TAKING ADVANTAGE OF BANK DIVERSITY IN EUROPE

GIUSEPPE SIANI
Head of the Directorate General for Financial Supervision and Regulation - Banca d'Italia

Towards financial bio-diversity and new business model sustainability

In the last decade, European banks have been dealing with demanding business challenges, coping with the prolonged low interest rate environment and struggling with legacies from the past, such as overbanking and non-performing loans, as well as with significant technology developments and revised consumer attitude.

The financial system is currently facing a new fundamental sustainability step where digitalization and ESG issues represent crucial drivers for structural changes. In particular, banks currently rely on a set of business capabilities that provide for the differentiation to compete in the market place and that help develop their business along with technological advances, such as smartphone technologies, internet and application programming interfaces (APIs), artificial intelligence, big data and distributed ledger technologies. Financial firms combine these business drivers to pursue competitive edge in providing their services. Moreover, they may make recourse to market operators and external providers, often outside the scope of prudential supervision, by lowering entry barriers in business model developments.

The current development has clearly attracted both Fintechs, typically small and focused on specific services and Big techs, usually operating through platforms and moving from the non-financial sector to the financial one. Therefore, incumbent banks face competition across different business lines and in turn have to review their business models.

Structural changes due to digitalization and climate push EU banks to reshape their business models.

The ESG plays a crucial differentiation role too; several banks have started to consider adjusting their business models to incorporate ESG factors into their strategies, governance and risk management, and acknowledge that these factors can affect their financial performances. Their current key challenge lies with data issues, ie. their availability, reliability and comparability; effective data governance is therefore crucial to assess the "greenness" of investments and favoring the desired efficient market allocation.

Against this background, the European banking system has reacted in different ways. Some institutions are trying to perform traditional banking business in a more efficient way, setting up an agile cost structure through investments for innovation, deep digitalization of processes (e.g. credit scoring and algorithms), outsourcing of internal controls and IT systems. In the latter respect, an effective risk management is crucial to deal with the threats posed by data sharing, location (essential for cloud solutions) and integrity, as well as the concentration of critical functions in few external providers.

In other cases, traditional banks have disposed unprofitable and capital intensive businesses, thus increasing bio-diversity of the financial system. In fact, new players – such as investments funds specialized in credit portfolios and/or turnaround, NPL managers – have started to consider the opportunity to extract value from these activities. Moreover, new business models have been developed, by both reengineering internal processes with larger use of technology and relying on new skills and competences, thus proposing new mix of activities and alternative distribution channels.

A number of successful business cases has also showed that size may not represent the unique success factor any longer; small and medium intermediaries, with a more flexible cost structure and higher ability to react to market changes, seem to manage to get competitive advantages. As a matter of fact, reaching a minimum scale does not represent a hurdle to invest in new technologies (sunk costs may no longer be an obstacle), thanks to new business opportunities offered by both the use of external platforms and the potential access to data and information embedded in the banks' proprietary data.

The increasing differentiation among business models in the financial industry raises new challenges to supervision too, given that a one-size-fits-all approach that is based on one predetermined set triggers as proxies for financial distress may no longer be fit for purposes. The supervisory toolkit therefore needs to incorporate tailored methodologies without undermining the necessary horizontal benchmarking; the acquisition of new skills and expertise plays a central role too.

Last, but surely not least, the current business model differentiation increases the business role of outsourcers, thus raising the issue of the appropriate scope of prudential supervision beyond the traditional definition of financial intermediation, whatever their nature.

MARGARITA DELGADO
Deputy Governor - Banco de España

Banking business models in the EU: dealing with diversity

A business model describes the way a firm operates and how it creates value for its stakeholders. In the banking context, the definition of business models is usually based on a combination of structural banking features, such as the funding configuration or ownership arrangements and business lines (e.g. retail, CIB or asset management).

