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**Privatization, Political Risk and Stock Market Development  
in Emerging Economies**

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**Abstract**

This paper investigates whether privatization in emerging economies has a significant indirect effect on local stock market development through the resolution of political risk. We argue that a sustained privatization program represents a major political test which gradually resolves uncertainty over political commitment to a market-oriented policy as well as to regulatory and private property rights. We present evidence suggesting that progress in privatization is correlated with improvements in perceived political risk and that these improvements are significantly larger in privatizing countries than in non-privatizing countries, indicating that the resolution of such risk is endogenous to the privatization process. Our analysis further shows that changes in political risk in general tend to have a strong effect on local stock market development and excess returns in emerging economies, suggesting that political risk is a priced factor. We conclude that the resolution of political risk resulting from successful privatization has been an important source for the rapid growth of stock markets in emerging economies.

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## Introduction

The rapid evolution of capital markets in developing countries has emerged as a major event in recent financial history. Portfolio flows to emerging countries rose tenfold from 1989 to 1995 (IFC 1997) and kept rising until the recent crises. Local stock markets also grew considerably in size. The aggregate market capitalization of the countries classified by the IFC as emerging markets rose from \$488 billion in 1988 to \$2,225 billion in 1996. Trading on these stock markets rose in similar magnitude, growing from \$411 billion to \$1,586 billion in that period (IFC 1997).

These remarkable developments followed a crisis period when foreign debt and large government deficits had undermined confidence in these economies. A critical policy change in many of these countries has been the establishment of large privatization programs. The known benefits of privatization are a reduction in public debt, improved incentives and efficiency,<sup>1</sup> and better access to capital. Sales to the private sector led to an inflow of foreign capital and technological transfers (Sader 1995) and have increased integration of local firms in international trade patterns.

The earliest extensive privatization plans were launched in the early eighties in Chile and the UK. These programs were deemed successful and were mimicked by many developing and industrialized countries. From 1980 to 1987, a total of 696 privatization transactions were recorded by Candoy-Sekse (1988), of which 456 took place in developing countries. The importance of sales in developing countries thereafter increased significantly. Privatization revenues climbed from \$2.6 billion in 1988 to \$25.4 billion in 1996, amounting to \$154.5 billion over the whole period (World Bank 1997, 1998). The privatization database of the World Bank reports more than 3000 transactions in developing countries.

While the privatization process in developing countries has been studied extensively, little attention has been given to its impact on the development of the local equity markets. The coincidence of the emergence of local stock markets and the progress of privatization begs the question to what extent these developments are related.

As many countries carried out privatization sales through offerings on the local stock exchange, sales certainly led to increases in market capitalization.<sup>2</sup> However, this direct effect

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<sup>1</sup> For an assessment of welfare gains from privatization see Galal et al. (1994). For evidence on efficiency gains see Claessens and Djankov (1997) and Boubakri and Cosset (1998).

<sup>2</sup> In Chile, by 1993 the three largest companies listed on the exchange were all privatized firms. With a market value of over \$10 billion, they represented almost 25% of the market's capitalization. TelMex is easily

of privatization does not account for much of the growth in local stock markets. Total sale revenue of \$154.5 billion from 1988-1996 represents only a small fraction of the increase in market capitalization over that period. In addition, many privatization transactions were not carried out through public issues and some took place in countries not classified by the IFC as an emerging market). Thus, although privatization appears to be associated with stock market development, the recent magnitude of market development by far exceeds their direct impact: thus there must have been both a reduction in discount rates and/or new private issues.

We study here how privatization sales may produce significant indirect benefits for local market development. Listings of large privatized companies provide substantial impact on trading liquidity while at the same time increasing investment opportunities for local investors to increase their portfolio diversification; these effects have a positive impact on the risk-sharing function of the market and lead to market deepening. This should particularly hold for developing countries, where local investors are not well diversified as a result of capital controls (Levine (1991)).<sup>3</sup>

Pagano (1993b) argues that firms seeking listings create an externality for other firms because their shares increase the potential for diversification for all investors. As the original owners incur some flotation costs but do not receive all the benefits of diversification, there will be an undersupply of new listings. Privatization may resolve this "low listing trap" by adding diversification possibilities, encouraging both investment and listings by private firms.<sup>4</sup> In addition, an increase in overall liquidity due to new privatization-related listings can have a self-reinforcing effect on the willingness to hold shares, removing the local market from a "low-liquidity trap".<sup>5</sup>

These gains in market deepening and broadening could of course be the result of new private listings as well; there is no specific role here of privatization. In this paper we argue that the process of privatization itself, whenever implemented rigorously and consistently, leads to a progressive resolution of regulatory and legal uncertainty, and thus to a resolution

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Mexico's major listed firm, representing 18% of the market's capitalization in 1993. In Argentina the shares of YPF, Telecom and Telefonica added up to about 50% of total market capitalization in 1994. Around 30% of Malaysia's market capitalization in 1992 was contributed by privatized stocks. (Euromoney 1993,1994).

<sup>3</sup> These local investors tend to be less diversified because of capital controls. New listings due to privatization sales reduce the non-systematic risk of a local equity portfolio, and increase the willingness to invest in stocks, leading to higher valuation and trading.

<sup>4</sup> An objection to this view is that improving access by domestic investors to foreign financial markets would have an even stronger diversification effect and may thus lead to a similar acceleration in local listings.

