

EU financial market regulation a decade from the financial-crisis-era reforms: crisis, uncertainty, and capacity

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ABSTRACT

This article reflects on the effectiveness of European Union (EU) financial market regulation, a decade or so after the closure of the EU's massive financial-crisis-era reform programme. To do so, it considers the first significant test of the financial-crisis-era reforms: the March 2020 period of acutely elevated financial stability risk as the COVID-19 pandemic intensified, global markets roiled, and the investment fund sector experienced large-scale disruption. It relates the EU's broadly successful management of this period to, first, the resilience of the legislative choices made and refined over the financial crisis era as regards investment fund regulation and, secondly, to technocratic action, by the European Securities and Markets Authority (ESMA) and the European Systemic Risk Board (ESRB), that facilitated rule amplification, risk monitoring, supervisory coordination, and supervisory convergence and thereby supported the earlier legislative choices. Drawing on the March 2020 experience, the article goes on to consider the capacity of EU financial market regulation more generally to manage what are increasingly dynamic risks to financial market stability. It identifies a strengthening of the EU's capacity in this regard, but also persistent and intractable risks to this capacity, including as regards legitimisation.

I. INTRODUCTION: THE FINANCIAL-CRISIS-ERA RULEBOOK, REVIEW, AND RISK

Almost a decade has passed since the European Union's (EU) financial-crisis-era reform programme for financial markets closed with the adoption of a final suite of legislative measures in April 2014.¹ It is over a decade since the establishment in 2011 of the European

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¹ On the reforms, see E Ferran, 'Crisis-driven Regulatory Reform: Where in the World is the EU Going?' in E Ferran and others, *The Regulatory Aftermath of the Global Financial Crisis* (Cambridge University Press, 2012) 1 and, for political economy perspectives, the discussions in the (2009) 47 Special Edition of the *JCMS*. This discussion is concerned with financial markets and so does not address banking-related reforms.

Securities and Markets Authority (ESMA) which has come to wield a decisive technocratic influence over the EU financial market.² These reforms were profoundly transformative to the structure of EU financial market regulation, leading to the now vast financial market rule-book (composed of often densely complex legislation, administrative rules, and soft law) and to a supporting supervisory architecture of some intricacy and dynamism. There is nothing innately meaningful or magical about a decade or so passing from this epochal reform period. Much remains in flux. The financial-crisis-era legislative measures are being or have been reviewed, with the June 2023 agreement on the reform of MiFID II/MiFIR, a leviathan of the financial-crisis-era period, a significant waypoint.³ The intervening decade has also been punctuated by the adoption of new legislation, much of it fund-raising-focused and driven by the Capital Markets Union (CMU) agenda adopted in 2015 and refreshed in 2020.⁴ The supervisory architecture remains unsettled.⁵ Nonetheless, the decade marker, while expedient, provides a natural point for reflection.

To do so, this discussion considers the first significant test of the financial-crisis-era reforms to financial market regulation: the March 2020 period of acutely elevated financial stability risk as the Covid-19 pandemic intensified and global markets roiled. There have, of course, been other tests. The preparations from 2016 to 2020 for managing the UK's withdrawal from the EU showed that the EU had developed a significant technocratic capacity, in particular through ESMA, to address the operational complexities and regulatory ambiguities the withdrawal generated and to cushion the EU against related risks.⁶ The early 2021 Gamestop/'meme stock' episode that convulsed US retail markets did not expose material weaknesses in EU investor protection regulation.⁷ And while the illegal Russian invasion of

² ESMA and its sister agencies (the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (EIOPA)) (the European Supervisory Authorities (ESAs)) were established in 2011 as coordinating agencies with competence to support the Commission's adoption of administrative rules, adopt soft law, facilitate supervisory coordination and convergence, and exercise a limited suite of direct intervention/supervision powers. ESMA has significantly more direct supervision powers than EBA and EIOPA, being the exclusive supervisor of a small population of regulated actors. For a book-length treatment by this author, see N Moloney, *The Age of ESMA. Governing EU Financial Markets* (Hart Publishing, 2018).

³ All the financial-crisis-era legislative measures (and all financial market legislation since) have 'review clauses' which mandate review of the measure by a specified time and indicate the review's scope (typically areas of contestation or uncertainty over the legislative negotiations). The review of the Markets in Financial Instruments Directive II (MiFID II)/Markets in Financial Instruments Regulation (MiFIR) (Directive 2014/65/EU [2014] OJ L173/349 and Regulation (EU) No 600/2014 [2014] OJ L173/84) (in force since 2018), eg, was launched in 2020 and culminated in the 2021 MiFID III/MiFIR 2 proposals (COM(2021)726 (MiFID III) and COM(2021)727 (MiFIR 2)), on which the Council and European Parliament reached provisional agreement in June 2023. These reforms are primarily finessing in nature but will bring material operational change to how trading data are consolidated and distributed through a 'consolidated tape'.

⁴ The CMU agenda is concerned with embedding market finance and frames much of EU financial market regulation policy: Commission, A Capital Markets Union for People and Businesses. New Action Plan (COM(2020)590) and Commission, Action Plan on Building a Capital Markets Union (COM(2015)468).

⁵ Section VI.B ahead.

⁶ The array of supporting ESMA measures extended from guidance on how the EU's third country regime applied to UK firms, to guidance for Member State supervisors on how to address the repatriation of financial market business from the UK to the EU, to cooperation agreements with UK regulators. For an ESMA perspective, see ESMA Chair, Speech, 13 February 2019.

⁷ Including as regards the 'payment-for-order-flow' (PFOF) conflict-of-interest risk strongly associated with the episode and arising from the Robinhood trading/brokerage app directing retail orders in Gamestop shares to particular trading platforms and receiving related fees. See M Arrigoni, 'Think Twice, It's All Right. Lessons from the Gamestop Saga' EBI WP 98/2021 <<https://ssrn.com/abstract=>

Ukraine in early 2022 led to strain in commodities markets, critical infrastructures in the EU, in particular the central clearing counterparties (CCPs) that, under EMIR,⁸ support derivatives (including commodity derivatives) trading, proved resilient, albeit that refining reforms are underway.⁹

The March 2020 period is of defining importance, however, as the first large-scale dislocation in financial markets since the financial crisis era. It tested the EU's reforms across three significant vectors: the financial market rulebook's capacity to manage financial stability risks—one of the defining concerns of the crisis-era reforms¹⁰; ESMA's institutional capacity to provide technocratic support to the rulebook; and in the context of investment funds, a sector that has experienced vertiginous growth since the financial crisis, the risk profile of which is dynamic and incompletely understood, and which poses a significant challenge accordingly to the EU's post-financial-crisis regulatory capacity.

As the COVID-19 pandemic deepened and the global economy froze, March 2020 saw large-scale and destabilizing upheaval in financial markets globally, primarily in the investment fund markets and short-term debt markets (with risk transmitting from one segment to the other).¹¹ The market disruption was largely unexpected. The decade since the financial-crisis-era reforms were adopted has seen the non-bank segment of the financial system ('non-bank financial intermediation' (NBFI); previously termed 'shadow banking'), including the investment fund and debt markets associated with the March 2020 upheaval, become a (if not the) major regulatory preoccupation globally.¹² As the NBFI segment

3877240> and N Moloney, *EU Securities and Financial Markets Regulation* (Oxford University Press, 2023) 538–39 and 800–01. Reform has, however, followed. Although the matrix of EU rules governing conflict-of-interest risk makes it difficult to engage in PFOF, the Commission's 2021 MiFID III/MiFIR 2 proposals included a complete ban on PFOF (in part also to support equity market transparency) which was agreed by the co-legislators in June 2023 (transition arrangements will apply). On the US experience, see J Macey, 'Securities Regulation and Class Warfare' (2021) Co Bus LR 796 and J Angel, 'Gamestonk: What Happened and What to do About it', Georgetown McDonough School of Business Research Paper (2021) <<http://ssrn.com/abstract=3782195>>.

⁸ EMIR (the European Market Infrastructure Regulation: Regulation (EU) No 648/2012 [2012] OJ L201), a pillar financial-crisis-era measure, governs derivatives markets in the EU, including by requiring that certain derivatives be 'cleared' through CCPs as a means for supporting financial stability.

⁹ See, eg, Commission, Facing the Energy Crisis in the EU: work streams relating to the financial system (2022) and ESMA, Review of the RTS with respect to the procyclicality of CCP margin (2023).

¹⁰ Financial stability can be described as a state-of-affairs whereby the financial system is capable of withstanding shocks and the unravelling of financial imbalances (a definition often used by the EU institutions: eg ESMA, Strategy 2023–28 (2022) 10). The recasting of financial market regulation, previously primarily concerned with market efficiency and integrity and with investor protection, to manage financial stability risks was one of the dominant themes of the financial-crisis-era reform agenda. On the related global/G-20 reforms, see R Lastra, 'Systemic Risk and Macro-Prudential Supervision' in N Moloney, E Ferran and J Payne (eds), *The Oxford Handbook of Financial Regulation* (2015) 309. Key stability-oriented EU reforms include MiFID II/MiFIR (n 3) (investment firms); CRD IV/CRR (investment firm prudential regulation: Directive 2013/36/EU [2013] OJ L176/338 (Capital Requirements Directive IV) and Regulation (EU) No 575/2013 [2013] OJ L176/1) (Capital Requirements Regulation); EMIR (n 8); the rating agency regime (the Consolidated Credit Rating Agency Regulation: ELI <<http://data.europa.eu/eli/reg/2009/1060/2019-01-01>>); and, more recently, the re-tooled prudential regime for investment firms under the IFD/IFR (Investment Firm Directive (EU) 2019/2034 [2019] OJ L314/64 and Investment Firm Regulation (EU) 2019/2033 [2019] OJ L314/1).

¹¹ See FSB, Holistic Review of the March Market Turmoil (2020) and IMF, Global Financial Stability Report. Markets in the Time of COVID-19 (2020). The period has been described as 'the worst market turmoil since 2008': L-D Capotá and others, 'Are Ethical and Green Investment Funds More Resilient' ECB Working Paper Series No 2747 (November 2022) (at 3).

¹² The NBFI population is vast, generating challenges as regards how best to capture it. NBFI risk globally is monitored by the global coordinator for financial stability risk management, the Financial

burgeoned,¹³ with it came the realization that how it amplifies risk across the financial system, including into the repaired and intensively regulated banking system, was poorly understood. In the last decade or so, monitoring and remedial efforts have intensified.¹⁴ The March 2020 upheaval saw the NBFIs segment exposed to its most acute financial stability risks since the financial crisis. The proximate cause of the market turmoil, however, originated outside the financial system: the curtailment of economic activity consequent on the COVID-19 pandemic. Ultimately, massive central bank and fiscal interventions played the decisive role in calming financial markets. Nonetheless, the financial-crisis-era reforms proved more-or-less resilient under pressure, including as regards NBFIs risk,¹⁵ even if a strengthening of how NBFIs financial stability risk, and particularly investment fund risk, is contained is now a global priority.¹⁶ Ultimately, the March 2020 upheaval, while exacerbated by financial system/NBFIs interdependencies, was the product of an external shock. In contrast, the global financial crisis originated within the financial system and the risks were amplified by regulatory failures which required large-scale repair.

The dynamics of the episode and of how risks were transmitted are intricate and arcane, involving complex feedback loops between acutely volatile asset prices, investment fund liquidity, and pressure in short-term debt markets in conditions of unprecedented global economic turmoil. The headline message as regards EU financial market regulation, and in particular the investment funds regime, is, however, straightforward. Although the investment fund sector has burgeoned and risk transmission patterns have evolved since the financial-crisis-era reforms, the EU investment fund rulebook proved robust in managing this change, and large-scale regulatory repair has not been needed. This success reflects the

Stability Board (FSB), through its annual monitoring report on non-bank financial intermediation. In these reports, the FSB reviews the activities of, *inter alia*, pension funds, insurance companies, investment firms, and investment funds. In the EU, NBFIs risk is monitored by several institutions, including the ECB, but in particular by the European Systemic Risk Board (ESRB). The ESRB's annual reviews are based on 'entity components' (investment funds and 'other financial institutions', including investment firm dealers in financial instruments and CCPs) and 'activity components' (such as derivatives use). On capturing the NBFIs population, see K Judge, 'Information Gaps and Shadow Banking' (2017) 103 Va LR 411, 414, characterizing it as 'an intermediation regime that resides in the capital markets while serving many of the economic functions traditionally fulfilled by banks'.

¹³ The NBFIs sector has grown very significantly since the financial crisis, driven by, *inter alia*, the regulatory constraints on bank risk-taking, demographic change fuelling demand for market-based savings and retirement products, and technological developments: S Aramonte, A Schrimpf and H Shing Song, 'Non-bank Financial Intermediation and Financial Stability, Bank for International Settlements (BIS) WP No 972 (2022). NBFIs assets now represent some 49.2% of global financial assets (42% in 2008): FSB, Global Monitoring Report on Non-Bank Financial Intermediation (2022).

¹⁴ The FSB's first major interventions ((Recommendations to Strengthen Oversight and Regulation of Shadow Banking (2011) and Strengthening Oversight and Regulation of Shadow Banking. An Overview of Policy Recommendations (2013)) marked the start of a multi-layered international agenda. For a financial-crisis-era perspective see E Gerding, 'The Shadow Banking System and its Legal Origins' (2012) <<https://ssrn.com/abstract=1990816>> and for a post-financial-crisis examination see H Nabilou and A Prum, 'Shadow Banking in Europe: Idiosyncrasies and their Implications for Financial Regulation' (2019) 10 European J of Risk Regulation 781.

¹⁵ FSB (2020) (n 11) 1–2. The sectoral reports from the major international standard-setters were similarly broadly positive. eg IOSCO (the International Organization of Securities Commissions), Operational Resilience of Trading Venues and Market Intermediaries during the Covid-19 Pandemic. Consultation Report (2022), reporting trading venues and investment intermediaries to have been broadly resilient.

¹⁶ L Noonan, 'Ireland and Luxembourg Step up Calls for Tougher Shadow Banking Rules' *Financial Times* (2 July 2023). For a recent review, designed to 'advance the debate', see Central Bank of Ireland, Discussion Paper. An approach to macroprudential policy for investment funds (2023).

resilience of the foundational legislation but also the EU's strengthened technocratic capacity.

It is less clear that the March 2020 experience mirrors a similarly successful capacity of EU financial market regulation generally, a decade or so after the financial-crisis-era reforms, to manage subsequent periods of elevated financial stability risk. Certainly, uncertainty and fragility can be expected. The March 2020 upheaval, the early 2021 disruption in commodities markets following the outbreak of war in Ukraine, the autumn 2022 dislocation in UK LDI (liability-driven investment) funds consequent on the Truss government's September 2022 'mini-budget', and the evolving market response to the changed monetary policy environment, as interest rate risks and slowing central bank asset purchases reduce liquidity, are all indicators of a financial market that is increasingly volatile and 'accident prone' and, relatedly, of elevated financial stability risks.¹⁷ The EU has, however, developed a significant capacity for reviewing, correcting, and adapting financial market regulation. Relatedly, the EU's ability to gather and interrogate financial market data, and so its capacity for diagnosis and remediation, has changed out of all recognition since the financial crisis.¹⁸ Conversely, sustainability risks are emerging. These include the long-standing reliance by the EU on notionally foundational legislation, revised through inter-institutional, political processes, to ground the financial market rulebook, albeit that risks and their regulatory remediations are becoming increasingly complex and data-framed and, arguably, in need of technocratic management. The sustainability risks also, however, include the extent to which technocratic but soft ESMA action can, given the totemic *Meroni* constraints on agency action,¹⁹ continue to be relied on as an expedient 'sticking-plaster' where regulation struggles and formal revision processes are not sufficiently agile (even if the Court of Justice appears ever-sympathetic to affording ESMA wide discretion²⁰). Alongside, while the institutional setting which supports the supervision of the EU financial market is in many respects capable of withstanding volatile conditions, being characterized by adaptability and incrementalism, the slight tilt to centralization that can recently be observed may bring some destabilizing complexity.

This examination of how EU financial market regulation has evolved and performed in the decade or so since the financial-crisis-reform period, through the lens of the investment funds regime and the March 2020 upheaval, is situated in the literature that characterizes law, regulation, and their institutional arrangements as necessary supports to financial markets.²¹ Given how the investment fund regime, as well as EU financial market regulation

¹⁷ eg IMF, *Safeguarding Financial Stability Amid High Inflation and Geopolitical Risks*, Global Financial Stability Report, April 2023 and, for EU/euro area perspectives, ESMA, *Report on Trends, Risks, and Vulnerabilities*, No 1 (2023) and ECB, *Financial Stability Review* (May) (2023).

¹⁸ The ability of regulators to gather, interrogate, and manage market data is now widely recognized as critical to effective rule design and supervision. eg R Berner and K Judge, 'The Data Standardization Challenge' in D Arner and others (eds), *Systemic Risk in the Financial Sector: Ten Years After the Global Financial Crisis* (2019) 135.

¹⁹ Case 9-56 *Meroni v High Authority* ECLI:EU:C:1958:7.

²⁰ The Court of Justice has, since the financial-crisis-era 'agencification' of EU financial system governance, repeatedly affirmed the validity of the new agencies' binding but also soft powers and afforded them a significant margin of discretion: Case C-911/19 *FBF v ACPR* ECLI:EU:C:2021:599 (an unsuccessful industry challenge to EBA's powers to adopt soft law); Cases T-481/17, T-510/17, T-523/17, T-570/17 and T-628/17 (the *Banco Popolare* cases: a series of unsuccessful challenges by impacted financial institutions to the Single Resolution Board's decision to place Banco Popolare in resolution (for an informal summary, see <<https://ebi-europa.eu/publications/eu-cases-or-jurisprudence/>>)); and Case C-270/12 *UK v Council and Parliament* ECLI:EU:C:2014:18 (an unsuccessful challenge by the UK to ESMA's intervention powers under the Short Selling Regulation).

²¹ eg K Langenbucher, *Economic Transplants. On Lawmaking for Corporations and Capital Markets* (Cambridge University Press, 2017); S Deakin and others, 'Legal Institutionalism: Capitalism, and the

more generally, has evolved in the decade or so since the financial-crisis-era reforms, it considers, alongside the legislative rulebook, the more depoliticized and technocratic elements of EU financial market regulation through which the financial-crisis-era political/normative legislative choices have been articulated.

Section II considers why a focus on investment funds and the inclusion of technocratic action is helpful in considering the evolution and performance of EU financial market regulation in the decade or so since the financial-crisis-era reforms. Section III outlines the regulatory and institutional setting of EU financial market regulation immediately prior to the March 2020 dislocation. Sections IV–V considers the March 2020 crisis. Section VI widens the inquiry, considering the capacity of the EU regulatory system more generally to manage the increasingly dynamic financial stability risks of financial markets. Section VII concludes.

