



IPOL | DIRECTORATE-GENERAL FOR INTERNAL POLICIES
EGOV | ECONOMIC GOVERNANCE SUPPORT UNIT



European Parliament

IN-DEPTH ANALYSIS

Fines for misconduct in the banking sector – what is the situation in the EU?

External authors: **Martin R. Götz**
Tobias H. Tröger

Research Center Sustainable Architecture for Finance in Europe (SAFE)

Scrutiny paper on the Single Supervisory Mechanism
provided at the request of the Economic and Monetary Affairs Committee

IN-DEPTH ANALYSIS

Fines for misconduct in the banking sector – what is the situation in the EU?

External authors: Martin R. Götz
Tobias H. Tröger

Research Center Sustainable Architecture for Finance in Europe (SAFE)

Provided in advance of the public hearing
with the Chair of the Supervisory Board of the ECB
in ECON
on 23 March 2017

Abstract

Bank regulators have the discretion to discipline banks by executing enforcement actions to ensure that banks correct deficiencies regarding safe and sound banking principles. We highlight the trade-offs regarding the execution of enforcement actions for financial stability. Following this we provide an overview of the differences in the legal framework governing supervisors' execution of enforcement actions in the Banking Union and the United States. After discussing work on the effect of enforcement action on bank behaviour and the real economy, we present data on the evolution of enforcement actions and monetary penalties by U.S. regulators. We conclude by noting the importance of supervisors to levy efficient monetary penalties and stressing that a division of competences among different regulators should not lead to a loss of efficiency regarding the execution of enforcement actions.

This paper was requested by the European Parliament's Economic and Monetary Affairs Committee.

AUTHORS

Martin R. Götz, Research Center Sustainable Architecture for Finance in Europe (SAFE) and Goethe University

Tobias H. Tröger, Research Center Sustainable Architecture for Finance in Europe (SAFE) and Goethe University

The authors thank Andreas Roth, Gerrit Tönningsen, Jan Krahnert, Johannes Kasinger and Mark Wahrenburg for very valuable comments

RESPONSIBLE ADMINISTRATOR

Marcel Magnus
Economic Governance Support Unit
Directorate for Economic and Scientific Policies
Directorate-General for the Internal Policies of the Union
European Parliament
B-1047 Brussels

LANGUAGE VERSION

Original: EN

ABOUT THE EDITOR

Economic Governance Support Unit provides in-house and external expertise to support EP committees and other parliamentary bodies in playing an effective role within the European Union framework for coordination and surveillance of economic and fiscal policies.

E-mail: egov@ep.europa.eu

This document is also available on Economic and Monetary Affairs Committee homepage at: <http://www.europarl.europa.eu/committees/en/ECON/home.html>

Manuscript completed in March 2017

© European Union, 2017

DISCLAIMER

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

CONTENTS

List of abbreviations.....	4
List of figures	4
Executive summary.....	5
1. Introduction.....	7
2. Trade-offs of enforcement actions	8
3. Legal framework for imposing sanctions for violation of prudential banking regulation.....	9
3.1 General structure of enforcement proceedings in prudential banking regulation	9
3.2 SSM.....	9
3.2.1 Breaches of directly applicable EU law.....	10
3.2.2 Breaches of all other banking regulation that bear on the functioning of the SSM	11
3.2.3 Breaches of ECB regulations and decisions	11
3.2.4 Breaches of all other relevant prudential banking regulations	12
3.3 United States.....	12
3.3.1 Cease and desist order	12
3.3.2 Formal written agreements	12
3.3.3 Civil money penalty.....	13
3.3.4 Competent authorities.....	14
4. Empirical evidence on the effect of bank sanctions.....	15
4.1 Enforcement action and changes in bank behaviour	15
4.2 Real and financial costs of enforcement actions	15
5. Enforcement actions in Europe and the United States.....	17
5.1 Enforcement actions in Europe	17
5.1.1 Institutional background	17
5.1.2 Data from bank regulators	17
5.1.3 Alternative data sources.....	17
5.2 Enforcement actions in the U.S.	18
5.2.1 Institutional background	18
5.2.2 Overview of enforcement actions in the U.S.....	18
5.2.2.1 Data source	18
5.2.2.2 Enforcement Actions by U.S. Regulators from 2001 to 2016.....	18
5.2.2.3 Level of civil money penalties from 2013 to 2016.....	19
6. Conclusions.....	20
References.....	21

LIST OF ABBREVIATIONS

CD	Cease & Desist
CRD IV	Capital Requirements Directive IV
CRR	Capital Requirements Regulation
CMP	Civil Money Penalties
DOJ	Department of Justice
EBA	European Banking Authority
ECB	European Central Bank
ESRB	European Systemic Risk Board
EU	European Union
EUR	Euro
F	Federal Reporter
FA	Formal Agreement
FDIC	Federal Deposit Insurance Corporation
FIRREA	Financial Institutions Reform, Recovery and Enforcement Act of 1989
FRS	Federal Reserve System
MiFID II	Markets in Financial Instruments Directive II
MiFIR	Markets in Financial Instruments Regulation
NCA	National Competent Authority
OCC	Office of the Comptroller of the Currency
PCA	Prompt Corrective Action
SSM	Single Supervisory Mechanism
TFEU	Treaty on the Functioning of the European Union
U.K.	United Kingdom
U.S.	United States
U.S.C.	United States Code
USD	US Dollar

LIST OF FIGURES

Figure 1: Enforcement actions by U.S. regulators (2001 – 2016).....	18
Figure 2: Level of total civil money penalty by year and regulator (2013 – 2016).....	19

EXECUTIVE SUMMARY

Prudent banking regulation hinges on the ability of regulators to ensure that banks are stable and safe. The execution of enforcement action to correct deficiencies in banks' management and/or financial health is an important tool that allows supervisors to sanction banks in case they violate safe and sound banking practices and/or law.

The use of enforcement actions is subject to discretion of regulators. While enforcement actions are considered to improve the stability of individual banks, worries that fines against specific institutions may be counterproductive for financial stability also exist. Since sanctions against banks frequently highlight existing deficiencies at an institution, worries about the overall viability of that institution (or the banking system) may emerge once supervisors disclose enforcement actions to the public.

In this in-depth analysis, we compare the legal framework for supervisors in the Banking Union and the U.S. that governs the execution of enforcement actions against banks. In recent years, banks were also subject to monetary penalties in the U.S. that sanctioned criminal misconduct. The payment obligations that arise in this context can be substantial and contribute significantly to a bank's conduct costs, like for instance Deutsche Bank's settlement of USD 7.2 bn in 2017 for misleading investors in its sale of residential mortgage-backed-securities prior to the financial crisis. However, we do not consider and examine liability based on criminal offenses in this in-depth analysis and focus on monetary penalties issued by supervisory authorities instead because European banking regulation does not provide for any sanctioning powers based on criminal offenses. As a consequence, we analyse the legal provisions that allow imposing monetary penalties to sanction violations of prudential banking regulation (preconditions, range of fines) and observe no material variations with regard to typical misconduct. Important differences exist, however, with regard to the distribution of enforcement powers. While each supervisor in the U.S. has the independent authority to initiate enforcement actions and levy fines against the institutions that fall under its remit, the authority to execute enforcement actions in the Banking Union (SSM) is split between the European Central Bank (ECB) and national competent authorities (NCA).

