Harvard Law School Program on International Financial Systems
Agence France Trésor

Symposium on Building the
Financial System of the 21st Century:

An Agenda for Europe and the United States

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Final Report
SYMPOSIUM ON BUILDING THE FINANCIAL SYSTEM OF THE 21ST CENTURY: AN AGENDA FOR EUROPE AND THE UNITED STATES

The 19th Europe-U.S. Symposium of the Program on International Financial Systems sponsored by Harvard Law School was held on March 20-22, 2019 at the French Treasury in Paris, France. Sessions addressed threats to cross-border banking, the evolution of the asset management industry, and the ways in which core infrastructures were changing in response to shifts in regulation and technology. A major concern of many participants was fragmentation, both in capital markets and banking. Among the causes discussed were issues of cross-border resolution, the differing regulatory approaches of Europe and the U.S., and Brexit.
Session 1: Threats to Cross-Border Banking: Resolution and Brexit

In Session 1, participants discussed threats to cross-border banking. They raised concerns about the ability of banks to operate globally in a system increasingly characterized by ringfencing and divergences among national or regional regulatory bodies. They paid particular attention to transatlantic differences and to the potential effects of Brexit on transnational banks.

Global Trends in Cross-Border Resolution

Participants identified a number of trends affecting cross-border banking, many of which revolved around problems of cross-border resolution of failing banks. Overall, these trends had made cross-border banking more difficult and costly, and contributed to fragmentation.

A particular focus of discussion was ringfencing of capital and liquidity, which several participants stated had become “the global norm.” Participants pointed to a variety of examples in Europe and the U.S. It was noted, for example that Fed regulations on foreign banking organizations mandated the establishment of intermediate holding companies for U.S. subsidiaries. These subsidiaries were also required to create living wills and undergo stress testing. In Europe, participants pointed to the imposition of similar ring-fencing under the EU’s intermediate parent undertaking rules. Some participants also expressed concern that foreign banks might be pressured by national authorities to establish subsidiaries rather than branches, in order both to assert the primacy of local regulation and supervision and to hold sufficient capital within the country. At the global level, it was noted that some argued that higher internal Total Loss-Absorbing Capacity (TLAC) within banking groups or prepositioning of higher capital in foreign subsidiaries could obviate the need for ringfencing, but some participants felt that these solutions had essentially the same effect as ringfencing, trapping of capital. As one put it, high levels of internal TLAC would substitute de facto ex ante ringfencing for “disorderly ex post ringfencing.”

A further complication was the lack of legal consistency or clarity across key categories and functions. Many participants expressed confusion over what it meant to establish a branch vs. a subsidiary. In some jurisdictions, there appeared to be little distinction in terms of the capital requirements and obligations to national regulators. Even within the EU, participants noted big differences in different countries in the rules for establishing branches. And branches of non-EU banks would face quite different circumstances, as they are regulated by both their home countries and the EU. Further, thorny questions of branch regulation were raised by the approach of Brexit. For example, one participant raised the question of whether a UK branch of a French bank would be able to do business in Germany. From a policy point of view, there was also a concern about whether banks might try to game this complex system as a strategy to avoid taxes or regulation within a particular jurisdiction.

Looking at the new global landscape of ringfencing and prepositioning of capital, some participants argued that it spelled the demise of Single Point of Entry (SPOE) as a principle for resolution of multinational banks. SPOE was based on the principle that failure (and rescue
through bail-in) would be confined to the main holding company while the constituent units would operate uninterrupted and the bank would be able to allocate capital across borders as needed. The rise of ringfencing and mandated prepositioning of capital, however, called into question whether this system would be relevant anymore. Several participants pointed to recent decisions by banks such as Standard Chartered to reorganize their business and capital management into several regional intermediate holding companies as evidence of this trend. A number of participants expressed frustration with the situation, arguing that SPOE was the most efficient way of managing failure within a financial conglomerate.

Participants also discussed how the new system, with or without SPOE, would manage an actual cross-border resolution. Many participants were optimistic about the ability of various national (or EU) regulators to operate in a coordinated fashion. They believed that mutual trust among regulators was at a high level and that a cross-border resolution would likely proceed according to existing plans and understandings among regulators. Some participants raised the question of why ringfencing and prepositioning of capital continued to be such an important feature of the global financial regulatory system when mutual trust and planning was at such a high level. Others countered that “trust” was actually due to ringfencing; since regulators knew that their taxpayers would not be liable for a subsidiary failure in another jurisdiction, they could concentrate on how best to coordinate information and action in such a case. In this sense, the efforts of national authorities to build a system that did not rely on trust or prior agreements actually increased trust across jurisdictions rather than being “trustless.”