II. THE CONTEXT: INVESTMENT FUNDS, TECHNOCRATIC ACTION, AND REVIEWING THE DECADE SINCE THE FINANCIAL CRISIS REFORMS

A. Investment funds

In contrast with the much-examined EU primary fund-raising markets and issuer disclosure regulation, and with the secondary investment intermediation markets and investment services regulation, the investment funds sector and its EU regulatory setting have drawn less attention in the literature.²² The funds sector has, however, much to offer any examination of how EU financial market regulation has developed and performed in the decade or so since the financial-crisis-era reforms. It constitutes a burgeoning segment of the EU financial system, the impact of which on financial stability is not fully understood. It is a critical institutional support to CMU. And it operates in a regulatory setting that can be tracked back to 1985, that has experienced repeated cycles of experimentation and reform, and that has a distinct political economy.²³

Constitutive Role of Law' (2017) 45 JCE 188; K Pistor, 'A Legal Theory of Finance' (2013) 41 J of Comparative Economics 315; and E Ferran, *Building an EU Securities Market* (Cambridge University Press, 2000).

²² The EU financial market regulation literature has burgeoned since its early days in the late 1970s and, alongside, has moved from typically considering the (then limited) regime as a whole (in particular as regards the relative merits of harmonization versus competition and the transformative potential of law) to address myriad sectoral issues, notably in the issuer disclosure and investment services segments. eg the many discussions of the CMU agenda typically address the issuer disclosure and investment intermediation regimes, their transformative capacity, and their political economy drivers. For a representative example see F Allen and others (eds), *Capital Markets Union and Beyond* (MIT Press, 2019). From the sectoral literature on the investment funds regime see, eg, K Navid, 'How Many Single Rulebooks? The EU's Patchwork Approach to Ensuring Regulatory Consistency in the Area of Investment Management' (2022) 23 EBOLR 347 (on the rulebook's consistency); E Howell, 'Post-'Brexit' UK Fund Regulation: Equivalence, Divergence or Convergence' (2020) 21 EBOLR 611 (a Brexit-related assessment); D Zetsche, 'The Anatomy of European Investment Fund Law' (2017) <<http://ssrn.com/abstract=2951681>> (a meta-examination); and E Ferran, 'After the Crisis: The Regulation of Hedge Funds and Private Equity in the EU' (2011) 12 EBOLR 379 and L Quaglia, 'The "Old" and "New" Political Economy of Hedge Fund Regulation in the EU' (2011) 34 West European Politics 665 (the legal implications and political economy of the highly contested financial-crisis-era negotiations on the new regime for alternative investment funds, including hedge funds).

²³ Member State interests can be strong in the fund sector given the sector's geographical organization and so the competitive territory at stake. This dynamic came into sharp relief over the financial-crisis era (Ferran (n 22) and Quaglia (n 22)) and remains a feature of political negotiations on the fund regime. In particular, as the structure of the EU fund industry is heavily based on cross-border business models, with

Investment funds, managed by investment managers and whose assets are separately held by depositaries, pool investors' capital to achieve returns (tied to investors' shares or units in the fund) that are related to contractual and regulatory asset allocation/portfolio construction mandates. Given funds' powerful capacity to intermediate capital (the EU investment fund sector represents in the region of €18.2 trillion assets under management²⁴), a deep and liquid funds market is regarded as a key institutional component of a strong financial market²⁵ and so as central to the achievement of CMU.

The funds sector is also one of the most heavily regulated sectors of the EU financial market. It generates risks to investor protection which are well understood.²⁶ These are managed by well-tested regulatory tools²⁷ which are also designed to support the cross-border 'passporting' (in practice, marketing) of funds from their 'home' authorizing Member States across the EU. The sector also generates risks to financial stability. These are much less well understood and the regulatory tools through which these risks can be managed are still developing.

The burgeoning of the investment fund sector globally is one of the defining features of the recent evolution of financial markets and a driver of the expansion in the NBFIs sector.²⁸

funds typically authorized in Ireland or Luxembourg and then 'passporting' cross-border, legislative negotiations can be exposed to tensions potentially arising between 'home' authorizing States and host States. The sector also relies heavily on delegation-based business models which can mean that EU funds outsource much of their risk management and asset management business and operations to third countries. The UK withdrawal from the EU, eg, prompted significant Member State contestation as to the extent to which greater controls should be placed on national regulators' ability to authorize funds that rely heavily on third-country (in effect, UK) services and operations. The Commission's related 2017 proposal to empower ESMA to review regulators' actions (COM(2017)536) did not garner sufficient Member State support, but the episode exposed significant cleavages, driven by competitive interests, between the Member States (eg A Mooney and J Thompson, 'Europe's National Regulators Clash Over Delegation' *Financial Times* (8 October 2017)).

²⁴ Investment fund assets represented some €18,215 billion at the end of 2022: European Fund and Asset Management Association (EFAMA), *Asset Management in Europe* (2022).

²⁵ eg B Black, 'The Legal and Institutional Preconditions for Strong Securities Markets' (2001) 48 *University of California LR* 781.

²⁶ These derive from the principal/agent risk arising between the principal investor and the agent fund manager and taking expression in, eg, portfolio allocation failures, fraud, and mis-selling. From the cognate US literature (which is long-standing and extensive, reflecting the vast scale and long history of, and mass retail investor engagement in, the US funds market) see P Mahoney, 'Manager Investor Conflicts in Mutual Funds' (2004) 18 *J Econ Perspectives* 161; H Jackson, 'Regulation in a Multi-sectored Financial Services Industry: An Exploration Essay' (1999) 77 *Washington University LQ* 319; and, earlier, R Clark, 'The Soundness of Financial Intermediaries' (1976) 86 *Yale LJ* 1.

²⁷ The EU's flagship 'UCITS' fund (see ahead) sits within a densely harmonized regulatory scheme oriented to retail investor protection. Its core structural and regulatory feature, mandatory redemption on demand (an investor can demand the fund that their investment be liquidated), is a powerful investor protection mechanism as it allows the investor to exit on demand and so mitigates liquidity risks. Redemption on demand is supported by extensive asset allocation requirements designed to ensure the liquidity of the UCITS asset portfolio. The UCITS fund is, in addition, subject to risk management requirements, while the UCITS manager is subject to conduct and prudential regulation as is the UCITS depositary. Distribution requirements also apply, including short-form, retail-oriented disclosure and also marketing requirements. While the UCITS regime has not experienced major episodes of retail market mis-selling, difficulties persist, notably as regards the extent to which retail costs and fees can erode returns. ESMA reports annually on UCITS' costs (through its annual (since 2019) *Performance and Costs of Retail Investment Products Report*) and has adopted related soft law (including 2021 *Guidelines on performance fees*).

²⁸ As markets recovered from the financial crisis, investment fund assets under management globally rose from \$53.6 trillion in 2005 to \$76.7 trillion in 2015: FSB, *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities* (2017) 1. The steep growth in the funds

Alongside this growth, financial stability risks have intensified. These risks are primarily a function of evolving risks to fund liquidity and their wider impact. To take one of the main sources of liquidity-related fund stability risk, where a fund is ‘open-ended’, in that it must redeem on demand (or allow an investor to sell back to the fund the share or unit purchased), its underlying assets must be sufficiently liquid for it to do so. But the post-financial-crisis period has seen investment fund assets, in some fund segments, become increasingly illiquid as funds sought higher returns from more illiquid assets in response to the long-prevailing low-interest rate environment. Where open-ended funds’ liquidity profiles become more illiquid, it raises the prospect of de-stabilizing fire sales of illiquid assets when such funds face elevated redemption pressure in stressed market conditions.²⁹ The related risks can be amplified where similarly designed funds act collectively in response to market conditions.³⁰ How investment fund liquidity risks transmit into the wider financial system, however, is not fully understood. Neither is how these risks can be contained through regulation. Fund regulation has long relied on authorization, conduct, portfolio allocation, and disclosure tools, many of which have a prudential, stability-oriented dimension, particularly as regards risk management. But it is less familiar with the more interventionist, prudential tools associated with financial stability and now well-tested in the banking sector. Fund-level micro-prudential tools (for example, liquidity management requirements that constrain investors in redeeming their units), and system-level macro-prudential tools (currently primarily associated with the banking sector, such as pan-industry capital buffers, and including, for funds, sector-level fund leverage restrictions), are still developing.³¹ Understanding the drivers of investment fund financial stability risks, and of how regulatory mitigants should be designed, has emerged as one of the driving preoccupations of the international standard-setters. The international investment fund reform agenda, which has traditionally rested with financial market regulators (coordinated through IOSCO and classically concerned with authorization, conduct, portfolio allocation, and disclosure tools) is now being spearheaded by the FSB (concerned with global financial stability and with related prudential tools). While initial efforts were tentative, reflecting uncertainty as to the extent to which funds posed stability risks, and also differing regulatory perspectives on the relative value of prudential (including macroprudential) and conduct tools,³² international coordination has recently intensified after the March 2020 upheaval.³³

sector has since prompted IOSCO to monitor it annually (since 2022). Its first review reported that the sector had more than doubled since 2000: IOSCO, *Investment Funds Statistics Report* (2022). Similarly, in the euro area, the sector has grown from €3.6 trillion (2000) to €14 trillion (2020): G di Iasio, C Kaufmann and F Wicking, ‘Macroprudential Regulation of Investment Funds’ ECB WP Series No 2695 (2022). This growth has, like NBF1 growth generally (n 13), been associated with the regulatory constraints on banks, technological developments, and the search for yield in a (previously prevailing) low-interest rate environment: IMF, *Investment Funds and Financial Stability*, DP/2021/018 (2021).

²⁹ See, eg, in the context of the March 2020 turmoil, FSB (n 11), di Iasio, Kaufmann and Wicking (n 28) and IMF (n 28).

³⁰ See, eg Central Bank of Ireland (n 16).

³¹ For an early intervention see van der Veer and others, *Developing Macroprudential Policy for Alternative Investment Funds*, ECB Occasional Paper No 202 (2017).

³² See S James and L Quaglia, ‘Epistemic Contestations and Interagency Conflict: the challenge of regulating investment funds’ (2023) 17 *Regulation and Governance* 346.

³³ The FSB’s first major intervention on investment fund stability came in 2017 (n 28). It suggested that open-ended funds were generally resilient, but adopted 14 high-level recommendations, primarily concerned with monitoring, reporting, and the coordinated development of additional tools, such as guidance on liquidity management and stress testing. Subsequently, IOSCO adopted fund liquidity risk management recommendations: IOSCO, *Principles for Liquidity Risk Management for Collective Investment Schemes* (2018). Following the March 2020 upheaval, the FSB and IOSCO assessed the effectiveness of their 2017 and 2018 recommendations on liquidity risk management: FSB, *Assessment of the*

The EU investment fund legislative regime, through which this growth and these risks are being managed, addresses the fund manager (through authorization/management requirements, including prudentially oriented risk management requirements), the depositary (including asset protection requirements), fund portfolio construction/asset allocation (through ‘eligible assets’, leverage, and risk management requirements, all of which have a prudential colour), and disclosure. The regime has a long lineage, but the financial-crisis era saw it significantly revised and become sharply tilted towards addressing financial stability risks. It stretches back to 1985 and the adoption of the legislative regime constituting and governing the highly successful retail-oriented ‘UCITS’ fund (Undertaking for Collective Investment in Transferable Securities).³⁴ The current incarnation of the UCITS regime was adopted in 2009 and extensively revised by the financial-crisis-era 2014 UCITS V reforms.³⁵ Alongside, the financial-crisis-era 2011 Alternative Investment Fund Managers Directive (AIFMD)³⁶ covers the management of non-UCITS funds. The UCITS/AIFMD rulebook now forms a dense, multilayered (legislation, administrative rules, and soft law), and mature regulatory system. The AIFMD and UCITS regimes have been revised (but not materially) over the decade or so since the financial crisis, in particular, to reduce frictions to cross-border marketing,³⁷ and are supported by new sectoral regimes, notably the distinct rulebook adopted in 2017 for money market funds (MMFs).³⁸

B. Technocratic action

The marked impact of technocracy on the evolution and performance of the EU investment funds regime in the decade or so since the financial-crisis-era reforms suggest that this dynamic should be interrogated. But technocratic action commands attention in principle in any examination of how EU financial market regulation has evolved and performed.

Technocratic (typically regulatory) action in financial markets can be regarded as humdrum and operational, an executive application of political choices, and not attracting the political, distributive, and normative pyrotechnics, and legal controversies, that can be associated with legislative reform.³⁹ It can, relatedly, be characterized in terms of ‘second

Effectiveness of the FSB’s 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds (2022) and IOSCO, Thematic Review on Liquidity Risk Management Recommendations (2022). They subsequently consulted on a related series of enhancements as regards liquidity risk management tools: FSB, Addressing Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds. Revisions to the FSB’s 2017 Policy Recommendations (2023) and IOSCO, Anti-dilution Liquidity Management Tools—Guidance for Effective Implementation of the Recommendations for Liquidity Risk Management for Collective Investment Schemes (2023). How to design a macroprudential ‘tool kit’ is also under discussion. eg Central Bank of Ireland (n 16) and di Iasio, Kaufmann and Wicking (n 28).

³⁴ The UCITS sector accounted for some €11.6 trillion in ‘net asset value’ (a proxy for market size) in the EEA-30 in 2020 (2/3 of the EEA funds market), as compared to the €5.5 trillion (1/3) accounted for by the non-UCITS, alternative investment fund segment: ESMA, Annual Statistical Report on EU Alternative Investment Funds (2022) 10.

³⁵ Following a series of reforms, the UCITS regime now takes the form of Directive 2009/65/EU [2009] OJ L302/32, as amended subsequently, most significantly by the 2014 ‘UCITS V’ reforms (Directive 2014/91/EU [2014] OJ L257/186).

³⁶ Directive 2011/61/EU [2011] OJ L174/1.

³⁷ Under the 2019 ‘refit’ reforms: Directive (EU) 2019/1160 [2019] OJ L188/106 and Regulation (EU) No 2019/1156 [2019] OJ L188/55.

³⁸ Regulation (EU) 2017/1131 [2017] OJ L169/8.

³⁹ The political/technocratic distinction is classically expressed in terms of the division of labour between political principals (the legislature) and their executive agents (non-majoritarian regulatory agencies): political principals delegate executive powers (set out in legislation), to implement and apply their choices, to executive agencies, such as financial regulators. From the extensive EU ‘agencification’ literature, see E Ruffing, ‘Agencies between Two Worlds: Information Asymmetry in Multilevel Policy-making’

order' change (related to institutional developments, such as the establishment and development of regulatory agencies) and 'third order' change (technical changes to rules and practices), and is typically associated with more steady-state political and market conditions. In contrast, first-order reforms typically engage changes to the normative basis for intervention and are often associated with major disruption and material legislative reform,⁴⁰ such as occurred during the financial crisis. They are relatedly more likely to attract scholarly contestation.⁴¹

Certainly, the foundational challenges pressing on EU financial market regulation are significant, 'sticky', and politically contested. Above all, the embedding of market finance and the securing of market integration remain elusive, despite decades of muscular legislative effort and political contestation, most recently through the CMU agenda. Behind the headline figure of increased non-financial companies' (NFC) reliance on market funding relative to bank lending over 2011–19 (38.0 per cent of funding to 42.8 per cent) lies a story of limited growth in share-based funding and a decline in initial public offerings since the pre-financial-crisis period,⁴² a decline in admissions to trading of shares by 12 per cent over 2010–18 although GDP grew by 24 per cent over this period,⁴³ and limited development of the EU market finance ecosystem generally.⁴⁴ Relatedly, contestation is emerging as to how to respond. A marked cleavage is opening between the canonical assumption of EU financial market regulation that harmonized regulation, in service of investor confidence and removing regulatory barriers, can best achieve market integration; and the striking deregulation deployed in the latest salvo in the CMU agenda. The swingeing deregulation proposed by the Commission's December 2022 Listing Act reforms to the EU's disclosure and admission to the trading rulebook marks a sharp break with the past and so underlines the unsettled nature of the CMU agenda.⁴⁵ It may signal material political contestation as to how market finance can best be supported through law in the face of deep-rooted frictions.⁴⁶

Nonetheless, and as exemplified by the investment fund regime, technocracy matters to any assessment of how EU financial market regulation has evolved since the financial-crisis-

(2015) 22 *JEPP* 1109; M Busuioc, *European Agencies. Law and Practice of Accountability* (Oxford University Press, 2013) and M Thatcher and A Stone Sweet, 'Theory and Practice of Delegation to Non Majoritarian Institutions' (2002) 25 *West European Politics* 1.

⁴⁰ See J Black, 'What is Regulatory Innovation' in J Black, M Lodge and M Thatcher (eds), *Regulatory Innovation. A Comparative Analysis* (Edward Elgar Publishing, 2005) 1.

⁴¹ eg the EU's legislative market abuse regime is one of the most-examined aspects of EU financial market legislation over the past 30 years or so, in part as it expresses a normative position on the identification and treatment of abusive conduct and so engages foundational discussions as to the role of regulation in markets. For a recent example, from a property rights perspective, see A Taleska, 'European Insider Trading Theory Revisited: The Limits of the Parity-of-Information Theory and the Application of the Property Rights in Information Theory to Activist Investment Strategies' (2020) 17 *ECFR* 558.

⁴² Commission, *Monitoring Progress towards a Capital Markets Union: a tool-kit of indicators* (SWD (2021)544). Little change was reported in the 2023 update, with drops in the value of IPOs and in the value of corporate bond issuances: Commission, *Overview of CMU Indicators—2023 Update*, August 2023.

⁴³ Oxera, *Primary and Secondary Equity Markets* (2020).

⁴⁴ The ECB reported on flat growth over 2016–22 in venture capital and growth capital (as compared to significant growth in the USA) and a drop in the proportion of listed shares. Most growth was in the bond segment: ECB, *Financial Integration and Structure in the Euro Area* (2022) 12 and 17.

⁴⁵ COM(2022)760, COM(2022)761, and COM(2022)762.

⁴⁶ The EU is not alone in grappling with this question. In the UK, the weakening competitiveness of the UK equity market has prompted a series of policy and regulatory reviews and reforms and scholarly assessments. See, eg, B Cheffin and B Reddy, 'Will Listing Rule Reform Deliver Strong Public Markets for the UK?' (2023) 86 *MLR* 176 and E Ferran, 'International Competitiveness and Financial Regulators' Mandates: Coming Around Again in the UK' (2023) 9 *J of Fin Reg* 30.

era reforms. First, and to state the obvious, technocratic action gives life to financial market legislation and so to political and normative choices. It is not always easy to discern the normative basis of EU financial market regulation, which has evolved in an *ad hoc* and incremental manner, save its defining and Treaty-mandated preoccupation with market integration. But it can reasonably be suggested that chief among the normative underpinnings of the financial-crisis-era reforms was the identification of financial stability risk, previously associated with banking markets, as a key risk to the effective operation of financial markets and as requiring management through extensive regulatory reform.⁴⁷ The legislative choices that reflect this underpinning have been extensively examined,⁴⁸ but less attention has focused on the operational, technocratically oriented period of refinement and application that followed the adoption of these choices and which can be associated in particular with the widening reach of ESMA.⁴⁹ Technocratic action, however, is the means through which foundational choices are articulated and applied, through administrative rules and supervisory action, and tested, in particular in dynamic market conditions where agility is needed.⁵⁰ Technocratic action is all the more important in the currently prevailing conditions of market uncertainty and dynamism, as regulators grapple with the complexities of NBSF risk.⁵¹ Second, while the second- and third-order reform effects of technocratic action are not associated with normative change or political choices, they can, over time, come to have incremental, sedimentary effects of wide import,⁵² and so come to shape the normative basis of regulatory governance.⁵³ They can as a result generate normative challenges, in particular as regards legitimation.⁵⁴

⁴⁷ n 10.