Empirical evidence, mostly from the U.S., indicates that banks change their behaviour when they are subject to an enforcement action. In particular, existing studies highlight that banks become safer once regulators intervene. Regarding lending, other work has found that banks issue more favourable loan terms once they are subject to an enforcement action.

Detailed data on regulatory intervention in Europe is only scarcely publicly available; it is particularly inaccessible with regard to the ECB's practice. We therefore focus on the evolution of enforcement actions by U.S. regulators. Our analysis indicates that U.S. regulators are quite active in sanctioning banks and issue on average about 500 enforcement actions against banks in the U.S. per year. The data also shows that the activity of U.S. regulators has increased since the financial crisis. Regarding the issuance of monetary penalties against banks in the U.S. we find that the aggregate amount of fines was very large in 2014 and 2015, where U.S. regulators issued total fines of more than 2 billion USD. This activity was primarily driven by monetary penalties against large banks in the U.S. due to wrongdoings in money laundering and their trading behaviour in foreign exchange markets.

We conclude by focusing on the interplay between different supervisors regarding the execution of enforcement actions. To ensure that enforcement actions contribute to financial stability, it is of utmost importance that supervisory authorities have adequate sanctioning powers at their disposal that allow them to react swiftly and effectively once relevant infringements of the regulatory framework are detected. Two things are particularly important. First, the regulatory framework has to allow that sanctions are set within the efficient range to correct social harm and serve as a

deterrent and thus should not be truncated at suboptimal levels. Our analysis indicates that regulators in the Banking Union have the ability to set fines at efficient levels. Second, the procedure for imposing sanctions has to be practically workable. An inefficient overlap of competences of multiple agencies may compromise the incentive effects of enforcement actions. Regarding the Banking Union, it is important to note that the hub and spokes-approach of the SSM with its division of competences between the ECB and NCA provides an additional impediment to the effective sanctioning of banks. These shortcomings should not be neglected.

1. INTRODUCTION

This paper was requested by the European Parliament under the supervision of its Economic Governance Support Unit.

Prudential regulation and supervision aims at ensuring the stability and soundness of the banking sector. Since disruptions due to bank failures pose negative externalities and tend to be followed by a significant slowdown in real economic activity, policy makers provide regulators with different toolkits to ensure stability. In addition to regulatory prescriptions for banks' capital and balance sheet compositions, bank supervisors monitor institutions' activities and can intervene if threats to their stability emerge.

In particular, regulators can step in and correct bank behaviour and/or levy monetary sanctions against banks and/or personnel to address deficiencies that may threaten the soundness of banks. This ability is an important feature of banking supervision as market discipline may not necessarily provide sufficient incentives for shareholders to restrict banks' risk taking. First, due to opaqueness of bank business models (Morgan, 2002) regulators may have better information than market participants. Second, distortions to competition, such as implicit government guarantees, may undermine market participants' incentives to monitor and further incentivize banks to take on more risk, undermining financial stability. To address these shortcomings, regulators need the ability to intervene with a view to protecting financial stability, particularly because any form of private enforcement, for instance in the form of class actions against banks, is also impeded by the informational asymmetries just described.¹

Theory suggests that the severity of regulatory intervention should be set at a level that compels banks to internalize the external costs they cause due to misconduct. This will improve financial stability because banks receive an adequate incentive to mitigate existing deficiencies and are also deterred from engaging in unsafe and unsound banking practices. Detailed information on the magnitude and type of enforcement actions taken by regulators against banks is, however, often not readily available. Moreover, differences in the supervisory architecture and the enforced regulations complicate the comparison of supervisory interventions across jurisdictions.

In this in-depth analysis we discuss the role and effect of sanctions against banks, compare the legal framework in the Banking Union and the U.S., and provide empirical evidence from the U.S. regarding the evolution of enforcement actions in recent years. In particular, we start in chapter 2 and highlight legal and economic arguments regarding the benefits and costs of regulatory intervention. Following this, we discuss the legal framework that governs enforcement actions against banks in the Banking Union and in the U.S. in chapter 3. This chapter aims at identifying areas where the pertinent legal framework in the Banking Union requires improvement as we compare the key features of the sanctioning procedure in the SSM with the situation in the United States. In chapter 4 we present and discuss empirical findings regarding the impact of enforcement actions on bank behaviour. Exploiting data on enforcement actions in the U.S., chapter 5 presents information on the evolution of enforcement actions against banks in the U.S. and the level of monetary penalties against U.S. banks over the recent years. Chapter 6 concludes by synthesizing the findings of the previous sections and outlining potential ways forward.

¹ Where regulation is enforced in a meaningful manner through private action as well, setting administrative (and/or criminal sanctions) at the levels we describe in chapter 2 will result in excessive liability of wrongdoers and welfare decreasing over-deterrence.

2. TRADE-OFFS OF ENFORCEMENT ACTIONS

The banking sector is, in comparison to other sectors of an economy, more opaque (Morgan, 2002), and debt governance doesn't work effectively (Dewatripont and Tirole, 1994). This provides a rationale for prudent regulation. To limit possible detrimental effects of bank failures, prudential banking regulation and supervision is designed to ensure a safe and sound banking system.

Enforcement actions by supervisory authorities against financial institutions are powerful tools to achieve this end. First, they embody supervisors' legal powers to intervene in a bank's operations to restore and/or ensure safety and soundness. Moreover, the ability of supervisors to levy fines in reaction to a bank's misconduct is a deterrent that provides banks with the necessary incentives to implement internal structures and control procedures that guarantee safe and sound banking practices, thereby increasing financial stability (Elderfield, 2012).

The momentum of prudential banking regulation hinges critically on the sanctions imposed when a breach of applicable rules or standards occurs. Ideally, sanctions are set at a level that induces optimal precaution against any realization of conduct risk. To achieve this, typically, the wrongdoer should be compelled to internalize the (social) costs of her action. A potentially liable party will invest in additional precautions against a breach of law (for instance by enhancing internal compliance regimes and review procedures) if the marginal costs of such an investment are lower than the corresponding benefits in the form of a lower liability risk. If the expected liability equals social costs investments in precaution are automatically set at socially optimal levels (for the general theory see Shavell, 1980, 1987). Rational agents will calculate the expected private costs of misconduct by multiplying the expected sanction with the detection probability.²

Enforcement actions, however, may also inflict a cost to financial stability. In particular, an ex post enforcement approach to bank misconduct may be suboptimal as such behaviour may be an industry-wide phenomenon (Skinner, 2016). If this is the case, enforcement actions, by their very nature, are not able to cure the underlying problem retroactively and may even exacerbate systemic risk by levying fines from an already troubled financial sector. Moreover, due to the opaqueness of banks, the disclosure of (large) fines that sanction misconduct may undermine confidence in the whole sector regardless of the actual existence of industry-wide problems and thereby also threaten financial stability (European Systemic Risk Board, 2015). Thus, the aim to address problems at one institution may unintended spill over and affect the health of other banks. If this effect is anticipated, a threat to impose large fines, particularly on systemically important institutions, may not be credible from the start. As a consequence, the impact of such implausible sanctions on bank behaviour may be mute.

