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The 2013 Capital Requirements Directive IV and Capital Requirements Regulation: Implications and Institutional Effects

Niamh Moloney

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Abstract This survey article considers the background to and major features of the behemoth 2013 CRD IV/CRR regime which governs the prudential regulation and supervision of banks and investment firms in the EU. The CRD IV/CRR regime is in its infancy. Initial empirical assessments suggest, however, that while it is likely to strengthen bank stability, it may also contribute to a contraction in the funding capacity of the EU financial system. While the ultimate effects of CRD IV/CRR are unclear, it can reasonably be speculated that unintended and potentially prejudicial effects may arise. This article suggests that the extent to which CRD IV/CRR can be applied flexibly, amplified and corrected reasonably easily, and supervised in a manner which supports consistency of application across the EU as well as an appropriate level of national supervisory discretion, will therefore have a significant influence on the ability of the EU to mitigate the risk of these effects arising.

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After reviewing the background to and major features of CRD IV/CRR, the article considers the extent to which the harmonization model deployed under CRD IV/CRR, the EU’s regulatory capacity to amplify and correct CRD IV/CRR, and the supervisory governance arrangements which support CRD IV/CRR are likely to mitigate the risks of unintended and prejudicial effects.

Zusammenfassung …

Key words Banking Union; CRD IV; CRR; European Banking Authority; prudential regulation.

Acronyms
BTS Binding Technical Standards
CRD IV/CRR Capital Requirements Directive IV/Capital Requirements Regulation
CVA Credit Valuation Adjustment
EBA European Banking Authority
ECB European Central Bank
LCR Liquidity Coverage Ratio
NCA National Competent Authority
SREP Supervisory Review and Evaluation Process
SSM Single Supervisory Mechanism

I. Introduction

A. Introduction

This survey article\(^1\) considers and contextualizes the main features of the 2013 Capital Requirements Directive IV (CRD IV) and the Capital Requirements Regulation (CRR).\(^2\) These two measures together form the backbone of the post-crisis prudential regulatory regime which applies to financial institutions - banks and investment firms - in the EU.

The CRD IV/CRR regime is vast in scale (the CRR alone runs to over 500 Articles and is being amplified by a highly detailed set of delegated ‘level 2’ administrative EU rules); wide in scope, capturing a complex population of financial institutions; highly technical (the regime drills deep into the workings of the risk management and capital planning systems of financial institutions); and imposes a level of harmonization previously unparalleled in EU financial regulation. It is also

\(^1\) This survey article is based on a report prepared for the 17 April 2015 European Community Studies Association/University of Salzburg/Vienna School of International Studies/Vienna University of Economics and Business Conference on ‘European Banking Union.’ It seeks to review the major features and implications of the CRD IV/CRR regime. I am grateful to participants in the conference for their valuable insights and to the journal’s referee for helpful comments.

a relatively new regulatory regime. The bulk of its provisions have applied only since 2014 and some of its transitional arrangements extend to 2019. Its implications accordingly remain unclear. This discussion, which takes a legal and institutional perspective, is accordingly and necessarily selective.³ It outlines the major features of the CRD IV/CRR regime and speculates as to its major consequences - with respect to harmonization and the banking ‘single rule-book’ and also with respect to institutional matters and the European System of Financial Supervision (ESFS).

Section I considers the main features and the political economy of CRD IV/CRR. Section II maps its coverage. Section III considers the main implications of the regime and how it may have unintended effects. Sections IV, V, and VI consider whether the level of harmonization deployed, the regulatory capacity of the EU to calibrate and correct regulation, and the EU’s supervisory governance arrangements which support CRD IV/CRR are likely to mitigate the related risks and unintended effects of the new regime. Section VII concludes.

B. CRD IV/CRR: Purpose and Main Features

The CRD IV/CRR regime is a prudential regulation measure. Prudential regulation is concerned with the solvency of financial institutions and with the support of financial stability. Regulation of this type is designed to reduce, albeit not to eliminate, the risk of institution failure. It seeks to manage the risks which financial institutions assume and to internalize within such institutions the costs of these risks. It also seeks to contain the risks of intermediary failure, given the dangers which risk contagion poses to the financial system. Prudential regulation is accordingly primarily concerned with the imposition of operational, risk-focused requirements on financial institutions and with the supervision of such requirements. These operational requirements typically include internal controls and risk management requirements; incentive management rules, including with respect to governance and remuneration; and capital, liquidity, and leverage requirements. Capital requirements, for example, are designed to impose internal costs on the carrying of risks

by intermediaries, to absorb the losses which an intermediary does not expect to make in the ordinary course of business, and to support orderly winding up in an insolvency. Reflecting these functions of prudential regulation, the CRD IV/CRR regime seeks to increase the level and quality of financial intermediary capital in order to improve the loss-absorbing capacity of intermediaries and to enhance their resilience to liquidity shocks; reduce pro-cyclicality and systemic risk within the financial system; and, by imposing internal costs on the taking of risks, remove (or at least reduce) the implicit ‘Too Big To Fail’ subsidy which applies to large financial institutions.  

CRD IV/CRR is a creature of the financial crisis era. It is in large part designed to meet the EU’s commitment to implement the G20 crisis-era regulatory reform agenda and, in particular, to implement the Basel III Agreement reforms to bank capital, liquidity, and leverage requirements; these reforms formed the central pillar of the G20’s initial reform prescriptions. The CRD IV/CRR regime is accordingly based on the three ‘Pillars’ of the Basel III Agreement: Pillar 1 - capital requirements (including for credit, operational, and market risk), capital buffers, securitization requirements, clearing and over-the-counter (OTC) derivative-related requirements, large exposures requirements, liquidity and leverage requirements, and governance and system requirements; Pillar 2 – the internal assessment of capital adequacy by Basel III-scope institutions (the Internal Capital Adequacy Assessment Process - ICAAP) and the subsequent supervisory review by the supervisory authorities of Basel III-scope institutions (the Supervisory Review and Evaluation Process – SREP); and Pillar 3 – market disclosures designed to support market oversight and discipline, and supervisory reporting. 

The CRD IV/CRR regime is accordingly a regulatory measure but it also has a market construction and market support function. It acts as the harmonized prudential regulation rulebook which governs the EU’s internal banking and investment services market. Accordingly, it contains the authorization procedures and ‘passporting’ requirements which apply to banks in the EU. It also dovetails with the massive 2014 Markets in Financial Instruments Directive II/Markets in Financial Instruments Regulation (MiFID II/MiFIR) regime which applies to investment firms.

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Structurally, the CRD IV/CRR has highly prescriptive (CRR) and more discretionary (CRD IV) elements. The CRD IV regime, which, as a Directive, had to be implemented by the Member States, addresses the authorization and passporting process for banks (the procedures for investment firms are contained in MiFID II/MiFIR); the supervisory review process (SREP); and much of the governance regime which applies to financial institutions within the scope of CRD IV/CRR. The coverage of CRD IV, which applies to the more discretionary or flexible elements of the CRD IV/CRR regime, was shaped by a series of policy and political determinations over the related negotiations as to the appropriateness of some degree of national discretion and flexibility in certain areas of prudential regulation. For example, CRD IV contains the discretionary supervisory powers which allow national supervisory authorities (national competent authorities or NCAs) to impose on financial institutions additional requirements to those set out in the Basel III Pillar 1 rule-book. By contrast, the CRR element of the CRD IV/CRR regime takes the form of a Regulation and so is directly applicable in the Member States. It covers the Basel III Pillar 1 and 3 rule-books, as well as distinct EU rules.

Institutionally, the CRD IV/CRR regime sits within a complex and multi-layered institutional eco-system. The European Banking Authority (EBA), the EU’s banking market agency - established in 2011 as part of the crisis-era reforms to EU financial system governance and conferred with quasi-rule-making and supervisory convergence powers - has emerged as a key influence on the development of the CRD IV/CRR regime. EBA has been conferred with a very large number of mandates under the ‘level 1’ CRD IV/CRR to propose Binding Technical Standards (BTSs) (a form of ‘level 2’ delegated administrative rule) which are adopted by the Commission and which amplify and clarify the CRD IV/CRR regime. EBA’s quasi rule-making powers also include the power to adopt soft Guidelines and Recommendations which apply through a ‘comply or explain’ mechanism (they are typically directed to the national supervisory authorities). These quasi-regulatory powers, in combination with EBA’s recent pro-activity in identifying flaws within CRD IV/CRR and in proposing remedial action to be taken by the co-legislators at ‘level 1’ (section V below), have led to EBA becoming the de facto custodian of the vast CRD IV/CRR ‘single rule-book’ which is composed of the legislative CRD IV/CRR IV text but also of a vast array of administrative rules in the form of BTSs, other Commission

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administrative rules,\textsuperscript{8} and soft law. EBA’s ability to ensure the consistent application of CRD IV/CRR may, however, become compromised given the uncertain effects of the Banking Union/internal market chasm which now fragments the EU banking market and, in particular, the evolving role of the ECB as the dominant actor with Banking Union’s Single Supervisory Mechanism (SSM), as discussed further in section VI.

C. Context: From Liberalization, to Regulation, to Support of Supervisory Centralization

The CRD IV/CRR prudential regulation regime is a creature of the crisis era. But its roots extend far back into the early history of EU financial system regulation. In terms of legislation, these roots can be traced to the 1977 Banking Coordination Directive I (BCD I) which set out minimum standards, including authorization requirements, for banks (deposit-taking institutions) only.\textsuperscript{9} It was a basic framework measure - very different in style and substance to modern EU banking regulation. In particular, it did not harmonize at a sufficient level of detail to allow for mutual recognition of authorization. A step change, which reflected international developments, occurred with the 1989 Banking Coordination Directive II (BCD II) which implemented the Basel I Agreement\textsuperscript{10} and so imposed harmonized capital requirements on EU banks. With this enhancement of harmonization BCD II was also able to introduce the ‘banking passport’ which allowed banks to operate cross-border on the basis of a single home Member State authorization. The banking passport was available to a wide range of services carried out by deposit-taking institutions, including investment services. BCD II, and subsequent EU measures which addressed, for example, large exposure regulation and the application of the banking prudential regime to investment firms, were consolidated in 2000 within the Consolidated Banking Directive.\textsuperscript{11} The 2000 Directive was subsequently overtaken in 2006 by the Capital Requirements Directive I (CRD I),\textsuperscript{12} which implemented the Basel II Agreement, applying it to EU banks and investment firms.

\textsuperscript{8} Two controversial elements of the Basel III regime – the Leverage Ratio and the Liquidity Coverage Ratio – are amplified under CRD IV/CRR by means of Commission administrative rules and not BTSs. Where an administrative rule does not take the form of a BTS, EBA provides Technical Advice to the Commission but does not propose the measure, and does not benefit from the procedural protections which apply to its proposals for BTSs.


The harmonized EU prudential regulation rule-book which applied at this point in the evolution of EU prudential regulation for financial institutions was primarily concerned with liberalization and with passporting. It was also porous. While the harmonized rule-book implemented the Basel Agreements, it contained numerous national discretions and derogations for Member States. Significant changes were to follow – both with respect to regulatory style and substance. The financial crisis, as is now well known, led to a paradigmatic change to EU financial system regulation. The previously dominant concern with market liberalization was trumped by a driving concern to protect the stability of the EU financial system. Similarly, the related concern to accommodate a degree of national regulatory flexibility, and the policy/political acceptance of a modicum of national regulatory divergence and competition - associated, at least to some extent, with the pre-crisis phase of EU financial system regulation - took second place to the new imperative to construct a ‘single rule-book’. The financial crisis also, reflecting international developments and the work of the Basel Committee and the Financial Stability Board, led to a related change to the sophistication and intensity with which prudential and financial stability risks were addressed by the EU.