The EU banking ecosystem comprises 5,179 individual credit institutions with diverse characteristics, operating in a complex mix of 27 Member States with differences in national history, culture, financial markets and local regulatory frameworks.

Over the past decades, the EU banking system has undergone very significant institutional changes, such as the adoption of the euro or the creation of the Single Supervisory Mechanism (SSM) with more than 2,200 consolidated credit institutions under its remit. This is clearly an outstanding example of the coexistence of various business models under a single supervisory authority.

In order to assess banks consistently, the SSM uses a common methodology, with peer comparison as a key component. For this purpose, it has identified 12 different business models for significant institutions, considering three key features:

1. Main income source: from traditional lending to trading activities.
2. Customer and funding base: distinguishing between the retail deposit base and wholesale market-based funding.
3. Size and geographical focus: from a small market to a large international footprint.

There are meaningful differences among the resulting business models in terms of bank size (from €10 billion in average assets for *Small Market Lenders* to €1,500 billion for *G-SIBs and G-SIB Universal Banks*), profitability (from ROE of 3.9% for *Corporate & Wholesale Lenders* to 7.4% for *Universal Banks and Investment Banks*) and risk assessment (best SREP scores for *Asset Managers and Custodians* and worst for *Diversified Lenders*).

The plurality of business models poses challenges for banking regulation and supervision in the Banking Union. Combining homogeneity in banking rules with diversity in business models is a difficult task and leads to the risk of neglecting important intrinsic characteristics of the broad European banking sector.

Prudential authorities need to adopt a flexible approach to cater for a variety of business models.

Clearly at the SSM we have to find the right balance between horizontal standardisation and banks' singularities. Additionally, proportionality issues need to be taken into consideration in the application of a level playing field.

But the existence of different business models can also be beneficial and even necessary. It makes for a better fit for European economic needs and helps to better meet the demand of the different customer segments. Some credit institutions focus on specific areas or even on social objectives, whereas larger universal banks compete in global markets.

Diversity in business models is also a source of financial stability for the EU banking sector. It reduces systemic risk, makes the sector overall more resilient to economic turmoil and provides room for smaller, more keenly-focused participants, less affected by the moral hazard problem of too-big-to-fail institutions.

EU prudential authorities need to adopt a flexible approach to cater for a variety of business models.

We are striving for a complete European Banking Union, with a common regulatory and supervisory framework that will most certainly be beneficial for the functioning of a single market. But this objective has to be compatible with the need to adapt the framework to European economic and banking diversity.

As a general rule, the existing set of business models has to meet European market needs and provide adequate support to finance the economy. But business models – even though their profitability levels differ – also need to be sustainable.

Close scrutiny of how business models are evolving, combined with a flexible approach, is more justified than ever. Given the fast-changing environment, the digitalisation process, the appearance of new players in the financial industry, increasing environmental and demanding regulatory requirements and the new macroeconomic challenges, banks need to adapt their business models to ensure that they remain sustainable over time.

While it is for bank management to define the business models, supervisors need to assess their robustness, profitability and sustainability, to identify potential vulnerabilities at an early stage and address them within the supervisory framework, while remaining neutral regarding management decisions. It is a challenge for both parties to assess the changes and cater for the diversity required.

To conclude, the existence of a range of business models is beneficial for the European financial system and requires a flexible approach from the prudential authorities.

FRANÇOIS-LOUIS MICHAUD

Executive Director - European Banking Authority (EBA)

Banks, business models and beyond

Coming back to first principles when approaching bank business models

Fundamentally, the business model of a bank is simple: it is about granting credit and collecting deposits. While banks may look very similar to the public (or to their non-bank competitors!), they are in fact not all the same. This is especially the case in Europe, where the economy remains largely funded by a high number of banks which display many combinations of activities, resources, and organisations.