Additionally, concerns regarding the real effect of sanctions for misconduct may emerge as fines represent a shock to a bank's profits. Since the disclosure of enforcement actions against a bank also highlights shortcomings in bank management (compliance organization, risk management), this signal may be followed by a withdrawal of deposits or funds from other, more sophisticated debt holders. Eventually, this funding shock may lead to a decrease in bank lending with detrimental effects for the real sector.

² Hence, if the detection probability is less than 100%, the sanction should be raised accordingly to force decision makers to take the consequences of their behaviour fully into account: if, for instance, violations are detected only in 80% of the cases the sanction should equal 125% of the social costs (on the rationale for super-compensatory sanctions (punitive damages) see generally Cooter, 1989; Polinsky and Shavell, 1998). The general theory also holds with regard to corporate entities/groups under the assumption that the institutions of corporate governance—by and large—force executives to fully reflect potential sanctions in their decisions on behalf of the firm that would benefit from a violation of prudential banking regulations (for a more general discussion of the issue see Polinsky, 1980; Shavell, 1987).

3. LEGAL FRAMEWORK FOR IMPOSING SANCTIONS FOR VIOLATION OF PRUDENTIAL BANKING REGULATION

This chapter describes the key features of the regulatory framework that determines the range in which sanctions for the violation of prudential banking regulation are set and the procedure that governs the imposition of these sanctions. We deliberately do not examine liability based on criminal offenses – although we acknowledge that it plays an important role in the United States at least during recent years (see 3.3.3) – because European prudential banking regulation does not provide for any criminal sanctioning powers to national or supranational supervisors. Our analysis starts with a general sketch of the typical structure of enforcement proceedings in prudential banking regulation (see 3.1) and then focuses specifically on the powers to impose fines in the Banking Union (see 3.2) and briefly compares the situation with that in the United States (see 3.3).

3.1 General structure of enforcement proceedings in prudential banking regulation

Typically, enforcement actions emerge out of continuous supervision or bank exams that indicate deficiencies in the management of the bank or reveal financial problems. Reasons for initiating enforcement actions due to managerial problems may be, for instance, unsatisfactory management, poor loan administration, insufficient corporate planning or inadequate internal controls. In addition, enforcement actions may be due to financial issues, such as low capital, large volume of subquality assets, failure to recognize or charge off losses, poor liquidity, unwarranted dividends or other insider payments, or failure to file (accurate) reports with regulators (Curry et al., 1999).

Supervisors will usually seek to remedy deficiencies in a bank's management or financial situation through informal enforcement proceedings, which have a dialogical structure (for a description of the U.S. approach see Federal Reserve, 2016, ch. 5). Formal enforcement actions represent a stronger regulatory intervention. If an institution, for instance, engages in unsafe, unsound or unlawful practices supervisors can initiate a formal enforcement action, to compel an institution to remedy the problem. Most of these enforcement measures take the form of enforcement orders that require the supervised institution to take specific actions to remedy the problems identified directly. For instance, the ECB can use respective supervisory powers laid down in art. 16(2)(b) and (c) of the SSM Regulation to improve management soundness and risk coverage or to restore adequate capital levels, while U.S. authorities can issue safety and soundness orders under the Federal Deposit Insurance Act, 12 U.S.C. § 1831p-1, or prompt corrective action orders under the same law, 12 U.S.C. § 1831o, to achieve similar goals. In addition to these orders that directly command action (or omission) certain (severe) violations of prudential banking regulation are threatened with monetary sanctions (especially fines) to ensure compliance in the first place.

3.2 SSM

The EU Treaties have not conferred to the EU a general competence to impose criminal sanctions; only the power to impose administrative sanctions has been conferred to the EU in specific fields by acts of secondary EU law (Riso, 2014). However, from a functional perspective, this distinction may only be of secondary importance: as long as sanctioning levels and procedures are in line with key desiderata (see 2), the practical outcomes will accord with the social optimum and the legal classification of the pertinent regime will remain largely irrelevant in this respect.

In the context of the SSM the more meaningful distinction is between breaches of directly applicable EU law (see 0), of all other supranational or national prudential banking regulation that bears on the functioning of the SSM (see 0), of ECB regulations and decisions (see 0), and of all other relevant law (see 0).

3.2.1 Breaches of directly applicable EU law

Art. 18(1) of the SSM Regulation³ empowers the ECB to sanction supervised entities who, “intentionally or negligently, breach a requirement under relevant directly applicable acts of Union law in relation to which administrative pecuniary penalties shall be made available to competent authorities under the relevant Union law”. According to art. 288 of the TFEU⁴ only regulations are directly applicable in all Member States whereas directives have to be transposed into national legislation in order to become directly applicable. As a consequence, the ECB is competent to directly sanction breaches of provisions of the CRR⁵ but not those of provisions in national banking regulation that transpose CRD IV⁶ (for a discussion Schneider, 2014).

The objective scope of the sanctioning powers is hence confined to violations of own funds requirements, large exposure limits, liquidity requirements, and related reporting and public disclosure requirements. These highly prescriptive rules are of a rather technical nature and relate, at best, indirectly to improper business conduct, inappropriate supply of financial services etc. Prudential requirements with a direct bearing on these aspects can be found only in CRD IV within pillar two, where standards for proper business organization, adequate risk monitoring systems, adequate internal control systems etc. are laid down.⁷ Hence, the ECB has no competence to directly sanction violations of harmonized national prudential banking regulation. Furthermore, its autonomous sanctioning power is generally confined to those significant institutions that fall under its direct supervision (Schneider, 2014; ECB, 2017), i.e. even if violations of CRR provisions occur at less significant banks, the ECB is not competent to sanction these breaches of prudential banking regulation.

Art. 18(1) of the SRM Regulation creates an autonomous sanctioning power for the ECB which allows the supranational supervisor to determine the range of pecuniary sanctions independent of national prudential banking regulation in the Member States. In doing so it has to follow the (adapted) procedure laid on in Regulation (EC) 2532/98 and thus has to act in line with procedural guarantees. The range for administrative pecuniary penalties goes

- up to twice the amount of the profits gained or losses avoided because of the breach where those can be determined, or
- up to 10 % of the total annual turnover of a legal person in the preceding business year,⁸ or
- up to any other ceiling as may be provided for with regard to other pecuniary penalties in relevant Union law.⁹

As a consequence, substantial pecuniary sanctions can be imposed, giving room for their socially desirable calibration. In particular, even (moderate) super-compensatory sanctions can be imposed to reflect limited detection probabilities. It is an important feature of EU law that it allows to impose high sanctions for short or even one-time violations. This seems superior to systems where

³ Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, OJ L 287, 29.10.2013, p. 63.

⁴ Consolidated version of the Treaty on the Functioning of the European Union, OJ C 326, 26.10.2012, p. 47.

⁵ Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, OJ L 176, 27.6.2013, p. 1.