Cross-Border Resolution in Europe

While much of the discussion of cross-border resolution was global in nature, many participants cautioned that it was equally important to raise concerns about cross-border resolution within the EU. Despite the existence of common laws across the EU, as well as the development of a common resolution regime within the eurozone, these participants emphasized that cross-border bank resolution within the EU was complex and varied considerably by location.

One key issue was the role of national regulators and national law. Except when determined by the Single Resolution Board (SRB) as being systemically important, bank failures were to be handled by national authorities, whose legal tools, bankruptcy laws, and economic or political trade-offs varied considerably. Although national authorities in the eurozone operate under a single law, the role of the national authorities effectively created 19 different sets of implementing rules. In Italy, for example, participants made the point that the government had mostly opted to bail out troubled banks with public and private funds rather than following EU bail-in mechanisms.

It was also noted that the EU itself also has multiple rules for resolution of non-systemically important banks. This includes fragmentation at the system level between ECB (as supervisor) and SRB (as resolution authority), both of which can identify a failing or likely-to-fail bank. This sort of overlap could create significant problems if the judgment of the two were to differ in an important case. Another key aspect of the Single Resolution Mechanism (SRM) is that the SRB has the obligation to decide whether EU-level resolution is in public interest—if not, the management of the resolution reverts back to the national level.
One example given to shed light on both the workings of the SRM and the complications of national implementation was of the Latvian bank ABLV, which in February 2018 was determined by the ECB to be likely to fail. However, the SRB determined that resolving ABLV was not in the eurozone public interest. The bank closed down in Latvia, where laws allowed for voluntary liquidation; however, Luxembourg law did not allow voluntary liquidation, so the Luxembourg subsidiary still exists but is not allowed to operate.

Some participants expressed optimism that time and experience would help to iron out the challenges of bank failures in the EU and eurozone. For example, the Single Resolution Fund (SRF) was set to be fully funded by 2024. Also, it was suggested that issues such as the point at which resolution would be triggered in different jurisdictions should be harmonized and that standards for determining SRB intervention could be made more clear to national authorities. Other participants were skeptical that technical fixes would be enough to ensure consistency among eurozone countries in bank resolution. They argued that bank failures typically followed political logic that did not always accord with legally-mandated measures, as in the resistance of Italian authorities to impose bail-in in recent cases. In other words, they argued, the EU was trying to solve political problems through regulation, but the actual outcomes would in many cases ultimately depend on the social impact of bank failure on politically important groups.

**Brexit and “Enhanced Equivalence”**

While much remained unknown about how Brexit would work in practice—or even when a final agreement between the UK and EU would be reached—participants raised a number of concerns about how the post-Brexit relationship between the UK and EU would be managed. An issue of particular concern was the principle of “enhanced equivalence,” which would underpin the EU’s approval of Europeans doing business in the UK since a formal chapter elaborating this in the Brexit agreement had been rejected by the EU.

A number of participants expressed unease with the equivalence process as the mechanism for ensuring continued access between the UK and EU financial markets. They pointed out that the exiting process was unilateral, slow, opaque, and typically was determined on an issue-by-issue or sector-by-sector basis. Thus, they worried that in the case of the UK, it could inject additional uncertainty and delay into the provision of cross-border financial services, at considerable cost to the financial institutions and economies of both the UK and the EU.

It was also argued by some participants that the goals of the UK and EU were quite different from one another, beyond the desire to reduce the costs of the transition and to ensure financial stability. They claimed that the ultimate goals of the EU in Brexit negotiations were advancing the cause of Capital Markets Union (CMU) and seeking competitive advantage for EU financial institutions and markets. Both goals would be best served by reducing the scope of cross-border access to UK-based banks and markets. For the UK, the major goal was to maintain the prominence of its markets and clearinghouses, especially as UK banks’ continental branch networks were limited. Thus, they argued, it would be difficult to achieve mutually satisfactory agreements on market and clearing access, with the EU unlikely to see market efficiency as more important than nurturing EU-based financial markets.
Some expressed hope that “enhanced” equivalence would smooth the transition and ensure continued access to each other’s markets. In principle, enhanced equivalence described a means by which EU equivalence determinations could be used more flexibly to apply to UK-financial activities than the ways in which equivalence determinations had been done for other countries to date. In this sense, it would recognize the high level of integration between UK and continental financial systems and markets, streamline the determination of equivalence, and take into account the fact that the UK’s post-Brexit financial regulation would at least initially be identical to that of the EU.

