The Biases of an “Unbiased” Optional Takeovers Regime: The Mandatory Bid Threshold as a Reverse Drawbridge

Johannes W. Fedderke
Pennsylvania State University

Marco Ventoruzzo
Bocconi University and ECGI

© Johannes W. Fedderke and Marco Ventoruzzo 2015. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
http://ssrn.com/abstract=2706602

www.ecgi.org/wp
The Biases of an “Unbiased” Optional Takeovers Regime: The Mandatory Bid Threshold as a Reverse Drawbridge

December 2015

Johannes W. Fedderke
Marco Ventoruzzo

For comments on an earlier draft and discussions on the ideas included in this paper we wish to thank Paul Davies, Luca Enriques, Klaus Hopt, Fausto Panunzi, Dan Puchniak, Umakhant Varottil, and Way Wee. We are also grateful for comments to participants in the conference organized by the Center for Banking & Finance Law and the Center for Law & Business of the Faculty of Law of the National University of Singapore and the Singapore Management University on “Comparative Takeover Regulation” held in Singapore, July 23 and 24, 2015, Singapore; and to participants in the workshop organized by Consob, the Italian securities regulator, on “The 13th Directive and Takeover Defenses — Comparative and Economic Arguments in Favor of the British Model,” September 4, 2015, Rome, Italy.

© Johannes W. Fedderke and Marco Ventoruzzo 2015. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.
Abstract

The role of private ordering in takeover regulation is one of the most relevant and interesting issues regarding the optimal regime for acquisitions of listed corporations. Support for more flexible rules and freedom of contract is gaining some traction among both legislatures and academics in Europe. In the European Union, the Takeover Directive (Directive 2004/25/EC) grants numerous options to both national regulators in implementing the European rules, and to individual issuers in tailoring the applicable rules in their bylaws. This flexibility was a political compromise accepted to facilitate the approval of the Directive, but it is hotly debated: is it a necessary evil that should be constrained, or a blessing that should be enhanced? The conundrum of the balance between mandatory and enabling rules touches different aspects of takeover regulation, from tender offers to defensive measures, from the treatment of control enhancing devices to directors’ duties. In this contribution, we focus on private ordering in the regulation of mandatory tender offers, one of the pillars of the European approach, and an interesting one also because the debate, so far, centered primarily on contractual freedom and directors’ discretion with respect to defensive measures and control enhancing devices. After a brief Introduction, in Part II we offer a very short overview of the European rules on mandatory bids and their theoretical framework. On this basis we discuss critically, as an example of private ordering, a recent Italian reform allowing bylaws to regulate the triggers of the mandatory bid, a reform whose interest goes beyond the Italian market. We then consider, also critically, an interesting but controversial scholarly proposal to strengthen private ordering even further through an optional, default regulation of takeovers. In Part III we present an economic model to consider the possible effects of private ordering in this area, which supports the idea that a default optional regime would not be desirable. In Part IV we sketch a different proposal to reduce the costs of corporate acquisitions, which might benefit minority investors and the market for corporate control.

Keywords: Takeovers, Mandatory Bids, Defensive Measures, Control Enhancing Devices, Control, Law and Economics

JEL Classifications: K22

Johannes W. Fedderke
Professor of Economics
Pennsylvania State University, School of International Affairs
Lewis Katz Building
University Park, PA 16802, United States
e-mail: jwf15@psu.edu

Marco Ventoruzzo*
Professor of Law
Bocconi University, School of Law
Via Roentgen 1
Milan, 20136, Italy
phone: +39 02 5836-5127
e-mail: marco.ventoruzzo@unibocconi.it

*Corresponding Author
The Biases of an “Unbiased” Optional Takeovers Regime: The Mandatory Bid Threshold as a Reverse Drawbridge.*

Johannes W. Fedderke,†Marco Ventoruzzo.‡

Contents

I. Introduction 2

II. The European Mandatory Bid and Private Ordering 3
   A. The Mandatory Bid in a Nutshell .............................................. 3
   B. Legislatures Tinkering with the Mandatory Bid Rule and Contractual Freedom:
      The Italian Experiment ......................................................... 7
   C. Scholarly Proposals to Expand Private Ordering: The Biases of Contractual Freedom 12

III. Strategic Interactions Under Mandatory Bid Structures 16
   A. Structure of the Strategic Interaction ........................................ 17
   B. Payoffs to the Game ............................................................ 19
   C. Solution to Game ................................................................. 20
   D. Private Benefit to Control ..................................................... 23
   E. Extreme Mandatory Bid Rule .................................................. 24
   F. Impact of the Magnitude of the Mandatory Bid Requirement ............. 26

IV. Trimming the Peacock’s Tail: Toward a Lighter Mandatory Bid Rule 29
   A. A Modest Proposal to (Partially) Liberalize Takeovers ....................... 29
   B. Anything Else? ........................................................................... 31

V. Conclusions 33

*For comments on an earlier draft and discussions on the ideas included in this paper we wish to thank Paul Davies, Luca Enriques, Klaus Hopt, Fausto Panunzi, Dan Puchniak, Umakhant Varottil, and Way Wee. We are also grateful for comments to participants in the conference organized by the Center for Banking & Finance Law and the Center for Law & Business of the Faculty of Law of the National University of Singapore and the Singapore Management University on “Comparative Takeover Regulation” held in Singapore, July 23 and 24, 2015, Singapore; and to participants in the workshop organized by Consob, the Italian securities regulator, on “The 13th Directive and Takeover Defenses – Comparative and Economic Arguments in Favor of the British Model,” September 4, 2015, Rome, Italy.

†Professor of Economics, Pennsylvania State University, School of International Affairs, University Park, PA, USA; Director, Economic Research Southern Africa, Cape Town, South Africa; Research Fellow, South African Reserve Bank, Pretoria, South Africa; Research Fellow, Helen Suzman Foundation, Johannesburg, South Africa; Professor of Economics, University of the Witwatersrand, Johannesburg, South Africa.

‡Professor of Law, Bocconi University School of Law, Milan, Italy; and Pennsylvania State University Law School, University Park, PA, USA; External Scientific Member, Max Planck Institute, Luxembourg; Research Associate, ECGI, Brussels, Belgium.
I. Introduction

The role of private ordering in takeover regulation is one of the most relevant and interesting issues regarding the optimal regime for acquisitions of listed corporations. The issue is rife with complex questions and implications, both from a more technical legal perspective and in terms of public choice theory. Support for more flexible rules and freedom of contract, in this area, is gaining some traction among both legislatures and academics in Europe.

In the United States, corporations and their directors have significant discretion in adopting defensive measures, and the primary regulatory strategy used to curb the discretion of the incumbents are often elusive and slippery fiduciary duties. In the European Union, on the other hand, the Takeover Directive (Directive 2004/25/EC) grants numerous options to both national regulators in implementing the European rules, and to individual issuers in tailoring the applicable rules in their bylaws. This flexibility was a political compromise accepted to facilitate the approval of the Directive, but it is hotly debated: is it a necessary evil that should be constrained, or a blessing that should be enhanced? As will be discussed more extensively below, some scholars have recently suggested that takeovers should be primarily governed with default rules from which corporations could opt-out, including with respect to the mandatory bid rule, and some legislatures have at least partially steered toward this direction, as a recent Italian reform indicates.

The conundrum of the perfect balance between mandatory and enabling rules in this area touches different aspects of takeover regulation, from tender offers to defensive measures, from the treatment of control enhancing devices to directors’ duties, and cannot be comprehensively tackled here. In this contribution, we will focus on one specific issue concerning private ordering in the regulation of mandatory tender offers, one of the pillars of the European approach, and an interesting one also because the debate, so far, has been primarily centered on contractual freedom and directors’ discretion with respect to defensive measures and the breakthrough rule (meaning the rule neutralizing contractual barriers to acquisitions such as shareholders’ agreements).
More precisely, after a very short overview of the European rules on mandatory bids and their theoretical framework, we will concentrate on three issues: the recent “experiments” of the Italian legislature introducing greater contractual freedom on mandatory bids as a proxy for the tendency toward optional rules; a critical discussion of a scholarly proposal to further enhance this freedom in Europe; and an explanation of our modest idea, intended as a sketch for future research, on how to reform the mandatory bid rule in a way that might be more beneficial to minority investors, at least in some jurisdictions.

II. The European Mandatory Bid and Private Ordering

A. The Mandatory Bid in a Nutshell

It is well known that the mandatory bid rule (hereinafter, also “MBR”) adopted by the European Directive of 2004 provides that when someone acquires “control” of a listed corporation, it must launch a tender offer on all the outstanding voting shares at a minimum “fair” price. Different national legislatures define the triggering event, acquisition of control, in slightly different ways, but generally there is a sort of presumption (with some exceptions and extensions) that acquisition of a fixed threshold, often around 30%, mandates the tender offer. The minimum price is generally determined based on market prices and prices paid for shares by the bidder in a relevant period preceding the triggering event.

This mechanism is a double-edged sword. On the one hand it protects minority shareholders because it allows every shareholder wishing to do so to sell the shares and obtain at least part of the control premium. Minority shareholders are granted a fair exit option if they are not satisfied with the new (possible) majority. On the other hand, however, the mandatory tender offer can render acquisitions, especially hostile ones, very expensive and more costly than a voluntary offer whose conditions are freely determined and simply put to a market test. At least in principle, the bidder must be financially able to purchase all the outstanding shares at a premium. There is no doubt that this mechanism can hinder the market for corporate control and in fact, in the U.S., where no mandatory bid is imposed by statute at the federal level, statutory or bylaws provisions whose legal and economic effects are similar to the MBR are considered having a defensive nature.

The MBR developed in the U.K. in the 1960s, in a system characterized by widespread ownership structures and in which many corporations are controlled with far less shares than

---

6 For a discussion of the mandatory tender offer rule in different European countries, from Austria to the United Kingdom, see Dirk Van Gerven (ed.), COMMON LEGAL FRAMEWORK FOR TAKEOVER BIDS IN EUROPE (Cambridge University Press, 2008).
7 See again Dirk Van Gerven, supra.
8 This is the case, for example, of statutes in Pennsylvania, Maine and South Dakota, providing that when someone obtains a significant participation (ranging from 20% to 50%), minority shareholders have the right to be cashed-out at a fair price (Takeover Bids Directive Assessment Report commissioned by the European Commission, June 2012, available at http://ec.europa.ed/internal_market/company/docs/takeoverbids/study/study_en.pdf. On the possible defensive effects of EU takeover rules, focusing on board neutrality and options of Member States, see Paul L. Davies, Edmund-Philipp Schuster, Emilie Van de Walle de Chlecke, The Takeover Directive as a Protectionist Tool?, ECGI – Law Working Papers No. 141/2010. The defensive effects of the adoption of the U.K. takeover regime, through the directive, in continental European countries, are also discussed by Marco Ventoruzzo, Takeover Regulation as a Wolf in Sheep’s Clothing: Taking U.K. Rules to Continental Europe, 11 U. PA. J. BUS. & EMP. L. 135 (2008), also in a public choice perspective.
the threshold mandating the tender offer. In that context, hostile acquisitions can occur without a mandatory offer, and more generally the mandatory tender offer is not triggered by each and every control acquisitions, but only when the buyer acquires a percentage of shares – set at the 30% level – that makes it unlikely, if not impossible, a future hostile acquisition. In other words, it is possible to argue that the original goal of the mandatory tender offer in the U.K. was not so much to force the buyer to offer to purchase all the shares any time control changes hands, but only when the new controlling shareholder holds so many shares to be shielded from the policing function of the market for corporate control. When transplanted in continental European systems, where more concentrated ownership structures prevail and incumbents often own a participation well above the threshold triggering the mandatory offer, these rules can morph into a solid barrier to hostile acquisitions, and occasionally also a disincentive to friendly ones.9

In this perspective, the implementation of the Thirteenth directive made acquisitions more costly in several jurisdictions. The Italian example is interesting and somehow paradigmatic, although similar considerations would also apply to other countries. Italy adopted a new statute following in good part the British approach in 1998 (with the so-called “Testo Unico della Finanza” – hereinafter “TUF” –, meaning “Consolidated Law on Finance”), in the absence of any European obligation to do that. When the directive was implemented in 2006, two important changes were introduced. First, the minimum price of the mandatory bid had been defined in the 1998 statute as the average between the average market prices, and the higher price paid by the bidder in the six months preceding the offer. With the introduction of the European rules, the minimum price was raised to the highest price paid by the bidder; the first element of the calculation was simply dropped.10 Second, the mandatory offer was extended from all but only the common shares, to also other categories of limited voting shares. Obviously both innovations affected the cost of many potential acquisitions. For example, according to a rough calculation, the tender offer launched in 2005 by EDF, a French utility company, on the Italian energy corporation Edison would have cost approximately 400 million euro more with the new rules, and it would have been even more expensive if limited voting shares would have been included.