<sup>5</sup> Pagano (1989) offers a theoretical interpretation of the externality effect of liquidity which is parallel in spirit to the diversification argument. In his model, participation by each trader reduces the volatility and increases the liquidity of the market for all other potential trades, and thereby inducing more entry. This in turn reduces volatility and enhances liquidity, generating the potential for multiple, Pareto-ranked equilibria.

of uncertainty over future policy. In particular, successful privatization results in a strengthening of property rights and institutional reliability which broadens the appeal and confidence in equity investment. As such, its impact is particularly relevant for emerging stock markets, whose legal systems are less developed.

Our argument is that prior to a sale, a government is uniquely motivated to establish a solid regulatory framework and to reduce ambiguity concerning private rights. Whenever the government uses the stock market to sell state-owned enterprises, the government also has incentives to facilitate stock market transactions. This may reverse a policy of discouraging private capital issues in order to fund the state's own funding needs. However, this process is neither instantaneous nor irreversible: after the sale there is some potential risk of a policy reversal (Perotti, 1995), particularly as many countries privatize at a time of difficult economic conditions and privatization hits entrenched political constituencies. Only as the commitment to the announced policy is sustained over time, a progressive resolution of legal and political uncertainty takes place.<sup>6</sup> Equity investment, the residual bearer of such risks, thus becomes gradually more attractive as political risk is resolved over time. Unlike indirect benefits, the resolution of policy uncertainty is specific to privatization sales, and may occur even when privatization does not take place predominantly through public share offerings.

Our argument has two testable implications. First, the recent wave of privatization sales in developing countries should have altered the perceived political risks of these countries considerably, especially if governments have successfully implemented the announced privatization plans. Second, related shifts in political risk would have affected the attractiveness of equity investments and lead to stock market development.

In this paper we investigate these two implications in order to assess to what extent privatization contributes to the strengthening of local stock markets through the resolution of political risk. We first concentrate on how political risk has changed over the course of privatization in 22 emerging economies. We hereby focus on countries that have privatized extensively over a number of years after 1987, and use several quantitative indicators that proxy for our notion of political risk. We then assess the importance of political risk for stock market development in emerging economies by relating changes in stock market development proxies such as market capitalization, traded value and excess returns to changes in political risk.

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<sup>6</sup> For a dynamic model of political risk resolution, see Cherian and Perotti (1998).

We find that many emerging countries have gradually reduced their political risks during their period of sustained privatization. Privatization often starts at a time of declining credibility, which improves thereafter. This suggests that a sustained privatization policy represents a major political test which gradually resolves uncertainty over the political commitment to a market-oriented policy.

The second part of our analysis reveals that such changes in political risk are strongly associated with growth in stock market capitalization, traded value and excess returns. The economic impact of changes in political risk on stock market development appears large. These results suggest that the resolution of political risk through privatization has been an important factor in the recent emergence of the stock markets of developing countries.

The relevance of political risk for privatization that we document is consistent with results reported by Jones et al (1998). They show that share allocation and pricing in IPOs from privatizations are sensitive to political considerations. Our result that political risk resolves gradually is also consistent with the puzzling findings that privatization IPOs appear to outperform matched control groups (Megginson et al 1998). Perotti and Huibers (1998) attribute this result to the greater sensitivity of these stocks to political risk. They confirm that this effect vanishes after the IPO, as political risk gradually declines.

Our analysis on the influence of political risk on stock market development is also related to recent research on the link between the legal institutional framework and corporate finance. LaPorta et al (1997, 1998) find that countries with lower quality of legal rules and law enforcement have smaller and narrower capital markets and that the listed firms on their stock markets are characterized by more concentrated ownership. Demirgüç-Kunt and Maksimovic (1998) show that firms in countries with high ratings for the effectiveness of their legal systems are able to grow faster by relying more on external finance. Our analysis contributes to this literature by looking at the relation between stock market development and political risk, a measure of the quality of the institutional framework that supports the viability of external finance.

The results are related to the literature on growth in emerging economies, which suggests that development of local financial markets support economic growth. Levine and Zervos (1998) find that stock market variables such as market capitalization over GDP, traded value over GDP, and various measures of asset mispricing help predict subsequent economic growth.<sup>7</sup> This suggests that countries have much to gain from privatization.

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<sup>7</sup> See Pagano (1993) and Levine (1997) for an overview of the literature.

Our results also have implications for the analysis of market segmentation, of which political risk is viewed as one of the main causes. Emerging capital markets are believed to have grown largely as a result of decreasing segmentation. But this raises the question of why these markets have become progressively more integrated in the first place. Bekaert (1995) provides evidence that higher levels of political risk are related to higher degrees of market segmentation. Erb, Harvey and Viskanta (1996a) show that expected returns are related to the magnitude of political risk. They find that in both developing and developed countries, the lower the level of political risk, the lower are required stock returns.<sup>8</sup> Taken together with our results, it seems that political risk is a priced factor for which investors are rewarded and that it strongly affects the local cost of equity, which may have implications for growth.

The outline of the paper is as follows. In Section I we discuss the theoretical basis for the links between privatization, political risk and stock market development. In Section II we introduce our methodology and the political risk indicators that we use throughout the paper. Section III presents suggestive evidence that successful privatization gradually reduces political risk. Section IV addresses the empirical relation between political risk and stock market development in emerging economies. We offer some concluding remarks at the end.

## **Section I Privatization, Political Risk and Stock Market Development**

Is there something special about privatization sales? Do they provide some indirect benefits for stock market development, regardless of whether or not the privatized shares are floated on the stock exchange? We will argue here that the **successful** transfer of important enterprises from state to private control has strong implications for the general perception of equity investment in emerging economies.

