ecgi

Regulatory Sanctions and Reputational Damage in Financial Markets

John Armour
University of Oxford and ECGI

Colin Mayer
University of Oxford CEPR and ECGI

Andrea Polo
Universitat Pompeu Fabra and Barcelona GSE

This paper can be downloaded without charge from:
http://ssrn.com/abstract_id=1678028

www.ecgi.global/content/working-papers

european corporate governance institute

Regulatory Sanctions and Reputational Damage in Financial Markets

John Armour
Colin Mayer
Andrea Polo

Abstract

We study the impact of the enforcement of financial regulation by the U.K.'s regulatory authorities on the market price of penalized firms. Existing studies rely on analyses of multiple events that may distort the measurement of reputational losses. In the United Kingdom, the entire enforcement process involves only one public announcement and is accompanied by complete information on legal penalties. We find that reputational losses are nearly nine times the size of fines, and are associated with misconduct harming customers or investors, but not third parties.

John Armour
Professor of Law and Finance
University of Oxford, Faculty of Law
St Cross Building, St Cross Road
OX1 3UL, Oxford, United Kingdom
phone: +44 1865 281616
e-mail: john.armour@law.ox.ac.uk

Colin Mayer
Peter Moores Professor of Management Studies
Oxford University, Saïd Business School
Park End Street
OX1 1HP, Oxford, United Kingdom
phone: +44 1865 288811
e-mail: colin.mayer@sbs.ox.ac.uk

Andrea Polo*
Assistant Professor of Finance
Universitat Pompeu Fabra and Barcelona GSE
Ramon Trias Fargas 25-27
08005, Barcelona, Spain
phone: +34 93 542 2641
e-mail: andrea.polo@upf.edu

*Corresponding Author

Regulatory Sanctions and Reputational Damage

in Financial Markets

John Armour, Colin Mayer and Andrea Polo*

We study the impact of the enforcement of financial regulation by the U.K.'s regulatory authorities on the market price of penalized firms. Existing studies rely on analyses of multiple events that may distort the measurement of reputational losses. In the United Kingdom, the entire enforcement process involves only one public announcement and is accompanied by complete information on legal penalties. We find that reputational losses are nearly nine times the size of fines, and are associated with misconduct harming customers or investors, but not third parties.

JEL Codes: G28, G38, K22, K42, L51

Keywords: Regulation, Reputation, Enforcement

I. Introduction

Reputational losses can be an important deterrent to misconduct (Klein and Laffler (1981), Shapiro (1983)). A common procedure for estimating reputational loss is to measure the impact of revelation of information about firm conduct on market values and associated costs.[1] Using this procedure, researchers have found that reputational losses resulting from misconduct affecting firm's customers, suppliers or investors are large and significant, while losses associated with misconduct involving third parties (such as market participants in general or the public at large) are small and insignificant (Karpoff and Lott (1993), Murphy, Shrieves, and Tibbs (2009)).[2]

A significant problem with prior studies, mostly based on U.S. data, is that information about misconduct and associated penalties on offending firms is typically revealed over an extended period that "can stretch over several years" (Karpoff, Koester, Lee, and Martin (2014)). The first announcement is often that the regulator has commenced an investigation and even this may be preceded by speculation in the press of a potential investigation. Later announcements relate to the evolving investigation, finishing with information about whether the defendant has been found guilty and the size of associated fines. Furthermore, consequent on the regulatory ruling, there may be subsequent private litigation by investors. One study (Karpoff, Lee, and Martin (2008)) addresses this by cumulating market value impacts across all identifiable announcements. However, this is

---

[1] See Karpoff (2012) for an extensive survey. Specific examples include Jarrell and Peltzman (1985) on product recalls; Mitchell and Maloney (1989) on air safety disasters; Karpoff and Lott (1993) and Murphy, Shrieves, and Tibbs (2009) on frauds perpetrated on related parties; Karpoff, Lott, and Wehrly (2005) on environmental violations; Karpoff and Lott (1999) on punitive damage awards; and Karpoff, Lee, and Martin (2008) on financial misrepresentation.

[2] A recent study using a large sample of corporate lawsuits (Haslem, Hutton, and Smith (2015)) records smaller reputational losses than those reported in the previous literature. The smaller losses in this study may reflect the inclusion of less egregious lawsuits that do not involve class actions or regulatory interventions.

subject to the concern that information leakages and confounding news might make these noisy or inaccurate measures of losses.

In this paper, we are able to address this concern by exploiting a unique feature of the U. K. financial regulatory system that the entire enforcement process involves only one public announcement, which includes information about associated legal penalties. During the period of this study, U.K. regulators only made public announcements on completion of the enforcement process. The Financial Services Authority (FSA) and the London Stock Exchange (LSE) investigated firms for possible violations of financial regulation and listing rules but only made their investigations public once misconduct had been established and a fine and/or order to pay compensation had been determined.[3]

Moreover and again in contrast to the United States, the announcement of an FSA/LSE enforcement action was unlikely to trigger any private litigation. Securities litigation, for example, is practically non-existent in the United Kingdom (Armour, Black, Cheffins, and Nolan (2009)), owing to differences in substantive law and litigation funding rules (Davies (2007)). This is highly significant for our purposes, because it gives a much more precise and complete picture of announcements of regulatory sanctions to the market. The immediate inclusion of information about the size of financial payments and the absence of class action claims mean that no assumptions need be made about the accuracy of the market's estimates of future financial penalties. While the possibility of leakage of information prior to regulatory announcements cannot be entirely excluded, the sample

---

[3] U.K. regulators' practices changed after our sample period such that pre-announcement of investigations prior to their completion has now become commonplace. Consequently, the data reported in this study are in effect the entire population of observations for which such a clear identification of reputational losses is possible.

employed in this study is a significant advance over previous studies in addressing the potential mismeasurements that may have arisen from multiple announcements.

We conduct an event study of the impact of announcements of regulatory sanctions on disciplined firms in the United Kingdom. We find that reputational sanctions are large: stock price reactions are on average nine times larger than the financial penalties imposed by the FSA. We also report that reputational losses are confined to misconduct that directly affects 'second parties'—those who trade with the firm, such as customers and investors. The announcement of a fine for wrongdoing that harms 'third parties' who do not trade with the firm - such as other market participants or those harmed by money laundering – has no impact on stock prices. In cross-sectional regressions, we find that the reputational sanction is unrelated to the size of financial penalties levied, is smaller for larger firms, and increases in intensity since the financial crisis of mid-2007. In robustness tests, we are able to rule out the possibility that reputational losses are explicable as profits forgone from curtailment of the proscribed activity.

