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Multinational Regulatory Competition and Single-Stock Futures

*Frank Partnoy**

I. INTRODUCTION

Numerous legal scholars have addressed the question of whether regulatory competition is a race to the bottom, to the top, or in some other direction.¹ This literature has focused on both international and domestic regulatory competition, but has not attempted to analyze, for particular incidents of regulatory competition, the interplay between international and domestic regulatory competition.

Single-stock futures provide an excellent opportunity for such analysis. Single-stock futures are obligations to buy or sell individual stocks at a specified time and price. For example, the purchaser of a \$100 December

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¹ See, e.g., Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L.J. 2359, 2384 n.76 (1998) (offering race-to-the-top interpretation); Ralph K. Winter, Jr., *State Law, Shareholder Protection, and the Theory of the Corporation*, 6 J. LEGAL STUD. 251, 262-92 (1977) (same); Stephen J. Choi & Andrew T. Guzman, *Portable Reciprocity: Rethinking the International Reach of Securities Regulation*, 71 S. CAL. L. REV. 903 (1998) (arguing for regulatory competition among national securities law regimes); James D. Cox, *Choice of Law Rules for International Securities*, 66 U. CIN. L. REV. 1179 (1998) (discussing problems associated with privatizing securities regulation); Lucian Arye Bebchuk, *Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law*, 105 HARV. L. REV. 1435, 1448-50 (1992) (offering race-to-the-bottom interpretation). See generally William W. Bratton & Joseph A. McCahery, *Regulatory Competition, Regulatory Capture, and Corporate Self-Regulation*, 73 N.C. L. REV. 1861 (1995); James D. Cox, *Regulatory Duopoly in U.S. Securities Markets*, 99 COLUM. L. REV. 1200 (1999). Several scholars have offered alternatives to the race-to-the-top/race-to-the-bottom dichotomy. See, e.g., Bernard Black & Reinier Kraakman, *A Self-Enforcing Model of Corporate Law*, 109 HARV. L. REV. 1911, 1974-77 (1996) (suggesting path-dependent evolution of corporate law); Ehud Kamar, *A Regulatory Competition Theory of Indeterminacy in Corporate Law*, 98 COLUM. L. REV. 1908, 1927-28 (1998) (suggesting that corporate law has developed based on vague, open-ended standards); Lucian Arye Bebchuk & Mark Roe, *A Theory of Path Dependence in Corporate Ownership and Governance*, 52 STAN. L. REV. 127 (1999) (extending path dependence argument).

2002 futures contract on IBM stock is obligated to buy IBM stock for \$100 at a specified date during December 2002. The purchaser of a single-stock futures contract will make money if the price of the stock increases during the relevant period; the seller will lose money. From a purely financial perspective, single-stock futures behave much like ordinary stocks.²

However, single-stock futures differ from ordinary stocks in several respects, the most important of which is regulatory. In the U.S., single-stock futures had been illegal for nearly two decades, until December 15, 2000, when Congress passed the Commodity Futures Modernization Act ("CFMA"). The CFMA lifted the ban on trading of single-stock futures, single-stock futures are likely to begin trading soon on U.S. exchanges.³ Outside the U.S., single-stock futures were legalized only recently in many jurisdictions, and are subject to varying regulatory frameworks. For example, seven exchanges traded single-stock futures last year, including exchanges in Hong Kong, Sydney, and Mexico, and other exchanges recently have approved trading of such futures.⁴

The competition for regulation of single-stock futures has evolved in three stages, beginning in the U.S. and then spreading internationally. This article attempts to make some sense of these stages of regulation, and to use the example of single-stock futures as a framework for contributing to the academic debate about regulatory competition. For the past two decades, there has been a variety of forms of regulatory competition related to single-stock futures. In recent months, that competition is changing focus, from competition within or between particular countries to competition among international joint ventures of domestic regulators. This change in focus provides the motivation for the theories developed here.

² Single-stock futures contracts can be thought of as leveraged positions in the underlying stock, depending on the underlying margin requirements. *See infra* Part III.A.

