



NUS Law Working Paper 2020/007

EW Barker Centre for Law & Business Working Paper 20/05

Facilitating the Optimal Mechanism in Mergers & Acquisitions: A Comparative Perspective from the Commonwealth and United States

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[March 2020]

This paper can be downloaded without charge at the National University of Singapore, Faculty of Law Working Paper Series index: <http://law.nus.edu.sg/wps/>

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Facilitating the Optimal Mechanism in Mergers & Acquisitions: A Comparative Perspective from the Commonwealth and United States*

I: Introduction

“The rise of corporate governance” in recent years has been well documented by numerous scholars¹. Has this increase in attention to corporate governance led to any form of systemic convergence or divergence in corporate governance regimes around the world? In a compelling article,² Gordon puts forth a nuanced narrative – while there has been convergence in many of the formal governance rules across law regimes the world over, local regimes do continue to diverge considerably. For example, Gordon argues that we continue to observe heterogeneity in ownership structures. Despite many improvements in minority-shareholder protection, the Anglo-Saxon paradigm of diffuse ownership has not emerged as the predominant form of ownership structure across the globe.

The striking degree of divergence in the way that hostile takeovers are regulated across different jurisdictions is also observed, even between common law jurisdictions. Under Delaware takeover law, directors who decide to put their company up for sale must seek and obtain the best price for their shareholders. Known as “*Revlon*”³ duties, the target company’s board of directors are placed in the shoes of “auctioneers charged with getting the best price for the stock-holders at a sale of the company”.⁴ In contrast, the position in Takeovers Codes elsewhere in the Commonwealth is more ambivalent, and the duty to shareholders imposed by these codes may simply be an enhanced one to treat shareholders fairly.⁵

In this article, we attempt to evaluate several comparative takeover regimes pursuant to a “welfarist” analysis⁶. Our benchmark is that of economic efficiency, taking into account the

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¹ See, for example Bebchuk, Alon, and Robert J. Jackson. "The Rise of Corporate Governance." (2016)., Netter, Jeffrey, Annette Poulsen, and Mike Stegemoller. "The rise of corporate governance in corporate control research." *Journal of Corporate Finance* 15.1 (2009): 1-9. and Cadbury, Adrian. "The rise of corporate governance." *The accountable corporation* 1 (2006): 3-44.

² Jeffrey N. Gordon, Convergence and Persistence in Corporate Law and Governance, in *Oxford Handbook of Corporate Law and Governance* (Jeffrey Gordon & Georg Ringe eds., 2017).

³ “*Revlon*” duties are named after the seminal case of *Revlon, Inc. v. MacAndrews & Forbes Holdings*, 506 A.2d 173, 1986 Del. (1986). The facts of the case and the implications of its holding will be discussed in detail later.

⁴ *Ibid.* at 182.

⁵ *Heron International v Associated Communications Corp* [1983] BCLC 244, *John Crowther Group v Carpets International* [1990] BCLC 460 (“duty” to obtain best price) but compare *Re a Company* [1986] BCLC 382, *Fulham Football v Cabra* [1992] BCC 863 (CA), *Dawson International v Coats Paton* [1991] BCC 276 (allowing boards to recommend lower bids). See further, Wan Wai Yee and Umakanth Varottil, *Mergers and Acquisitions in Singapore: Law and Practice* (LexisNexis, 2013) Ch 8.

⁶ By a “welfarist” analysis, we are referring to the maximization of social welfare under a “Kaldor-Hicks” framework. After allowing for compensation between parties, the situation cannot be modified so as to make one individual (or preference criterion) better off without making at least one individual (or preference criterion) worse off. See Markovits, Richard S. "A constructive critique of the traditional definition and use of the concept of the effect of a choice on allocative (economic) efficiency: Why the Kaldor-Hicks test, the Coase theorem, and virtually all law-and-economics welfare arguments are wrong." *U. Ill. L. Rev.* (1993): 485.

effects of law on both allocation and investment.⁷ Our normative framework is natural in the context of corporate governance where efficiency considerations tend to be paramount, especially in the U.S.⁸ Indeed, ever since Jensen and Meckling's seminal work,⁹ the minimization of agency costs amongst various stakeholders of the firm has been seen as a central objective of contemporary corporate law.¹⁰ We compare and contrast three common law takeover regimes: Delaware law, the United Kingdom ('UK') (on whose laws those of many Commonwealth jurisdictions are modelled on), and Singapore. We argue that that Singapore's takeover regime emerges as the most efficient of these three jurisdictions. The intuition of our thesis stems from the fact that Singapore's takeover regime is *context specific*, and is thus best able to balance the tension between ex-post allocative inefficiencies caused by the failure to allocate target companies to high-value bidders, and ex-ante investment efficiencies resulting from the inducement of acquiring bidders given reduced competition for target firms. Given the hegemony of Law & Economics in U.S. corporate law scholarship,¹¹ our observations are somewhat surprising; and highlight an important role for comparative corporate law scholarship even where a common normative structure is assumed.¹²

Two economic arguments justify *Revlon* duties. The first is that a company's managers should maximize the value of their shareholders' investment in the company.¹³ The second specifies that auctions are "optimal"¹⁴ mechanisms¹⁵ to maximise shareholder returns. The first premise is relatively uncontroversial, as long as the maximisation process is *constrained* by exogenous law where negative externalities result from it.¹⁶ For example, a profit-maximizing¹⁷ firm may choose to engage in activities that have a detrimental impact on the environment. Where appropriate, such conduct should rightfully be restrained by environmental regulation.¹⁸ To the extent that no such negative externalities exist,

⁷ See more generally Zerbe, Richard O. *Economic efficiency in law and economics*. Edward Elgar Publishing, 2002.

⁸ See Bainbridge, Stephen M. "Community and Statism: A Conservative Contractarian Critique of Progressive Corporate Law Scholarship." *Cornell Law Review* 82, no. 4 (1997): 856-1532. ("Over the last few decades, law and economics scholars have mounted a largely successful hostile takeover of the corporate legal academy.")

⁹ Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 *J. FIN. ECON.* 305 (1976).

¹⁰ See Kraakman, R. et.al, 2017. *The anatomy of corporate law: A comparative and functional approach*. Oxford University Press.

¹¹ *Supra* 8.

¹² By "normative structure", we are making reference to the normative framework we adopt in this article – economic efficiency. *C.f.* Rock, Edward B. "America's Shifting Fascination with Comparative Corporate Governance." *Wash. ULQ* 74 (1996): 367. ("Unless German managers are motivated by the same things that motivate American managers, there is little reason to believe that the normative structures of German corporate life have very much to say to America.")

¹³ Kraakman, *Supra* 10

¹⁴ By "optimal", we refer to welfare maximization as a normative yardstick, although we consider revenue maximization to be a relevant yardstick as well. See Part 2.

¹⁵ In Mechanism Design, a "mechanism" is an allocative device that allocates objects pursuant to an agent's type. Auctions are examples of mechanisms since they allocate a scarce object in accordance with the valuations of participating agents. See Krishna, Vijay. *Auction theory*. Academic press, 2009.

¹⁶ Kraakman, *Supra* 10.

¹⁷ The maximization of shareholder value follows from profit-maximization, with the latter being a strong factor in eventuating the former.

¹⁸ In other words, any claim that relates to the "maximization of shareholder value" would not amount to a substantive defense in environmental law.

shareholder value maximization reduces agency costs¹⁹ between managers and shareholders, increasing both shareholder value and social welfare.

The second premise, however, is controversial amongst legal scholars and economists alike. Broadly speaking, the disagreement lies on two levels. Firstly, commenters disagree about the definition of “optimality”, as it is clear that the objective of revenue maximization often conflicts with the goal of welfare maximization.²⁰ Indeed, most efficiency claims implicitly assume the latter, as the former enjoys little to no intellectual support.²¹ Secondly, proponents of auctions have argued that auctions generally lead to allocative efficiency, where the target’s assets are allocated to the highest-valuing acquirer amongst potential acquirers.²² On the other hand, detractors of auctions have suggested that auctions reduce incentives to search for mismanaged companies²³ and that auctions reduce *ex ante* bidder participation,²⁴ causing auctions to be either revenue or welfare-inferior to other mechanisms of sale.