A good match between these three parameters will ensure that a bank strives in the short term (aka "business model viability") as well as in the long term ("sustainability"). This of course matters for its stakeholders and may warrant change over time due to endogenous or exogenous factors. This is also of direct interest for policymakers willing to ensure an adequate flow of funding to the economy through the cycle. For all these reasons banks business models need to be scrutinised individually and collectively, as recommended by EBA guidelines. [1]

The notion of bank business models is commonly used, but what constitutes a model and distinguishes it from another is not easy to define. Most approaches look at the past performance of certain combinations of activities, resources, and organisations (i.e. types of business models), and of shifts thereof. To assign banks to types of business models, academic studies tend to rely on quantitative approaches: applying clustering methodologies to banks' financial accounts and complementing this with judgmental overlays.[2] As an alternative, EBA staff proposed an initial qualitative categorisation of institutions based on supervisory judgment applied at solo level further validated using quantitative indicators.[3] This offers both more granularity in classifying banks and more flexibility for reflecting national specificities.

Along those lines, certain business models may look "more equal than others" depending on the perspective considered. As shown in EBA's 2021 Risk Assessment Report the average RoE of cross-border universal banks was 6.4% against 5.3% only for local universal banks between 2014 and 2021. On the other hand, during the pandemic, local universal banks experienced a lower profitability decline. Cross-border universal banks tend to benefit from higher net interest income (NII) and higher fee and trading income as a share of equity than competitors from other groups. They however display higher operating expenses due to lower economies of scale when operating across jurisdictions with different rules. Local universal banks tend to have higher impairment costs presumably due to a lesser geographical and product diversification.

The 2021 EU-wide EBA stress-test seemed to confirm these results. In the adverse scenario, geographically diverse banks had lower capital depletions than banks focused on domestic markets, and banks with higher NII had lower capital depletion than other banks.[4]

Academic studies also analyse the effect of business model migration on bank performance. Banks changing business models tend to increase their profitability, stability, and cost efficiency. Interestingly, it is not entirely clear-cut whether underperforming banks are inclined to switch models.[5]

All in all, lessons should be drawn from such analyses but caution is in order. Indeed, the future performance of a bank cannot simply be inferred from the past performance of any peer group. Moreover, bank business models should also be envisaged from the perspective of the important transformations which are currently underway in the banking sector.

A first such trend is that other financing sources than banks have gradually developed in the EU over the past decade. They may expand further as a Capital Markets Union progresses. Innovation in the areas of digital and information technology is a second game changer. "Bigtechs" increasingly leverage their client databases and IT systems to offer some the financial services which used to be provided by banks. Together with "fintechs", they are now key components of a banking value chain which so far had been fully integrated by banks. Lastly, the necessary ESG transition will directly affect banks' activities, resources, and organisations.

Even if these developments suggest a regime change, they do not necessarily mean that "this time is different." They may simply require looking at bank business models through the prism of first principles: what are banks supposed to provide, whatever the forms they may have taken over time?

Against that backdrop, a viable and sustainable bank business model should meet the three criteria which are at the core of financial intermediation: ensuring a "delegated monitoring" of lenders and borrowers, which requires having better information than the market; providing them liquidity through the cycle (transforming risks, durations, currencies...), which requires having sophisticated risk management and sustainable funding; and performing these critical functions efficiently, which requires reaping economies of scale and scope. The latter does not necessarily mean bigger balance sheet anymore.

[1] *EBA (2014 and 2021), Guidelines on common procedures and methodologies for SREP*

[2] *Roengpitya et al (2017), Bank business models: popularity and performance, BIS Working papers; Ayadi (2019), Banking Business Models: Definition, Analytical Framework and Financial Stability Assessment.*

[3] *Cernov, M., and T. Urbano (2018), EBA Staff Papers.*

[4] *EBA (2021), 2021 EU-wide stress test – Results.*

[5] BIS (2017); Ayadi et al. (2020), Bank Business Model Migrations: determinants and effects, British Journal of Management.