The results in this paper are consistent with a majority of previous studies. The more precise identification of announcement dates in this study therefore supports and significantly reinforces inferences about reputational losses that have been drawn from previous ones.

The rest of this paper is structured as follows. Section II outlines the institutional framework of enforcement in the United Kingdom and formulates the hypotheses of the paper. In Section III, we describe our data and methodology. Section IV presents the results and Section V reports the conclusions.

II. Institutional Structure and Hypotheses

A. The Financial Services Authority and its Approach to Enforcement

The Financial Services Authority (FSA) was the U.K.'s integrated financial regulator, with responsibility for banking, insurance, and financial market supervision until 2013.[4] It was established in 1997, and took over as regulator for the full range of activities in December 2001 under the Financial Services and Markets Act ('FSMA') 2000.

The FSA's *Handbook* of rules contained a wide range of conduct of business and prudential requirements for financial firms, as well as the U.K. Listing Rules applicable to publicly traded companies listed on the London Stock Exchange's (LSE) Main List (FSMA 2000). These rules were drafted with the FSA's statutory objectives in mind: maintaining market confidence; consumer protection; promoting public awareness of the financial system; and reduction of financial crime.

The FSA had very wide enforcement powers, including the ability to pursue civil, and, in certain serious cases, criminal sanctions against wrongdoers. The FSA also had power to issue a public censure, in addition to or instead of any formal penalty.

Where enforcement action was taken, this ordinarily began with an investigation (Blair, Walker, and Purves (2009)). If the results of the investigation suggested that misconduct had occurred, the FSA had to decide what action, if any, to take and to send a 'warning notice' to the firm in question. This set out details of what the FSA proposed to do and their reasons. The firm then had an opportunity to respond to and address the issues raised by the FSA. If the regulator was unpersuaded by the response, it issued a 'final notice' giving details of any penalty or order. Typically the firm did not contest the matter, but rather

---

[4] From 1 April 2013, the FSA was abolished and its roles split between the Prudential Regulation Authority (PRA), concerned with the safety and soundness of financial institutions, and the Financial Conduct Authority (FCA), concerned with the conduct of financial institutions.

agreed to a settlement with the FSA in the hope of obtaining a more lenient penalty. However, a final notice was still made even in cases where the settlement procedure had been used. Consequently, problems of sample selection that would likely arise if settlements between regulator and firm could be reached in private are not relevant here.

The timing of the release of information by the FSA concerning its enforcement activity was very different from that employed by the SEC in the United States. The governing legislation provided that the FSA should not release information about ongoing investigations until they had been concluded and a final notice issued, and even then only to release information in such a way as was 'fair' to the party being investigated (Financial Services and Markets Act 2000). Final notices consequently usually contained no more than a summary statement of the facts supporting the FSA's conclusions, and details of all the fines and payments of compensation ordered.

In contrast to the United States, securities litigation is practically unknown in the United Kingdom, because the legal environment lacks key procedural mechanisms necessary to support class action litigation (Armour, Black, Cheffins, and Nolan (2009)). Consequently, the announcement of an FSA enforcement action was unlikely to trigger any private litigation. The foregoing features mean that the FSA's announcement of a final notice was a unique event associated with each enforcement action, conveying information that in a typical SEC case would encompass three or four separate announcements—investigation, conclusion, penalty, and civil actions.[5]

---

[5] It is, however, possible that in the case of international firms also publicly-traded in the United States, an announcement of enforcement by the U.K. FSA might trigger subsequent class actions in the US. We check for this possibility in our data. See *infra.*

B. The London Stock Exchange and AIM Rules

While the FSA was responsible for the setting and enforcement of the Listing Rules governing firms on the LSE's Main List, the LSE itself was responsible for setting and enforcing the Rules of its Alternative Investment Market (AIM) (LSE (2010)). Similarly to the FSA, the LSE had powers to levy fines, to de-list, or simply to issue statements of public censure of firms found to be in breach of the rules.[6] The publicity surrounding enforcement was similar to the FSA: no public announcement was made until an investigation was completed (LSE (2009)).

C. Formulation of Hypotheses

A popular perception is that the FSA and LSE's enforcement activities did not impose any meaningful sanction on wrongdoer firms.[7] On the other hand, investors may react to new information released by the regulatory authorities regarding the financial misconduct of a firm. We therefore hypothesize that there is a 'reputational loss':

Hypothesis 1. Reputational Loss. The publication of final notices of enforcement activity is associated with abnormal losses to the firm's shareholders, which exceeds the value of any financial payments the firm is required to make.

---

[6]AIM Rules for Companies, February 2010, Rule 42. In contrast to the FSA, whose powers were derived from statute, the LSE's powers in relation to AIM-listed firms derived from firms' listing agreements, under which firms undertook to submit to LSE enforcement and to pay any fines levied against them. Prior to April 2010, the LSE had used those powers in only seven cases.

[7] See for example *The Times,* July 7, 2009: "The threat of fines from the FSA are seen as a footling expense, just another cost of doing business, no different from paying the quarterly phone bill. The embarrassment factor no longer counts for much, alas. There is not much shame in being on the receiving end of a fine."

6

Where a firm is revealed to have abused the confidence of its customers, suppliers or investors ('second parties') then its reputation and the terms on which it can trade with these parties in the future are likely to be adversely affected. On the other hand, where a firm has profited at the expense of persons who are not connected with it ('third parties') then its customers, suppliers and investors are not directly affected and the terms on which it trades with them would not be expected to alter (Karpoff and Lott (1993), Alexander (1999)).

Hypothesis 2. Second Party vs. Third Party Wrongs. Abnormal losses associated with the publication of financial notices should be significantly larger where the prohibited conduct imposes losses on customers and/or investors than where the injured parties do not trade with the firm.

We conjecture that the reputational loss is related to the information content of the regulatory announcement. In particular we consider whether it is smaller (a) for cases where the fines are smaller because these are associated with less egregious offences;[8] (b) for large firms on which more information is in the market domain; and (c) after the financial crisis of 2007, following which the degree of regulatory activity increases and may therefore be less informative about any particular case.

Finally, we examine and seek to distinguish another possible explanation of a market sanction exceeding the value of any mandated payments, namely that it is simply due to a loss of profits on the prohibited activity (Karpoff and Lott (1993)).

---

[8] According to the Decision Procedures and Penalties Manual of the FSA (2010), one of the principles of determining the level of penalties was that they should reflect the seriousness of the breach.