This review article will not rehearse the causes of the financial crisis, its impact on the EU financial system, and the regulatory prescriptions which followed. But with specific reference to the CRD IV/CRR regime, the emergence of distinct EU-specific problems with the 2006 CRD I regime, combined with a large-scale reconsideration at the global level of the Basel II Agreement on which the 2006 CRD I was based, led to a fundamental reshaping of the 2006 CRD I regime and to its ultimate replacement by CRD IV/CRR. Initially, major reforms were made to CRD I by the CRD II (2009) and CRD III (2010). These measures were based on Basel Committee reforms as well as EU-specific reforms (notably with respect to executive remuneration and with respect to the supervision of cross-border EU banking groups). The 2009 CRD II and 2010 CRD III reforms were then consolidated within and significantly refined by the

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14 For a consideration of the changes to how prudential regulation was designed, applied, and supervised globally over the crisis era see, eg, Avgouleas, E, The Governance of Global Financial Markets: the Law, the Governance, the Politics (CUP, 2012).

15 See the references at notes 13 and 14 above.

massive 2013 CRD IV/CRR regime.\textsuperscript{17} CRD IV/CRR implements the Basel III Agreement as well as related earlier Basel Committee reforms.\textsuperscript{18} It also adopts EU-specific reforms. As discussed in section II below, the latter include the extensive new executive remuneration regime; the new firm governance rules; a number of transparency/reporting requirements; and the three additional capital buffers which the EU has adopted in addition to the Basel III Agreement buffers (the systemic risk buffer, the global systemic institution buffer, and the ‘other systemic institution’ buffer).

With respect to its regulatory design, the harmonization achieved by CRD IV/CRR, regarded as a whole, is not technically in the form of ‘maximum harmonization’ which removes Member State discretion. But the level of harmonization which the regime achieves is extensive and intrusive across a number of dimensions. The CRD IV/CRR regime marks the first time elements of prudential regulation have applied on a fully harmonized basis in the EU, through the directly applicable CRR. The CRD IV/CRR regime is also amplified by a dense thicket of secondary ‘level 2’ delegated administrative rules (primarily in the form of Binding Technical Standards but including also other administrative rules) and by an immense array of soft law, primarily in the form of Guidelines and Recommendations issued by EBA. As discussed in section VI, CRD IV/CRR also governs national supervisory practices (through the SREP requirements in particular); supports EBA’s myriad activities in support of pan-EU supervisory coordination and convergence; and is a core element of the rule-book which governs how the ECB/SSM engages in supervision within Banking Union. Although aspects of the CRD IV/CRR regime are still something of a work-in-progress,\textsuperscript{19} the adoption of the regime has been described by the Basel Committee as a ‘watershed event’, given the scale of harmonization it has brought to the EU market.\textsuperscript{20}

Given the importance of CRD IV/CRR, a short note on its political economy is warranted. Although CRD IV/CRR was the pathfinder for the EU’s financial crisis reform agenda, kicking

\textsuperscript{17} The Commission’s Proposals were presented in July 2011 (COM (2011) 453 – CRD IV and COM (2011) 452 – CRR), the Parliament reached negotiating positions in May 2012 (A7-0170/2012 - CRD IV and A7-0171-2012 – CRR), and the Council adopted General Approaches in March 2013, following which trilogue negotiations concluded in April 2013.

\textsuperscript{18} In particular the 2010 Basel trading-market risk reforms (‘Basel 2.5’).

\textsuperscript{19} As at 18 February 2016, 26 of the 50 sets of level 2 Regulatory Technical Standards required to be adopted under CRD IV/CRR had completed the level 2 adoption process: Commission, Regulatory Technical Standards Supplementing Regulation (EU) 575/2013 (CRR) and Directive 2013/36/EU (CRD), State of Play, 18 February 2016.

off the massive programme of EU reforms, and despite its scale, its adoption was relatively uncontroversial. During the Basel III Agreement negotiations (which shaped CRD IV/CRR) the EU negotiated as a bloc on some issues where a common interest could be established, but the interests of the individual Member States who sit on the Basel Committee also shaped the Basel III Agreement.\footnote{Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Sweden, Spain, and the United Kingdom all sit on the Basel Committee. For discussion of how individual Member State interests and collective EU interests were imposed (or not) on the Basel III Agreement see Quaglia, L, \textit{The European Union & Global Financial Regulation} (OUP, 2014) 43-46 and Blom, J, ‘Banking’ in Mügge, D (ed), \textit{Europe and the Governance of Global Finance} (OUP, 2014) 35, 47-52.} This imposition of EU preferences through two channels of influence reflects the significant structural differences which persist between Member States’ banking markets.\footnote{For a recent discussion see Commission, European Financial Stability and Integration Report 2014 (2015) (SWD (2015) 98) 62-72.} Subsequent EU implementation of the Basel III Agreement through the CRD IV/CRR negotiations was accordingly relatively uncontroversial - certainly as compared to the fraught parallel crisis-era negotiations on the 2011 Alternative Investment Fund Managers Directive.\footnote{Directive 2011/61/EU [2011] OJ L174/1. See further Ferran, E, ‘After the Crisis: The Regulation of Hedge Funds and Private Equity in the EU’ 12 \textit{European Business Organization Law Review} (2011) 379.} There were, however, some difficulties. The main points of contention included: the nature of the highly harmonized single rule-book model adopted, and the related prohibition on Member States from imposing higher capital requirements and being able to use capital as a competitive device; the extent and scale of the capital buffers (which extend beyond the Basel III Agreement requirements); and, most famously, the executive remuneration regime. While solutions were found, the negotiations had the effect of embedding national and EU calibrations and preferences to the potential detriment of the global consistency of the Basel III Agreement (section IV below). Overall, the CRD IV/CRR regime sits well with the characterization of EU financial system regulation as being shaped over the crisis by ‘market-shaping’ States rather than by ‘market-making’ States. The crisis-era has seen the ‘market-shaping’ coalition of Member States, and their institutionally-shaped economic interests, come to the fore, as a more intrusive approach to regulation, and a more sceptical approach to market finance, has developed.\footnote{See, in particular, the work by political economist Lucia Quaglia: eg, Quaglia, L, ‘The ‘Old’ and ‘New’ Political Economy of Hedge Fund Regulation in the EU’ (2011) 34 \textit{West European Politics} 665.} CRD IV/CRR provides ample evidence of this development.
D. Scope of Application and Coverage

With respect to scope, the CRD IV/CRR regime can be strongly associated with the prudential regulation of banks. It applies to the entire population of EU ‘credit institutions’ - defined, broadly, as deposit-taking institutions. Some 8,000 credit institutions, from the very small to the EU’s Global Systemically Important Banks (G-SIBs), come within the CRD IV/CRR regime, which covers some 52% of global banking assets.

The CRD IV/CRR regime also forms a key element of the EU’s investment firm prudential regulation regime. As was also the case with the earlier Basel II Agreement, the Basel III Agreement has been applied by the EU to all credit institutions and, in addition, to most investment firms. The extension of the Basel III Agreement by CRD IV/CRR to investment firms is designed to forestall the competitive distortions and arbitrage risks which could arise were it not so applied, particularly as EU regulation of credit institutions and investment firms applies on a functional basis and is not institution-based. Much of the regime is specific to credit institutions and to credit risk. But the CRD IV/CRR regime also imposes distinct rules on large universal banks with material capital market and trading operations and on specialist investment firms. These include requirements relating to the capital charge which applies to the ‘trading book’ (broadly, market activities) of financial institutions.

With respect to the substantive coverage of the regime, CRD IV Article 1 provides that the Directive lays down rules concerning access to the activity of credit institutions and investment firms (access to the activity of investment firms will primarily be governed by MiFID II, however - CRD IV contains the parallel authorization and passporting provisions for credit institutions); the supervisory powers and tools for the prudential supervision of credit institutions and investment firms by NCAs; the prudential supervision of institutions by NCAs consistent with CRD IV/CRR; and the publication requirements for NCAs in the field of prudential regulation and supervision. Some elements of CRD IV are disapplied from investment firms given the parallel requirements for investment firms in MiFID II/MiFIR.
The 2013 CRR addresses own funds (capital) requirements relating to credit risk, market risk, operational risk, and settlement risk; large exposure reporting and capital requirements; liquidity requirements; leverage reporting; and public disclosure requirements (CRR Article 1). Like CRD IV, while the CRR applies to credit institutions and investment firms, much of it is concerned with credit risk and accordingly with credit institutions. From the distinct investment firm perspective, the main features of the CRR include the capital requirements relating to risks other than core credit risk (and in particular counterparty credit, market, settlement, operational, and liquidity risk); the constituents of the own funds which can be used to meet capital requirements; and the disclosure reporting regime.

E. CRD IV/CRR as One Moving Part within the Post Crisis Regulatory Framework

The CRD IV/CRR regime forms only one element (if a key element) of the larger EU regulatory superstructure which is designed to support financial stability. For example, a regulatory dependence on capital requirements to manage financial institution risk would lead to a prohibitively costly capital regime which would likely trigger a contraction in the supply of credit. Accordingly, the regulatory superstructure of which the CRD IV/CRR regime forms a part includes the 2012 European Market Infrastructure Regulation (EMIR), which addresses the stability of the derivatives market;\textsuperscript{29} the 2014 Bank Resolution and Recovery Directive (BRRD);\textsuperscript{30} the 2014 Deposit Guarantee Directive (DGD);\textsuperscript{31} and the proposed reforms to bank structure which are ongoing.\textsuperscript{32} All of these measures are designed to work together to address financial stability risk. The resolution and recovery procedures contained in the BRRD, for example, take some pressure from the CRD IV/CRR capital regime, while EMIR’s rules on the central clearing of derivatives work with those CRD IV/CRR capital rules which impose a capital charge on non-centrally cleared derivatives.

\textsuperscript{29} Regulation EU (No) 648/2012 [2012] OJ L201/1.
\textsuperscript{32} The Commission Proposal is at COM (2014) 43.
II. Mapping CRD IV/CRR: the Main Elements

A. Capital (Pillar 1)

The CRD IV/CRR capital requirements are based on the Basel III Agreement. They accordingly seek to remedy the weaknesses in the Basel II capital assessment framework which became associated with the prejudicial prevalence of poor-quality capital (which was not sufficiently loss-absorbing) and of insufficient levels of capital which the crisis exposed. In response, a more prescriptive approach - which is designed to increase the quality and loss-absorption capacity of capital - has been adopted towards the constituents of capital (or own funds). Additional capital requirements have also been imposed, primarily through the capital buffers which are designed to mitigate pro-cyclicality risks. Higher capital requirements have also been imposed with respect to certain assets (notably investments in hedge funds, real estate, venture capital, and private equity).

Among the most significant of the new capital requirements is the new capital charge for counterparty credit risk/Credit Valuation Adjustment (CVA). This requirement is designed to capture ‘credit valuation adjustment risk’ - or the risk associated with a deterioration in the creditworthiness of a counterparty (the risk of loss caused by changes in the credit spread of a counterparty due to changes in its credit quality\(^ {33} \)); such deterioration can have material systemic implications when related ratings downgrades and capital adjustments occur. As the financial crisis revealed, this risk is particularly acute with respect to OTC derivatives and with respect to repurchases and securities financing activities. The new CVA capital regime accordingly applies a capital charge to these instruments and activities and is designed to capture the mark-to-market losses associated with a deterioration in the creditworthiness of a counterparty and to provide incentives for financial institutions to reduce counterparty credit risk by clearing OTC derivatives through CCPs (although capital charges also apply to CCP exposures).\(^ {34} \) The charge attempts in particular to manage risks arising from the difference between the hypothetical value of a derivative transaction, assuming a risk free counterparty, and the true value of a derivative transaction, taking into account the possibility of changes to the creditworthiness of capital.


\(^ {34} \) Commission, 2011 CRD IV/CRR Proposal Impact Assessment (SEC (2011) 949) paras 3.4 and 5.3.
counterparty.\textsuperscript{35} The CVA risk assessment takes into account a range of risk mitigants such as collateral, netting, and hedging arrangements, and is designed to incentivize firms to enter into ‘eligible hedges’ against counterparty risk (these hedges are defined under the CRR with reference to different eligible credit default swap (CDS) arrangements).