If auctions are not an efficient way to sell a company, what then is the optimal mechanism for the sale of public companies? Unfortunately, there is no clear consensus in the existing literature. Indeed, the “optimality” of *any* mechanism of sale turns on the empirical validity of the underlying assumptions establishing the efficiency of the said mechanism. However, the argument that policymakers have little to no guidance in determining the appropriate policy response is a bold claim that perhaps goes too far. By examining the characteristics of the *typical* transaction²⁵ subject to takeover regulation, we are able to make arguments as to why certain mechanisms should be favored over others. Furthermore, it is not clear that a “one size fits all” approach²⁶ is appropriate in relation to takeover regulation. We will argue that duties to seek the best sale price for shareholders, such as those imposed by *Revlon*, are indeed problematic. As such, the flexibility accorded by UK-style Takeover Codes may be preferable. This flexibility is captured by the “proper purpose rule”²⁷. The crux behind the efficiency properties underlying the “proper purpose rule” stems from the fact that it is *context-specific*. Thus, what is really a standard involves a duty on the part of the target directors to act fairly in relation to the shareholders whilst being heavily guided by the

¹⁹ Jensen, Michael C., and William H. Meckling. "Theory of the firm: Managerial behavior, agency costs and ownership structure." *Journal of financial economics* 3.4 (1976): 305-360.

²⁰ Krishna, Supra 5.

²¹ See Cramton, Peter, and Alan Schwartz. "Using auction theory to inform takeover regulation." *Journal of Law, Economics, & Organization* 7.1 (1991): 27-53. As Schwartz notes, there is “no moral or distributional case for benefiting target shareholders as a group rather than benefiting society as a whole”.

²² See Gilson, Ronald J. "Seeking competitive bids versus pure passivity in tender offer defense." *Stan. L. Rev.* 35 (1982): 51.

²³ Schwartz, Alan. "Search theory and the tender offer auction." *JL Econ. & Org.* 2 (1986): 229.

²⁴ Che, Yeon-Koo, and Tracy R. Lewis. "The role of lockups in takeover contests." *The RAND Journal of Economics* 38.3 (2007): 648-669.

²⁵ See Kaplow, Louis, and Steven Shavell. "Accuracy in the Determination of Liability." *The Journal of Law and Economics* 37.1 (1994): 1-15.

²⁶ More generally, see Davies, Marlene, and Bernadette Schlitzer. "The impracticality of an international “one size fits all” corporate governance code of best practice." *Managerial Auditing Journal* 23.6 (2008): 532-544.

²⁷ See eg RC Nolan, “The Proper Purpose Doctrine and Company Directors” in BAK Rider (ed) *The Realm of Company Law* (Kluwer Law International, 1998), 1.

regulatory authorities, who are themselves drawn from market professionals,²⁸ in fashioning an efficient, if not necessarily the most efficient, outcome. This may or may not involve an auction. The regulator's decisions are subject to judicial review, but cannot be appealed on the merits.

The paper is organized as follows. In Part 2 of our paper, we discuss some preliminary claims about the disparate objectives of revenue and welfare maximization. In Part 3 of our paper, we identify the salient economic features of M&A transactions that are relevant to takeover regulation. In Part 4, we suggest general guidelines as to how takeover regulation should move towards the optimal mechanisms that are applicable given real-world assumptions. With efficiency as the appropriate normative yardstick, in Part 5, we suggest the removal of defensive measures, the removal of *Revlon*-type duties and the enforcement of ex-ante deal protection measures as simple reforms that would substantially improve the efficiency of takeover regimes. We will see that this is in effect precisely the present position in Singapore.

II: Preliminary Claims: Revenue vs Efficiency

The relationship between the objectives of revenue²⁹ maximization and social welfare maximization is not immediately clear. Cramton and Schwartz³⁰ observe that the goal of revenue maximization entered the law through takeover litigation, where the question for the court was often whether the target board fulfilled its fiduciary duty towards its shareholders by maximizing revenue in a sale. They argue that this goal is thus a mere historical artefact, that there is no "moral or distributional case" for revenue maximization, and that this goal has no intellectual support. Thus, according to Cramton and Schwartz,³¹ the right question for the state is "which takeover mechanisms advance the common good".

Practical applications aside, revenue maximization may be viewed as an imperfect proxy for welfare maximization if *resale* is not costly. Consider the sale of a single object through an auction. If there are unrealized gains from trade, the winner of the auction can simply resell the object to someone who attaches a higher value, so allocative efficiency is ultimately unaffected. As Krishna³² argues, however, this argument is suspect for many reasons. Post auction transactions typically involve bargaining amongst a small number of agents, which may result in inefficient outcomes if they take place under conditions of incomplete

²⁸ See John Armour, Jack B Jacobs, and Curtis J Milhaupt, "The Evolution of Hostile Takeover Regimes in Developed and Emerging Markets: An Analytical Framework" (2011) 52 Harvard International Law Journal 2019.

²⁹ Note that we use "revenue" as a term equivalent to shareholder value here. Care must be taken as revenue is usually linked what is generated by the company's underlying business whereas the share price is determined by the forces of supply and demand for the shares, and revenue in that context can simply be increased by decreasing the supply or increasing the demand for those shares. Further the seller in the context of takeovers is an individual shareholder itself but for the purposes of discussion here can also be the target company in a sense making a collective decision for all the shareholders. See Jarrow, Robert A., Philip Protter, and Kazuhiro Shimbo. "Asset price bubbles in incomplete markets." *Mathematical Finance: An International Journal of Mathematics, Statistics and Financial Economics* 20, no. 2 (2010): 145-185.

³⁰ Cramton and Schwartz, *Supra* 11.

³¹ *Ibid.*

³² Krishna, *Supra* 5.

information.³³ Furthermore, if resale involves significant transaction costs as mentioned above, it might not take place even if it should.

These arguments are particularly pertinent in the setting of takeover regulation. Indeed, as we will argue later, takeovers take place in the context of considerable *layers* of information asymmetry. Often, trade will require costly investments in value discovery. Thus, to the extent that the objective of revenue maximization conflicts with welfare maximization, we argue that the latter should always prevail over the former.

III: The Context in which the “Ordinary” M&A Transaction Takes Place

According to Easterbrook and Fischel³⁴, takeovers are an important means of reducing agency costs between shareholders and managers, as managers who fail to effectively maximize the value of the firm in accordance with their shareholders’ interests would simply be replaced using the market for corporate control.³⁵ Furthermore, even if existing managers are acting in the best interests of their shareholders; it would be allocatively efficient to re-allocate ownership of the firm to a new owner who would be able to exploit synergistic gains from the takeover. For example, a manufacturer of mobile devices could enjoy economies of scope³⁶ if it were to acquire a manufacturer of wireless chips, since the combined entity may gain productive efficiencies through exploiting the complementary resources of both firms. Thus, the extent to which efficient takeovers are *facilitated* by takeover regulation is a matter of paramount importance.

We begin our analysis by examining the *environment* in which takeovers take place. For completeness, we consider not only “hostile takeovers” where the target company’s management does not (at least in the first instance) wish for the deal to go through, but also “voluntary transactions” where the target company agrees to sell the target company to the acquirer. Collectively, we term both transactions “M&A transactions”.

A: Costly Value-Discovery

The characteristic feature of almost all M&A transactions is that of *costly* value-discovery³⁷. *Ex ante*, a potential acquirer does not know the exact value of how much the target company is worth to him – deals usually take place in conditions of information asymmetry. Furthermore, the potential acquirer cannot obtain additional information to improve his estimate of how much the target company is worth to him without expending costs on value-discovery. The target is unlikely to voluntarily disclose all payoff-relevant information to him.³⁸

³³ See Myerson, Roger B., and Mark A. Satterthwaite. "Efficient mechanisms for bilateral trading." *Journal of economic theory* 29.2 (1983): 265-281.

³⁴ Easterbrook, Frank H., and Daniel R. Fischel. "Corporate control transactions." *Yale Lj* 91 (1981): 698.

³⁵ See also Kraakman et.al, *Supra* 3.

³⁶ Panzar, John C., and Robert D. Willig. "Economies of scope." *The American Economic Review* 71.2 (1981): 268-272.

³⁷ Cramton and Schwartz, *Supra* 11. See also Che and Lewis, *Supra* 14.

³⁸ If trade were to take place in an environment of complete information, no mechanism for allocating the object would be required. See Krishna, *Supra* 5.

The phenomenon of costly value-discovery has critical implications for the optimality of candidate mechanisms used for the sale of corporations. Consider the conventional simultaneous ascending auction,³⁹ a mechanism that has often been lauded for its revenue and efficiency properties. But as Cramton and Schwartz rightly point out,⁴⁰ since bidding in M&A auctions is costly, actual M&A auctions differ in material aspects from such auctions. The key as to why such auctions may be inefficient lies in the fact that auction *participation* is endogenous to the bidder⁴¹ – if a given bidder knows that the expected gains from ex post competition in a M&A auction will not exceed its expected outlays in value-discovery, he will simply not participate in the said M&A auction in the first place.