III. Data and Methodology

A. FSA and LSE Enforcement Data

We examine all the press statements related to enforcement actions by the FSA and the LSE on their websites over the period 2001 - January 2011.[9] There are 341 cases. Shortly thereafter, the FSA and LSE relaxed the restriction that announcements about an investigation would only be made once it had been completed. This is therefore the population of investigations where the event date was precisely and uniquely specified. Since we are interested in the share price reaction following the press statements, we construct a database of all the press statements announcing sanctions imposed on listed companies or subsidiaries of listed companies. We drop all cases relating to individuals or non-listed companies. After this first filter has been applied, we obtain a sample of 83 cases.

We take pains to exclude cases in which information about the specific case or the investigation leaked into the market before the regulator's press statement. To identify these, for each of the 83 cases, we check FACTIVA to see whether in the two years before the event, there are any press reports about the specific cases. We complement the analysis on FACTIVA with a search on the Lexis-Nexis database looking at the news in the categories 'Law and Legal System' and 'Crime, Law Enforcement & Corrections' in the two years before the announcement and up to two years following the announcement to confirm that there is no additional public or private enforcement activity on the case. In most cases we find nothing. However, we find announcements in three types of case: (i) where there is

---

[9] We hand collect the data. This allows us to avoid the potential biases, over-restrictiveness or over-inclusion that could afflict financial misconduct research in the Unites States, which relies on public databases for its analysis, as discussed by Karpoff, Koester, Lee, and Martin (2014).

media speculation about an investigation at a particular company; (ii) where there is "voluntary" disclosure by the company that it is under investigation; (iii) where the FSA decides to make an investigation public, because, for instance, it is thought that this would bring forward witnesses (FSA (2009); 31); and (iv) where an enforcement action on the same case starts in another country. In total we find 28 such cases, where the information is in the public domain before the regulator's press statement. We drop these from the main analysis.[10]

Since an advantage of this study is that the size of the penalty is precisely identified on the day of the initial announcement, we filter out 7 cases where the press statements by the FSA or the LSE simply states that "customers will be compensated as appropriate" without specifying the actual amount of the compensation. Any share price decrease in such cases could be a consequence of uncertainty about the amount of compensation to be offered by the company. In these cases, announcements are not fully informative and are therefore excluded from the analysis.

Moreover, we exclude 3 cases for which there has been a change of ownership in the investigation period and 5 further cases for which other potentially confounding news about the company (unrelated to the regulatory notice) is announced in the newspapers the day before, the day of, or the day after the press announcement about the misconduct.

Having conducted these filtering exercises, we obtain a clean dataset of 40 events, for which the regulatory announcement is unique and contains full details of any financial payments by way of fine or compensation that the firm is as a consequence required to pay. Of these, 37 are enforcement actions by the FSA and 3 by the LSE. For the FSA, enforcement

---

[10] While we have undertaken as an extensive a press search as possible, the absence of references to investigations does not rule out the possibility of leakage of information by rumors and word-of-mouth.

activity covered the full range of financial services regulation and the U.K. Listing Rules. For the LSE, it only covered breaches of the AIM Rules. The average market capitalization of the sanctioned firms in our sample is more than £23 billion, but the dispersion is very high. The average financial payment is 0.26% of market capitalization. 29 firms in the sample are financial companies and 17 of the 40 cases occur after the start of the subprime crisis, which we take to have been in June 2007. A brief description of each case is reported in the Appendix A and descriptive statistics are reported in Table 1.

[Table 1 about here]

B. Characterization of Wrongs

In order to test Hypothesis 2, we subdivide the sample according to whether the sanctioned misconduct is committed against customers and/or investors (26) or against a third party (14). This classification is performed on a functional, rather than a legal, basis. In the first category, we include mis-selling of financial products and misleading advertisements, each of which harms customers, and tardy announcements of information to the market where mandated, which we take to harm the firm's investors. We refer to this category as 'second party' wrongs because the harm in each case is done to persons who are in an existing contractual relation with the firm.

In the second category, we include failure to comply with 'gatekeeper' obligations designed to minimize the risk of money laundering by a firm's clients, market misconduct (for instance, trading in stocks to move the market price) and failures to comply with obligations to report transactions in other firms' securities. The harm resulting from these

10

failings is borne by persons other than the firm's own customers or investors. We refer to this category as 'third party' wrongs.

C. Event Study Methodology

We employ standard event study methodology (Fama, Fisher, Jensen, and Roll (1969)) to evaluate the stock price reaction to the public announcement of misconduct. We calculate the abnormal share price reaction around the event. We use the market model as a benchmark of normal returns.[11] The abnormal return for firm i at time t is defined as

$$(1) \quad AR_{i,t} = R_{i,t} - \alpha_{i,t} - \beta_i R_{m,t}$$

where $R_{i,t}$ and $R_{m,t}$ are the returns on firm i's common stock on day t and the index of market returns on day t, respectively. The coefficients α_i and β_i are estimated from an ordinary least squares regression of $R_{i,t}$ on $R_{m,t}$ using a 260-day period consisting of days -261 to -2 relative to the announcement day. The average abnormal return for each day t in the event window is computed as

$$(2) \quad AR_t = \sum_{i=1}^{N} AR_{i,t}/N$$

Where N is the number of firms over which abnormal returns are averaged on day t. The cumulative average abnormal return for the window t_1, t_2 is defined as

$$(3) \quad CAR(t_1, t_2) = \sum_{t=t_1}^{t_2} AR_t$$

Parametric t-statistics for the mean abnormal returns are calculated from the cross-section standard error of abnormal returns. To make sure that the presence of outliers does not

---

[11] On this, we follow Bhagat and Romano (2002): "Since several studies have found evidence inconsistent with the economic models, in particular CAPM, the use of such restrictions is not appropriate. Hence most researchers have begun to rely on the statistical models to estimate the expected returns." In any event, in short-horizon event studies the test statistic specification is not highly sensitive to the benchmark model of normal returns (Kothari and Warner (2007)).

bias our results we winsorize the abnormal returns before estimating the test statistic. We set all outliers to a 90% percentile of the data, meaning that all data below the 5th percentile are set to the 5th percentile, and data above the 95th percentile to the 95th percentile.

IV. Results

A. Effect on Market Valuation

Table 2 shows the average cumulative abnormal returns in the event windows (0), (0,1), (-1,1) and the associated t-statistics and non-parametric z-statistics. We find that press statements by the FSA and the LSE about corporate misconduct result in statistically significant losses in shareholder wealth. These results are robust to: a) using the non-winsorized variables b) dropping the outlier instead of winsorizing and c) using a different benchmark model of normal returns (market model with $\alpha=0$ and $\beta=1$). We focus our attention on the event window (-1,1) in order to capture the full impact of the event on the share price and to account for potential leakage of information the day before the press statement by the regulators. The 3-day average cumulative abnormal return is -1.68% and statistically significant (the t-statistic is -1.97, and the Wilcoxon signed-rank z-statistic is -2.94). This result is robust to: a) excluding the 3 LSE cases and b) excluding also 5 cases for which it may be argued that they were not totally unexpected.[12] This shows that the U.K. enforcement actions are not trivial.