⁶ Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, OJ L 176, 27.6.2013, p. 338.

⁷ Relevant provisions can also be found in MiFID II and MiFIR which fall outside the scope of banking supervision altogether.

⁸ Art 18(2) of the SSMR and art. 128 of the SSM Framework Regulation define the total turnover as that stated in the consolidated account of the ultimate parent undertaking.

⁹ This provision is meant to leave room for future developments, Riso (2014).

penalties are strictly based on the period during which the respective violation occurred, because fines can approximate social harm regardless of the temporal dimension of the misconduct. Under these preconditions, administrative sanctioning powers are apt to capture the full damage caused.

Art. 18(6) of the SSM Regulation requires the ECB to publish any penalty imposed under art. 18(1) of the SSM Regulation thereby adding a reputational dimension to its public enforcement efforts (on the high significance of these market-based effects see Armour et al. 2016).

3.2.2 Breaches of all other banking regulation that bear on the functioning of the SSM

If violations of any other prudential banking regulation occur, art. 18(5) of the SSM Regulation empowers the ECB to request NCAs to open proceedings where necessary for the purpose of carrying out the ECB's tasks under the SSM Regulation. Although sanctioning powers remain assigned to NCAs only, the ECB is tasked with ensuring that appropriate penalties are imposed in accordance with (a) national legislation transposing EU Directives, with (b) national legislation exercising options granted under EU Regulations for Member States and with (c) any relevant national legislation that confers specific powers that are currently not required by Union law. Besides pecuniary sanctions imposed on credit institutions this also includes administrative penalties or measures imposed on members of the management bodies or any other responsible individuals as well as non-pecuniary penalties (for this interpretation see also ECB, 2017). The scope of the ECB power to initiate proceedings is once again limited to significant banks under direct ECB supervision where the ECB not only has sufficient information to make the relevant determinations but also has an immediate responsibility to ensure an enforcement of prudential regulation as uniformly as possible.

However, even with regard to significant banks under direct ECB supervision national fragmentation of sanctioning regimes survives within the SSM. The extent and preconditions for sanctioning some of the most relevant violations relating to business conduct, supply of financial services etc. are left to the discretion of national regulators implementing art. 65 et seq. of CRD IV. Yet, since the promulgation of CRD IV, the manoeuvring space for Member States may not be that large in the end, because arts. 66(2)(c) and (e), 67(2) (e) and (g) of CRD IV require the range of sanctions to reach 10% of total annual net turnover or twice the amount of the benefit derived from the breach, thus corresponding to the sanctioning powers of the ECB under art. 18(1) of the SSM Regulation. The regulatory framework hence does not impede the evolution of uniform sanctioning practices also with regard to the magnitude of the penalties imposed by either the ECB or NCAs. However, a potentially momentous flaw of the regime follows from the observation, that the power to initiate proceedings could prove rather ineffective in practice, because NCAs might not pursue cases with utmost dedication and vigour if they are not convinced on the merits and only follow ECB orders (see Tröger, 2014). Quite importantly, it is unsettled as a matter of law whether the ECB can influence proceedings beyond compelling their initiation, in particular, whether the ECB can influence the magnitude of sanctions set under (harmonized) national law and thus make a significant contribution to fully aligning Member States' sanctioning practices within the SSM.

3.2.3 Breaches of ECB regulations and decisions

Art. 18(7) of the SSM Regulation allows the ECB to sanction breaches of its regulations and decisions in accordance with Regulation (EC) 2532/98.¹⁰ Originally, the sanctioning power was not promulgated with a view to supervisory matters. After the introduction of the SSM, however, the sanctioning power conferred to the ECB now also extends to its supervisory tasks. Yet, the requirement of prior supervisory action beyond the CRR/CRD IV framework (adoption of specific

¹⁰ Council Regulation (EC) No 2532/98 of 23 November 1998 concerning the powers of the European Central Bank to impose sanctions, OJ L 318, 27.11.1998, p. 4.

regulations or individual decisions) and the limited powers to impose sanctions¹¹ will prevent art. 18(7) of the SSM Regulation from getting more than secondary importance.

3.2.4 Breaches of all other relevant prudential banking regulations

Sanctions for all other breaches of prudential banking regulation remain in the exclusive domain of Member States that are only bound by the harmonizing prescriptions in art. 65 et seq. of CRD IV (see supra 3.2.1). Under the restrictive interpretation of Art. 18(5) of the SSM Regulation (ibid.) the ECB has no competence to influence actual sanctioning practices under harmonized national banking laws.

3.3 United States

Aside from criminal liability enforced by the Department of Justice, U.S. banking laws provide two legal bases for supervisory authorities to impose sanctions on banks where conduct risks materialize. The important distinction is between purely corrective (non-punitive) orders (see 0) and civil money penalties which fine identified violations of prudential banking regulation (see 0).

3.3.1 Cease and desist order

Under the Federal Deposit Insurance Act, 12 U.S.C. § 1818(b), the competent regulator may adopt a cease and desist order against insured depository institutions or any institution-affiliated parties, including individuals, not only in case of a violation of a law, rule, or regulation, or any condition imposed in writing by a Federal banking agency, but also where “unsound or unsafe practices” occur (see 12 U.S.C. § 1818 (b)(1)). The latter requires a breach of the basic principles of proper conduct of business, and can thus be understood as a very broad, fiduciary duty-linked standard that requires specification through supervisory practices (for an insightful discussion see Schooner, 1995) and stands in stark contrast to the far more rule based approach in the EU (supra 0).

With regard to the legal consequences, the competent authorities may not only require the respective party to cease and desist from the unsound practice or violation going forward, but also oblige them to take affirmative action to correct the conditions resulting from any such violation or practice. The design of affirmative actions is very flexible, and it also includes claims for damages, restitution, reimbursement, indemnification, or guarantee against loss, 12 U.S.C. § 1818 (b)(2). However, such cease and desist orders may not be of a punitive nature, but must serve “as a means of correcting improprieties”, see *First National Bank of Bellaire v. Comptroller of the Currency*, 697 F.2d 674, 683 (5th Cir.1983).

3.3.2 Formal written agreements

Instead of issuing a cease and desist order, U.S. supervisory authorities can also choose at their discretion to conclude a formal written agreement under 12 U.S.C § 1818(b) with the same regulatory content. As a contractual form, these agreements require the consent of the bank. Further sanctions, especially civil money penalties can be issued if the agreement is breached, regardless of whether any specific banking regulation has been violated, 12 U.S.C. § 1818(e)(i).

¹¹ The ECB can impose fines to the upper limit of EUR 500,000 and periodic penalty payments to the upper limit of EUR 10,000 per day of infringement, for a maximum period of six months, see Art. 2(1) of Regulation (EC) 2532/98.