Inefficiency from costly value-discovery does not only arise from the preclusion of ex ante bidder participation. It also arises from a more serious problem – subsequent free riding on informational externalities associated with the first bidder’s investments in value-discovery.⁴² Consider the situation where an initial bidder invests costs in preparing and initiating a takeover bid. If bidder participation is sequential, a second bidder can simply free-ride on the first bidder’s investments by issuing a “topping” bid which the target may wish to consider.⁴³ Since investments in value-discovery are sunk, the first bidder may be under-rewarded for his investment. Knowing this, the first bidder may be incentivized to not invest in the first place. To ameliorate such “free-riding” concerns, several commentators⁴⁴ have suggested deal protection measures to protect ex ante investments in value-discovery. We will discuss these measures later.

A large volume of literature in auction theory has focused on endogenous bidder entry/participation. Importantly, several authors have established that variations in the auction environment may affect optimal policies (like reservation prices) in ways not anticipated by models that ignore entry. For example, McAfee and McMillan⁴⁵ demonstrate that where bidders can enter upon paying a fixed entry cost, the seller should not impose a reserve price higher than his own valuation, unlike the case with a fixed number of bidders. Levin and Smith⁴⁶ show that when entry is stochastic, reservation prices discourage entry – a desirable phenomenon in “common-value” auctions but an undesirable one in “independent-private-value” auctions. The final point is particularly relevant, as both screening and variations in valuation distribution are important characteristics in M&A transactions. It is to the latter that we now turn to.

B: Valuation and Informational Structure

³⁹ Also known as an “English auction”, where the winning bidder pays the expected value of the second highest bid. See Krishna, *Supra* 5.

⁴⁰ Cramton and Schwartz, *Supra* 11.

⁴¹ In this paper, I use the term “bidder” as a synonym for the term “potential acquirer”. The term “bidder” is used as auctions are frequently invoked in many explanations of how a given mechanism works.

⁴² Che and Lewis, *Supra* 14.

⁴³ *Ibid.*

⁴⁴ *Ibid.* See also Fraidin, Stephen, and Jon D. Hanson. “Toward unlocking lockups.” *Yale Ij* 103 (1993): 1739.

⁴⁵ McAfee, R. Preston, and John McMillan. “Auctions with entry.” *Economics Letters* 23.4 (1987): 343-347.

⁴⁶ Levin, Dan, and James L. Smith. “Equilibrium in auctions with entry.” *The American Economic Review* (1994): 585-599.

Where valuations are distributed pursuant to an “independent-private-values” framework, the *ex ante* valuation of any given bidder in an auction does not depend on his/her rival bidder.⁴⁷ Thus, a takeover resembles an independent private-values auction when the “social surplus that would be produced varies substantially across potential bidders”. In contrast, where valuations are distributed in accordance with a “common-values” framework, the *ex ante* valuation of any given bidder is perfectly correlated with his/her rival bidder.⁴⁸ Where valuations are imperfectly correlated with each other, the valuations are said to be distributed in accordance with an “affiliated-values” framework.⁴⁹

Although valuation structure is exogenously determined, it is critically important to the determination of the optimal mechanism at hand. Why is this so? Under a “common-values” framework, bidder participation is generally inefficient. Because every bidder has the same underlying valuation for the target company, restricting entry reduces aggregate transaction costs.⁵⁰ Of course, if managers were to restrict entry without inducing higher bids in return, revenue from sale of the target would be reduced accordingly.⁵¹ On the other hand, under an “independent-values” framework, auctions tend to be desirable – competition between bidders is desirable as it leads to allocative efficiency. As we will discuss later, the empirical incidence of how valuations are distributed in the M&A setting will be of critical importance in determining the optimal mechanism for the sale of corporations.

A recent wave of literature has suggested that the *informational* environment is also an important factor in determining whether a given mechanism is optimal or not. The central idea behind this is that bids may *reveal credible information* on the underlying bidder’s valuation or signal of the object. For example, in sequential mechanisms where bidders have common or affiliated values, an initial bid that is high enough will reveal the attractiveness of the deal to other bidders.⁵² Knowing this, however, an initial bidder who knows that he is revealing such valuable information might choose to strategically respond to such “free riding” on the information externality by shading his bid. This, in turn, would change the seller’s revenue from the sale. In turn, the seller might wish to respond to correct these incentive problems by increasing the probability that the object is sold to the initial bidder. This is an important point which we will return to later. For now, this suggests the importance of context.

C: Strategic Responses

Mechanisms in M&A transactions may also take on a *sequential* nature⁵³, where either participation or bidding may take place sequentially rather than simultaneously. Because of the sequential nature of such transactions, potential acquirers are likely to behave *strategically* in response to the actions of the target management, the target shareholders,

⁴⁷ Krishna, Supra 5

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Harstad, Ronald M. "Alternative common-value auction procedures: Revenue comparisons with free entry." *Journal of Political Economy* 98.2 (1990): 421-429.

⁵¹ Cramton and Schwartz, Supra 11.

⁵² Wang, Zhe. "Structuring M&A offers: auctions, negotiations and go-shop provisions." (2017).

⁵³ Krishna, Supra 5.

and other potential acquirers. Of course, the same reasoning would apply to all other players in any given transaction, since it is a “turn-based” strategy game.

One example of such strategic behavior in M&A transactions is the phenomena of *preemptive bidding*⁵⁴, where the initial bidder may wish to preempt subsequent bidders by credibly signaling that he has a sufficiently high valuation through a high bid. In UK-style Takeover Codes, this would involve inserting a “no increase” statement in the offer document.⁵⁵ With this, selling shareholders will have to take the bid as it is. This is because the bidder would not be able to improve on the bid, unless there are exceptional circumstances, or the right has been reserved (such as where a competitive situation arises). The first bidder generally possesses superior information about the value of the object, as it has invested in value-discovery. Thus, subsequent bidders might be deterred from placing a bid even if they have a potentially higher valuation than the first bidder. However, the loss of the social surplus from inefficient allocation of the target firm⁵⁶ may be compensated by the entry costs saved by the second firm.⁵⁷

Second, unlike the usual ascending simultaneous auction considered by auction theory, the target firm is often not able to commit to withdraw itself from the market if it is not sold. Knowing this, bidders may shade or discount their bids accordingly in earlier rounds of sale, reducing the expected revenue of the seller pursuant to his inability to commit.⁵⁸ However, the seller is also aware of the consequences of its inability to commit to a sale (and a reserve price), and so might wish to credibly commit to a sale instead.

Third, a further layer of complexity is present in many M&A transactions. The strategic incentives of potential acquirers are distorted by the presence of toeholds⁵⁹ that they may hold in target firms. To see how such a toehold may be distortionary, consider the incentives of a given bidder when he loses an auction. With a toehold, the losing bidder attains some “insurance” conditioning on losing, since he would gain some compensation from the winning bidder's premium over the current market price. In this way, the loser's bid effectively sets the price his rival pays when he loses. The higher his losing bid, the more profitable his expected payoff. Thus, a given bidder has an incentive to continue bidding to raise the winning

⁵⁴ See Fishman, Michael J. “A theory of preemptive takeover bidding.” *The Rand Journal of Economics* (1988): 88-101. See also Aktas, Nihat, Eric De Bodt, and Richard Roll. “Negotiations under the threat of an auction.” *Journal of Financial Economics* 98.2 (2010): 241-255. and Dimopoulos, Theodosios, and Stefano Sacchetto. “Preemptive bidding, target resistance, and takeover premiums.” *Journal of Financial Economics* 114.3 (2014): 444-470.

⁵⁵ See eg Singapore Code on Take-overs and Mergers, rule 20.2 (“Singapore Code”). There can also be a “no extension” statement issued under rule 22.7 of the Singapore Code.

⁵⁶ Assuming an independent-private-values framework

⁵⁷ Fishman, *Supra* 42.

⁵⁸ See Skreta, Vasiliki. “Optimal auction design under non-commitment.” *Journal of Economic Theory* 159 (2015): 854-890. and Burguet, Roberto, and Jozsef Sakovics. “Reserve prices without commitment.” *Games and Economic Behavior* 15.2 (1996): 149-164.

⁵⁹ Bulow, Jeremy, Ming Huang, and Paul Klemperer. “Toeholds and takeovers.” *Journal of Political Economy* 107.3 (1999): 427-454.

price in case he loses the auction.⁶⁰ This, along with hubris and over-optimism, may result in a 'winner's curse'.⁶¹

D: Management-Shareholder Dichotomy

In M&A transactions, target shareholders do not act as a collective whole when dealing with potential acquirers. Rather, the board of a target company has considerable say in whether any proposed deal goes through or not. This is especially true in Delaware, but is much less often the case in UK-style Takeover Codes. In UK-style codes, mandatory takeover rules reduce or even remove coercion of target shareholders and protect against inefficient takeovers.⁶² In contrast, such inefficient takeovers often result from the U.S. target company board's ability to issue a "poison pill", also known as a "shareholders' rights plan".⁶³ As a poison pill makes acquisitions unprofitable by diluting the potential acquirer's shareholding upon acquisition beyond a certain threshold, all bids are made conditional on the target board redeeming its pill. This provides the board with a limited ability to set a reserve price in any given mechanism, as it can "just say no" in response to most proposed acquisitions.⁶⁴

While the ability to set a reserve price may aid in maximizing the shareholders' payoffs, it is well established that reserve prices are welfare-distortionary.⁶⁵ The seller finds it optimal to reduce the probability of a sale occurring in exchange for a higher price, but it would be socially optimal to maximize the probability of sale so long as the buyer's valuation is higher than that of the seller. Thus, reserve prices are inefficient - in all probability, the seller will refuse to sell the object even if there is a buyer who values it more than he does.