The new capital requirements extend beyond the coverage of credit risk in the banking book and also cover trading book/market risk capital requirements. The related reforms include a new capital requirement for ‘stressed Value-At-Risk’ calculations (designed to ensure higher levels of capital apply to the trading book and to reduce pro-cyclicality risks\textsuperscript{36}); an incremental capital charge to cover default risk and credit risk migration (for example, the impact of ratings downgrades); and additional capital requirements for securitized products in the trading book.

Further and more fundamental reforms to the capital requirements assessment of trading book assets will follow as the Basel Committee has recently adopted a new market risk framework. The new regime, adopted in January 2016, must be implemented within national regimes by January 2019 and reported under by banks by December 2019.\textsuperscript{37} Key features of the new framework (which is informally being described as forming part of a ‘Basel IV’ package of reforms\textsuperscript{38}), which is designed to harmonize trading book requirements more fully and also to increase trading book capital requirements, include: a more consistent and harmonized approach globally to trading book capital requirements; revisions to the regulatory boundary between the trading book and the banking book and clearer specification of which positions lie in each book, in order to limit arbitrage; reforms to the internal risk modelling standards required of financial institutions in relation to trading book risk where they use such internal models to calculate capital requirements, including supervisory approval requirements; a new standardized approach for the assessment of trading book capital requirements which is more risk sensitive; and rules governing risk management. The new regime accordingly provides for a standardized approach for calculating capital requirements and for an internal-model-based approach, although the regime is regarded as being designed to encourage firms to adopt the new standardized approach

\textsuperscript{35} Allen & Overy, n 33 above.
\textsuperscript{36} N 18 above.
\textsuperscript{38} Key regulators and policy makers decry the ‘Basel IV’ label, arguing that the current generation of reforms represent the implementation and finalization of reforms committed to over the financial crisis: Arnold, M and Binham, C, ‘Basel Committee Soften New Rules on Bank Capital’, Financial Times, 14 January 2016.
in preference to relying on internal risk models (reflecting changes currently being made to the Basel III Agreement which are similarly designed to reduce the importance of internal-model-based approaches to the assessment of capital requirements, as noted ahead). Related ‘transformational’ change is likely to be necessary for firms’ data and technology infrastructures. Overall, the new ‘Basel IV’ trading book regime, while lighter than the reforms originally proposed, is predicted to make trading activities more costly for banks when it comes into force in 2019.

Overall, CRD IV/CRR financial institutions must satisfy three own funds/capital requirements: a Common Equity Tier 1 (CET 1) capital ratio of 4.5 per cent; a Tier 1 capital ratio of 6 per cent; and a total capital ratio of 8 per cent. In each case, the capital ratio is a percentage of the ‘total risk exposure amount’ (CRR, Article 92(2)). The 8 per cent capital ratio is supplemented by the new capital buffers and also by any additional SREP capital requirement which may apply to individual institutions, following the SREP review process. The capital buffers are addressed by CRD IV Articles 128–42, which provide for the Basel III-required buffers as well as the EU-specific buffers: the capital conservation buffer (Basel III); the counter-cyclical buffer (Basel III); the global systemic institution risk buffer (EU); the other systemic institutions buffer (EU); and the systemic risk buffer (EU). Additional capital requirements may be imposed on any in-scope institution under the Pillar 2 supervisory review SREP process which is carried out by national supervisors.

42 The components of ‘CET 1’ and ‘Tier 1’ capital are specified, albeit that the regime allows for significant divergence in application.
43 This buffer (2.5 % of total exposures and composed of Common Equity Tier 1 capital components) sits above Common Equity Tier 1 capital and is designed to conserve capital: where an institution breaches the buffer (where the total ratio of Common Equity Tier 1 falls below 7% - 4.5% and 2.5%), progressively tougher restrictions are imposed on the institution to ensure capital is conserved.
44 This buffer is designed to counteract economic cycle effects by requiring banks to hold an additional capital amount (composed of Common Equity Tier 1 capital components) in good economic conditions. This capital can then be released when economic activity contracts.
45 Inserted by the European Parliament and designed to apply a capital surcharge to global systemically important financial institutions (G-SIFIs) (as identified by the FSB).
46 Designed to apply a surcharge to domestically important institutions as well as EU institutions.
47 Member States may apply this buffer to the financial sector or one or more subsets of the financial sector.
48 The 2014 EBA Guidelines on Common Procedures and Methodologies for the Supervisory Review and Evaluation Process (EBA/GL/2014/13) (the 2014 EBA SREP Guidelines) impose a unified ‘ICAAP’ (Internal Capital Adequacy Assessment Process) scoring procedure which can, following the SREP assessment by the supervisor, lead to the imposition of additional overall capital requirements.
The ‘total risk exposure amount’ against which the different capital ratios are set is the sum of a series of capital/risk assessments, mainly directed to asset risk, which are governed by the CRR. These assessments relate to: the ‘risk-weighted exposure amounts’ (the ‘RWA’ assessment) for credit risk and dilution risk in respect of all the business activities of an institution, excluding risk-weighted exposure amounts from the trading book of the institution; the own funds requirements for the trading book of an institution (for position risk and also for large exposures which exceed the limits set by the CRR); the own funds requirements for foreign exchange risk, settlement risk, and commodities risk; the own funds requirements for the credit valuation adjustment (CVA) risk of OTC derivatives, other than credit derivatives recognized to reduce risk-weighted exposure amounts for credit risk; and the risk-weighted exposure amounts for counterparty risk arising from the trading book business of the institution for identified derivatives, including credit derivatives, repurchase transactions, securities or commodities lending or borrowing transactions based on securities or commodities, margin lending transactions based on securities or commodities, and long settlement transactions (Article 92(3)).

The internal capital/risk assessment process deployed by financial institutions and which governs these different assessments is very similar to the assessment process which applied under the Basel II Agreement which allowed institutions to rely on internal risk models (Basel I, by contrast, adopted a standardized approach). The capital assessment for credit risk, for example (similar methods apply to other forms of risk), remains based on the three Basel II ‘Standardized’, ‘Internal Risk Based’ (IRB), and ‘Advanced Internal Risk Based’ approaches for assessing the risk weightings of assets (the ‘RWA’ assessment) against which the capital assessment is made. The Standardized model is based on the identification of large ‘buckets’ of assets to which risk weightings are assigned by the Basel III/CRD IV/CRR standards. Generally, only small banks with under-developed risk-modelling capacities adopt the Standardized model, which adopts a blunt approach to the risk assessment of assets, being based on broad risk buckets. The IRB model, used by most banks apart from the most complex and sophisticated, is based on banks using internal models (based on the ‘Probability of Default’) to determine the risk weighting to be attached to different asset classes, and allows for a more calibrated approach (which may be less costly in capital terms) to be adopted. The Advanced IRB model is more sophisticated again and allows banks to calculate credit risk using an additional assessment of ‘Loss given Default’. This approach allows a bank to further calibrate the capital required by
assessing the exact loss which arises once a loan has defaulted. Supervisory review of the internal risk models used to determine the risk weightings used is accordingly of critical importance to the new regime, and much of CRD IV is therefore concerned with the Pillar 2 SREP supervisory review process. The SREP has led to the supervisory review of internal models for assessing capital - particularly the models used for the risk-weighting of assets (or the RWA process) - become more intensive and intrusive. Significant changes are, however, likely to follow. The Basel Committee has recently identified significant variability across banks in how capital is assessed, and is moving towards a more standardized approach, based on standard and comparable risk metrics and on limiting the extent to which banks can rely on internal risk models. Changes are likely to include: a removal of the IRB option for certain exposures, where the IRB model parameters are regarded as not being sufficiently reliable; minimum requirements for IRB models, to ensure a minimum level of conservatism; and greater specification of parameter estimation practices to reduce variability in the RWA assessment under the IRB approach. This development can be regarded as something of a move back to the Basel I, Standardized, approach and as a move away from the Basel II/III reliance on banks’ internal risk models.

B. The Liquidity Coverage Ratio (Pillar 1)

The new liquidity coverage ratio (CRR, Articles 411-428) was heavily contested over the Basel III negotiations and has not yet received global support and is to be phased in for the EU market. The liquidity coverage ratio is designed to ensure that institutions manage their cash flows and liquidity more effectively and can better predict liquidity requirements and respond to liquidity strains. It is particularly concerned with banks’ ability to manage deposit outflows in a stressed environment, and to match assets with long-term and more stable liabilities. It is composed of two elements: a Liquidity Coverage Requirement (LCR) (a buffer designed to support short-term (30-day) liquidity resilience); and a Net Stable Funding Requirement (NSFR) (designed to ensure an institution has an acceptable amount of stable funding over a one-year period).

49 Key analyses include: Basel Committee, Revisions to the Standardized Approach for Credit Risk (2013); Basel Committee, Analysis of Risk Weighted Assets for Credit Risk in the Banking Book (2013); Basel Committee, Capital Floors: the design of a framework based on standardised approaches (2014); and Basel Committee, Reducing Variation in Credit Risk-Weighted Assets – Constraints on the Use of Internal Model Approaches (2016),
The LCR is designed to ensure that institutions (and particularly banks) have a buffer of ‘high quality liquid assets’ to cover the difference between the expected cash outflows and the expected cash inflows over a 30 day stressed period. It requires institutions to maintain an LCR providing at least full coverage of projected liquidity outflows minus projected liquidity inflows under stressed conditions. The LCR is to be phased in with institutions required to hold 60% of the LCR in 2015, 70% in 2016, 80% in 2017 and 100% in 2018. The nature of the LCR calculation is to be amplified by delegated administrative ‘level 2’ rules (CRR Article 460). A Commission 2015 level 2 administrative rule sets out the requirements governing the assets which can be considered as ‘high quality liquid assets’ and how expected cash outflows and inflows are to be calculated. Until the LCR is in force, firms must report on their liquid assets on a not less than monthly basis.

The Commission is not obliged to propose a NSFR although the CRR imposes a reporting requirement for the NSFR and provides for preparatory and exploratory work.

C. The Leverage Ratio (Pillar 1)

The leverage ratio is designed to restrict the build-up of excessive leverage and to provide a backstop against failure of the risk models on which credit risk assessments are made, and against related gaming by institutions. A new prudential regulation tool, it is still at an early stage of development. The CRR regime (Articles 429–30) is accordingly based on data collection (with respect to institutions’ internal leverage ratios) and assessment, and a binding proposal is expected by the end of 2016.

The EU regime is accordingly currently primarily based on disclosure. In October 2014, the Commission adopted a level 2 administrative rule which requires firms to use the same methods to calculate, report, and disclose their leverage ratios. Investment firms which do not take on proprietary risk are exempt from the leverage ratio.

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51 The Commission is consulting on the NSFR, based on EBA’s preparatory work: Commission, Consultation Paper on Further Considerations for the Implementation of the NSFR in the EU (2016).
D. Risk Governance (Pillar 1)

The 2013 CRD IV/CRR regime contains extensive requirements related to internal risk-management systems and procedures. For example, and in addition to the detailed CRR-specific procedures which relate to the capital assessment process, under the CRD IV framework for ‘review processes’ firms must have in place sound, effective, and comprehensive strategies and processes to maintain, on an ongoing basis, the amounts, types, and distribution of internal capital that they consider adequate to cover the nature and level of the risks to which they are or might be exposed (Article 73). More generally, an overarching requirement prescribes that firms have robust governance arrangements; effective processes to manage, monitor, and report the risks they are or might be exposed to; adequate internal control mechanisms; and remuneration policies and practices that are consistent with and promote sound and effective risk management (Article 74(1)). These systems must be comprehensive and proportionate to the nature, scale, and complexity of the risks inherent in the firm’s business model and activities. Specific requirements apply with respect to recovery and resolution plans (Article 74(4)). An array of requirements governs particular internal risk-management procedures and systems (Articles 77–87), ranging from rules addressing how own funds are to be calculated to rules governing specific forms of risk assessment.