3.3.3 Civil money penalty

With regard to punitive claims, the competent authority has the competence to impose civil money penalties. With regard to the gravity of the violation of prudential banking regulation, three different tiers that are unrelated to regulatory capital requirements¹² and ascend with the graveness of the violation can be distinguished:

- **Tier 1:** Violation of any law, regulation, final order, temporary order pursuant to 12 U.S.C. § 1818 (b), (c), (e), (g) or any final order under 12 U.S.C. § 1831o or § 1831p-1, any condition imposed by a Federal banking agency or agreed on in writing by a Federal banking agency and the respective institution. The penalty imposed may not exceed USD 9,623 for each day during which such violation continues, 12 U.S.C. § 1818 (i)(2)(A).¹³
- **Tier 2:** Violation as in Tier 1, or reckless engagement in an unsafe or unsound practice in conducting the affairs of the insured depository institution, or breach of fiduciary duty if such violation, practice, or breach is either a part of a pattern of misconduct, or causes/is likely to cause more than a minimal loss to the institution, or results in pecuniary gain or other benefit to the wrongdoer. The penalty imposed may not exceed USD 48,114 for each day during which such violation, practice, or breach continues, 12 U.S.C. § 1818 (i)(2)(B).
- **Tier 3:** Deliberate violation as in Tier 1/deliberate engagement in any unsafe or unsound practice/deliberate breach of fiduciary duty causing knowingly or recklessly a substantial loss to a depository institution or a substantial pecuniary gain or other benefit to the wrongdoer, by reason of such violation, practice, or breach. The penalty for each day during which such violation, practice, or breach continues may not exceed
 - in the case of any person other than an insured depository institution, an amount of USD 1,924,589, 12 U.S.C. § 1818 (i)(2)(C)
 - in the case of any insured depository institution, an amount the lesser of USD 1,924,589, or 1 % of the total assets of such institution, 12 U.S.C. § 1818 (i)(2) (D).

Civil money penalties may thus be imposed within Tier 2 and Tier 3 for unsafe or unsound practice in conducting the business of a depository institution or for breach of fiduciary duty without prior breach of specific rules, regulations or orders of the competent authority, provided all other conditions are fulfilled. Particularly for breaches that extend over a longer period, U.S. prudential banking regulation allows to hand-down severe penalties for any realization of conduct risks. In these scenarios, the range for civil money penalties allows competent authorities to calibrate sanctions in accordance with the policy recommendations outlined.

Since 1989 the US Department of Justice (DOJ) has the power to seek civil money penalties against any person that violates one or more of fourteen enumerated criminal statutes that involve federally insured financial institutions, 12 U.S.C. 1833a. The DOJ has revitalized the provision that was promulgated as a reaction to the savings and loan crisis of the 1980s¹⁴ to impose multi-billion dollar penalties on financial institutions in the wake of the crisis of 2007/08. Courts have supported this approach by acknowledging that banks themselves can be liable under FIRREA, see *United States v. The Bank of New York Mellon*, 941 F.2d 438 (S.D.N.Y. 2013). The critical lever is that FIRREA allows to increase the penalty up to the amount of the pecuniary gain that any person derives from the violation, or the amount of pecuniary loss suffered by any person, 12 U.S.C. 1833a(b)(3). On the eight factors relevant for the determination see *United States v. Menendez* No. CV 11-06313, 2013 WL 828926 (2013 C.D. Cal.). Hence, the headline-grabbing sanctions for banks in the US are a rather recent phenomenon and result from the violation of criminal statutes.

¹² CRR art. 92(1) distinguishes Common Equity Tier 1 (CET1), Additional Tier 1 (AT1) and Tier 2 (T2) capital.

¹³ All maximum penalties described here deviate from the amounts laid down in the respective statutory provisions in the U.S.C. because they are inflation adjusted by administrative order of the competent authorities, see Bipartisan Budget Act § 701, Pub.L. 114-74, 129 Stat. 599-601.

¹⁴ Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), Pub.L. 101-73, 103 Stat. 183.

3.3.4 Competent authorities

Although the U.S. also involves a multitude of supervisory authorities in the oversight of its financial sector, no multi-level regime of shared competences exists. Each supervisory authority administers and enforces the pertinent aspects of prudential banking regulation for those institutions that come under its remit autonomously. Hence, the Federal Reserve is the prudential regulator for bank holding companies, U.S. branches of foreign banks, foreign branches of U.S. banks and state chartered banks that are members of the Federal Reserve System as well as non-bank financial institutions that have been determined to be systemically important. The OCC is the prudential regulator for federally chartered banks and federally chartered branches of foreign banks. Finally, the FDIC administers the federal deposit insurance fund and plays a key role in the resolution of banks and (since Dodd Frank) other systemically important financial institutions.

4. EMPIRICAL EVIDENCE ON THE EFFECT OF BANK SANCTIONS

In this chapter we survey the literature to shed light on the general effects of sanctions imposed on banks. As none of the empirical studies discussed is comparative, they do not allow any inferences on the relative effectiveness of the underlying regimes.

4.1 Enforcement action and changes in bank behaviour

Empirical evidence indicates that deteriorations in banks' financial condition lead to enforcement actions. Peek and Rosengren (1997) find evidence that the likelihood of initiating a formal enforcement action by U.S.-regulators against a bank is related to the bank's balance sheet variables that reflect bank health, such as capital ratios, past due loans or loan loss reserves. Analysing the causal impact of regulatory intervention on bank behaviour is thus difficult as other factors affecting bank behaviour occur simultaneously.

In two early studies of banks in the U.S., Peek and Rosengren (1995, 1996) find that institutions that were subject to an enforcement action decreased their assets more if they were also poorly capitalized. Furthermore, affected banks also decreased their commercial real estate lending more than banks that were not subject to an enforcement action. Studying whether enforcement actions that focus on the safety and soundness of banks affect bank behaviour differently, Delis et al. (2016a) confirm the earlier general findings. They show that enforcement actions encourage banks to reduce their risk-weighted assets, which allows these banks to increase their risk-based capital ratio, but not necessarily their capital base. Moreover, Delis et al. (2016a) find that the timing of supervisory intervention via enforcement actions is important: the impact of enforcement actions on a bank's risk-based capital ratio is smaller if regulators defer their action in response to a deterioration of the bank's financial health.

Using supervisory data on regulatory intervention by German regulators, Berger et al. (2016) show that German banks decrease their liquidity creation when they are subject to supervisory intervention. Berger et al. (2016) however also find that banks do not reduce lending once they are subject to supervisory intervention and the overall reduction in liquidity creation is the result of changes in the liabilities structure of banks. Cross-country evidence from Delis and Staikouras (2011) finds that on average sanctions against banks lead to a reduction in risk, correspondingly improving financial stability. Exploiting information from Italian banks, Caiazza et al. (2014) present evidence that enforcement actions are followed by an improvement in bank stability. However, this development takes time: in their analysis the authors find that banks are not able to improve stability in the first year after the enforcement action, but rather need at least two years to increase their soundness. Again, using information from Italian banks, Caiazza et al. (2015) find evidence of a deterrent effect of enforcement actions as they find that banks increase their stability when their likelihood of being subject to an enforcement action increases. This finding is consistent with the idea that the possibility of supervisors to initiate enforcement actions disciplines bank managers and increases stability even though no enforcement action is actually taken.