However, some participants saw the prospect of enhanced equivalence as more of a threat than a solution. They worried that EU regulators would demand higher levels of information and legal requirements of post-Brexit UK financial regulation than existing equivalence determinations had required of other countries. Moreover, these participants expected that the EU authorities would demand the ability to monitor or oversee UK supervision of financial institutions or clearinghouses that served EU customers. The rationale for the enhanced informational and data demands, as well as the extraterritorial extension of EU supervision was that UK financial markets were of systemic importance to the European financial system; it was noted in this regard that the EC staff working paper from last year called for more intense scrutiny of countries with financial stability implications for EU. Other participants were skeptical of that rationale. They argued that the EU was trying to impose its own system on the UK, either as a means of gaining competitive advantage or out of a desire extend its own prudential and macroprudential standards globally.

A number of participants offered suggestions of how enhanced equivalence should work in practice. One principle that appeared to have considerable support was reciprocity. Whereas the existing process of EU equivalence determinations was unilateral, these participants argued that enhanced equivalence should allow for negotiated agreements that would create obligations for both parties, in order to reduce uncertainty or arbitrary decisions. There was also a high degree of support for increasing the transparency of the EU equivalence process. Many participants also agreed that enhanced equivalence should not require the UK (or other EU partners) to submit to extraterritorial financial supervision in order to secure access to European customers and markets. However, some participants disagreed, arguing that UK financial markets and institutions were so important to EU financial stability that it was essential that they be answerable to EU authorities.

There was also considerable discussion of the EU equivalence process more broadly, including how it pertained to the U.S. and other jurisdictions. One major concern raised by Brexit was that, if the EU imposed stricter requirements on the UK, those stricter requirements would also be extended to other jurisdictions that had previously received equivalence determinations. This could damage transatlantic financial integration, which would raise costs and increase fragmentation. For third countries, demands for extraterritorial supervision would also be very burdensome.

Most participants agreed that equivalence determinations should be outcomes-based, rather than to force a high level of regulatory harmonization. They also called for transparency and clearer procedures in order to ensure that such determinations were non-politicized and were based
entirely on financial stability and fairness criteria rather than as a means of protecting or gaining commercial advantage for domestic financial institutions.

More ambitiously, some participants called for multilateral solutions rather than a series of bilateral agreements or unilateral equivalence determinations. They worried that the existing architecture for cross-border banking and other financial activities was a patchwork of non-standardized authorizations that hampered truly multinational (or global) operations by financial institutions. They noted that this raised costs and resulted in contradictory requirements both for multinational financial institutions and even for domestic actors in particular jurisdictions who could face higher costs or fewer opportunities due to reductions in competition or market liquidity. While this appeared to be an attractive goal for many participants, however, there was considerable skepticism that it would be possible. It was noted that, despite the creation of common G20 standards, national systems had continued to differ in significant ways from one another and that widespread calls for greater sovereignty of economic policy made binding agreements much more politically difficult. Still, many of these participants agreed that the EU and U.S. should make active efforts to reduce the barriers to equivalence.

**Fragmentation in Europe and Beyond**

All of the developments addressed in Session 1 raised concerns among participants about fragmentation of finance, both in Europe and globally. There was particular focus on Europe, where complexity, conflicting objectives, and Brexit were seen by many participants as likely to increase fragmentation across multiple financial sectors and markets.

There was general agreement that European banking and finance were as yet not highly integrated, despite the proactive efforts to create an effective European Banking Union (EBU) and Capital Markets Union. To the extent that European capital markets were integrated, it was due to the role of London as a regional and global market center. The lack of an agreement on passporting and freedom of access was understood to mean that fragmentation would necessarily increase with Brexit. In addition to the forces already noted above, participants cited various causes. For example, many pointed to provisions in the most recent version of the Markets in Financial Instruments Directive (MiFID II) that incentivized fragmentation of liquidity pools. A number of participants also argued that some European governments were pushing national champions or otherwise providing competitive advantages to institutions within their borders. Several claimed that the requirement that euro clearing occur in EU-based central counterparties (CCPs) was more about developing local markets and institutions rather than seeking to ensure proper prudential oversight. Others pushed back strongly on this notion, arguing that financial stability could not be outsourced to the UK (or other) authorities; while they regretted Brexit, they stated that London-based clearing could not adequately address EU stability and competition concerns over the long term.