⁴⁸ eg with respect to EMIR and derivatives markets see D Murphy, *Rules and Reasoning from Lehman to Covid* (Oxford University Press, 2022); J Braithwaite, 'The Inherent Limits of "Legal Devices": Lessons for the Public Sector's Central Counterparty Prescription for the OTC Derivatives Market' (2011) 12 EBOLR 87; and D Awrey, 'The Dynamics of OTC Derivative Regulation: Bridging the Public-Private Divide' (2010) 11 EBOLR 155.

⁴⁹ The wider 'agencification' of EU financial markets governance through ESMA, however, has drawn attention from legal as well as regulatory studies and political economy perspectives: eg M Božina Beroš, 'Examining Agency Governance in the European Union Financial Sector. A Case Study of ESMA' (2017) 30 Economic Research 1743 and E Howell, 'The Evolution of ESMA and Direct Supervision: Are there Lessons for EU Supervision' (2017) 54 CMLRev 1027.

⁵⁰ Well-illustrated over the COVID-19 crisis by the swathe of at-the-time novel 'supervisory forbearance' actions (or actions to lift/suspend rules) taken by regulators globally. See, eg, K Judge, 'Stress Testing During Times of War' in Doyme Farmer and others (eds), *Handbook of Financial Stress Testing* (2022) 224 (the US experience) and N Moloney and PH Conac, 'EU Financial Market Governance and the Covid-19 Crisis' (2020) ECFR 363 (the EU experience).

⁵¹ On the prevailing complexity and uncertainty in financial markets as requiring technocratic analysis and cooperation see M Lehmann, 'Legal Fragmentation, Extraterritoriality and Uncertainty in Global Financial Regulation' (2017) 37 OJLS 406. For an earlier financial-crisis-era assessment see E Helleiner and S Pagliari, 'The End of an Era in International Financial Regulation? A Postcrisis Research Agenda' (2011) 65 International Organization 169.

⁵² C Ford, *Innovation and the State: Finance, Regulation and Justice* (Cambridge University Press, 2017).

⁵³ eg the regulatory theory/political economy literature is increasingly examining how 'bottom-up' agency/supervisory action can shape EU financial governance, particularly as regards the ECB's supervisory practices within Banking Union: eg M Božina Beroš, 'Developing Banking Union's Common Supervisory Culture: A Look into the 'black box' of Joint Supervisory Teams' (2023) 45 J of European Integration 103 and J Zeitlin, 'Uniformity, Differentiation, and Experimentalism in EU Financial Regulation: The Single Supervisory Mechanism in Action' Amsterdam Centre for European Studies Research Paper No 2021/04 (2021) <<http://ssrn.com/abstract=3857077>>.

⁵⁴ The strains that ESMA's engagement with the administrative rule-making process (by advising the Commission on the adoption of administrative rules and proposing a specific form of rule for Commission adoption (the Binding Technical Standard (n 56))) and its soft law powers place on the Treaties' constitutional settlement on administrative rule-making and on the *Meroni* principle which

III. THE REGULATORY AND INSTITUTIONAL SETTING AFTER THE FINANCIAL-CRISIS-ERA REFORMS: FROM 2014 TO 2020

A. The financial market setting

The long arc of EU financial market regulation bends from 1966 and the Segré Report's identification of financial market regulation as forming part of the integration project, but the 2008–2014 financial-crisis-era reforms have been decisive in shaping the current system of financial market governance. By the time the financial-crisis-era reform period closed in 2014, a legislative ('level 1'⁵⁵) 'single rulebook' of materially greater specification and technicality than the previous legislative regime, and strongly oriented to manage financial stability risks, was in place. A new administrative rulebook ('level 2') of immense scale and intricacy, and of a heavily proceduralized and granular quality, was under construction by the Commission, supported by ESMA.⁵⁶ The move to 'more Europe', through this rulebook, and as a means for supporting market integration but also financial stability, was decisive.⁵⁷ The supervisory architecture was based, as had long been the case, on supervision by Member State regulators (national competent authorities (NCAs)), anchored by home authorization and supervision, but had become framed by the European System of Financial Supervision (ESFS): a pillar financial-crisis-era reform and composed of the NCAs that ground the ESFS; the three sectoral ESAs (ESMA as regards financial markets) that support supervisory cooperation and supervisory convergence; and the risk-monitoring European Systemic Risk Board (ESRB). Relatedly, NCA supervisory practices were being 'Europeanized', steered by ESMA's purposeful exercise of its soft, supervisory convergence and coordination powers.⁵⁸ ESMA was also exercising its limited but precedential direct supervisory powers, initially conferred in 2011 in relation to rating agencies.

Between 2014 and 2020 (and since), EU financial market regulation continued to 'bend towards uniformity'.⁵⁹ The legislative single rulebook was expanded, primarily to

curtails agency discretion have been extensively examined: eg M Egeberg and J Trondal, 'Researching EU Agencies: What Have We Learned (and where do we go from here?)' (2017) 55 JCMS 675; E Chiti, 'Is EU Administrative Law Failing in some of its Crucial Tasks?' (2016) 22 ELJ 576; and S Griller and A Orator, 'Everything under Control? The "Way Forward" for European Agencies in the Footsteps of Meroni' (2010) 25 ELR 3.

⁵⁵ Law-making for financial markets follows the Lamfalussy model which is based on a hierarchy of 'level 1' normative legislation, 'level 2' administrative rules (adopted by the Commission, advised by the ESAs), 'level 3' ESA soft law, and level 4 enforcement of Member State obligations.

⁵⁶ The Commission adopts administrative rules (under arts 290–291 TFEU), based on mandates in the relevant level 1 legislation, and supported by ESMA's technical advice. For a specific category of administrative rule, bespoke to financial services—the Binding Technical Standard—the ESAs (including ESMA) propose the draft Standard to the Commission for adoption, according to the procedures set out in the ESA Regulations and which reflect arts 290–291.

⁵⁷ The choice faced by the EU in repairing its financial system was at the time often expressed as 'more Europe' (a closely integrated market governed by more densely harmonized rules) or 'less Europe' (segmented national financial markets, more limited harmonization, and cross-border access based on locally regulated subsidiaries): eg Financial Services Authority, *The Turner Review. A Regulatory Response to the Global Banking Crisis* (2009) 101–102.

⁵⁸ 'Europeanization' here relates to NCA supervisory decision-making increasingly following 'harmonized' best practices and operational approaches set by ESMA. On the Europeanization of national agencies' practices see T Bach, E Ruffing and K Yesilkagit, 'The Differential Empowering Effects of Europeanization on the Autonomy of National Agencies' (2015) 28 Governance 285. The phenomenon can also explain the diffusion of EU law in practice. In the context of how general principles of EU law are shaping national legal systems and cultures see T Tridimas, 'The General Principles of EU Law and the Europeanization of National Law' (2020) 13 Review of European Administrative Law 5.

⁵⁹ The expression is drawn from a Brexit-related speech by UK Prime Minister May (17 January 2017).

support market finance under the CMU agenda,⁶⁰ but also to strengthen financial stability.⁶¹ It was refined, as the swathe of reviews required by the ‘review clauses’ embedded in all the financial-crisis-era measures were launched and completed, and as the ‘REFIT’ process provided an additional review impetus.⁶² The construction of the now behemoth administrative rulebook which supports the major crisis-era legislative measures was completed and it entered a semi-permanent state of review and reform.⁶³ Alongside, the supervisory architecture was adjusted, reflecting the incrementalism strongly associated with supervisory reform in the EU.⁶⁴ ESMA slowly and episodically acquired additional direct supervisory powers,⁶⁵ and the ECB emerged as a nascent (since 2021) but potentially centrifugal influence on how supervision will develop.⁶⁶ Alongside, operational and infrastructure innovations, particularly as regards data collection, became part of EU financial market regulation, including by means of ‘trade repositories’—massive data nodes, originally established under EMIR, supervised by ESMA, and which now hold vast data banks on securitization and secured financing transactions markets as well as on derivatives markets.⁶⁷

Threaded across the decade or since the financial-crisis-era reforms is the technocratic capacity ESMA has brought to EU financial market governance, and which can be illustrated by a selective excursus into ESMA’s most recent exercises of its powers.⁶⁸ Over 2018–22, ESMA first exercised its precedent setting, binding MiFIR powers to prohibit the marketing of investment products⁶⁹; took direct action on short selling as the COVID-19 pandemic

⁶⁰ Key CMU measures include the 2017 Prospectus Regulation (Regulation (EU) 2017/1129 [2017] OJ L168/21), the 2017 Securitization Regulation (Regulation (EU) 2017/2402 [2019] OJ L347/35), and the 2015 ELTIF Regulation (Regulation (EU) 2015/760 [2015] OJ L123/98).

⁶¹ Key stability-oriented measures included the 2019 IFD/IFR (prudential regulation of investment firms (n 10)), the 2017 Money Market Fund Regulation (n 38), the 2016 Benchmarks Regulation (Regulation (EU) 2016/1011 [2016] OJ L171/1), and the 2015 Securities Financing Transactions Regulation (Regulation (EU) 2015/2365 [2015] OJ L337).

⁶² The Commission’s ‘regulatory fitness and performance programme’ (REFIT), which forms part of the Commission’s Better Regulation agenda, is designed to systematically review rules to ensure that they are ‘simpler, more targeted, and easier to comply with’.

⁶³ eg rapid revisions were made, by means of an administrative rule change, to the MiFID II/MiFIR regime for trading venues, shortly before it came into force in 2018, following the emergence of regulatory arbitrage risk arising from the differential treatment of a particular form of trading venue (the ‘systematic internalizer’). The reform (achieved through Delegated Regulation (EU) 2017/2294 [2017] OJ L329/4) was adopted ‘as a matter of urgency’ (rec 5) following ESMA’s identification of the arbitrage risk.

⁶⁴ See ahead Section VI.B.

⁶⁵ See ahead *ibid*.

⁶⁶ In 2021, ECB Banking Supervision took over, from NCAs, the supervision (within the Banking Union’s Single Supervisory Mechanism), of the largest and most systemically significant investment firms in the EU (‘Class 1’ firms) following their re-designation as ‘credit institutions’ under the IFD/IFR. Four investment firms were so re-classified as credit institutions and brought within ECB direct supervision: ECB Banking Supervision, Annual Report on 2022 (2023).

⁶⁷ Under EMIR, the Securities Financing Transactions Regulation, and the Securitization Regulation.

⁶⁸ For examination see Moloney (n 2) and A Spendzharova, ‘Becoming a Powerful Regulator: The European Securities and Markets Authority in European Financial Sector Governance’ TARN Working Paper 8/2017 <<http://ssrn.com/abstract=2965429>>.

⁶⁹ In summer 2018, ESMA imposed (under MiFIR Art 39) restrictions on the marketing of contracts for differences (CFDs) to retail investors, and banned the sale of binary options to retail investors, following a series of mis-selling scandals: ESMA Decision (EU) 2018/796 [2018] OJ L136/50 and ESMA Decision (EU) 2018/795 [2018] OJ L136/31. The restrictions, initially for three months, were extended in subsequent decisions by ESMA to apply for one year, and were replaced by the parallel national restrictions subsequently imposed by most NCAs. On the legal and market significance of the decisions see Moloney (n 7) 821–25; P Iglesias-Rodríguez, ‘ESMA as a Residual Lawmaker: The Political Economy and Constitutionality of ESMA’s Product Intervention Measures on Complex Financial Products’ (2021) 22 EBLOR 627; V Colaert, ‘The MiFIR and PRIIPs Product Intervention Regime: In Need of

roiled markets in early 2020⁷⁰; produced a host of soft law measures, including in response to the 2021 Gamestop/meme-stock episode⁷¹; played a critical role in post-Brexit UK/EU financial relations by assessing the major UK CCPs as regards whether they should be required to relocate to the EU to provide EU clearing services⁷²; and supported the EU's response to the outbreak of the war in Ukraine in March 2022.⁷³ While inevitably selective, this catalogue exemplifies the purposeful and at times entrepreneurial exercise by ESMA of its competences which has placed it at the centre of EU financial market governance at moments of stress.

The investment fund setting has followed a similar arc in the past decade or so since its legislative underpinnings were reformed over the financial-crisis era, with regulation becoming more granular and supervision more Europeanized, and ESMA a recurring technocratic influence.

B. The investment fund setting

The default EU regulatory scheme for investment funds is the Alternative Investment Fund Managers Directive (AIFMD), adopted in 2011 and a centrepiece of the financial-crisis-era reforms.⁷⁴ The Directive addresses the management of all investment funds, apart from those funds authorized under the UCITS Directive. These 'non-UCITS' funds, which cover a wide range of funds and investment strategies, constitute the alternative investment fund (AIF) population, the management of which is addressed by the AIFMD.⁷⁵ The AIFMD

Intervention' (2020) ECFR 99; and V Bavosso, 'Regulating Complex Financial Products Post-Crisis: Between the STS Regulation and ESMA Product Intervention Powers' (2020) <<https://ssrn.com/abstract=3537505>>.

⁷⁰ By using (for the first time) its exceptional powers under the Short Selling Regulation (Regulation (EU) No 236/2012 [2012] OJ L86/1) to, in specified circumstances, expand the supervisory reporting requirements applicable to short selling. Given the prevailing acute financial market volatility and the potential stability risks posed by any increase in short selling, ESMA reduced the original supervisory reporting threshold for short sales from positions representing 0.2% of share capital to positions representing 0.1%, initially for three months: ESMA Decision, 16 March 2020. The increase was subsequently made permanent by a Commission administrative rule.

⁷¹ ESMA issued a series of warnings over the period, including as regards the risks associated with trading over a period of high volatility (Public Statement, 17 February 2021); the risks raised by PFOF and the need for firms to comply with relevant MiFID II rules (Public Statement, 13 July 2021); and the potential market manipulation risks relating to investment recommendations made on social media (Public Statement, 28 October 2021).

⁷² Its closely followed 2021 assessment of the two UK CCPs which together dominated clearing in euro denominated derivatives found that the CCPs remained of 'tier 2' status under EMIR, and so mandatory relocation to the EU was not required for the provision of clearing services to the EU, and the relevant third country equivalence regime could be used for EU access: ESMA, Assessment Report under Art 25 (2c) of EMIR. Assessment of LCH Ltd and ICE Clear Europe Ltd (2021).

⁷³ ESMA *inter alia* monitored CCPs as regards volatility risks in the energy and commodity derivatives markets; engaged with rating agencies regarding ratings; sought to verify the impact on benchmarks; monitored the impact on investment funds, including as regards liquidity, in coordination with NCAs; monitored, with NCAs, the impact on trading venues; facilitated information gathering and sharing on cyber security; engaged in market risk assessments; and made a series of recommendations to market participants relating to sanctions compliance, market disclosures, and financial reporting: ESMA, Public Statement, 14 March 2022.

⁷⁴ n 36. The Directive established a new regulatory regime for the management of a host of funds previously not addressed at the EU level and relatedly experienced the most difficult negotiations of the financial-crisis-era period. Industry resistance was fierce, particularly from the hedge fund and private equity sectors, while Council contestation was significant, with a cleavage between the UK (in favour of a liberal approach) and other Member States (see Ferran (n 22)).

⁷⁵ The UCITS' portfolio requirements are liberal, but they nonetheless impose significant and specific constraints on UCITS funds as regards asset allocation and as regards the degree to which a fund can be

addresses the authorization and regulation of AIF managers and governs their depositaries. It does not require the authorization of AIFs and so is not a product measure. It forms a sprawling legislative regime of some technical complexity and is encrusted with highly detailed administrative rules which delve into intricate, operational technicalities, from risk management to the use of leverage (or debt), to depositary regulation. The AIFMD also supports the management of the EU's three bespoke fund vehicles (the EuVECA (venture capital funds), the EUSEF (social entrepreneurship funds), and the ELTIF (long-term investment funds)⁷⁶), the regulation of which is nested within the AIFMD regime. The AIFMD draws on a host of regulatory tools, from authorization (of the manager) to manager conduct, organizational, and prudential regulation (including process-based and often highly quantitative requirements as to risk management and the use of leverage), to depositary regulation, to disclosure. The UCITS Directive, amended in the closing stages of the financial-crisis-era reforms by the 2014 UCITS V reforms,⁷⁷ addresses the investment management of the UCITS fund, a retail-oriented investment fund, constituted, as previously noted, in accordance with the Directive's detailed asset allocation requirements, and which must be authorized under the Directive. The UCITS Directive also, like the AIFMD, applies authorization, conduct, and prudential/risk management requirements to fund managers and governs the depositary. The AIFMD regime is in some respects more sophisticated as regards risk management, reflecting the higher risk profile associated with AIF management, but also the AIFMD's liberal approach to asset allocation which places more pressure on that Directive's risk management requirements. The AIFMD and its supporting administrative rules and soft law form a management-focused regulatory regime that is concerned in particular with wholesale market risk and the management of financial stability risks. The UCITS Directive and its supporting administrative rules and soft law, in contrast, form a product (UCITS)-focused regulatory system, concerned in particular with retail market risk, and less directly associated with financial stability risk management, given in part the extensive asset allocation and leverage conditions imposed on UCITS funds. A distinct regime applies to money market funds (MMFs) under the 2017 MMF Regulation, which was initiated in the closing stages of the financial-crisis-era reform programme, but adopted later given significant contestation on its coverage.⁷⁸ This Regulation is supported by the AIFMD and the UCITS regimes in that an MMF can be constructed as a UCITS or an AIF. But given the distinct financial stability risks posed by MMFs (as outlined ahead), the MMF Regulation imposes extensive, intricate, and bespoke risk management rules on MMFs, including on the extent to which a fund can offer redemption 'at par' (or guarantee the amount repayable to investors regardless of the underlying asset value of the fund).⁷⁹

'leveraged' (or deploy debt strategies). Accordingly, hedge funds, property funds, private equity funds, and commodity funds all fall outside the UCITS regime either because of the extent to which they are leveraged or because the assets in which they invest (such as property, commodities, and certain derivatives) are not UCITS 'eligible assets'. The AIFMD does not constrain asset allocation or investment/leverage strategies through specific prescriptions, but instead manages risk by means of detailed risk management requirements imposed on the manager.

⁷⁶ Regulation (EU) No 345/2013 [2013] OJ L115/1; Regulation (EU) No 346/2013 [2013] OJ L115/18; Regulation (EU) 2015/760 [2015] OJ L123/98.

⁷⁷ n 35. The 2014 UCITS V reforms to the 2009 UCITS IV Directive led to the UCITS risk management regime becoming more closely aligned to the more articulated AIFMD regime and also to strengthened depositary regulation.