³ Trading will be authorized among institutional investors in the U.S. by August 2001 and by individual investors in the U.S. by December 2001. *See* Joseph Weber, *Caution: Single-Stock Futures Ahead*, *BUS. WEEK*, Feb. 26, 2001, at 38. Congress passed the CFMA just hours before adjourning for the session, with no comment or debate. Prior hearings on the CFMA had not addressed many important policy issues, and the last-minute approval of the bill during the controversy surrounding the Presidential election precluded any further considerations of policy. *See* Frank Partnoy, *Stock Gambling on the Cheap*, *N.Y. TIMES*, Dec. 21, 2000, at A39. The CFMA also exempted swaps from regulation, thereby cemented some long-standing attempts by financial market participants to insulate a large portion of the derivatives market from regulation, and is a good example of intrajurisdictional and interjurisdictional regulatory competition. The Commodity Futures Trading Commission granted a regulatory exemption for swaps just before President Clinton took office in 1993, and in the CFMA Congress essentially made that exemption law. However, the swaps amendments have not created (and probably will not create) multinational regulatory competition, so the focus of this article is on the single-stock futures amendments.

⁴ *See, Exchange Traded and OTC Derivatives: Make or Break for Chicago*, *FINANCIAL NEWS*, Feb. 5, 2001, at 2

This article argues that regulatory competition is not monolithic and can take at least three very different forms. The regulation of single-stock futures has evolved through all three stages of these forms.

The first form of regulatory competition involves “intra-jurisdictional regulatory competition,” or competition within a jurisdiction among alternative regulators. Regulatory competition related to single-stock futures began in context of intra-jurisdictional regulatory competition: namely, a dispute within the U.S. federal jurisdiction between the Securities and Exchange Commission (“SEC”) and Commodity Futures Trading Commission (“CFTC”).

The second form involves “inter-jurisdictional regulatory competition,” or competition among regulators in different jurisdictions. In recent years, this form of regulatory competition has dominated with respect to single-stock futures. While the U.S. regulatory regime was embroiled in a costly turf battle, several European regulators and exchanges, as well as the self-regulated private over-the-counter market, began competing with the costly U.S. regulatory regime.

Whereas these first two forms of regulatory competition are well documented and covered in the legal literature, the third form – which I call “multinational regulatory competition” – is newer and more difficult to characterize. Accordingly, any claims about future regulatory competition in this form necessarily are speculative. By “multinational regulatory competition,” I mean competition occurring when a group of regulators from more than one sovereign forms a partnership as a multinational regulator and then seeks to compete with other groups of regulators, also formed from more than one sovereign. There is some recent empirical evidence that regulatory trends in market for single-stock futures are in the direction of multinational regulatory competition.⁵

Multinational regulatory competition may be an attractive alternative to other forms of regulatory competition. As discussed in greater detail below, intra-jurisdictional competition is subject to costly and inefficient turf battles over regulatory market power. Inter-jurisdictional competition is not subject to those same problems, but is likely to generate other costs and inefficiencies, as parties engage in territory-related regulatory arbitrage transactions, which are – at best – normatively indeterminate. Multinational competition – which involves competition between partners of regulators of different countries, and therefore captures both intranational and international competition – may be more likely to create race-to-the-top conditions.

Part II describes this new framework for analyzing theories of regulatory competition (including the notion of multinational regulatory competition), and applies the framework to the regulation of single-stock futures.

⁵ See *infra* Part III.

Part III discusses several policy issues related to the regulation of single-stock futures, and attempts to address whether or how multinational regulatory competition with respect single-stock futures might be a more efficient regulatory regime than other structures.

In particular, Part III expands the discussion to focus on more general international regulatory issues relevant to single-stock futures. The three preliminary conclusions are: (1) single-stock futures will introduce opportunities for substantial leveraging of individual stock transactions in ways that previously were not available; (2) single-stock futures will shift the focus of securities fraud regulation in numerous areas, including insider trading and market manipulation, and (3) single-stock futures will allow investors to avoid costly restrictions on short sales, which should improve market efficiency. On balance, single-stock futures have the potential to make markets fairer and more efficient, and multinational regulatory competition is one likely method of encouraging such improvements.

II. REGULATORY COMPETITION AND SINGLE-STOCK FUTURES

Regulatory competition can occur in several different ways. First, regulators within a particular jurisdiction can compete. For example, regulators in the financial markets frequently have overlapping jurisdiction. The regulation of single-stock futures has been an example of this type of competition.