EDOUARD FERNANDEZ-BOLLO

Member of the Supervisory Board - European Central Bank (ECB)

Preserving the diversity of European banking business models

A business model can be defined as the sum total of systems, mechanisms and methods through which a bank generates earnings and satisfies its owners, customers and other stakeholders. The key to sustainability is to maintain an adequate cost/income ratio and keep stakeholders satisfied with the services provided. As supervisors strongly committed to a neutral and objective approach to different business models, our starting point is measuring financial resilience. From this point of view, the main parameters defining bank business models are income mix, customer mix, funding mix, size and geographical exposure. We also take other criteria into account, most importantly strategic management, risk appetite and development strategies – of which digitalisation forms a very important element. Needless to say, specificities arising from legal form and ownership structure are considered too.

Market share in the banking system can be defined in various ways. The most common indicator is total assets in terms of loans to households and non-financial corporations, but this does not necessarily tell the full story of revenues generated. Some banks specialise in certain activities only, so for them the market needs to be defined more narrowly. For example, asset managers do not aspire to have a significant balance sheet, so their market share is more adequately captured by assets under management; likewise, investment banking services are typically measured in number and value of transactions rather than any balance sheet amount. Nevertheless, most of these measures of market share taken from supervisory statistics roughly coincide.

Global systemically important banks (G-SIBs) in the euro area make up nearly 50% of the total market of significant institutions directly supervised by the ECB; other universal and investment banks another 25%; diversified lenders are a bit less than 15% (even though this is the largest category by number); other bank business models (such as specialised lenders for customer finance or corporate/wholesale finance) tend to be around 5% each or below.

To preserve diversity, banks need to ensure the resilience of their banking models.

The degree of reliance varies – indeed it is one of the key differentiating factors among banks – but lending remains the main source of income at around 60%. This is why the latest reported statistics can be seen as relatively good; they show lending income benefiting from rising interest rates, credit demand resilient despite the macroeconomic situation and income statements not yet affected by the strong deterioration in the cost of risk. The pre-pandemic standards they are being compared against, however, are not very high.

The viability test for different business models is yet to come. The core issue is a bank's capacity to sustain its activity through the cycle, including absorbing risks in the event of a recession. As supervisors, we believe the appropriate level of profitability should be determined bank by bank and on average through the cycle, not just at a single point in time. Everything depends on a bank's business model and specific characteristics – the overall riskiness of the bank being the key driver when determining the appropriate level of profitability. This goes beyond simply risk on the asset side (credit risk, market risk); it also extends to liquidity risk, funding risk, interest rate risk in the banking book, operational risk and risks related to sound decision-making and strategic management and execution. The ability to retain profits through the cycle and raise capital in case of need have to be considered as well.

It is important to emphasise that supervisors do not look at the profitability of a credit institution in the abstract, but its contribution to the resilience of the banking system as a whole. This goes beyond a single-factor approach; the specificities of each case are taken into account. Even within peer groups of comparable banks, we still see very different levels of cost/income ratio, and also quite different investments in the future, in digital transformation for instance.

From the point of view of the supervisor, what is essential right now is for each bank, whatever its business model, to carefully assess the potential impact different macroeconomic scenarios could have on its customer base and prepare to respond proactively to difficulties that may emerge. Experience tells us it is best to react quickly. This includes adapting operations and services to the needs of the economy, supporting increased use of digital tools and investing to cope with emerging risks.

It is precisely because we value diversity of business models that we are sceptical about the notion that authorities are able to assess what the optimal degree of diversity is: this should be determined by the market alone.

The role of the authorities is to ensure that individual banks are able to manage the risks inherent to their business model in a way that is prudent – otherwise, they should exit the market.

JACQUES BEYSSADE

Secretary General - Groupe BPCE

Recognition of different business models: we need a big step forward!

Reflecting upon the different impacts of banking regulation and supervision on different business models would constitute without a doubt a big step forward for cooperative banks, as a step towards the recognition of their business model and their characteristics.