---

[12] Three cases for which we find evidence of media speculating before the announcement that a company, together with the rest of the companies in the same industry, may be characterized by a common malpractice; one case where JP Morgan is sanctioned one year before in the United States for a similar wrongdoing but in a completely different case; and one case in the third party subgroup where RBS, together with other 19 banks, is

The reported abnormal share price reaction of -1.68% is an average of the effect of all press statements in our sample. By decomposing the sample into cases involving second- and third-party wrongs we can distinguish results where investors and customers have been affected from those relating to third parties such as the state, or other companies' investors. The bottom of Table 2 reports the CARs in the event window (-1,1) for these two categories. We observe that shareholder wealth effects are highly dependent on this stratification. While second-party wrongs (against customers and investors) are associated with a -2.62% share price reaction that is strongly statistically significant (the t-statistic is -2.21, the Wilcoxon signed-rank z-statistic is -3.54), third party wrongs are in fact characterized by a *positive* stock price reaction of 0.24%, although this is not statistically significant.[13] The difference in market reactions amongst the two groups is statistically significant using both parametric and non-parametric tests.

In Figure 1 we enlarge the event window to -10 days, + 10 days and plot the CARs for the two subgroups of press. From this picture we can confirm that there is no evidence of leakage of information before day -1 and that the negative share price reaction for the customers/investors subgroup is not reversed in the subsequent ten days.

---

named by the U.K. High Court as having handled money of the Nigerian dictator and one year later RBS receives a fine for money laundering in a different case.

[13] In so far as share price reactions represent an updating of investors' priors about the likelihood of misconduct and the form that it takes, the positive but insignificant share price reaction to revelation of third party cases may reflect a positive reaction to the news that a second party violation is not uncovered rather than a positive perceived benefit of a third party violation.

As a test of the filtering exercise, in Table 3 we report the results of three larger samples (51, 63 and 80) obtained by progressively reintroducing the cases that we filtered out according to their degree of reliability. In Panel A of Table 3, we reintroduce 11 cases of leakage of information (but not where there is also a confounding event or a parallel enforcement case in the Unites States) summing the share price reactions during the announcement date and the first day in which the market became aware either of the misconduct or the investigation. In Panel B, we reintroduce a further 12 cases where there is no leakage but there is some confounding information during the actual date (i.e. the compensation is not determined). In the last sample, in Panel C, we also reintroduce cases where there is both leakage (summing the two events) and some confounding information. The results in Table 3 confirm the general pattern.

[Table 3 about here]

At this point, we do not know whether these market valuation effects are due to reputational losses, or to (differences in) financial payments required of the defendant firms. The next section explores this question in order to test hypotheses H1 and H2.

B. Measuring Reputational Loss

To measure reputational losses, we follow the "residual approach" used, among others, by Jarrel and Peltzman (1985), Karpoff and Lott (1993) and Karpoff, Lee, and Martin (2008). We calculate the change in the share price $\Delta V_t = V_t - V_{t-1}$ in the event window around the

14

announcement of misconduct by the regulator and then subtract the amount of financial payments (fines and/or compensation) imposed by the regulator.[14]

$$(4) \quad \text{Reputational loss} = \Delta V_t - \text{Fine} - \text{Compensation}$$

For each statement, we calculate the mandated financial payments (fines and compensation) as a percentage of the firm's value prior to the announcement event. Table 4 reports that the average fine for the entire sample is 0.15% of firm value. If we decompose the sample into the two types of wrong with which we are concerned, we observe that the average fine tends to be higher for wrongs against third parties (0.19%) than for wrongs against customers and/or investors (0.13%). The amount of compensation is zero for the former group and 0.18% for the latter. The overall average compensation amounts to 0.12% of firm value. It is therefore clear that differences in financial payments do not explain the differences in market reaction between the two groups of wrongs.

[Table 4 about here]

In the bottom of Table 4, we subtract the total financial payment from the market reaction to measure the reputational loss as the residual.[15] We observe that reputational losses are negative and statistically significant for the entire sample (-1.41%). This allows us to

---

[14] In some cases the press statements report two figures: the compensation to be paid and the compensation that has already been paid. We sum these figures because this is the first time that the misconduct and the associated amount of compensation have been announced to the market.

[15] Karpoff, Lee, and Martin (2008) also subtract the loss in share value that comes from investors revising the financial information on which they were previously valuing companies. This is not relevant to this study because, even in those cases where sanctions relate to delayed timings of announcements to the market, regulatory sanctions come several months later, well after the announcement has been capitalized in market prices. This is a further advantage of the data used in this study.

reject the null hypothesis in relation to H1, namely that there is no reputational sanction associated with regulators' announcements.

Decomposing the sample, we see that the differences in overall market reaction are driven by differences in reputational losses rather than financial payments. The reputational loss for the customers/investors subgroup (that is, second-party wrongs) is -2.31% of market value, and is strongly statistically significant. This result is robust to excluding the 3 LSE cases and excluding also the 5 cases discussed in footnote 12. For wrongs to third parties, the reputational effect is in fact positive (0.43%), although it is not statistically significant. These results are consistent with hypothesis H2, namely that reputational losses are only incurred where harm is done to parties who trade with the firm.

C. Cross-Sectional Differences in Reputational Losses

In this section, we employ a cross-sectional multivariate regression analysis to examine the determinants of the reputational losses. The dependent variable is the reputational loss as defined in equation (4). We run OLS regressions with robust standard errors. We then multiply both sides of the equation by -1 to make the interpretation of regression results more intuitive: that is a higher reputational loss is associated with a higher coefficient. Table 5 reports the results. In the first model, we simply use a dummy variable *customers/investors* as regressor, which takes the value of one when the wrongdoing is against customers/investors and zero otherwise. The positive and statistically significant coefficient is consistent with our earlier results.

[Table 5 about here]

16

In the second model we introduce additional independent variables to test further hypotheses about the cross sectional determinants of reputational sanctions. We include: *financial payment*, which is the amount of the fine plus compensation as a percentage of firm value, as an independent variable in the regression; *market size*, defined as the log of market value of common equity before the press statement; a dummy *post-crisis*, which takes the value of 1 if the date of the press statement is after June 2007. Finally, we control for possible differences in the reaction of investors in financial and non-financial firms through a dummy variable taking the value of 1 for financial firms. Having added these additional regressors, the coefficient of *customers/investors* is smaller but still highly statistically significant.