There was also a difference of opinions on the feasibility of EBU and CMU. Some participants argued that the main obstacle to greater integration was political. They suggested that Brexit could actually contribute to a new political consensus to develop the policies needed to fully integrate European markets. Others were skeptical. They argued that structural factors, including EU countries’ reliance on banking and the continent’s limited numbers of pension funds and other institutional investors, would make CMU extremely difficult to achieve. Moreover, many
financial transactions could still be done cheaply and efficiently in the liquid UK or US markets, reducing the likely demand for EU-based services. There was also discussion as to the nature of the political obstacles. It was argued that it would be difficult to build truly integrated EU financial markets if the political resistance was due to either a broad suspicion of market finance or a desire on the part of national governments to develop national champions.

Looking beyond Europe, many participants were worried about transatlantic and global fragmentation. They argued that fragmentation was reducing liquidity, increasing costs, and potentially making the financial system more brittle. In banking, a number of participants made the point that a more fragmented, ringfenced system would not improve the resolvability of multinational banks, although they agreed that it would reduce the likelihood a particular state having to bail out depositors and creditors in other jurisdictions.

The effects of fragmentation were seen as differentiated by financial activity. Some participants argued that higher costs due to fragmented regulation and ringfencing might simply be the “price of being global” for banks that would likely be passed on to customers. For asset managers, however, fragmentation was more of a serious threat to their business models.

Perhaps most important was the systemic effects of fragmentation. Participants discussed whether banking had become more or less fragile as a result of these forces. On the one hand, some expressed concern about the difficulties that fragmentation raised for capital management within multinational banking groups. On the other hand, they also recognized that high capital requirements in multiple jurisdictions would likely reduce the need for resolution but arguably at the cost of more economic growth. For capital market fragmentation, there was greater concern about how reduced liquidity might help to amplify a crisis. In contrast, some participants expressed the view that fragmentation might be a reasonable cost for the EU to pay in order not to be dependent on UK or US regulators for its financial stability.
Session 2: The Evolution of the Asset Management Industry

In Session 2, participants discussed the evolution of the asset management industry. In looking at the global picture, major topics included fragmentation and the rise of index funds. However, much of the session focused on current issues in Europe, including regulation of benchmarks and efforts to ensure that the asset management sector would promote the EU’s environmental, social, and governance (ESG) goals.

Changing Face of Asset Management

Participants agreed that the global asset management sector had changed dramatically in recent years as a result of new technologies and strategies, as well as changing investor profiles and preferences. They sought to evaluate those changes on the basis of two key questions: how well were end-users being served? And were there any implications for financial stability?

One clear trend in asset management was declining costs for investors, driven by technological changes, competition among trading platforms and exchanges, rise of index funds, and increased competition among funds for customers. A variety of technological changes were noted as contributors to this trend— for example, increased computing power and software made trading more efficient, while new interfaces and tools lowered the cost of reaching retail customers. Emerging tools such as robo-advising were seen as likely to continue to push down the cost curve. Meanwhile, greater competition among trading venues, between asset managers, and between index and actively-traded funds further worked to hold down costs for many asset management products.

Some concerns were discussed. Some that had been widely reported were the possibilities that the rise of passive investment might increase herd behavior, weaken price discovery, and hurt either financial stability or economic growth. However, there appeared to be no support for these concerns among participants. Market liquidity remained very high in major markets, driven in part by technological capabilities that enabled faster, cheaper trading. In terms of price discovery (and therefore allocation of resources), many participants pointed out that passive investing was still very much a minority of funds under management and that such funds accounted for a very small percent of total trading even in U.S. equities, where they had had their greatest impact. They also argued that, if passive funds were missing undervalued assets, they would start to underperform actively-managed funds or activist investors. This suggested a natural equilibrium between passive and active funds. Participants also saw no evidence that investors in passive funds were more susceptible to herd behavior than other investors—in fact, it was noted that the prevalence of pension funds and retirement assets among passive investors suggested they were less likely to pull out of funds quickly. It was acknowledged that there would likely be some consolidation among funds and asset management groups, which could hurt profitability among fund managers, but participants argued that there was still a great deal of competition, so end-users would not be harmed by potential monopoly pricing.
Finally, some participants observed that, with the cost structure of fund investment dropping, asset management firms were shifting the focus of their retail strategies. Rather than simply trying to market individual funds or differentiate by performance, they were increasingly focusing on providing tools and advice for retail investors to optimize their own portfolio allocation.

**Asset Management in Europe**

While participants were generally optimistic about the effects of technological developments and competition on the quality and cost-performance of asset managers on the global level, they expressed considerable frustration about the conditions for asset managers in the EU. This was due to several factors, including Brexit, regulation, and market structure. They worried that these impediments were also hindering the growth of long-term growth capital, and thus weakening economic growth prospects in Europe.