Empirical and anecdotal evidence seem to confirm that the mandatory bid rule, in particular in systems with concentrated ownership, discourages hostile acquisitions by making them more costly. Two possible indicators of this effect can be mentioned.

The number of tender offers, and especially hostile ones, in some countries has been abysmally low since the adoption of the Directive, in fact so low even considering the dimensions of the market that it is hard not to think that the regulation played a role. Surprisingly few empirical studies tackle the issue of the number of hostile takeovers in Europe, and the hard data available is scant, possibly also due to the difficulty of clearly identifying hostile acquisitions, because “friendly” ones can be conducted under a more or less implicit threat of hostile acquisition. Anecdotally, however, the picture is unequivocal: at a recent conference a top executive of the Italian Securities and Exchange Commission could list only four hostile tender offers from 1998, and as a fifth one he added . . . the hostile takeover of the Catholic Church by the Roman Empire! (One might however argue that it was the other way around: the Church took over the Empire.

9 For a more extensive discussion we must refer again to Marco Ventoruzzo, Takeover Regulation, supra.

10 If, for example, under the previous approach a bidder had acquired a block of shares outside the market for a price of €4.4 a share, and the average market price in the relevant period had been €3, the minimum price of the mandatory offer was €3.7; under the new approach introduced in 2006 to implement Directive 2004/25/EC, the minimum price would be €4.4. Market prices become relevant, essentially, in the relatively limited circumstances in which the bidder has not purchased shares of the target in the relevant period preceding the triggering event.
and look which one of the two institutions survives today).\textsuperscript{11} Of course it is possible to object that the number of hostile offers, in these systems, would have been low in any case, due to the presence of strong controlling shareholders; and the most important causes of limited takeover activity should be found in other legal, economic, historical and even sociological issues that run deeper than the mandatory bid rule. It might be true, but it is hard to deny that the mandatory bid contributed to making limiting hostile offers extremely infrequent.

A second piece of evidence can be found in the evolution of ownership structures after the adoption of the mandatory bid rule. In some jurisdictions, the stake of the average controlling shareholder decreased after the introduction of the new regime, remaining however well above the triggering threshold of the mandatory bid. Italy is, once again, an illustrative case. Consider the data elaborated by Consob, the Italian Securities and Exchange Commission, on ownership structures in Figure 1.

The graph shows the growth of “weakly controlled” corporations from 1998, the year in which the MBR was introduced, to 2013. With some simplifications, “weakly controlled” corporation pursuant to the Report of Consob, are controlled “\textit{de facto}” with a percentage of shares in between 20\% or 30\% (depending on the degree of dispersion of other shareholders), and 50\%\textsuperscript{12}. The data indicate a growth, both in terms of absolute numbers and market capitalization, of corporations controlled with less than absolute control and with a stake in between 30\% (the

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Evolution of Ownership Structures of Italian Listed Corporations (1998-2013).}
\end{figure}

\textsuperscript{11}The reference is to the presentation by Marcello Bianchi at the workshop on “The 13th Directive and Takeover Defenses – Comparative and Economic Arguments in Favor of the British Model,” September 4, 2015, Rome. The other hostile tender offers listed were the ones of Ina by Generali and Telecom by Olivetti in 1999, the contest between BNL and Banca Antonveneta in 2006, and the acquisition of Parmalat by Lactalis in 2011.

\textsuperscript{12}More precisely, according to the Consob 2014 Report on Corporate Governance, “weekly controlled” corporations are defined as “Companies neither controlled by a shareholders’ agreement nor majority controlled, included in one of the following categories: i) a single shareholder holds at least 30\% of the ordinary shares; ii) a single shareholder holds a stake a) at least equal to 20\% of the ordinary shares and b) higher than half of the sum of the ordinary shares held by all the major shareholders (i.e. by shareholders with more than 2\%).”
triggering threshold of the mandatory bid) and 50% or, in any case, sufficiently close to 30% that a mandatory bid might would likely to be triggered in case of hostile acquisition.

Also Figure 2 confirms a reduction of the average control participation since the adoption of the MBR, from 48.7% to 46.8%. This is a limited, but far from trivial reduction, also considering that it is an average of all Italian listed corporations. Also in light of the data in Figure 1, the reduction of the stake of the controlling shareholder has been significant for some corporations.

A reduction of ownership concentration is also confirmed by the data illustrated by Martin Bull and Martin Rhodes, suggesting a decrease of ownership concentration of large listed corporations equal to almost 25% from 1996 to 2004/2005.13

Different explanations are possible for this evolution, but one hypothesis is that entrenched shareholders felt protected by the MBR, and confidently decided to adopt a higher leverage, diversify their investment, or in any case lower their participation, resting assured that their hold on the steering wheel would have not been weakened.

With a touch of cynicism (or realism), another clue suggesting that the mandatory bid rule protects existing large shareholders can also be found in the very fact that several European States adopted it, in one version or another, in the 1990s, well before there was any European requirement to do that.14 It is reasonable to believe that, in this period, controlling shareholders and executives of listed corporations were more powerful political actors and lobbies in their continental European systems than institutional investors or small shareholders. In addition, very limited regulatory competition existed among European jurisdictions.15 Under these cir-

---

13 Martin Bull, Martin Rhodes, ITALY — A CONTESTED POLITY, 135 (Table 1).
15 States actively engaged in regulatory competition and aiming at attracting incorporations are generally, at the margin, more protective of minority investors because they have at least some influence on the decision on
cumstances, one might conclude that the legislature was particularly sensitive to the preferences of incumbents and controlling shareholders.

One often uttered criticisms of the Takeover Directive is that the political compromise allowing its adoption required making several of its pillars, and in particular the board neutrality rule and the breakthrough rule, optional, permitting both Member States in their statutes and listed corporations in their bylaws to opt in or out of these rules. We can endlessly discuss the effectiveness of both board neutrality and the breakthrough rule in terms of investors’ protection, and it is particularly questionable that the former actually empowers minorities in systems with concentrated ownership structures.\(^\text{16}\) Independently from the correct answer to these questions, however, what is interesting to note is that optional rules already have an important role in shaping the European market for corporate control, at least with respect to defensive measures and control-enhancing devices.\(^\text{17}\)

Today freedom of contract seems to be gaining some traction, or at least some attention, also with respect to the mandatory bid mechanism, whose mandatory nature was generally accepted when the Takeover Directive was enacted in 2004. A first example of this evolution is offered by the Italian legislature, and will be briefly discussed in the next paragraph.

**B. Legislatures Tinkering with the Mandatory Bid Rule and Contractual Freedom: The Italian Experiment**

In 2014, the Italian government amended the statute governing takeovers, and in particular the rules triggering the mandatory bid. In order to clarify the meaning and impact of the new rules, let us briefly explain the pre-existing legal regime in light of the framework set forth by the Thirteenth Directive.\(^\text{18}\)

To begin with, as mentioned, Article 5 of Directive 2004/25 mandates Member States to provide a mandatory bid on all the outstanding voting shares when someone acquires sufficient votes to control the target corporation; the same provision also requires national legislatures to define control. The Italian legislature, as most European ones, adopted a sort of presumption of control with a fixed threshold: the tender offer is (was) triggered by the acquisition of 30% of the shares voting on directors’ election. Exemptions from the mandatory offer exist. In particular, there is no mandatory offer if a party unrelated to the one passing the relevant threshold already has control. According to the interpretation of Consob, the Italian Securities and Exchange Commission, this exemption only applies when the existing shareholder has absolute control, i.e. more than 50% of the voting rights. When the controlling shareholder owns less than that, e.g. 37%, no exemption applies and whoever obtains more than 30% must follow through with the offer. This confirms that the mandatory bid can be a powerful protection for an incumbent controlling shareholder holding in between 30% and 50%. Without his agreement and the tendering of his shares, it is extremely difficult for an interested party to acquire control,

---

\(^\text{16}\) On the triviality of the board neutrality rule to empower minority shareholders see Gerner-Beurle & Others, supra.

\(^\text{17}\) See the discussion of different national regimes in Dirk Van Gerven, supra.

\(^\text{18}\) The literature on this topic is humongous. For a recent and complete discussion of the Italian system, analyzed in a broader theoretical framework concerning the market failures of control acquisitions and the legal strategies used to curb them, see Alessandro Pomelli, TRASFERIMENTO E CONSOLIDAMENTO DEL CONTROLLO NELLE SOCIETÀ QUOTATE (Giuffrè, 2014), where extensive bibliographical references can be found.
but still exceeding 30% imposes an offer on all the outstanding shares at the minimum, statutory-defined, price.

The minimum price of the mandatory bid must be the highest price paid by the bidder (or subjects acting in concert with him) in the twelve months preceding the offer. Only if no purchase occurred in this period, the minimum price is simply the average market price, but this is fairly rare as everyone trying to obtain control, for obvious reasons, wants a toehold in the target corporation before launching an offer (you do not attack a citadel before having established your camp sufficiently close to the walls). Under exceptional circumstances that render these elements economically irrelevant or distorted, such as for example market manipulations, the Stock Exchange Commission has the authority to allow parties to offer a lower price, or mandate an higher one (Article 106, Paragraph 3, TUF).

One additional aspect that needs to be mentioned, also because it is relevant discussing reform proposals, is that the acquirer must generally launch a mandatory bid once passed the relevant threshold independently from the technique he used to obtain the shares, either private purchases of shares from block holders outside the market, market transactions, or a voluntary offer. There are however two important exceptions to this rule.¹⁹

First, if the relevant threshold is obtained through a partial voluntary offer at a freely determined price, no follow-up mandatory bid is necessary provided that some conditions, designed to protect minorities, are met. The three conditions, spelled out in Article 107 TUF, are as follows: (a) The offer must be on at least 60% of each and every class of voting shares; (b) the bidder and other subjects acting in concert must not have acquired more than 1% of the shares voting on directors’ elections in the year preceding the offer or during the offer; (c) the offer must be “approved” (through tendering) by the majority of the minority of the offerees. The Securities and Exchange Commission must verify that the required conditions have been met and grant the exemption.²⁰

Pursuant to Article 106, Paragraph 4, TUF, a second exemption from the MBR is available when the relevant participation is acquired through a voluntary tender offer, at a freely

¹⁹Other important exemptions, set forth by Article 106, paragraph 5 TUF and regulated by Consob, apply in case of transactions aiming at the turnaround of a distressed corporation, when shares are transferred to related entities without a substantial change in control, for temporary transactions, in case of merger or spin-off, for gratuitous acquisitions of shares and when the acquirer did not intend to obtain control, e.g. when the threshold is obtained as a consequence of the exercise of statutory pre-emptive rights on newly issued shares. Also extension of the mandatory bid are provided, for example, in case of indirect acquisition of the relevant participation through acquisition of a corporation whose major asset is the participation in the target corporation (Article 106, paragraph 3, TUF).

²⁰These conditions, as we will articulate below, are at the same too tight to prompt an active and efficient market for control, and not entirely bulletproof with respect to possible coercive, not-value maximizing offers. The first statement should be almost self-evident: in very few circumstances it is possible to launch an offer on a substantial percentage of the outstanding shares without having acquired a minority participation in the target, which also represents a way for the bidder to limit losses in case the takeover is unsuccessful. Conversely, however, the idea that as long as an offer is made on all shares, minority investors do not need protections against possible back end actions that would coerce them into accepting a sub-optimal front end, ignores over thirty years of litigation and debate on freeze out in the U.S. (Marco Ventoruzzo, Freeze-Outs: Transcontinental Analysis and Reform Proposals, 50 VA. J. INT’L L. 841 (2010)). It is true that cash out mergers are either impossible of very difficult in Europe and in Italy specifically, and it is also true that minority shareholders have some protections in the rules governing sell-out and buy-out rights: see Articles 15 and 16 of Directive 2004/25/EC and, for an interesting analysis, Christoph Van der Elst, Lientje S. F. Van den Steen, Opportunities in the M&A Aftermarket: Squeezing Out and Selling Out, Universiteit Gent Financial Law Institute Working Paper No. 2006-12, available on www.ssrn.com. However, one of the reasons why this might have not been a major concern so far in Europe might be exactly because hostile acquisitions are fairly rare, rather than because the regulation is perfect.
determined price, but extended to all the outstanding shares. The offer can be either in cash or an exchange offer, but in this second case the securities representing the consideration must be listed in a regulated market to ensure – at least in theory – a similar degree of liquidity of the tendered shares and correct pricing.