⁷⁸ n 38. See further Moloney (n 7) 338–45.

⁷⁹ Most EU MMFs are in the form of 'Low Volatility Net Asset Value' (LVNAV) funds which can redeem at a 'constant net asset value' (ie guarantee the amount repaid, regardless of the fund asset value), while having a fluctuating fund asset value. LVNAV funds are in consequence subject to extensive asset allocation and risk management requirements as well as to 'collar' rules. Collar rules set limits on the

This legislative rulebook proved broadly stable over the decade or so since the financial-crisis-era reforms.⁸⁰ This stability is a reflection of the durability of the legislative choices made (and in the case of the AIFMD of a searingly difficult negotiation process), but it can also be associated with the availability of ESMA as a technocratic channel through which the funds' rulebook could be amplified and refined. Several sets of administrative rules amplify the UCITS Directive covering, *inter alia*, asset allocation, the management company, and the depositary,⁸¹ and which together form an administrative rulebook of formidable breadth and depth. While most of the UCITS rules were adopted prior to ESMA's 2011 establishment, ESMA was pivotal to the adoption of the AIFMD administrative rulebook, which is composed of the wide-ranging 2013 Delegated AIFMD Regulation⁸² but also a series of more specific sets of rules, advising the Commission on the adoption of these rules.

Alongside, ESMA constructed a dense 'soft rulebook', using its proceduralized power under ESMA Regulation Article 16 to adopt Guidelines, as well as its more lightly proceduralized Article 16b power to adopt Q&As, and also its generally non-proceduralized and malleable powers to adopt other soft law.⁸³ ESMA inherited extensive fund soft law from its predecessor, the Committee of European Securities Regulators.⁸⁴ But it has materially thickened this soft law through extensive subsequent measures. These include several sets of Article 16 Guidelines (with which NCAs must 'comply or explain'⁸⁵) which together constitute a soft but hefty operational manual on UCITS risk management, extending from fund manager remuneration to stress testing.⁸⁶ These Guidelines often have a quasi-regulatory orientation and are not easily distinguished from administrative rules. They can also have a strongly operational quality, well-illustrated by the 2020 Liquidity Stress Testing Guidelines which address, *inter alia*, the design and governance of UCITS stress testing models, data sources, frequency of stress testing, and scenario design. Alongside, an extensive and frequently updated UCITS Q&A⁸⁷ further amplifies ESMA/NCAs' expectations regarding the application of the UCITS regime, while ESMA also issues 'Opinions' and similar measures, typically where divergences are identified in how NCAs apply the rulebook or where there is a lack of clarity. Similarly, ESMA's soft law measures have materially thickened the AIFMD

extent to which the market value of the LVNAV fund can deviate from the constant value at which the fund commits to redeem units. If those limits are breached, the fund must convert to a form of MMF which has a variable redemption value. Some 46% of EU MMFs take the form of LVNAV funds: ESMA, EU MMF Market 2023 (2023).

⁸⁰ The most significant reforms were CMU-driven and related to cross-border marketing: n 37.

⁸¹ Including Delegated Directive 2007/16 [2007] OJ L79/11 (asset allocation); Delegated Directive 2010/43/EU [2010] OJ L176/42 (regulation of the management company); and Delegated Regulation (EU) 2018/1619 [2018] OJ L271/6 (the depositary).

⁸² Delegated Regulation (EU) No 231/2013 [2013] OJ L83/1. It is the keystone of the AIFMD administrative rulebook, addressing in detail the organization and regulation of the AIF investment manager, including risk management requirements, and the AIF depositary.

⁸³ These include ESMA Regulation Art 29 which empowers and requires ESMA to build a common supervisory culture and consistent supervisory practices. Art 29 has been used by ESMA as the competence to support a now vast soft rulebook including Q&As (now covered by art 16b but initially not specified in the ESMA Regulation) Opinions, Briefings, Public Statements, and other measures.

⁸⁴ Including the wide-ranging 2007 Eligible Assets Guidelines on portfolio construction and the pivotal 2010 Guidelines on UCITS risk measurement.

⁸⁵ In practice, all NCAs follow the Guidelines.

⁸⁶ Including: Guidelines on performance fees (2020); Guidelines on liquidity stress testing (2020); Guidelines on remuneration policies (2016); and Guidelines for UCITSs, including structured UCITSs and ETFs (2012 (revised 2014)).

⁸⁷ ESMA, Questions and Answers. Application of the UCITS Directive. The Q&A is immensely detailed and addresses ESMA Guidelines as well as administrative and legislative rules.

rulebook, including through Guidelines,⁸⁸ typically of quasi-regulatory colour,⁸⁹ a regularly revised AIFMD Q&A, and Opinions on the operation of the AIFMD.⁹⁰ Two sets of Guidelines address the MMF Regulation. Regarded as a whole, the ‘soft rulebook’ for investment funds is a construction of immense intricacy, oriented to operational risk management, that exemplifies the technocratic turn EU financial market regulation has taken since the financial-crisis-era reforms.

Alongside, ESMA has developed, through the purposeful use of its soft supervisory convergence powers, a substantial operational capacity, notably as regards investment fund stress testing, a still novel prudential tool in the funds area but one geared to the identification of financial stability risks. ESMA initially developed its stress testing capacity in relation to MMF stress testing (MMF managers must regularly carry out stress testing under the MMF Regulation), adopting in 2018 detailed Guidelines for MMF stress testing under an MMF Regulation mandate; these Guidelines are regularly updated to reflect prevailing drivers of market stress, in consultation with the ESRB, and ESMA reports on stress test findings.⁹¹ ESMA has since, building on this experience and in response to an ESRB Recommendation,⁹² adopted the 2020 Guidelines for UCITS and AIF liquidity stress testing by fund managers,⁹³ and engaged in sector-level stress tests.⁹⁴ Further, and as outlined ahead, ESMA launched in early 2020, prior to the March 2020 market turmoil, a Common Supervisory Action (CSA) designed to assess UCITS funds’ liquidity risk management arrangements and their capacity to cope with market stress.⁹⁵ The CSA, a novel form of supervisory convergence measure, recently developed by ESMA and through which NCAs carry out ESMA-co-ordinated thematic supervisions of aspects of the single rulebook,⁹⁶ proved prescient, allowing ESMA to assess the performance of funds, rules, and NCAs as regards liquidity risk management. Prior to the March 2020 turmoil, ESMA was therefore constructing a significant executive capacity.

ESMA has also, and reflecting the global turn to enhance regulators’ ability to gather and interrogate data in support of financial stability risk management, materially enhanced the EU’s data capacity as regards investment funds. The year 2019 saw the first iteration of its now annual reports on the AIF sector and of its now annual reports on the fees and performance of retail investment products, including investment funds. It also reports regularly on

⁸⁸ Guidelines on Art 25 AIFMD (leverage reporting) (2021); Guidelines on Liquidity Stress-Testing in UCITS and AIFs (2020); Guidelines on Performance Fees in UCITS and Certain Types of AIF (2020); Guidelines on AIFMD Reporting (2014); Guidelines on Key Concepts of the AIFMD (2013); and Guidelines on Sound Remuneration Policies under the AIFMD (2013 (revised 2016)).

⁸⁹ The 2014 AIFMD Reporting Guidelines, eg, supplement the already detailed AIFMD reporting requirements and include over 130 specific guidelines directing how firms should provide AIFMD disclosures.

⁹⁰ A May 2021 ESMA Opinion, eg, recommended that NCAs require additional reporting on systemic risks from fund managers to supplement the reporting already required under the AIFMD rulebook and its Guidelines.

⁹¹ The current iteration was adopted in 2023: ESMA, Guidelines on Stress Test Scenarios (2018, updated 2023). ESMA’s first report was issued in 2023, on the 2021 exercise: ESMA, Stress Testing MMFs in the EU—First Evidence from Fund Reporting (2023).

⁹² ESRB Recommendation 2017/6 [2018] OJ C151/1 (see ahead Section V).

⁹³ ESMA, Guidelines on Liquidity Stress Testing for UCITS and AIFs (2020).

⁹⁴ For a review of its approach see ESMA, Stress Simulation for Investment Funds (2019).

⁹⁵ ESMA, Public Statement (ESMA presents the results of the 2020 CSA on UCITS Liquidity Risk Management), 24 March 2021.

⁹⁶ ESMA has developed the CSA tool (which is not specified in the ESMA Regulation) under its general supervisory convergence competence (ESMA Regulation Art 29) and has used it to address MiFID II know-your-client requirements (2019) and cost and charges requirements (2022), as well as in the investment fund context.

funds' exposure to property.⁹⁷ ESMA's first annual report on the MMF sector followed in 2023, based on the streams of supervisory reporting now available since the coming into force of the MMF Regulation.⁹⁸ These extensive annual reports, alongside the coverage of the investment fund market in ESMA's bi-annual Trends, Risks, and Vulnerabilities (TRV) Reports, and also the ESRB's review of investment fund stability risks in its annual NBFi review, as well as the ECB's coverage of fund risk, including through its half-yearly Financial Stability Reviews, form the basis of a now extensive EU databank on fund market trends and risks.

On the eve of the March 2020 turmoil, the funds rulebook, as technocratically amplified and applied in the decade or so since the financial-crisis-era reforms, looked broadly successful. The UCITS legislative regime had proved stable and had not experienced major strain. By way of illustration, the explosive growth in the EU of Exchange-Traded Funds (ETFs) (funds which typically track major market indices/benchmarks and so are low cost),⁹⁹ was managed without related reforms to the UCITS rulebook.¹⁰⁰ In contrast, the ETF sector was the focus of regulatory concern in the USA, partly reflecting its much larger scale but also a lighter regulatory regime.¹⁰¹ Relatedly, the UCITS sector had not experienced any major failures.¹⁰² Similarly, while the AIFMD financial-crisis-era negotiations were among the most difficult in the history of the single rulebook, in a vindication of the subsequent technocratic amplification process, the AIFMD became successfully embedded within EU financial market regulation as its platform for managing AIF risk. By way of example, although the financial-crisis era saw vigorous debate in the EU and internationally on the risks and appropriate regulation of the hedge fund sector, it was by 2020 a quieter corner of financial market regulation, reflecting slower growth levels,¹⁰³ but also the embedding of the AIFMD.¹⁰⁴

IV. THE MARCH 2020 CRISIS

As noted in Section I, the management of NBFi financial stability risk has been one of the driving preoccupations of the global regulatory reform agenda since the close of the financial-crisis-era reform period. In the EU, the NBFi sector, now regularly monitored by the ESRB, experienced strong growth, including in the investment fund population, after the financial crisis: in 2021, the continued expansion of NBFi and the retreat of the traditional banking

⁹⁷ Recently, ESMA, *Alternative Investment Fund Exposure to Commercial Real Estate* (2023).

⁹⁸ ESMA, *EU MMF Market 2023* (2023).

⁹⁹ Assets under management in the EU ETF sector grew from €504 billion in 2017 to €1.2 trillion in 2021 (see ESMA's Trends, Risks, and Vulnerabilities Reports No 2 (2021) and No 1 (2017)). For a review of the EU market see A Thomadakis, 'The European ETF Market: What can be done Better?' *ECMI Commentary* No 52 (2018).

¹⁰⁰ ETFs are heavily regulated in the EU as they typically take the form of UCITSs. They are also addressed by specific ESMA Guidelines (n 86). ETFs are further subject to admission and trading rules under MiFID II/MiFIR.

¹⁰¹ Discrete rules did not apply to ETFs under US regulation. Reforms followed in 2019, in particular, to address the risks posed by leveraged ETFs (which use derivatives to amplify the performance of benchmarks). See H Hu and J Morley, 'The SEC and Regulation of Exchange-Traded Funds: A Commendable Start and a Welcome Invitation' (2019) *So Cal LR* 1155.

¹⁰² One of the few major failures concerned the 2019 suspension of redemptions in a UK UCITS (Woodford Equity Income Fund). Following significant outflows, redemption was suspended to protect investors: ESMA, Trends, Risks, and Vulnerabilities Report No 2 (2019) 22.

¹⁰³ See J McCahery and A de Roode, 'The Lost Decade for Hedge Funds: Three Threats' in D Cumming, G Wood and S Johan (eds), *The Oxford Handbook of Hedge Funds* (Oxford University Press, 2021) 35.

¹⁰⁴ The ESRB repeatedly reported in its annual Non-Bank Financial Intermediation Risk Monitor on the hedge fund sector as carrying the highest levels of leverage in the AIF sector (as did ESMA), but the sector did not become a target for heightened regulatory concern given the AIFMD's risk management requirements.

sector was identified as one of the most significant trends in the European economic and financial system.¹⁰⁵ The NBFIs segment also began to raise financial stability concerns, in particular as regards investment funds. Investment funds form part of the NBFIs population as they can amplify financial stability risks in several ways. Chief among these are: direct credit intermediation (or credit provision through, *inter alia*, direct loan origination by funds and also funds' holdings of financial institutions' debt securities); and, the concern of this discussion, through the distinct liquidity risks associated with certain categories of funds. As outlined in Section I, particular risks arise with 'open-ended funds' (such as UCITS funds) which must meet redemption requests from investors on demand, but which may hold potentially illiquid assets and be required to engage in fire-sales which disrupt financial markets.

In the decade following the financial-crisis-era reforms, UCITS bond funds emerged as a significant channel for NBFIs financial stability risk. They began to hold more illiquid, lower-rated debt securities (reflecting the search for returns in the then-prevailing low-interest rate environment)¹⁰⁶ and relatedly became more exposed to liquidity risk and in danger of exposing the financial system to financial stability risks. In the AIF sector, concern mainly focused on open-ended real estate funds which could be exposed to elevated liquidity risks where property prices fall.¹⁰⁷ Alongside, the distinct risks associated with MMFs were by then well-known, given their idiosyncratic asset and liability structure. MMFs are of systemic significance as major funders to the short-term debt markets, and so of governments and financial institutions, as they typically invest in (their assets are composed of) short-term government debt and short-term commercial debt.¹⁰⁸ A distinct feature of MMFs, however, generates material risks. MMFs seek to allow investors to redeem at a more-or-less stable net asset value per unit/share—that is, the investor is not exposed to fluctuations in the underlying value of the fund but can redeem the MMF unit or share at a guaranteed 'principal value', or close to.¹⁰⁹ This means that MMF units or shares (MMF liabilities) are highly liquid and can act as a functional substitute for cash and, relatedly, can allow regulated financial entities to meet liquidity needs. MMFs are, however, exposed in consequence to two mutually reinforcing liquidity vulnerabilities, in the form of the mismatch between less-liquid MMF short-term debt assets and highly liquid, short-term MMF liabilities. Short-term debt markets are, even in a steady state, subject to illiquidity risks, being typically 'buy to hold' markets, but MMF investors can redeem on demand and with expectations as to a specified value; the pressure to realize less-liquid assets can therefore expose MMFs to risks in meeting their highly liquid liabilities. MMFs are also, and relatedly, subject to pre-emptive redemption risk: the prospect of an MMF restricting redemption when under stress in realizing assets in conditions of heightened illiquidity can generate 'first mover advantage' effects and precipitate runs on MMFs. And where MMFs act in a similar manner in response to prevailing pressures, systemic stability risks can arise. MMF stress and related market dislocation were a feature of the financial crisis, particularly in the USA¹¹⁰ but also, albeit to a lesser extent, in the EU.¹¹¹

¹⁰⁵ Commission, 2021 AIFMD/UCITS Proposal Impact Assessment (SWD(2021)340) 132.

¹⁰⁶ eg ESMA, Trends, Risks, and Vulnerabilities Report No 2 (2019) 21.

¹⁰⁷ ESRB, EU Non-Bank Financial Intermediation Risk Monitor No 6 August (2021) 4.

¹⁰⁸ eg Euro Area MMF assets under management represented €1.44 trillion at the end of 2020 and were primarily in the form of exposures to non-Euro Area banks (33% of assets) and Euro Area banks (31% of assets): ESMA, EU Money Market Fund Regulation—legislative review (2021) 7 and 10.

¹⁰⁹ An MMF unit with a face value of 1.00 euro, eg, would redeem at 1.00 euro (or close to), regardless of the market valuation of the fund.

¹¹⁰ IOSCO, Consultation on Money Market Funds (2012).

¹¹¹ EU MMFs came under redemption pressure in 2008, reflecting thin liquidity in the short-term debt market after the Lehman collapse, increased investor demand for cash, and outflows from MMFs to bank deposits: ESMA, Response to the Commission Shadow Banking Green Paper (2012).

The growing risks associated with NBFI, and in particular with investment funds, crystallized in March 2020. As large segments of the global economy shut down, markets experienced a sharp re-pricing downwards of credit risk, a related ‘flight’ to safe, highly liquid assets followed (the ‘dash for cash’), and, relatedly, MMFs and open-ended funds experienced massive redemption pressure as investors sought safer assets.¹¹² In the EU, bond (UCITS) funds and MMFs were particularly exposed to redemption risk, reflecting the increased risk of their underlying and less liquid debt instruments. The financial stability risks were increased as the below-market-value asset sales by funds to meet redemption requests, and into illiquid markets, increased bond market volatility and illiquidity, and so impaired funding for financial and non-financial companies.¹¹³

The significantly elevated risks were, however, largely contained. UCITS corporate bond funds experienced large outflows, but they proved able to manage the liquidity risks. Following the March 2020 disruption, ESMA assessed the performance of some 367 UCITSs which had particularly large exposures to corporate bonds¹¹⁴ and found that the liquidity risk management systems mandated by the EU regulatory regime had overall worked well.¹¹⁵ Only six funds suspended redemptions and most other bond UCITSs were either able to manage the liquidity risk through managing their portfolios or (in the case of some 134 funds) by imposing ‘swing pricing’ restrictions (increases in the price of units or shares, as a cost on investors seeking to redeem). Across the sector as a whole, only 0.2 per cent of all EU investment funds imposed redemption suspensions.¹¹⁶ UCITS liquidity profiles recovered quickly in April 2020, and by 2021 the UCITS sector was no longer of concern.¹¹⁷ ESMA’s CSA on UCITS liquidity risk management subsequently found little evidence of significant liquidity risk across the sector.¹¹⁸ Similarly, the AIF segment did not experience material disruption. Some liquidity mismatch risk was identified in open-ended real estate funds,¹¹⁹ but the segment did not experience significant redemption pressure and used liquidity management tools to a limited extent only.¹²⁰

The MMF market came under the most significant pressure. Funds flowed into public (government) debt MMFs, as investors fled to safe assets, but the structural vulnerability in the private debt MMF market (given the liquidity mismatch between a potentially illiquid asset base and a liability base that, with cash-like features, was vulnerable to destabilizing redemption pressure), was exposed to searing effect globally.¹²¹ Liquidity risks crystallized as

¹¹² For a review of the global experience see the FSB’s 2020 review (n 11).

¹¹³ For a review of the EU market turmoil see ESRB, *EU Non-Bank Financial Intermediation Risk Monitor* October (2020) 5–8.

¹¹⁴ This riskier segment of the UCITS market was small in an overall population of some 30,000 UCITS funds.

