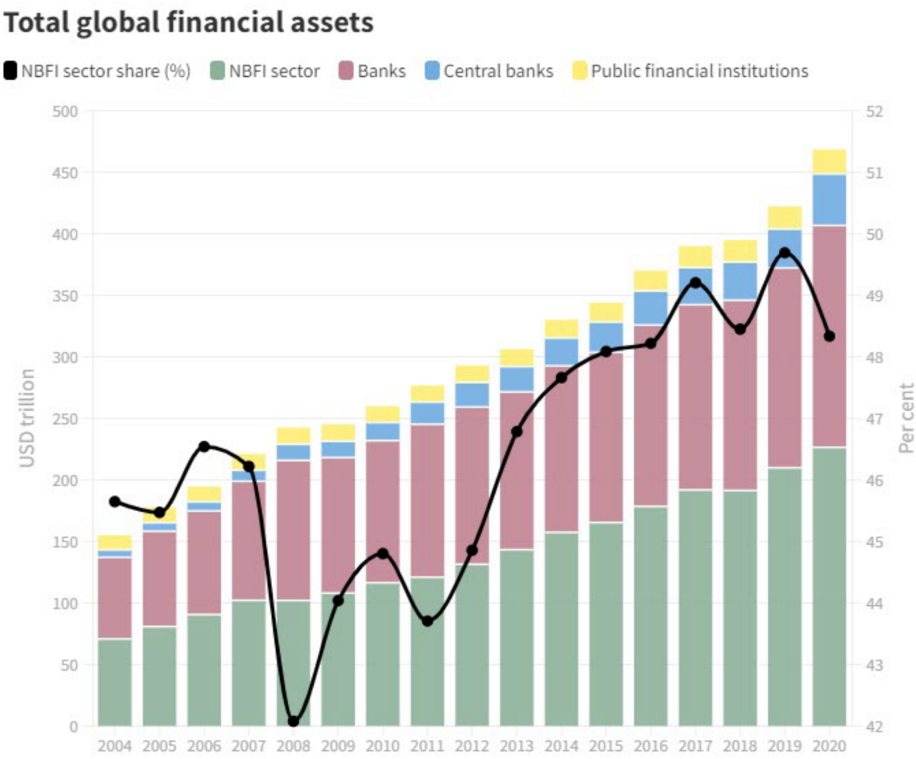
The new competitive environment

Technological developments and the new regulatory framework may therefore be affecting credit institutions' ability to compete in the market segments in which a banking licence is not required to operate.

I have already commented on the fact that new firms and tech groups (such as fintechs and big techs) are giving rise to growing competition in certain business areas (especially payment services) where until recently banks played a dominant role.

But in addition to these new players, non-bank financial intermediaries (NBFIs) are growing significantly. This sector includes investment funds, leveraged funds (hedge funds), private equity firms, investment services firms and other capital market intermediaries. These entities already hold more assets than commercial banks after several years of their market share in the sector growing (Graph 3).

Non-bank financial intermediaries' market share — Graph 3



Source: Financial Stability Board, *Global Monitoring Report on Non-Bank Financial Intermediation*, 2022.

3. New challenges and risks

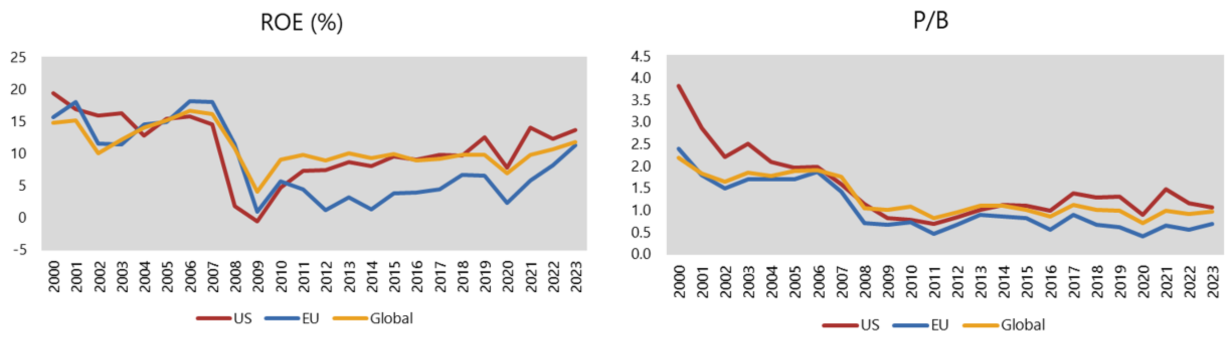
This new technological, regulatory and competitive environment brings with it new risks for banks which managers must confront.