Indeed, it seems long ago when cooperatives have entailed debates on the opportunity to dismiss or not the main assumptions of their business model: economic democracy based on stakeholder representativeness ("one head one vote" and openness of membership), mutualism implying acting in the interests of members and with them, local roots, and long-term clients' relationships.

What was seen yesterday as disadvantages (risk aversion, composition of capital, untradeable cooperative shares…) were recognized as advantages during the crisis. Indeed, the reasons for their resilience are their cooperative structure (member ownership and benefit) and their comparative advantages in times of crisis (stronger attractiveness among investors because their shares are not sensitive to stock market fluctuations, statutory level of reserves ensuring a stability of value, non-dilutive nature of their capital in case of capital increase, good balance between long-term profitability and low risks).

This was evidenced when cooperative banks suffered far less than other banks and have demonstrated their ability to recapitalize during crises. Intending to drop the "one size fits all" regulatory approach is the right thing to do. But we would face the same old pitfall if benchmarks are the "new normal" to supervise banks. Let's highlight some key points.

Today, the SSM is in its role when it sends a general message about the insufficient profitability of some European banks and makes transversal analyses. But these analyses must take into account the variety of business models.

In terms of profitability for instance, our Group has a payout ratio of less than 10%, its capacity to put earnings into reserves is therefore not comparable to the listed groups and moreover the reserves are not distributable. Furthermore, the high level of equity, which is a choice of the group, also naturally explains the lower profitability. Hence, the right indicator should be the residual income after distribution of the payout to equity holders.

We would face the same old pitfall if benchmarks are the "new normal" to supervise banks.

Another example is visible in the analyses on the cost income ratio, which is very high for some European banks: the weight of real estate credit in the balance sheet should be taken into account as it mechanically explains a high-cost income ratio for those banks because the margin is low (and the risk too). The weight of the French Livret A also explains in particular a high cost of resources for some banks.

Moreover, the ECB's analyses of European averages also lead to comparisons of very different business models without entering in more in-depth analysis (see in particular the flat vs floating rates topic in real estate). Beyond that, the regulation itself could lead to numerous unintended consequences on the different business models if we don't consider the broad picture.

Let's take the example of the cumulative effect of the leverage ratio and the NSFR which is very significant: the first ratio tends, if it is applied individually and not globally, to favour risky activities, and the second one favours long-term activities. We are therefore potentially left with a non-diversified risky long-term business model. Since analysts and rating agencies focus on the same ratios, they reinforce the trend.

To ensure that supervision is respectful of the diversity of the business models, the transparency of different benchmarks is the cornerstone of supervision analysis. Each bank should be able to position itself vis-à-vis the benchmark and either comply or explain.

Second, we should ensure that supervision fully respect the different business models. A set of relevant diversification indicators should be defined and applied by the SSM in that purpose. We stand ready with the cooperative banks to work hand in hand with the SSM on this matter.

Notably, the capacity of serving customers and small companies at granular level in all the territories should be one of the main indicators. Maintaining banks activities in some French territories is a concern for public authorities. It is key that cooperative banks continue to play a development role in the economy, notably to encapsulate every stakeholder in the ecological transition.

On the contrary, the sale of NPL on the secondary market is a counterproductive action based on an irrelevant criterion for groups like ours that are focused on long-term relationships and have a role in supporting local communities.

As regard BPCE, it is essential to preserve the DNA of our Group: support its 36 million customers, whether they are individuals, professionals, associations, companies or local authorities, over the long term and at every stage of their lives, with the ambition of being useful to everyone.

JULIA SYMON
Head of Research and Advocacy - Finance Watch

Bank diversity in the European Union and banking regulation

A diverse and well-integrated banking sector, comprising banks of different sizes and business models, is demonstrably beneficial for both financial stability and corporate and retail customers. In this context, the role of banking regulation and supervision should be to provide for financial stability and protect EU citizens and society at large from excessive risk-taking in the banking sector – among others, by creating, and preserving a level playing field for banks of different sizes and business models.