¹¹⁵ ESMA, *Report on Recommendations of the ESRB on Liquidity Risks in Investment Funds* (2020).

¹¹⁶ ESMA Chair Maijoor, *Speech*, 13 November 2020. Some 140 funds in total suspended redemptions in March 2020: ESMA *Fund Liquidity CSA* (n 95), 4.

¹¹⁷ ESMA, *Trends, Risks, and Volatility Report No 2* (2021).

¹¹⁸ 2021 ESMA *Fund Liquidity CSA* (n 95). The CSA found an ‘overall positive result’, with only a low number of cases where significant liquidity risks, threatening redemption, were identified, consistent with NCAs’ monitoring of UCITS fund liquidity in March 2020.

¹¹⁹ 2021 ESRB *Non-Bank Financial Intermediation Monitor* (n 107), 4.

¹²⁰ ESMA reported that two open-ended real estate funds suspended redemptions (in June 2020) and that more generally there was limited reliance on liquidity management tools, albeit that some funds experienced valuation difficulties: ESMA, *Annual Statistical Report on EU Alternative Investment Funds* (2021) 9–10.

¹²¹ See FSB, *Policy Proposals to Enhance Money Market Fund Resilience* (2021), ESRB, *Issues Note on Systemic Vulnerabilities of and Preliminary Policy Considerations to Reform Money Market Funds* (2021), V Baklanova, I Kuznits and T Tatum, ‘Prime MMFs at the Outset of the Pandemic: Asset Flows, Liquidity Buffers and NAVs’ SEC Public Information, 15 April 2021, and FSB (n 11).

institutional investors withdrew from MMFs and turned to cash, in part to meet the requirements the financial-crisis-era reforms had imposed as regards the provision of collateral in stressed market conditions.¹²² In the EU, certain classes of MMF, particularly US\$-denominated funds, experienced sustained and large-scale redemption pressure.¹²³ The scale of the redemption pressure led to the prospect of MMFs then placing additional liquidity strain, through large-scale asset sales of short-term debt,¹²⁴ into a short-term debt market that was critical for liquidity management purposes generally, and so for financial stability, but which was already severely disrupted as investors withdrew from trading in short-term debt and sought safer assets.¹²⁵ In practice, however, the MMF sector globally did not generate large-scale instability. Massive central bank intervention in mid-March 2020, alongside unprecedented governmental support of economies, stabilized markets.¹²⁶ Disruption in the EU MMF sector was confined to particular currency segments,¹²⁷ and no EU MMF was required to use redemption restrictions or to convert from an MMF guaranteeing the redemption amount to a flexible MMF.¹²⁸

V. LESSONS LEARNED

A. The rulebook

The EU's capacity to withstand the elevated financial stability risks over March 2020 was in large part a function of the financial-crisis-era legislative rulebook for investment funds, as amplified by extensive administrative rules and soft law.

The limits which the UCITS rulebook places on the extent to which UCITSs can be leveraged (carry debt), as well as the UCITS asset portfolio rules which are designed to manage liquidity risks—which have been amplified by extensive administrative rules and ESMA soft law—had earlier, as NBF1 risks began to build, been associated with limiting the financial stability risks in the UCITS segment.¹²⁹ Similarly, the AIFMD regime proved resilient. Its extensive liquidity risk management and leverage management requirements stood up relatively well, in practice, to the turbulence, with the AIF sector not experiencing undue strain, as was also underlined by the AIFMD Review. Mandated by the AIFMD's review clause,¹³⁰ the Review was supported by a series of analyses and stakeholder reviews and culminated in

¹²² EMIR, eg, requires that counterparties to derivatives transactions post collateral (in the form of 'margin'); margin levels can increase sharply with market volatility. In March 2020, higher margin requirements increased investors' incentives to withdraw from MMFs and hold cash.

¹²³ In the week of 13–20 March 2020, Euro Area MMFs experienced outflows amounting to 8% of assets under management, a volume exceeded only by outflows in the depths of the financial crisis in September 2008: 2020 ESRB Non-Bank Financial Intermediation Monitor (n 113) 7–8.

¹²⁴ US\$MMFs in the EU and USA were estimated to have sold more than US\$50 billion of commercial paper, more than five times the capacity of the banks which dealt in commercial paper, and so swamping these banks' ability to carry the excess sales by MMFs: 2021 ESMA MMF Legislative Review (n 108), 11.

¹²⁵ FSB (n 11) 28.

¹²⁶ Including via outright purchases of commercial paper on the primary and secondary short-term debt markets (ECB, Bank of England, and US Federal Reserve), provision of bank lending facilities to buy MMF assets (Federal Reserve), and extending the eligible collateral for access to central bank funding to include unsecured bank debt (ECB): 2021 ESMA MMF Legislative Review (n 108) 9.

¹²⁷ Certain US\$-denominated MMFs experienced significant difficulties, with outflows from mid-March representing more than 25% of their assets: FSB (n 11) 20.

¹²⁸ 2023 ESMA MMF Stress Testing Report (n 91) 5, reporting that the sector became 'eventually resilient' and that outflows had stabilized by April 2020. See also 2021 ESMA MMF Legislative Review (n 108) 9.

¹²⁹ ESRB, Shadow Banking Monitor No 2 May (2017) 17–18.

¹³⁰ AIFMD Art 69 required that the Commission commence a review of the Directive by July 2017.

the Commission's June 2020 AIFMD Report.¹³¹ It found that the AIFMD had facilitated the securing of financial stability, albeit that a series of enhancements could be made, as was also highlighted by the subsequent 2021 AIFMD/UCITS Proposal.¹³² The Proposal was relatively modest accordingly,¹³³ with its most significant reforms a new regime governing loan origination by AIFs (designed to support CMU by expanding market-based financing sources as well as to support financial stability) and a new liquidity management tools framework, designed, as noted ahead, to strengthen financial stability risk management. The MMF Regulation, supported by the UCITS and AIFMD regimes, was also perceived to have worked well, overall, with large-scale and broad-based stress in the MMF sector avoided in March 2020.¹³⁴ Some strains were, nonetheless, exposed, linked to the portfolio restrictions the Regulation imposed on certain funds, and a review process is underway, as noted ahead. The stabilization of the MMF sector was, however, also a function of large-scale central bank and fiscal intervention which calmed financial markets globally.¹³⁵ Absent such intervention, the resilience of the MMF Regulation's support of the structural vulnerability inherent in the MMF asset and liability mismatch might have been more seriously tested. Nonetheless, ESMA's analysis of the subsequent 2021 stress test of MMFs, which also took place in conditions of elevated economic stress due to COVID-19, found that the sector, overall, was proving stable.¹³⁶

The rulebook accordingly proved, despite or perhaps because of its intricacy, more-or-less able to contain the changes to fund risk profiles in the period since the financial-crisis-era reforms, as well the intensification of those risks as markets roiled in response to the COVID-19 shock; major gaps were not exposed. It is difficult to draw a direct line from the rulebook to the March 2020 performance of the funds sector, in particular given the unprecedented fiscal stimulus that calmed markets, but it is reasonable to suggest that the extensive asset allocation requirements and leverage restrictions under the UCITS regime, the detailed AIFMD risk management requirements, and the bespoke portfolio constraints and risk management requirements of the MMF Regulation, supported by extensive administrative rules and soft law, reduced the risks to financial stability. Alongside, the funds rulebook did not impose growth-constraining/integration-impeding costs in that it did not constrain fund growth, which has been significant since the financial-crisis-reform era.

Since then, persistent stress in financial markets, particularly over 2022, has not exposed material weaknesses in the funds sector or in how it is regulated.¹³⁷ The rulebook has also shown some foresight in its coverage of macro-prudential regulation, now a feature of the international debate post-March 2020 on the management of fund stability risk. The AIFMD (Article 25), in a still-innovative reform, provides for a macro-prudential response to fund

¹³¹ Commission, Report Assessing the Application and Scope of the AIFMD (COM(2020)232) 5.

¹³² COM(2021)721. The Proposal suggested that the AIFMD had performed well in March 2020, with only some €5 billion of assets being subject to liquidity management tools, and only 56 of 30,357 AIFs being liquidated or entering into liquidation: 2021 AIFMD/UCITS Proposal Impact Assessment (n 105) 10.

¹³³ The Proposal noted that the Review had suggested that the AIFMD was generally meeting its objectives; and that the proposed reforms were improvements designed to target areas that had not been sufficiently addressed when the Directive was originally adopted (n 132) 2 and 6.

¹³⁴ 2021 ESRB Issues Note (n 121).

¹³⁵ As was acknowledged by ESMA: 2023 ESMA MMF Stress Testing Report (n 91) 5.

¹³⁶ 2023 ESMA MMF Stress Testing Report (n 91). ESMA found that while the stress test conditions led to some significant negative impacts as regards liquidity and credit risks, overall the sector showed good resilience.

¹³⁷ The year 2022 saw the assets under management by investment funds experience their sharpest decline since the global financial crisis reflecting, *inter alia*, sharp declines in equity markets, but funds proved able to deal with any liquidity strains: Speech by ESMA Chair Ross, 21 March 2023.

stability risk in that it governs how NCAs are to impose sector-level leverage limits—a form of macro-prudential intervention. While the relevance of and design of macro-prudential tools as a means for managing financial stability risks remains debated internationally, the EU regime has recently been activated, with ESMA supporting the adoption by the Irish NCA of Article 25 leverage limits on real estate funds to manage potential stability risks.¹³⁸

The story is not, however, entirely positive. The intricate engineering of the MMF Regulation, in particular the rules which require, in stressed conditions, that MMFs that guarantee redemption value (LVNAV funds) convert to flexible MMFs that do not, came to be associated with elevated risks. More broadly, and as discussed in Section VI, the extent to which legislation, designed to be normative and foundational, can sustainably continue to be the main vehicle for EU financial market regulation, is unclear.

B. Risk monitoring and operational capacity

The March 2020 upheaval also underlines how the EU's technocratic capacity has deepened since the financial-crisis era and the establishment of the ESFS.

The ESRB began to monitor NBFIs financial stability risks, including in relation to investment funds, in related annual reports from 2016.¹³⁹ Although the ESRB recognized, from the outset, contestation as to the extent to which investment funds contributed to NBFIs risk, it presciently included them in its monitoring.¹⁴⁰ It focused on AIFs, identifying UCITSs as generating less concern given the limits the UCITS rulebook places on UCITS leverage, as well as the moderating effect of the UCITS asset portfolio rules which contain liquidity risks. The ESRB reported, however, on an escalation of liquidity risks in open-ended bond funds (typically in UCITS form), as their asset portfolios became more exposed to lower-rated debt securities of potentially greater illiquidity risk.¹⁴¹ It similarly reported on the increasing stability risk posed by the AIF sector as it grew, given in particular the higher levels of leverage carried by hedge funds and real estate funds, but also the liquidity risks associated with open-ended real estate funds. Alongside, ESMA's bi-annual TRVs monitored the investment fund sector, similarly noting potential liquidity mismatch risks in open-ended bond funds,¹⁴² while the ECB also identified an intensification in fund risk profiles.¹⁴³

This monitoring of intensifying risks led to technocratic action, with the ESRB adopting a Recommendation which called for, *inter alia*, harmonized rules governing liquidity management tools, ESMA Guidelines on liquidity stress testing, and ESMA Guidelines on leverage limits.¹⁴⁴ In response, ESMA adopted its 2020 Guidelines on liquidity stress testing for UCITS and AIFs, and it later adopted its 2021 Guidelines on AIF leverage limits.¹⁴⁵ While

¹³⁸ ESMA, Advice on a Proposed Measure by the Central Bank of Ireland under art 25 of Directive 2011/61/EU (2022).

¹³⁹ Investment fund financial stability risks became subject to closer attention globally around this time. eg IMF, Global Financial Stability Report, April (2016) and Global Financial Stability Report, April (2015).

¹⁴⁰ See, eg, ESRB, Shadow Banking Monitor No 2 May (2017).

¹⁴¹ See, eg, ESRB, EU Shadow Banking Monitor No 3 September (2018).

¹⁴² See, eg, ESMA, Trends, Risks and Vulnerabilities Review No 2 (2018), noting a deterioration in the liquidity risk profile of bond funds.

¹⁴³ eg ECB, Financial Stability Review, November 2019, considering the risks posed by bond funds and MMFs (at 4.2).

¹⁴⁴ n 92.

¹⁴⁵ ESMA, Guidelines on Liquidity Stress Testing in UCITS and AIFs (2020) (these highly technical Guidelines address the operational modalities of stress testing); and ESMA, Guidelines on Art 25 of the AIFMD (2021). (the Guidelines address how NCAs are to assess leverage-related risk and the imposition of related leverage-related limits on AIFs (in accordance with AIFMD Art 25)).

these Guidelines were not engaged over the March 2020 episode, they have subsequently formed part of ESMA's supervisory convergence arsenal for managing fund stability risks and have a strongly operational quality. They relatedly evidence a now significant EU technocratic capacity to adopt practical measures in response to risks in an agile and responsive manner, outside the legislative process. The risk monitoring similarly led to ESMA drawing on the soft CSA tool it had developed as part of its supervisory convergence toolkit: it launched a CSA into UCITS fund liquidity in early 2020, which would later capture the March 2020 period.

Over and following March 2020, ESMA's supervisory coordination and convergence powers provided the EU with an operational capacity for monitoring, coordination, and review. Over the crisis ESMA coordinated between NCAs and subsequently, in response to an ESRB recommendation,¹⁴⁶ assessed the performance of funds over the crisis, calling in consequence for enhanced supervisory review by NCAs.¹⁴⁷ Alongside, its 2020–21 CSA on UCITS fund liquidity, launched in January 2020 and so covering the March 2020 turmoil, allowed it to assess not only fund liquidity profiles and their compliance with UCITS requirements but also levels of NCA supervisory convergence. While the CSA was broadly positive, finding sufficiently sound liquidity risk management by funds and a high level of NCA convergence, it exposed some weaknesses and so provided a platform for NCA coordination and learning.¹⁴⁸ A subsequent CSA was carried out over 2022 on fund asset valuation practices, including in stressed conditions.¹⁴⁹ While it similarly found generally good compliance, it led to ESMA and NCA discussions on how the market and NCAs could be better prepared to address conditions of market stress. The use of two CSAs in quick succession points to the capacity ESMA now has to coordinate NCAs to review their operational practices in response to market stress, and to facilitate NCA learning, and so, accordingly, to support NCAs' execution of legislative objectives, in dynamic and volatile operating conditions. More broadly, cooperation between NCAs, between NCAs and ESMA, and between the ESRB and ESMA, appears to have been efficient under stressed conditions. Since then, ESMA's review and convergence activities have continued, with the outbreak of the war in Ukraine seeing ESMA monitoring fund liquidity, in coordination with NCAs.¹⁵⁰ The MMF sector remains a focus of ESMA monitoring. ESMA's regular refinement of the MMF stress test Guidelines to incorporate, in consultation with the ESRB, prevailing economic and market conditions,¹⁵¹ its assessment of stress test results,¹⁵² and the now annual MMF market report¹⁵³ all provide early warning indicators of emerging stress and so support the technocratic supervisory process but also the law reform process.

That the March 2020 disruption did not lead to the crystallization of financial stability risks is in large part a function of the resilience of the rulebook. The technocratic capacity that the EU showed as regards risk monitoring, review, and the development of enhanced supervisory tools was, however, significant in supporting the rulebook in practice. It also indicates the maturing of the institutional setting established in 2011 and its capacity to manage stressed conditions, as is considered further in Section VI.

¹⁴⁶ ESRB Recommendation 2020/4 [2020] OJ C200/1.

¹⁴⁷ ESMA, Report on Recommendations of the ESRB on Liquidity Risks in Investment Funds (2020).
¹⁴⁸ n 95.

¹⁴⁹ ESMA, Final Report on the 2022 CSA on Valuation (2023).

¹⁵⁰ ESMA, Public Statement (Regulatory Response to War in Ukraine), 14 March 2022.

¹⁵¹ For the 2023 iteration see n 91.

¹⁵² n 91.

¹⁵³ n 98.

C. Reform capacity, agility, and some depoliticization?

Finally, the response to the March 2020 turmoil suggests some agility in the legislative process, as well as a considerable capacity to embed technical, data-informed, and operationally tested expertise.

The AIFMD Review, already underway, pivoted speedily to include liquidity management tool provisions designed to strengthen the fund rulebook's capacity to manage financial stability risks. The subsequent 2021 AIFMD/UCITS Proposal,¹⁵⁴ and reflecting wide-spread stakeholder support,¹⁵⁵ proposed the adoption of a liquidity management tools regime for UCITSs and open-ended AIFs, based on the fund manager being required to choose one from the prescribed set of liquidity management tools and to adopt a related policy on its use, and on strengthened NCA cooperation, as well as on new NCA powers to require the use (or dis-use) of a specified liquidity management tool. This reform, which has seen the EU move ahead of the international reform debate,¹⁵⁶ was accompanied by a new regime for loan origination (loan provision) by AIFs, designed to diversify sources of credit but also to support fund financial stability,¹⁵⁷ and by an enhancement of UCITS reporting.¹⁵⁸ There is a markedly operational hue to the reforms which, while modest, promise much as to the further enhancement of the funds' regime ability to manage stability risks. They also illustrate the extent to which technocracy has come to influence the legislative process, with the Proposal reflecting the ESRB's recommendations regarding liquidity management tools and ESMA's call for these recommendations to form part of the AIFMD review.¹⁵⁹ Perhaps reflecting this technocratic support, although political contestation on the Proposal was significant, it was, for the most part, limited to matters of technical design and execution rather than of substantive principle, and agreement was reached relatively speedily in July 2023.¹⁶⁰ Over the inter-institutional negotiations, some skirmishes arose between the institutions as regards the delegation reforms, reflecting the distinct political economy of the funds regime and the competitive territory at stake, and also as regards the means through which the reforms should be amplified, reflecting what can be varying institutional positions on the extent to which ESMA should be empowered.¹⁶¹ But the most difficult negotiations related to

¹⁵⁴ n 132.

¹⁵⁵ n 105, 7.

¹⁵⁶ The FSB and IOSCO consulted on liquidity risk management tools in July 2023. In the EU, political agreement on the earlier 2021 AIFMD/UCITS proposal was reached in July 2023.

¹⁵⁷ The conditions specified by the Commission's proposal included that any such funds be closed-end where the notional value of the loans originated exceed 60% of net asset value, and that a 5% risk retention requirement apply.

¹⁵⁸ The reform was designed to support the development of an integrated UCITS reporting system (UCITS reporting is significantly less extensive than AIFMD reporting).

¹⁵⁹ ESRB Recommendation (n 92), Recommendation A; and ESMA Letter to the Commission (AIFMD Review), 18 August 2020.

¹⁶⁰ The Council reached a Presidency Compromise in June 2022 (Council Document 9768/1/22) relatively speedily, some six months after the Commission proposal was adopted in November 2021, and the Parliament reached its negotiating position in January 2023 (ECON Report A9-0020/2023). Trilogue discussions opened in March 2023 and completed in July 2023. The liquidity management tool proved less contentious than other reforms, with the Commission's proposal broadly supported by the Council and Parliament, albeit that the Council, reflecting the industry position, was not in favour of NCAs being empowered to require certain tools to be used (or dis-applied).