Brexit was a matter of considerable frustration for those involved in the asset management sector, as it both added to costs for UK-based operations and cut into liquidity for all asset managers. Already, many firms had moved parts of their operation out of the UK into other EU states, and this would lead to ongoing costs and inefficiencies. Depending on the final Brexit arrangements, additional costs of compliance were likely to arise as well. Market fragmentation was also expected, particularly given the requirement that euro clearing for EU-based clients occur within the EU. With London markets less accessible, it was expected that derivatives clearing as well as some equities and bond trading would move to smaller, less liquid EU-based CCPs and trading venues, making the job of fund managers more challenging and likely raising costs for end-users.

Another regulatory challenge was what some participants saw as a fundamental misunderstanding among EU regulators of the functions and character of asset management. These participants argued that EU regulators basically saw major asset managers as big, bank-like systemically-important financial institutions (SIFIs) that could trigger a future crisis. The U.S., it was noted, had rejected this approach by deciding that asset management firms should not be designated as SIFIs but instead should be subject to regulation of their products and services to prevent systemic risk.

Some participants argued that the EU sought to impose regulations that were similar to those for banks, such as capital and liquidity requirements. These participants argued that asset management firms were different in multiple ways from systemically important banks. First, they noted asset management firms are not involved in either credit creation or the payments system. Also, it was not funds but the end-users that actually owned the securities under management, and that it was choices by individual investors that would drive their actions. Moreover, they argued that the funds that were big enough to be systemically important were not actually leveraged. Thus, they argued, cumbersome regulations were not necessary to prevent contagion, but only served to raise costs for firms and lower demand among investors. Some participants also suggested that EU regulators remained suspicious of foreign asset managers and instead sought to promote domestic firms, even though the greatest expertise lay in the globally active firms. Other participants rejected these criticisms. They argued that some asset management firms and funds actually did present a potential threat to the system, whether through leverage,
herd behavior, or (perhaps most likely) their reliance on hedging instruments that could quickly become illiquid and contribute to contagion. This justified the need to keep some functions including euro clearing onshore where they could be effectively regulated under EU law.

Not all impediments to the asset management sector in the EU could be attributed to regulation. A number of participants pointed to structural challenges that they argued hindered growth of funds under management. The biggest of these was the relative lack of pension funds, especially private pension funds. Pension funds and individual retirement funds were fundamentally important players in supporting the growth of the U.S. asset management sector, but the EU’s reliance on unfunded or government-managed pension funds significantly reduced the potential pools of capital available for investment in long-term or risky assets. It was also noted that the bank-based systems of many European economies had prevented the development of a tradition of individual investment in risk capital.

Several participants made the case that these structural characteristics also weakened the prospects for CMU to be successful. Given the need for long-term risk capital in order to spur investment and economic growth, they argued, the various regulatory and structural impediments to the growth of asset management would likely contribute to continued anemic economic growth in the EU.

**Indexes and Benchmarks**

Participants discussed at length the roles and possible regulation of indexes and benchmarks. Both were seen as important to the asset management industry, which used them extensively in the design and evaluation of their funds.

Given the popularity of index-based passive investing, some participants argued that it was necessary to look more deeply at how they were constructed, how they operated, and what their impact was on investors. One key focus was the growing use of “bespoke” indexes. While many of these were modifications of widely used indexes (such as applying an environmental filter to an index such as the S&P 500), their increasing use raised serious questions for some participants. From the point of view of investor protection, three concerns were raised. First, such bespoke indexes, if they could be easily changed based on performance, did not really function as indexes that could be passively managed, but rather constituted a form of active trading strategy. Second, investors could not easily compare these funds against a benchmark index, making it difficult for them to judge the performance of the funds on which they were based—as some put it, these funds were being “graded on their own curve.” Third, the criteria under which bespoke indexes were designed or modified were generally non-transparent, making it difficult for investors to actually understand what they were investing in.

To some participants, this suggested a role for regulators. Proponents of government involvement suggested that, unless there were clear rules on standard setting and means of ensuring transparency, funds could easily manipulate indexes and benchmarks to lure investors into products they did not really understand and could not judge. Some further called for regulators to oversee the design of indexes to ensure that choice and weighting of assets matched the desired outcomes. Many participants were skeptical of government involvement in overseeing and regulating indexes, however. Most importantly, they felt that the value of a
particular index should be demonstrated in the marketplace rather than dictated by governments—if new indexes better served the needs of some investors, then their use should be allowed to expand. They worried that government involvement would not only make for fewer options for investors, but also that regulators would seek to push social or political agendas that did not necessarily prioritize the desire of investors to maximize returns. Another criticism of regulatory intervention was that, despite the increasing usage of bespoke indexes by funds, they remained a very small portion of total passively-managed assets, and therefore not an important target for investor protection. A number of participants saw regulatory scrutiny to be part of a slippery slope toward more government involvement in all investment decisions.