Privatization is an ideal test for political commitment to market-oriented reforms, as it severely tests the determination of policymakers to resist the political backlash after the sale is completed (Perotti, 1995). It involves a retreat of political forces from the governance of economic activity. As a consequence, politicians used to discretionary control over firms' activities see their capacity to reallocate resources sharply curtailed. In this shift of control rights to private owners lies an important cause of improved performance of firms under

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<sup>8</sup> In addition, Erb, Harvey and Viskanta (1996b) and Diamonte, Liew and Stevens (1996) find that changes in political risks are related contemporaneously to stock returns, using several quantitative indicators that proxy for the notion of political risk as outlined above. De Santis and Imrohorglu (1997) report that emerging financial markets exhibit a higher conditional probability of large price changes than developed stock

private ownership.<sup>9</sup> Although privatization in itself may help strengthen the political forces in favor of market-oriented reforms (Bell, 1995; Biais and Perotti, 1997; Schmidt, 1997), after a sale no sovereign government can be fully restrained from altering policy. Therefore, only a sustained and consistent privatization policy establishes investors' confidence.<sup>10</sup>

In general, a successful privatization program requires institutional changes that contribute significantly to the strengthening of the legal framework underlying equity investment. However, private control and policy reforms must be maintained during any political backlash. As a consequence, market deepening will occur only as confidence builds up over time as a result of the actual progress of privatization and not upon its announcement. Thus our conjecture is that only the **actual implementation** of the privatization program contributes to the a build up of confidence in a more reliable economic environment, leading to investment and trading. This may explain why privatization may be contemporaneous or even precede successful stock market development. Alternative benefits of privatization, such as improved risk sharing and increased liquidity of the market would supply early, anticipatory effects on market indicators.

There is a tradition of political risk even in developed economies. In the case of the Nippon Telegraph and Telephone sale, the firm was sold as a monopoly but was subsequently broken up, with a large fall in value (over 4% in one year and 80% in five years; see Jones et al, 1998). Grandy (1989) offers some historical examples for the US.

The political temptation to reverse policy after privatization is steep because areas traditionally under public ownership (utilities and infrastructure) were historical monopolies with major fixed sunk investments, which produce a long term steady cash flow of revenues. Thus the profits represent considerable rents or quasi rents, which may arouse strong political opposition from, say, users.<sup>11</sup> Private investment in such industry has always been reluctant because of this heightened risk of de facto expropriation by ex post policy shifts.

An excellent example is the recent case of a highway construction project in Bangkok; a major infrastructure initiative funded by foreign investors, mostly Japanese banks. Once the

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markets. There may be a role for political risk in explaining this difference in magnitude, as policy changes tend to have a large systemic effect.

<sup>9</sup> The constitutional guarantee of property rights makes them residual with respect to contractual and legal obligations; thus, legislation may chip away at the owner's entitlement, but it can never fully expropriate them (Perotti, 1995).

<sup>10</sup> Levine and Demirguc Kunt (1994) maintain that "causes of ultimate success or failure of public enterprise reform are based more in the political commitment to change .. than in the pre-existing state of the financial system".

<sup>11</sup> Such rents are also easily appropriable by other stakeholders such as workers or domestic suppliers. In Brazil and Mexico salaries in the oil industry are several times as high as for the average manufacturing job.



roads were ready, there was a massive public reaction against the toll rates they charged. Although these fees had been negotiated beforehand, the government forced the roads to be opened and ordered fares to be reduced. The uproar among foreign investors led to a policy reversal, with compensation for a gradual phase-in of the toll rates.

Since investors understand the government's incentives to reallocate value or maintain entrenched rents, governments need to strengthen institutional rules protecting equity investment and prove over time that they intend to continue doing so. Thus the privatization process can only progressively establish credibility of announced reform policy, and thus leads only gradually to financial development.

The confidence-building hypothesis has been advanced in Perotti (1995), who shows that privatization sales need to be gradual (while securing immediate transfer of control) so that confidence on a stable policy towards privatized companies can be firmly established. Underpricing may also serve as a complementary signal of commitment. Perotti and Guney (1993) document that sale programs in twelve countries are initially gradual, even when retained stakes are explicitly targeted to be sold over a few years. Proceeds from privatization increase over time, suggesting gradual selling calibrated to build investors confidence. As policy credibility increases, larger initial sales become more common. They also document extensive underpricing, which on average is greater in privatization sales than in initial public offerings (IPO) of private firms, and is especially larger for firms with substantial taxable rents such as utilities which are exposed to greater policy risk. Traditional asymmetric information explanations for underpricing such as Rock (1986) and Grinblatt and Hwang (1989) do not seem appropriate here, since these firms tend to be large and well known relative to private IPOs. Dewenter and Malatesta (1997) confirm that underpricing, while not always higher for privatization sales, is greater for firms subject to greater political risk.

Another source of evidence on the impact of privatization on the perception of political risk is Sader (1993), who adds privatization sales to a specification proposed by Edwards (1990). His cross-section results over 21 countries indicate that privatization sales are a significant determinant of foreign direct investment. Moreover, the result is driven by the size of the program rather than the concentration of sales in specific industries, such as communications, which may be particularly attractive for foreigners.<sup>12</sup> Openness to foreign investment in privatization is also a good predictor of FDI.

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<sup>12</sup> However, the size of privatization sales in utilities, other traditionally public infrastructures, financial institutions and mining interests, turns out to be correlated with foreign interest. Sader's explanation, with which we concur, is that these are traditionally industries in which populist and nationalist politicians allowed limited

A successful privatization programme may also lead to a resolution of contractual and legal uncertainty relevant to capital markets, such as protection of minority shareholders.<sup>13</sup> While there may be resistance by established interests as well as listed firms to a significant improvement in such rules, the necessity for the government to attract foreign and domestic investors requires a reliable security commission, the promotion of greater accounting standards and more transparent disclosure rules, the availability of procedures to contest managerial decisions and appointment, and a reduction in the legal and fiscal rules which typically favour public sector borrowing. Additional steps often involve restrictions on dividend repatriation, foreign ownership and competitive entry.