The variable *financial payment* is not statistically significant, implying that the size of the penalty does not serve as a signal of the seriousness of the reputational consequence of a wrong.[16] Reputational sanctions are negatively and statistically significantly associated with *market size*: the bigger the company, the smaller is the reputational sanction as a proportion of size. This is consistent with the prediction that there is more information in the market about larger firms and consequently the informational value to the market of an announcement by the regulator is proportionately smaller. Finally, we observe that the

---

[16] The inclusion of *financial payment* as a regressor raises an issue of possible endogeneity if the FSA and the LSE take into consideration the potential market impact of the penalties they levy. There is no suggestion that this is the case: the FSA's regulatory handbooks make no reference to reputational concerns in relation to determining the size of fines. According to the handbooks, the penalty is set in relation to: a) the financial benefit to the wrongdoer; b) the seriousness of the misconduct; c) deterrence effects; and d) mitigating factors (for instance, the degree of cooperation of the firm in question) (FSA (2009)). Nevertheless, to test for possible endogeneity, we undertake a two-stage regression, using a variable that distinguishes between abuses that are "clearly profit enhancing" and those that are not (see below, text at note 17). Given the objectives of the FSA—in particular, item (a) on the list--this variable should be correlated with the financial penalty but not with reputational losses that reflect future worsening of terms of trade and it should therefore satisfy the conditions of being an appropriate instrument. We find evidence that the variable is correlated with the financial penalty in the first stage regression; however, the predicted value of the financial penalty is never significant in the second stage, suggesting that the absence of a correlation between the financial penalty and reputational losses is robust to corrections for possible endogeneity.

coefficient for *post-crisis* is positive and statistically significant, implying that in the post-financial crisis world, reputational sanctions are more, not less, significant.

Very similar results are obtained when Tobit regressions are run instead of OLS, where the dependent variable is set to zero when reputational sanctions are positive to avoid treating these cases as reputation enhancing events. The results, both in the OLS and in the Tobit regressions, are robust if we winsorize the variable *financial penalty* apart from the variable *market size* which becomes insignificant. If we bootstrap the standard errors, we obtain very similar results. If we drop the outlier instead of winsorizing, we obtain the same results except for the variable *market size,* which is not significant in all the specifications. The post-crisis effect is closely associated with the three cases of the AIM listed firms.

D. Reputational Loss or Profits Forgone?

We have interpreted the "residual" share price reaction—over and above mandated financial payments—as reputational loss, defined as the present value of the more expensive terms of trade in the future. However, it may be that some or all of these residual losses may be explicable as profits that will be forgone from loss of future earnings on the proscribed activity in question.

The striking differences in the market response to the two different categories of misconduct are strongly suggestive that these losses are the result of reputational losses not forgone profits. There is no reason to believe that forgone profits should vary so greatly depending on whether the harm is done against second or third parties. However, we perform an additional robustness check by distinguishing between cases involving activities that are "clearly profit enhancing" in impacting the cash flow of companies - for instance, mis-selling

of products or misleading advertisements - from those that are not.[17] If some or all of the market loss is due to profits forgone from ceasing to engage in the misconduct, we should observe larger market reactions (net of financial payment) in the first group.

To test this, we run a similar regression to that in section IV.C on the subsample of cases of misconduct against customers/investors (25 cases), introducing the dummy variable, *clearly profit enhancing*. We retain the control variables that had explanatory power in the prior specifications. The results reported in Table 6 show that this newly created dummy variable does not significantly enter the regression in the two different specifications. The coefficient of the variable *Clearly profit enhancing* is also not significant in the specifications where we drop the outlier instead of winsorizing, where we bootstrap the standard errors, or where we winsorize the variable financial penalty.

[Table 6 about here]

The results do not therefore appear to be driven by profits forgone from prohibited activities and further support our interpretation of these market losses as reputational sanctions.

V. Conclusions

This paper exploits a unique feature of the U.K. financial regulatory system over the period of this study that the entire enforcement process involves only one public announcement and is

---

[17] Examples of activities that are not clearly profit-enhancing include failure to have effective systems and controls in place to protect consumers' confidential information, not carrying out customer orders on a timely basis, and failure to keep the market informed of price-sensitive information in a timely manner.

accompanied by complete information about legal penalties. This avoids potential errors that may have been introduced into previous analyses by multiple announcements over extended periods of time.

The paper examines the impact on the market value of firms of enforcement by U.K. regulatory authorities for financial misconduct over the period 2001 to 2011. It records that penalized firms' stock prices experience statistically significant abnormal losses of approximately nine times the fines and compensation paid. We interpret the fall in equity market value in excess of mandated payments as the firms' reputational loss. Consistent with a majority of the prior literature (Karpoff (2012)) we find that reputational losses are confined to cases where the wrongdoing is against related parties - customers or investors. The more precise identification of the dates of enforcement in this paper yields results that are consistent with most existing studies and therefore lends significant support to inferences that have been drawn from them about the impact of regulatory sanctions on reputational losses.

References

Alexander, C. R. "On the Nature of the Reputational Penalty for Corporate Crime: Evidence." *Journal of Law & Economics*, 42 (1999), 489–526.

Armour, J.; B. S. Black; B. R. Cheffins; and R. Nolan. "Private Enforcement of Corporate Law: An Empirical Comparison of the United Kingdom and the United States." *Journal of Empirical Legal Studies*, 6 (2009), 701–745.

Bhagat, S., and R. Romano. "Event Studies and the Law Part I: Technique and Corporate Litigation." *American Law and Economics Review*, 4 (2002), 141–168.

Blair, M.; G. Walker; and R. Purves. *Financial Services Law*, 2nd ed. Oxford, United Kingdom: Oxford University Press (2009).

Davies, P. *Davies Review of Issuer Liability: Final Report*. London, United Kingdom: HM Treasury (2007).

Fama, E. F.; L. Fisher; M. C. Jensen; and R. Roll. "The Adjustment of Stock Prices to New Information." *International Economic Review*, 10 (1969), 1–21.

Financial Services Authority. *Decision Procedures and Penalties Manual (DEPP).* London, United Kingdom: FSA (2010).

Haslem, B.; I. Hutton: and A. Smith. "How Much do Corporate Defendants Really Lose? A New Verdict on the Reputation Loss Induced by Corporate Litigation". Working paper. Southern Utah University**.** 2015

Jarrell, G., and S. Peltzman. "The Impact of Product Recalls on the Wealth of Sellers." *Journal of Political Economy*, 93 (1985), 512–536.

Karpoff, J. M., and J. R. Lott, Jr. "The Reputational Penalty Firms Bear from Committing Criminal Fraud." *Journal of Law & Economics*, 36 (1993), 757–802.

