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4 **THE EFFECT OF GLOBAL FINANCIAL**  
5 **MARKETS ON BUSINESSES**  
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12 **ABSTRACT**

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15 *This paper reviews the theory and evidence on the effects of globalization of*  
16 *financial transactions on businesses. Two important benefits are identified.*  
17 *First, globalization reduces a company's cost of capital. Second, globalization*  
18 *improves corporate governance so that manager actions are better aligned*  
19 *with shareholder interests. This improvement in corporate governance further*  
20 *contributes to a reduction in a firm's cost of capital.*  
21

22 **INTRODUCTION**

23  
24 Entrepreneurs with good ideas are constrained by the amount of capital they can  
25 raise. Although they can use their own money and borrow from family and friends,  
26 these are limited sources of capital. Eventually, if they want to make their firms  
27 achieve their potential, they have to fund growth using other people's money. They  
28 can borrow from fellow citizens under a contractual obligation to pay them back  
29 with interest – debt – or they could make these citizens co-owners, with a promise  
30 to share all the ups and downs of ownership – equity.

31 Today we take the existence of debt and equity as prosaic facts of economic  
32 life. We should not. The ability of firms to raise money from fellow citizens is  
33 remarkable. Equity is more of a paradox than debt. Think about it. If you buy  
34 shares (firm equity), you give money to a firm that has no contractual agreement  
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36  
37 **Leadership in International Business Education and Research**  
38 **Research in Global Strategic Management, Volume 8, 163–174**  
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**ISSN: 1064-4857/doi:10.1016/S1064-4857(03)08011-2**

1 to give you anything back. If you buy corporate bonds (firm debt), even though  
2 the firm has a contractual agreement to return your principal with interest, this  
3 agreement is only valid if the firm is solvent. It is no wonder, then, that in the  
4 history of finance, debt arrived before equity.<sup>1</sup>

5 If the ability of firms to raise money from citizens is remarkable, the ability of  
6 firms to raise money from foreigners is a miracle. But globalization is doing just  
7 that. Local U.S. corporate bonds and local U.S. equity held by foreign investors,  
8 or foreign corporate bonds and foreign equity held by U.S. investors, are on the  
9 order of billions of dollars. If cross-border transactions for the whole world are  
10 included, local securities held by foreign investors are on the order of trillions of  
11 dollars.

12 How has this globalization of financial transactions affected businesses? This  
13 paper reviews the impact on two aspects of business: the firm's cost of raising funds  
14 in capital markets (its "cost of capital"), and the extent to which the firm practices  
15 good corporate governance. We discuss the conditions under which globalization  
16 would be expected to reduce a firm's cost of capital and review the empirical evi-  
17 dence on whether such a decline has occurred. We then examine how globalization  
18 has improved corporate governance and how this improvement itself has led to a  
19 decrease in a firm's cost of capital. The final section concludes by discussing  
20 questions that remain to be addressed by future research.

## 21 22 23 **THE EFFECT OF GLOBALIZATION ON THE** 24 **COST OF CAPITAL** 25

26 Firms undertaking investments necessary to their growth turn to investors for  
27 funding. When are investors willing to provide this funding? When they expect  
28 to receive a rate of return that compensates them for the risk of their investment.  
29 The greater the risk, the greater the return required to compensate them for the  
30 use of their funds. This required return demanded by investors is the firm's cost of  
31 capital. In deciding on the worthiness of an investment project, firms compare the  
32 cost of capital with the investment's expected future return. If the cost of capital  
33 rises relative to the expected return of the investment, then the project is less likely  
34 to be profitable and will be rejected. Proper measurement of the cost of capital  
35 therefore becomes critical to the correct assessment of an investment's benefits.

36 Globalization can affect a firm's cost of capital because it alters the risk of a firm's  
37 investment.<sup>2</sup> To see why, consider a small, closed economy that tends to specialize  
38 in the production of steel. If steel production is a large fraction of the country's total  
39 production, then investors have few alternative investment opportunities available  
40 to them. In this case, the variability of an investor's return on a portfolio of that

1 country's assets is largely determined by the variability of the return on steel. Steel  
2 producers seeking to raise capital will need to compensate investors for this risk  
3 with a higher return, which will raise the firm's cost of capital.