¹⁶¹ The Proposal's delegation regime (delegation has been a source of political controversy since Brexit) saw some contestation, including as regards the Commission's proposal that NCAs be required to report to ESMA on their approvals of delegations by fund managers of operations to third countries (this proposal was not supported by the Council or Parliament). Contestation also arose as to whether the amplification of the liquidity tool management regime should be via administrative rules (Commission and Council) or soft ESMA Guidelines (Parliament).

the detail of the loan origination regime, indicating that technical, financial-stability-oriented reforms can still attract significant political contestation, the EU's technocratic capacity notwithstanding.¹⁶² Nonetheless, while politics will always therefore matter, ESMA's technocratic influence on the legislative process can be expected to deepen. The important review of the UCITS portfolio allocation rules, launched in 2023 and the first major review since well before the financial crisis, is likely to draw heavily on ESMA's analysis.¹⁶³ The Commission's decision not to pursue legislative reform of the MMF Regulation, as noted ahead, underlines, however, that ESMA's influence on legislation, as a level 3 actor, depends in large part on the Commission supporting its approach.

Review of the MMF Regulation has been less agile, albeit that this could also suggest caution in prematurely disrupting the regime, in force only since 2018. The Regulation did not experience major strain over March 2020, but some of its design features became associated with an elevation of stability risks. In particular, the 'collar' rules (which require those MMFs which can, under the Regulation, commit to redeeming at a constant value while having a fluctuating asset value (LVNAV funds) to, when specified thresholds are breached, convert to MMFs which can only offer a fluctuating redemption value) became associated with creating pre-emptive redemption pressure (as investors redeemed where they feared a drop in MMF value would lead to the mandatory conversion of the MMF).¹⁶⁴ Something of an institutional cleavage has, however, opened up as to how to respond. The EU's technocratic actors, ESMA, the ESRB, and the ECB, have all recommended that constraints be imposed on LVNAV funds.¹⁶⁵ But the Commission's subsequent 2023 review (under the MMF Regulation's review clause), was sanguine. It suggested that the Regulation had held up well over March 2020 and also in the face of the volatility generated by the illegal Russian invasion of Ukraine, the September 2022 UK PM Truss 'mini budget', and the early 2023 Silicon Valley Bank collapse, acknowledged the calls for reform but underlined the uncertainties and implementation risks as well as the dangers posed in constraining MMFs as providers of liquidity, and concluded that further assessment was needed. The review accordingly underlines that technocratic influence has limits, with the Commission's concern to facilitate the MMF market and not disrupt liquidity trumping, it appears, for now at least, technocratic calls for reform. It remains to be seen whether the Commission has been overly cautious, but there is certainly merit in allowing the regime to further embed, supported by ESMA's monitoring and convergence action. And there is extensive technocratic expertise at

¹⁶² The loan origination regime emerged as one of the most contentious of the Proposal's reforms, with the Council more cautious and interventionist, seeking to add a 150% leverage cap to the Commission proposals (resisted by the Commission and Parliament), and the Parliament generally adopting a more liberal approach, including proposing that open-ended funds (and not only closed-end funds) be permitted to engage in loan origination.

¹⁶³ The Commission has tasked ESMA with reviewing the regime as part of its review of whether the portfolio allocation rules are in line with market developments: Commission, Letter to ESMA, 6 June 2023.

¹⁶⁴ See n 79 on the features of the LVNAV fund, the dominant form of EU fund. Although no LVNAV fund required conversion, some came close: ESMA Chair Maijoor, Speech, 13 November 2020. On the stresses associated with the LVNAV design, see 2021 ESMA MMF Legislative Review (n 108) 24–40.

¹⁶⁵ In the wake of the March 2020 upheaval, ESMA quickly consulted on MMF reform and proposed reforms (2021 ESMA MMF Legislative Review (n 108) and ESMA, Opinion on the Review of the MMF Regulation (2022)), including, *inter alia*, reforms to address the cliff-edge risks that the Regulation's 'collar' requirements generate for LVNAVs, liquidity management tool requirements, liquidity buffers, and enhancements to reporting and stress testing. Similar but more restrictive reforms were proposed by the ESRB (Recommendation ESB/2021/9 [2022] OJ L129/1) and in the policy discourse (LD Capotã and others, 'Is the EU MMF Regulation Fit for Purpose? Lessons from the Covid-19 Turmoil' ECB WP No 2737 (2022)).

the EU's disposal, including through ESMA's oversight of MMF stress testing and its annual reviews of the MMF sector, that augurs well for any future reviews.

A further observation can be offered. The investment fund experience suggests that the EU now has a significant capacity to influence the international response to investment fund financial stability risks.¹⁶⁶ It has (unusually) experience of macro-prudential regulation, it has an extensive toolkit of micro-prudential regulation, soon to be enhanced by liquidity management tools, and its ESMA- and ESRB-led arrangements for technocratic and operational coordination have been tested in crisis conditions. Given that technocratic 'uploading' of interests and experience to the international standard-setters shapes, albeit within the wider political frame set by the interests of the major financial markets, how international standards evolve,¹⁶⁷ the EU's capacity to shape the international reform agenda can be expected to be significant.

The story of the funds rulebook, over a decade or so since the financial-crisis-era reforms, can be regarded as reassuring, as regards the resilience of the foundational legislative reforms but also the technocratic capacity of the EU since then to amplify, support, and revise those rules. Reassuring too, in many respects, is the status of EU financial market regulation more generally, although the pressure on its resilience is intensifying, as considered in the following penultimate Section VI.

VI. CAPACITY AND CRISIS: THE FUTURE RESILIENCE OF EU FINANCIAL MARKET REGULATION

A. The rulebook

(i) *A mature and resilient legislative process ...*

This discussion will not dissect the intricate and densely amplified legislative rulebook that supports financial stability in the EU financial market. MiFID II/MiFIR, IFD/IFR, CRD IV/CRR, EMIR, the Securities Financing Transaction Regulation, the Short Selling Regulation, and the rating agency regime are all, in different ways, designed to identify, manage, and contain financial market risks to financial stability, and their features (and weaknesses) have been well-canvassed. Of wider import is the underpinning legislative process that supports these measures and also their capacity to respond to changing risks.¹⁶⁸

Legislative reform is markedly more frequent now than a decade or so ago. Some reforms are efforts to enhance the relevant legislation's capacity to achieve the objectives sought.¹⁶⁹ Some are a consequence of the ratcheting effect of review clauses (which can be used as

¹⁶⁶ On the EU's capacity to shape international financial market governance see D Mügge, 'Europe's Regulatory Role in Post-Crisis Global Finance' (2014) 21 JEPP 316 and L Quaglia, *The European Union and Global Financial Regulation* (2014).

¹⁶⁷ 'Up-loading', 'down-loading', and 'cross-loading' effects are used in the international financial political economy literature to examine the relative strengths of states' capacities, including through their regulators, to shape international financial governance. On the EU's capacity, including through regulatory agencies such as ESMA and EBA, in the context of securitization where the EU influenced the adoption of a more facilitative approach globally, see L Quaglia, 'It takes Two to Tango: The European Union and the International Governance of Securitization in Finance' (2021) 59 JCMS 1364.

¹⁶⁸ This inevitably selective discussion addresses the legislative process, and not the rule-making process more generally, as legislation provides the normative underpinning of EU financial market regulation and sets the mandates for delegated administrative rule-making.

¹⁶⁹ Such as the early reform of the 2017 Prospectus Regulation, shortly after it was adopted, by the 2019 SME Regulation (Regulation (EU) 2019/2115 [2019] OJ L320/1) in order to better support small and medium-sized enterprises. To take another example, EMIR has been repeatedly revised since its 2012 adoption, albeit that only two of the many EMIR reforms have been substantial and wide-ranging in design (the 2019 EMIR 'Refit' and EMIR '2.2' reforms).

political compromises where agreement has proved difficult).¹⁷⁰ Yet others take the form of ‘quick fix’ responses, such as the 2021 COVID Recovery reforms, with the ‘quick fix’ device a new feature of EU financial market regulation.¹⁷¹ The state of almost permanent review that now attends the single rulebook brings its own challenges in terms of the frictions and costs of change, the evidential difficulties in capturing how best to review measures and the metrics which are to be used¹⁷² (although the EU’s market data capacity has been significantly enhanced, as noted ahead), and political, institutional, and market distraction effects.¹⁷³ But the consequent legislative instability at least suggests an agile legislative process capable, to some degree, of self-correction—albeit that it also suggests that the legislation grounding EU financial market regulation no longer has (if it ever had) a foundational, immutable, normative quality.

More frequent legislative reform is being supported by a materially enhanced market data capacity which augurs well for the EU’s ability to capture dynamic risks to financial stability. The single rulebook can now be regarded as a form of ‘regulation-by-data-requisition’, given the scale on which it requires regulated actors to provide public disclosures and supervisory reports, and given the reporting infrastructures it has required to be established. Chief among these infrastructures are the ESMA-authorized trade repositories that host vast data flows on the EU’s derivatives, securitization, and securities financing transactions markets, and the ESMA-authorized data reporting services providers that funnel the massive volume of MiFIR-mandated transaction reports and trading data from trading venues and counterparties to the market.¹⁷⁴ Alongside, the Commission is refining market data management and developing an integrated data reporting system,¹⁷⁵ as is reflected by the new European

¹⁷⁰ This ratchet effect is evident from the large-scale MiFID II/MiFIR review which was launched only two years after the coming into force of MiFID II/MiFIR, reflecting the MiFID II/MiFIR review clauses which mandated that several specified areas be reviewed by the Commission by March 2020 (eg MiFID II Art 90).

¹⁷¹ The 2020 Covid Recovery Package (SWD(2020)120) led to ‘quick fix’ deregulatory reforms designed to facilitate the raising of capital, including to the prospectus regime and to MiFID II: Directive (EU) 2021/338 [2021] OJ L68/14 (MiFID II) and Regulation (EU) 2021/337 [2021] OJ L68/1 (Prospectus Regulation).

¹⁷² Legislative reviews in the EU have long been accompanied by extensive impact assessments which are reviewed by the Commission’s independent Regulatory Scrutiny Board (the Board’s 2022 Report found an improvement in the quality of impact assessments generally, but also identified a series of weaknesses: Regulatory Scrutiny Board, Annual Report 2022). While external reviews have also long been used to support the reform process, they are becoming more common, in particular macro market surveys, such as the 2020 Oxera report on the equity markets (n 43). Alongside, the ESAs typically support review processes by engaging in extensive consultations and review (ESMA’s engagement with the MiFID II/MiFIR review, eg included ten reports primarily concerned with market structure and a series of reports concerned with retail market issues).

¹⁷³ eg whether or not the granular reforms proposed by the Commission in May 2023 to the MiFID II regime, in service of stronger retail market protection and of the new Retail Investment Strategy (COM (2023)279), would, if adopted, lead to the market and behavioural change sought in terms of better investor outcomes, remains to be seen. It might reasonably be argued that the now massive retail rulebook needs to be stabilized and fully embedded in firms and in supervisory and enforcement processes and that political and institutional capacity should be directed primarily to this end.

¹⁷⁴ To give some sense of the scale, some 650 million transaction reports are made monthly under MiFIR (ESMA, 2022 Report on Quality and Use of Transaction Data (2023)), while a 2021 review by ESMA of only two days of EMIR-mandated trade repository reporting covered 20 million records (ESMA, EMIR and SFTR Data Quality Report 2021 (2022)). The data flows are used, eg, for monitoring trends in derivatives markets and firms’ exposures to derivatives, risk monitoring (including by market segment and by asset class), and market abuse detection.

¹⁷⁵ As set out in its European Data Strategy: COM(2020)66.

Single Access Point (ESAP) data hub to be hosted by ESMA.¹⁷⁶ Relatedly, the ever-expanding competences conferred on ESMA across the single rulebook as regards data collection and the development of data infrastructures, as well as its own-initiative risk monitoring and data assessment activities,¹⁷⁷ have seen it develop as a critical data node for EU financial market governance. In consequence, ESMA now has a significant capacity to gather, interrogate, enhance the quality of,¹⁷⁸ and use data to inform supervision and drive supervisory convergence, but also to shape regulatory reform. This massive expansion in the EU's data capacity over the last decade or so can be expected to lead to the outcomes of legislation being scrutinized more closely¹⁷⁹ and to more data-informed legislative design. Thus far, however, the scorecard is somewhat mixed. Reforms consequent on review clauses tend to be based on extensive reviews and impact assessments (often by ESMA),¹⁸⁰ but the 'quick fix' reforms have been more reactive.¹⁸¹

Relatedly, the legislative process can now draw on significant technocratic capacity and so can more easily develop resilient and expertise-informed legislative solutions, as is exemplified by the 2019 IFD/IFR. In force from 2021, it addresses the prudential regulation of investment firms, including as regards organizational, capital, and liquidity requirements. Given the centrality of investment firm intermediation to financial market stability, it is arguably the most significant legislative reform since the financial-crisis-era reform period. In substance, the IFD/IFR constructs a new regime for the prudential regulation of investment firms and recasts the previous regime contained within the bank-oriented CRD IV/CRR. It addresses the full panoply of prudential regulation (including capital, liquidity, and leverage requirements and related reporting, disclosure, and supervisory arrangements), but it does so in an innovative, proportionate, and highly segmented manner. The IFD/IFR segments the investment firm population into Class 1 investment firms (the largest and most systemically significant investment firms, re-designated as credit institutions and so authorized under and subject to the most rigorous prudential requirements of CRD IV/CRR); Class 1 Minus investment firms (larger and more complex firms, subject to the IFD/IFR in principle but in practice to much of CRD IV/CRR); Class 2 firms (medium-sized firms, subject to a calibrated application of IFD/IFR); and Class 3 firms (small investment firms, subject to minimal requirements under the IFD/IFR).¹⁸² Alongside, the rules of the IFD/IFR regime

¹⁷⁶ COM(2021)723. This transformative operational reform is designed to establish an ESMA-based repository for all public disclosures made by regulated actors, including issuers, trading venues, investment firms, and investment funds. Provisional agreement was reached by the co-legislators in June 2023 and the ESAP is expected to be operational by 2027.

¹⁷⁷ Which extend from its collection and interrogation of a swathe of sectoral reports from NCAs, to its publication of an expanding range of risk monitoring and statistical reports, to its construction and hosting of key MiFID II/MiFIR databases on trading data, to its supervision of the EU's trade repositories and data reporting services providers.

¹⁷⁸ ESMA's supervisory agenda includes the enhancement of trade repository/data reporting services provider data, through intensive engagement with NCAs and by means of metrics, on which it reports annually (see n 174).

¹⁷⁹ As is exemplified by the adoption in 2021 of metrics to monitor CMU (n 42).

¹⁸⁰ See n 172.

¹⁸¹ The multitude of reports that shaped the MiFID II/MiFIR Review (including 10 from ESMA) stands in contrast with the thin impact assessment that accompanied the 'quick fix' Covid Recovery reforms (SWD(2020)120).

¹⁸² Broadly, Class 1 firms have assets equal to or in excess of €30 billion and engage in own account dealing or underwriting—the most risk intensive investment firm activities; Class 1 Minus firms are identified by a series of proxies, including having assets equal to or in excess of €15 billion, and engaging in own account dealing or underwriting; Class 3 firms are the smallest firms and their identification is via proxies relating to size and activities (such as the firm's revenue from investment services or activities being less than €30 million; and, where it engages in investment management, the firm's assets under management being less than €1.2 billion). All other firms are Class 2 firms.

are finely calibrated. In particular, the capital assessment at the heart of the regime is based on drilling into the extent to which an investment firm's activities pose risks to the firm (RtF), risks to clients (RtC), and risks to the market (RtM), by means of an innovative 'k-factor' assessment used to quantify the level of capital required.¹⁸³ This granular segmentation makes the prudential rules for investment firms materially more risk sensitive, but also more adaptable to changing risk profiles and more resilient to change and uncertainty. Substance aside, the IFD/IFR suggests a significant maturing of the legislative process in that it implies an appetite for experimentation which augurs well for the future of the rulebook. The impetus for experimentation lay not with the political process, however, but with the EU's post-financial-crisis technocratic capacity. The IFD/IFR is heavily based on the European Banking Authority's (ESMA's sister banking authority) technical blueprint. EBA had been charged with reviewing the financial-crisis-era CRD IV/CRR as regards its appropriateness for investment firm risk and delivered an innovative series of related reports and advice, informed by extensive consultation, technical assessment, and data, to the Commission across 2015–17.¹⁸⁴ The Commission's subsequent IFD/IFR proposals were closely based on EBA's approach¹⁸⁵ which also prevailed over the negotiations. The IFD/IFR accordingly might be regarded as emerging from a nuancing, in practice, of the co-decision 'level 1' legislative process in which the ESAs as 'level 3' actors do not play a formal role: the inter-institutional, political co-decision process was layered on to a technocratic, agency blueprint which, re-constituted as the Commission proposal, formed, in effect, the final legislative measure. This is not to suggest a troublesome *de facto* bypassing of the co-decision process. Some of the changes made by the Commission to EBA's model were material and spoke to the constitutional cleavage between technical agency advice and executive or political decision-making,¹⁸⁶ while political contestation between the co-legislators shaped the perimeter of the IFD/IFR.¹⁸⁷ Nonetheless, intensifying financial market uncertainty and complexity suggest that this type of innovative and data-informed technocratic engagement will increasingly be essential to successful legislative design.

Political preferences and contestation, however, set the pace and direction of legislative reform.¹⁸⁸ There are few signs, so far, of any re-setting changes to the Council's overall posture, which, over the last decade or so can be characterized as of a broadly regulatory

¹⁸³ On the IFD/IFR see Moloney (n 7) 400–12.

¹⁸⁴ EBA, Report on Investment Firms (2015); Discussion Paper on Designing a New Prudential Regime for Investment Firms (2016); Opinion on the First Part of the Call for Advice on Investment Firms (2016); and Opinion in response to the Commission's Call for Advice on Investment Firms (2017).

¹⁸⁵ Further, given the scale of EBA's preparatory work, the Commission did not engage in a pre-proposal consultation or impact assessment: Commission, Inception Impact Assessment (Ref. Ares (2017)1546878).

¹⁸⁶ The Commission accepted EBA's advice that Class 1 firms be subject to the CRD IV/CRR, but it specified the criteria for the identification of such firms in the legislative proposal. By contrast, EBA had proposed that it be charged with specifying how the firms be identified: COM(2017)791 (IFD) and COM(2017)790 (IFR).

¹⁸⁷ The Council introduced the application, under IFD/IFR, of CRD IV/CRR to Class 1 Minus firms: Council Documents 7460/19 ADD 1 (IFD) and 7460/19 ADD 2 (IFR), 19 March 2019.