Sustainability of the business model

The combination of increased competition, more demanding regulation and excess supply in some sectors is putting the sustainability of many banks' business models to the test.

In the wake of the GFC, the banking sector was able to maintain stable shareholder's return comfortably exceeding the cost of capital. After the crisis, bank profitability shrank abruptly at a global level, remaining for years at levels considerably below the historical average (Graph 4). Only recently has the sharp rise in interest rates made it possible to significantly increase margins. Even so, bank profitability is still below its pre-crisis levels. In addition, in the absence of other profit drivers, the impact of rate rises on margins should tend to fade over time as these rises are passed through to deposits and are felt in credit demand and non-performing loans.

Bank profitability and market valuation — Graph 4



Source: Refinitiv Datastream.

Analysing the evolution of commercial banks' stock prices shows that in terms of book value the market price of bank shares generally settled after the GFC at values well below the historical average. These low valuations have scarcely been affected by the recent increase in profitability. In fact, the stock prices of many banks around the world are now below their book value, which underlines the lack of market confidence in their capacity to remunerate shareholders satisfactorily in the future. Additionally, banks' low stock prices can end up affecting their solvency. In particular, low stock market to book value ratios increase the cost of capital and reinforce incentives for excessive dividend payouts.

It is notable that the profitability of the industry and its prospects according to the market indicators mentioned are much less favourable in Europe than in the United States. This points to adverse structural elements in the European banking sector. Many studies indicate that European banks have excess capacity that can only be corrected through an orderly consolidation process, ideally through cross-border operations, and which would also promote greater integration of the European banking sector (Restoy (2018)).

In sum, the new environment in which banks operate has put more pressure on them, by denting their profitability and market value. Under these conditions, the viability of the business models that are most affected by the new developments can be compromised.

Additional challenges

Besides its overall impact on business models, the evolution of the technological, regulatory and competitive environment has directly affected banks' risk profile.

For example, the dominant role that digital banking has assumed – along with social media's power to disseminate both information and disinformation – could contribute to increasing the frequency and intensity of bank runs. The crisis in the United States in spring 2023, in which one bank lost $40 billion in deposits, shows that the stability of bank deposits traditionally assumed by bank managers and regulators may be too optimistic in the current technological environment.

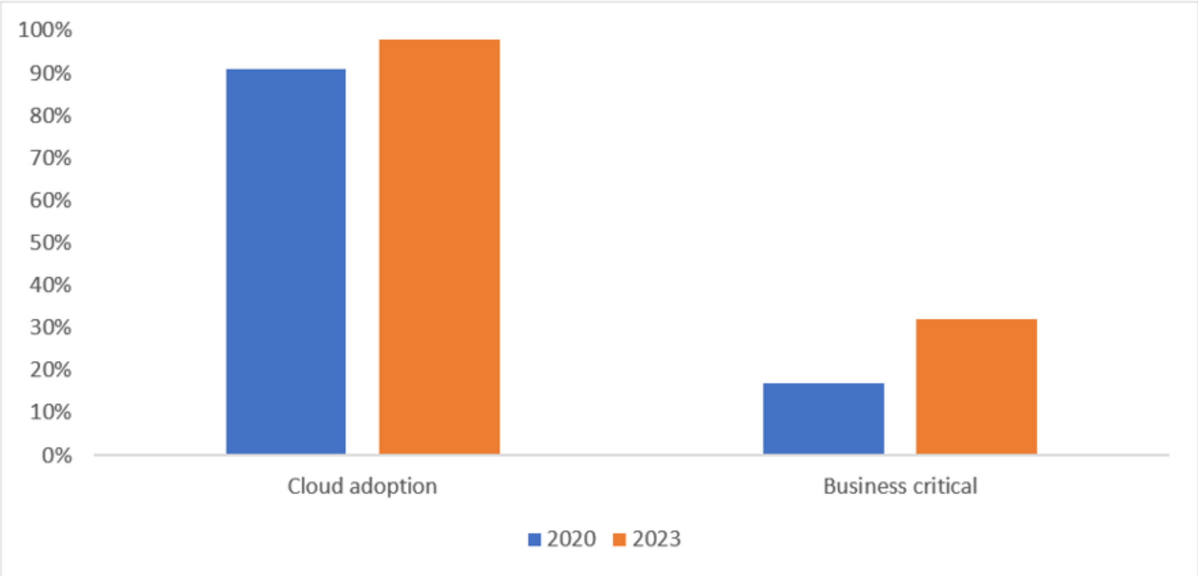
Likewise, special attention should be paid to the interconnections between banks and non-bank financial service providers. Earlier I mentioned the partnership between Apple and Goldman Sachs to launch a high-yield savings account. There are more and more examples of this kind of collaboration all the time, even as big techs compete with banks in other market segments.