The regulatory framework succinctly described existed, as mentioned, before the 2014 reform, and was quite similar to the approach followed in other Europeans jurisdictions, and not only.21 With the 2014 decree, the Italian Government introduced a new two-pronged regime, one for “small or medium listed corporations,” and one for all the others.22 The former group can opt out of the 30% default regime applicable to all corporations, and regulate in their bylaws the triggering threshold, setting it anywhere in between 25% and 40% of the shares voting on directors’ elections.23

Another degree of flexibility granted to “small and medium listed corporation” concerns the possibility of eliminating, in the bylaws, the obligation to launch a tender offer when a shareholder holding a percentage of shares between the basic triggering threshold of the mandatory bid and absolute control (e.g., a shareholder holding 46%), acquires more than 3% of the voting shares in one year. The rational of this type of mandatory bid is obviously that reinforcing control might make majority shareholders too strong and future hostile acquisitions more difficult, and therefore a fair exit should be offered to minority investors. With the new rules, however, controlling shareholders can eliminate this protection and entrench themselves without “paying any price.”

For “non-small and medium” listed corporations – which cannot opt out of the single statutory threshold for mandatory bids –, in addition to the 30% threshold, a new and lower one has been added at the 25% level: in this type of corporations there are therefore now two statutorily-defined triggering thresholds, at the 25% and 30% thresholds.

The first innovations, allowing small and medium corporations to alter in their bylaws the regime of the mandatory offer, attributes an important role to contractual freedom and optional rules, and is therefore the most interesting one in the perspective of this contribution. Before briefly discussing it, however, it is useful to spend a few words also on the dual thresholds regime envisioned for non-small and medium corporations.

According to the first commentators, one difference between the regimes applicable when the 25% or 30% thresholds are acquired seems to concern the above-mentioned exemption set forth when other controlling shareholders are present. When someone obtains 30% of the voting shares, as explained before, the exemption can only be invoked if the controlling shareholder has absolute control (over 50%), a rule that makes hostile takeovers more expensive and might

---

21 For example, the mandatory bid rule also exists in China, although not surprisingly financial supervisors have broad latitude in waiving the requirement. For an overview of non-European systems see John Armour, Jack B. Jacobs, Curtis J. Milhaupt, The Evolution of Hostile Takeover Regimes in Developed and Emerging Markets: An Analytical Framework, 52 HARVARD INT’L L. J. 219 (2011).

22 Defined as listed corporations whose total sales as resulting from the last financial statement approved by the shareholders’ meeting do not exceed 300 million euros, or whose average market capitalization in the last solar year is lower than 500 million euros. Exceeding both measures for three consecutive years excludes the possibility to be considered a small or medium corporation (Article 1, paragraph 1 w-quarter of the TUF).

23 A possible reason why the upper limit of this contractual freedom is set to 40% is that the Directive requires mandating the tender offer in case of acquisition of control. In theory, if we interpret this requirement as limited to absolute control, the threshold could be set at 50%, but not more. Conversely, it is difficult to imagine situations in which, in a listed company, someone has more than 40% but does not control the entity. However, it is questionable that this approach is in line with the substantive goals of the directive, because it allows de facto control to be transferred without triggering a mandatory bid.
protect incumbents. Different rules seem however to apply when someone acquires between 25% and 30%. In this second scenario, if another shareholder owns more shares than the percentage triggering the offer (e.g., 28%: de facto but not absolute control), the mandatory bid seems to be excluded.\(^{24}\) If this interpretation is correct, the rationale for granting the exemption more easily in the second scenario might be not to burden the acquirer with a mandatory bid when the shares obtained do not represent a very large participation. It is questionable whether the legislature had this level of subtlety, or rather the somehow asymmetrical regulation was simply not thought through. But in any case the resulting regimes seem an implicit but quite significant acknowledgement that mandating an offer when another shareholder has de facto control is an obvious obstacle to the market for corporate control.

As for the flexible threshold for small and medium enterprises, our key issue here, a first necessary question is if this statutory provision is compatible with the European directive. The text of the directive requires “Member States” to define “control” for the purposes of triggering the tender offer. Some experts have wondered whether EU rules impose that national legislatures directly define control or can, so to speak, delegate this definition to single corporations, deferring to private ordering. The question is interesting and very important, but the short answer is that — at least from a purely textual point of view — the optional regime introduced by the Italian legislature is compatible with the Directive.

Some doubts could be cast reading the “whereas” of the directive and more generally its goals in terms of harmonization and protection of securities holders. The substantive objection could be that multiplying the events triggering the MBR based on contractual provisions variable through time does not foster the development of a single, harmonized, regulation of takeovers or, as whereas (3) puts it, does not contribute “to create Community-wide clarity and transparency in respect of legal issues to be settled in the event of takeover bids and to prevent patterns of corporate restructuring within the Community from being distorted by arbitrary differences in governance and management cultures.” In addition, as it will be discussed below, it is questionable that the new rules truly protect the interests of “holders of securities, in particular those with minority holdings” as the Directive requires Member States to do. These arguments based on the general goals of the Directive, however, are very slippery from a practical perspective due to the difficulty of clearly defining concepts such as protection of minorities in an area in which economic analysis does not offer absolute and unshakable certainties.

In any case, a doctrinal interpretation of these provisions and their compatibility with European law is not the goal of this Article. What is notable for the purposes of our discussion if that with this new approach, in a non-marginal European economy and legal system, private ordering — so far limited to board neutrality and breakthrough rule — has crept into the regulation of the mandatory bid, and on such a central element as its triggering threshold.

The new rules raise several interpretative questions that would require a long discussion. We will limit ourselves here to point out one issue relevant for the broader question of the impact of contractual freedom in takeovers regulation. Can the modification of the triggering threshold through a bylaws amendment, when possible, be considered, at least in some cases, a defensive measure? The answer must undoubtedly be affirmative. By lowering the triggering threshold, in particular, the target corporation can make acquisitions more difficult and expensive. The controlling shareholder can now, at least in some corporations, not only lower the threshold

\(^{24}\)For an analytical interpretative discussion of the new rules see Renzo Costi, Intervento al Seminario “Voto Maggiorato, Voto plurimo e Modifiche OPA, 42 GIURISPRUDENZA COMMERCIALE 226 (2015); Chiara Mosca, La Maggiorazione del Voto, il Presupposto dell’Obbligo di Offerta Pubblica di Acquisto e le Altre Novità in Materia di Soglie OPA, in 38 NUOVE LEGGI CIVILI COMMENTATE 863 (2015).
when in need of keeping undesired suitors at bay; but can also raise it to a level superior to his own participation (e.g. 40% when he has 36%), if he wants to sell to a friendly buyer without triggering the public offer.

It is crucial to underline that the lower the triggering threshold for the mandatory bid, the harder hostile acquisitions might be. If a tender offer on all the shares, at a legislative mandated minimum price, must be launched when 25%, instead of 30%, of the shares is acquired, other things being equal the financial burden for the bidder is by definition more significant. Also compliance and legal costs might rise, or at least raise at an earlier stage. After the 2014 reform this lower threshold applies to all larger corporations (unless, pursuant to the interpretation mentioned before, there are other controlling shareholders), and can easily be opted in by small and medium corporations. The new rules for small and medium enterprises granting this contractual freedom were, in fact, adopted exactly and explicitly to incentivize going public without fear of losing control. This might be a desirable goal to reinforce equity markets and reduce dependence on the banking system to finance investments and economic growth, but the perplexities we mentioned on their impact on the market for corporate control, especially in a system where plenty of control-enhancing devices are available, remain.

In addition, as mentioned, small and medium corporations can also allow incumbents to sell their stake without any tender offer by raising the triggering threshold up to 40%. The seller might in this case be able to gobble up the entire control premium, leaving minorities out in the cold and hungry.

In other words, if the corporation can be analogized to a medieval castle where incumbents rule, the triggering threshold can work as a “reverse drawbridge:” It is lowered to resist attacks, and raised to welcome friends.

The conclusion that variable, contractually determined thresholds for the mandatory bid are problematic for small investors is confirmed by the fact that the legislature has provided an appraisal right for shareholders not voting in favor of a bylaws amendment altering them.\textsuperscript{25} The very provision of a mandatory appraisal remedy is excellent evidence of the fact that the legislator is aware that allowing shareholders to meddle with the triggers of the mandatory bid might negatively affect minority investors. Of course the question is whether this protection is sufficient to counterbalance the additional powers granted to the majority, but there is no doubt that they could result in a prejudice for minorities.

In this perspective it is not surprising that the rules we have just examined are included in a piece of legislation that introduced also other new control-enhancing devices in the Italian legal system, such as multiple voting shares and loyalty shares.\textsuperscript{26} The underlying philosophy is coherent with a broader protectionist movement characterizing the most recent evolution of takeover law in several European countries, especially with respect to foreign acquisitions, epitomized also, for example, by the French “loi Florange” of 2014.\textsuperscript{27}

In sum, the Italian mini-reform of 2014 suggests a growing interest of the legislature for private ordering and contractual regulation not only in the area of defensive measures, but also

\textsuperscript{25} Pursuant to Article 106, paragraph 1-ter TUF, which indicates the applicability of the general provisions of the Italian Civil Code for appraisal rights. Exit rights are actionable whenever the threshold triggering the mandatory bid is amended after the corporation is listed.

\textsuperscript{26} On the introduction of multiple voting shares and loyalty shares in Italy, also for bibliographical indications, see Marco Ventoruzzo, The Disappearing Taboo of Multiple Voting Shares: Regulatory Responses to the Migration of Chrysler-Fiat, 114 ZEITSCHRIFT FÜR VERGLEICHENDE RECHTSWISSENSCHAFT 192 (2015).

\textsuperscript{27} For a critical appraisal of the loi Florange in France, see the editorial by Professor de Beaufort, Ne pas casser l’équilibre actuel del la legislation sur les OPA, La Tribune February 17, 2014, available at www.latribune.fr.
governing the mandatory bid itself, an approach that some Italian jurists have even suggested should not be limited to small and medium listed corporations, but extended to all listed ones. In addition, the new rules confirm, at least indirectly, that the mandatory bid might discourage control acquisitions, especially hostile ones, and that attributing more discretion to controlling shareholders on the mechanics of the mandatory bid could be a way to lure them to the stock exchange offering access to equity markets with no (or lower) risk of weakening control.

It is very interesting that a European legislature has started courting private ordering in this area so explicitly, but this Italian reform is not an isolated example of the growing attention that an optional takeover regime is receiving in Europe. In fact, in academic (and partially regulatory) circles in Europe, the idea that contractual freedom should play a more important function in determining the balance between an active market for corporate control and defensive measures is more and more discussed. In the next paragraph, we briefly consider this development.

**C. Scholarly Proposals to Expand Private Ordering: The Biases of Contractual Freedom**

One of the most interesting examples of this line of thought, and probably the best articulated one, is offered by a recent paper by Luca Enriques, Ron Gilson and Alessio Pacces entitled “The Case for an Unbiased Takeover Law (with an Application to the European Union).” In a nutshell, they start from the premise that takeover rules should neither foster nor hinder takeovers, but instead let single corporations decide the optimal takeover regime, simply providing for default rules that corporations could opt out of, subject to some specific protections for minority investors. This approach, according to the Authors, should also extend to the MBR.

More precisely, Enriques, Gilson and Pacces propose a dichotomy, or “regulatory dualism,” as they call it, primarily aimed at overcoming political opposition. Corporations that will go public after the introduction of their “unbiased” approach will be subject to default rules “that favor the interests of (minority) shareholders over those of management and controlling shareholders.” These corporations can however opt out of the fallback provisions, and opting out could be made easier or harder with specific bylaws provisions, for example through super-majority requirements. On the other hand, corporations already listed at the adoption of the “unbiased”

---

28For the suggestion of extending the flexible contractual regime introduced for small and medium enterprises to all corporations, and further expanding the role of private ordering in the regulation of mandatory offers, see Renzo Costi, Francesco Vella, *Un’Opa a Misura di Impresa*, http://www.lavoce.info/archives/30659/una-opa-a-misura-di-impresa/.