E. Firm Governance (Pillar 1)

Among the many new or re-tooled regulatory devices which the financial crisis produced is regulatory oversight of internal firm governance\(^53\) and the related imposition of requirements relating to governance structures, the fitness and probity of management, and the allocation of responsibility to directors and senior management.\(^54\) Governance requirements have been used to enhance risk management; to provide regulatory incentives (including through the application of civil liability and other enforcement devices) for directors and senior management to engage in

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\(^{53}\) Governance requirements are not new to EU financial regulation, but hitherto have primarily been a function of the EU’s corporate governance regime for listed companies. See, eg, Moloney, N, Ferrarini, G and Ungureanu, MC, ‘Executive Remuneration in Crisis’ 10 Journal of Corporate Law Studies (2010) 73.

prudent risk management;\textsuperscript{55} and to promote cultural change.\textsuperscript{56} Traditionally, governance requirements have been deployed to improve interest alignment between shareholders and management in the public company; the financial crisis led to governance requirements being re-deployed to respond to the systemic risks posed by financial institutions and to align the interests of a wider set of stakeholders with those of management.

Although the Basel III Agreement does not directly address firm governance,\textsuperscript{57} CRD IV/CRR imposes an extensive governance regime on in-scope institutions. Under CRD IV (Articles 88 and 91), governance requirements apply to management body composition, responsibilities, and functioning and are designed to support senior management oversight of risk management and the embedding of a culture of prudent risk assessment. Experience in the corporate governance field suggests that mandatory governance requirements, and particularly harmonized requirements, should be deployed with a light touch, and allow firms the flexibility to adapt governance structures to their business models and operating environments.\textsuperscript{58} The CRD IV regime is, however, prescriptive in places,\textsuperscript{59} including with respect to the number of permitted cross-directorships.

The governance regime also includes the highly contested executive remuneration rules (CRD IV, Articles 92-96). As has been extensively examined, the regulation of executive remuneration was, from an early stage of the crisis-era reform process internationally, identified as a means for embedding stronger risk management processes and incentives,\textsuperscript{60} although the extent to which disclosure, governance, and substantive design requirements should be imposed on executive

\textsuperscript{55} In the UK, the design of financial-institution-specific governance requirements and of civil liability regimes and sanctions for bank directors and senior management who engage in excessive risk-taking has been extensively debated. See, eg, from the earlier stages of the crisis-era, The Walker Review, A Review of Corporate Governance in UK Banks and other Financial Industry Entities (2009) and, in its latter stages, Parliamentary Commission on Banking, Changing Banking for Good (2013).

\textsuperscript{56} See Kershaw, D and Awrey, D, ‘Towards a More Ethical Culture in Finance: Regulatory and Governance Strategies’ in Morris, N and Vines, D (eds), Capital Failure: Rebuilding Trust in Finance (OUP, 2014) 277.

\textsuperscript{57} Although the Basel Committee has supported governance reform: Basel Committee on Banking Supervision. Principles for Enhancing Corporate Governance (2010). A revised set of Principles was issued in July 2015 (Basel Committee, Consultative Document, Guidelines, Corporate Governance Principles for Banks (2015)).


\textsuperscript{59} For critique see Enriques and Zetsche, n 3 above.

\textsuperscript{60} Internationally coordinated reform of remuneration practices was supported by the G20 and driven by the FSB which has engaged in frequent reviews of its Principles for Sound Compensation Practices (2009) and related Implementation Standards (2009). For a recent example see FSB, Fourth Progress Report on Compensation Practices (2015).
remuneration has been subject to intense contestation. The CRD IV requirements reflect the EU’s crisis-era concern to promote stronger risk management processes within financial institutions and to construct more effective risk management incentives for management. But they also reflect the febrile debate on perceived excesses in ‘bankers’ pay’ during the CRD IV/CRR negotiations and the strong concern of the European Parliament to impose limits on variable pay. The CRD IV executive remuneration regime is based on the extensive 2010 CRD III reforms which applied a series of principles to the design of executive remuneration - the CRD IV negotiations led to the CRD III regime being extended, including by the highly contested ‘bonus cap’ and by the similarly contested disclosures required relating to employees earning in excess of €1 million.

The extensive and prescriptive CRD IV executive remuneration regime, which has disclosure, governance, design, and supervisory review elements, applies to credit institutions and investment firms at group, parent company, and subsidiary level and - generating great industry hostility and concerns as to the competitive position of the EU - to these entities when established in offshore financial centres (Article 92(1)). At the core of the regime is the requirement that firms comply (in a manner and to the extent appropriate to their size, internal organization, and the nature, scope, and complexity of their activities) with the seven principles set out when establishing and applying remuneration policies for and to particular categories of staff, including senior management and ‘risk takers’ Remuneration governance is also addressed: where a firm is significant in terms of its size and internal organization, and the nature, scope and complexity of its activities, it must establish a remuneration committee, responsible for remuneration decisions (Article 95). Detailed and restrictive requirements apply to the variable elements of remuneration (Article 94). These include: the highly contested ratio rule (bonus cap), which requires that the variable component of remuneration cannot exceed 100% of the fixed component of total remuneration for each individual; the requirement that at least 50% of variable remuneration take the form of shares or equivalent ownership interests; the requirement that a substantial portion and at least 40% of variable pay is deferred for not less than

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62 The latter category is governed by a Regulatory Technical Standard (C(2014) 1332).

63 The cap can be raised to 200%, but a series of conditions apply, including with respect to NCA and shareholder approval: Art. 94(1)(g).

64 Including instruments which can be fully converted into Common Equity Tier I instruments: Art. 94(1)(l).
three to five years; and the direction that all variable remuneration be subject to claw-backs (repayment).

Specific supervisory obligations apply in relation to remuneration. These include the benchmarking by national supervisory authorities of remuneration trends and practices, and their collection of data on the number of natural persons per institution that are remunerated €1 million or more per financial year (Article 75(3)) and related aggregated reporting by EBA.

F. Disclosure (Pillar 3)

An extensive public disclosure regime applies to in-scope institutions under the CRR (Articles 435-51). These disclosures are to be made at least annually and in conjunction with the annual financial statements (Article 433). Additional disclosures are required where a firm has been permitted to deploy particular methodologies under CRD IV/CRR, including the IRB approach. But while the public reporting regime is extensive it is dwarfed by the massive supervisory reporting regime which is embedded across CRD IV/CRR. FINREP (financial reporting) addresses financial reporting for supervisory purposes and COREP (common reporting) addresses supervisory reporting relating to capital. Highly detailed EBA templates govern the reporting required of institutions under FINREP and COREP.

G. Supervisory Review and Evaluation Process (SREP) (Pillar 2)

The supervision of CRD IV/CRR is the subject of a distinct, harmonized supervisory regime (based on Basel III, Pillar 2). This regime is based on intense NCA review of institutions’ CRD IV/CRR compliance and on NCAs requiring specific risk mitigation measures which are calibrated to individual institutions’ risk profiles and which include, where appropriate, additional capital and liquidity requirements. As such, CRD IV/CRR represents a significant shift from the previously rules-based intervention which characterized EU harmonization in this area. This shift has been intensified by the extensive operational 2014 EBA SREP Guidelines which govern the practical application by NCAs of the SREP.

65 The criteria for ‘clawback’ must include where the staff member participated in or was responsible for conduct which resulted in significant losses to the institution or failed to meet appropriate standards of fitness and propriety: Art. 94(1)(n).
66 EBA publishes aggregate data on ‘high earners’ (over €1 million) on a pan-EU basis.
The new supervisory regime has two elements which operate on a broadly annual cycle. Institutions are first expected to review their capital needs (the internal ‘ICAAP’). This internal review is followed by the ‘SREP’, which is carried out by NCAs and designed to ensure that institutions have adequate arrangements, strategies, processes, and mechanisms, as well as capital and liquidity, to ensure sound management and coverage of their risks. The SREP is considered further below.

Reflecting the central importance of supervision to CRD IV/CRR, the coverage of NCAs’ required powers is detailed and so stands in contrast to EU financial system regulation more generally. For example, NCAs must have the expertise, resources, operational capacity, powers, and independence necessary to carry out their functions in relation to prudential supervision and related investigatory and enforcement activities (CRD IV Article 4(4)). Similarly, the CRD IV/CRR regime is prescriptive with respect to NCA form, given that prudential supervisors may sit within institutional arrangements which generate conflicts of interest. In this regard, CRD IV Article 4(7) provides that supervision under CRD IV/CRR must be separate and independent from functions relating to resolution. Resolution authorities must, however, co-operate closely and consult with the NCAs with respect to bank resolution plans.

The most striking element of the CRD IV/CRR supervisory regime relates to the distinct ‘supervisory review’ process (SREP) which NCAs must engage in to review the arrangements, strategies, processes, and mechanisms implemented by firms to comply with CRD IV/CRR (CRD IV, Articles 97–110). The SREP process is in part designed to ensure that institution-specific prudential measures (such as additional capital or liquidity requirements) are imposed where necessary. It is, accordingly, an important safety valve for NCAs, given the otherwise prescriptive harmonization under the capital regime in particular (see further section III on flexibility under CRD IV/CRR). In-scope institutions may, however, face considerable uncertainty as a result in their operating environments. The SREP, which must take place at least annually and include stress testing, is designed to evaluate the risks to which the institution is or might be exposed, the systemic risks which the institution may pose, and the risks revealed by stress testing, and to cover all CRD IV/CRR requirements. The swingeing supervisory powers which NCAs must be able to wield under the SREP include powers to: require institutions to hold additional own funds; reinforce internal capital and governance systems; apply specific provisioning policies; require divestment of excessively risky activities; limit variable remuneration where such remuneration is inconsistent with the maintenance of a sound capital
base; restrict or prohibit distributions or interest payments; require more frequent reporting; and impose specific liquidity requirements (Article 104). The technical criteria for the SREP are specified in some detail by Article 98, which requires, *inter alia*, that the results of stress tests are considered, that exposure to and management of identified risks are examined, and that governance arrangements, corporate culture and values, and the ability of management body members to perform their duties are examined. The conduct of the SREP is subject to review by EBA: NCAs are to report to EBA so that EBA can support the development of SREP consistency (Article 107). EBA is also charged with conducting SREP peer reviews and with reporting to the European Parliament and Council on the degree of convergence achieved.

**III. Risks and Implications**

A. Potential Risks: Some Regulatory Design Examples

Unintended effects are, not surprisingly, becoming associated with the vast crisis-era reform programme. These relate to, for example, the cumulative impact of the G20 reform programme on the availability of high-quality collateral globally; the contraction in bank lending; the tougher capital requirements for market making and related liquidity pressure in the markets for certain long-term assets; and the growth of the shadow banking sector - to identify just a few.\(^{67}\) Specific concerns as to the implications of the CRD IV/CRR regime have been frequently aired, reflecting the scale and novelty of the new regime. These concerns have extended from general concerns as to the optimal role which capital can play in the support of financial stability\(^ {68}\) to more specific concerns related to the design of CRD IV/CRR. The new CVA capital charge, for example, has led to concerns that the charge is too closely linked to the CDS market (on which the ‘eligible hedges’ regime which mitigates the CVA charge depends) - which can be volatile - and that the charge may accordingly lead to higher rather than lower levels of counterparty credit risk. Similarly, and to take another example, the LCR has generated concern that it may lead to pressure on the availability of high quality collateral, as the LCR requires financial institutions to hold highly liquid, unencumbered assets as a liquidity buffer.