A similar set of questions was raised about efforts to regulate financial benchmarks. Participants agreed that these efforts were motivated by the known flaws and abuses of the London Interbank Offered Rate (LIBOR). They recognized that regulators around the world were trying to unwind LIBOR-based contracts and products and find replacements that would reflect market conditions and not be manipulated by insiders. However, many participants expressed concern that the legitimate desire to protect investors had gone too far in the EU, veering into increasingly assertive regulation. A particular concern was over extraterritoriality. It was noted that EU regulators had asserted their authority to scrutinize and oversee the operation of any benchmark on which financial products were provided to EU citizens or corporations. At the extreme, as one participant put it, the Nigerian Interbank Offered Rate could now be regulated in Europe if it were used in determining returns of a fund that was sold to Europeans. Some participants disputed that claim, arguing that EU regulators followed a clearly defined set of categories that differentiated among critical benchmarks, significant benchmarks, and other benchmarks with thresholds based on asset classes. Depending on the classification, regulation could range broadly from simple reporting to rules on governance to ongoing oversight. While assessments of current benchmark regulation were mixed, participants agreed that this was an issue to keep an eye on.

ESG and Asset Management

There was considerable discussion in Session 2 about emerging EU efforts to promote environmental, social, and governance (ESG) goals through the asset management sector. Participants noted that the European Securities and Markets Authority (ESMA) was beginning to develop an ESG agenda for asset managers. They discussed the benefits and potential downsides of such a strategy, as well as the ways in which it might progress. Participants noted considerable differences between U.S. and EU approaches to promoting ESG goals through regulation of asset management and questioned whether this could lead to conflict between the two sides over time.

A number of participants pointed out that, regardless of whether ESG-directed regulations were in place or not, ESG was becoming an increasingly important issue in the asset management industry. Partly, this was due to investor demand and the popularity of impact investing. Participants noted that there was rising demand for “green” or socially-conscious funds with goals ranging from promoting environmental sustainability to avoiding investment in particular sectors (weapons, tobacco, etc.) or in authoritarian countries, and that asset management firms were working hard to meet that demand. However, there were as yet no universally-accepted criteria for how to judge whether (or to what extent) investing in particular companies or infrastructure projects supported or detracted from ESG goals.
A second reason for increased interest in ESG among asset managers was more traditional in nature. Several participants asserted that there was a growing realization among investors and asset managers that ESG principles may be aligned with long-term profitability. They argued that companies that ignored the impacts of climate change in their physical investments would be less profitable, just as an infrastructure project that sparked social protests or was poorly managed was likely to fail as an investment. In this sense, investing with ESG principles in mind would benefit their clients. This point also extended to how asset managers should exercise voice in proxy votes as representatives of their clients—pushing ESG principles in the boardroom could be an effective way of improving long-term corporate performance. However, some participants were skeptical. They argued that the impact of ESG principles on corporate profitability had yet to be demonstrated, let alone quantified. Thus, they saw the case for ESG-oriented investing or voice not to be convincing, except for those investors who were pursuing ethical goals as part of their strategy.

An important set of challenges for ESG-conscious investing revolved around the problem of measurement, at multiple levels. To begin, participants noted that there was not even an accepted or consistent way of measuring commitment to ESG of a particular company or infrastructure project. This created confusion since it was not clear whether a particular investment should be counted as “green” or “clean.” Even if a scale could be created, participants questioned whether there should be a simple threshold that separated green investments from non-green investments or whether asset managers should instead follow a green-weighting (analogous to risk-weighting). Only after that conceptual hurdle was surmounted could there be an objective assessment of the economic and ESG performance of a particular investment of fund. Thus, the situation called for a clearer set of criteria, the collection and dissemination of better and more standardized data, and the development of models that accounted for the various risks and objectives about which various types of investors were most concerned.