29 Needless to say, we do not argue that the presence of strong controlling shareholders able to entrench themselves is necessarily and always negative, as this might foster, if the strong owners are enlightened, honest and efficient, more long-term growth. Out point here is simply to recognize the possible effects of an optional regime.

30 Another interesting example of private ordering in takeover regulation are stock exchange rules, existing in some European jurisdictions, that require corporations listed on alternative markets to introduce a mandatory bid rule mechanism in their bylaws. In fact these corporations, not listed on a regulated market, are not subject to the Takeover Directive, but stock exchanges require them to comply, on a – so to speak – voluntary basis, with some of its rules. The Italian market AIM is a case in point. This example is in itself extremely interesting and, in a way, confirms the underlying thesis of this article. If, in fact, the requirement to contractually adopt a MBR might be designed to protect minority investors, and in some situations it does; it can also be a powerful protection for incumbents, making hostile acquisitions more difficult. Considering that the business of Stock Exchanges benefits from attracting issuers – often they are for-profit enterprises whose earnings are determined by listing fees –, it is questionable who is really protected by these types of listing rules.

31 Enriques & Others, *supra*.

32 Enriques & Others, *supra*. 

12
approach “should be governed by default rules matching the status quo even when it favors the incumbents.”

The premise of this reasoning suggests a balanced, neutral and apolitical approach to regulation and sounds appealing at first. A closer look, however, raises several doubts. The very choice of the term “unbiased” for the proposed regime could be considered either imprecise or disingenuous. In this area, there are really no “unbiased” rules. Virtually any rule – including the absence of any rule – on issues such as the mandatory bid, board neutrality and breakthrough affects interested stakeholders and determines or alters the distribution of power and wealth among them. The problem, in this area as well as in others, is not to aspire to a regime that neither favors nor disfavors anyone, hoping that contractual forces will select the best possible option; but rather to understand who will benefit from a certain regime, decide if that is politically and economically desirable or not, and explicitly say so.

Notwithstanding the catchy formulation of the proposal, in fact, it is debatable that a default regime with possible opt-outs would be “unbiased,” and in fact it can turn out to be quite “biased” in favor of either incumbents or minorities, depending on how it is concretely designed. In fairness, Enriques, Gilson and Pacces acknowledge that identifying the right default regime is crucial, and seem to indicate (even if without spending too much time detailing this aspect of their proposal) that protections designed to ensure that opting in and out would efficiently reflect the interests of different shareholders should also be adopted. They however discount, in our opinion, the extreme complexity of the very pillar of their reasoning: the precise definition of the optimal default regime and the need to craft adequate protections for minorities to ensure the efficiency (and fairness) of optional choices.

To delegate the regulation of takeovers to contractual forces and more or less “assisted” private bargaining is not always the most efficient and fair option; mandatory rules are not always anathema; and market failures, especially in this area, exist. Default rules designed to reduce bargaining costs that parties can contract around are desirable when the parties have similar bargaining strength and symmetric information, transaction costs are limited, and no significant externalities are present. In addition, in order for this type of “issuer’s choice” to function efficiently and effectively, investors must be able to clearly distinguish and correctly price different bylaws options and their judgment must be reflected in market prices, at the IPO stage or afterwards. In short, for this approach to work properly, financial markets must be efficient. These conditions do not seem fully verified in our area, with the consequence that a purely default, optional regime appears risky.

The free rein advocated by Enriques, Gilson and Pacces, could easily morph into a free reign...
of the most powerful, informed or organized constituencies.

Let us consider more analytically the problems of the optional takeover regime. We will mention four issues. First of all, with respect to newly listed corporations, who should decide the default regime “crafted against the interest of management and of controlling shareholders”? Does not this decision, in itself, require an evaluation by the legislature of the effects of legal rules? And the regime most advantageous to a specific party does not change from jurisdiction to jurisdiction, corporation to corporation, and time to time, depending on countless variables? Why is it that legislators cannot be trusted to identify the preferable mandatory regime, but are considered able to spell out the preferable default regime?

The Authors indicate, for example, that “A default mandatory bid rule is [...] biased against the interest of the controlling shareholder.” This is clearly not always the case, or at least it depends on a broad set of variables, as we will discuss more formally in Paragraph II.B below. At a minimum, as indicated above, a controlling shareholder primarily interested in avoiding hostile bids might benefit from a mandatory tender offer that raises the costs of unsolicited acquisitions and favors entrenchment. Similarly, a board neutrality rule requiring the approval of defensive measures by shareholders can be relatively ineffective at empowering minority investors when a strong controlling shareholder, who can easily approve defenses not in the best interest of the corporation, is present.36 Should board neutrality still be necessarily and always considered in favor of minority investors? What about situations in which, in fact, the quick adoption of defenses by directors would be necessary to protect shareholders vis-à-vis a non-value maximizing, coercive offer?

In other words and more generally: in the “unbiased” approach, determining correctly the default regime that favors either investors or incumbents is crucial. However, this crucial determination is not only extremely complex and requires a judgment call of the legislature, but it is virtually impossible to identify a default regime that is always in favor or against specific stakeholders, since this depends on many evolving variables.

An easy possible reply to this objection – and we come to our second criticism – is that a non-optimal optional regime is still preferable to a non-optimal mandatory one. After all, supporters of the “unbiased” approach might retort, if the default regime is undesirable, corporations could opt out and embrace a preferable alternative; but they would be stuck with a mandatory non-optimal one.

But is it really possible – in the real world, not in theory – to opt out of, or to prevent opting in, a regime only or primarily favorable to incumbents? Is it truly possible to craft rules that ensure that opting out is possible when efficient and fair? Opting out, even with a supermajority, is only effective when the decision-maker internalizes the preferences of the other relevant parties in a Pareto-efficient way. Let us assume, for example, that the default regime requires the mandatory bid, but shareholders eliminate it. If the controlling shareholder controls a sufficient number of votes, he can impose its preferences to her fellow shareholders even if they are not in their best interest. Should the legislature set a mandatory super-majority to opt out? At which level? In some countries, either directly or indirectly also through shareholders’ agreements, incumbents often control almost 2/3 of the votes. Should there be mandatory appraisal rights for (minority) dissenting shareholders? Or should this matter be left entirely to contractual forces? In this case, minority protections at the IPO stage would be adopted only if not doing so would penalize the issuing price and the cost of capital in such a way that decision-makers

36 And in fact approval of defensive measures by shareholders might make, at least as a practical matter, more difficult to invoke directors’ liability for minority investors. See again Gerner-Beurle & Others, supra.
would internalize the preferences of investors. But is the market really so efficient? It would be almost too easy to mention the 2007-2008 financial crises to underline the ineptitude of the market to properly price financial instruments, but even the most optimistic supporter of the market should acknowledge that the empirical evidence is, at best, mixed and inconclusive.37

Enriques, Gilson and Pacces argue that “individual companies should be able to decide who decides” the preferable takeover regime.38 There is a semantic pitfall in this sentence. Individual companies do not decide anything: as the famous brocard goes, they have “neither body nor soul.” There is someone (controlling shareholders, directors, managers, minority shareholders) who decides who decides within the company. The legislature cannot avoid entrusting someone with this decision. Although the “who decides who decides” question might evoke the old Abbott and Costello routine,39 in fact, if the legislature were not to take up this question in a question, it will still be providing an answer, and that answer would be: Whoever has more muscle will decide.

Last but not least let us not forget that convincing scholarship has explained that, when regulatory competition in corporate law is limited, as it is the case in Europe, legislatures and policy makers tend to favor incumbents, and minority protections tend to be lower.40

A third problem that this approach raises, and that goes to the very political root of the proposal, is the following: even assuming that everything we have argued before is not true, and that in fact it would be possible to elegantly provide a regime in which shareholders will be able to select a value-maximizing takeover regime, a perfectly efficient takeover regulation born out of private ordering. Would this “unbiased” regime be socially preferable to all other regulatory options? Why the legislature should not be allowed, or expected, to craft takeover rules considering also other interests, economic goals, stakeholders? Assuming shareholders – i.e., a sufficiently large number of shareholders – are perfectly content making hostile acquisitions impossible, or on the contrary favoring takeovers so much that the average turnover of directors is a few months, why other considerations should not tilt the balance toward a different regime? What about the impact of takeovers on industrial policies, research and development, employment levels, environmental protection?

Of course one answer of the proponents of the “unbiased” effect could be that this is exactly what they want to avoid. But is it really desirable, let alone realistic, that legislatures ignore these concerns? Is it right to imagine takeovers regulation in a void, unrelated to all the very profound consequences on the economy and on the society of corporate acquisitions and enterprise ownership? Is it acceptable that law makers make a step back leaving the floor to the drafters of bylaws when a transaction implies externalities – and takeovers do have externalities – for the constituencies of those law makers? Mandatory takeover rules are not only adopted in the interests of shareholders, but also to curb other types of market failures, something discounted by the proposal we are criticizing, which seems to assume that this entire matter only concerns shareholders, directors and executives.

Finally, and this is our fourth concern, the proposal underestimates the importance of a certain standardization and uniformity in this area. The Takeover Directive has already been criticized as lame in harmonizing European rules and creating a leveled playing field.41 This

---

37 See Bebchuk, supra.
38 Enriques & Others, supra, 89.
39 See it at https://www.youtube.com/watch?v=kTcRRaXV-fg, from 1:30 on.
40 Marcel Kahan, Ehud Kamar, supra, 737 (2002).
41 Other authors argue that the European Union should not further harmonization, if not with respect to free-choice and contractual freedom enhancing harmonization (Luca Enriques, Company Law Harmonization
The possibility of U.S. legislatures to experiment is often indicated as a point of strength of the American system. But it should not be forgotten that in this country diversity occurs in a system that largely shares a similar underlying structure, one single language, and fairly similar legal institutes. For historical, economic and cultural reasons the different States in the U.S. offer variations on the same theme. Across the Atlantic, lack of harmonization in Europe – at least at this stage of its legal development – often means a cacophony of entirely different musical genres. This might raise the costs of cross-border activities and business transactions. It might make the academic discourse more intriguing because of comparative differences, but also more fractured and compartmentalized. The value of minimum harmonization, in Europe, should not be discounted.

One-size might not fit all, but too many sizes might make it impossible for a European-wide market to thrive. In finance and corporate activities, tailor-made rules are not always preferable to a prêt-a-porter collection only marginally adaptable.

III. Strategic Interactions Under Mandatory Bid Structures

At the heart of the analysis of Enriques, Gilson and Pacces is the objective to identify rules governing take overs that are neutral in terms of fostering or hindering take overs.

The concrete proposal advanced is that of a regulatory dualism. Corporations that become public after the adoption of the "unbiased" approach should face a default regime crafted against management and controlling shareholder interests. However, such corporations could opt out of the default regime, thereby giving incumbent stakeholders significant discretionary power in choosing the rules that are to govern any take over bid. Corporations already public at the point of adoption of the "unbiased" approach would be bound by then existing default rules even if favoring incumbent controlling shareholders.

Enriques, Gilson and Pacces advance their proposal (in part) on the basis of a set of claims crucial to their position. First, that a default mandatory bid rule is biased against the interest of the controlling shareholder. Second, that an opt-out of a default regime will be feasible only when efficient and fair. Third, that shareholders will necessarily select the value-maximizing take-over bid strategy, rendering it socially optimal.

In this section we confront the question of whether these claims are justified, and if so, under what conditions they are true.