4.2 Real and financial costs of enforcement actions

Focusing on bank lending in the U.S., Delis et al. (2016b) find that enforcement actions are followed by changes in the financing arrangement of a loan syndicate. In particular, they find that enforcement action against a lead arranger in a syndicate discourages participants of the syndicate to finance a loan. To ensure that the syndicate is financing the loan, the lead arranger must increase his share. This is consistent with the idea that enforcement actions signal problems at a specific bank and hence other banks (in a syndicate) react by requiring that bank to have more skin in the game. Similarly, Delis et al. (2016b) study whether an enforcement action is followed by changes in loan pricing. The authors find that a bank decreases its loan prices for borrowers and loans are

running for a longer maturity once a bank is subject to an enforcement action. This suggests that borrowers benefit from enforcement actions and experience more favourable loan terms.

Considering bank competition, Manser (2014) uses information on U.S. enforcement actions and finds that rival banks also change their competition when banks are subject to enforcement actions. In particular, he finds that competition between banks becomes softer once regulators initiate enforcement actions at competing banks. This suggests that enforcement actions lead to a reduction in competition among banks. Hence, even though supervisory interventions tend to increase bank safety they also limit bank competition.

Fiordelisi et al. (2016) study whether enforcement actions are followed by changes in a bank's corporate culture. Using information from U.S. banks over the years 2006 to 2013, they compare changes in corporate culture between sanctioned and non-sanctioned banks and find little difference. This suggests that enforcement actions do not affect bank culture.

5. ENFORCEMENT ACTIONS IN EUROPE AND THE UNITED STATES

In this chapter we briefly discuss the disclosure of enforcement actions in Europe and touch on publicly available data to assess the prevalence of bank sanctions. We then provide a short overview of the role of regulators and supervisors in the United States with respect to the execution of enforcement actions against financial institutions and present descriptive statistics regarding the evolution and magnitude of enforcement actions against financial institutions in the U.S.

5.1 Enforcement actions in Europe

5.1.1 Institutional background

Art 68(1) of CRD IV stipulates that “Member States shall ensure that the competent authorities publish on their official website at least any administrative penalties against which there is no appeal [...], including information on the type and nature of the breach and the identity of the natural or legal person on whom the penalty is imposed”. Art. 18(6) of the SSM Regulation contains a similar disclosure obligation for the ECB. Thus, similar to the publishing regime for U.S. supervisors, competent authorities in the EU shall disclose the nature and amount of monetary penalties they impose.

5.1.2 Data from bank regulators

We visited several websites of NCAs and found limited information on the nature and/or amount of administrative penalties. While some NCAs publish information on the type of enforcement action against banks, the level of detail and additional information differs substantially across Europe. We could not find any relevant information on the ECB website.¹⁵ Our observations are in line with the findings of a recent report by the EBA, which documents great heterogeneity in the level of transparency regarding the issuances of enforcement actions across European banking regulators (European Banking Authority, 2015).

5.1.3 Alternative data sources

CCP Research Foundation, an organization supporting and encouraging research on regulatory penalties or other conduct costs of banks collates information on the amount of conduct costs of selected European banks, including legal penalties. Aggregate statistics and information on the nature of the underlying fines are available on the website of the foundation.¹⁶ Additional information for individual banks can be purchased from CCP Research Foundation and thus cannot be evaluated here. It is important to note that CCP Research Foundation aims at measuring a firm’s conduct costs. This is a broader definition and incorporates fines imposed by regulators or other authorities, as well as other conduct costs. Although CCP Research foundation is still collecting information, they provide a short analysis of the breakdown of different cost categories for U.K. banks over the period 2008 to 2013. Their analysis indicates that fines by regulators or other authorities account for about 14% of U.K. banks’ conduct costs (CCP Research Foundation, 2015).

¹⁵ The last available report on the ECB’s supervisory activities only mentions that a few enforcement actions had been initiated, but – presumably – were not completed with the imposition of fines, ECB (2015, at 54)

¹⁶ <http://www.ccpresearchfoundation.com/>

5.2 Enforcement actions in the U.S.

5.2.1 Institutional background

As noted earlier (supra 3.2), federal law enables the respective federal authorities to initiate and conduct enforcement actions autonomously. Formal enforcement actions have to be disclosed to the public (12 USC § 1818(u)).

5.2.2 Overview of enforcement actions in the U.S.

U.S. regulators disclose enforcement actions to the public, reporting the infraction and the type of enforcement action employed. We will start by describing the evolution of enforcement actions by U.S. regulators over the last 15 years, where we highlight the prevalence of certain severe enforcement actions. Following this, we will examine the amount of civil money penalties imposed on banks by U.S. regulators over the last four years.

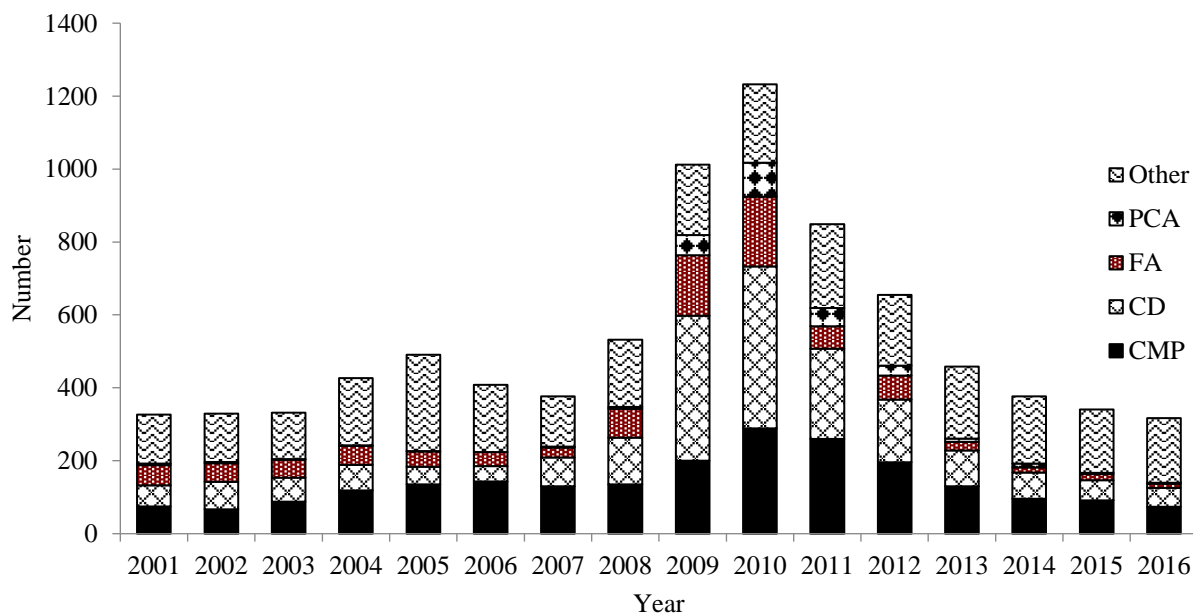
5.2.2.1 Data source

SNL Financial provides aggregate information on the type of enforcement action against banks in the U.S. since 2000. We gather information about the issue date and type of enforcement action and group the enforcement actions based on frequency and severity in the following five groups: Formal Written Agreements/Supervisory Agreements (FA); Cease and Desist Orders (CD); Prompt Corrective Actions (PCA); Civil Money Penalties (CMP) and Others (for a detailed description of the respective actions see 3.1, 3.3.1, 3.3.2, and 3.3.3). The most frequent enforcement actions in the group of unspecified measures are sanctions against personnel.