4 Suppose this economy decides to open its market so that foreign investors can  
5 invest in the country's steel firms and domestic investors can invest in other firms  
6 outside their own country. Now foreigners can assume some of the risk that, prior  
7 to liberalization, was borne fully by domestic residents, and domestic residents  
8 can diversify their portfolio holdings outside their home market. Whereas prior to  
9 liberalization the risk of a domestic steel firm was assessed relative to the other firms  
10 in the home market, now investors will assess the risk of domestic steel investments  
11 relative to an expanded set of foreign and domestic firms. If there are firms within  
12 this expanded set whose returns are not highly correlated with those of domestic  
13 steel producers, then investors are able to diversify away some of the risk of  
14 steel return variability. That is, the variability of domestic steel returns contributes  
15 less to the variability of investors' total portfolio after liberalization. Under these  
16 conditions, globalization will reduce the required return on steel investments and  
17 lower a steel firm's cost of capital.

18 A fall in the cost of capital could yield several benefits for the steel firms (Stulz,  
19 1999a). Projects that previously were perceived to be unprofitable now become  
20 profitable. The increased attractiveness of investment projects may spur greater in-  
21 vestment in the steel industry. Finally, as discussed more fully below, the attraction  
22 of new investors to the steel industry could increase the monitoring of corporate  
23 activities and improve corporate governance in this sector of the economy.

24 While it is easy to speculate about the beneficial effects of globalization on a  
25 firm's cost of capital, the estimation of any benefits poses a greater challenge.  
26 This difficulty arises particularly in calculating the cost of equity capital, or the  
27 required return on a firm's stock, because it requires a knowledge of whether and  
28 how investors require compensation for various types of risk.

29 One way to estimate the effects of globalization on a firm's cost of capital is to  
30 specify an asset pricing model that relates an asset's required return to risk factors,  
31 and then test whether a model estimated using global risk factors dominates one  
32 estimated using only domestic risk factors. An example of a model that has been  
33 tested in this fashion is the Capital Asset Pricing Model (CAPM). According to  
34 CAPM, the required return on a firm's stock depends on a single source of risk: the  
35 extent to which the firm's stock moves together with other stocks in the "market  
36 portfolio," a portfolio of all stocks available to investors. An investor will require  
37 a higher return on a stock that moves closely with the market portfolio because the  
38 opportunities for risk reduction through diversification are limited. Investors will  
39 require a lower return on stock that does not closely mimic the market portfolio  
40 because more of the firm's risk can be offset through diversification.

1 In the context of CAPM, globalization affects how investors determine their  
2 market portfolios. In a market completely segmented from foreign markets, the  
3 “market portfolio” is the portfolio of domestic assets. If globalization eliminates  
4 restrictions on investment, then the “market portfolio” becomes the portfolio of  
5 world assets, and a stock’s required return will now be assessed by its co-movement  
6 with the world market portfolio. A test of globalization’s effects therefore involves  
7 testing which source of risk – domestic market or world market – better explains  
8 the cross-section of returns.

9 Many studies that have tested CAPM with both global and domestic market  
10 risk factors find that a global CAPM outperforms a purely domestic one in devel-  
11 oped countries (Chan, Karolyi & Stulz, 1992; De Santis & Gerard, 1997; Harvey,  
12 1991; Korajczk & Viallet, 1990; Stehle, 1977). World market risk is therefore an  
13 important component of a firm’s cost of capital for these countries, and firms that  
14 use the domestic CAPM to evaluate investment projects are likely to undervalue  
15 an investment’s worth. When tests of the global CAPM are applied to emerging  
16 market stock returns, however, the results indicate that local factors remain impor-  
17 tant to the pricing of emerging market stocks (Bekaert & Harvey, 1995; Harvey,  
18 1995). These results suggest that liberalization in some emerging markets has been  
19 incomplete and in some cases not credible. As the liberalization process continues  
20 in these markets, we would expect the risk reduction benefits of globalization to  
21 translate into a lower cost of capital.