¹⁸⁸ As has been extensively documented. For analysis of the now well-charted limitations of the EU's bank recovery and resolution funding arrangements (under the Single Resolution Mechanism) as reflecting French and German preferences to reduce costs for their banking industries see D Howarth and I Asimakopoulos, 'Still Born Banking Union: Explaining Ineffective European Union Bank Resolution Rules' (2022) 60 JCMS 264.

(or ‘market-shaping’) orientation.¹⁸⁹ Nonetheless, national preferences continue to diverge, including as regards the management of the financial stability risks, as the varying national treatments of the spike in short selling in early 2020, in response to the acute volatility in asset prices as the COVID-19 pandemic deepened, suggest.¹⁹⁰ It remains unclear how the withdrawal of the UK from the EU will shape the Council as regards the management of financial stability. There is little sign of change so far, save as regards the more restrictive approach that has emerged to the third country regime, but this is a function of a distinct set of preferences relating to post-Brexit EU/UK relations.¹⁹¹ As noted in Section II, there are nascent signs of a tilt towards deregulation, and so towards the liberal, ‘market-making’ posture associated with the UK as an EU Member State, initially identifiable in the 2020 Capital Market Recovery Package and more marked recently in the Commission’s 2022 Listing Act proposal.¹⁹² These measures are, however, concerned with market finance and with enrolling private capital in the post-COVID recovery and are designed to be facilitative. A line cannot easily be drawn from these measures to the emergence of a more deregulatory approach in the Council to stability-oriented measures. In this area, the greater engagement of technocracy, exemplified by the IFD/IFR experience, and so a regulatory orientation, may be the more indicative trend. Alongside, the attention that NBF financial stability risk is attracting globally can be expected to moderate any re-setting deregulatory interests that might arise. Furthermore, the normative setting for financial stability regulation is relatively stable, with broad agreement internationally and in the EU on the tools used to support financial stability (which tools reflect the original G20 reform financial-crisis-era reform agenda). To the extent there is political contestation as regards the approach to supporting financial stability in the EU, at least with respect to financial markets, it is primarily concerned with the idiosyncratic interests and preferences at stake as regards the organization of CCP clearing, following the offshoring of the clearing of euro-denominated interest rate derivatives in the UK post-Brexit.¹⁹³ Ultimately, the technical complexity of financial stability measures, the international setting that moderates competitive interests in deregulation, the very long shadow of the financial crisis, and the dynamism of financial market risk all imply less political

¹⁸⁹ The political economy literature characterizes Member States’ preferences, very broadly, in terms of whether they tend towards a liberal, facilitative approach to markets (‘market making’: classically, the UK pre-Brexit) or a more dirigiste, regulatory approach (‘market shaping’: classically, France). eg C Burns, J Clifton and L Quaglia, ‘Explaining Policy Change in the EU: Financial Reform after the Crisis’ (2018) 25 JEPP 728.

¹⁹⁰ Only six NCAs imposed curbs under the Short Selling Regulation, taking ‘market-shaping’ action that was criticized, in some quarters, as an intrusion into market dynamics. See K Langenbucher and L Pelizzon, ‘Short Selling—On Ethics, Politics and Culture’ (2021) ZBB 301; L Enriques and M Pagano, ‘Emergency Measures for Equity Trading: The Case Against Short-Selling Bans and Stock Exchange Shutdowns’ in C Gortsos and W-G Ringe (eds), *Global Pandemic Crisis and Financial Stability* (2020), <<http://ssrn.com/abstract=3607930>>; and G Siciliano and M Venturozzo, ‘Banning Cassandra from the Market? An Empirical Assessment of Short-Selling Banks During the Covid-19 Crisis’ 2020 ECFR 386.

¹⁹¹ C-A Petit and T Beck, ‘Recent Trends in UK Financial Sector Regulation and Possible Implications for the EU, Including its Approach to Equivalence (2023) (Study for the European Parliament PE 740.067) and N Moloney, ‘Third Countries and EU Financial Market Access: Technocracy, Politics, and the end of Deference?’ (2023) LSE Legal Studies WP No 16/2023 (<<https://ssrn.com/abstract=4492090>>).

¹⁹² n 171 and 45. The Council agreed to its negotiating position on the Listing Act speedily (June 2023).

¹⁹³ See N Moloney, ‘Financial Services’ in F Fabrinini (ed), *The Framework of New EU-UK Relations* (Oxford University Press, 2021) 115; and S James and L Quaglia, *The UK and Multi-level Financial Regulation* (Oxford University Press, 2020).

contestation in relation to, and more technocratic influence over, financial-stability-oriented measures.

(ii) ... *but emerging sustainability risks*

The experience since the financial-crisis-era reform period suggests potentially systemic sustainability weaknesses in the rule-making process, two in particular.

First, it is not clear that legislation, designed to be high-level and normative, can continue to be the main vehicle for supporting financial stability. The complexity and dynamism of financial market risk, and the related uncertainty as to how stability-oriented legislation—drafted in anticipation of, but not tested in, crisis conditions—will perform under pressure, suggest that legislation will increasingly struggle as a means for containing financial stability risks. EMIR, a pillar financial-crisis-era measure and the EU’s foundational legislative regime governing derivatives market risk provides a useful example. An immensely intricate measure, EMIR is also the single rulebook’s most unstable component, being revised some 15 times since its 2012 adoption, and is currently the subject of the 2022 EMIR 3.0 proposal (directed in the main to Brexit-related risks).¹⁹⁴ Instability is not necessarily a problem—it indicates a political willingness and an institutional capacity to make necessary revisions—albeit that it imposes costs, as previously noted. But EMIR’s marked dynamism indicates that complex legislation, designed to capture and manage volatile risks, can struggle, particularly when regulatory prescriptions are tested in live conditions, as was recently the case with EMIR’s foundational margin requirements.¹⁹⁵ The outbreak of war in Ukraine in 2022, and the consequent acute volatility in commodities markets, significantly increased margin requirements thereby placing some counterparties under stress. Although neither the EU nor the global financial system experienced undue margin-related dislocation,¹⁹⁶ the episode highlighted the pressure a regulatory device designed to secure financial stability (increases in margin when risks are higher) can experience in live conditions of market stress.¹⁹⁷ The prescription that legislation be more high-level and that administrative rules—adopted by the Commission but heavily influenced by technocracy in the form of ESA/ESMA technical advice and proposals for Binding Technical Standards—be relied on more heavily is not a new one, but it is becoming all the more urgent. The now well-tested nature of the administrative rule process, ESMA’s increasingly sophisticated and data-informed technical capacity, and the stable normative setting for financial stability regulation all suggest that administrative rules should be the first port of call for reform.¹⁹⁸

A second source of sustainability risk concerns the now structural reliance on ESMA soft law to support binding rules. All the major legislative measures that support financial

¹⁹⁴ COM(2022)697.

¹⁹⁵ ‘Margin’ relates to the collateral required to be provided by counterparties to derivatives contracts and is designed to contain counterparty credit risk. The imposition of margin requirements on derivative transactions was one of the pillar G-20 crisis-era reforms measures, and was implemented in the EU through EMIR.

¹⁹⁶ Liquidity strain consequent on higher ‘margin calls’ was observed globally but was not regarded as presenting material financial stability risks: FSB, Letter to G20 Finance Ministers and Central Bank Governors, 14 April 2022. Reform discussions are, however, underway. eg Basle Committee on Banking Supervision, Committee on Payments and Infrastructures and International Organization of Securities Commissions, Margin Dynamics in Centrally Cleared Commodities Markets in 2022 (2023).

¹⁹⁷ Refinements were made to the EMIR margin rules through administrative rule adjustments.

¹⁹⁸ There are already signs of this happening. The refining of the MiFID II/MiFIR regime to address sustainable finance, eg, was achieved by means of administrative rules (mainly Delegated Regulation (EU) 2021/1253 [2021] OJ L277/1), the arbitrage risks that emerged with the MiFID II/MiFIR trading venue regime were dealt with through an administrative rule change (n 63), and the EMIR margin regime was adjusted through administrative rules, following the 2022 stress in commodity derivatives markets.

stability are supported by extensive ESMA soft law.¹⁹⁹ But ESMA soft law, in whatever format,²⁰⁰ is inherently troubling as regards legitimation given the extent to which it is followed by NCAs and by the market, its identity in practice with administrative rules, and the breadth and often non-proceduralized nature of ESMA's related powers.²⁰¹ The 2019 ESA Reform Regulation, which followed the 2017 ESA Review, recognized the intensifying pressure on legitimation as ESA soft law burgeoned, and placed additional procedural guard rails around the ESAs' (and so ESMA's) soft law powers, in a classic expression of how political action, through constitutive legislation, can legitimize (or at least strengthen the legitimation of) agency action.²⁰² Judicial review is also supporting legitimation, albeit that the expansive 2021 Court of Justice *FBF* ruling on EBA's soft law powers, which allowed EBA a significant margin of discretion in adopting Guidelines, has been criticized for in effect side-lining, but not over-ruling, the *Meroni* ruling which, by confining agencies' discretion, forms part of ESMA's legitimation arrangements.²⁰³ The ruling does, however, confirm that soft law can be the subject of an Article 267 TFEU preliminary reference, which at least widens the field within which judicial review can operate, albeit that the Article 263 TFEU annulment action remains inaccessible.²⁰⁴ Certainly, the more expansive and operational ESMA soft law becomes, and the more it shapes national supervisory practices, the more likely the preliminary reference is to be deployed and the wider the Court of Justice's field for review.

While the legitimation risks posed by soft law are well-understood, their reach is widening. This is usefully illustrated by ESMA's recent construction and use of the soft 'supervisory forbearance' device, designed to *de facto* suspend administrative rules. As the amplifying administrative rules that support the single rulebook become ever more dense, intricate, and dependent on data, the need for some form of remedial suspensive or adjustment power has become pressing. In particular, administrative rules increasingly 'operationalize', through the application of highly specified and quantitative metrics, the legislative requirements that support financial stability. The rules governing the identification of the derivatives subject to the CCP clearing obligation under EMIR, and those dictating the scope of the application of the MiFIR trading market transparency rules as regards bond markets, provide classic

¹⁹⁹ EMIR, eg is amplified by an extensive Q&A and some 10 sets of detailed Guidelines, typically of quasi-regulatory colour.

²⁰⁰ As previously noted, ESMA adopts a host of different soft law measures, including Guidelines and Q&As (ESMA Regulation art 16 and b) but also other measures including Opinions, Public Statements, and Briefings (adopted usually under its general supervisory convergence powers (arts 29 and 31)).

²⁰¹ See, eg, Moloney (n 2) 145–65 and Egeberg and Trondal (n 54).

²⁰² The 2019 reforms tightened the procedures applicable to the adoption of art 16 Guidelines and saw Q&As (originally developed by the ESAs as a soft supervisory convergence tool, on their own-initiative, and not expressly covered by the ESA Regulations) brought within the Regulation and proceduralized (if thinly), reflecting some political, NCA, and industry concern as to increasing volumes of soft law and intensifying legitimation risks.

²⁰³ F Annunziata, 'The Remains of the Day: EU Financial Agencies, Soft Law and the Relics of Meroni' EBI WP 106/2021 (2021) <<https://ssrn.com/abstract=3966980>>. The extent to which the ESAs' powers and actions have overtaken the constraints imposed by *Meroni* has been a constant in the ESA literature since 2011. See, eg, Moloney (n 2); E Howell, 'The European Court of Justice: Selling us Short' (2014) 11 ECFR 454; H Marjosola, 'Bridging the Constitutional Gap in EU Executive Rule-Making' (2014) 10 European Constitutional LR 500; M Busuioac, 'Rulemaking by the European Financial Supervisory Authorities: Walking a Tight Rope' (2013) 19 ELJ 111 and M Chamon, 'EU Agencies Between Meroni and Romano or the Devil and the Deep Blue Sea' (2011) 48 CMLRev 1055.

²⁰⁴ See M Chamon and N de Arriba-Sellier, 'FBF: On the Justiciability of Soft Law and Broadening the Discretion of EU Agencies' (2023) 18 European Constitutional LR 286 and H Marjosola, M van Rigsbergen and M Scholten, 'How to Exhort and to Persuade with(out) Legal Force: Challenging Soft Law after FBF' (2022) 59 CMLRev 1523.

examples,²⁰⁵ but there are many others. These administrative rules can, because they are heavily dependent on applying metrics that can become outdated, require nimble adjustment or suspension when market conditions change, and risk management so requires. This is not accommodated within the administrative rule-making process which must follow the relevant Treaty (Article 290/291 TFEU) procedures.²⁰⁶ Side-stepping the constitutional restrictions, ESMA has, in response and in an expansive use of its ESMA Regulation supervisory convergence powers, developed an informal ‘supervisory forbearance’ tool to suspend rules in practice by advising NCAs not to prioritize the supervision of the relevant rules.²⁰⁷ This tool was used to striking effect over the COVID-19 crisis to lessen compliance costs, when ESMA issued a series of supervisory forbearance statements for NCAs, as regards regulated actors’ compliance with specified obligations.²⁰⁸ ESMA’s usual formula—a statement that it expects NCAs ‘not to prioritize supervisory action’ and to deploy their risk-based supervisory powers in a proportionate manner—is somewhat elliptical, but the effect is clear: rules are *de facto* suspended.²⁰⁹ Given the complexity and dynamism of markets and risks, and the inevitable rigidities associated with legislative and administrative rule-making (even allowing for the greater agility in recent years), there is much to be said for ESMA’s approach. It is also reasonable to characterize this form of action as an example of the increasing technocratic capacity of the EU to manage stability risks. Nonetheless, while informal supervisory forbearance action is functionally appealing, it raises legitimization risks, particularly where it is not proceduralized through legislative conditions which place politically agreed guard rails on such action. Legislative remediation is, however, taking place, if slowly. A suspensive mechanism, which lies with the Commission (advised by ESMA), was adopted in 2019 for the EMIR CCP clearing obligation.²¹⁰ A similar mechanism has been proposed for the MiFIR Derivatives Trading Obligation under the 2021 MiFIR 2 Proposal.²¹¹ The

²⁰⁵ See ESMA, Draft Technical Standards on the Clearing Obligation—Interest Rate Derivatives in Additional Currencies (2015) (ESMA’s first assessment of the CCP clearing obligation) and ESMA, Press Release, 2 May 2018 (ESMA’s first assessment of bond market liquidity under the MiFIR transparency regime).

²⁰⁶ As amplified by the ESA Regulations in the case of Binding Technical Standards.

²⁰⁷ ESMA’s supervisory forbearance statements are relatively rare but are not exceptionally so, and address, for the most part, difficulties with EMIR. One of the earliest examples concerns a joint 2017 supervisory forbearance statement (with EBA and EIOPA) regarding EMIR margin requirements. A more recent example relates to the global withdrawal of the LIBOR interest rate benchmark (following the 2012 interest rate fixing scandal). The withdrawal required that the EMIR CCP clearing obligation be adjusted as regards certain LIBOR-referenced interest rate derivatives. Pending the adoption of revisions to the relevant administrative rules, and given the risks of market disruption, ESMA took supervisory forbearance action in 2021 to mitigate the risk: ESMA, Public Statement, 16 December 2021.

²⁰⁸ A series of such statements were adopted by ESMA over March to April 2020 relating primarily to the informal extension of deadlines for reporting requirements and to the informal delay of the application of specified measures: Moloney and Conac (n 50). These statements were all adopted under ESMA Regulation art 31(2)(c) which empowers ESMA to take appropriate soft measures in the event of developments which may jeopardise the functioning of financial markets, with a view to coordinating actions undertaken by NCAs.

²⁰⁹ Albeit that ESMA’s sensitivity to the legitimization risks is clear as the statements typically note that neither ESMA nor NCAs have the formal power to disapply a directly applicable measure.

²¹⁰ The 2019, ‘EMIR Refit’ reforms empower the Commission to suspend a CCP clearing obligation following an ESMA request: EMIR art 6a. Its adoption was contentious given that any such suspension of the relevant administrative rule imposing the obligation would bypass the Council and Parliament which have oversight and veto powers over the adoption of administrative rules.

²¹¹ The MiFIR Derivatives Trading Obligation requires that transactions in derivatives subject to the EMIR clearing obligation be executed on specified trading venues. A new art 32a would allow for the DTO’s application to specified instruments to be suspended, in alignment with the EMIR suspension power. Provisional agreement was reached in June 2023 after the trilogue negotiations.

2019 ESA Reform Regulation empowered ESMA to issue a ‘no action’ letter to the Commission and to NCAs in exceptional circumstances when it considers that the application of a legislative or administrative act is liable to ‘raise significant issues’, as either that act conflicts with another act, the absence of administrative acts raises legitimate doubts as to the legal consequences of the act in question (where it is a legislative act), or the absence of ESMA Guidelines would raise practical difficulties concerning the application of the act in question. The new power does not empower ESMA to suspend the relevant measure, reflecting ESMA’s lack of competence to adopt binding rules, although ESMA is to advise the Commission on the appropriate action and to adopt soft law as necessary.²¹² These legislative reforms go some way to addressing the difficulties, but they do not (and cannot under the current constitutional settlement) directly empower ESMA to suspend rules. ESMA’s supervisory forbearance statements therefore continue to provide an expedient if constitutionally unsteady solution. The sustainability of this solution is doubtful, however, given the increasing dynamism and complexity of markets and risks, and the related increasing likelihood that rules may require suspension in conditions of market stress or significant change.

B. The supervisory setting

(i) Decentralization and learning ...

Finally, the shape of the supervisory setting, a decade or so after its reconfiguration by the financial-crisis-era reforms, falls to be considered. NCAs, which ground the ESFS, remain the anchors of the supervisory architecture which is based on home/host NCA supervision, coordinated through the ESFS, and in particular by ESMA. The single rulebook allocates home or host jurisdiction to NCAs and also specifies the tasks and minimum powers of NCAs, including as regards supervisory cooperation and information exchange. Over the last decade or so, the single rulebook has also begun to bring a degree of procedural harmonization, through law, to the operational business of NCA supervision. This has been mainly achieved through the ‘supervisory review and evaluation process’ (SREP), originally developed under the CRD IV/CRR banking regime.²¹³ In an indication of the intensifying Europeanization of the supervisory process, the SREP model, as amplified by extensive 2022 ESA Guidelines, now applies to the most systemically significant financial market actors: CCPs (EMIR) and investment firms (IFD/IFR).²¹⁴ Procedural harmonization is also being achieved through the host of administrative rules that amplify the single rulebook by specifying how the different NCA reviews, approvals, waivers, and actions specified by legislation are to be carried out.²¹⁵ This NCA-based system is supported technocratically by ESMA’s extensive supervisory convergence powers and by its risk monitoring and reporting activities.

²¹² In ESMA’s first (2020) application of this power, it advised the Commission of its concerns regarding the serious difficulties certain aspects of the sustainability-related disclosures required under the EU’s Benchmark Regulation generated for NCA supervision and enforcement in the absence of the required administrative rules. ESMA called for remedial administrative rules to be adopted and, in the interim, recommended NCA supervisory forbearance as regards the application of the disclosure rules: ESMA, Opinion (to Commission), 29 April 2020 and ESMA, No Action Letter (to NCAs), 29 April 2020.