In the EU, many participants observed, government was stepping into the informational breach. The first step in this effort was the creation of a taxonomy of green companies. While some participants saw this as a useful exercise to bring greater rigor and transparency to the effort, a number of participants were worried about the longer-term implications. Some complained that the EU was trying to make the asset management sector solve societal issues that the political system was not managing effectively. They argued that if policymakers really wanted to have a major impact on ESG goals, they would do better to implement policies that would have direct impact, whether through regulations that mandated or disallowed particular activities or through subsidization and support of desired investments and activities. They were also critical of the focus on the asset management sector, arguing that policymakers needed to bear in mind that regulation of asset management actually would have the effect of determining the returns on the assets of millions of households. Other participants were less concerned. They countered that government involvement in creating taxonomies for the asset management industry were just one piece in a comprehensive strategy to address the most pressing problems facing the world. Given the urgency of climate change in particular, they stated that every tool should be used.

A major concern for participants on both sides of the issue was what would be regulators’ next steps. At the moment, ESMA’s agenda was focused on mandating disclosure of ESG-related activities by companies and trying to create a taxonomy of green companies. This effort was ongoing, with multiple categorization schemes currently on the table. The taxonomy effort
appeared to be responsive to the concerns of investors and respectful of their desire to decide on how their money should be used. But a number of participants argued that it was unlikely that the efforts would stop at mandated disclosure or public classification of companies into categories of ESG compliance. They predicted that voluntary ESG classifications could easily become legally-relevant categories—for example, they could feed into risk-weighting of bonds and bank loans, which would have important effects on the allocation of capital and credit, as well as uncertain effects on financial stability. Some also questioned how the ESG taxonomies might be integrated with the growing focus on regulating benchmarks, and speculated that ESMA might seek to impose EU-approved ESG criteria for any investments or indexes to be considered green.

In contrast to the EU’s increasingly assertive approach, participants characterized the U.S. approach to ESG investing as privately-driven and voluntary. Rather than relying on government taxonomies, U.S. authorities remained hands-off, allowing asset managers to make use of varying definitions and standards, although there appeared to be some convergence toward a small number of voluntary standard-setting bodies such as the Sustainability Accounting Standards Board. At least for the moment, disclosure of ESG-related activities remained voluntary, with some firms choosing to submit their records to standard-setting bodies and some not. Participants were unsure whether this primarily reflected U.S. traditions of leaving such decisions to markets and private actors or reflected the lack of political consensus in the U.S. over environmental and social policy goals.

A final question was how the EU’s ESG agenda might affect global markets and firms. Some participants argued that Europe’s role was as a thought-leader and role model for other countries that could learn from it how to champion environmental and social goals in investing. Whether this vision of ESG-conscious investing would prevail globally would depend on the outcome of a contest of ideas. Other participants predicted that the EU might seek to enforce its standards extraterritorially, either through risk-weighting rules, regulation of benchmarks (as described above), or limiting access to the EU markets to companies that did not follow its rules. If that were to occur, participants worried about the potential for U.S.-EU conflict over rules and claims of discrimination against U.S. firms.
Session 3: How Are Regulation and Technology Changing Core Financial Infrastructures?

In Session 3, participants discussed the ways in which regulation and technology were changing core financial infrastructures. Discussion focused in particular on clearing and data reporting. Common challenges included cybersecurity, risk management, and management of cross-border regulatory difference.

**Challenges and Opportunities**

Participants agreed that technological and regulatory changes had driven a considerable transformation of financial infrastructures. In trading and clearing, technological change had enabled new techniques and strategies, increased liquidity, and driven down costs for end-users. The rise of fintechs, cloud computing, and data analytics had also served to change the relevant players in financial markets, including through outsourcing of core functions such as data storage and processing, risk management, and order matching to new players that often perceived of themselves as technology companies rather than financial institutions.

Technology also drove new challenges. One of these was standardizing, storing, protecting, and making effective use of the enormous amounts of trade data generated in exchanges, CCPs, and other trading venues. Many participants expressed concern about cybersecurity and how financial infrastructures and regulators could keep data—and the integrity of trades and accounts—safe. They also questioned whether regulators could actually make effective use of the tremendous amounts and types of data being produced, and some worried that the costs of producing data (sometimes for more than one jurisdiction at once) were not worth the benefits.

Regulation was also a major factor in the growth and evolution of financial infrastructures. International regulatory agreements starting with the G20 financial regulatory reform agenda had increased the profile and systemic importance of CCPs, as they had sought to ensure that standardized over-the-counter (OTC) derivatives were centrally cleared. This was extended through several mechanisms, including the Principles for Financial Market Infrastructures (PFMI) of the International Organization of Securities Commissions (IOSCO) and the Committee on Payments and Market Infrastructures of the Bank for International Settlements (BSI). Nonetheless, national regulations often cut against international efforts at coordination. This was a concern for many participants.