To do so, we consider a simple strategic interaction between an incumbent controlling shareholder, minority shareholders, and a bidder wishing to assume a controlling share.
A. Structure of the Strategic Interaction


We consider the strategic interaction of three players. The "bidder" refers to a potential shareholder who wishes to challenge an incumbent controlling shareholder for control. The "incumbent" player is the current controlling shareholder, who holds $0 < \alpha \leq 1$ of the share capital, sufficient to exercise control. The "minority" shareholder is the mass of minority shareholders, who hold $0 < (1 - \alpha) \leq 1$ of the share capital.\footnote{We do not consider questions of coordinated action between minority shareholders, but treat all minority shareholders as homogeneous in their response to any bid offer ($p_f$), so as to to treat the minority shareholders as a single (class) of player for the purposes of analytical simplicity.}

The prevailing market price prior to any strategic interaction is $p_m$. The valuation of a bidder of the firm is $p_w > p_f > p_m$, where $p_w$ denotes the share price fully reflecting bidder’s valuation of the company, $p_f$ the proposed bid share price.\footnote{We are abstracting from the process by which the bidder arrives at the valuations, which is not the focus of our analysis. For a discussion of price determination see Burkart, M., Gromb, D., and Panunzi, F., 2000, Agency Conflicts in Public and Negotiated Transfers of Corporate Control, Journal of Finance, 55(2), 647-77.} This assumption implies that the bidder is able to identify value that incumbent owners and management have not been able to realize, such that they are able to rationally bid ($p_f$) above current market price ($p_m$), and potentially realize a value above bid price ($p_w$).\footnote{For an analysis that examines conditions under which controlling shareholders act so as to to realize efficiency gains to the benefit of all shareholders, and those under which they realize only private gains, see Burkart, M., Gromb, D., and Panunzi, F., supra.} Thereby we are abstracting from agency problems between the new controlling shareholders and management, feasible under incentive alignment or due to the disciplining effect of actual or threatened dismissal of poor management in a properly functioning market for corporate control.\footnote{See for instance Jensen, Michael C., and Meckling, William H., 1966, Mergers and the Market for Corporate Control, Journal of Political Economy., 73 (2), 110-20.} Of course, inefficient incumbent management
need not necessarily be vulnerable to take over bids in the presence of shareholder free riding, which inhibits the ability of bidders to realize capital gains on the shares they acquire such that takeovers occur with lower frequency than they should. Since in our analysis we contest the generality of the Enriques, Gilson and Pacces claims, viz. that it is always the case that a mandatory bid rule is biased against the incumbent controlling shareholder, that opt outs will occur only when efficient and fair, and that shareholders will necessarily choose the socially optimal strategy, it suffices to show that this is not true for the case of takeovers in the absence of the shareholder free riding (or any other) market imperfection. For the same reason we also abstract from the agency problems attaching to the bidder who, after assuming control, may limit the benefit realized by minority shareholders by extracting private benefits from their control.

The timing of the strategic interaction between players is as follows. The bidder either does, or does not make an offer \((p_f)\), for a proportion \(\beta > \alpha\) of the share capital, with \(0 < \alpha < \beta \leq 1\). Since \(\beta\) represents the proportion of share capital for which the prospective new controlling shareholder bids, note that \(\beta\) can represent either a proportion voluntarily defined by the bidder, or a mandatory proportion defined by an external regulator (the legislature, the courts, an antitrust agency). In what follows we begin by allowing the proportion to be general, in the sense of being constrained only by \(\alpha < \beta \leq 1\). We also consider the special case in which \(\beta = 1\), such that the prospective new controlling shareholder is forced to make an offer on the entire share capital of the bid target.

If the bidder chooses not to bid, the game ends. If bidder does bid, both incumbent and minority shareholder then choose to either hold their existing share capital thereby rejecting the offer, or accepting the offer \(p_f\) for the proportion \(\beta\) of their holdings. The game then ends.

We distinguish between two alternative information sets under which incumbent and minority exercise their choice. In the first, the bidder approaches the incumbent controlling shareholder first, in order to secure their acquiescence to the takeover. Incumbent either accepts or rejects. The approach to minority shareholders occurs strictly after the approach to the incumbent. This provides a game of full information and without strategic uncertainty, as illustrated in Figure 3.

In the second, the bidder approaches the incumbent controlling and minority shareholders simultaneously, and both incumbent and minority exercise their choice under strategic uncertainty, that is without knowing the choice of the other shareholders, as illustrated by Figure 4.

The distinction between the two information sets can be thought of as a "friendly" and "hostile" takeover. In the case of the "friendly" takeover, moves are sequential, with bidder openly approaching first the incumbent shareholder, and subsequently minority shareholder if required (as in Figure 3). Under the "hostile" takeover, bidder launches the bid simultaneously over both the incumbent and minority holding without giving the incumbent the chance to consider the possibility of selling their controlling stake at the outset (as in Figure 4).

Objective of all players is to maximize the market capitalization of their shareholdings.

---

50See for instance Grossman, Sanford J., and Hart, Oliver D., 1980, Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation, Bell J. Econ. 11(Spring), 42–64.


52Note that this differs from some of the definitions of "hostile" and "friendly" takeovers employed in the literature. The closest is the definition employed by Betton & Others, supra, in which a take over is hostile/friendly conditional on the rejecting/accepting response by the target management to a merger invitation made by a bidder. By contrast, in the Loyola and Portilla, supra, definition, hostile/friendly takeovers are defined by the intention of the bidder to remove/retain the private benefits of management.
For the sake of analytic tractability, we exclude two complications. First, changes in $\beta$ do not affect the likelihood of a bid. In effect this means that the bidder is certain that they can realize the $p_w - p_f$ value, and hence be able to realize a return, even if the entire share capital has to be purchased. Second, we preclude collusion amongst any of the players, most specifically between the incumbent and the bidder.

### B. Payoffs to the Game

We detail the pay-off structure to the three players under the alternative terminal nodes of the game. These are labelled sequentially from top to bottom as A through E. For incumbent, this gives:

\[
\begin{align*}
A &: \text{Hold} & \text{Hold Minority} & : & 0 \\
B &: \text{Hold} & \text{Accept Minority} & : & \pi_c = \alpha (p_w - p_m) \\
C &: \text{Accept} & \text{Hold Minority} & : & \pi_c = \alpha \left[ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) \right] \\
D &: \text{Accept} & \text{Accept Minority} & : & \pi_c = \alpha \left[ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) \right] \\
E &: \text{No Bid} & & & 0 \\
\end{align*}
\]

for minority:

\[
\begin{align*}
A &: \text{Hold} & \text{Hold Minority} & : & 0 \\
B &: \text{Hold} & \text{Accept Minority} & : & \pi_m = (1 - \alpha) \left[ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) \right] \\
C &: \text{Accept} & \text{Hold Minority} & : & \pi_m = (1 - \alpha) (p_w - p_m) \\
D &: \text{Accept} & \text{Accept Minority} & : & \pi_m = (1 - \alpha) \left[ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) \right] \\
E &: \text{No Bid} & & & 0 \\
\end{align*}
\]
and for bidder:

\[
\begin{align*}
A : \text{Hold}_{\text{incumbent}} & \& \text{Hold}_{\text{minority}} : 0 \\
B : \text{Hold}_{\text{incumbent}} & \& \text{Accept}_{\text{minority}} : \pi_b = \beta (p_w - p_f) \\
C : \text{Accept}_{\text{incumbent}} & \& \text{Hold}_{\text{minority}} : \pi_b = \beta (p_w - p_f) \\
D : \text{Accept}_{\text{incumbent}} & \& \text{Accept}_{\text{minority}} : \pi_b = \beta (p_w - p_f) \\
E : \text{No Bid} & : 0
\end{align*}
\]

\[C. \text{ Solution to Game} \]

\text{Without Strategic Uncertainty.} — Solution is by backward induction in the extensive form depicted by Figure 3.

Consider the choice of the minority player if incumbent chooses to hold (i.e. between A and B). The pay-off of accepting the \( p_f \) bid will be higher than holding, if:

\[
(1 - \alpha) [(1 - \beta) (p_w - p_m) + \beta (p_f - p_m)] > 0
\]

\[\Rightarrow (1 - \beta) p_w + \beta p_f - p_m > 0
\]

\[\Rightarrow (1 - \beta) (p_w - p_f) + (p_f - p_m) > 0
\]

satisfied provided only \( p_w > p_f, p_f > p_m \). Hence, if incumbent holds in the face of the \( p_f \) offer of the bidder, minority will always accept the bid. If minority did not, there is no capital gain realized, since price remains at the initial market value, \( p_m \).

By contrast, consider the choice of the minority player if the incumbent player chooses to accept (i.e. between C and D). The pay-off of accepting the \( p_f \) bid will be higher than holding,
if:

\[
(1 - \alpha) \left[ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) \right] > (1 - \alpha) (p_w - p_m)
\]

\[
\implies -\beta p_w > 0
\]

a contradiction, given \( \beta, p_w > 0 \). Hence, if incumbent accepts the \( p_f \) offer of the bidder, minority will always hold, since they benefit from the additional capital gains due to \( p_w > p_f \).

Given full information, the incumbent therefore knows that if they hold in the face of the \( p_f \) offer of the bidder, minority will always accept; conversely if incumbent accepts the the \( p_f \) offer of the bidder, minority will always hold. It follows strictly that the incumbent will prefer to accept the \( p_f \) offer of the bidder, if:

\[
\alpha \left[ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) \right] > \alpha (p_w - p_m)
\]

\[
\implies -\beta p_w > 0
\]

a contradiction, given \( \beta, p_w > 0 \). Hence, the incumbent will always hold in the face of the \( p_f \) offer of the bidder, since by holding incumbent can realize the full \( (p_w - p_m) \) capital gain from the take-over.

Hence the game has a unique Nash equilibrium solution (B): Bidder makes the \( p_f \) offer; incumbent holds; minority accepts the the \( p_f \) offer. The resultant payoffs of the players are thus:

**Incumbent:**
\[
\pi_c = \alpha (p_w - p_m)
\]

**Minority:**
\[
\pi_m = (1 - \alpha) \left[ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) \right]
\]

**Bidder:**
\[
\pi_b = \beta (p_w - p_f)
\]

Note that this means that the pay-off to the incumbent is maximized, since they realize the full \( (p_w - p_m) \) value gain simply by holding their share capital. By contrast, the minority has to sell at least a part of its share capital at the offer price, \( p_f \), for the bidder to be able to realize the full market value of the company, \( p_w \), so that since \( p_w > p_f \) the capital gain realized by the minority is constrained. Note also that, since:

\[
\frac{\partial \pi_m}{\partial \beta} = 0 \quad \frac{\partial \pi_m}{\partial p_f} = 0 \quad \frac{\partial \pi_m}{\partial p_m} < 0 \quad \frac{\partial \pi_m}{\partial p_w} > 0
\]

\[
\frac{\partial \pi_m}{\partial \beta} = -(1 - \alpha) (p_w - p_m) + (p_f - p_m) < 0 \quad \frac{\partial \pi_m}{\partial p_m} = (1 - \alpha) \beta > 0 \quad \frac{\partial \pi_m}{\partial p_m} < 0 \quad \frac{\partial \pi_m}{\partial p_w} > 0
\]

\[
\text{if } (1 - \alpha) > \frac{(p_f - p_m)}{(p_w - p_m)} < 1, \text{ given } p_w > p_f
\]

\[
\frac{\partial \pi_b}{\partial \beta} = (p_w - p_f) > 0 \quad \frac{\partial \pi_b}{\partial p_f} < 0 \quad \frac{\partial \pi_b}{\partial p_m} = 0 \quad \frac{\partial \pi_b}{\partial p_w} > 0
\]

\[
\text{if } p_w > p_f
\]

the implication is that raising \( p_f \) lowers the pay-off to the bidder, raises that of the minority, and leaves that of the incumbent unchanged. A higher market price, \( p_m \), lowers the pay-off to the incumbent and minority (smaller capital gain), and does not affect the pay-off to the bidder. The higher the market price the bidder is able to generate for the share capital post-bid, \( p_w \), the greater the pay-off to all players (greater capital gain). Finally, raising \( \beta \) increases the pay-off to the bidder (under the presumption that the bidder is able to extract value from the bid, such that \( p_w > p_f \)), and leaves that of the incumbent unchanged. The impact of raising \( \beta \) on the profits of the minority is ambiguous. It increases minority profits only if the minority holding
is sufficiently small, specifically such that \((1 - \alpha) < (p_f - p_m) / (p_w - p_m)\). We return to these implications in the discussion below.

**With Strategic Uncertainty.**—Next, consider the strategic interaction under the extensive form game depicted by Figure 4.

Given that incumbent and minority move simultaneously, play is under beliefs and hence expected pay-offs. Define \(\theta_M (p, 1 - p)\) as the belief of incumbent concerning the probability of minority play of hold and accept respectively. Symmetrically, \(\theta_I (q, 1 - q)\) as the belief of minority concerning the probability of incumbent play of hold and accept respectively.