Yet, as of today, the EU banking sector is very polarised. The top-5 banks in almost each member state hold more than half of all banking assets in that market (the EU average is 68%). The EU's 37 largest banks account for 71,4% of domestic banking total assets.

The EU finalisation of Basel III reforms - the Banking Package - holds among its stated objectives the prevention of competitive disadvantages and the reduction of compliance cost for the European banks. Yet, judging by the contents of the legislative proposal, the largest EU banks, G-SIIs and major O-SIIs, would be allowed to continue operating with lower levels of capital, on average, than their global peers and with a competitive advantage over smaller and mid-sized banks in the EU domestic market. EU citizens, and society at large, would remain exposed to the systemic risk emanating from a poorly capitalised banking sector and liable to underwriting the losses of underperforming banks.

Levelling the playing field

Truly levelling the playing field between banks of different business models and sizes requires a faithful implementation of the Basel reforms without the so-called 'EU-specific adjustments', which stand to benefit mostly large banks, as they account for over 80% of the total capital shortfall that would result from the undiluted implementation of Basel III in the EU per the EBA estimates. A large number of smaller and mid-sized EU banks would remain either largely unaffected or even benefit from the combined effect of (i) the modifications of the Standardised Approach introduced by Basel III, and (ii) the output floor, which caps the 'cost of capital' advantage of banks using the IRB approach.

Basel III as an opportunity to level the playing field and improve diversity in the banking sector.

Capital rules for unrated corporate exposures

Generally, under Basel III, SA-CR risk weights are reduced for highly-rated borrowers and increased for low-rated and unrated borrowers. In the EU Banking Package, the Commission proposed a transitional arrangement that would allow banks, under certain conditions, to apply a preferential risk weight of 65% to unrated corporate exposures for the purposes of calculating the output floor. This arrangement is motivated by the desire to prevent disruptions of bank lending to unrated corporates in the EU, as they are significantly more reliant on bank funding than their counterparts in other regions. It is separate from, and comes alongside the so-called 'SME supporting factor', which benefits all banks, whereas the transitional arrangement is targeted solely at IRB banks.

The Commission's reasoning is based on the assumption that the competitive environment is static and that banks will pass on increases in their own funding costs, if any, to their customers. In reality, the financial industry is anything but static and it would not be difficult at all to conceive of a different scenario where closing the gap in capital requirements between banks using the SA-CR and those using IRB, would restore a level playing field. IRB banks account for a majority of SME lending. With smaller and mid-sized banks competing in this segment on level terms, even a modest increase in competition would likely prevent incumbents from passing on the increase in their cost of capital to customers. In the broader context, this could reverse the trend towards concentration and promote a more diverse banking landscape that is more resilient and less exposed to systemic risk.

Beyond the Banking Package: a case for a structural reform

Beyond the reform currently on the table, the accounting for different bank business models calls for more fundamental reform, including the separation of deposit-taking and commercial banking activities from capital markets-related activities. Too-big-too-fail bank institutions do not only take deposits and provide credit, but also run highly leveraged and risky trading activities at their own cost and for their own benefit. The bank regulators' paradox is that large complex and interconnected banks need very little capital in the good times, but they can never have enough in an extreme crisis. Splitting different business segments would remove the benefit of implicit public support for banks' trading activities, increase financial stability and prevent systemic contagion between banks.

This contribution draws on sections of an earlier Finance Watch publication by Christian M. Stiefmueller, "Cracks in the pillars – Financial stability loses out in the EU's Basel III endgame", March 2022.