Korajczk and  
Viallet (1990) is  
not found in ref.  
list. Pl. check.

22 While much of the evidence indicates that a global CAPM outperforms a do-  
23 mestic one, studies also find that a global CAPM does not completely explain the  
24 behavior of stock returns. These pricing errors could be due to the failure of the  
25 model to account for additional risk factors, other than world market risk, that may  
26 affect required returns. Foreign exchange risk is one factor that may affect an asset’s  
27 required return. When purchasing power parity does not hold, investors in different  
28 countries can pay different prices for the same good when it is evaluated in the same  
29 currency. Unanticipated changes in exchange rates therefore represent another  
30 source of risk that is priced. Recent evidence suggests that asset-pricing models  
31 that take into account foreign exchange risk perform better than those that do not.<sup>3</sup>

32 Empirical studies have also compared local and global versions of models in  
33 which multiple risk factors affect an asset’s expected return.<sup>4</sup> Some of the possible  
34 risk factors that have been examined are the size of the firm, the ratio of its book-  
35 to-market value of equity, and the time of year.<sup>5</sup> The evidence on the ability of a  
36 global multi-risk factor model to outperform a single-risk factor model such as the  
37 CAPM is mixed. In addition, some tests of multiple risk factor models find that  
38 local factors remain important to the pricing of securities.<sup>6</sup> As with the CAPM,  
39 however, these multi-risk factor models are unable to accurately account for the  
40 behavior of returns.

1 To summarize, most of the empirical studies indicate the importance of global  
2 factors to the estimation of the cost of capital. However, the empirical models  
3 to date do not adequately explain the cross-sectional and time-series behavior of  
4 expected returns, and hence do not completely explain the cost of capital. It is  
5 important to remember, however, that tests of the world CAPM or global multi-  
6 factor models are implicitly joint tests of the asset-pricing model specification and  
7 of the hypothesis that financial markets are integrated internationally. Pricing errors  
8 could arise from the inappropriateness of the specification or from the existence  
9 of implicit or explicit barriers to capital movements.

10 An alternative way to test the impact of globalization on the cost of capital  
11 that avoids the estimation of an asset-pricing model involves specifying a proxy  
12 for the cost of capital and testing whether specific episodes of financial market  
13 liberalization affect this proxy. One proxy is the stock price. If financial mar-  
14 ket liberalization reduces the cost of capital in a country, then one would expect  
15 firms to have improved investment prospects, and their stock prices should rise.  
16 The evidence supports the hypothesis that financial market liberalization raises  
17 stock prices or, equivalently, reduces a country's cost of capital. One study of  
18 twelve emerging markets found that stock prices increased an average 26% during  
19 the eight months leading up to a country's liberalization (Harvey, 2000).<sup>7</sup> The  
20 change in a country's aggregate dividend yield has also been used as a proxy  
21 for the change in a country's cost of capital. Using this proxy, one study  
22 of twenty emerging market countries found that capital market liberalization  
23 reduces a country's cost of capital by slightly less than one percent (Bekaert  
24 & Harvey, 2000). These changes, while statistically significant, are smaller than  
25 what one would have expected given the extent of the liberalization in some coun-  
26 tries. It is possible, however, that inaccuracies in the model assumptions or in  
27 the dating of the liberalizations could cause the drop in the cost of capital to be  
28 underestimated.