Before December 2000, the SEC and CFTC competed over regulation of single-stock futures for nearly two decades.⁶ Originally, the SEC claimed it should have jurisdiction because single-stock futures behave like the underlying individual stocks and bonds; the CFTC claimed it should have jurisdiction because such single-stock futures behave like futures. The result was stalemate, and a Congressional ban of trading of single-stock futures. Similar forms of competition have occurred in other areas.⁷

I refer to this type of regulatory competition as "intra-jurisdictional regulatory competition." Intra-jurisdictional regulatory competition is unlikely to be efficient for several reasons. First, absent other forms of competition, intra-jurisdictional competition is likely to consist simply of participants in an oligopolistic regulatory regime (in the case of single-stock futures, a duopoly). Each regulator has market power; the only question is whether one regulator will achieve monopoly power. Accordingly, each regulator has incentives to expend resources to capture these rents, and no regulator faces competition from outside the regulatory regime.

⁶ In many ways, such competition will continue under the cooperative regime envisioned by the CFMA.

⁷ Obvious examples include competition among banking regulators and between the Federal Trade Commission and the Antitrust Division of the Department of Justice.

Second, an oligopolistic regulatory regime imposes duplicative costs. Parties must either comply with multiple regulator requirements, or establish why only one set of requirements is relevant. The existence of overlapping regulatory jurisdiction creates confusion among market participants. Such cost and confusion was a major reason why the British financial market regulator is now a single entity.

A second form of regulatory competition is “interjurisdictional regulatory competition.” For example, corporations in the U.S. choose among the several states in deciding whether to incorporate. Because there is only one incorporation option within a particular state, there is no intrajurisdictional regulatory competition. Instead, state monopolist regulators compete with each other. The deadweight losses associate with individual state monopolies are mitigated by competition among monopolists.

Interjurisdictional regulatory competition can take on many forms. State regulators can compete with federal regulators. National regulators can compete with each other. National regulators can compete with supranational regulators.

Interjurisdictional regulatory competition is likely to create benefits intrajurisdictional regulatory competition does not. The market power of regulators is limited by the presence of competition outside of the monopoly structure. Therefore, the consequence of a regulator having monopoly power is mitigated. Much of the debate among legal academics has focused on the potential costs and benefits of interjurisdictional regulatory competition, and that debate need not be rehashed here.

A third form of regulatory competition – which, to my knowledge, has not received the attention of legal scholars – is “multinational regulatory competition.” Multinational regulatory competition occurs when a group of regulators from more than one sovereign forms a partnership as a multinational regulator and then competes with other groups of regulators, also formed from more than one sovereign. Figure 1 describes the various possibilities.

Figure 1

Sovereign A

Regulator A1

Regulator A2

Sovereign B

Regulator B1

Regulator B2

Intrajurisdictional regulatory competition involves competition between Regulator A1 and Regulator A2, or between Regulator B1 and Regulator B2. Interjurisdictional regulatory competition involves competition between one regulator from Sovereign A (e.g., Regulator A1) and one regulator from Sovereign B (e.g., Regulator B1). Multinational regulatory competition involves competition between Partnership 1, formed by Regulator A1 and Regulatory B1, and Partnership 2, formed by Regulatory A2 and Regulator B2.

Multinational regulatory competition is likely to have additional benefits not associated with other forms of regulatory competition. It avoids the costs and inefficiencies associated with intrajurisdictional regulatory competition, for the same reason interjurisdictional regulatory competition avoids those costs: regulators with market power are subject to competition from outside their jurisdiction.

Moreover, multinational regulatory competition adds a layer of competition not existent under interjurisdictional regulatory competition. Individual actors can choose among regulatory choices, just as they do under interjurisdictional competition, and individual regulators are subject to competitive forces, as they ideally would be under a functionally operating system of intrajurisdictional competition. Accordingly, scholars might find multinational regulatory competition to be an attractive alternative to interjurisdictional competition, regardless of their position with respect to the race-to-the-top vs. race-to-the-bottom debate.

Whereas interjurisdictional regulatory competition is appropriately characterized as a linear race (either to the bottom or to the top), multinational regulatory jurisdiction is more complex, dynamic, and non-linear. There are two layers of competition – from outside a particular sovereign and from within the sovereign – and these layers move in opposite directions. Moreover, the two layers of competition interact, creating second order effects from the effects of interjurisdictional competition on intrajurisdictional competition (and vice versa). In addition, there is likely to be higher-level competition between the partnerships of multinational regulatory regimes.

Perhaps more importantly, there are not the same incentives for parties to engage in regulatory arbitrage transactions as existed under interjurisdictional competition, because parties within a particular jurisdiction are not subject solely to that jurisdiction rules. In other words, there is no need for transactions within a particular sovereign to move “offshore.” Accordingly, multinational regulatory competition should capture the benefits of interjurisdictional competition while avoiding some of the costs.