Karpoff, J. M., and J. R. Lott, Jr. "On the Determinants and Importance of Punitive Damage Awards." *Journal of Law & Economics*, 42 (1999), 527–573.

Karpoff, J. M.; J. R. Lott, Jr.; and E. W. Wehrly. "The Reputational Penalties for Environmental Violations: Empirical Evidence." *Journal of Law & Economics*, 48 (2005), 653–675.

Karpoff, J. M.; D. S. Lee; and G. S. Martin. "The Cost to Firms of Cooking the Books." *Journal of Financial and Quantitative Analysis*, 43 (2008), 581–611.

Karpoff, J. M. "Does Reputation Work to discipline Corporate Misconduct?" In *Oxford Handbook of Corporate Reputation*. Oxford, United Kingdom: Oxford University Press (2012).

Karpoff, J. M.; A. Koester; D. S. Lee; and G. S. Martin. "Database Challenges in Financial Misconduct Research." Georgetown McDonough School of Business. Working Paper (2014).

Klein, B., and K. B. Laffler. "The Role of Market Forces in Assuring Contractual Performance." *Journal of Political Economy*, 89 (1981), 615–641.

Kothari, S.P., and J. B. Warner. "Econometrics of Event Studies." In *Handbook of Corporate Finance: Empirical Corporate Finance,* Vol 1., B. E. Eckbo, eds. Amsterdam, Netherlands: Elsevier (2008).

London Stock Exchange. *Inside Aim*. London, United Kingdom: LSE (2009).

London Stock Exchange. *AIM Rules for Companies—February 2010*. London, United Kingdom: LSE (2010).

Mitchell, M. L., and M. T. Maloney. "Crisis in the Cockpit? The Role of Market Forces in Promoting Air Travel Safety." *Journal of Law & Economics*, 32 (1989), 329–355.

Murphy, D. L.; R. E. Shrieves; and S. L. Tibbs. "Understanding the Penalties Associated with Corporate Misconduct: An Empirical Examination of Earnings and Risk." *Journal of Financial and Quantitative Analysis*, 44 (2009), 55–83.

Shapiro, C. "Premiums for High Quality Products as Returns to Reputations." *Quarterly Journal of Economics*, 98 (1983), 659–680.

Figure 1. CARs (-10,10) For the Two Types of Wrongdoings

Figure 1 shows cumulative abnormal returns (CARs) over the 21 days, from -10 to + 10, around the announcement of misconduct. We split the sample between wrongdoings against customers/investors and third parties. The sample consists of the 40 cases obtained after applying the filters described in session 3.1. Cumulative abnormal returns are based on market model parameters calculated over the period -261 days to -2 days relative to the announcement date. Three cases (numbers 27, 30 and 31 in the Appendix A) have been excluded because of substantial confounding announcements over the same period.
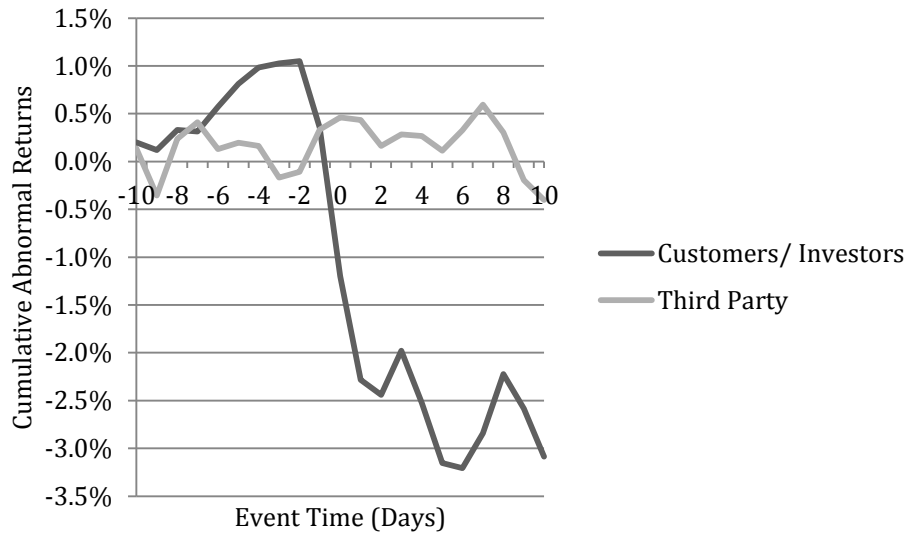
Table 1. Descriptive Statistics

Table 1 reports the number of cases of financial misconduct sanctioned by the FSA and the LSE involving customers and investors in Panel A and third parties in Panel B together with the nature of the wrongdoings. Panel C reports some descriptive statistics of the sample. We report the average, the median, the maximum and minimum values of market capitalization and the financial penalty expressed as a percentage of market capitalization. We also report the number of cases happening after (vs. before) June 2007, sanctioned by the FSA (vs. the LSE) and relating to financial (vs. non-financial) companies. The sample consists of the 40 cases obtained after applying the filters described in session III.

Panel A Wrongs vs. Customers/ Investors

Mis-Selling of Products	Misleading Advertisements	Timing of Announcements to the Market	Other	Total
10	2	6	8	26

Panel B Wrongs vs. Third Parties

Compliance with Money Laundering Rules	Market Misconduct	Transaction Reporting Failures	Other	Total
4	2	7	1	14

Panel C Descriptive Statistics

	Max	Min	Median	Mean
Market capitalization (£m)	108004.50	1.42	19109.15	23615.59
Financial payment: fine + compensation (% of market cap)	2.51	0	0.01	0.26

Post-crisis	17
FSA	37
Financial companies	29

Table 2. CARs around the Press Statement of Misconduct

Table 2 reports cumulative abnormal returns (CARs) around the announcement of misconduct. In the first three lines we report the CARs for the total sample in three event windows (0), (0,1), (-1,1). In the last two lines, for the event window (-1,1), we split the sample between wrongdoings against customers/investors and third parties. The sample consists of the 40 cases obtained after applying the filters described in section III.1. Cumulative abnormal returns are based on market model parameters calculated over the period -261 days to -2 days before the announcement date. Abnormal returns are winsorized at 90%. T-statistics are calculated from the cross-section standard error of abnormal returns. We report also the Wilcoxon signed-rank z-statistics. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Sample	Announcement Window	Announcement Return (%)	t-statistic	z-statistic	No. of Obs.
	(0)	-1.26	-2.55***	-1.96**	40
All	(0,1)	-1.16	-1.66 **	-2.80***	40
	(-1,1)	-1.68	-1.97 **	-2.94***	40
Customers/ Investors	(-1,1)	-2.62	-2.21***	-3.54***	26
Third Party	(-1,1)	0.24	0.22	0.91	14