\(^{68}\) eg, the influential work by Hellwig and Adnati, calling for higher levels of capital: Hellwig, M and Adnati, A, *The Bankers’ New Clothes: What’s Wrong with Banking and What to do About it?* (Princeton University Press, 2013).
To take another example, the persistence of internal risk models within the CRD IV/CRR framework has generated some concerns. The Basel III/CRD IV/CRR regime reflects an international concern, at the time of the Basel III Agreement negotiations, to move banks away from Standardized models for assessing risk. CRD IV/CRR accordingly seeks greater risk sensitivity and so encourages the use of internal risk models for calculating own funds requirements (CRD IV Article 77(1)). But it follows that effective supervisory review of the internal models used by banks is of critical importance if the risks of model gaming, internal competence failures, and of over-reliance on credit ratings in the design of models are to be effectively managed. The CRD IV/CRR SREP process is, however, leading to the supervisory review of the internal models used for assessing capital becoming more intensive and intrusive: the ECB/SSM is currently engaging in a major review of IRB models, for example, which is predicted to take several years. Nonetheless, the embedding of internal risk assessment models within the CRD IV/CRR regime has led to concern in some quarters, particularly given the weaknesses which the financial crisis exposed in the ability of internal models to reliably capture risk. Major changes are in train, however. The ongoing ‘Basel IV’ package of reforms is designed to address the risks posed by internal models, as noted in section II.A above.

B. Potential Risks: Emerging Empirical Evidence - An Institutional View

The Basel III Agreement was, from the outset, subject to empirical assessment, and empirical evidence on the impact of the crisis-era reform programme on global banking markets is beginning to emerge. With respect to CRD IV/CRR, initial indications seem to augur well, at

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69 RCAP, n 20 above.
70 Eg, Presentation of SSM Annual Report by Danièle Nouy, Chair of the SSM, ECON 31 March 2015, Briefing Note (PE 542.656) and ECB, Annual Report on Supervisory Activities (2016) 8.
71 eg, Andrew Haldane of the Bank of England (speech on ‘The Dog and the Frisbee’ (2012)), warning that Basel III has ‘spawned startling degrees of complexity and an over-reliance on probably unreliable models’.
73 eg, Santos, A and Elliott, D, Estimating the Costs of Financial Regulation, IMF Staff Working Paper (2012). The study suggested that the reforms would lead to a ‘modest increase’ in bank lending rates (17 basis points in the EU), and that banks had the ability to adapt to the new regulatory regime without taking action which would harm the wider economy. By contrast, the industry-based Institute of International Finance predicted a reduction of 3.2% of GDP in the US, the Euro Area, the UK, Switzerland, and Japan between 2011 and 2015: IIF, The Cumulative Impact on the Global Economy of Changes in the Financial Regulatory Framework (2011).
least with respect to the impact of CRD IV/CRR on the stability of banks - although findings are inevitably highly preliminary. It is certainly the case that bank capital ratios are strengthening, as has been confirmed by a range of studies and assessments, including the 2014 EU-wide stress tests and the related ECB/SSM asset quality review. But it is also the case that the credit supply has contracted and that SMEs in particular are facing funding challenges. The proportion of small bank loans as a proportion of total EU lending has dropped, reflecting de-leveraging pressures, reduced bank risk appetite, but also regulatory effects relating to increased capital charges. To take another example, the matrix of rules which apply to securitizations under CRD IV/CRR is associated with the dampening of the securitization market and the related reduction in funding capacity in the EU.

More data can be expected. The EU’s commitment to ex post review, well expressed by the myriad review clauses within CRD IV/CRR, augurs well for the development of a reasonably robust institutional data-set on the impact of CRD IV/CRR. In addition, EBA, the ESRB, and the ECB (within the SSM in particular) provide the EU with a strong technical capacity for monitoring the impact of the CRD IV/CRR regime.

The Commission’s initial summer 2014 review of the reform programme generally is a very early review and covers a period over which CRD IV/CRR had just come into force. The Commission highlighted, however, the importance of CRD IV/CRR to the financial stability agenda and adopted a robust approach to its potential costs, underlining the wider societal and economic importance of the reforms. The Commission’s study suggested that the impact of

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74 As recently evidenced by the April 2016 EBA Risk Dashboard (for Q 4 2015) which points to increasing capital ratios (at 13.6% CET 1).
75 For a summary see ECB, Aggregate Report on the Comprehensive Assessment, Summary, October 2014.
78 Through, eg, its regular CRD IV-CRR/Basel III ‘Monitoring Exercise’ (which covers, inter alia, the impact of the regime on regulatory capital ratios).
higher bank capital requirements and the 2014 BRRD together could lead to a 0.6-1.1% increase in GDP annually,\(^{81}\) and noted significant improvements in bank risk governance.

A more cautious assessment emerged from EBA in its important February 2015 review which sought to provide a preliminary assessment of the potential impact of the banking reforms (CRD IV/CRR; the BRRD; EMIR; and the bank structural reforms).\(^{82}\) Its findings underline how the CRD IV/CRR regime is likely to impact on different financial institutions in different ways. EBA reported that while the new capital regime will improve banks’ solvency, it is also likely to lead to changes to business models (particularly given the increased capital charges on trading activities) and will lead to pressure on banks’ income sources and generate operational and implementation costs. With respect to the Leverage Ratio, EBA found that, as the ratio is not risk-weighted, it will impact more heavily on banks engaging in low margin and low-risk-weighted activity but in high volumes, and so might induce banks to shift to riskier assets and, overall, lead to a shrinkage in lending capacity. EBA also suggested that the Liquidity Coverage Ratio is likely to lead to a drive to increase deposits and reduce reliance on short-term wholesale funding and to more pressure on high quality liquid assets. EBA warned that the reforms will likely have contradictory effects, but suggested that, overall (and including CRD IV/CRR), the reforms are likely to: reduce the level of investment banking; lead to better capitalized institutions and a modified bank funding mix (based on more deposits and less heavily reliant on short-term wholesale funding); lengthen the maturity of wholesale funding; reduce the loan to deposit ratio; reduce the size of banks; lead to a rise in funding and operational costs and to a lower return on equity; and drive a greater emphasis on internal governance. EBA has similarly predicted that retail lending will contract and that banks will be less profitable. That the CRD IV/CRR reforms are likely to limit lending is borne out by the EU’s current flagship policy agenda – Capital Markets Union (CMU). The CMU agenda is, in part, designed to foster alternative, non-bank sources of lending, to address a contraction in SME lending and the funding challenges faced by SMEs, and to weaken the EU’s current dependence on bank financing,\(^{83}\) and as such can be related to the impact of CRD IV/CRR.

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C. Flexibility and Proportionality

CRD IV/CRR may, accordingly, generate unintended effects and may reduce the ability of the EU financial system to fund growth. The CRD IV/CRR regime is, however, designed to meet a range of inter-locking objectives which have often complex inter-relations and it will be some time before its effects are clear. It is all the more difficult to critique its effects as CRD IV/CRR forms part of a wider system of EU financial governance. While CRD IV/CRR can, for example, be associated with a contraction in lending, the current CMU agenda is designed to better equip EU financial governance to support a wider range of non-bank funding channels and to reduce the current dependence on bank funding.

Nonetheless, given the uncertainty as to its effects, it is not unreasonable to suggest that a degree of flexibility and proportionality in the application of CRD IV/CRR is warranted. It is also the case that national banking markets continue to vary very significantly across the EU and to require calibrated regulatory treatment. A careful balance needs to be struck, however, between the accommodation of an appropriate level of flexibility, on the one hand, and the need, on the other hand, to ensure pan-EU regulatory consistency so that arbitrage effects are minimized, pan-EU consistency in supervisory practices, and, for the Banking Union zone, that the SSM, in applying CRD IV/CRR, is operating within a legally clear environment.

The following sections consider whether CRD IV/CRR and its supporting regulatory and supervisory governance arrangements balance appropriately between flexibility and consistency by examining the harmonization model employed by CRD IV/CRR; the institutional capacity of the EU to calibrate and finesse CRD IV/CRR; and the supervisory governance arrangements which underpin CRD IV/CRR.
IV. Mitigating Risks: Flexibility and the Single Rule-book


CRD IV/CRR is designed to operate as a ‘single rule-book’ which applies consistently across the Member States. As such, it reflects the EU’s wider policy goal, since the financial crisis, to construct a ‘single rule-book’ for the EU financial system.\textsuperscript{84}

An intense level of harmonization is achieved by CRD IV/CRR. Over 100 BTSs - proposed by EBA and adopted by the Commission - are to amplify CRD IV/CRR, along with other level 2 delegated administrative rules proposed and adopted by the Commission and, in addition, soft EBA Guidelines and Recommendations. To take the own funds/capital example, the CRR sets out the characteristics and conditions for the constituents of own funds, and a series of mandates have been given to EBA to produce draft BTSs on the quality criteria which apply to own funds, the deductions to be applied to own funds, and the related disclosure requirements. In addition, EBA monitors the quality of own funds and may provide related advice and opinions. The own funds matrix therefore currently includes detailed BTSs on own funds, which address the constituent components of capital and deductions from capital;\textsuperscript{85} EBA reports which monitor the quality of own funds;\textsuperscript{86} and EBA lists which identify the capital instruments that have been classified by NCAs as Core Equity Tier 1 capital.\textsuperscript{87} To take another example - the supervision example - EBA has adopted extensive Guidelines for common procedures and methodologies for the SREP\textsuperscript{88} which are regarded by EBA as a ‘major step forward in forging a consistent supervisory culture across the single market.’ Overall, the degree of prescription which the CRD IV/CRR brings is well-illustrated by the interactive ‘single rule-book’ hosted by EBA which embeds the extensive range of BTSs, other delegated administrative rules, and soft Guidelines and Recommendations within the CRD IV/CRR legislative text.

The intense level of harmonization adopted under CRD IV/CRR and the related commitment to a single rule-book reflects a number of factors. These include the wider political commitment to a

\textsuperscript{84} For early support see The High Level Group on Financial Supervision in the EU, Report (2009) (the DLG Report) 27-29.
\textsuperscript{86} Eg, EBA, Report on the Monitoring of Additional Tier 1 (AT1) Instruments of EU Institutions (2015).
\textsuperscript{87} EBA, Updated List of CET I Instruments, October 2015.
\textsuperscript{88} 2014 EBA SREP Guidelines (n 48).
single rule-book over the financial crisis; the granular nature of prudential regulation and the intensity of the Basel III Agreement reforms; and the crisis-era experience with the more open-textured 2006 CRD I regime. The EU’s major diagnostic report on the financial crisis, the de Larosière Report, found, for example, that Member States took different approaches to the core definition of the own funds which constituted capital, to internal firm governance, and to ‘fit and proper’ management rules.\(^89\) In addition, a number of Member States did not apply (as was permitted under a transitional opt-out) certain 2006 CRD I rules which might have reduced the risks of securitization activities, and significant divergences appeared with respect to Member States’ requirements for the IRB risk models on which the Basel II/CRD I capital regime heavily depended.\(^90\) The ‘single rule-book’ approach was accordingly designed to remove national options and discretions and, thereby, to remove inconsistencies and the related risks of regulatory/supervisory arbitrage, competitive distortions, and damage to the internal market.

B. A Porous Rule-book?

But, although typically described as constituting a single rule-book, it is not clear that the CRD IV/CRR prudential regime operates as one. With respect to the capital rules, for example, some flexibility is built into the regime. Additional capital (and leverage and liquidity requirements) can be imposed by NCAs on individual institutions under the SREP process (CRD IV, Article 104). NCAs are additionally empowered to increase the capital requirements which apply in relation to real estate loan assets in order to manage local property bubbles (CRR, Article 124) and, more generally, NCAs can impose additional and stricter requirements where they identify changes in the intensity of macro-prudential or systemic risk in the financial system with the potential to have serious negative consequences to the financial system and the real economy in a specific Member State (CRR, Article 458). The capital buffer regime is also designed to allow NCAs some flexibility, particularly with respect to the Counter-cyclical Buffer which Member States are to adjust to reflect local economic and structural conditions. Similarly, the Systemic Risk Buffer is designed to apply flexibly, including with respect to whether it applies to one institution, a subset of institutions, or all institutions. Initial evidence from the ESRB suggests

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\(^89\) DLG Report, n 84 above, 18 and 28.