Finally, it can be argued that privatization does create a firmer legal background for investors. Following a sale, policy reversals (re-regulation, taxation, entry deregulation, etc.) are based on arm-length relations, thus subject to much greater public scrutiny. Consequently privatization allows highlighted public debate and increased reliance on legal, as opposed to administrative, recourse. Heightened visibility of policy choices also contributes to reduced political risk.

In the next sections we explore empirically whether the progress of privatization is associated with a reduction in political risk and whether indeed political risk is important for stock market development. We expect political risk resolution to be particularly relevant for developing countries and we therefore focus on emerging markets. This also allows us to understand to what extent the resolution in political that resulted from sustained privatization contributed to the recent boom in emerging stock markets. Section II describes our methodology and introduces the political risk indicators that we use. We then analyze the impact of privatization of political risk (Section III) and assess the importance of political risk for stock market development in emerging countries (Section IV).

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the possibilities for foreign and private investment. The decision by the government to privatize in these areas ".. is considered a signal of improvement in the investment climate through reduced government intervention and restrictive regulations" (Sader, 1993).

<sup>13</sup> Modigliani and Perotti (1997) show that a strong institutional framework of "rules of the game" is necessary to protect minority investors and thus to promote the development of security markets.

## Section II Sample construction and methodology

We focus on developing countries with some privatization experience that are characterized by a minimally developed stock market. To be inclusive, we look at all the countries classified by the IFC as emerging markets. From this group of countries, we selected all markets for which there are data available in the Emerging Stock Markets Factbook from at least 1988 onwards. This leads to a sample of 31 countries.

In order to assess how sustained privatization influenced the development of these stock markets through a resolution of political risk, we chose to proceed in two steps. The first is to establish how political risk is related to privatization over the medium term. We require a sufficient history of privatization sales to ensure that our sample includes countries where privatization was maintained for at least some time. From the sample of 31 emerging economies, we select all those countries that have been engaged in substantial privatization sales for at least four years during 1988-1995. Using this criterion, there are 22 countries that can be classified as having a significant privatization policy.<sup>14</sup>

Our privatization data are obtained from the privatization database maintained by the World Bank, which records privatization transactions that took place since 1988. For all countries which privatized in 1988 or 1989 we rely on other sources to assign the beginning of the privatization program.<sup>15</sup> Most countries in our sample continue to privatize till 1995. The list of countries and years of start of the privatization program are in the Appendix.

Ideally we would test for a relation between privatization and political risk by classifying countries as a successful or unsuccessful privatizer, but this would require a subjective judgement on the quality of each country's privatization policy. We instead use changes in perceived political risk as a summary statistics. While on average the programs in

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<sup>14</sup> There are only a few countries for which inclusion in either of the samples is ambiguous. We neglected Costa Rica and Uruguay for our initial sample of emerging stock markets because of incomplete data for the market capitalization or traded value on the stock market. For Israel, the World Bank reports 15 privatization transactions spread out over 1988 to 1995. We were unable to obtain information about an explicit privatization policy in Israel or about privatization revenues for the years before 1988. Given the low number of transactions and the lack of data we excluded Israel as a privatizing country, but include it in our initial sample of emerging stock markets.

<sup>15</sup> The countries for which we relied on other sources than the World Bank privatization database are Chile, Jamaica, Malaysia and Mexico. The year of the start of privatization and the sales data for these countries are obtained from Hachette and Luders (1993), Leeds (1991), Sader (1993) and Galal, Jones and Vogelsang (1994), and Rodriguez (1992) respectively. For Brazil, we deviate from the procedure given in the text above to determine the start of privatization. In 1988, there was one large privatization transaction, followed by zero sales in 1989 and 1990. Sader (1993) reports that the sale in 1988 was incidental and that in 1990 a privatization plan was announced, with actual sales starting in 1991. We use this last year as the start of privatization sales.

the sample were deemed successful, the sample does include countries for which the privatization process was stopped or slowed down due to political backlash.<sup>16</sup>

To assess how these privatization efforts have affected perceived political risk, we collect different quantitative measures of political risk. (See later for a discussion of these indicators). For each country, we then determine how political risk has developed since the start of privatization, and contrast it with the development in the four years before privatization started. We also compare the political risk developments for our sample of privatizing countries with those in countries that did not privatize during 1988-1995.

Our second step is to test to what extent changes in political risk contribute to stock market development. For this part of the analysis we relate the stock market development in all of the 31 countries in our initial sample to changes in their perceived political risks. We use growth in market capitalization, traded value and number of listed firms as direct measures of stock market development as well as MSCI World Index adjusted returns.

### **Political risk indicators**

We use five different quantitative indicators for political risk. All these ratings are indicators for country risk, of which political risk is only one of the sources. We wish to stress that our notion of political risk is much broader than the ‘political stability’ concept that often underlies the use of the term ‘political risk’ in standard textbooks. However, not all of the indicators we will use conform closely to our specific notion of political risk.