Second, *unfaithful* management is a distinct possibility in most M&A transactions.⁶⁶ In particular, the incentives of management may diverge significantly from those of shareholders. Management will, in any given instance, maximize their own self-interest over that of their shareholders.⁶⁷ With unfaithful management, the choice of mechanism becomes important insofar it may force management to abide by certain "rules" that attenuate the possibility of management extracting surplus from the deal (or lack of a deal). For example, most auctions reduce the possibility of profitable "side payments"⁶⁸ made to management given the transparent framework in which auctions must take place. However, it is important

⁶⁰ Che and Lewis, *Supra* 14.

⁶¹ Varaiya, Nikhil, "The 'Winner's Curse' Hypothesis and Corporate Takeovers" *Managerial and Decision Economics* 9 (1988): 209.

⁶² Schuster, Edmund-Philipp, "The Mandatory Bid Rule: Efficient, after All? (2013) 76 *Modern Law Review* 529. The rule was introduced to the EU by the Takeover Directive (2004/25).

⁶³ More generally, see Dawson, Suzanne S., Robert J. Pence, and David S. Stone. "Poison pill defensive measures." *The Business Lawyer*(1987): 423-439.

⁶⁴ Cramton and Schwartz, *Supra* 11.

⁶⁵ Krishna, *Supra* 5.

⁶⁶ Cramton and Schwartz, *Supra* 11.

⁶⁷ Jensen and Meckling, *Supra* 9.

⁶⁸ See Jackson, Matthew O., and Simon Wilkie. "Endogenous games and mechanisms: Side payments among players." *The Review of Economic Studies* 72.2 (2005): 543-566. Under Commonwealth Takeover Codes, no special deals are allowed, see eg rule 10 of the Singapore Code (this applies whether or not there is a competitive bid as the idea there is for the equality of treatment of selling shareholders). Bidders are to be provided equal access to information under rule 9.

not to overstate the frequency of “unfaithful management”, as boards face considerable extra-legal constraints on their behavior over time.⁶⁹

IV: Structuring the Optimal Mechanism for Takeover Regimes

Given the aforementioned analysis, it is clear that M&A transactions give rise to complex interactions that do not point in a common direction. Nevertheless, we attempt to provide some general guidelines on how such transactions should be structured with the optimal mechanism in mind.

A: Competition and Deal Protection

As mentioned above, auctions are mechanisms that have been lauded for their revenue-maximising and efficiency properties. In a rarified setting, auctions allocate objects to bidders willing to pay the highest value for the object, and thus are allocatively efficient.⁷⁰ As the highest-value bidder also pays the value of the second highest bidder in equilibrium, the typical auction also maximizes the seller’s revenue in accordance with the information rent that he pays for not knowing the bidders’ valuations.⁷¹ Yet, as we have seen from Part 3, the efficiency properties introduced by ex post competition have undesirable effects in precluding *ex ante* investments in value-discovery.

In 2011, the United Kingdom prohibited all deal protections (including termination fees) in M&A deals; ostensibly to protect the competitive process for potential bidders.⁷² The resulting events were a catastrophe – after the regulatory change, M&A deal volumes in the United Kingdom declined significantly, with no countervailing benefits to target shareholders in the form of higher deal premiums or more competing bids.⁷³ It is for this reason that Singapore, whose Takeover Code is otherwise quite similar,⁷⁴ made an explicit choice not to prohibit deal protection devices such as the use of break fees outright. Singapore’s experience with deal protection devices had been positive in both encouraging initial as well as rival bids and increasing shareholder returns or revenue in a takeover. Instead, Singapore’s Code requires that the break fees remain below a 1% threshold. The regulator, the Securities Industry Council, must also be consulted on their use.⁷⁵ This suggests a degree of merit

⁶⁹ It is important to remember that shareholders retain the power to remove directors with cause. Alongside with reputation concerns, there will be some convergence of management’s interests with that of the shareholder’s. See Kreps, David M., and Robert Wilson. "Reputation and imperfect information." *Journal of economic theory* 27.2 (1982): 253-279.

⁷⁰ Krishna, Supra 5.

⁷¹ Ibid.

⁷² On July 21, 2011, the Code Committee formally adopted the changes proposed in PCP 2011/1. These changes were published in a response statement, RS 2011/1 (Code Committee 2011b), and Instrument 2011/2 (Code Committee 2011c), and, as mentioned, entered into force on September 19, 2011. See now rule 21.2 UK Takeover Code.

⁷³ Restrepo, F. and Subramanian, G., 2017. The Effect of Prohibiting Deal Protection in Mergers and Acquisitions: Evidence from the United Kingdom. *The Journal of Law and Economics*, 60(1), pp.75-113.

⁷⁴ See WY Wan, “Legal Transplantation of UK Style Takeover Regulation in Singapore” in Umakanth Varottil and Wan Wai Yee eds, *Comparative Takeover Regulation* (CUP 2017).

⁷⁵ Rule 13 of the Singapore Code. The position in Hong Kong is similar under rule 33 of their Takeover Code. See further, Wan Wai Yee and Umakanth Varottil, *Mergers and Acquisitions in Singapore: Law and Practice* (LexisNexis, 2013) at [8.102].

regulation in the takeover market. However, the context-specificity of how bids are structured and how boards react to them, as well as differing shareholder interests, suggest that any firm rule prohibiting or allowing deal protection devices may not work if the goal is to promote allocative efficiency. Instead, the system in most UK-style Takeover Codes (a form of “soft law”) allows for a degree of flexibility, alongside close consultation with a regulator that is sensitive to the fast-changing needs of the market.⁷⁶ This has been the case since at least 1968, when “the court’s role in the matter was then overtaken by the creation of a Takeover Panel and Code”⁷⁷.

From a mechanism design perspective, the protection of an initial bidder’s investment may thus be a desirable feature that should be countenanced by the law. Such contractual devices are known as “deal protection” measures in M&A law – they attempt to facilitate *ex ante* bidder entry by compensating the initial bidder for his initial investment in value discovery. At the same time, however, deal protection reduces the probability of winning for a non-recipient bidder, thus reducing competition for the target.⁷⁸ Nevertheless, Ayres has noted that the allocative efficiency of the sale is likely to remain the same in the presence of non-foreclosing bids.⁷⁹ The justification for this principle lies with the fact that break fees cause *all* bidders to bid below their valuations by the amount of the fee. This is because the net value of acquiring the target is reduced by the fee for both buyers – the non-recipient bidder loses the fee when he wins, but the recipient bidder also loses the fee if he wins. Indeed, much of the contemporary literature favours the allowing initial bidder deal protection; and substantial empirical evidence supports this position.⁸⁰

The jury is still out on whether break fees are unambiguously efficient, as much of this may be context specific, given that these fees are negotiated and settled upon in situations of uncertainty. For example, while a break fee may be needed in order to encourage a first bidder to do its due diligence and come up with an offer,⁸¹ it may be socially desirable for break fees to be permitted for subsequent bidders (and not the first bidder) instead.⁸² Take, for instance, the case where there is a non-recipient first bidder. Singapore’s experience with the 2013 takeover of F&N Ltd, a large Singapore conglomerate,⁸³ was that a break fee was necessary to encourage the *second* bidder to enter the fray. The end result was greater value

⁷⁶ See further Ellis Ferran, “Corporate Law, Codes and Social Norms – Finding the Right Regulatory Combination and Institutional Structure” (2001) 1 JCLS 381 at 408–409.

⁷⁷ Paul Davies, *Introduction to Company Law* (Clarendon, 3rd ed 2020) at 111. He also points out at 113 how the EU Takeovers Directives 2004 has given a more formalized basis to the Panel and Code

⁷⁸ Here, a winning bidder is still the bidder with the highest valuation. However, with deal protection measures in place, there is a positive probability that the object might not be sold at all. This is similar to the imposition of a bidding fee or a reserve price. See Krishna, *Supra* 5.

⁷⁹ Non-foreclosing bids are bids that do not terminate the takeover contest. See Ayres, I., 1990. Analyzing stock lock-ups: Do target treasury sales foreclose or facilitate takeover auctions. *Colum. L. Rev.*, 90, p.682.