\(^90\) Commission, CRD IV/CRR FAQ, July 2013.
that Member States and their NCAs are applying these macro-prudential measures and capital buffers to reflect national market conditions.\textsuperscript{91}

More generally, an array of national exemptions and discretions are available. These include a host of technical options and discretions on the technicalities of how capital is constituted; on the application of the CVA charge (for example, whether the CVA calculation applies to securities financing transactions and if related risk exposures are ‘material); on the application of the large exposure regime (under which NCAs can exempt certain intra-group exposures\textsuperscript{92}); and on the application of the LCR to investment firms, pending Commission action in this area. Elsewhere, core concepts are not subject to detailed or prescriptive definitions. Perhaps most prominently, the pivotal definition of the instruments eligible for Core Equity Tier 1 capital is designed in terms of the instruments meeting a range of criteria which reflect the Basel III Agreement (CRR, Article 26).\textsuperscript{93}

The CRD IV/CRR prudential rule-book can also be characterized as being somewhat porous with respect to its implementation of the Basel III Agreement. In a number of respects, CRD IV/CRR deviates from the Basel III Agreement. The major deviations include additions to the Basel III regime, notably the rules which apply to corporate governance (including executive remuneration) and to systems and controls; the additional capital buffers which apply in the EU; and the enhanced Pillar 3 disclosures relating to risk management objectives and policies, governance arrangements, and leverage ratios. The additions also include the highly detailed reporting requirements which apply to supervisory capital reporting (COREP) and financial reporting (FINREP), and which are the subject of detailed rules governing formats and templates. The deviations from the Basel III Agreement also take the form of alterations to the Basel III regime; these include the series of exemptions which apply to the CVA capital regime as well as the lighter capital charge which applies in the EU to SME loan assets (noted below).

\textsuperscript{91} ESRB, A Review of Macro-prudential Policy in the EU One Year After the Introduction of the CRD.CRR, June 2015.

\textsuperscript{92} This exemption is to be reviewed, under CRR Article 507. A Call for Advice has been issued to EBA by the Commission (26 April 2016).

\textsuperscript{93} A complex matrix of interlocking CRR requirements address the composition of Core Equity Tier 1 capital.
C. Does Divergence Matter or Mitigate?

A reasonable argument can be made to the effect that the flexibility within CRD IV/CRR and the changes it makes to the Basel III Agreement are strengths. CRD IV/CRR applies to a vast and diverse population of credit institutions and investments firms and applies across Member States with different economic cycles and conditions and which are experiencing different stages of financial system development.94 A fully harmonized regime, which does not reflect EU-specific conditions, could accordingly be prejudicial. The novel LCR, for example, is expressly designed to take into account the large and diverse population of EU banks.95

In addition, the national supervisory flexibility which the SREP accommodates injects a degree of pragmatism into CRD IV/CRR and reflects the need for some local supervisory discretion. Similarly, the ability of NCAs to impose additional prudential requirements (with respect to capital, risk weights, large exposures, and liquidity) in order to address macro-prudential/systemic risk (CRR, Article 458) acts as a mitigant against over-prescription and insufficient flexibility in the regime (as well as against regulatory error) and may come to operate as a useful safety valve. The potential for disruption to the internal market and for competitive gaming by Member States is reduced by the novel procedural controls which apply to Article 458. These include the possibility for a Council veto (on a Commission proposal) where there is ‘robust, strong, and detailed evidence’ that the national measure will have a negative impact on the internal market that outweighs the financial stability benefits. The ESRB has reported positively on the procedure.96

The flexibility within the regime also provides a means through which political risks and pressures can be addressed. Over the CRD IV/CRR negotiations the appropriateness of the shift to a single rule-book approach was contested between the Member States. With respect to capital levels, for example, the general prohibition on Member States from adopting additional capital requirements (outside the specific provisions which allow for local supervisory action) was highly contested over the negotiations with some Member States, notably the UK and Sweden, concerned to retain the flexibility to impose additional capital requirements where necessary given local market conditions. The highly prescriptive executive remuneration regime also

94 As has been acknowledged by the Basel Committee: RCAP, n 20 above, 4.
95 Commission, LQR FAQ.
96 N 91 above, 4, noting the procedures to be effective.
proved highly contentious in the UK which took an unsuccessful action to the Court of Justice of the EU which it ultimately abandoned following the Advocate General’s November 2014 dismissal of its claim.\textsuperscript{97} The flexible capital buffer regime, however, has proved to be a useful means for addressing at least some of these potentially destructive political pressures and tensions and for accommodating national preferences. For example, the UK’s approach to bank structural reform, which involves imposing a higher capital charge on some institutions, is regarded as being accommodated within the Systemic Risk Buffer which can be used for a subset of institutions (in this case, the banks within the UK ‘ringfence’). Devices such as these accordingly provide a means through which the EU can support some local flexibility on regulatory design questions which require sensitivity to local economic and political conditions.

Similar arguments can be made with respect to the CRD IV/CRR divergences from the Basel III Agreement. CRD IV/CRR diverges from the Basel III Agreement with respect to, for example, the capital charge for SME loan assets. Under CRD IV/CRR, the Basel III capital requirement is, in effect, reduced by a factor of 0.7619 (the SME capital discount or ‘supporting factor’). This discount was identified by the Basel Committee as a material divergence from the Basel III Agreement.\textsuperscript{98} But the EU has long been concerned to strengthen the weak EU SME funding market and has recently made strenuous regulatory efforts in this regard, including revisions to prospectus disclosures; the construction of a new ‘SME Growth Market’ regulatory classification for trading venues; and under the CMU agenda, which contains a number of reforms directed to SME funding. Reflecting this policy concern, in its 2016 Report for the Commission on the EU SME capital discount EBA highlighted that the discount was designed as a precautionary measure against the risk of lending to SMEs being jeopardized in the wake of the stricter Basel II/CRD IV/CRR capital requirements, and so had a non-prudential function - although EBA also reported that the initial evidence suggested that the discount had not provided an additional stimulus for lending to SMEs and called for additional monitoring of the effects of the discount.\textsuperscript{99} This variation through the discount of the Basel III requirements accordingly reflects a long-standing weakness in the EU economy and a related policy concern to support SMEs.\textsuperscript{100}

\textsuperscript{98} RCAP, n 20 above, 4 and 19.
\textsuperscript{100} As recently reflected in the Commission Staff Working Document on CMU which highlighted the importance of SMEs to the EU economy and the distinct approach to the capital charge for SME loans adopted under CRD IV: n 76 above, at 14.
There are, however, countervailing factors which suggest that the porous nature of the CRD IV/CRR rule-book may generate - rather than mitigate - regulatory risks. With respect to the internal market, transaction costs for cross-border banking groups could be generated as well as distortions to competition and regulatory arbitrage risks, all of which could be prejudicial for the stability and efficiency of the internal market. EBA Chairman Enria has warned of the risks which exemptions, derogations, and mechanisms for allowing national flexibility bring and has identified the Basel Committee implementation review process (noted below) as a corrective mechanism.\textsuperscript{101} Particular concerns have recently emerged with respect to national divergences in relation to the instruments which can constitute capital – the differential treatment of deferred tax assets is a significant source of difference across the Member States.\textsuperscript{102} With specific reference to Banking Union, the ECB/SSM’s important 2013-2014 Comprehensive Assessment of the balance sheets of the 130 most significant banks in the Euro Area found variations in the current definition of capital across banks and Member States which, it suggested, undermined the extent to which any review could provide a reliable pan-Euro-Area picture of bank health. It warned of the need to improve the consistency of the capital definition and of the related quality of Core Equity Tier 1 capital which it identified as a priority matter for the SSM.\textsuperscript{103} Further challenges arise for Banking Union. Relevant national rules implementing EU banking rules must be applied by the ECB within the SSM where the harmonized rules take the form of a Directive (2013 SSM/ECB Regulation, Article 4(3)). Difficulties may arise therefore where Member States have, for example, ‘gold-plated’ CRD IV/CRR, adopted distinct national arrangements, or where the correct interpretation is not clear. For example, which court (Court of Justice or national) has jurisdiction to rule on a contested ECB application/interpretation within the SSM of a relevant national law implementing CRD IV?\textsuperscript{104} While these procedural complexities can be addressed, they underline nonetheless the importance of minimizing unnecessary divergence in the single rule-book. The ECB/SSM has already taken action for the Banking Union zone, adopting a 2016 Regulation which governs how it will exercise the different national options and discretion

\textsuperscript{101} House of Lords, n 67 above, para 142.

\textsuperscript{102} The treatment of tax losses has also drawn the attention of the EU’s competition authorities with respect to whether state aid rules have been broken: Politi, J, Buck, T, and Oliver, C, ‘EU banks defend use of tax credits’ \textit{Financial Times} 5 May 2015 6.

\textsuperscript{103} Aggregate Report, n 75 above, 10-11. SSM Chairman Nouy has been reported as calling for legislative action to address the inconsistencies: Binham, C and Arnold, M., ‘Big banks face fresh capital clampdown as Europe’s new watchdog bares teeth’ \textit{Financial Times} 25 February 2015, 1.

conferred on NCAs and which it may, as the SSM supervisor, apply; these include certain options and discretions relating to the definition of capital. More generally, the Commission has committed to reducing national options and discretions.

From a global perspective, EU divergences from the Basel III Agreement risk the creation of competitive distortions internationally. The EU’s approach to the new CVA capital charge relating to derivative transactions is particularly problematic in this regard. The EU has adopted a series of exemptions to the CVA charge which are not available under the Basel III Agreement. Many relate to how EMIR (which imposes central clearing requirements on certain derivatives transactions as well as risk management requirements more generally) is designed. The EU CVA exemptions under CRD IV/CRR include the dis-application of the CVA charge from transactions with ‘non financial counterparties’ whose derivatives activities fall under the threshold at which EMIR applies to derivatives transactions; with pension funds (reflecting an EMIR transitional exemption); and with entities which fall outside the scope of EMIR (including central banks, development banks, and local/regional governments). These exemptions could lead to a significant competitive advantage for EU banks and investment firms in the pricing of derivatives trades with counterparties as exempted transactions will not be subject to a CVA charge. The EU accordingly failed the Basel Committee’s 2014 review of EU implementation of Basel III (under the Regulatory Consistency Assessment Programme - RCAP) with respect to the CVA capital charge. The Basel Committee found that the exemptions were a material departure from Basel III and materially boosted the capital ratios of EU institutions.

The Basel Committee also pointed to the EU’s concessionary risk weights for SMEs as an ‘important departure from the letter and spirit of Basel.’ Overall, while much of the CRD IV/CRR regime was in compliance with Basel III, these departures (and other elements) led to a finding of ‘material non compliance’ against the EU.

The impact of these divergences internationally remains to be seen. There are, however, some grounds for cautioning against predictions of serious prejudice to the Basel III Agreement. Full global convergence under Basel III is unlikely to be achieved given the different national preferences at stake and the extent to which international standards are changed as they are

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107 RCAP, n 20 above, 21.  
108 RCAP, n 20 above, 4.
filtered through national implementation processes.\textsuperscript{109} The Basel III Agreement is also still in a transitional stage and is continually being refreshed, in part to reflect market experience with the regime.\textsuperscript{110} EU divergences may accordingly come to represent a means through which the EU ‘uploads’ its interests to ongoing Basel Committee negotiations,\textsuperscript{111} while the Basel Committee RCAP monitoring mechanism provides a means through which pressure can be exerted on the EU to, at the least, review those divergences which reflect distinct EU economic interests and which are prejudicial internationally.