The first indicator is the so-called Country Credit Rating (‘CCR’) constructed by the *Institutional Investor*. This indicator is based on information provided by leading international banks and is constructed and published by the *Institutional Investor*. Bankers are surveyed to grade each country (developed as well as developing) on a scale of zero to 100, where the score of 100 represents the least chance of default. The survey is held every 6 months, includes 75-100 banks reporting their country ratings and was initiated in 1979. The survey results are published in March and September. The March survey is based on interviews gathered in November and December, and therefore reflects the opinion prevailing around the end of the year preceding the actual publication of the risk rating.<sup>17</sup>

To shed more light on the factors that bankers take into account in their rating, the *Institutional Investor* provides bankers with a list of nine factors. The bankers are asked to

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<sup>16</sup> Turkey and Venezuela are prime examples during this period.

<sup>17</sup> An editor at the *Institutional Investor* confirmed that the March ratings are generally received during November and December.

rank them in order of importance for their credit ratings. For the credit ratings of 1994, debt service, political outlook and economic outlook were considered as the three most important factors in rating emerging economies.<sup>18</sup> Bankers seem to care a lot about policy uncertainty in their ratings. Quotes in the *Institutional Investor* citing the motivations of the banker's for grading a country suggest that they are concerned about a government's attitude and ability to sustain a good economic policy.<sup>19</sup>

The forward looking nature of the ratings, the large number of bankers interviewed and the explicit considerations for government policies make the CCR a very useful indicator.

The other three indicators were obtained from the commercial agency International Country Risk Guide (ICRG). This series was first constructed for 1984. ICRG classifies country risk into three different categories: political risk, financial risk and economic risk. Each indicator consists of different components of country risk, for which every country receives a score on scale of 1 to 100. These different components are then weighted to construct the country's rating for each category. The components of each of these indicators and the weight of each component for the indicator are given in Table A2 of Appendix 2.

The political risk indicator of ICRG, which is based on subjective analysis by its analysts, contains the components "Economic expectations vs. reality", "Economic planning failures", "Political leadership" and "Law and order tradition". These conform directly to our notion of political risk. However, most of the other components are more related to political turmoil, for which we expect not strong direct association with privatization.

The financial risk indicator is based on quantitative as well as qualitative information. It has three components that make this indicator worth considering. These are "Repudiation of contracts by the government", "Expropriation of private investments" and, somewhat less interesting for our purposes, "Losses from exchange controls". However, this indicator is partially based on historical information and may not be very forward looking. We consider this indicator a less attractive indicator for the type of political risk we wish to measure than the CCR and the ICRG political risk indicator.

The components of the economic risk indicator do not appear to be related to our notion of political risk as it seems to measure the financial capacity of the country. We include it in our analysis to compare its effect with the country credit rating.

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<sup>18</sup> See Erb, Harvey and Viskanta (1996b) for the complete rankings.

<sup>19</sup> For example, "I think Jamaica's rise (in its rating) reflects not only good economic policies but also reduced scepticism about the Prime Ministers intentions, particularly in view of the populist policies during his previous stint as prime minister." (II Sept 1990, p. 153) or "...I've got a low regard for their ability to follow any economic policy." (II March 1989, p. 69).

## **Section IV Privatization and political risk in emerging economies**

In this section we analyze whether political risk in emerging economies has improved as a direct consequence of the privatization programs. Within our sample of 22 emerging economies that we classified as having a privatization policy, we compare the development of our political risk indicators in the four years before privatization and during privatization. To further assess whether the development of political risk is indeed endogenous to the privatization process, we compare the changes in political risk indicators of the emerging countries we classified as privatizers with the simultaneous changes in developing countries that did not engage in privatization. As a final check, we analyze whether within our sample of 31 emerging economies, privatization sales and political risk are directly related.

We first contrast the development in political risk before and during privatization. For each country that we classified as a privatizer we calculate the semi-annual (in case of the CCR) or monthly (in case of the ICRG) growth rates in the political risk. Note that a positive growth rate stands for a decrease in political risk. To fully exploit our data, we pool these percentage changes in one data set. Table 1 shows the average change in each of the indicators during the four years before privatization and for the period from the year in which privatization took of up to the end of the sample, which is 1995.

The CCR on average decreased in value in the four years before privatization, suggesting that deteriorating credibility may induce the establishment of a sale program. Political risk performance improves strongly during privatization: the implied yearly improvement is around 3.6%. We can reject that these two samples have a similar rate of improvement at the 1% confidence level. The ICRG Political risk indicator exhibits a similar pattern; its average improvement during privatization however is at about equal to that of the CCR. We can reject the notion of equal rate of improvement political risk at high levels of confidence as well. The ICRG financial and economic risk indicators behave differently. These ratings on average improved both before and during privatization, and their means are quite similar across the periods. Taken together, these findings suggest that these two indicators are of a quite a different nature than the CCR and ICRG political risk indicator. The discrepancy in the behavior of the CCR and the ICRG economic risk indicator supports our earlier contention that the CCR does not simply capture macro-economic developments.<sup>20</sup>

**Table 1: Percentage improvement in political risk before and during privatization.**

CCR refers to the percentage improvements in the semi-annual *Institutional Investor* Country Credit Risk Rating. ICRGPOL, ICRGFIN and ICRGECO refer to percentage improvements in the monthly political, financial and economic risk indicators as constructed by the International Country Risk Guide agency. A description of these indicators is given in the text above. The sample consists of 22 emerging economies that engaged in substantial privatization after 1987 (see Appendix 1). The political risk improvements are pooled into one data set. 'Before privatization' refers to the four years before the first privatization sales took place in a country. 'During Privatization' represents the years from the start of privatization up to 1995.