This generates the expected pay-offs for the incumbent under accept, \(E_{I,a} (\theta_M)\), and hold, \(E_{I,h} (\theta_M)\), and for the minority under accept, \(E_{M,a} (\theta_I)\), and hold, \(E_{M,h} (\theta_I)\), of:

\[
\begin{align*}
E_{I,h} (\theta_M) &= (1 - p) \alpha (p_w - p_m) \\
E_{I,a} (\theta_M) &= \alpha [(1 - \beta) (p_w - p_m) + \beta (p_f - p_m)] \\
E_{M,h} (\theta_I) &= (1 - q) (1 - \alpha) (p_w - p_m) \\
E_{M,a} (\theta_I) &= (1 - \alpha) [(1 - \beta) (p_w - p_m) + \beta (p_f - p_m)]
\end{align*}
\]

It follows immediately that \(E_{I,h} (\theta_M) > E_{I,a} (\theta_M)\), and \(E_{M,h} (\theta_I) > E_{M,a} (\theta_I)\) if:

\[
p^*, q^* < \beta \left[1 - \frac{p_f - p_m}{p_w - p_m}\right] = \beta \left(\frac{p_w - p_f}{p_w - p_m}\right)
\]

where \(p^*, q^*\), denotes the threshold probability with which minority and incumbent play "hold" respectively.

There is thus a mixed strategy Nash equilibrium, where:

\[
p^* = q^* = \beta \left[1 - \frac{p_f - p_m}{p_w - p_m}\right] = \beta \left(\frac{p_w - p_f}{p_w - p_m}\right)
\]

Under the two mixed strategies, \(\sigma_l = (q^*, 1 - q^*)\), \(\sigma_M = (p^*, 1 - p^*)\), it follows that:

\[
\begin{align*}
E_{I,h} (\sigma_M) &= E_{I,a} (\sigma_M) = E_I (\sigma_I, \sigma_M) = \alpha [(p_w - p_m) - \beta (p_w - p_f)] \\
E_{M,h} (\sigma_I) &= E_{M,a} (\sigma_I) = E_M (\sigma_I, \sigma_M) = (1 - \alpha) [(p_w - p_m) - \beta (p_w - p_f)]
\end{align*}
\]

This allows us examine the consequences of changes in \(\beta, p_w\) and \(p_f\). The impact of such changes is on the probability values under the mixed strategies, \(p^*, q^*\), as well as the expected values of the pay-offs under the mixed strategy equilibrium.

Since:

\[
\frac{\partial p^*}{\partial \beta} > 0, \quad \frac{\partial p^*}{\partial p_f} < 0, \quad \frac{\partial p^*}{\partial p_w} > 0, \quad \frac{\partial q^*}{\partial \beta} > 0, \quad \frac{\partial q^*}{\partial p_f} < 0, \quad \frac{\partial q^*}{\partial p_w} > 0
\]

increases in \(\beta\) and \(p_w\), as well as decreases in \(p_f\), for both incumbent and minority player, all have the effect of raising the threshold probability value with which the opposing player has to play the hold strategy, which would mandate a "hold" play for either incumbent or minority. Thus increases in \(\beta\) and \(p_w\), and decreases in \(p_f\), raise the probability that incumbent and minority will "hold" rather than accept.

This has immediate implications in our context. Raising the proportion of shares on which the bidder has to target in a take-over bid \((d \beta > 0)\), will lower the likelihood that both incumbent and minority will accept the bid, and hence raise the likelihood that they will hold their share capital instead.
Further, given:

\[ \frac{\partial E_I(\sigma_I,\sigma_M)}{\partial p_f} < 0 \quad \frac{\partial E_I(\sigma_I,\sigma_M)}{\partial p_w} > 0 \quad \frac{\partial E_M(\sigma_I,\sigma_M)}{\partial p_f} > 0 \quad \frac{\partial E_M(\sigma_I,\sigma_M)}{\partial p_w} < 0 \]

increases in \( \beta \) lower expected pay-offs for both minority and incumbent - since a smaller proportion of shares is available for the full \((p_w - p_f)\) capital gain. By contrast an increase in \( p_f \) increases expected pay-offs for both minority and incumbent - since a higher price is realized on any shares sold to bidder. An increase in \( p_w \) increases expected pay-offs for both minority and incumbent - since a higher capital gain \((p_w - p_f)\) is realized on any held shares. Finally, an increase in \( p_m \) decreases expected pay-offs for both minority and incumbent - since a lower capital gain \((p_w - p_m)\) is realized on any held shares.

D. Private Benefit to Control

As a first generalization, we consider the possibility that there exists a private benefit to controlling shareholders, denoted \( \rho \). Thus the valuation prior to any bid to the incumbent controlling shareholder is given by \((p_m + \rho)\); symmetrically the bidder realizes the private benefit over and above any capital gain from efficiency improvements, \( \beta (p_w - p_f) + \rho \).

This changes the pay-off structure of the game. Specifically, for incumbent in (1) for pay-offs under B, C and D, there is a loss of the private benefit from control, giving the net pay-off of \( \pi_c - \rho \). Conversely, for bidder in (3) for pay-offs under B, C and D, there is an additional gain of the private benefit from control, giving a net pay-off of \( \pi_b + \rho \). Pay-offs to the minority remain unaffected, since minority does not realize the private benefit.

We note at the outset that the core insights derived under the absence of the private benefit remain unaffected.

Solution to the Game Without Strategic Uncertainty.—The extensive form continues to be that reported in Figure 3, and solution continues to be by backward induction. Thus the game continues to have the unique Nash equilibrium solution (B): Bidder makes the \( p_f \) offer; incumbent holds; minority accepts the the \( p_f \) offer. The only change is with respect to the precise magnitude of the pay-offs realized by incumbent and bidder, with \( \pi_c = \alpha (p_w - p_m) - \rho \), \( \pi_b = \beta (p_w - p_f) + \rho \), while \( \pi_m \) is unchanged. The impact of changes in \( \beta, p_f, p_w \) and \( p_m \) for our purposes are symmetrical to the case without private benefits. The only material change is to note that \( \partial \pi_c / \partial \rho < 0 \) and \( \partial \pi_b / \partial \rho > 0 \), such that a greater private benefit from control lowers the pay-off to incumbent, and raises that of the bidder (there is a directly greater loss and gain from the change in control respectively).

Solution to the Game With Strategic Uncertainty.—Again, the extensive form continues to be that reported in Figure 4, while solution is again under expected pay-offs. Maintaining our notation, under \( \theta_M(p, 1 - p) \) and \( \theta_I(q, 1 - q) \), only the expected pay-offs for the incumbent

---

53 Note that generally in the literature private benefits are held to attach to an incumbent management, rather than controlling incumbent shareholders, in the context of a principal-agent model with shareholders. See Loyola and Portilla, supra; and Goldman, E., Qian, J., 2005, Optimal toeholds in takeover contests, Journal of Financial Economics, 77, 321-346. Most analyses, particularly those that focus on shareholder pay-offs, do not consider these private benefits at all. Our approach of attributing private benefits to incumbent controlling shareholders therefore differs from this literature. However, see the discussion in Burkart, M., Gromb, D., and Panunzi, F., 1998, Why Higher Takeover Premium Protect Minority Shareholders, Journal of Political Economy, 106(1), 172-204, in which private benefits to control are considered in the context between of agency problems between a controlling and minority shareholders.
change to \( E_{I,h} (\theta_M) = (1-p) [\alpha (p_w - p_m) - \rho] \) and \( E_{I,a} (\theta_M) = \alpha [(1-\beta) (p_w - p_m) + \beta (p_f - p_m)] - \rho \), so that the condition for \( E_{I,h} (\theta_M) > E_{I,a} (\theta_M) \) is then \( p^* < \beta \left( \frac{p_w - p_f}{p_w - p_m} \right) \), though for \( E_{M,h} (\theta_I) > E_{M,a} (\theta_I) \), \( q^* < \beta \left( \frac{p_w - p_f}{p_w - p_m} \right) \) continues to hold. Note that now \( p^* > q^* \), reflecting the need for compensation for the loss of the private benefit from control. The resultant mixed strategy Nash under \( \sigma_I = (q^*, 1 - q^*) \), \( \sigma_M = (p^*, 1 - p^*) \), provides:\footnote{For proof, see the Appendix.}

\[
\begin{align*}
E_{I,h} (\sigma_M) &= E_{I,a} (\sigma_M) = E_I (\sigma_I, \sigma_M) = \alpha [(p_w - p_m) - \beta (p_w - p_f)] - \rho \\
E_{M,h} (\sigma_I) &= E_{M,a} (\sigma_I) = E_M (\sigma_I, \sigma_M) = (1-\alpha) [(p_w - p_m) - \beta (p_w - p_f)]
\end{align*}
\]

The consequences of changes in \( \beta \), \( p_w \) and \( p_f \) are unaffected from the baseline case without private benefits, with both (13) and (14) continuing to hold. Thus increases in \( \beta \) and \( p_w \), as well as decreases in \( p_f \), for both incumbent and minority player, all continue to have the effect of raising the threshold probability value with which the opposing player has to play the hold strategy, which would mandate a "hold" play for either incumbent or minority. Thus increases in \( \beta \) and \( p_w \), and decreases in \( p_f \), raise the probability that incumbent and minority will "hold" rather than accept. Further, increases in \( \beta \) lower expected payoffs for both minority and incumbent - since a smaller proportion of shares is available for the full \( (p_w - p_f) \) capital gain. By contrast an increase in \( p_f \) increases expected payoffs for both minority and incumbent - since a higher price is realized on any shares sold to bidder. An increase in \( p_w \) increases expected payoffs for both minority and incumbent - since a higher capital gain \( (p_w - p_f) \) is realized on any held shares. Finally, an increase in \( p_m \) decreases expected payoffs for both minority and incumbent - since a lower capital gain \( (p_w - p_m) \) is realized on any held shares.

What is new is that:

\[
\frac{\partial p^*}{\partial \rho} > 0
\]

implying that greater private benefits to control, raises the threshold \( p^* \) value for minority playing hold strategy, which would mandate incumbent to play "hold" also. This therefore increases the probability that incumbent will hold.

\[E. \textbf{Extreme Mandatory Bid Rule}\]

As a second generalization, in place of a voluntary bid structure, we consider the possibility of a mandatory bid offer, under which the bidder is obligated to purchase all shares, such that \( \beta = 1 \). Note that this constitutes the most extreme form of a mandatory bid offer regime, in which the bidder is forced to offer to buy the entire share capital of the bid target. We note at the outset that the core insights derived under the extreme mandatory bid rule is a special (limit) case of the general case in which the constraint is that \( \alpha < \beta \leq 1 \).

The extensive form of the games continues to be that reported in Figures 3 and 4, though the pay-off-structures of the games are affected. Specifically, for incumbent in (1) for pay-offs under C and D, since \( \beta = 1 \), pay-off is now given by \( \pi_c = \alpha (p_f - p_m) \). For minority, in (2) under B and D, pay-off is now given by \( \pi_m = (1-\alpha) (p_f - p_m) \). For bidder in (3) under B, C and D, pay-off is now given by \( \pi_b = (1-\alpha) (p_w - p_f) \), \( \pi_b = \alpha (p_w - p_f) \) and \( \pi_b = (p_w - p_f) \) respectively.

\[\textbf{Solution to the Game Without Strategic Uncertainty} \]—Since the extensive form
continues to be that reported in Figure 3, solution continues to be by backward induction, and isomorphic to Section III.C. Thus the game has a unique solution (B): Bidder makes the \( p_f \) offer; incumbent holds; minority accepts the the \( p_f \) offer. Solution renders the equilibrium Nash. The change is with respect to the precise magnitude of the pay-offs realized by the players. Specifically:

\[
\begin{align*}
\text{Incumbent} & : \quad \pi_c = \alpha (p_w - p_m) \\
\text{Minority} & : \quad \pi_m = (1 - \alpha) (p_f - p_m) \\
\text{Bidder} & : \quad \pi_b = (1 - \alpha) (p_w - p_f)
\end{align*}
\] (17)

The impact of changes in \( p_f, p_w \) and \( p_m \) are entirely symmetrical to the voluntary bid case. Raising \( p_f \) lowers the pay-off to the bidder, raises that of the minority, and leaves that of the incumbent unchanged. A higher market price, \( p_m \), lowers the pay-off to the incumbent and minority (smaller capital gain), and does not affect the pay-off to the bidder. Finally, the higher the market price the bidder is able to generate for the shares capital post-bid, \( p_w \), the greater the pay-off to all players (greater capital gain).