V. Mitigating Risks: Rule Design and Rule-Making

A. The Legislative Text

Does the CRD IV/CRR regime contain within it textual mitigants against regulatory risk, distinct from the approach to harmonization noted in section IV above? It is certainly the case that the CRD IV/CRR regime is potentially highly dynamic. It seems reasonable to predict, as discussed in section V.B, that EBA has the technical capacity to drive change to the regime at the administrative level. But the review clauses - a major feature of the crisis-era regulatory regime - embedded within CRD IV/CRR also provide a means for correcting and refreshing the regime at the legislative level, if there is the political will to engage with change.

To take only one example, Article 502 CRR requires the Commission (in consultation with EBA, the ESRB, and the Member States) to periodically monitor whether CRD IV/CRR has had significant effects on the economic cycle and to consider whether any related remedial measures are justified. This review obligation is accompanied by a host of more specific review obligations (Articles 502-519), some of which have a wide reach (for example the obligation to assess the impact of the regime on long-term funding) and some of which are more specific (such as the review obligations which apply to the CVA).

In addition, phase-in techniques are deployed across CRD IV/CRR, which does not come fully into force until 2019. The LCR and Leverage Ratio are phased in, for example, but so too are

\textsuperscript{110} The CVA charge, eg, is currently under review: Basel Committee, Consultative Document, Review of the Credit Valuation Adjustment Risk Framework (2015).  
\textsuperscript{111} On the uploading process through which states seek to impose their preferences on international standards see Quaglia, n 21 above.
different elements of the capital regime. Observations periods and reporting periods are similarly a feature of the LCR and Leverage Ratio regimes.

The CRD IV/CRR regime also relies to a significant extent on proportionality devices which give both in-scope firms and NCAs some discretion in how the regime is applied and which allow the regime to be calibrated to reflect the wide and diverse population of financial institutions subject to CRD IV/CRR. These devices apply to both substantive rules and to supervisory requirements. With respect to the timing of the SREP, for example, NCAs are to establish the frequency and terms of the SREP review, having regard to the size, systemic importance, nature, scale, and complexity of the activities of the institution concerned, and taking into account the principle of proportionality (CRD IV, Article 97). Proportionality is also a particular feature of the new internal governance regime. The governance arrangements, risk management systems, internal control procedures, and remuneration policies to promote sound and effective risk management required under Article 74 CRD IV, for example, must be proportionate to the nature, scale, and complexity of the risks inherent in the institution’s business model and activities. To take another example from the governance sphere, a nomination committee is only required for those institutions which are significant in terms of size, internal organization, and the nature, scope, and complexity of their activities (Article 88(2)). With respect to the capital rules, the extent to which institutions must use the more sensitive (and complex) IRB approach (as called for by the Basel III Agreement but now under review) similarly depends on the type of institution engaged. Article 77(1) of CRD IV requires NCAs to encourage institutions that are significant in terms of their size and internal organization, and the nature, scale, and complexity of their activities, to develop an internal credit risk assessment capacity and to increase their use of the CRR’s IRB approach for calculating own-funds requirements for credit risk, where their exposures are material in absolute terms and where they have, at the same time, a large amount of material counterparties. Proportionality mechanisms are currently the focus of close policy and institutional attention in the EU given their importance for the appropriate calibration of rules to national conditions and to particular business models.112 They carry, however, the risk of divergence and of gaming and can lead to rules being disapplied altogether. The particular difficulties which the CRD IV/CRR executive remuneration regime has generated with respect to proportionality are considered in the following section.

112 See, eg, the 2016 Balz Resolution: European Parliament, ‘Resolution on Stocktaking and Challenges of the EU Financial Services Regulation: impact and the way forward towards a more efficient and effective EU framework for financial regulation and a Capital Markets Union’, 19 January 2016 (P8_TA-PROV2016(0006))
B. The Rule-making Process and EBA

The scale of the CRD IV/CRR delegations to administrative ‘level 2’ rule-making, and particularly to BTSs proposed by EBA, suggests that the related injection of EBA’s technical expertise, and the extensive consultation procedures to which EBA is subject, can mitigate the risks of CRD IV/CRR regulatory error. Consideration of EBA’s role in the amplification and (potentially) correction of the regime is therefore warranted.

As has been widely discussed and debated, including over the 2014 Commission ESFS Review, the European Supervisory Authorities (ESAs) bring enhanced technical capacity and transparency to delegated ‘level 2’ administrative rule-making. This is notwithstanding persistent challenges relating to the accountability, funding, and independence of the ESAs – and in particular relating to the influence exerted by the Commission over BTSs, as these are proposed by the ESAs but adopted by the Commission. ESMA, the sister ‘markets’ authority to EBA was the pathfinder for the quasi-rule-making powers conferred on the ESAs. EBA was somewhat later to engage with the level 2 process given the 2013 adoption of CRD IV/CRR but has since been engaged in a massive quasi-regulatory exercise, proposing a vast number of BTSs for adoption by the Commission, producing Technical Advice for the Commission for administrative rules not in the form of BTSs, and adopting soft Guidelines and Recommendations. From the publicly available documentation, the process seems relatively smooth, with little public evidence of de-stabilizing tensions between the Commission (the constitutional location of ‘level 2’ rule-making power and which adopts BTSs) and EBA (the location of technical expertise and a focal point for industry consultation, but which can only propose BTSs). There are, however, stresses in the process.

The vast bulk of the delegations to administrative rule-making under CRD IV/CRR concern the proposal by EBA of BTSs. These delegations relate accordingly to the BTS ‘level 2’ process

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which was adopted under the founding 2010 ESA Regulations\textsuperscript{115} and not to the standard ‘level 2’ process under which the Commission proposes and adopts administrative rules (reflecting the Article 290 and 291 TFEU process) and in respect of which EBA’s role is limited to providing Technical Advice.

The EBA/Commission relationship with respect to BTSs seems to be functioning well, certainly based on the large number of BTSs which have been proposed and adopted. Points of difference can, however, arise between the Commission and EBA, notwithstanding EBA’s technical expertise and the extensive consultation it engages in. Sometimes these points of difference are made public. For example, in its FAQ on the LCR (and with respect to EBA’s Technical Advice) the Commission noted differences with EBA’s Advice ‘on a small number of points’ and that ‘this is not to be construed as a negative reflection on the quality or rigour of EBA work.’\textsuperscript{116} But more typically it can be difficult to discern why and where the Commission changes EBA’s approach and the process through which changes are made (which can involve lobbying of the Commission) is not transparent. One major report on the ESA Review, for example, highlighted industry concern that BTSs proposals from EBA were being over-turned later in the BTS process.\textsuperscript{117} A solution to this difficulty is not easily found as the Commission is the constitutional location of delegated, administrative rule-making power. Overall, however, the scale of the BTSs produced since the adoption of CRD IV/CRR is a testament to the overall effectiveness of the process.

Other challenges arise. It is not clear, for example, that the procedurally cumbersome BTS process, which is based on a series of steps and on Commission endorsement of the BTS, is appropriate for some of the highly technical operational standards which EBA proposes. In particular, one BTS sets out the technical reporting template to be used by banks for supervisory reporting and is composed in part of a series of data cells. Notoriously, it runs to some 1,861 pages in the Official Journal.\textsuperscript{118} Changes to this template are inevitably required as glitches arise in the template, technical changes are made to particular reporting lines, and other highly technical and detailed amendments are made. But the BTS process requires that all of these technical changes, however procedural, must go through the BTS process and OJ publication. While efforts are underway to develop an efficient procedural means for addressing such

\textsuperscript{116} N 95 above.
\textsuperscript{117} Mazars Report, n 114 above, para 63.
\textsuperscript{118} The BTS relates to supervisory reporting ([2014] OJ L191/1).
technical issues, the difficulties underline the challenges which the current process can generate.

Difficulties with timeliness have also arisen, leading to potential legal uncertainty for market participants and to a lack of clarity for NCAs in the application of CRD IV/CRR. Strict time limits (typically 3 months) apply to the Commission when considering a BTS proposal from EBA. But over the CRD IV/CRR process, these periods have, on occasion, been very significantly extended. While such delays, in effect, breach the EBA Regulation which sets out the time limits for Commission review of proposed BTSs, action is unlikely. But delays of this nature can bring costs for market participants.

The binding rule-book aside, EBA’s soft law tools, and in particular its Guidelines, provide the EU with an additional means for supporting the consistency with which CRD IV/CRR is applied and for addressing difficulties which emerge. To take one example, in response to the criticism by the Basel Committee of the EU for allowing the application of Standardized risk weights to certain exposures where a bank is otherwise to apply the IRB approach, the EU noted the role of EBA in supporting convergence and, in particular, the mandate to EBA to adopt Guidelines setting out recommended limits on the proportion of a bank balance sheet which is subject to the Standardized approach (CRR Article 150(4)). The EU also noted the importance of EBA’s Guidelines and other advisory work in driving convergence with respect to the constituents of Core Equity Tier I capital. More generally, EBA’s 2014 SREP Guidelines are of critical importance to supporting convergence in how NCAs across the EU apply their Pillar 2 supervisory powers, given the significant risk of divergence in operational procedures. The Basel Committee has acknowledged more generally the importance of EBA Guidelines in supporting the consistent application of rules, albeit that it has also highlighted that this remains a ‘work in progress.’

EBA Guidelines also provide a mechanism for signalling where changes may be necessary to the legislative regime. The scope of application of the proportionality mechanism which applies to the CRD IV/CRR remuneration regime (under Articles 74 and 92(2) CRD IV and Article 450 CRR) proved contentious within EBA, with some NCAs suggesting that it can mean the dis-

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119 EBA Board of Supervisors Minutes, 13 May 2014.
120 EBA’s 27 March 2014 proposal for a BTS on own funds, eg, was not finalized for adoption by the Commission until 20 January 2015, although the process provides for a 3 month review + 6 week response time for EBA: Regulatory Technical Standards, State of Play (n 19).
121 RCAP, n 20 above, 18.
122 RCAP, n 20 above, 4.
application of certain remuneration requirements to particular firms, notably smaller and complex firms.\textsuperscript{123} EBA’s 2015 Guidelines on the remuneration regime\textsuperscript{124} adopt the position, reflecting the Commission’s view, that the proportionality requirement, as currently drafted in the level 1 text, cannot lead to the dis-application/waiver of remuneration requirements. EBA has, however, recognized that waivers are, in some circumstances, appropriate and has, in a separate Opinion, called for legal clarification of CRD IV.\textsuperscript{125} EBA has also recommended that legislative action be taken to address the EU’s failure to comply with the Basel III CVA regime and advised NCAs on the appropriate steps to take, including under the SREP, pending such legislative change.\textsuperscript{126} Whether or not EBA’s initiatives in support of greater consistency tilt CRD IV/CRR away from an optimal balance between consistency and flexibility remains to be seen. But it can be suggested with a reasonable degree of confidence that EBA brings an expert, technocratic capacity to bear - even allowing for the reality that the NCAs on its decision-making Board of Supervisors are likely to bring national preferences into play - and that EBA is sensitive to the political context. For example, while EBA was notably robust in expressing concern as to the materiality of the risks which arose because of the EU CVA exemptions, it was careful to be sensitive to the impossibility of changing the regime other than through legislative change by the co-legislators.

Overall, EBA has significantly enhanced the institutional and technical capacity of the EU. But EBA operates within an increasingly challenging and dynamic operating environment following the establishment of the ECB/SSM. How it manages the challenges which may emerge, such as Banking Union caucusing on its Board of Supervisors or the ECB/SSM operating as a competing standard-setter,\textsuperscript{127} will have wider implications for the EU’s capacity to manage risks arising from CRD IV/CRR.