		Mean Change %	Standard Deviation	Minimum	Maximum	Number of Observations
CCR (semi-annual)	Before Privatization	***-1.21	5.85	-32.66	14.44	186
	During Privatization	***1.80	5.45	-24.53	29.27	304
t-value for Equality of Means: ***5.76						
ICRGPOL (monthly)	Before Privatization	-0.04	1.90	-11.76	11.63	958
	During Privatization	***0.31	2.55	-21.28	26.47	1824
t-value for Equality of Means: ***3.74						
ICRGFIN (monthly)	Before Privatization	***0.39	3.22	-18.75	20.00	958
	During Privatization	***0.42	3.26	-13.79	80.95	1824
t-value for Equality of Means: 0.24						
ICRGECO (monthly)	Before Privatization	0.14	4.41	-29.17	37.21	958
	During Privatization	***0.27	3.31	-23.53	27.66	1824
t-value for Equality of Means: 0.90						
***	denotes significance at the 1% level					
**	denotes significance at the 5% level					
*	denotes significance at the 10% level					

The development of the CCRs and ICRG political risk indicator seem to confirm our hypothesis of a resolution of political risk through privatization. This raises the issue of the timing of the resolution of political risk. During what stage of privatization is the improvement in political risk realized? Note that if those providing the ratings would believe that privatization will certainly be sustained, we would observe an immediate and stable gain in political credibility from the announcement of a privatization programme.

<sup>20</sup> We also performed non-parametric Wilcoxon rank tests and Mann-Whitney tests for these medians. This provided similar results.

We search for such an announcement effect by looking at the political risk developments in the two years before actual sales started and compared it with their changes in the two years before. The development in political risk is almost identical in both periods; there seems to be no response in political risk trends at the announcement of privatization. This suggests that those providing the ratings have initially been very sceptical about government intentions and that they revised their beliefs as actual privatization progressed.

We then looked at the timing of the resolution during the period of actual privatization sales. If the uncertainty about a policy reversal would be fully resolved once the first sales went through, we expect to find that most of the improvement in political risk will be realized in the very early stages of privatization. The data show that this is not the case. The CCR and ICRG political risk indicators do improve significantly during the later stages of privatization, suggesting that political risk was only gradually resolved over the sale process.

Of course, the observed pattern in political risk may be due to factors other than privatization. For example, there may have been a change in perceived political risk over the last fifteen years shared by all non-OECD countries, independently of whether or not these countries engaged in substantial privatization.<sup>21</sup> To verify this, we constructed a benchmark for the development of political risk in countries that did not engage in privatization. We selected all countries that are classified as developing countries by the Global Development Finance CDROM of the World Bank, and removed all countries for which the privatization database reported some transactions. This resulted in a sample of 24 countries. Subsequently, we constructed a benchmark for each political risk indicator, equally weighting the countries. The semi-annual (in case of CCR ratings) or monthly (in case of ICRG ratings) growth rates of the ratings of each of the privatizing countries are then matched with those of the benchmark. This allows us to construct a series for the difference in political risk performance.

Table 2 reports the matched performance of the benchmark and the results of a t-test on the difference in the political risk development. Because the findings in Table 1 suggest no relation between privatization and the ICRG financial and economic risk indicators, we only report the results for the CCR and the ICRG political risk indicator.

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<sup>21</sup> This possibility is limited by the imperfect time overlap of the various privatization periods. For example, the year 1986 is classified as a year of privatization for Chile, Jamaica, Malaysia and Mexico while for the other countries, this year falls outside the sample or is classified as a year before privatization sales started. Nevertheless, 1992, 1993, 1994 and 1995 are all classified as years in which privatization was underway for all countries.



**Table 2: Difference-tests between political risk developments of privatizing and nonprivatizing countries before and during privatization.**

CCR refers to the percentage improvements in the semi-annual *Institutional Investor* Country Credit Risk Rating. ICRGPOL refers to percentage improvements in the monthly political risk indicator as constructed by the International Country Risk Guide agency. A description of these indicators is given in the text above. The sample of privatizing countries consists of 22 emerging economies that engaged in substantial privatization after 1987 (see Appendix 1). ‘Before privatization’ refers to the four years before the first privatization sales took place in a country. ‘During Privatization’ represents the years from the start of privatization up to 1995. The benchmark ‘Non-privatizers’ is determined by constructing an index for the average improvement in the ratings in all the developing countries that didn’t privatize during 1988-1995. Each semi-annual or monthly observation for the development of the rating of a privatizing country is paired with the improvement of the benchmark over that same period. A t-test is then performed to test the hypothesis that the series of the differences between the two are equal to zero.

		Mean Change Privatizers % (1)	Mean Change Non-privatizers % (2)	t-value for the Difference (1) – (2)	Number of Observations
CCR (semi-annual)	Before Privatization	-1.21	-1.65	1.08	186
	During Privatization	1.80	0.69	***3.39	304
ICRGPOL (monthly)	Before Privatization	-0.04	-0.01	-0.47	958
	During Privatization	0.31	0.26	0.74	1824

\*\*\* denotes significance at the 1% level

\*\* denotes significance at the 5% level

\* denotes significance at the 10% level

Note first the results for the CCR indicator. The privatizing countries clearly outperform the benchmark during privatization, while their performance is quite similar before privatization. This strongly suggests that the CCR improvement that we reported in Table 1 is indeed endogenous to the privatization process. The ICRG political risk indicator outperforms the benchmark only slightly during privatization.