⁸⁰ See Officer, M.S., 2003. Termination fees in mergers and acquisitions. *Journal of Financial economics*, 69(3), pp.431-467.

⁸¹ See Kahan, Marcel, and Michael Klausner. "Lockups and the market for corporate control." *Stan. L. Rev.* 48 (1995): 1539.

⁸² This would likely be precluded in the instance where the first bidder was already granted a break fee. See Coates IV, John C. "M&A break fees: US litigation versus UK regulation." In *Regulation vs. Litigation: Perspectives from Economics and Law*, pp. 239-284. University of Chicago Press, 2010.

⁸³ For details of the takeover, see SIC, Public Statement on Competitive Situation in relation to Fraser & Neave, Limited (15 January 2013).

for shareholders when the first bidder raised its bid and eventually won even if an argument could be made that all bids were now in the shadow of the break fee. Amendments to the Code in 2016 then made it clear that boards of target companies may, but are not obliged to, seek a competing offer. But a target board offering a break fee to a second bidder would not, *per se*, be seen as frustrating the first existing offer. The prohibition against frustrating offers is one of the most sacrosanct principles which guide a target board, which is why poison pills are generally prohibited in Singapore unless shareholder approval is obtained.⁸⁴ Clarifying that it does not apply where a target board searches for a competing bid shows that Singapore boards can now also put a company on the block. Corresponding changes to the Code in 2016 then provide that there will then be a formal action to resolve a competitive situation, where neither party has declared its final offer price in the later stages of the offer period. Rule 20.5 was in a sense introduced after the Securities Industry Council trialed the use of such a sequential auction in the F&N case when the Code did not provide for it at that time. This closely followed the auction procedure set out by the UK Takeover Panel in the case of Cove Energy plc in 2012.⁸⁵

Che and Lewis⁸⁶ argue that differing forms of deal protection give rise to distinct efficiency and revenue outcomes. According to the authors, break fees and stock lockups are non-equivalent tools for revenue and efficiency. As explained above, break fees induce the socially desirable level of takeovers. However, stock lockups create either too little or too much competition, depending on whether they are granted to the first or second bidder. Unlike break fees, a stock lockup shifts rents from the non-recipient to the recipient of the lockup. As any given bidder receives “insurance” in the form of an increased stock price conditioning on losing, he has an incentive to bid more aggressively, which in turn means that the cost of subsidizing bidder entry is higher than optimal. Indeed, Che and Lewis note that private incentives diverge from the socially optimal setting, with target shareholders preferring them over break fees as they induce greater bidding competition.

Again, this suggests the need for a context specific approach to deal protection devices.⁸⁷ Regulators in UK-style takeover regimes, as with the courts in the Delaware, should not be asked to decide hypothetical cases. Without relevant facts, a trier of fact may find it impossible to formulate a rule that would implement an efficient outcome in a given majority of cases. Indeed, it has been said that the strength of the common law system has always stemmed from its preference for pragmatism over dogmatism.⁸⁸ The bifurcated corporate structure may be viewed from a variety of perspectives that often conflict with one another. Corporate law theory, while a good thing to have, usually provides a view of the company that is correct from certain perspectives, but not others.

⁸⁴ Wan Wai Yee and Umakanth Varottil, *Mergers and Acquisitions in Singapore: Law and Practice* (LexisNexis, 2013) at [8.102] where the authors point out that post-bid poison pills are prohibited by the Singapore Code and pre-bid ones are restricted by general company law and the listing rules in the case of companies listed on the Singapore Exchange.

⁸⁵ SIC, Consultation Paper on Revision to the Singapore Code on Take-Overs and Mergers (6 July 2015) para 16. See also UK Takeover Panel, Consultation Paper (PCP 2014/1) on Miscellaneous Amendments to the Takeover Code (16 July 2014).

⁸⁶ Che and Lewis, *Supra* 14.

⁸⁷ See further, Wan Wai Yee and Umakanth Varottil, *Mergers and Acquisitions in Singapore: Law and Practice* (LexisNexis, 2013) at [8.102] distinguishing break fees from poison pills.

⁸⁸ See Grey, Thomas C. "Holmes and legal pragmatism." *Stan. L. Rev.* 41 (1988): 787.

B: Identifying Valuation Structure

As mentioned in Part 3, valuation structure is critical in determining the optimal mechanism, as optimality under a “common-values” framework is completely different from that of an “independent-private-values” framework. Under a “common-values” framework, the competitive process does little to ensure allocative efficiency,⁸⁹ as all potential bidders ultimately have an identical underlying valuation for the target firm. Under an “independent-private-values” framework, however, the opposite is true.

Are we able to identify valuation structure under a practicable rule that minimizes the sum of both the error and administrative costs of enforcing such a rule?⁹⁰ Some commentators⁹¹ have suggested that common-value structures are associated with *financial* buyers, who attempt to improve a given target’s value by improving the target’s capital structure, correcting target mismanagement or by improving the target’s internal corporate governance. On other hand, independent-private-value structures are associated with “strategic” or “synergistic” buyers, who attempt to acquire targets to benefit from economies of scope or economies of scale. It is difficult to see how any rule making such a binary distinction⁹² would be tenable in practice. Putting the issue of affiliated-value acquirers aside, would a law-enforcement agency be capable of evaluating whether an acquisition was proposed for “strategic” or “financial” purposes? Any such rule would also distort the incentives of potential acquirers to frame their acquisitions as “financially-motivated”. The reality is that there are almost always going to be mixed motives here and the law has not been consistent in dealing with them, particularly from a causation viewpoint.⁹³

Gorbenko and Malenko⁹⁴ provide some insight as to how common-value structures may be identified. Essentially, they argue that the decision to approach the target reveals information about the initiating bidder's valuation of the target. In "common-value" takeover auctions, the information revealed through a bidder's decision to approach the target has a large negative impact on his expected gains from the acquisition. This in turn disincentivizes the initiating bidder from approaching the target. In equilibrium, each bidder never approaches the target no matter how high his valuation is. In contrast, in "independent-private-value" takeover auctions, notwithstanding the revelation of a bidder's valuation to his rival, the rival

⁸⁹ Allocative efficiency is distinguished from “informational” efficiency. We will define the latter term later. See also John Armour et al, *Principles of Financial Regulation* (Oxford, 2016) Ch 5.

⁹⁰ See Kaplow, Louis, and Steven Shavell. "Accuracy in the Determination of Liability." *The Journal of Law and Economics* 37.1 (1994): 1-15. and Christiansen, Arndt, and Wolfgang Kerber. "Competition policy with optimally differentiated rules instead of “per se rules vs rule of reason”." *Journal of Competition Law and Economics* 2.2 (2006): 215-244.

⁹¹ Gorbenko, Alexander S., and Andrey Malenko. "Strategic and financial bidders in takeover auctions." *The Journal of Finance* 69.6 (2014): 2513-2555.

⁹² Nevertheless, this distinction makes sense when used as a form of identification strategy (for empirical work).

⁹³ See Andrew Verstein, “The Jurisprudence of Mixed Motives” (2018) 127 Yale Law Journal at 1106. With the business judgment rule in the US, which is perhaps closest to what is discussed here, the test is to determine which the primary motive is (at 1170). In the context of the proper purpose rule for takeovers in the UK, see *Eclairs Group Ltd v JKC Oil and Gas Plc* [2015] UKSC 71, noted H Tjio [2016] LMCLQ 176 (support for the but-for test).

⁹⁴ Gorbenko and Malenko, *Supra* 65.

does not update his valuation of the target upon learning that the auction is bidder-initiated. Thus, in equilibrium bids may be initiated by both potential acquirers as well as the target.

C: Inducing Efficient Conduct

Beyond inducing or reducing ex post competition where desirable, after correcting for any informational externalities the optimal mechanism should also improve the informational environment in which takeovers take place. For example, it is well known that where bidder values are affiliated, sequential mechanisms are informationally more efficient as compared to their simultaneous counterparts as they improve the accuracy of bidders' signals regarding their valuations.⁹⁵ Intuitively, sequential mechanisms provide valuable information on the attractiveness of the target, and on any underlying shared component of the target's valuation.

Nevertheless, one must be careful with such blanket prescriptions, since informational externalities and the possibility of strategic conduct are omnipresent in sequential mechanisms. For example, the optimal mechanism would foreclose inefficient strategic behavior, such as where preemptive bidding is likely to take place. Indeed, Che and Lewis⁹⁶ establish that providing subsequent bidders with "deal protection" measures counteracts the first bidder's incentives to engage in preemptive bidding. Similar reasoning applies to the regulation of "unfaithful" boards, where an optimal mechanism would disincentivize managers from acting strategically at the expense of shareholder value.