**Solution to the Game With Strategic Uncertainty.**—The extensive form continues to be that reported in Figure 4, with solution under expected pay-offs. Continuing with our notational convention, under \( \theta_M (p, 1 - p) \) and \( \theta_I (q, 1 - q) \), the expected pay-offs for the incumbent under accept, \( E_{I,a} (\theta_M) \), and hold, \( E_{I,h} (\theta_M) \), and for the minority under accept, \( E_{M,a} (\theta_I) \), and hold, \( E_{M,h} (\theta_I) \), are now:

\[
\begin{align*}
E_{I,h} (\theta_M) &= (1 - p) \alpha (p_w - p_m) \\
E_{M,h} (\theta_I) &= (1 - q) (1 - \alpha) (p_w - p_m) \\
E_{I,a} (\theta_M) &= \alpha (p_f - p_m) \\
E_{M,a} (\theta_I) &= (1 - \alpha) (p_w - p_m)
\end{align*}
\] (18)

It follows immediately that \( E_{I,h} (\theta_M) > E_{I,a} (\theta_M) \), and \( E_{M,h} (\theta_I) > E_{M,a} (\theta_I) \), if:

\[
p^*, q^* < \left( \frac{p_w - p_f}{p_w - p_m} \right)
\] (19)

where \( p^*, q^* \), denotes the threshold probability with which minority and incumbent plays "hold" respectively. There is thus a mixed strategy Nash equilibrium, where:

\[
p^* = q^* = \left( \frac{p_w - p_f}{p_w - p_m} \right)
\] (20)

and under the two mixed strategies, \( \sigma_I = (q^*, 1 - q^*) \), \( \sigma_M = (p^*, 1 - p^*) \), it follows that:

\[
\begin{align*}
E_{I,h} (\sigma_M) &= E_{I,a} (\sigma_M) = E_I (\sigma_I, \sigma_M) = \alpha (p_f - p_m) \\
E_{M,h} (\sigma_I) &= E_{M,a} (\sigma_I) = E_M (\sigma_I, \sigma_M) = (1 - \alpha) (p_f - p_m)
\end{align*}
\] (21)

Note that changes in \( p_w \) and \( p_f \) carry implications entirely symmetrical with those under the general case. Increases in \( p_w \), raises the probability that incumbent and minority will hold, while increases in \( p_f \), lowers the probability that incumbent and minority will hold.
The table provides the effect of raising mandatory bid proportion on profit and probability of "holding" rather than "accepting" for different scenarios.

### Table 1: Effect of Raising Mandatory Bid Proportion

<table>
<thead>
<tr>
<th>Effect on Profit</th>
<th>Friendly Take Over</th>
<th>Hostile Take Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incumbent</td>
<td>0</td>
<td>&lt; 0</td>
</tr>
<tr>
<td>Minority</td>
<td>&gt; 0 if ((1 - \alpha) &lt; \frac{(p_f - p_m)}{(p_w - p_m)})</td>
<td>&lt; 0</td>
</tr>
<tr>
<td>Bidder</td>
<td>&gt; 0 if (p_w &gt; p_f)</td>
<td>&gt; 0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect on Probability of &quot;Holding&quot; rather than &quot;Accepting&quot;</th>
<th>Friendly Take Over</th>
<th>Hostile Take Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incumbent</td>
<td>–</td>
<td>&gt; 0</td>
</tr>
<tr>
<td>Minority</td>
<td>–</td>
<td>&gt; 0</td>
</tr>
<tr>
<td>Bidder</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

### F. Impact of the Magnitude of the Mandatory Bid Requirement

We began this section of the paper by noting that the proposal Enriques et al (2014) to increase the discretion of incumbent controlling shareholders on the basis of three core claims. First, that a default mandatory bid rule is biased against the interest of the controlling shareholder. Second, that an opt-out of a default regime will be feasible only when efficient and fair. Third, that shareholders will necessarily select the value-maximizing take-over bid strategy, rendering it socially optimal.

Given our analysis of the strategic interaction between incumbent, minority shareholders and bidders, are these claims plausible?

To answer this question, consider the summary of our results reported in Table 1, for both the case of "friendly" (the case without strategic uncertainty) and "hostile" (the case with strategic uncertainty) takeovers. We consider the effect of changing the proportion of shares on which any mandatory bid must be placed, on both profits and on the likelihood of holding rather than accepting (the latter defined only for "hostile" takeovers).

So is a default mandatory bid rule biased against the interest of the controlling shareholder?

Not necessarily. Under a friendly take-over, raising the stringency of the mandatory bid requirement \((d \beta > 0)\) has no effect on the incumbent’s profit at all, since the incumbent chooses to hold his stake in order to realize the maximum possible capital gain resulting from the bid.\(^{55}\) It is only under the hostile take-over condition that the profit of the incumbent is lowered by a more stringent mandatory bid requirement \((d \beta > 0)\), since the increased bid requirement will raise the expected proportion of the capital holding on which only the limited bid-price capital gain, \(p_f - p_m\), is realized.\(^{56}\)
What of the minority shareholder interest?

Again, the impact of a mandatory bid rule is conditional. Under a hostile take over, the profit of minority shareholders is lowered by a more stringent mandatory bid requirement \((d\beta > 0)\), for the same reason as for the incumbent shareholder - a smaller proportion of the shareholding is expected to give the maximum capital gain, a larger proportion the smaller capital gain associated with the bid price.\(^{57}\)

Under a friendly take over, the impact of a more stringent mandatory bid requirement \((d\beta > 0)\) is ambiguous for the minority shareholder. It would increase the profits of minority shareholders only if the minority stake is "small," \((1 - \alpha) < (p_f - p_m) / (p_w - p_m)\), and decrease it if the minority stake is "large," \((1 - \alpha) > (p_f - p_m) / (p_w - p_m)\). Why is this? Recall that the minority shareholder rationally plays the accept strategy, given that incumbent holds, with the consequence that the minority shareholder realizes the capital gain \((p_w - p_m)\) on the proportion \((1 - \beta)\) of their holding, and the capital gain \((p_f - p_m)\) on the proportion \(\beta\) of their holding. Since, provided only that the bidder is able to extract value from the take over, such that \(p_w > p_f\), it will follow that the capital gain on the capital position that is held will exceed that which is sold to the bidder, \((p_w - p_m) > (p_f - p_m)\). Increases in \(\beta\) will therefore lower the larger of the two sources of capital gain, and increase the smaller of the two sources of capital gain.

So will shareholders will necessarily select the value-maximizing take-over bid strategy, rendering it socially optimal?

Again, not necessarily. Since under friendly take over bids the incumbent controlling shareholder has no incentive to change the mandatory bid requirement, since their capital gain is unaffected.\(^{58}\) Yet, since capital gains of the minority shareholder are affected negatively or positively by changing the mandatory bid proportions conditional on \((1 - \alpha) \geq (p_f - p_m) / (p_w - p_m)\), efficiency would require an increased mandatory bid proportion under "small" minority share holdings, and a decreased mandatory bid proportion under "large" minority share holdings. While in principle minority shareholders could induce the incumbent to act accordingly through transfer payments, difficulties surrounding collective action coordination are likely to preclude this possibility.

Under hostile take overs, there is an incentive on the part of incumbent shareholders to lower the mandatory bid proportion in order to raise expected capital gains, which is aligned with the interest of minority shareholders. However, this does not represent a social efficiency gain, since the increased capital gain on the part of incumbents and minority shareholders is offset by the decreased profit realization on the part of the bidder - the game is zero-sum across the society at large.

Will an opt-out from a default regime be feasible only when efficient and fair?

---

\(57\) The reason is exactly symmetrical to that outlined in the preceding footnote.

\(58\) Our analysis precludes the possibility of collusion between incumbent and bidder. Were such collusion possible, it is feasible that incumbent would have an incentive to alter \(\beta\), so as to lower cost of the take over for the bidder, in return for a transfer payment from bidder to incumbent. In our simple case, this is excluded.
### Table 2: Profits and Profit Ranks under Alternative Strategic Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Incumbent</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly Take Over</td>
<td>$\beta &lt; 1$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\alpha (p_w - p_m)$</td>
<td></td>
</tr>
<tr>
<td>Hostile Take Over</td>
<td>$\beta &lt; 1$</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>$\alpha [(p_w - p_m) - \beta (p_w - p_f)]$</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>$\alpha (p_f - p_m)$</td>
<td>3</td>
</tr>
<tr>
<td>Hostile Take Over</td>
<td>$\beta = 1$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$(1-\alpha) [ (1 - \beta) (p_w - p_m) + \beta (p_f - p_m) ]$</td>
<td>1</td>
</tr>
</tbody>
</table>

| Minority               |                                    |      |
| Friendly Take Over     | $\beta < 1$                        |      |
|                        | $(1-\alpha) [ (1 - \beta) (p_w - p_m) - \beta (p_w - p_f) ]$ | 2    |
|                        | $(1-\alpha) (p_f - p_m)$           | 3    |
| Hostile Take Over      | $\beta < 1$                        |      |
|                        | $\beta (p_w - p_f)$                | 2    |
| Hostile Take Over      | $\beta = 1$                        |      |
|                        | $\beta (p_w - p_f)$                | 2    |
|                        | $(p_w - p_f)$                      | 1    |

The preceding analysis demonstrates that this is not the case. We have just seen that under a hostile bid, incumbent will have an incentive to reduce the mandatory bid proportion, and this will serve to increase the expected capital gains for both incumbent and minority shareholders. However, this is not an efficiency enhancement, since incumbent’s and minority’s gain is offset by bidder’s loss, in a zero-sum outcome. There is no net social gain. Certainly, therefore, the opt-out will not occur only when efficient and fair.

It is also not feasible to claim that all feasible value gains will be realized by the proposal. Since under friendly take overs incumbent does not have an incentive to change the mandatory bid proportion, the potential profit gain by minority shareholders that would be realized by an increased mandatory bid proportion under "small" minority share holdings, and a decreased mandatory bid proportion under "large" minority share holdings, would not be realized.

Finally, we briefly comment on the relative magnitudes of the expected capital gains to be realized under our alternative outcomes of the strategic interaction. The profits realized under the alternative strategic outcomes, and their ranking in terms of relative magnitudes, is summarized in Table 2. We note that for incumbent and minority, capital gains are highest under friendly take overs, followed by hostile take overs with a mandatory bid proportion that is not complete ($\beta < 1$). The lowest profit is realized under the full mandatory bid proportion ($\beta = 1$). For the bidder the reverse is true: highest capital gain is realized under the full mandatory bid proportion ($\beta = 1$), while the capital gains under either friendly or hostile bids is the same, under an incomplete mandatory bid proportion ($\beta < 1$).

Two important claims follow from this analysis. First, it is not possible to claim that a mandatory bid rule is always in the best interest of minority shareholders, and against the interests of incumbents. We have shown that there exist circumstances in which incumbents are unaffected, and we have also demonstrated that minority interests can be both positively and negatively affected by an increase in the mandatory bid proportion ($\beta$). It follows that the claim that is easy to find a default regime crafted against the interests of decision makers is not substantiated. Second, since we have shown that incumbents may select mandatory bid rules that are not consistent with value-maximizing bid strategies, it follows that incumbents, if given the right to do so, could choose tender offer rules that would result in an efficiency loss.
IV. Trimming the Peacock’s Tail: Toward a Lighter Mandatory Bid Rule

A. A Modest Proposal to (Partially) Liberalize Takeovers

The preceding discussion confirms the difficulty of identifying an optimal default regime, and casts doubts, in our opinion, on the feasibility of an optional takeover regime, but also indicates that the MBR can be inefficient. Numbers could be fairly easily substituted in the formula above to show those conclusions.

For sure, however, the MBR is far from being a flawless regulatory approach. Rather than venturing in private ordering and risking a free-for-all deregulation, we believe that a more compelling idea would be to retain the basic principles of the MBR, but to partially liberalize it and reduce the cost of (hostile) acquisitions.59

As mentioned before, a mandatory tender offer on all the shares at a fair price is desirable in case of a friendly transfer of control, and especially after a negotiated sale of a controlling participation, in order to allow minority investors to benefit, at least partially, from the control premium and grant them an exit in case a new and undesired controlling shareholder has materialized. Efficiency and fairness considerations support this claim, including the fact that attracting small and institutional investors interested in the capital gains determined by a change in control makes markets deeper, more liquid and reduces the cost of capital.