For their part, banks provide NBFIs with services that are reflected in both the assets and liabilities of banks. These services offer NBFIs liquidity lines and instruments for the investment of their cash balances. In addition, banks provide prime brokerage services, facilitate access to centralised clearing houses and act as counterparties in derivatives transactions. Thus, somewhat paradoxically, although NBFIs have taken some business away from traditional banks, they remain indirectly exposed to the risk of that business through their interaction with those non-banks. In some cases – for example, the link of Archegos (an asset manager) with Credit Suisse – the risks stemming from the interaction between banks and other financial entities can be quite substantial.

At the same time, banks' growing reliance on new technologies, especially services provided by external technology companies, such as those which provide cloud computing, can add significant operational risk. It is important to keep in mind that, according to recent surveys, the vast majority of financial entities already use external cloud service providers. Even more importantly, the percentage of them that use those providers to perform activities that they themselves deem critical is growing (Graph 5). At the global level, the cloud service industry is highly concentrated in three major providers, so a prolonged outage of even one of them could have a systemic impact.

Cloud adoption in financial services Graph 5

Cloud adoption in financial services*



Cloud adoption – percentage of respondents citing that their organisation is using some form of cloud computing
Business critical – percentage of workloads designated by respondents as "business critical" that have moved to the cloud

Source: Cloud Security Alliance, *State of Financial Services in Cloud*, 5 June 2023.

4. Public policy

What I have described so far shows that the changing banking environment has created new risks – and accentuated existing ones – for the correct functioning and stability of the financial system. Financial authorities must therefore update the tools they use to prevent those risks from materialising, or at least to mitigate their impact.

In the current environment, there are basically two available tools: the regulation of entities that carry out certain financial activities, and the supervision of the regulated entities.

Regulation

Starting with regulation, a first area of focus is those direct or indirect financial market participants that have either recently appeared or recently become much more important. These are the new firms that provide financial services through unique business models (such as big techs), NBFIs that have become much more significant and external providers of critical services to regulated entities. As I said earlier, these have the potential to generate unique risks for the proper functioning of the market and therefore generally require specific regulation. Although many countries have been taking initiatives in this direction, the international community still needs to develop global standards to encourage and facilitate consistent regulations across jurisdictions (Ehrentraud et al (2022)).

In terms of the banking sector, we have seen that recent developments have increased its exposure to risks such as those related to business continuity, deposit stability and their often opaque exposure to NBFIs.

Until now I have not mentioned climate change-related risks, as these do not stem directly from the technological, regulatory and competitive environment in which banks operate. Nevertheless, it is clear that both direct physical risks to which banks' borrowers and counterparties are subject, as well as those arising from the impact of public policies that penalise the most fossil fuel-dependent activities, affect all relevant risk categories – that is, credit, market and operational risk.

Against this backdrop, the regulatory framework should be – and indeed, is being – reviewed. The Basel Committee, which develops international standards for prudential regulation of banks, is developing a related workplan. However, any substantial change in the regulatory framework for banking in the near term could prove to be a complex task, for at least three interrelated reasons.

First, the industry is still absorbing the impact of the Basel III reforms and facing headwinds that dent banks' profitability and market value. This means that banks may find it difficult to digest new and significant regulatory changes.

Second, in the wake of the post-GFC reforms, it has been possible to narrow the scope for increasing regulatory requirements without damaging to an undesirable extent banks' ability to perform their core intermediation function.

Third – and this may be the factor that limits regulatory reform's effectiveness in the current context – traditional regulatory tools such as capital and liquidity requirements may not generally be the most effectives ones to strengthen the industry's ability to face the most significant current challenges.