The tradeoffs involved in takeover regulation have been comprehensively set out by Wang, who attempts to compare a "simultaneous negotiation followed by a go-shop provision" to a standard auction in this setting.⁹⁷ She illustrates that where bidders' valuations are *moderately* correlated with each other, where bidders' prior probabilities of the existence of gains from trade are *sufficiently low*, and where bidders' costs of learning their valuations are *sufficiently high*, the "go-shop" negotiation generates consistently higher seller revenue than its auction counterpart.

The intuition is as follows: where bidders have costly information acquisition, no bidder will make a serious bid for the target without knowing the existence of gains from trade. Since information acquisition is simultaneous in an English ascending auction, some bidders will refrain from participating in any auction in the first place, even when they are solicited to do so. In a "go-shop" mechanism where bidders' valuations are sufficiently correlated, however, new bidders find the first bid informative about their own valuations, and so are induced to participate in the mechanism. Nevertheless, if the bidders' values are excessively correlated, go-shop negotiations cannot improve upon English ascending auctions since a bidder knows

⁹⁵ See Bulow, Jeremy, and Paul Klemperer. *Auctions vs. negotiations*. No. w4608. National Bureau of Economic Research, 1994. See also Milgrom, Paul, and Robert J. Weber. "A Theory of Auctions and Competitive Bidding." *Econometrica*, 1982, 50, 1089-1122.

⁹⁶ Che and Lewis, *Supra* 14.

⁹⁷ Wang, *Supra* 40.

that ex-post competition in the “go-shop” phase will be extremely intense.⁹⁸ Again, sensitivity to context is required in order to achieve the optimal outcome.

V: Revisiting Takeover Law: Facilitating the Optimal Mechanism

We are now ready to address the normative desirability of our candidate takeover regimes. We first begin by describing the salient features of existing takeover law in Delaware, the UK, and Singapore. We then assess the desirability of three features in light of our earlier discussion.

A: Existing Takeover Law

Under Delaware takeover law, there are two different standards for fiduciary obligations in the takeover context. *Unocal*⁹⁹ sets the fiduciary standard for defensive tactics, while *Revlon*¹⁰⁰ sets the standard for fiduciary obligations once management has decided to sell the company. We have seen that in contrast, UK-style Takeover Codes do not separate the two situations. Both are subsumed within a flexible proper purpose rule which requires directors to act fairly and provide shareholders with sufficient information, time and advice in which to make their own decision about whether to accept a bid. However, target boards are now encouraged to shop for competitive bids. In Singapore, at least, they are allowed to use deal protection devices as a starting point. If there is no resolution towards the end of the offer period, a formal modified auction procedure is then mandated which attempts to accelerate what would have occurred in an extended competitive offer process. This process came about through trial and error on the part of the market regulator in working through real life takeovers, as opposed to any form of *a priori* reasoning.

In *Unocal*,¹⁰¹ an acquiring company (Mesa) attempted to conduct a two-step takeover of Unocal. The first step involved a partial bid for 37% of Unocal at \$54 in cash per share. This would be enough to vest control of Unocal in Mesa. The second step involved a s 251 merger, but the shareholders would only receive \$54 in debt securities (subordinated Mesa debt). In response to the “coercive” nature of the two-step takeover, the Unocal board elected to adopt a selective self-tender, by offering to buyback its own shares from its shareholders at a premium of \$72 in a debt security if Mesa succeeded in its bid. However, Mesa was not allowed to participate in this deal. Thus, if Mesa had continued pursuing its proposed transaction conditional on Unocal's offer being accepted, it would have suffered huge losses that would make the acquisition unprofitable.

The Delaware Supreme Court devised an “enhanced scrutiny” standard to evaluate the Unocal board's conduct, where a two-prong “reasonableness and proportionality” test was used to determine if the “Business Judgement Rule” applies. When evaluating the “reasonableness” of the defensive measure, the Court noted that a key concern was whether

⁹⁸ By “intense” competition, we are referring to Bertrand type competition, where price competition is so intense that the equilibrium price is that of marginal cost. See, generally, Varian, Hal R. *Intermediate microeconomics with calculus: a modern approach*. WW Norton & Company, 2014.

⁹⁹ *Unocal Corp. v. Mesa Petroleum Co.*, 493 A.2d 946 (Del. 1985).

¹⁰⁰ *Revlon*, Supra 1.

¹⁰¹ *Unocal*, Supra 73.

the directors were “acting solely or primarily out of a desire to perpetuate themselves in office”. Upholding *Unocal*'s defensive tender offer and the exclusion of Mesa from it, the Court accepted *Unocal*'s characterization of Mesa's bid as a threat both because of the structure of the deal and the inadequacy of the price. In particular, the Court viewed the deal as “coercive” given the “prisoner's dilemma”¹⁰² that each shareholder faced. Although all of the shareholders would be better off if no one tendered into the low-priced first step, each individual shareholder had an incentive to tender their shares, since they would be worse off if the deal went through and if they had not tendered in the first step. Given the severity of this threat, the court also held that the self-selective tender offer met the proportionality test.

The Delaware Supreme Court's decision in *Unocal* has been judicially reinforced over the years. In *Unitrin*¹⁰³, for example, the court held the evaluation of a defense under the *Unocal* standard¹⁰⁴ should be conducted pursuant to a “range of reasonableness”. Thus, so long as a defense would not preclude¹⁰⁵ the bid's success, it would fall within the range of reasonableness and the court would not substitute its judgment for the board's¹⁰⁶. All this, however, sounds alien even today to a M&A lawyer in a UK-style takeover regime, even if a US business judgment rule can be accommodated within the proper purpose rule, as seen in the next paragraph.¹⁰⁷ In UK-style Takeover Codes, two-tier coercive offers are generally disallowed.¹⁰⁸ In addition, partial bids require regulatory approval even given that such bids must be structured in order for shareholders to offer their shares proportionately or pro rata in order to reduce coercion. Even such partial bids are impermissible if a bidder were to only look to acquire between 30 and 50% of the target company shares, and in Singapore the Securities Industry Council has no discretion in this instance.¹⁰⁹

Under UK-style Takeover Codes, the philosophy is to leave the decision whether to accept or reject the offer to the shareholders themselves through the provision of adequate information and advice.¹¹⁰ The rules providing that a takeover offer cannot be frustrated¹¹¹ are intended to preserve the existing shareholders' choice of whether to sell to the bidder, rather than protecting the bidder's offer. Schwarcz, on the other hand, thought that US takeover cases are only quantitatively different in that the interests of *long term investors* can

¹⁰² See Coffee Jr, John C., and William A. Klein. “Bondholder coercion: The problem of constrained choice in debt tender offers and recapitalizations.” *U. Chi. L. Rev.* 58 (1991): 1207.

¹⁰³ *Unitrin, Inc. v. American General Corp.*, 651 A.2d 1361 (Del. 1995).

¹⁰⁴ The court referred to the “proportionality” limb here.

¹⁰⁵ By preclusion, the court defined it as being “mathematically impossible or realistically unattainable”.

¹⁰⁶ See also *Air Products & Chemicals, Inc. v. Airgas, Inc.*, 16 A.3d 48 (Del. Ch. 2011)., upholding the proposition that the power to defeat an inadequate hostile tender offers ultimately lies with the board of directors, and that so long as the board articulates a legally cognizable threat (like an allegedly inadequate price of an offer), defensive measures that fall within a range of reasonable responses proportionate to that threat would be upheld.

¹⁰⁷ This is in the context of takeovers. For the argument that the US business judgment rule in general has its genesis in the UK type duty to act in good faith in the best interest of the company, see David Kershaw, *The Foundations of Anglo-American Corporate Fiduciary Law* (Cambridge University Press, 2018) Pt 1.

¹⁰⁸ Note 2 to Rule 10 Singapore Code (seen as a special deal for some selling shareholders).

¹⁰⁹ Rule 16.3 Singapore Code (SIC will normally consent to a partial offer for less than 30% and will normally not consent to a partial offer for more than 50%).

¹¹⁰ General Principles 9 and 10 Singapore Code.

¹¹¹ General Principles 4 and 7, and rule 5 Singapore Code.

even more clearly be considered by directors,¹¹² but this is probably because they do not have mandatory takeover rules,¹¹³ which are of themselves already protective of the company and its shareholders. In UK-style Takeover Codes, these are part of the amalgam of rules in the offering shareholders equality of treatment.¹¹⁴ Takeover defences like poison pills in the US, which are ostensibly for protecting long term investors from being coerced to sell out may, however, be abused by the board of directors of a target company (acting less for shareholders in trying to maintain their management positions). It must be noted that the U.S. position is inconsistent: outside of takeover situations, the concern is almost solely with shareholder value.¹¹⁵ At the same time, however, there may be some convergence in that after the takeover of Cadbury Plc by Kraft Foods Ltd, the UK amended its Code in 2011 to, as we have seen, restrict deal protection devices in order to “strengthen the target in negotiating takeover bids (and presumably promote shareholder primacy).”¹¹⁶ That bracketed point is important. The authors of the leading M&A text in Singapore state that “while company law allows the board to consider the interests of stakeholders that are not shareholders, such interests cannot override the shareholders’ interests (whether short-term or long term) and there is no method of enforcing such consideration if the board fails to do so”.¹¹⁷ By contrast, the position in the UK is headed towards more director primary in the takeover context, although Kershaw has pointed out that prohibiting deal protection specifically was not in fact an immediate or obvious consequence of the Cadbury takeover¹¹⁸.