\textsuperscript{124} EBA/GL/2015/22, Guidelines on Sound Remuneration Policies under CRD IV.
\textsuperscript{125} EBA December 2015 Opinion on the Application of Proportionality (EBA/Op/2015/25).
\textsuperscript{126} EBA CVA Opinion February 2015 (EBA/Op/2015/02).
VI. Mitigating Risks: Supervising CRD IV/CRR

A. EBA and CRD IV/CRR Supervision

Among the most innovative features of CRD IV/CRR is the degree of prescription it imposes on supervision, in particular with respect to the SREP. This new supervisory regime may mitigate the risks posed by CRD IV/CRR but it may also increase the risks.

The supervisory governance arrangements which support the supervision of CRD IV/CRR and the SREP sit within a complex institutional architecture. The defining feature of this architecture is the structural fault which divides the EU’s supervisory governance arrangements governing the single banking market (primarily EBA’s remit) from those governing Banking Union/the SSM (primarily the remit of the ECB). EBA, operating under the supervisory coordination arrangements which apply under CRD IV/CRR and which include requirements for cross-border colleges of supervisors, is charged with driving pan-EU supervisory convergence in how CRD IV/CRR is applied, in particular under the SREP, and with supporting related pan-EU supervisory coordination. The ECB, at the centre of the SSM, is responsible for oversight of the SSM and for the direct supervision of some 123 banking groups in accordance with CRD IV/CRR and also with EBA’s pan-EU convergence measures, including its SREP Guidelines.

From its establishment EBA has been mandated to support supervisory convergence and coordination across the single banking market and it has been conferred with a series of related powers, including with respect to participation in and oversight of colleges of supervisors; peer review; and the adoption of supervisory guidance. Specific supervisory convergence obligations are also imposed on EBA under CRD IV/CRR. In particular, Article 107 CRD IV mandates EBA to collect and assess supervisory information from NCAs, including with respect to the SREP, stress testing, and internal model review; adopt SREP guidelines; conduct peer reviews; and report annually to the European Parliament and Council on the degree of supervisory convergence across the Member States.

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128 Supervisory colleges support coordination between the different ‘home’ NCAs within group structures and include the host NCAs of ‘significant branches’ (CRD IV, Art. 116). Colleges are charged with a range of coordination responsibilities and must also adopt certain joint decisions for banking groups, including with respect to capital, liquidity, and joint recovery plans (CRD IV, Arts. 112-118).

129 For an extensive critical review see Ferran, n 7 above.
The demands of the CRD IV/CRR regulatory agenda have been such that it is only recently that EBA’s supervisory mandate has come to the fore and that its potential to support pan-EU supervisory convergence has become clearer. Chief among its initiatives are the important and detailed 2014 SREP Guidelines which govern the granular business of CRD IV/CRR supervision and which are built on: business model analysis; assessment of internal governance and control arrangements; assessment of risks to capital and capital adequacy; and assessment of risks to liquidity and liquidity adequacy.130 But while the Guidelines are designed to ensure that institutions with similar risk profiles, business models, and geographic exposures are reviewed and assessed by NCAs consistently, and are subject to broadly consistent supervisory expectations, their aim is ‘not to impose restrictive granular SREP procedures and methodologies.’131 EBA has emphasized that the Guidelines are ‘guiding’ and should not be regarded as ‘restricting or limiting supervisory judgment as long as it is line with applicable legislation’, but that the intended harmonization and convergence should not be compromised.132 The SREP is also designed to apply proportionately, reflecting the level of systemic risk posed by an institution, and to support a ‘minimum engagement model’ where the frequency, depth, and intensity of assessments varies according to the category of institution.133

The line between the degree of pan-EU supervisory consistency necessary to support financial stability and the avoidance of arbitrage and local preference and forbearance, and the prejudicial dampening of appropriate national supervisory discretion, is thin. But the SREP Guidelines at least acknowledge the need for local flexibility, albeit within an EBA-set framework. While CRD IV/CRR is still a very new regime, and while the SREP Guidelines came into force only in 2016, early indications augur well, including for EBA’s ability to support convergence. EBA’s 2015 report, for example noted that since 2011 a ‘satisfactory degree of convergence’ had taken place in the overall supervisory framework, although divergent supervisory methodologies still persisted.134

The achievement of optimal supervisory outcomes is further supported by EBA’s review of the colleges of supervisors which are charged with applying the SREP in a coordinated manner. EBA is required under CRD IV to participate in and monitor the EU’s colleges of supervisors (there

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130 2014 EBA SREP Guidelines (n 48) 7.
131 Ibid, 9-10.
132 Ibid, 10.
133 Ibid, 11.
are currently some 102 active colleges) (CRD IV, Article 116).\textsuperscript{135} In fulfilling this mandate EBA engages in thematic review of colleges, following some 25 ‘closely monitored’ colleges intensely. EBA’s review, which seems to be robust, serves to identify weaknesses, to identify areas where progress is needed, and to set objectives. In its 2014 review, for example, EBA reported that the process for reaching joint decisions on capital was becoming more standardized and better structured, but that more consistency was needed in the outcomes of the joint decisions made by the EU’s supervisory colleges.\textsuperscript{136} In its 2015 review, it noted further progress, particularly with respect to group risk assessments, although it noted that joint decision-making in relation to capital and liquidity still posed challenges.\textsuperscript{137}

The arrangements which support CRD IV/CRR supervision have yet to be tested under pressure, but they hold the promise of leading to greater consistency and effectiveness in supervision. They also, certainly at this point, accommodate national supervisory judgment. The potential efficacy of these arrangements must, however, be considered in the context of the forces which Banking Union may unleash, to potentially destructive effect.

B. The Impact of Banking Union

This discussion will not canvass the reasons for and the governance arrangements of Banking Union’s SSM.\textsuperscript{138} But from the perspective of optimal CRD IV/CRR supervision, the co-existence alongside EBA, charged with supporting pan-EU supervisory convergence and coordination, of the ECB/SSM - the direct supervisor of 123 of the EU’s most significant banking groups and responsible for the delivery of SSM-scope supervision of all SSM-scope banks - may destabilize the institutional setting of CRD IV/CRR supervision. This risk is well reflected in the vivid acknowledgement by EBA Chairman Enria of the ‘existential search’ which EBA faces in the supervisory area.\textsuperscript{139} Supervision appears to be the major fault-line across ECB/EBA relations - and the CRD IV/CRR SREP runs along this fault-line.

\textsuperscript{138} For discussion of SSM operation and the projected risks and benefits see the discussions at n 127 above.
\textsuperscript{139} House of Lords EU Committee Report 2015, n 67 above, para 93.
The ECB within the SSM, as a supervisor, is subject to the CRD IV/CRR SREP requirements and to EBA’s SREP Guidelines and related supervisory convergence and coordination measures, including with respect to the application of CRD IV/CRR within colleges of supervisors.\textsuperscript{140} But supervision is a granular operational activity, and divergences may arise between how the ECB delivers supervision within the SSM and EBA’s pan-EU Guidelines and other measures in this area. More specifically, the ‘SSM Supervisory Manual’, developed by the ECB in consultation with SSM NCAs and under continual review, covers the processes, procedures, and methodologies for the supervision of all SSM banks: the Manual covers the ‘SSM SREP’, including with respect to risk assessment and bank capital and liquidity quantification.\textsuperscript{141} It remains to be seen whether divergences will develop between EBA’s approach to the SREP and the SSM’s approach, and whether any divergences become material with prejudicial consequences for the integrity of CRD IV/CRR supervision. There are already multiple indicators of the ECB’s intention to adopt a harmonized approach to supervision. It is, for example, engaging in a review of banks’ IRB models for capital assessment and, more generally, in its first Annual Report, informed bank management of its determination to ‘carry out the necessary changes to achieve full harmonization in order to create a level playing field and more effective supervision.’\textsuperscript{142}

Pessimistic speculation as to destructive SSM/EBA tensions may, however, risk over-statement. EBA is not configured as a direct supervisor and its concern is convergence, not supervision; it has a distinct role to that of the ECB/SSM. In addition, early indications suggest a cooperative relationship between the ECB/SSM and EBA. The important 2014 pan-EU asset quality review/stress test, for example, which was, in effect, shared between the ECB and EBA was, institutionally at least, successful in terms of ECB and EBA cooperation and despite the strong incentives both institutions (both of which have powers in relation to stress testing\textsuperscript{143}) had to claim ownership over the exercise. Similarly, EBA has agreed on an approach for the 2016 stress test, which will be carried out in coordination with the ECB for the Banking Union zone.


\textsuperscript{141} See ECB, Annual Report on Supervisory Activities (2015) 33-34.

\textsuperscript{142} Letter from SSM Chair Nouy to the Management of Significant Banks, 27 January 2015.

\textsuperscript{143} EBA is charged with considering, at least annually, whether it is appropriate to consider EU-wide stress tests and with disclosing the results (2010 EBA Regulation, Art. 22). It is also, for the purposes of running stress tests, empowered to request related information directly from financial institutions and to request NCAs to conduct specific reviews and onsite inspections (2010 EBA Regulation, Art. 32(3a)). The ECB is also empowered to conduct stress tests, albeit in cooperation with EBA (2013 ECB/SSM Regulation, Art. 4(1)(f)).
Overall, what can be concluded as to the impact current supervisory governance arrangements are likely to have on the EU’s capacity to achieve a balance between ensuring that CRD IV/CRR applies consistently across the EU, and allowing for a degree of fluidity and national flexibility? It is difficult to argue that EBA will not bring greater consistency to CRD IV/CRR application and supervision in light of recent evidence. It also seems to be the case that national supervisory judgment will be accommodated, particularly with respect to the discretions which NCAs have under the SREP and with respect to the application of macro-prudential tools, including the different capital buffers. Within the Banking Union zone, a higher degree of prescription can be expected, particularly for the 123 significant banking groups which fall under direct ECB supervision – although even here, the Joint Supervisory Teams (composed of ECB and NCA staff) which supervise these groups are to respond to the diversity of bank business models across the EU and are designed to reflect the specific knowledge of local NCAs.\footnote{See, eg, ECB, Annual Report on Supervisory Activities (2015) 5.}

**VII. Conclusion**

This discussion considers the background to and major features of the behemoth CRD IV/CRR regime which governs the prudential regulation and supervision of banks and investment firms in the EU. While the CRD IV/CRR regime is still in its infancy, initial empirical assessments point to a likely strengthening of bank stability but to a contraction in the funding capacity of the EU financial system consequent on its application. While the outcome of CRD IV/CRR remains unclear, it can reasonably be speculated that, along with a strengthening of financial stability, it may have unintended and prejudicial effects, not least given the concerns raised during its negotiation on aspects of its regulatory design. The extent to which CRD IV/CRR can be applied flexibly, amplified and corrected reasonably easily, and supervised in manner which supports consistency of application across the EU along with an appropriate level of national supervisory discretion, will shape the ability of the EU to mitigate the risk of these effects arising.

CRD IV/CRR harmonizes at an intense level. But there is a significant degree of flexibility within the regime. It is unclear whether this flexibility will, in the long term, act as a risk mitigant or exacerbate the dangers of prejudicial effects. But until the CRD IV/CRR regime matures, the discretions and options contained within it, and which reflect the persistent structural differences across the EU banking market, provide an important safety valve for the application of national...
discretion. CRD IV/CRR also contains a number of textual mitigants which should reduce the risk of unintended effects, notably the proportionality mechanisms which allow for calibrated application of the regime. The EU’s regulatory capacity to amplify and correct CRD IV/CRR is in large part a function of EBA’s effectiveness and recent evidence augurs well in this regard. While difficulties persist with respect to the effectiveness of the administrative rule-making procedures which govern much of EBA’s quasi-regulatory activities, EBA’s technical capacity to shape and correct CRD IV/CRR is considerable.

The extent to which the EU’s supervisory governance arrangements will lead to an optimal balance between consistency and flexibility can only be speculated on, particularly as the effect of the SSM remains to be seen. But it can reasonably be asserted that while EBA is likely to drive greater consistency in supervisory practices, NCAs are unlikely to be significantly constrained in exercising supervisory judgment which is informed by local experience.

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