We also performed the non-parametric Wilcoxon signed rank test on the median of the difference series. This test may be especially useful for the ICRG political risk indicator because these ratings are updated quite infrequently while at the same time the magnitude of the revisions in the ratings can be quite dramatic.<sup>22</sup> Both of these characteristics undermine the validity of a t-test. The Wilcoxon test shows that the median difference in ICRG political risk performance during privatization is significant at the 5% level (p-value = 0.039). These results offer some strong evidence that the evolution of the CCR risk indicator diverges between privatizing and non-privatizing countries during privatization. For the ICRG political risk indicator, the evidence is somewhat weaker.

<sup>22</sup> The ICRG political risk indicator responds dramatically to reductions in political instability. For example, Liberia’s and Ethiopia’s ICRG political risk rating rose by more than 200% between 1993 and 1995. In comparison, the improvement in the CCR ratings was below 50%.

It may be that political risk has recently improved in all emerging countries vis-à-vis other developing countries, irrespective of the privatization policies. The superior political risk performance of the privatizing emerging economies that we just documented, would then fail to hold within our full sample of emerging countries.

To address this possibility, we decided to take a somewhat richer test. We first calculate the yearly percentage change in political risk in each emerging country. To capture the political risk resolution associated with privatization, we pool all yearly observations in one data set and regress the change in political risk on two different proxies for privatization. The first proxy we use is simply the revenue from privatization sales over GNP. The second one is a dummy that equals one if the country is classified as a privatizing country and the year of the observation is concerns a year in which privatization sales took place. We also control for the main macro-economic developments by including the growth in GNP per capita, the growth in exports per capita and the real depreciation in the regressions. The data are obtained from the International Financial Statistics of the IMF and the World Bank Global Development Finance database.

We wish to stress that a contemporaneous linear relation between privatization sales (scaled by GNP) and changes in political risk is not entirely consistent with the hypothesis we have laid out in Section II. Our argument is that privatization has a gradual and contingent impact, as investors watch actual deeds rather than policy statements. Privatization revenues are not an ideal proxy for the fulfilment of announced policy. Reform policies associated with privatization may be reversed over time and political risk should be more sensitive to the stock of privatized firms than to the current flow. Therefore, the resolution of risk may be fastest when privatization approaches its latest stage (even though sales may be slowing down) as investor confidence keeps climbing in view of the maintained policy vis-à-vis previously privatized firms. Because of these considerations, we also perform regressions with a dummy variable to proxy for privatization stages.

Table 3 shows the results of these regressions. The CCR rating is positively related to both measures of privatization and significant at the 1% level. The privatization dummy indicates that during privatization, the CCR rating improves by almost 3% every year, vis-à-vis the ratings of the other emerging economies. The ICRG political risk indicator has a weaker relation to privatization. The coefficient of the privatization dummy is close to significant at the 10% level and quite large in size. Note also that the ICRG political risk

indicator is not very correlated with contemporaneous macro-economic developments, as opposed to the CCR ratings.

**Table 3: Privatization and political risk in emerging economies**

The sample consists of all countries classified as an emerging stock market by the IFC and for which the Emerging Stock Markets Factbook provides data on stock market capitalization and traded value on the stock market from 1988 on. This sample consists of 31 countries: the 22 countries we classified as privatizing (see Table A1 of Appendix 1) and 9 additional countries. For the latter group of countries, we use data from 1988 to 1995. For the countries included in our sample of privatizing countries, we use data for the years as reported in Table A1 in Appendix 1. The yearly data for the 31 countries are then pooled into one sample. The privatization sales dummy equals one if the country is classified as a privatizing country and the year of the observation is during the early or late stage of privatization (see Table A1 of Appendix 1). t-values are calculated using White heteroskedasticity-consistent standard errors and are in parentheses.

Dependent Variable: Political Risk				
	Country	Credit Rating	ICRG	Political Risk
Constant	-.00 (-.44)	-.01 (-1.02)	***.02 (3.22)	**.02 (2.08)
Growth in GNP Per Capita	***.18 (4.06)	***.19 (4.42)	.01 (.24)	.01 (.29)
Growth in Exports Per Capita	.05 (1.35)	.04 (1.14)	.05 (1.30)	.04 (1.14)
Real Depreciation	.02 (.65)	.02 (.81)	.02 (1.02)	.02 (1.08)
Privatization Sales/GNP	***1.89 (3.45)		.47 (1.24)	
Privatization Dummy		***.029 (3.07)		.017 (1.51)
Adjusted R-sq.	.17	.15	-.00	.00
N	306	306	298	298

\*\*\* denotes significantly different from zero at the 1% level  
 \*\* denotes significantly different from zero at the 5% level  
 \* denotes significantly different from zero at the 10% level

We conclude that there is apparently some evolution in the perception of political risk in countries engaging in sustained privatization programs relative to other developing countries. This is especially so when political risk is measured by the CCR. Our results support the view that privatization leads to a resolution of political uncertainty. At the same time, it seems that only actual implementation of privatization changes the perception of investors towards political risk.

In the next section we analyse how this reduction in political risk favour the development of equity investment in emerging countries.