In *Revlon*¹¹⁹, an acquiring vehicle, Pantry Pride, attempted to make a takeover bid for *Revlon*. In response, the *Revlon* board adopted several defenses. In addition to a shareholder rights plan, the *Revlon* board also adopted a stock repurchase plan that committed *Revlon* to repurchasing shares in exchange for subordinated debt from external creditors, with covenants restricting *Revlon's* ability to sell its assets and take on new debt. In response to these defenses, Pantry Pride raised its price, but *Revlon* continued to resist, changing its strategy to countenancing a management buyout instead. In approving the management buyout transaction, the board waived the poison pill and the debt limitation covenant, but the bidding managers conducting the buyout managed to secure a lock-up on assets (giving them the option to buy assets upon Pantry Pride's successful bid), along with a “no-shop” provision and a termination fee. Pantry Pride sued, seeking to enjoin these defenses.

Turning the *Unocal* reasoning on its head, the Court held that when it became clear that a company was going to be sold, the duties of the directors shift from *Unocal* duties to that of an auctioneer, with a duty to sell the company to the highest bidder. If an active auction were

¹¹² Steven Schwarcz, “Temporal Perspectives: Resolving the Conflict Between Current and Futures Investors” (2005) 89 University of Minnesota Law Review 1044 at 1060-1.

¹¹³ Contrast rule 14 Singapore Code. See also Schuster, Edmund-Philipp, “The Mandatory Bid Rule: Efficient, after All?” (2013) 76 Modern Law Review 529.

¹¹⁴ See General Principle 8, and rules 10, 17, 18, 19, 20.4 and 21.1 Singapore Code.

¹¹⁵ Davies, *supra* n 77 has pointed out that the US “reliance on fiduciary duties gives courts considerable flexibility on this matter”.

¹¹⁶ Wan Wai Yee and Umakanth Varottil, *Mergers and Acquisitions in Singapore: Law and Practice* (LexisNexis, 2013) at [8.102].

¹¹⁷ Wan Wai Yee and Umakanth Varottil, *Mergers and Acquisitions in Singapore: Law and Practice* (LexisNexis, 2013) at [8.101].

¹¹⁸ David Kershaw, *Principles of Takeover Regulation* (OUP, 2017) at 7.30.

¹¹⁹ *Revlon*, *Supra* 1.

in progress, the directors would not be permitted to take any non-shareholder interests into account.

More importantly, the *Revlon* court invalidated the asset lockup, along with the no-shop provision and termination fee. In line with the court's earlier reasoning, the no-shop was impermissible in this context because the board had already decided to sell the company, and therefore had a duty to attain the highest price that it could.¹²⁰ This should be contrasted with Singapore's F&N case, where a gentle solicitation of a rival bid put the company on the block and this was followed by a formal modified auction imposed by the Securities industry Council – where the impasse could not be broken. The use of a market driven regulatory authority avoided all or nothing solutions that courts might be tempted towards. In Delaware, this “all or nothing” solution is director primacy in response to unsolicited bids, subject to a duty to obtain the best price where a decision is made to let the company be taken over.¹²¹ There is less need to talk about such a duty in the Hohfeldian sense if shareholders were always the focus in all takeovers, but in a measured way where the proper purpose rule imposes a duty on the target directors to exercise their powers fairly in relation to them.

B: Defensive Measures

An overview of existing takeover law raises an immediate question – can defensive measures as sanctioned by *Unocal/Unitrin* possibly be justified in line with optimal mechanism design? We argue that this is not possible. Consider a typical coercive bid led by a potential acquirer. Even if this exploits coordination problems between shareholders *inter se*, any offer made by the acquirer must be at least as attractive when compared to the current value of the shares in question. Thus, even if potential acquirers can profit from the eventual sale of their acquired shares, a coercive bid does not affect efficiency – it is merely a transfer from existing shareholders to the acquirer. Furthermore, coercive bids are likely to be less common in settings where there is competition for the target, as the surplus of the potential acquirer dissipates in accordance with strong competition.¹²² Secondly, the argument that the board enjoys an informational advantage over the shareholders with regard to the company's “true” valuation is weak. As Gilson et al point out,¹²³ the informational advantage of managers is largely reduced by disclosure.¹²⁴ In any case, if the concern is truly with coercion, this can be addressed more directly with UK-style mandatory takeover rules.

More importantly, defensive measures have often been justified by the board's limited ability to set a reserve price, which maximizes revenue for the shareholders. However, revenue maximization goals clearly conflict with welfare maximization goals here. As explained earlier in Parts 3 and 4, reserve prices are simply inefficient, as with positive probability, the target

¹²⁰ We will discuss the normativity of some of these measures later.

¹²¹ See John Armour, Jack B Jacobs, and Curtis J Milhaupt, “The Evolution of Hostile Takeover Regimes in Developed and Emerging Markets: An Analytical Framework” (2011) 52 Harvard International Law Journal 2019.

¹²² I.e. “Bertrand” type competition. *Supra* 41.

¹²³ Enriques, Luca, Ronald J. Gilson, and Alessio M. Paces. “The case for an unbiased takeover law (with an application to the European Union).” *Harv. Bus. L. Rev.* 4 (2014): 85.

¹²⁴ More importantly, while errors in shareholder valuations are largely “cancelled out” by shareholder heterogeneity, the effects of managerial self-interest (reflected by “unfaithful” boards) are not attenuated.

will refuse to sell itself even if there is a potential acquirer who values it more than its current market value.

C: Application of *Revlon*-type Duties

In recent years, Delaware courts have cut back on the scope and extent of “*Revlon* Duties”. In *Paramount v Time*,¹²⁵ for example, Paramount sued Time to enjoin Time's board from enforcing several defensive tactics that would stop Paramount from usurping Warner as a competing bidder with a higher price. The Court noted that any application of *Revlon* should be restricted to when the board declares that the board is seeking to actively sell the company, or where the board abandons its “long term strategy” to seek a breakup of the company. As the Time board’s actions were merely a defensive response to a hostile takeover and not an abandonment of the company’s continued existence,¹²⁶ the Time board was held not to be in breach of their *Revlon* duties.

In *Lyondell*,¹²⁷ the Lyondell board approved a merger with Basell for \$8 a share, a price which their financial advisor determined was fair. However, the board did not conduct a market check, resulting in a shareholder suit alleging that the board had failed to take the necessary steps to ensure that the price was fair. The Supreme Court held that the mere fact that a company was “in play”¹²⁸ did not mean that the board was subject to *Revlon* duties. Rather, *Revlon* duties would only apply if the board expressly initiated the sale. Thus, the board could essentially adopt a “wait and see” approach in response to a bid so long as it did not declare that it was up for sale. Indeed, many of these outcomes turn on thin factual distinctions. Given the inherent uncertainty and arbitrariness involved in cases like *Lyondell*, it is easy to see how Codes may be preferable in creating context-specific standards. In contrast, courts may have an advantage in applying stable rules, which simply are not workable in takeover situations. It has been said of the UK position that the Takeover Panel “keeps abreast on a near day to day basis with the progress of takeovers bids so as to be able to intervene and give directions to the parties in order to resolve problems as they arise, avoiding as far as possible after-the-event remedies when the optimal solution to the problem may no longer be available”.¹²⁹

Indeed, in line with academic commentary on the issue,¹³⁰ we could argue that *Lyondell* was wrongly decided from an efficiency point of view. To see why, consider the earlier analysis of Gorbenko and Malenko,¹³¹ who posit that bidders do not approach a target with prospective bids in a “common-value” setting, as they would not want rival bidders to “free-ride” on the information gleaned from their prospective bids. In equilibrium, we should only expect to see target boards or controlling shareholders initiating bids in such a setting. However, we also know that the efficiency effects following from the competitive process do not apply in the common-value setting – as every bidder has the same underlying valuation for the target

¹²⁵ *Paramount Communications, Inc. v. Time Inc.*, 571 A.2d 1140 (Del. 1989).

¹²⁶ The court noted that Time was moving from a dispersed ownership structure to another dispersed ownership structure.

¹²⁷ *Lyondell Chemical Co. v. Ryan*, 970 A.2d 235 (Del. 2009).

¹²⁸ i.e. that someone had made an offer for control or had filed a statutory notification showing that they intended to make an offer for control

¹²⁹ Davies, supra n 77 at 114.