The story is however different in a hostile acquisition context and when a controlling stake is bought from a controlling shareholder, but in the context of a bid offering identical conditions to all offerees, majority and minority shareholders. In these situations, the mandatory bid or the need to launch an offer meeting specific conditions can be an effective defense or an obstacle to efficient acquisitions not only for its financial costs, but also for the legal loopholes and risk of litigation it presents to the bidder.

As the theoretical shared wisdom suggests, the MBR should prevent inefficient takeovers, but can also impede some efficient ones; it discourages value-destroying control transfers, but also causes some value-increasing ones to be aborted. To put it more simply: by requiring acquirers to pay a fairly high price for all shares, the MBR reduces the risk of underpayment of shareholders; but can also discourage some less profitable, but still perfectly desirable, control transfers.

The MBR is a bit like the tail of the peacock: from an evolutionary standpoint, a handicap imposed by sexual selection that allows the fittest peacocks (offerors), able to “afford” it, to show it off (pay such a high price) to female peacocks (investors), signaling that notwithstanding the cumbersome appendix they can still outrun predators (they are so financially stable and efficient at managing the target that can sustain the expensive offer). The peacock’s tail indicates physical prowess, the MBR might signal financial mighty and managerial acumen. But there are some very fine peacocks with a somehow smaller and less colorful tail, and some very fine bidders with less cash on their hands.

After over ten years (and more in some countries) of experimenting with the MBR, it might make sense to curb its rigidity, to trim a little the statutory-imposed heavy tail of the peacock, allowing partial offers and more flexibility on prices. On this we agree with the gist of the contribution of Enriques, Gilson and Pacces, but we offer a different solution. The rationale of our position is that the very conflict of interest between incumbents and acquirer in hostile acquisitions contexts, or at least the incentives of the incumbents to obtain the highest price for their shares in a tender offer, might sufficiently protect minority shareholders. This is an area in which market forces, concentrating on elements fairly easy to assess by investors such as price and overall conditions of the offer, can function better than in the more complex elaboration of contractual takeover rules in an optional regime. If we have not pushed the metaphor too far, the idea is that the very competition between male peacocks will keep them fit and strong also without such a long tail, and might even allow new birds to enter the competition for marital affection, therefore broadening the genetic pool.

It might work as follows. If someone obtains a controlling stake from a large shareholder in a private transaction outside the context of a public offer, a follow-up mandatory bid on all shares at the highest price paid would be required. If, however, the relevant threshold has been acquired in a public offer to all shareholders, the MBR would not apply also in case of partial offers at a freely determined price. The difference with the already existing regimes in different jurisdiction would be, however, to release the very rigid conditions previously mentioned, such as approval of the majority of the minority or the prohibition of previous acquisitions exceeding 1%.60

Of course a similar approach requires some caveats. Specific rules – in reality, largely already in place – should be fine-tuned to protect investors, such as the all holders, pro-rata purchases and best price rules; but also rules designed to avoid coercive offers with a back-end less attractive for investors or other retaliatory measures, something that currently is largely uncharted territory in Europe.61

The idea is far from being wild. As already mentioned, several European jurisdictions – Italy is one example, as discussed above – already have exemptions from the mandatory tender offer when the triggering threshold is reached through a partial offer sufficiently protective of investors, or through an offer on all the outstanding shares. Our suggestion is simply to further extend the scope of these provisions and further liberalize tender offers vis-à-vis the MBR.

Under the approach we are suggesting it is totally possible – actually, inevitable – that when a tender offer is launched, in some cases, minority shareholders would receive a lower total consideration than the one they would receive in mandatory offer, or not be able to tender all the shares they would like to. This loss, however, might be more than compensated by a higher number of takeovers, and diversified investors would benefit from the additional takeovers. By partially liberalizing the MBR, a “pay one, get two” effect might follow. It is not difficult to demonstrate that, with less stringent rules, the financial resources currently necessary to

60 Note that this condition limits significantly the practical relevance of the exception, especially in case of hostile acquisition. It is rarely possible, for obvious economic reasons, to launch a hostile without having recently acquired some shares. This explains, for example, the 10-days window provided under U.S. law before disclosing the acquisition of a relevant threshold of a listed corporation under Section 13(d) of the Securities and Exchange Act of 1934. Prohibiting or making it harder to accumulate some shares before launching a tender offer hinders the ability of bidders to challenge incumbents.

61 On regulation of freeze-outs in the U.S., see Fernán Restrepo, Do Different Standards of Judicial Review Affect the Gains of Minority Shareholders in Freeze-Out Transactions? A Re-Examination of Siliconix, 3 HARVARD BUS. L. REV. 321 (2013); Ventoruzzo, Freeze-Outs, supra.
conduct one acquisition could be sufficient for two, therefore further enhancing the opportunity for possibly smaller, but more frequent capital gains for investors.

Considering the quite meager number of hostile offers in some European countries in the last ten years, it might make sense to discuss this idea with an open mind. Needless to say, a hostile tender offer when a controlling shareholder owns, for example, in between 30% and 40%, has a lower chance of success than when a more widespread ownership structure is present; but the question is whether it is desirable to raise the difficulties even further, and whether the MBR discourages takeovers in a sub-optimal way.

In the next section, we will consider more formally the question whether a mandatory bid is always desirable or always clearly in favor of one particular group of stakeholders.

B. Anything Else?

But there is more. The law should never only deal with efficiency considerations, and too often fairness and ethical concerns are ignored or forgotten in this area. An overlooked aspect of takeover regulation is the possible adverse selection of bidders, and therefore controlling shareholders, interested in extracting private benefits from the corporation and from minority investors. If it is true that the actual value of the shares for the incumbents is determined also by their ability to extract private benefits, it is entirely possible that – legal protections notwithstanding – bidders that for different reasons are not interested in exploiting these weaknesses of the system would be left out in the cold.

It is easy to imagine situations in which the minimum price of a mandatory tender reflects the private benefits of control, and a “good-hearted” bidder would be put off by this asymmetry in evaluating the shares, while might launch a value-creating offer if the legal system would grant him more freedom in determining price and number of shares. The idea of a “good-hearted” bidder is far from being as naïve as the expression might suggest. There are in fact investors that for a number of strategic, ethical and cultural considerations prefer not to extract (or extract less) private benefits from listed corporations, and they are exactly the investors the legislature should try to attract.

The idea, with yet another zoological metaphor, is the following. Gerard owns a donkey, Balthazar. Gerard works Balthazar almost to death, starves him and mistreats him. Enduring the torments, the patient beast earns Gerard $200 a month for a meager keep of $30 a month, and has an expected and not too happy life of two years. Based on that, the net value of the donkey for Gerard is $170 x 24 = $4,080 (ignoring the time-value of money, for simplicity).

Marie, Gerard’s neighbor, a much nicer person, would be perfectly happy to buy Balthazar and treat him more humanely. Under her care, the donkey would only make $120 a month, but to keep it would cost $50 a month, and it would probably live four, much happier years. This means that, for Marie, the value of the donkey cannot exceed $70 x 48 = $3,360; while as we have seen Gerard’s reservation price exceeds $4,000, exactly for his unscrupulous treatment of the quadruped. In some circumstances, the implication of the mandatory bid rule is to force everyone to pay the donkey the price of the cruel, exploitive owner: do we always want to encourage that?

Based on our discussion, a regime in which the bidder would be allowed to make a partial offer at a (partially) free price, but required to launch a tender offer on all the shares if he has privately acquired control from the incumbents, might represent a preferable compromise between

---

62The names of the characters in this hypothetical have not been chosen randomly, but in honor of readers who are also movie buff.
the rigidity of a generally-applicable mandatory bid rule, and the alternative of an optional regime with no statutory imposed offer, which could under-protect minorities. Of course this conclusion is consistent with the analysis of the case of private benefits illustrated in our simple model above.

Someone might suggest that this proposal entails a risk. If, under the more flexible regime, hostile takeovers would be facilitated, and the possible gains for controlling block holders would be reduced, they might simply acquire more than 50% of the shares to seal the door to the boardroom from any attacker. The response is however simple. To begin with, of course we should not forget that obtaining absolute control or, more precisely, acquiring in a limited period of time a relevant percentage of shares toward absolute control, also requires the launch of a mandatory tender offer to protect investors and grant them an exit right before the corporation becomes impregnable. Second, even if that would be the case, would it be so different from what happens today, at least in some jurisdictions, also because of the MBR? How many hostile offers have we recently seen, for example in Italy, of a corporation controlled with a 40% stake?

An even more subtle question is the following. Assuming our proposed regime is adopted, and therefore the MBR is maintained but put on a diet and not applied in some situations, or not applied so rigorously. Could corporations include the MBR in their bylaws? This is, after all, as mentioned before, what some Stock Exchanges require from the issuers they list on alternative markets for small corporations. A positive answer would, in practice, lead to an approach quite similar to the idea of a default regime from which corporations can opt out, advocated by Enriques, Gilson and Pacces.

Not surprisingly, our answer is negative. Or, more precisely, a contractual MBR might be acceptable and effective only as long as the controlling shareholder owns only a fraction of the percentage of shares representing the triggering threshold of the compulsory offer. For example, if the MBR is triggered by the acquisition of a 40% stake, the bylaws provision requiring a mandatory offer would be applicable only if the current controlling shareholder does not own more than 20%. Hostile changes of control would still be possible when the acquirer does not obtain so many shares to be shielded from the policing forces of the market. This was the gist of the rules introduced in the U.K. in the 1960s, and it would protect minorities without excessively discouraging a more vivacious and healthy market for corporate control.

One last point that clearly would require an extensive discussion, and we only mention here. Our proposal would be rather different if framed in terms of an amendment to the European Directive, or of statutory provisions at the level of single Member States. The difficulties should not be discounted. The first road makes more sense in theory, but considering the current political climate in the European Union, and the already fragile compromise of the Directive, it could be very steep. The second road raises, first of all, the question of the compatibility of this approach with European law, which is questionable with respect to the current text of the Directive. In addition, assuming that this issue could be addressed, there is an obvious collective action problem: since our proposal might make some hostile acquisitions of domestic corporations easier, which government – in the current political climate – would embrace it without similar and contextual changes in other countries?

Without denying these problems, we believe that a less expensive acquisition regime should be seriously considered.

---

63 See supra, footnote 30.
V. Conclusions

Private ordering in regulating takeover bids, and in particular the triggering threshold for a mandatory offer, might seem attractive in theory but, especially in systems with concentrated ownership structures and a strong separation between ownership and control, is risky. Efficient contractual solutions require the legislative definition of an optimal default regime that are not less difficult than the ones required by a partially mandatory regime, and a set of circumstances that, at best, are not entirely verified.

The MBR in its current formulation is, however, very expensive, and can hinder the market for corporate control. A more liberal regime reducing the current limitations to voluntary offers, at least for some types of acquisitions, should be considered, and might lead to more efficient and fair outcomes.

Shorter peacocks’ tails might be less pretty to look at, but should be considered if they can help protecting donkeys.
about ECGI

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

The ECGI produces and disseminates high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It draws 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.
ECGI Working Paper Series in Law

Editorial Board

Editor
Luca Enriques, Allen & Overy Professor of Corporate Law, Faculty of Law, University of Oxford

Consulting Editors
John Coates, John F. Cogan, Jr. Professor of Law and Economics, Harvard Law School
Paul Davies, Emeritus Fellow, formerly Allen & Overy Professor of Corporate Law, Faculty of Law, Jesus College, University of Oxford
Horst Eidenmüller, Chair of Private Law, German, European and International Company Law, University of Munich and University of Oxford
Amir Licht, Dean and Professor of Law, Radzyner School of Law, Interdisciplinary Center Herzliya
Roberta Romano, Sterling Professor of Law and Director, Yale Law School Center for the Study of Corporate Law, Yale Law School

Editorial Assistants:
Pascal Busch, University of Mannheim
Marcel Mager, University of Mannheim

www.ecgi.org/wp
**Electronic Access to the Working Paper Series**

The full set of ECGI working papers can be accessed through the Institute’s Web-site (www.ecgi.org/wp) or SSRN:

<table>
<thead>
<tr>
<th>Series</th>
<th>Link</th>
</tr>
</thead>
</table>