As I stated before, among other objectives, banks must adjust their business model to ensure their sustainability in the new technological and competitive environment, ensure their resilience to cyber attacks or disruptions in the services of external providers, and limit their exposure to other financial intermediaries and to climate-related risks. All of this entails a series of strategic decisions that are only feasible with proper governance and adequate risk management. While the availability of sufficient capital is, and will continue to be, necessary, no amount of capital can compensate for poor governance or an unsustainable business model. And addressing weaknesses in these areas is more a matter for supervision (Restoy (2023)).

Allow me to conclude with a few remarks on this subject.

Supervision

The role of banking supervision is not only, or even primarily, about monitoring regulated entities' compliance with the regulations. Supervision must characterise the risk profile of institutions, identify their main weaknesses and, based on this, design the most appropriate measures to address them. These are traditionally classified as quantitative measures, such as additional or qualitative capital or liquidity requirements, which imply concrete actions by the bank's management.

Of course, quantitative capital requirements help a bank absorb the manifestation of its vulnerabilities. However, in many cases correcting them requires adopting qualitative measures that affect the bank's strategic decisions and its management systems, internal procedures, governance etc. These measures are transmitted to the banks through scalable actions ranging from observations or recommendations to specific requirements whose non-compliance entails sanctions.

In a recent report commissioned by the ECB (Dahlgren et al (2023)) by a group of four independent experts – in which I had the honour to participate – we included a recommendation that we could probably extend to many other supervisors around the world: to refine the system of qualitative measures and strengthen their role in supervision.

Effectively fulfilling this recommendation requires making supervision more intrusive. This implies giving supervisory agencies the tools and powers to push banks to take appropriate measures in a timely manner. Greater supervisor intrusiveness requires strengthening supervisory agencies' human and material resources – something which is still pending in many jurisdictions (Carstens (2023)). Finally, this new approach must be supported by the appropriate supervisory culture, which needs to be fully owned by management and conveyed to all staff. This culture is incompatible with the mechanistic approaches prevailing in many supervisory agencies, based on regular checks of pre-established indicators. Supervision must more forcefully embrace the principle of risk sensitivity, which means adjusting actions and resources to the profile of each institution. This approach entails certain reputational and possibly legal risks, which the supervisory authority and its staff must be prepared to assume.

Conclusion

Public intervention in economic activity requires weighing its (mainly private) costs and (social) benefits.

Of course, determining the appropriate degree of interventionism, which strikes the right balance between efficiently allocating private resources and satisfying social objectives, is highly complex. The financial sector is no exception in this sense. Regulatory measures aimed at protecting banks' solvency can, at least in the short term, give rise to some unintended effects on their ability to serve their clients and especially their capability to finance the real economy.

However, public intervention in banking is not limited to establishing prudential rules that are mandatory for all institutions. Supervision is a complementary instrument that can be extremely useful in tailoring requirements to each institution and thus avoiding some of the possible negative effects of general regulation.

Prudential regulation has fortunately undergone great development in recent years, and some adjustments to it could still be necessary. But I believe that efforts should be mostly focused on improving supervisory effectiveness. In other words, I believe that now is the time for supervision.

Thank you.

References

Bank for International Settlements (BIS) (2019): "Big tech in finance: opportunities and risk", *Annual Economic Report 2019*, June, Chapter III.

Carstens, A (2023): "Investing in banking supervision", Speech at EBF Banking Summit, June.

Crisanto, J C, J Ehrentraud, M Fabian and A Monteil (2022): "Big tech interdependencies – a key policy blind spot?", *FSI Insights on policy implementation*, no 44, July.

Dahlgren, S, R Himino, F Restoy y C Rodgers (2023): *Assessment of the European Central Bank's Supervisory Review and Evaluation Process*, Report by the Expert Group to the Chair of the Supervisory Board of the ECB.

Ehrentraud, J, J Evans, A Monteil and F Restoy (2022): "Big tech regulation: in search of a new framework", FSI Occasional Papers, no 20, October.

Restoy, F (2018): "The European banking union: Achievements and challenges", *Euro Yearbook 2018: Completing monetary union to forge a different world*, Fundación de Estudios Financieros y Fundación ICO, Madrid.

Restoy, F (2023): "The quest for deposit stability", *SUERF Policy Note*, no 318, August.