Single-stock futures are an excellent example of this transition from intrajurisdictional regulatory competition to interjurisdictional regulatory competition and (potentially) to multinational regulatory competition. As noted above, Congress approved of the use of single-stock futures on December 15, 2000. This approval followed two decades of intrajurisdictional and interjurisdictional regulatory competition. First, the SEC and CFTC competed over jurisdiction. This competition was costly and inefficient, and the only resolution to the dispute was a Congressional ban on futures

contracts on individual stocks and bonds.⁸ For more than a decade, options on single securities were allowed; futures on single securities were not.⁹

It is difficult to argue that domestic regulatory competition (i.e., between the SEC and CFTC) was efficient. In fact, competition between the two regulators led to a stalemate that precluded any change in regulation, and was best described as a nasty turf battle.

Second, interjurisdictional competition from outside the U.S. put pressure on the U.S. ban on single-stock futures. As is often the case in financial markets, participants responded to costly regulation by engaging in regulatory arbitrage transactions¹⁰ to create economically equivalent positions not subject to the regulatory costs. This process of regulatory arbitrage can occur through interjurisdictional competition.

In this instance, the regulatory cost imposed on single-stock futures trading in the U.S. was very high, because such instruments were illegal. As a consequence, market participants who wished to obtain the exposure associated with a futures or forward position in an individual stock opted out of the U.S. securities regulatory structure and traded over-the-counter derivatives transactions, both inside and outside the U.S. Examples of such transactions include not only single-stock futures on non-U.S. exchanges, but a wide variety of equity derivative products, including equity swaps and over-the-counter options and options combination strategies. The normative consequences of such international competition are indeterminate. On one hand, market participants were able to reduce transactions costs and enter into transactions they otherwise would not have been able to enter.¹¹ On the other hand, to the extent U.S. regulations were beneficial, regulatory arbitrage likely eroded those benefits.

The third stage of this evolution of regulatory competition is multinational regulatory competition. The question is whether competition in the regulation of single-stock futures will move in this direction. There already is some evidence that competition is becoming multinational.

On March 26, 2001, the London International Financial Futures and Options Exchange (Liffe) and the National Association of Securities Deal-

⁸ Section 4(a) of the Commodity Exchange Act provides that it is unlawful to enter into a commodity futures contract that is not made "on or subject to the rules of a board of trade which has been designated by the Commission as a 'contract market' for such commodity." 7 U.S.C. § 6(a).

⁹ See *Board of Trade of the City of Chicago v. SEC*, 187 F.3d 713, 716 (7th Cir. 1999) (noting that "[t]his allocation appears to be a political compromise; no one has suggested an economic rationale for the distinction."). Over time, exceptions were carved out of this ban for futures on government securities, including U.S. Treasury bonds, and for futures on broad-based equity indices, including the Standard & Poor's 500 Index.

¹⁰ Regulatory arbitrage is defined as transacting to avoid regulatory costs.

¹¹ Peter H. Huang has argued that the use of derivatives to create additional transaction opportunities is normatively indeterminate. Peter H. Huang, *A Normative Analysis of New Financially Engineered Derivatives*, 73 S. CAL. L. REV. 471, 498-500 (2000).

ers Automated Quotation System (Nasdaq) announced a partnership to offer single-stock futures within both the U.S. and Europe.¹² The partnership will trade single-stock futures through an existing electronic system based in London, called Liffe Connect, which previously had offered single-stock futures based on several dozen U.S. stocks to investors outside the U.S.¹³ Presumably, the Liffe-Nasdaq partnership will lead to similar cross-border partnerships. Competition between these cross-border partnerships is the essence of the idea of multinational regulatory competition.

One need not look far to find examples of some limited pressure towards multinational regulatory competition in other areas in the financial markets. Just as corporations have accrued benefits from multinational status, other financial market entities have sought to expand beyond their domestic structure. There is no reason in principle why regulators cannot enjoy the same multinational benefits corporations long have enjoyed, and there is some evidence that regulators under this notion. For example, stock markets compete generally for trading in securities. American Depositary Receipts and Global Depositary Receipts allow investors in one jurisdiction to invest in securities in another jurisdiction. U.S. and European derivatives exchanges also have cooperated for many years. Admittedly, many of these examples have involved self-regulatory organizations with substantial market power within their jurisdiction (e.g., stocks that trade only on the New York Stock Exchange in the U.S. and the London Stock Exchange in England), and therefore do not generate the degree of competition envisioned by multinational regulatory competition. By contrast, single-stock futures are the most recent – and perhaps the best – example of how multiple cross-border regulatory partnerships can evolve and compete in multiple jurisdictions.