GUIDO MARIA NOLA
Chief Executive Officer - BancoPosta - Poste Italiane

Be disruptive, keep your roots – Embracing the everchanging nature of banking in the digital era

In 2022, Poste Italiane celebrated its 160th anniversary. In its long history, Poste adapted to secular changes in its main markets, Italy: from universal service and postal saving roles, to banking, insurance, and payment activities in the last two decades. Nowadays, it is playing an important role in the digitalization of Italian financial and non-financial services.

Even in the context of its continuous development, one would be hard pushed to find a period of faster change in the history of Poste when compared since its IPO in 2016.

First among them is the impact of the digital transformation-transition of our businesses, along with new threats, such as cybercrime or the birth of a new class of financial intermediaries (e.g.Fintech). Secondly, the role that Decentralised Finance is building for itself, along with the current, steady increase in the democratisation of financial services, bound to create more disruption.

In addition to the digital transition, the European financial system is facing unprecedented externalities: Covid 19, the war in Ukraine and extreme climate events, like the droughts in most of Europe. Our society as a whole and our companies are having to move suddenly from preparedness to adaptive strategies.

In this context, the role of regulatory bodies is even more relevant: as market players, we seek to achieve an even playing field for competition and protection for our customers from any excess. Our constant focus on governance, risk management, and internal controls remains central. Besides, the tackling of new requirements, such as the recent focus on sustainability (e.g. ESG), the fight against financial crime, and the need to find new channels of distribution of products, create completely new challenges (e.g. phishing and data stealth). Trusted intermediaries are the channels through which European citizens benefit from the financial innovation that technology can bring, advancing into new territories with the shielding of strong internal governance and conduct principles.

Shaping financial regulation in such complex times is a difficult task, not dissimilar from managing large financial institutions: it requires a fine balancing act between generating the expected outcomes and managing the impact of multiple disruptive forces pulling in different directions.

The best chance for financial system to ensure its own and its clients' sustainability is to embrace disruption, or disruptive innovation. This is key in our shared journey into an uncertain but fascinating future. Some ideas:

Proactive regulation should support adaptive governance – A popular concept among to environmental studies experts, "adaptive governance" is about managing complex ecosystems as webs of different ecosystems and it requires stake holders to develop a framework where all system players and interests are more widely understood and proactively managed. In a nutshell, it is about redefining the boundaries of the financial system and developing a wider, more comprehensive overview of its complexity.

Sandboxing and testing as a state of mind – We have appreciated recent efforts by ESMA, through Consob in Italy, the European Commission and the ECB, to develop sandboxing tools for the testing of financial innovation tools. One example has involved inviting Poste to test digital wallets by the European Commission. The sandboxing-validation approach, while fundamental for digital solutions, could also be widened to include more traditional financial products and governance frameworks. This measure will support the sharing of common best practices and shared terms and definitions.

Consider the new agents in the financial world #1: algorithms and machine learning – Our financial decisions and strategies are increasingly based on algorithm-based technologies. High frequency trading has been one of the first areas singled out by European institutions since a seminal study by ESMA in 2014. While special attention was originally paid to organisational requirements, the focus has shifted to more substantial challenges: algorithms and machine learning systems will become not only decision tools, but agents – even with legal consequences yet to be determined - as they will be able not only to follow coding rules but also to take their own decisions. This development can be a strong competitive driver, but it may also have distorting effects - especially where allocation of responsibility is relevant.

Consider the new agents in the financial world #2: nature and society as a whole – There is a substantial interest on the part of the European financial 'biosphere' in determining how to incorporate climate change in their work practices. See, for example, the work of the Commission around the Green and Social Taxonomies or the constant refining of our sustainability metrics. The lack of trust towards the financial system post-2008 requires to regard nature and society in its entirety as key agents in our decision-making processes. Increase attention to these agents will rebuild trust in the whole of the banking experience, from current accounts to investment management.

As we feel our way through externalities, it is time to refocus on the impact of finance on the world at large, be it our biosphere or our own society, from the general to the individual level. And this kind of disruption will serve well the purposes of regulation and conduct authorities too.