5.2.2.2 Enforcement Actions by U.S. Regulators from 2001 to 2016

Figure 1 plots the evolution and composition of enforcement actions in the U.S. from 2001 to 2016. Over that period, U.S. regulators executed on average 529 enforcement actions every year, where a quarter of all enforcement actions over the sample period are civil money penalties. These fines include monetary penalties against banks and also fines levied against a person. The most common enforcement actions are cease and desist orders.

Figure 1: Enforcement actions by U.S. regulators (2001 – 2016)



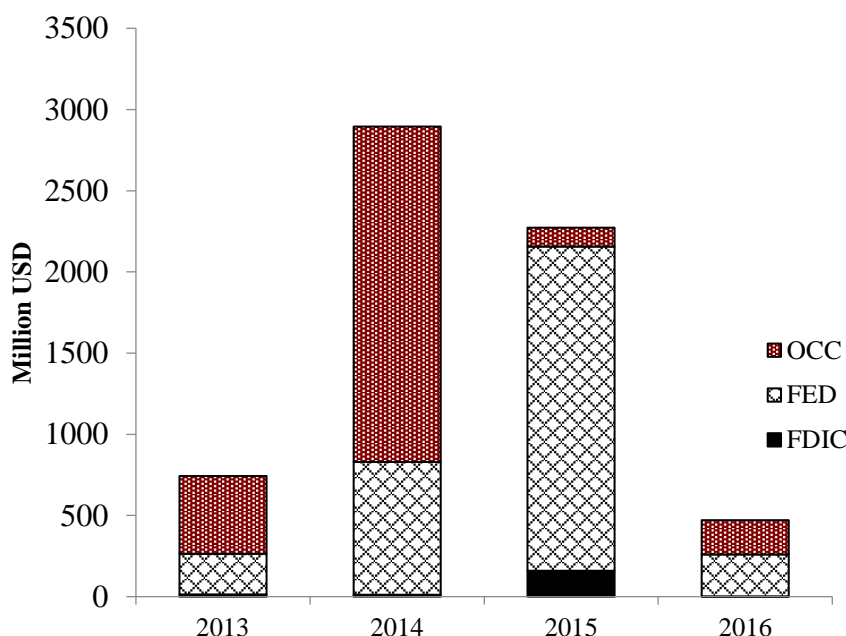
Source: SNL Financial.

Figure 1 indicates a spike in the issuance of enforcement actions after the financial crisis, as the number of enforcement actions is higher in the years 2009 to 2012. Specifically, the number of civil money penalties as well as the number of cease and desist orders increased over that period. This indicates a larger intervention by U.S. supervisors to address deficiencies in the banking sector.

5.2.2.3 Level of civil money penalties from 2013 to 2016

SNL Financial does not provide information on the amount of fines against banks. Hence, we collect disclosed information, available on the website of the Federal Reserve, the FDIC and the OCC and gather information about the amount of civil money penalties against banks.¹⁷ Figure 2 plots the amount (in million USD) of these civil money penalties against banks for the years 2013 to 2016 by supervisory authority.

Figure 2: Level of total civil money penalty by year and regulator (2013 – 2016)



Source: Own computation. Websites of Federal Reserve, FDIC and OCC.

The amount of monetary penalties against banks differs by regulator, which is in part a function of the characteristics (size) and business models of the supervised entities. On average, total fines levied against banks by the FDIC amounts to about 50 million USD per year. Over the same four years, the Federal Reserve and the OCC issued civil money penalties of about 830 million USD and 720 million USD, respectively. A particular high level of fines drives this in 2014 by the OCC and high monetary penalties by the Federal Reserve in 2013. In 2014, the OCC levied fines of more than 2 billion USD, which is concentrated on large U.S. banking organizations due to unsafe and unsound bank practices.¹⁸ Similarly, in 2015 the Federal Reserve levied a total of almost 2 billion USD in fines, mostly due to civil money penalties against large foreign and domestic banks due to their trading behaviour in foreign exchange markets.¹⁹

¹⁷ Not included are fines against personnel. These fines tend to be smaller.

¹⁸ In particular, the OCC fined Bank of America, Chase Bank, Citibank, JP Morgan Chase, JP Morgan Bank and Trust due to findings related to money laundering and trading behaviour on foreign exchange markets.

¹⁹ "\$342 million each for UBS AG, Barclays Bank PLC, Citigroup Inc., and JPMorgan Chase & Co.; \$274 million for Royal Bank of Scotland PLC (RBS); and \$205 million for Bank of America Corporation. The Federal Reserve also issued cease and desist orders requiring the firms to improve their policies and procedures for oversight and controls over activities in the wholesale FX and similar types of markets." (Federal Reserve System, 2015).

6. CONCLUSIONS

Regulatory intervention and the issuing of enforcement actions or monetary penalties are powerful tools to correct deficiencies and ensure bank stability. Empirical evidence further indicates that enforcement actions help restore bank stability, contributing to a safe and sound banking system.

Examining the evolution of enforcement actions in the U.S. the data indicate that U.S. bank regulators make considerable use of their regulatory power. About a quarter of all regulatory interventions are comprised of fines against banks and/or personnel. Focusing on the issuing of civil money penalties across different regulators in the U.S. is also interesting since banks in the U.S. are supervised by different regulators. While the Federal Reserve and the OCC supervises large institutions, the FDIC is the primary regulator for all smaller banks. Consistent with this, we also find that the total monetary penalties, issued by the Federal Reserve or the OCC are much larger than the fines by the FDIC.

To ensure that enforcement actions contribute to financial stability, it is of utmost importance that supervisory authorities have adequate sanctioning powers at their disposal that allow them to react swiftly and effectively once relevant infringements of the regulatory framework (regulations, orders etc.) are detected. Two aspects are critical:

- First, the regulatory framework has to allow that sanctions are set within the efficient range (that may exceed social harm) and are not truncated at suboptimal levels. We find that the EU regime, with regard to very harmful short-term or one-time violations even superior to its U.S. counterpart as it allows for sanctions to be calibrated in line with the social optimum.
- Second, the procedure for imposing sanctions has to be practically workable – an inefficient overlap of competences of multiple agencies will also compromise the incentive effects of the regime as a whole. Each U.S. supervisor has the independent authority to levy fines and issue enforcement actions. Regarding the Banking Union, it is important to note that the hub and spokes-approach of the SSM with its division of competences between the ECB and NCA authorities provides an additional impediment to the effective sanctioning of banks. These shortcomings should not be neglected, because only optimally calibrated sanctions handed out by effective enforcement authorities will induce socially optimal behaviour ex ante.