III. IMPLICATIONS OF SINGLE-STOCK FUTURES REGULATION

The regulatory competition debate as it relates to single-stock futures is not merely theoretical. The type of regulatory competition influences several policy issues relevant to financial market participants. The discussion below focuses on three of those issues: margin requirements, securities fraud, and short positions.¹⁴

¹² See Nikki Tait & Aline Van Duyn, *Liffe and Nasdaq Form Derivatives Link: Joint Venture Aims to Develop Market for Futures on Individual Stocks*, FIN. TIMES, Mar. 27, 2001, at 23. The partnership will be subject to U.S. regulation.

¹³ See Paul Armstrong, *Liffe and Nasdaq Derivative Link Hits LSE*, LONDON TIMES, Mar. 27, 2001, at #. Single-stock futures were not immediately successful in London: only 36,370 contracts traded during the second week of trading, and one prominent U.S. academic pronounced the contracts “dead on arrival.” See Joseph Weber, *Caution: Single-Stock Futures Ahead*, BUS. WEEK, Feb. 26, 2001, at 38 (quoting Professor Robert E. Whaley).

¹⁴ Portions of Part III are drawn from Frank Partnoy *Some Policy Implications of Single-Stock Futures*, FUTURES & DERIVATIVES LAW REPORT, March 2001, at 8.

A. Margin Requirements

One of the factors driving support for the CFMA was the high margin requirements associated with purchasing and selling stock. In general, margin requirements for futures are much less than they are for stocks. Investors in single securities in the cash markets are subject to a margin requirement of 50 percent.¹⁵ In contrast, futures transactions typically require margin of only a few percent.¹⁶

The CFMA amends Section 7 of the Securities Exchange Act of 1934 to provide that the Board of Governors of the Federal Reserve System shall prescribe the margin requirement applicable to trading of single-stock futures.¹⁷ However, the CFMA also provides that the Federal Reserve is permitted to delegate its authority to the Securities Exchange Commission and Commodity Futures Trading Commission, who then jointly would prescribe the applicable margin requirements.¹⁸ Although there are no explicit lower boundary constraints on appropriate margin requirements, there is a suggestion in the statute that initial and maintenance margin requirements should be consistent with the margin requirements for comparable option contracts.¹⁹

It seems clear that both initial and maintenance margin requirements for single-stock futures will be less than 50 percent. The question remains how much less. Some observers have predicted that levels will settle in the 20 percent range, still much higher than comparable levels for other futures; others are lobbying for lower requirements.²⁰ In any event, the margin requirements seem likely to fall in some intermediate range, based on the form and amount of regulatory competition.

What are the implications of this intermediate range? First, to the extent margin requirements for single-stock futures are lower than requirements for stock, investors are likely to use single-stock futures as a less costly vehicle for leveraged speculation in individual companies. The impact most likely will be strongest on individual investors. For many years, wealthy investors and institutions have had access to other types of derivatives transactions, including equity swaps, enabling them to take leveraged positions in individual shares of stock while avoiding the 50 percent margin requirement of Regulation T.

Whether lower margin requirements make sense depends in part on the actions of individual investors, and whether those actions will generate

¹⁵ See Federal Reserve Reg. T.

¹⁶ See *Exchange Traded and OTC Derivatives: Make or Break for Chicago*, FINANCIAL NEWS, Feb. 5, 2001, at 2 (citing "the 1% to 3% that is usual on futures in the U.S.").

¹⁷ See CFMA § 206(b)(1).

¹⁸ See CFMA § 206(b)(2).

¹⁹ See CFMA § 206(b)(2)(B)(iii).

²⁰ See *Exchange Traded and OTC Derivatives: Make or Break for Chicago*, FINANCIAL NEWS, Feb. 5, 2001, at 2

negative externalities. The relevant question is how additional speculation from unsophisticated traders will affect the safety and soundness of markets. The risk is that markets will be more volatile and that volatility will increase as stock prices decline, because investor margin calls on a given day will be triggered much more quickly.