29 Firm-level studies provide further evidence of the beneficial effects of glob-  
30 alization on the cost of capital of individual firms. This evidence indicates that  
31 the values of emerging market stocks that are eligible for purchase by foreign  
32 investors increase and the cost of capital falls, once governments liberalize their  
33 financial markets (Chari & Henry, 2001). The stocks of firms that remain closed  
34 to foreigners however experience no such revaluation. Individual actions that  
35 firms take to globalize their financing sources, such as cross-listing their stock  
36 on foreign stock exchanges, can also reduce a firm's cost of capital. Empirical  
37 investigations of these decisions generally show a positive revaluation following  
38 the announcement or actual listing of a stock's cross listing.<sup>8</sup>

39 Taken together, the empirical evidence to date suggests that globalization alters  
40 how investors perceive the risk of their investments. When the increased investment

1 opportunities afforded by globalization allow investors to better diversify their  
2 risks, a firm's cost of capital falls and its stock price rises.

### 3 4 5 **THE IMPACT OF GLOBALIZATION ON** 6 **CORPORATE GOVERNANCE**<sup>9</sup> 7

8 As globalization increases the ability of companies and investors to search the  
9 globe for preferred financing or investment avenues, two critical questions emerge.  
10 First, what are the ways in which the foreign suppliers of finance to domestic  
11 corporations assure themselves of getting a return on their investment? Second,  
12 what are the ways in which the foreign owners of capital try to align the interests  
13 of the domestic controllers of capital – the company managers – with their own  
14 interests? These are questions about international corporate governance.<sup>10</sup> We  
15 review seven general corporate governance mechanisms, with particular emphasis  
16 on how these are being affected by globalization.

17 The board of directors of a firm, in principle, represents the owners. Its responsi-  
18 bility is to monitor management, which it is supposed to do by crafting an effective  
19 “carrot and stick” incentive mechanism. This involves the design of a managerial  
20 compensation scheme that rewards the manager if the company value increases,  
21 and punishes the manager, sometimes by outright firing, if the company value  
22 decreases. One problem with boards is that managers may determine its compo-  
23 sition. The board's independence, therefore, seems to be desirable. Globalization  
24 has accelerated the desire for board independence. Codes of best practices issued  
25 in many countries around the world have sought to move boards towards greater  
26 representation by non-executive directors.<sup>11</sup> The Cadbury Committee report of the  
27 U.K. has been particularly influential in this dimension. Has all of this affected  
28 the bottom line? The evidence to date is that the number of outside directors is  
29 increasing, and these outside directors have been altering board decisions in some,  
30 but not all, countries studied.<sup>12</sup> It is still an open question whether company value  
31 has been directly impacted.

32 Corporate governance is a big problem if ownership is diffuse, because then it is  
33 not in the interest of a tiny owner to bear the entire cost of monitoring but to share  
34 with every other owner the benefit of monitoring. This is a free-rider problem. So a  
35 second way to monitor management is to have active large shareholders instead of  
36 many small shareholders. One problem with active large shareholders is that, like  
37 management, they have their own self-interests. Research in the U.S. has shown  
38 a complex relationship between the size of ownership of active shareholders and  
39 company value – when ownership is small, active shareholders want to free-ride,  
40 but when ownership is big, they prefer to entrench themselves rather than promote

1 shareholder interest.<sup>13</sup> Globalization makes it possible for investors from other  
2 countries to buy significant stakes in a firm and monitor management. Although  
3 this has led to an anti-foreign backlash – note that five years after the Southeast  
4 Asian crisis, despite all the talk of cleaning up bad loans, only a handful of banks  
5 have been sold to foreigners – increasing foreign ownership of local firms is a fact.  
6 Has all of this affected the bottom line? The evidence to date has been indirect.  
7 It comes from the ADR market, where it has been documented that foreign firms  
8 listed in the U.S. are worth more than their local counterparts (Doidge, Karolyi &  
9 Stulz, 2001). We do not know whether this is true for other countries.