¹³⁰ Lederman, Lawrence. "Deconstructing Lyondell: Reconstructing Revlon." *NYL Sch. L. Rev.* 55 (2010): 639.

¹³¹ Gorbenko and Malenko, Supra 65.

company, restricting entry reduces aggregate transaction costs.¹³² Indeed, to apply *Revlon*-type duties only where the board initiates the sale brings us *away* from the optimal mechanism – where we would expect to see *targets* soliciting bids, *Revlon*-type duties should not apply.

When should *Revlon*-type duties apply then? The efficiency properties of auctions clearly present themselves in settings of independent-private-value structures and unfaithful management.¹³³ Unfortunately, we do not have a dependable rule of identification regarding whether valuation structures correspond to an “independent-private-values” framework. More generally, we have seen various factual matrices where other mechanisms welfare-dominate auctions in accordance with empirical assumptions. Since *ex post* competition in M&A mechanisms is only beneficial to welfare in such a limited setting, the utility of *Revlon*-type Duties is at best a questionable one. The use of Hohfeld-relationships is not the optimal approach but perhaps forced upon courts with *Unocal*'s otherwise free reign given to directors in responding to unsolicited bids. In contrast, the proper purpose rule applicable to target boards in UK-style Takeover Codes creates less of a duty than a review of the exercise of powers. In some sense, it is a middling position that is based on the old equitable doctrine of “fraud on a power”.¹³⁴

D: Deal Protection Measures

Our final point relates to a consistent theme raised in Parts 3 and 4 – the tradeoff between *ex post* competition and the preclusion of deal-protection measures. In line with our earlier analysis, it is easy to observe that the holding in *Revlon* is perhaps too wide; with asset lockups and no-shop clauses entirely unenforceable. Furthermore, most cases have upheld termination fees only in the two to four percent range.¹³⁵ It is thus entirely plausible that such “maximum” fees are wholly inadequate in inducing the optimal level of bidder participation. However, we have seen that the Singapore Code now sets it at 1%. Prior to the 2007 amendments to the Code, a 3% threshold was permitted in the notable case involving the takeover of Natsteel Ltd. As a conservative measure, any reform of *Revlon*-type duties should thus focus on whether the deal-protection measure at hand was introduced after bidder entry. If the measure was introduced prior to bidder entry, this would suggest that it was introduced to protect the bidder's incentives to invest in value-discovery. On the other hand, if the measure was introduced subsequent to bidder entry, it would be plausible that the measure could have been implemented to foreclose competition.¹³⁶ Such measures should be rendered unenforceable by the Courts. Again, it may be that this does not sound like something courts, as opposed to a more sensitive and specialized market regulator, are well suited to handle.

¹³² *Supra* Parts III and IV.

¹³³ Cramton and Schwartz, *Supra* 11.

¹³⁴ *Eclairs Group Ltd v Jkx Oil and Gas Plc* [2015] UKSC 71 at [15]. See also Briggs LJ in the Court of Appeal, [2014] EWCA Civ 640 at [92] who also said that “I consider it important that the court should uphold the proper purpose principle in relation to the exercise of fiduciary powers by directors, all the more so where the power is capable of affecting, or interfering with, the constitutional balance between shareholders and directors, and between particular groups of shareholders.” (at [122]).

¹³⁵ See Griffith, Sean J. “Deal protection provisions in the last period of play.” *Fordham L. Rev.* 71 (2002): 1899.

¹³⁶ There were signs that it had become a “boilerplate term” in the UK which may explain why deal protection devices are now prohibited: Kershaw, *supra* n 118 at 7.31.

In the Delaware case of *Paramount Communications v QVC*,¹³⁷ Paramount offered itself up for sale to Viacom. Pursuant to the deal agreed upon by the parties, Viacom was offered a no-shop provision (subject to a fiduciary out), a termination fee and a stock lockup. When QVC tried to enter as a competing bidder, Paramount considered QVC's offer, but did not attempt to change the deal protections granted to Viacom in its negotiations with the latter. The court held in QVC's favor, distinguishing the case from *Paramount v Time*. A change in control from a dispersed ownership structure to a controlling shareholder structure was seen as a condition that would invoke *Revlon*-type duties¹³⁸ due to the fact that public shareholders would no longer be able to attain a controlling premium after the deal.

In invalidating the stock lockup and no-shop provisions, the Delaware courts held that the Paramount board had violated its *Revlon* duties by preventing the company from getting the highest price reasonably available. Was this justifiable in light of our analysis in Parts 3 and 4? As Che and Lewis have argued,¹³⁹ stock lockups induce either too little or too much competition because of the distortionary effects that they have on bidding, so the invalidation of stock lockups has some justifiable grounding.

The invalidation of the no-shop provisions, however, merits further discussion. With a no-shop provision, all informational externalities created by the initial bidder are completely internalized since there is no ex post competition. Thus, such a bidder would have efficient incentives to invest in ex-ante discovery of the target. In *Omnicare v NCS Healthcare*,¹⁴⁰ NCS was a financially distressed firm looking for a buyer to resolve some of its debt through a sale of its assets. NCS first approached Omnicare to see if it was interested in a sale, but the latter provided a low bid that was unacceptable to the shareholders and management of NCS. In the interim, NCS had solicited a bid from a competing bidder, Genesis, who offered a deal that paid off most of NCS's debt and also provided a small premium to NCS shareholders. As Genesis was afraid of being a "stalking horse" for Omnicare, it secured a quasi-exclusive agreement with NCS, which involved very strong deal protections. In particular, Genesis obtained a vote lockup from the majority shareholders committing to vote in favor of the deal, a tight no shop clause with no "fiduciary out", and a one-day time period to accept the deal.

The Delaware Supreme Court invalidated the combination of the defensive devices, applying *Unocal* as the appropriate standard for evaluating deal protection devices. However, as the dissent rightly noted, the Court should have allowed the agreement to stand. Genesis would never have made its deal in the first place without these deal protection devices. Indeed, Genesis was well aware of the value that its bid would bring to Omnicare and wanted exclusivity to prevent that. Again, a similar scenario arose in the Singapore F&N case with respect to a break fee although we have seen that that does not have the anti-competitive effects of other deal protection devices. However, it does appear that having a market regulator assessing the financial and economic merits of a deal protection device ex ante; and perhaps then adjusting it seems a more workable solution if the goal is to promote efficient

¹³⁷ *Paramount Communications v. QVC Network*, 637 A.2d 34 (Del. 1994).

¹³⁸ Indeed, the court determined that the acquisition was equivalent to a "sale".

¹³⁹ Che and Lewis, *Supra* 14.

¹⁴⁰ *Omnicare, Inc. v. NCS Healthcare, Inc.*, 818 A.2d 914 (Del. 2003).

takeovers than having a court judge the competitiveness of such devices ex post. As we have seen, however, the UK now prohibits all deal protection devices as a starting point but this was perhaps an overreaction to the Cadbury takeover.¹⁴¹

I: Conclusion

In this short paper, we have attempted to identify the salient economic features of M&A transactions that are relevant to takeover regulation. While attainment of the optimal mechanism in every instance may not be possible, we have suggested general guidelines as to how takeover regulation should move towards the optimal mechanisms that are applicable given real-world assumptions. With efficiency as the appropriate normative yardstick, we suggest the removal of defensive measures,¹⁴² the removal of *Revlon-type* duties and the enforcement of ex-ante deal protection measures as simple reforms that would substantially improve a given takeover regime. This is the state of Singapore law presently, which arguably has merged the best of the US and UK laws (as suggested has been the case with her insolvency laws).¹⁴³ This requires recognition of a proper purpose rule. Simply put, in cases where the exercise of a power would affect the strength and relative positions within the company of different sections or classes of shareholders, we should consider whether or not the power in the hands of directors was properly exercised in the light of the fairness, as between the different sections or classes of shareholders, of the purported exercise of the power. This balancing process is vital in takeovers where the use of soft law and the flexibility should be administered by a market regulator applying broad standards as opposed to going through the courts which are better at applying more specific rules.

¹⁴¹ Kershaw, supra n 118.

¹⁴² Compare Kershaw, supra n 118 at 338-369, describing how after the takeover of Cadbury by Krafts, the UK regulators were looking to make it harder for bidders to succeed there, and allow directors to take into account interests other than those of shareholders (or at least short-term shareholders who only want to know whether it is the right price to sell). They eventually introduced some rules prohibiting deal protection measures like inducement fees, but not other measures that more ostensibly prioritized the interest of long term shareholders over short term ones or which gave boards more power to defend against or frustrate takeovers (which he favours).

¹⁴³ Note by Senior Minister of State for Law and Finance, Indraneel Rajah SC, on Debt Restructuring, Legal Industry Newsletters, 20 June 2017.