Second, there will be ongoing pressure for regulators to push the margin requirements down as low as possible, in part to compete with the options markets, but also to compete with single-stock futures markets outside the U.S. Proponents of lower margin requirements argue that single-stock futures will not be viable unless their margin requirements are lower than those for corresponding options.²¹

Theoretically, it is correct that options can be used to construct synthetic cash or forward positions in single stocks. However, the transaction costs of replicating a single-stock futures position using options are high. A simple long position in a stock requires not only two options transactions (the purchase of a call and the sale of a put) but also a lending transaction. Moreover, to create a position that is economically equivalent to a long position in a stock, the exercise prices of the call and put must equal the current price of the stock, and the loan must be in an amount equal to the present value of the exercise price. Single-stock options do not trade for every exercise price (they typically trade in increments of \$5), and liquidity at any particular exercise price can be limited. Accordingly, high transaction costs preclude the use of options to replicate long stock or futures positions, especially in small trading lots, and therefore single-stock futures will be an attractive alternative to options even at higher margin requirements. In addition, the CFMA permits the SEC and CFTC to permit trading of options on single-stock futures as of December 15, 2003.²²

Third, the level of margin requirements will affect how management of particular companies will think about their shareholder base. Today, if the stock of a company drops precipitously in one day, the stock price can enter into a death spiral as investors receive margin calls. The possibility of an individual stock meltdown increases as the margin requirements decrease. For example, a company about to announce that it will miss an earnings estimate is much more likely to have its stock face downward price pressure if the margin requirement is substantially lower.

The CFMA envisions that regulators adopting margin requirements for single-stock futures will consider issues such as preserving the financial integrity of markets and preventing systemic risk.²³ If the regulators take these admonitions seriously, margin requirements should be set at an ap-

²¹ Some attorneys already have begun making this argument with respect to the margin requirements of the CFMA. See *Futures on Single Stocks May Face High Hurdles*, BUSINESS DAY (THAILAND), Feb. 13, 2001, at 1.

²² See CFMA § 251(a)(2).

²³ See CFMA § 206(b).

propriate level. Again, this is where the type of regulatory competition will play a significant role. Interjurisdictional regulatory competition alone might be a race to the lowest available margin requirement, because investors prefer a reduction in this requirement and will engage in regulatory arbitrage transactions to reduce their margin costs. It is unclear whether this race would be to the top or bottom, although there is a risk of negative externalities resulting from regulatory arbitrage. The alternative of multinational regulatory competition might provide some comfort that parties would not simply transact to minimize margin requirements. Moreover, multinational regulatory competition would result in an equilibrium margin level within the relevant jurisdictions, so that each jurisdiction would retain some control over these transactions, or at least information about these transactions.

B. Securities Fraud

The CFMA anticipates a wide range of securities fraud-related problems associated with single-stock futures by incorporating these new instruments into the existing securities regulation framework. For example, a single-stock future is defined as a "security future" and is included within the definitions of security in the Securities Act of 1933²⁴ and in the Securities Exchange Act of 1934.²⁵ Accordingly, absent an exemption, the securities laws generally apply to single-stock futures.

The CFMA explicitly contemplates the notion that individuals might engage in insider trading or market manipulation through the use of single-stock futures. In fact, single-stock futures are a natural vehicle for such activities. Because of the lower margin requirements and the greater potential to evade detection, single-stock futures might be a popular choice among insider traders. Just as insider traders began purchasing call options instead of stock in recent years, one can expect them to begin buying single-stock futures once those securities are available. Likewise, stock markets and futures markets are linked by various arbitrage transactions and parity conditions, and the introduction of single-stock futures will create additional opportunities for manipulation in both sets of markets.

The CFMA amends the insider trading portions of the securities laws to cover single-stock futures. For example, the CFMA amends Section 20(d) of the Securities Exchange Act (which prohibits trading of derivatives when trading of the underlying stock would constitute a violation) to in-

²⁴ See CFMA § 208(a)(1)(A). The CFMA also exempts certain single-stock futures from registration and reporting requirements. See CFMA § 208(b).