10 A third way to monitor management is through a well-functioning capital market  
11 in its role as a certifier. Commercial banks that issue loans, investment banks that  
12 help firms sell their securities, analysts who give buy/sell recommendations, rating  
13 agencies that rate bonds, external auditors who verify financial statements, the  
14 financial press that plays the watchdog role, and securities exchanges with their  
15 stringent listing requirements are all certifiers. One problem with certifiers is that  
16 they too are prone to conflicts of interest. The Glass-Steagall Act of 1933, which  
17 has now been abolished, was primarily established in the U.S. to forbid commercial  
18 banks that had close relationships with firms from holding the securities of those  
19 firms. The recently enacted Sarbanes-Oxley Act of 2002 in the U.S. attempts  
20 to prevent conflicts of interest among auditors. Globalization has dramatically  
21 increased the demand and supply of certifiers. The rating agencies, Moody's and  
22 Standard & Poor's, have vigorously expanded their activities beyond U.S. borders.  
23 Cross listing of equity in foreign exchanges has increased.<sup>14</sup>

24 A fourth way to monitor management is through a well-functioning capital  
25 market in its role as a market for corporate control. When internal corporate  
26 governance systems fail, the last resort, if a market exists, is for an outside party to  
27 obtain control of the firm. It is in the interest of the outside party to wrest control  
28 because the party could then, by instituting changes, increase company value from  
29 its current low level and share this increase with the other shareholders. The market  
30 for corporate control has been very active in the U.S. Target firms are almost always  
31 bought at a premium, thereby creating value for the shareholders of the target firm.  
32 The jury is still out on whether shareholders of the acquiring firm benefit, though  
33 the gain of the target outweighs the loss of the bidder. This leads us to the dark  
34 side of this mechanism for corporate control. An acquirer may simply be wasting  
35 corporate resources overpaying for acquisitions in order to create a business empire.  
36 Globalization dramatically increased cross-border mergers and acquisitions  
37 by U.S. firms about 500% in the 1990s. Although we have no research on whether  
38 this has been beneficial for the target companies, we do have research showing that  
39 it has been value-reducing for the acquiring U.S. companies (Denis, Denis & Yost,  
40 2002). We do not know whether this is true for non-U.S. acquiring firms as well.

1 A fifth way to monitor management is by public disclosure of firm-specific  
2 information. The more information a company provides, and the stronger is its  
3 commitment to providing continuing information, the less costly it is for investors  
4 to monitor management. Laws and regulations of all countries mandate public  
5 disclosure of certain types of firm-specific information at the time of security  
6 issuance, and they mandate periodic disclosure of audited financial statements.  
7 Although these laws exist in all countries that have capital markets, there is huge  
8 variation among countries in the amount of information that is required to be dis-  
9 closed, and the degree to which disclosure laws are enforced. Research has shown  
10 the U.S. to be in the top in nearly all surveys on disclosure quantity and quality.<sup>15</sup>  
11 We also know that if foreigners receive less information, they demand a higher  
12 return on their investment in a country.<sup>16</sup> Globalization has dramatically affected  
13 the demand for good information from foreign firms. A response to this demand  
14 has been the significant number of foreign firms opting to recast all their financial  
15 statements using U.S. GAAP standards or International Accounting Standards.  
16 Although it is still an open question about which of these accounting standards are  
17 better, the debate about local standards versus global standards seems to be settled.

18 A sixth way to monitor management is through the legal system, which plays  
19 two roles. First, it limits the ability of management to expropriate resources from  
20 investors, especially minority investors. Second, through the use of lawsuits, it  
21 provides a mechanism for owners to discourage managerial decisions that destroy  
22 company value. There has been extensive research on the effect of legal systems  
23 on corporate governance.<sup>17</sup> Countries have been scored on the rights they provide  
24 to their shareholders and to their creditors. Common law countries provide the  
25 strongest degree of protection for shareholders, whereas French civil law countries  
26 provide the least. It has also been found that if the law does not protect the owners  
27 from the controllers, then the owners become the controllers; the countries with  
28 the least legal protection are also characterized by a high concentration of equity  
29 ownership (in governments or in families) and poorly developed capital markets.  
30 The conflict between owners and controllers is now replaced by a conflict between  
31 dominant shareholders and minority shareholders.