Moreover, sanctions imposed on banks need to be reported in a transparent and timely manner. Our research indicates that the available information regarding enforcement actions is scarce and the reporting is heterogeneous across Europe despite harmonized disclosure obligations. Unfortunately, the ECB cannot be seen as a role model. Clear and prompt disclosure of regulatory interventions is necessary to build confidence in the supervisory and regulatory processes. In light of the long-standing U.S. practice of comprehensive disclosure, concerns regarding detrimental effects of far-reaching transparency obligations seem unwarranted.

REFERENCES

- Armour, John, Mayer, Colin, and Andrea Polo, “Regulatory sanctions and reputational damage in financial markets”, *Journal of Finance and Quantitative Analysis*, forthcoming (2016).
- Berger, Allen N., Christa H.S. Bouwman, Thomas Kick, and Klaus Schaeck. "Bank liquidity creation following regulatory interventions and capital support.", *Journal of Financial Intermediation* 26 (2016): 115-141.
- Caiazza, Stefano, Matteo Cotugno, Franco Fiordelisi, and Valeria Stefanelli. "Bank Stability and Enforcement Actions in Banking." (2014).
- Caiazza, Stefano, Matteo Cotugno, Franco Fiordelisi, and Valeria Stefanelli. “‘When a Scoffer is Punished, the Simple Becomes Wise’--The Influence of Enforcement Actions on Bank Risk-Taking.” (2015).
- CCP Research Foundation, “CCP Research Foundation C.I.C., Conduct Costs Project - Preliminary Analysis - “Consequences of misconduct= “Conduct Costs” (not just ‘fines’)”, (2015)
- Cooter, Robert D. “Punative damages for deterrence: when and how much?”, *Alabama Law Review* 40: (1989): 1143-1196.
- Curry, Timothy J., John P. O’Keefe, Jane Coburn, and Lynne Montgomery. "Financially distressed banks: How effective are enforcement actions in the supervision process?." *FDIC Banking Review* 12 (1999): 1-18.
- Danisewicz, Piotr, Danny McGowan, Enrico Onali, and Klaus Schaeck. "The real effects of banking supervision: Evidence from enforcement actions." *Journal of Financial Intermediation* (2016).
- Delis, Manthos D., and Panagiotis K. Staikouras. "Supervisory effectiveness and bank risk." *Review of Finance* (2011).
- Delis, Manthos D., Panagiotis K. Staikouras, and Chris Tsoumas. “Formal Enforcement Actions and Bank Behavior” *Management Science*, forthcoming, (2016a).
- Delis, Manthos D., Maria Iosifidi, Sotirios Kokas, and Dimitrios Xefteris. "Enforcement Actions and the Structure of Loan Syndicates." (2016b).
- Dewatripont, Mathias and Jean Tirole, *The Prudential Regulation of Banks*, Cambridge: MIT Press (1994).
- ECB (2015), Annual Report on supervisory activities, https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssmar2015.en.pdf?76bfa705d9eb131cee_d673b36b94079a.
- ECB (2017), Enforcement and sanctions, <https://www.bankingsupervision.europa.eu/banking/tasks/enforcement/html/index.en.html>.
- Elderfield, Martin "Effective enforcement - encouraging compliance and good practice" Speech, Dublin, Ireland, December 11, (2012). BIS <http://www.bis.org/review/r121212g.pdf>.
- European Systemic Risk Board “Report on Misconduct Risk in the Banking Sector.” (2015).

- European Banking Authority “Report on the Publication of Administrative Penalties on an anonymous basis”. EBA OP/2015/18 (2015).
- The Federal Reserve System “The Federal Reserve System: Purpose & Functions” Federal Reserve System Publication (2016).
- The Federal Reserve System, Federal Reserve Announces Fines Totaling More Than \$1.8 Billion Against Six Major Banking Organizations For Their Unsafe And Unsound Practices In The Foreign Exchange (FX) Markets. 2015. Web. 20 Feb. 2017.
- Fiordilesi, Franco, Jacopo Raponi, and P. Raghavendra Rau. “Corporate culture and enforcement actions in banking“ (2015).
- Manser, Michael. “The Competitive Consequences of Regulatory Intervention in Risky Banks“ (2014).
- Morgan, Donald P. "Rating banks: Risk and uncertainty in an opaque industry." *The American Economic Review* 92, no. 4 (2002): 874-888.
- Peek, John and Eric S. Rosengren “Bank regulatory agreements in New England.” *New England Economic Review*. May/June (1995) 15-24.
- Peek, John and Eric S. Rosengren “Bank regulatory agreements and Real Estate Lending.” *Real Estate Economics*. (1996) 56-73.
- Polinsky, A. Mitchell., “Strict Liability vs. negligence in market settings”, *American Economic Review* 70 (1980): 363-367.
- Polinsky, A. Mitchell and Steven Shavell. “Punative Damages: an economic analysis”, *Harvard Law Review* 111 (1998): 869-962.
- Riso, Antonio L. “The Power of the ECB to Impose Sanctions in the Context of the SSM”, ECB DG Legal Services Working Paper, (2014).
- Schneider, Sven H. “Sanctioning by the ECB and national authorities within the Single Supervisory Mechanism”, *Europäische Zeitschrift für Wirtschaftsrecht* 25 (2014): 18-22.
- Schooner, Heidi M. “Fiduciary duties’ demanding cousin: Bank director liability for unsafe or unsound banking practices” *George Washington Law Review* 63 (1995): 175-220.
- Shavell, Steven. “Strict liability versus negligence”, *Journal of Legal Studies* 9 (1980): 1-25.
- Shavell, Steven. *Economic Analysis of Accident Law*, Cambridge: Harvard University Press. (1987).
- Skinner, Christina P. “Misconduct Risk” *Fordham Law Review* 84 (2016): 1559-1610.
- Srinivas, Val, Daniel Byler, Richa Wadhvani, Alok Ranjan, and Vamsi Krishna “Enforcement actions in the banking industry.” Deloitte University Press (2015).
- Tröger, Tobias. “The Single Supervisory Mechanism (SSM) – Panacea or Quack Banking Regulation?” *European Business Organization Law Review* 15 (2014) : 449-497.



Европейски парламент Parlamento Europeo Evropský parlament Europa-Parlamentet Europäisches Parlament
Euroopa Parlament Ευρωπαϊκό Κοινοβούλιο European Parliament Parlement européen Parlaimint na hEorpa
Europski parlament Parlamento europeo Eiropas Parlaments Europos Parlamentas Europai Parlament
Parlament Ewropew Europees Parlement Parlament Europejski Parlamento Europeu Parlamentul European
Európsky parlament Evropski parlament Euroopan parlamentti Europaparlamentet

QA-04-17-141-EN-C (paper)
QA-04-17-141-EN-N (pdf)

IPOL | **DIRECTORATE-GENERAL FOR INTERNAL POLICIES**
EGOV | **ECONOMIC GOVERNANCE SUPPORT UNIT**

Contact: egov@ep.europa.eu

For more information: <http://www.europarl.europa.eu/committees/en/ECON/home.html>

PE 587.401

ISBN 978-92-846-0587-3 (paper)

ISBN 978-92-846-0586-6 (pdf)

doi:10.2861/799094 (paper)

doi:10.2861/56174 (pdf)