²⁵ See CFMA § 201(a)(1)-(5). The CFMA also covers any "narrow-based security index," which includes stock indices with a relatively small number of stocks. See CFMA § 201(a)(5).

clude single-stock futures.²⁶ Similarly, the CFMA amends Section 16(b) to include transactions in single-stock futures among its trading prohibitions.²⁷

Likewise, the CFMA amends the market manipulation sections of the securities laws to include single-stock futures. For example, the act amends the Section 9(b) prohibition against manipulation to include single-stock futures.²⁸

Consequently, it seems clear that anyone engaging in insider trading or market manipulation through the use of single-stock futures will be violating the securities laws to the same extent they would have if they had traded the underlying stock. As a policy matter, this result might be correct, but it does not allow for the possibility (and consequently the benefits) of regulatory competition. In other words, parties cannot currently opt out of the securities fraud regime as it applies to single-stock futures. In addition, the application of the various securities laws to the trading of single-stock futures leaves several questions unanswered.

First, to what extent are fiduciary duties owed to holders of single-stock futures? What if a company's stock is closely held by insiders and the company obtains external financing through the use of single-stock futures? For example, suppose the value of a company is \$1 million and all of the stock is held by insiders. The insiders sell long futures positions to investors, who agree to buy all of the stock in the company in one year for \$1.1 million.

In this scenario, to whom should management owe fiduciary duties? The insider shareholders of the company have been transformed into debtholders, who typically are not entitled to such duties. To see this, consider that as long as the company has value of at least \$1.1 million, the insiders will receive \$1.1 million in one year (i.e., 10 percent interest plus return of principal). However, if the company has value of less than \$1.1 million in one year, the insiders will suffer all of the losses. Thus, the insiders have become debtholders: they own a one-year bond with a 10 percent coupon and limited upside.

In contrast, the investors in futures have become the true (i.e., economic) shareholders of the company. They will capture any of the increases in the value of the company above \$1.1 million. Accordingly, there is a strong argument that management should owe a duty to such investors. Yet, traditionally, duties are owed to shareholders, not to holders of single-stock futures.

²⁶ See CFMA § 205(a)(3). Similarly, the CFMA includes single-stock futures in Section 21A(a)(1) of the Securities Exchange Act, which provides for liability for contemporaneous traders for insider trading. See CFMA § 205(a)(4).

²⁷ See CFMA § 208(b)(3).

²⁸ See CFMA § 205(a)(1).

Second, which single-stock futures traders are covered by the securities laws? Section 20(d) of the Securities Exchange Act, as amended by the CFMA, provides that trading single-stock futures will constitute insider trading whenever "purchasing or selling a security" would constitute insider trading. Has an insider who *sells* security futures when the insider possesses *positive* information engaged in insider trading? In other words, is there a violation when the prohibited cash transaction under Section 20(d) would have been a *purchase* of the underlying stock?

Third, how should single-stock futures be treated for other regulatory purposes? Equity derivatives of various types are popular in part because of the differential regulatory treatment they receive. Parties often engage in regulatory arbitrage transactions where economically equivalent transactions are treated differently from a tax, accounting, or other regulatory perspective.²⁹ Just as parties have used equity swaps, short-against-the-box, and various options transactions to receive a portion of the gain from an appreciated stock position without paying tax or recognizing gain, parties undoubtedly will use single-stock futures for such purposes, too.

In sum, the application of securities fraud regulation to single-stock futures does not contemplate much regulatory competition.³⁰ One obvious reason for concern about interjurisdiction regulatory competition in this area is the facilitation of regulatory arbitrage transactions, which might render the U.S. securities fraud regime irrelevant. Some scholars would applaud this result. Nevertheless, whatever one's view of the current U.S. securities fraud regime, multinational regulatory competition would be more likely to result in an equilibrium level of regulation that would not encourage such regulatory arbitrage transactions. Instead, each jurisdiction would retain partial control over the regulatory structure, and the competitive dynamic would ensure that no regulator retained substantial market power.

C. Short Positions

Single-stock futures might make markets more efficient for stocks whose value is influenced by the difficulty of selling that stock short. In a short sale, an investor borrows shares from a broker and sells them. If the price of the stock drops, the investor makes money because she can buy cheaper shares to satisfy the borrowing. If the price of the stock rises, the investor loses money because she remains obligated to satisfy the borrowing with more expensive stock.

²⁹ See Frank Partnoy, *Financial Derivatives and the Costs of Regulatory Arbitrage*, 22 J. CORP L. 211 (1997).

³⁰ Any residual intrajurisdictional competition between the SEC and CFTC is unlikely to generate benefits.