32 The seventh method of monitoring management is to change the nature of  
33 the dominant shareholder. Except for the Anglo-Saxon countries, the dominant  
34 shareholder elsewhere is often the government or the family. That is fast changing.  
35 Beginning with the privatizations under Prime Minister Thatcher in the U.K. in the  
36 1980s, numerous state-owned firms all over the world have been sold to the public.  
37 Research has shown that in most settings privatization “works,” in that the firms  
38 become more efficient, more profitable, financially healthier, and rewarding for  
39 investors. While this holds in both transition and non-transition economies, there  
40 is more variation in the former. Especially in transition economies, the identity



1 of the new owners and managers is important in determining post-privatization  
2 performance.<sup>18</sup> Stories in the financial press reveal that family businesses are also  
3 being restructured and sold at record rates. Unfortunately, we have no systemic  
4 global research on family businesses.

5 What then, has been the effect of globalization on corporate governance? It has  
6 been unequivocally positive.<sup>19</sup>

## CONCLUSION

10 This paper has reviewed two important benefits of globalization on businesses.  
11 First, the evidence suggests that globalization reduces the return investors require  
12 to supply capital to businesses, and hence reduces the firm's cost of capital. Second,  
13 globalization improves corporate governance so that manager actions are better  
14 aligned with shareholder interests. This improvement in corporate governance in  
15 turn contributes to a fall in the cost of capital.

16 It is also clear that the globalization benefits revealed by empirical research  
17 are lower than what one would expect, a result that suggests that markets are  
18 not fully integrated internationally. Indeed, investors continue to have a "home  
19 bias" in that they hold a higher proportion of home stocks relative to the weight  
20 of their home market in the world market portfolio.<sup>20</sup> This home bias persists  
21 across all markets even though explicit barriers to international investment have  
22 been dramatically reduced or eliminated in many markets. If foreign and domestic  
23 investors are unwilling or unable to buy stocks outside their home markets, then  
24 the risk-reduction benefits of financial market liberalization will not be obtained  
25 and cost of capital reductions will be minimal.

26 Possible explanations for this home bias include the existence of implicit capital  
27 market barriers, information differences between foreign and domestic investors,  
28 differences in consumption opportunities, and behavioral biases. If we are to under-  
29 stand globalization's effect on business, we must first understand the factors that ei-  
30 ther encourage or prevent investors from purchasing foreign stocks. Future research  
31 devoted to understanding the causes of home bias will therefore provide important  
32 insights into how globalization is likely to affect a firm's cost of capital over time.

## NOTES

34  
35  
36  
37  
38 1. Records of two banks in Mesopotamia (around 3000 B.C.) are the first records of debt  
39 in history. The first recorded shares were of the Russia Company (U.K., 1553 A.D.).

40 2. Many of the points raised in this section come from [Stulz \(1999a, b\)](#) and [Karolyi and Stulz \(2002\)](#). These papers provide extensive references on the topics discussed below.

1 3. See, for example, [Dumas and Solnik \(1995\)](#) and [De Santis and Gerard \(1997\)](#), who  
2 find that foreign exchange risk, along with world market risk, is priced.

3 4. A famous version of the multi-factor model is the Arbitrage Pricing Model, or APT.  
4 See [Cho, Eun and Senbet \(1986\)](#) and [Korajczk and Viallet \(1989\)](#).

5 5. The latter risk factor is often included to account for the famous “January” effect  
5 anomaly.

6 6. [Cho, Eun and Senbet \(1986\)](#) reject the joint hypothesis that markets are internationally  
7 integrated and that the international APT holds, while [Korajczk and Viallet \(1990\)](#) find  
8 that the international APT outperforms the world CAPM. However, they also find that the  
9 domestic APT outperforms the international APT. [Fama and French \(1998\)](#) find that a two-  
10 factor world CAPM explains returns, while [Griffin \(2002\)](#) finds that a domestic three-factor  
11 model is better able to explain the time variation of country returns, and that the addition  
12 of foreign factors leads to an economically small increase in explanatory power.