26

Table 3. CARs for Extended Samples

Table 3 reports the cumulative abnormal returns (CARs) around the announcement of misconduct for three larger samples (51, 63 and 80) obtained by progressively reintroducing cases (according to their degree of reliability) to the sample of 40 cases used in the main analysis. We split the sample between wrongdoings against customers/investors and third parties. In Panel A, we reintroduce 11 cases of leakage of information (but not where there is also a confounding event or a parallel enforcement case in the United States) summing the share price reactions during the announcement date and the first day in which the market becomes aware either of the misconduct or the investigation. In Panel B, we reintroduce 12 further cases where there is no leakage but there is some confounding information during the actual date (e.g. the compensation is not determined). In the last sample, in Panel C, we also reintroduce cases where there is both leakage (so we need to sum up two events) and some confounding information. Cumulative abnormal returns are based on market model parameters calculated over the period -261 days to -2 days relative to the announcement date. Abnormal returns are winsorized at 90%. T-statistics are calculated from the cross- section standard error of abnormal returns. We report also the Wilcoxon signed-rank z-statistics. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Total	Customers/ Investors	Third Party
Panel A. CARs (-1,1) Separating the Two Groups of Wrongdoings (51 cases)			
Market reaction (%)	-1.61	-2.25	-0.001
t- statistic	-2.47***	-2.77***	-0.6
z- statistic	-3.64***	-4.08***	0.67
No. of obs.	51	35	16
Panel B. CARs (-1,1) Separating the Two Groups of Wrongdoings (63 cases)			
Market reaction (%)	-1.49	-2.09	0.14
t- statistic	-1.37*	-1.47*	0.12
z- statistic	-3.31***	-3.90***	1.06
No. of obs.	63	45	18
Panel C. CARs (-1,1) Separating the Two Groups of Wrongdoings (80 cases)			
Market reaction (%)	-0.92	-1.32	0.12
t- statistic	-1.17	-1.29	0.14
z- statistic	-2.79***	-3.27***	0.91
No. of obs.	80	57	23

Table 4. Fine, Compensation and the Reputational Loss

Table 4 reports the cumulative abnormal returns (CARs) around the announcement of misconduct, the total financial penalty (we also show the two components of fine and compensation separately) and the reputational loss as a percentage of total market capitalization. The reputational loss is calculated by subtracting the total financial penalty from the market reaction. The sample consists of the 40 cases obtained after applying the filters described in section III.1. We split the sample between wrongdoings against customers/investors and third parties. Cumulative abnormal returns are based on market model parameters calculated over the period -261 days to -2 days relative to the announcement date. Abnormal returns are winsorized at 90%. T-statistics are calculated from the cross- section standard error of abnormal returns. We also report the Wilcoxon signed-rank z-statistics. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Total	Customers/ Investors	Third party
Market reaction (%)	-1.68**	-2.62***	0.24
Fine (%)	-0.15	-0.13	-0.19
Compensation (%)	-0.12	-0.18	0
Tot. financial payment (%)	-0.27	-0.31	-0.19
Reputational loss (%)	-1.41	-2.31	0.43
Reputational loss (t- statistic)	-1.65**	-1.95**	0.41
Reputational loss (z-statistic)	-2.50**	-3.29***	1.09
No. of obs.	40	26	14

Table 5. Cross-Sectional Determinants of Reputational Losses

Table 5 reports cross-section OLS regressions (with robust standard errors) with the reputational losses as a dependent variable. This is calculated by subtracting the total financial penalty from the market reaction (calculated under market model assumptions and winsorized). The independent variable in Model 1 is a dummy variable of whether the wrongdoing is against second or third parties. In Model 2 we also control for the financial payment as a percentage of market capitalization, the log of market capitalization of the firm before the announcement, a dummy for whether the announcement was made post June 2007, and a dummy for whether the firm is in the financial sector. The sample consists of the 40 cases obtained after applying the filters described in session III. p-values are in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Reputational loss	
	(1)	(2)
Customers/Investors	0.028*** (0.001)	0.015** (0.034)
Financial payment		-0.96 (0.240)
Market size		-0.004* (0.075)
Post-crisis		0.021*** (0.009)
Industry fixed effects (financial vs. non financial)	No	Yes
Intercept	-0.004 (0.363)	0.083* (0.060)
No. of obs.	40	40
R-squared	0.20	0.56
F	13.52	12.80
Prob.>F	(0.001)	(0.000)

Table 6. Do Reputational Losses Reflect Forgone Profits?

Tabl 6 reports OLS cross-section regressions (with robust standard errors) of the reputational losses in the 26 cases of wrongdoings against second parties. The reputational loss is calculated by subtracting the total financial penalty from the market reaction (calculated under market model assumptions and winsorized). In Model 1 the independent variables are a dummy variable which reflects whether the wrongdoing was "clearly profit enhancing" (see section IV.D for the definition), the log of market capitalization of the firm before the announcement, a dummy for whether the announcement was made post June 2007, and a dummy for whether the firm is in the financial sector. In Model 2 we control also for the financial penalty as a percentage of market capitalization. p-values are in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Reputational loss	
	(1)	(2)
Clearly profit enhancing	0.002	0.002
	(0.979)	(0.858)
Market size	-0.005**	-0.005**
	(0.014)	(0.044)
Post-crisis	0.028***	0.028**
	(0.009)	(0.016)
Financial payment		-0.555
		(0.574)
Industry fixed effects (financial vs. non financial)	Yes	Yes
Intercept	0.109***	0.124**
	(0.006)	(0.023)
No. of obs.	26	26
R-squared	0.57	0.57
F	8.38	7.23
Prob.>F	(0.001)	(0.001)

Appendix A. Description of Cases

Appendix A reports a description of each of the 40 cases obtained after applying the filters described in section III.1. We obtain the information from press statements announcing the sanctions. We report the following information: a) the date of the press statement; b) the name of the sanctioned company (when a non listed subsidiary is sanctioned we report both the names of the subsidiary and of the holding listed company); c) the fine and the total compensation in U.K. pounds (where press statements report two figures - the compensation to be paid and the compensation that has already been paid - we sum both figures); d) a brief description of the misconduct; e) our classification of the misconduct into a second or third party wrong; and f) the regulatory authority.

Table A1. Description of the 40 Cases.