**Central Clearing**

Central clearing was one of the major accomplishments of the G20 financial reform agenda, and many participants agreed that it had increased transparency and fairness, and had reduced some of the operational risk associated with OTC trading. This had been a particular concern of EU policymakers in MiFID II. However, it was also noted that the increased reliance on CCPs created a concentration of risk (including financial failure and cybersecurity) in the CCPs themselves. Thus, careful regulation and international cooperation would be important from a financial stability perspective.
Much of the discussion of central clearing focused on the challenges of cross-border regulatory cooperation. As noted, the actions of national regulators did not always accord with the agreed principles of international cooperation. On the U.S. side, participants noted the requirement of Commodity Futures Trading Commission (CFTC) registration for foreign CCPs that served U.S. customers, a registration requirement that the EU did not impose on foreign clearinghouses serving EU customers. Most agreed that the CFTC process was fair and transparent, but some felt that the threshold for registration was had been much too low and questioned whether, given equivalence determinations, it was necessary. A bigger concern for many participants was the extraterritoriality of EU rules, even absent registration, which they saw as more intrusive and less transparent than those of the CFTC—indeed, some pointed out that the most recent version of the European Market Infrastructure Regulation (EMIR 2.2) had extended the principle of EU oversight, authorizing it to examine any function of a CCP that had did business with Europeans. As a more specific example, many pointed out the EU’s Brexit position, which required localization of CCPs used in euro clearing. U.S., European, and other regulators were trying to bridge regulatory barriers to cross-border transactions by memorandums of understanding with foreign regulators, but these took time to conclude, especially when rules changed in one jurisdiction or another.

Participants discussed at length the issue of extraterritoriality in the regulation of financial infrastructures. Many expressed a strong preference for regulatory deference in order to allow market actors to choose clearing locations based on price, liquidity, convenience, or other factors. They realized that national regulators were necessarily nervous about the financial implications (and potential for systemic risk) if a poorly-supervised CCP in another country for which their home country financial institutions were members or major customers were to go under. However, they cautioned that management of a CCP failure would be made much worse if the failing CCP faced multiple regulators from multiple jurisdictions.

More broadly, extraterritoriality on the part of the U.S. and EU was seen as a problematic, but increasingly common feature of the global financial system. There was some difference of opinions as to the causes—whether extraterritorial regulations reflected a desire to promote domestic actors and institutions, to set de facto global standards, or just to protect domestic taxpayers from the possible mistakes of foreign regulators. But there was a high level of agreement that it contributed to market fragmentation, with negative impacts on liquidity, prices, and other costs.

**Data Reporting**

The other major topic of discussion was data. Participants expressed considerable frustration with the state of trade reporting. One aspect of that frustration was that regulators demanded too many fields of data, which created significant costs for financial institutions, exchanges, and CCPs. Moreover, they argued, the benefits seemed murky—not only were some data fields unlikely to be relevant to prudential supervision, there was no way that regulators would be able to process all of the data effectively to ensure legal compliance and financial stability. Some also pointed out that these requirements had heightened the systemic importance of trade repositories as crucial financial infrastructures.
Participants were even more frustrated by the lack of common standards regarding trade reporting. Differing requirements for data based on differing definitions and measurement significantly increased compliance costs for multinational financial institutions and for cross-border transactions. In addition to increasing costs for market actors, participants argued that the lack of standardization meant that regulators were hampered in their ability to develop accurate models for the importance of particular measures and that cross-border regulatory or supervisory cooperation was made unnecessarily difficult. Even legal entity indicators (LEIs), whose sole purpose was to simplify identification of parties to a transaction, were not standardized across borders.

Thus, participants called for a truly global approach to data reporting, with common standards for all transactions and entities. They urged the Financial Stability Board to prioritize implementation of standardization, including LEIs, Unique Transaction Identifiers (UTIs), and Unique Product Identifiers (UPIs). They also urged regulators to work together with the financial sector to determine which data were most useful to ensure that the legal and prudential dimensions of trading, clearing, and settlement could be properly monitored in as timely a manner as possible.

Finally, participants agreed on the importance of timely and reasonably-priced provision of market data. They were particularly critical of the quality and cost of European trading data from exchanges and other trading venues. Many participants emphasized the importance of creating a consolidated tape in order to improve efficiency and reduce gaps in pricing across venues. For many of these participants, the U.S. consolidated tape system was seen as a model to be emulated. There were, however, some concerns expressed participants about the pricing of the U.S. consolidated tape system, with some participants arguing strongly that leaving pricing for essential data to for-profit exchanges and data consolidators had created underregulated monopolies.