13 7. Evidence on the behavior of closed-end country funds (funds that invest in the assets  
14 of a particular country but are priced in the U.S.) surrounding financial market liberalization  
15 is also consistent with the hypothesis that financial market liberalization increases diversifi-  
16 cation benefits and reduces a country’s cost of capital. See [Bekaert and Urias \(1996\)](#) and  
17 [Bonser-Neal, Brauer, Neal and Wheatley \(1990\)](#).

18 8. See [Foerster and Karolyi \(1999\)](#), [Miller \(1999\)](#), and [Errunza and Miller \(2000\)](#). [Stulz](#)  
19 [\(1999a\)](#), however, notes that the revaluation effect documented in these studies can be  
20 consistent with other explanations.

21 9. Many of the ideas in this section come from [Stulz \(1999a\)](#) and [Denis and McConnell](#)  
22 [\(2002\)](#). The World Bank Web site <http://rru.worldbank.org/Resources.asp?results=true> is  
23 an excellent source for references.

24 10. The tension between owners and controllers was recognized even by [Adam Smith](#)  
25 [\(1776\)](#). [Jensen and Meckling \(1976\)](#) first provided a formal model for this tension in the  
26 financial economics literature.

27 11. During the past five years, 25 new codes of best practice were published. There are  
28 currently 39 codes operating in Europe. Most firms, unfortunately, do not comply ([Financial](#)  
29 [Times](#), April 8, 2002).

30 12. See [Denis and McConnell \(2002\)](#) for a survey of the evidence.

31 13. [Morck, Shleifer and Vishny \(1988\)](#) first documented this.

32 14. Porsche decided to exit Deutsche Börse in favor of joining the Morgan Stanley  
33 Capital International (MSCI) Index ([Financial Times](#), August 8, 2001). [Lang, Lins and](#)  
34 [Miller \(2001\)](#) have shown that foreign ADR listings in the U.S. stock markets serve as  
35 credible certification.

36 15. See, for example, the recent survey by [PricewaterhouseCoopers \(2001\)](#).

37 16. See [Bhattacharya and Daouk \(2002\)](#) for the link between insider trading and the cost  
38 of equity; see [Bhattacharya, Daouk and Welker \(2002\)](#) for the link between earnings opacity  
39 and the cost of equity.

40 17. La Porta, Lopez-de-Silanes, Shleifer and Vishny have a number of papers exploring  
this line of research. [La Porta, Lopez-de-Silanes, Shleifer and Vishny \(1998\)](#) is a good  
introduction.

18. Conclusion drawn by [Megginson and Netter \(2001\)](#) from their comprehensive survey  
on privatization.

19. The Mercato Italiano di Borsa, Italy’s stock exchange, launched the STAR1 ex-  
change, a separate market for small and midsize companies that follow strict governance  
requirements. Its performance thus far provides more evidence that good governance pays.

[Financial Times](#),  
(August 8, 2001) is  
not found in ref.  
list. Pl. check.

[Bhattacharya,](#)  
[Daouk and Welker](#)  
[\(2002\)](#) is not found  
in ref. list. Pl.  
check.

1 To be listed on the STAR1 exchange, a company must float at least 35% of its new issues  
 2 on the open market, include a minimum number of independent non-executive directors on  
 3 its board, and ensure that the compensation of management and directors reflects its per-  
 4 formance. These companies must also adhere to more rigorous disclosure requirements  
 5 than do their counterparts on the Borsa. The STAR1 exchange now lists 37 companies,  
 6 with a total market capitalization of \$7.5 billion. They outperformed their counterparts on  
 7 the Borsa by 16.5% from April 2001 to March 2002, and the weighted average of their  
 8 market-to-book ratios is 3.8, compared with 2.1 for all companies listed on the Borsa (*The*  
*McKinsey Quarterly*, 2002, No. 3).

9 20. For example, holdings of foreign stocks by U.S. investors are roughly 10% of a U.S.  
 10 investor's portfolio, even though foreign stocks comprise almost 50% of the world market  
 11 portfolio (Ahearne, Grierer & Warnock, 2001). Also see Lewis (1999) and Karolyi and  
 12 Stulz (2002) for a discussion of the home bias and for an extensive list of references.

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