²¹³ The SREP relates to ‘pillar 2’ (supervisory review) of the CRD IV/CRR regime.

²¹⁴ The SREP process is associated with prudential supervision (capital, liquidity, leverage, risk management, eg) and involves a high level of procedural harmonization as to how supervision is carried out in practice by NCAs. It is supported by extensive guidelines: ESMA/EBA, Joint Guidelines on Common Procedures and Methodologies for the Supervisory Review and Evaluation Process (SREP) under Directive (EU) 2019/2034 (2022) (investment firms); and ESMA, Guidelines on Common Procedures and Methodologies on Supervisory Review and Evaluation Process of CCPs under Article 21 of EMIR (2022) (CCPs).

²¹⁵ eg the MiFIR administrative rules that govern, in granular detail, how NCAs are to set the ‘position limits’ for commodity derivatives trading that are designed to support the stability of commodity derivatives markets.

Discrete supervisory arrangements apply in certain financial market segments reflecting the different degrees of pan-EU supervisory co-ordination required in relation to, and the varying levels of financial stability risks posed by, regulated actors. These arrangements have become more intricate and centralized in the decade or so since the financial crisis. Most notably, CCP supervision, since the 2019 EMIR 2.2 reforms, is NCA-based but is coordinated through colleges of NCA supervisors and overseen by the ESMA CCP Supervision Committee which has, *inter alia*, review powers over specified NCA decisions.²¹⁶ Exceptionally, there are currently two forms of direct, centralized supervision. First, ESMA has, incrementally and parsimoniously, been conferred with exclusive supervisory powers over a limited cohort of regulated actors (rating agencies, trade repositories, EU critical benchmarks and administrators, data reporting services providers, and specified third country actors, chief among them CCPs). Secondly, the largest and most complex investment firms, where they are re-classified as credit institutions under the IFD/IFR system, and where they are registered in a Member State within the scope of Banking Union's Single Supervisory Mechanism (SSM), are, since 2021, directly supervised within the SSM through ECB Banking Supervision. ESMA's population of supervised actors is of limited financial stability risk,²¹⁷ to limit fiscal risks to the Member States, while the ECB's population, reflecting its central position in the risk mutualization structures of Banking Union, relates to the most systemically significant financial market actors in the EU (save for CCPs).

This discussion will not rehearse the rich and multi-faceted debate on whether this decentralized system is fit for purpose.²¹⁸ It offers instead the modest observation that the absence of any large-scale failure in financial markets over the last decade or so, and the resilience of the investment fund market in March 2020, suggests that these arrangements, however idiosyncratic, piecemeal, and *ad hoc*, are more-or-less resilient and sustainable as regards financial stability risk management. The incrementalism and expediency which characterize how this system has developed since the financial-crisis-era reforms also allow for the testing and nuancing of solutions (the development of the SREP tool and its application beyond banks to investment firms and CCPs provides a useful example). Furthermore, incrementalism and expediency allow for a side-stepping of the multitude of political,²¹⁹

²¹⁶ The CCP arrangements are characterized by extensive hybridity, with NCA, college of supervisor, and ESMA elements. This hybridity reflects the complex risk profile, operational challenges, institutional intricacy (with NCAs, ESMA, and the ECB all having interests in CCPs supervision) and sensitive political economy (given the fiscal risks of CCPs) associated with the supervision of CCPs as highly systemic actors. See R Canini, 'Central Counterparties are too big for the European Securities and Markets Authority Alone: Constructive Critique of the 2019 CCP Supervision Regulation' (2021) 22 EBOLR 673 and E Grossule, 'Risks and Benefits of the Increasing Role of ESMA: A Perspective from OTC Derivatives Regulation in the Brexit Period' (2020) 21 EBLOR 393.

²¹⁷ Third-country CCPs are a striking exception but this reflects the idiosyncratic risks and political economy associated with CCP supervision and the UK's dominance in the clearing of certain euro-denominated financial derivatives.

²¹⁸ For financial-crisis-era perspectives see L Quaglia, 'Financial Regulation and Supervision in the European Union after the Crisis' (2013) 16 J of Economic Policy Reform 17. For post-crisis perspectives, typically acknowledging the path-dependent constraints but identifying weaknesses, particularly as regards crisis management, see W-G Ringe, L Morais and D Muños, 'A Holistic Approach to the Institutional Architecture of Financial Supervision and Regulation in the EU' EBI Working Paper 50/2019 (2019) and J Payne, 'Institutional Design for the EU Economic and Monetary Union: Financial Supervision and Financial Stability' in F Amttenbrink and C Hermann (eds), *The EU Law of Economic and Monetary Union* (Oxford University Press, 2017).

²¹⁹ Member States, albeit to different degrees, have long been wary of a centralization of supervision given the loss of autonomy and potential fiscal risks, as was clear over the negotiations on ESMA's establishment (eg A Spendzharova, 'Is More 'Brussels' the Solution? New European Union Member States' Preferences about the European Financial Architecture' (2012) 50 JCMS 315). The withdrawal of the

constitutional,²²⁰ fiscal (any centralization would require some form of loss mutualization), and operational complexities²²¹ that characterize any centralization of financial market supervision. Supervisory convergence, and not grand designs in institution building, is likely to continue to frame how financial market supervision is organized. With the Council wary, and although the European Parliament has long supported some centralization,²²² the Commission's 2022 ESA Review did not make adventurous claims or proposals regarding the re-ordering of financial market supervision, focusing instead on refining supervisory convergence.²²³ It is reasonable to suggest that the trajectory of the design of EU financial market supervision is bending towards ESMA incrementally acquiring more powers. But this trajectory is likely to continue on a gradually and not acutely bending course, with any new grants of power to ESMA relatedly likely to be limited to relating to non-systemic actors that pose minimal risks to financial stability, do not require risk mutualization, and do not expose Member States to fiscal risks.²²⁴

It is certainly, however, the case that the supervisory arc is moving towards more intense operational coordination in a manner that can reasonably be associated with more resilient management of financial stability risks. Much of this movement can be associated with ESMA's soft supervisory convergence powers, which have become the vehicle for an increasingly dense Europeanization of NCAs' supervisory practices. This is in part a function of legislative fiat and accordingly of political will. The 2019 adoption by the co-legislators of the IFD/IFR SREP, for example, led to the extensive ESMA/EBA 2022 SREP Guidelines which now govern how investment firm prudential supervision is carried out in practice. The 2019 ESA Reform Regulation reforms saw the co-legislators enhance ESMA's supervisory convergence powers in several ways, including by strengthening its peer review powers, directing it to establish a 'single supervisory handbook' (ESMA's exercise of its supervisory convergence powers was already impliedly constructing a 'supervisory handbook'

UK, which was hostile to supervisory centralization, has not significantly changed the political economy, with the Commission's proposals (under the ESA Reform Proposal (COM(2017)539) and the Crowdfunding Proposal (COM(2018)113)) to add to ESMA's direct supervisory competences (as regards, eg, certain funds and prospectuses and also crowdfunding services providers) failing to garner Council support. Reflecting the sensitivities, the Commission's High Level Forum on CMU did not reach a consensus position on centralized supervision: High-Level Forum on the Capital Markets Union, A New Vision for Europe's Capital Markets (2020) 24–25.

²²⁰ The *Meroni* restriction on agencies' capacity to exercise discretionary powers represents, at least in principle, a significant stumbling block to agency empowerment. Legislative work-arounds have been found for ESMA's limited suite of supervisory powers, mainly in the form of a highly detailed legislative proceduralization of how such powers are to be used, in order to constrain ESMA's discretion.

²²¹ The scale and heterogeneity of the financial market population (as compared to the relatively homogenous banking market), which ranges from small, non-systemic financial advisers to the most complex investment firms, CCPs, and MMFs, make institutional centralization a complex operational proposition.

²²² In particular, CCP supervision which it had earlier called for over the financial-crisis era. For a recent reiteration of its support, see the European Parliament Resolution of 8 October 2020, Further Development of the Capital Markets Union (P9_TA(2020) 0266).

²²³ COM(2022)228. The Commission reported that stakeholders were broadly in favour of NCA-based supervision of financial markets, but indicated that it would consider additional ESMA empowerments where indications arose that current arrangements were not appropriate for the desired level of market integration.

²²⁴ Most recently, ESMA has been conferred with exclusive supervisory powers over the external reviewers that support the European Green Bond designation (European Green Bond Regulation, Compromise Text, 10 May 2023 (Council Document 9074/23)). Relatedly, while the 2023 Markets in Crypto-Assets Regulation (MiCAR) (Regulation (EU) 2023/114 [2023] OJ L150/40) regime confers on ESMA enhanced monitoring powers over 'significant crypto asset providers' it does not provide for direct ESMA supervision.

for NCAs, but the 2019 reforms formalized this organic development), and mandating it to adopt two EU strategic supervisory priorities for NCAs, to frame NCAs' supervisory activities.²²⁵ But this ongoing Europeanization is also a function of technocratic action, in particular, ESMA's purposeful and at time entrepreneurial exercise of its powers. ESMA's construction of the new 'Common Supervisory Action' tool,²²⁶ its increasingly intrusive approach to its peer review powers,²²⁷ and its now vast soft rulebook indicate the multiplicity of channels through which it is shaping how supervision is carried out by NCAs and supporting risk monitoring. ESMA is also, in its supervisory convergence activities, increasingly prioritizing financial stability which, while an objective since ESMA's establishment,²²⁸ has recently become more strongly associated with financial market supervision and ESMA's mandate given the growth in NBFIs. ESMA's 2023–2028 Strategy identifies financial stability, and related risk monitoring, as a strategic priority, given in particular volatile market conditions.²²⁹

This NCA-based, supervisory-convergence-framed model for organizing EU financial market supervision has much to commend it in that it is based on technocratic, incremental, 'learning by doing', not least as ESMA can only go as fast in driving coordination as the NCAs that form its decision-making Board of Supervisors allow. It also accommodates the sharing of data and experience and the development of common solutions, supported by ESRB and ESMA risk monitoring, in response to what are increasingly dynamic and complex risks to financial stability. An incremental Europeanization of NCA supervisory practices, while of a less dramatic order than the conferral on ESMA of direct supervisory powers could, over time lead to material *de facto* standardization of EU financial market supervision, and the reduction of supervisory gaps and arbitrage risks, without the risks and costs of institutional centralization. There is, in effect, a 'sedimentary' quality to ESMA's extending influence as it sinks deeper into NCAs' national supervisory practices.²³⁰ And with this model there are also legal guard rails against legitimization risks, chief among them the *Meroni* principle—at least, where it is engaged: it is not always clear that agency supervisory or operational action constitutes a *Meroni* delegation from the institutions. The guard rails also include the Article 5 TEU proportionality and subsidiarity principles which can ground judicial review of ESMA action²³¹ and which the 2019 ESA Reform Regulation institutionalized in ESMA's governance.²³²

²²⁵ ESMA's current 'USSPs' relate to the supervision of ESG disclosures and market data quality (ESMA, Press Release, 10 October 2022).

²²⁶ n 96.

²²⁷ For a recent example, see ESMA's peer review of NCAs' authorizations of UK firms migrating to the EU which found that a risk-based approach, as deployed by some NCAs, led to only minimal requirements being applied: ESMA, Peer Review into the NCA's' handling of relocation to the EU in the context of the UK's withdrawal from the EU (2022).

²²⁸ ESMA Regulation Art 1(5).

²²⁹ n 10, 13–14 and 16.

²³⁰ Ford has identified the phenomenon of 'sedimentary innovation,' which relates to layers of apparently unremarkable and 'unflashy' innovation which can be highly consequential and lead to a markedly different regulatory landscape: (n 52) 194.

²³¹ Although the *Banco Popolare* litigation on judicial review of the proportionality of the Single Resolution Board's action in resolving *Banco Popolare* suggests a Court of Justice sympathetic to affording the EU financial agencies a wide operating discretion: see M Chamon, 'The Non-delegation Doctrine in the *Banco Popolare* Cases' *Review of European Administrative Law Blog*, 28 October 2022. On the proportionality principle as a foundational standard of review see T Tridimas, 'The Principle of Proportionality' in R Tridimas and R Schütze (eds), *Oxford Principles of EU Law*, Vol 1 (Oxford University Press, 2018) 243.

²³² The reforms required ESMA to establish a committee to ensure the proportionality of its actions: ESMA Regulation Art 1(6) (this takes the form of the ESMA Standing Committee on Proportionality and Coordination).

Whether or not this intricately engineered model has an inherent core tensile strength, or is patchy and unlikely to withstand significant pressure, remains to be tested in conditions of acute crisis, although the March 2020 episode augurs well. There are, of course, well-understood risks associated with this supervisory model. These include the limited incentives home NCAs have to monitor cross-border activity, although, moderating this risk, prudential supervision of cross-border activity remains the responsibility of the home NCA under the single rulebook²³³; the increase in legal and legitimation risks as soft ESMA action ratchets down the space for NCA discretion; an overly rigid Europeanization of NCA supervision that could leach out productive experimentation and innovation²³⁴; and the perennial, persistent, and well-canvassed risk that the EU does not have a sufficiently mature crisis management system, particularly as regards the rescue and resolution of systemically significant actors.²³⁵ But supervision does not operate in idealized environment, and the current model is a function of the interaction of multiple political, legal, and operational constraints.

(ii) ... but emerging centralization risks

The greater risks may lie in those areas where more centralization of the supervision of systemic actors has been attempted. The mid-2021 transfer to Banking Union's SSM of the largest and most complex investment firms, as regards their prudential supervision, represents a material centralization of operational supervisory power in financial markets.²³⁶ While it carries the advantages of the ECB's now tested and weighty SSM experience of bank supervision, it generates operational, coordination, legal, and political intricacies of some delicacy and complexity. It situates the supervision of the most complex investment firms, which pose the greatest risk to financial stability, within a somewhat byzantine institutional setting in which the ECB, EBA, ESMA, and relevant NCAs all have different but related supervisory, supervisory convergence, and supervisory coordination competences under CRD IV/CRR (prudential supervision) and MiFID II/MiFIR (conduct). It remains to be seen how effective the underpinning coordination and cooperation arrangements will be in practice; this new supervisory arrangement has only been in operation since 2021. But the inclusion of investment firms within the SSM will likely pose a significant test of the efficacy of institutional coordination arrangements. The inclusion may also generate unhelpful institutional frictions where the perimeters which mark the different spheres of operation of the key institutional players are blurred. In contrast, EMIR's hybrid model for CCP supervision may yet prove sustainable and flexible, albeit that the current institutional structure is

²³³ A risk increasingly being identified by host NCAs (ESA Joint Committee, Report on Cross-border Supervision of Retail Financial Services (2019)) and the subject of a peer review (ESMA, Peer Review on Supervision of Cross-border Activities of Investment Firms (2022)).

²³⁴ Sliding from 'learning' into 'surveillance' has been identified as a risk to optimal coordination in the context of international financial governance: A Riles, 'Is New Governance the Ideal Architecture for Global Financial Regulation?' (2013) 31 *Monetary and Economic Studies* 65.

²³⁵ The resolution of major investment firms is governed by the bank resolution regime (Directive 2014/59/EU [2014] OJ L173/19, as supported by the Banking Union's Single Resolution Mechanism), while CCPs are governed by Regulation (EU) 2021/23 [2021] OJ L22/1. On the weaknesses in the capacity of the CCP regime to contain major failures see J-H Binder, 'Central Counterparties' Insolvency and Resolution—The New EU Regulation on CCP Recovery and Resolution' EBI WP No 2021/82 <<https://ssrn.com/abstract=3778649>>. More generally, the resilience of the EU's crisis management system for banks, including as regards deposit insurance, has long been questioned but political progress is slow, although the Commission recently proposed a series of refining reforms in its April 2023 'CMDI' package.

²³⁶ Albeit currently confined to four major investment firms: (n 66).

unwieldy and its capacity to cope with a large-scale crisis is yet un-tested.²³⁷ Based on the pre-existing college of supervisors and ESMA coordination/convergence tools, the EMIR supervisory model refines these tools, in particular by affording ESMA more opportunities to shape supervisory convergence through the ESMA CCP Committee arrangement, but does not generate the legitimacy and functional risks associated with supervisory centralization. It is also dynamic, with the EMIR 3.0 reforms introducing refinements. Much will depend, however, on the extent to which this new form of operating will support effective data sharing on CCP risks, and, the litmus test of any stability-oriented cooperation mechanism, cope in conditions of acute crisis.²³⁸

VII. CONCLUSION

The epochal financial market reforms finalized in 2014 were designed in large part to manage financial stability risks. The first major test of these reforms came in March 2020 through the seismic economic shock delivered by the COVID-19 pandemic, and as regards a now burgeoning segment of the financial system—the funds sector—the financial stability risks of which remain unclear. The financial-crisis-era rulebook proved resilient to this shock, albeit the unprecedented central bank intervention and government fiscal support internationally was decisive in calming markets.

The importance of this moment for EU financial market regulation should not, nonetheless, be discounted. The history of EU financial market regulation tends to be one of crisis, weakness, and reform. Here, the rulebook and its supporting institutional structures worked. The foundational legislative choices made proved resilient under pressure. Technocratic action (through ESMA and the ESRB), which amplified these legislative choices through the administrative rule process and soft law, and also ensured their execution through risk monitoring and supervisory coordination and convergence, proved effective. Overall, and while caution is warranted in extrapolating wider lessons from the episode, it can reasonably be suggested that the technical (amplification and coordination) was essential to the success of the political (legislation).

It is less clear that the wider system of EU financial market governance will prove resilient in the face of future upheavals. The legislative process is becoming more agile, data-based, and technocratically informed, and the political economy setting seems stable. These conditions augur well for the EU's capacity to adapt in an agile manner to increasingly dynamic and uncertain financial stability risks. Nonetheless, soft law constitutes a weak point: it is functionally essential but constitutionally and politically unsteady, particularly as regards legitimation. There are few easy answers here to one of the most long-running and sticky conundrums in EU financial market governance. The ongoing and incremental hardening of legislative/political control, such as the 2019 EMIR and ESA Regulation reforms, and a more sceptical and muscular judicial review posture from the Court of Justice, may provide the most sustainable way forward. Supervision remains, as it ever was, unsettled terrain and rescue and resolution a long-standing risk. But there is now at least some evidence that the

²³⁷ It did not, however, experience strain over the early 2020 Covid-19-related market volatility: ESMA, Third EU-Wide CCP Stress Test (2020). The outbreak of the war in Ukraine, and the related volatility in commodity and energy derivative markets, led to an intensification of ESMA monitoring of impacts on CCP margin and of ESMA/NCA co-ordination regarding clearing members: 2022 ESMA Ukraine Public Statement (n 150).

²³⁸ The absence of a degree of fiscal risk mutualization, and of more direct ECB engagement, has been identified as a significant weakness: Canini (n 216).

current system—NCA based but ever more Europeanized through incremental ESMA technocratic action—is a sustainable way forward that minimizes the constitutional, political, and institutional risks of centralization. Overall, the prognosis is good, with the EU's increasingly mature institutional capacity perhaps the best indicator of future resilience.