Various rules and restrictions apply to investors shorting stock. For example, investors can sell short only following an uptick (or zero uptick) in the price of the stock (i.e., when the most recent transaction was at a higher price than the previous transaction). The "uptick rule" was designed to prevent steep market declines associated with sequential short sales. Whether or not it achieves its purpose, it imposes a significant cost on shorting. In addition, it frequently is difficult for investors to borrow a large number of shares, because the shares available for shorting transactions are only a fraction of the total outstanding shares. Investors also face the same 50 percent margin requirement for shorting that they face for purchasing stock. All of these restrictions increase the cost of shorting.

Single-stock futures might provide a benefit by offering a less restrictive market for selling short. The benefits could be substantial. A liquid market in single-stock futures might prevent certain financial market anomalies caused, at least in part, by restrictions on shorting.

For example, consider the "parent-subsidiary" valuation anomaly. Incredibly, some parent company's shareholdings of subsidiaries recently have had lower valuations than the shares of the subsidiaries themselves. For example, for several months after 3Com publicly issued a portion of its holdings of Palm, a previously wholly-owned subsidiary, the shares of Palm retained by 3Com were worth substantially less than the shares of Palm traded in the market.³¹

One might think this gap would be closed by arbitrage, with investors buying the cheap Palm shares through purchases of 3Com stock and selling short the more expensive Palm shares in the market. Yet notwithstanding very substantial trading volumes in both stocks, the gap persisted. In fact, the gap persisted even after the companies announced a firm date and an exchange ratio for the spin-off of all of 3Com's remaining ownership of Palm. One explanation for this puzzling anomaly (and for others like it) is that it was very difficult and costly to sell short Palm stock during this period, both because of applicable regulations and because of the difficulty of borrowing actual Palm shares.

If this explanation is correct, the trading of single-stock futures might ameliorate this anomaly, both by enabling investors to avoid regulations applicable to short sales and by creating a virtually unlimited supply of short futures positions for investors. In fact, 3Com and Palm both attempted to resolve the anomaly by allowing the trading of "when-issued" versions of the 3Com and Palm shares, which closely resemble a form of single-stock futures.³²

³¹ Frank Partnoy, *Strange New Math of Palm Inc.*, N.Y. TIMES, Mar. 15, 2000, at A29.

³² The shares traded under a separate ticker symbol and entitled the holder to one share of the company after the spin-off was completed. For example, when issued shares of 3Com, with ticker symbol COMS, traded under the ticker symbol COMSV, and entitled the holder

By enabling investors to sell short stock in a less costly manner, the CFMA might eliminate some of these market inefficiencies. Investors would be better off to the extent market prices are made more accurate, so if a market for shorting single-stock futures helps to make prices more accurate, the CFMA could create substantial benefits.

In this instance, either interjurisdictional regulatory competition or multinational regulatory competition likely would yield the relevant benefits. The major difference between the two regimes is that although interjurisdictional regulatory competition enables parties to avoid restrictions on shorting by moving transactions outside of the jurisdiction, multinational jurisdictional competition enables parties to avoid the restrictions by choosing among competing regimes within multiple jurisdictions. In addition, multinational jurisdictional competition has the added benefit of competition within particular jurisdictions, which might prove substantial.

IV. CONCLUSION

Whether regulatory competition results in a race-to-the-top or a race-to-the-bottom is a difficult question. This article has hinted at two issues that might help legal scholars interested in answers. First, regulatory competition comes in many shapes and sizes. I propose a tripartite framework for considering the various forms of regulatory competition. Intra-jurisdictional competition is least likely to yield benefits – and may not ever reach any equilibrium – because regulators retain market power and are subject to dysfunctional incentives. Interjurisdictional competition is likely to reach some equilibrium point, although such a result can be normatively indeterminate. In any event, interjurisdictional competition poses the risk that market participants will use regulatory arbitrage transactions to avoid particular jurisdictions. Multinational regulatory competition is an attractive alternative, because it ensures several modes of competition while preserving the possibility that every jurisdiction will retain partial oversight of relevant transactions.

Second, recent changes in the regulation of single-stock futures are an excellent experiment to watch for those interested in testing various theories of regulatory competition. Single-stock futures have been subject to each of the above three forms of regulatory competition, with differing effects, and may be the first regime to enjoy dynamic multinational regulatory competition. There are numerous policy concerns related to single-stock futures, and those policy concerns depend greatly on the type of regulatory competition. Multinational regulatory competition should ameliorate some of those concerns.

to one share of 3Com after the spin-off was complete (i.e., to one share of 3Com, ex-Palm). Likewise Palm shares traded under the ticker symbol PALMV.