#	Date	Listed - Holding Company Name	Subsidiary Name	Fine	Total Compensation	Nature of Misconduct	Second party (S)/ Third party (T)	FSA/ LSE
1	Sep. 25, 2001	Credit Suisse	Winterthur Life	500,000	10,000,000	Mis-selling of mortgage endowment policies.	S	FSA
2	Sep. 10, 2001	AMP	Pearl Companies	100,000	345,854	Not carrying out customer orders on a timely basis.	S	FSA
3	Dec. 17, 2002	Royal Bank of Scotland		750,000	0	Failure in compliance with money laundering rules.	T	FSA
4	Dec. 4, 2002	Lloyds	Abbey Life Assurance Company ltd	1,000,000	140,000,000	Mis-selling of mortgage endowment policies.	S	FSA
5	Dic. 10, 2003	Abbey National companies		2,320,000	300,000	Failure in compliance with money laundering rules.	T	FSA
6	Aug. 7, 2003	National Australian Bank	Northern Bank	1,250,000	0	Failure in compliance with money laundering rules.	T	FSA

31

7	Mar. 27, 2003	Royal and Sun Alliance Group		950,000	16,600,000	Mis-selling of mortgage endowment policies	S	FSA
8	Mar. 6, 2003	Prudential	Scottish Amicable	750,000	11,000,000	Mis-selling of mortgage endowment policies	S	FSA
9	Feb. 13, 2003	HBOS	Bank of Scotland	750,000	10,350	Badly administering savings schemes. Bank's inappropriate handling of funds had put 30,000 customers at risk of losing money.	S	FSA
10	Dec. 22, 2004	Bradford & Bingley plc		650,000	6,000,000	Mis-selling of precipice and with-profit bonds.	S	FSA
11	Dec. 21, 2004	AXA	AXA Sun Life	500,000	0	Misleading advertisements.	S	FSA
12	Oct. 20, 2004	Capita Group	Capita Trust Company Limited	300,000	3,500,000	Mis-selling of precipice bonds.	S	FSA
13	May 19, 2004	Universal Salvage Plc		90,000	0	Delay in revealing relevant information to the market.	S	FSA
14	Apr. 5, 2004	Deutsche Bank	Morgan Grenfell & Co Limited	190,000	0	Failure to act in its customer's best interests and failure to manage its conflicts of interests. Morgan Grenfell commenced proprietary trading in seven of the constituent securities of a client's programme trade, prior to its award, based on limited information provided to enable the firm to quote for that business. The proprietary trading resulted in the client paying more for the programme trade than they would otherwise have done.	S	FSA
15	Feb. 11, 2004	IFG Group	Berkeley Jacobs Financial Services Limited	175,000	1,000,000	Failure to monitor adequately a sales strategy which advocated the sale of non-pension products and a failure to ensure the suitability of sales.	S	FSA
16	Jan. 15, 2004	HBOS	Bank of Scotland	1,250,000	0	Failure in compliance with money laundering rules.	T	FSA

32

17	Dec. 14, 2005	HSBC Bank Plc		100,000	0	Transaction reporting failures.	T	FSA
18	Nov. 17, 2005	UBS AG		100,000	0	Transaction reporting failures.	T	FSA
19	Jan. 13, 2005	Hemscott	Hemscott Investment Analysis Limited	50,000	0	Misleading financial promotions	S	FSA
20	Nov. 22, 2006	Berkshire Hathaway	General Reinsurance U.K. Limited	1,225,000	0	Arranging two improper reinsurance transactions which enabled an unnamed client to gain tax benefits by transferring money among countries. In so doing, GenRe U.K. breached FSA Principle 2 by not conducting its business with due skill, care and diligence.	T	FSA
21	Aug. 7, 2006	Merrill Lynch International		150,000	0	Transaction reporting failures.	T	FSA
22	Apr. 11, 2006	Deutsche Bank AG		6,363,643	0	Market misconduct in running book building transactions. Deutsche Bank traded on Scania shares during the book building. The trading was not transparent to the market and was of a size and manner that contributed material changes to Scania's share price. It also prevented potential investors from gaining a full understanding of the nature of supply and demand for Scania's shares.	T	FSA
23	Mar. 16, 2006	Capita Group	Capita Financial Administrators Limited	300,000	0	Poor anti-fraud controls over client identities and accounts.	S	FSA
24	Nov. 16, 2007	Toronto Dominion Bank		490,000	0	Systems and controls failures in relation to one of its trading books.	S	FSA
25	Jun. 12, 2008	Woolworths Group plc		350,000	0	Failure to disclose information to the market in a timely manner.	S	FSA

26	May 15, 2008	AXA	Thinc Group Limited	900,000	0	Not having adequate risk management and compliance systems for its subprime mortgage business and failure to take reasonable care to ensure that it had records to prove that advice it gave to customers in relation to the sale of subprime mortgages was suitable.	S	FSA
27	May 12, 2008	Land of Leather		210,000	0	Ineffective monitoring or training in place to ensure that the insurance was being sold fairly.	S	FSA
28	Jan. 16, 2008	HSBC Group	HFC Bank	1,085,000	0	Failure to take reasonable care to ensure that the advice it gave customers to buy Payment Protection Insurance (PPI) was suitable, and for failure to have adequate systems and controls for the sale of PPI.	S	FSA
29	Nov. 5, 2009	UBS AG		8,000,000	42,000,000	Systems and controls failures that enabled four employees to carry out unauthorized transactions involving customer money.	S	FSA
30	Sep. 8, 2009	Barclays	Barclays Capital Securities Ltd and Barclays Bank PLC	2,450,000	0	Transaction reporting failures.	T	FSA
31	Jan. 20, 2009	Wolfson Microelectronics plc		140,000	0	Delay in revealing relevant information to the market.	S	FSA
32	Nov. 24, 2009	Nomura International Plc		1,750,000	0	Widespread systems and controls failures around book marking.	T	FSA
33	Apr. 8, 2010	Credit Suisse		1,750,000	0	Transaction reporting failures.	T	FSA
34	Apr. 8, 2010	Nomura Holdings	Instinet Europe Limited	1,050,000	0	Transaction reporting failures.	T	FSA
35	Jun. 7, 2010	Close Brothers Group	Close Investments Limited	98,000	0	Failure to properly protect and segregate client money.	S	FSA

36	Aug. 25, 2010	Societe Generale	1,575,000	0	Transaction reporting failures.	T	FSA
37	Jun. 3, 2010	J.P. Morgan Securities	33,320,000	0	Failure to protect client money by segregating it appropriately.	S	FSA
38	Nov. 23, 2009	Environmental Recycling Technologies	0	0	Delay in revealing relevant information to the market.	S	LSE
39	Jun. 19, 2008	Meridian Petroleum plc	75,000	0	Delay in revealing relevant information to the market.	S	LSE
40	Feb. 1, 2008	Subsea Resources PLC	0	0	Delay in revealing relevant information to the market.	S	LSE

35

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities.*

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.