## Section IV Political Risk and Stock Market Development

This section addresses the empirical relation between stock market development and political risk in emerging economies. We use the IFC's emerging markets database to obtain these data for our initial sample of 31 countries. We study the following indicators of stock market development:

- yearly percentage growth in market capitalization over GNP
- yearly percentage growth in traded value over GNP
- yearly percentage growth in the turnover ratio which is defined as traded value over market capitalization
- yearly percentage growth in the number of listed firms
- the yearly average of monthly returns, where each monthly return is adjusted for the return of the Morgan Stanley Capital International-world index.<sup>23</sup>

Before we relate stock market development to changes in political risk, we first report how our measures of market development fare before and during privatization within our sample of 22 privatizing countries. Table 4 reports the summary statistics.<sup>24</sup>

**Table 4: Descriptive statistics for market development before and during privatization.**

		% Change	Standard deviation	Minimum	Maximum
Capitalization/ GNP	Before Privatization	47.11	116.87	-74.74	678.61
	During Privatization	34.27	74.65	-66.01	402.83
Traded Value/ GNP	Before Privatization	98.62	278.63	-72.28	1928.48
	During Privatization	79.74	204.99	-76.89	2024.60
Traded Value/ Capitalization	Before Privatization	51.41	177.25	-78.64	1418.11
	During Privatization	28.36	72.99	-77.62	322.53
Number Of Firms	Before Privatization	9.71	31.32	-20.87	162.50
	During Privatization	7.14	13.98	-18.82	120.00

<sup>23</sup> We also used residuals from an estimated ICAPM model as a measure of stock market development. The results are similar to the results reported for the MSCI-world index adjusted returns reported here.

<sup>24</sup> For the traded value over GNP ratio, we removed the 1989 observations for Indonesia. In that year, the growth rate of the traded value over GNP equalled an 11700%, which is more than five times as large as the second largest growth rate in the sample.

MSCI Index Adj. Returns (monthly)	Before				
	Privatization	0.37	4.82	-12.43	10.02
	During				
	Privatization	0.72	4.19	-9.65	17.74

The data indicate that the development of stock markets in the countries has been radical in all privatization periods. The average yearly growth in traded value over GNP exceeds 75% in both periods. The pattern confirms our earlier claim that the direct effect of privatization from public share issues can only account for a small fraction of the growth of these markets.

It is striking that our growth indicators for traded value, capitalization and the number of firms all peak before privatization. There may be several reasons for the incidence of the peak. The countries that are classified by the IFC as emerging markets are countries whose stock markets actually did emerge, so there may be a sample selection at the inclusion date. These markets often started growing from a very low initial level of market development; small absolute increases in capitalization or traded value then produce very high growth rates. Also, the announcement of privatization may induce higher market capitalization, traded value and new listings from the anticipation of risk-sharing and liquidity benefits that are expected to result from future sales. Perhaps importantly, some governments list the shares of state-owned enterprises on the stock exchange before actually selling them. This effect is not too pronounced, however, as it can at most explain the peak for the growth capitalization and the growth in the number of firms; early listings do not increase traded value and decrease the growth in traded value over capitalization.

We now turn to the final part of our analysis. Are changes in political risk important for stock market development in emerging economies? In order to assess this, we use our full sample of 31 emerging stock markets and link stock market development in these countries to changes in political risk. For our non-privatizing countries we use data for the years 1988-1995. For the countries that we classified earlier as a privatizer, we use data for the years presented in Table A1 of Appendix 1. We pool the yearly observations into one data set, which produces a sample of about 300 observations.<sup>25</sup> We then regress our different measures of stock market development on the improvements on political risk, using separate regression for each political risk indicator.

<sup>25</sup> In the regression on excess returns, the size of our sample is reduced to around 190 because the EMDB does not provide return data for all years and for all countries.

We use three control variables to capture general economic developments: real depreciation vis-à-vis the US dollar, growth of exports per capita and GNP growth per capita. We also include yearly privatization sales scaled by GNP; this term should capture any direct effect of privatization sales as well as contemporaneous risk sharing and liquidity benefits.

We perform regressions both with and without country dummies. Only in the regressions for the growth in the number of firms the inclusion of country dummies seems useful. The adjusted R-squared increases by 10 percentage points, reflecting the erratic pattern of the number of listed firms across the different countries. Elsewhere the inclusion worsens the fit of the regression, measured by the adjusted R-squared. Table 5 reports the results of all the regressions, where we include country dummies only in the regression for the growth in number of firms.

Political risk proves to be an important factor for most measures of stock market development. The CCR is significant at the 1% level for the growth in capitalization over GNP and MSCI-world index adjusted returns. For the traded value over GNP regression, it is significant at the 5% level and it is borderline significant at the 5% level for the growth in number firms regression. The ICRG political risk indicator is strongly related to growth in capitalization and traded value, as well as to returns. It is not significant, however, in the regression for the turnover ratio and the growth in the number of firms. The ICRG financial risk indicator is never significant at the 5% level but is always positively related with stock market development, with significance at the 10% level in the traded value and in the traded value over capitalization regression. In contrast, the ICRG economic risk indicator, which largely reflects macroeconomic variables, displays no consistency in the sign of its coefficient and is not significant in any of our regressions. Note that the coefficient for the privatization sales over GNP term is insignificant in all regressions, and generally negative in CCR and ICRG political risk regressions. This is consistent with our earlier finding that stock market growth has been highest for our privatizing countries before the actual start of privatization sales.<sup>26</sup> Including country dummies in the regressions generally worsens the overall fit but increases the coefficient of the CCR and ICRG political risk indicators for the capitalization and traded value regressions, with little effect on the significance. The coefficient for the CCR equals 2.3 and 5.0 respectively after including country dummies, while the coefficient for the ICRG political risk indicator increases to 2.0 in the traded value regression.

The regressions also show that stock returns are strongly related to changes in the CCR and ICRG political risk indicator. This is remarkable, as it is quite difficult to find significant determinants of excess returns. Although the adjusted R-squares are especially high due to the inclusion of real depreciation, excluding this variable still produces an adjusted R-squared of 11% for the CCR regression. Our results for the relation between political risk and stock market returns are in line with Diamonte, Liew and Stevens (1996) and Erb, Harvey and Viskanta (1996b). Diamonte et al. find a strong contemporaneous relation between quarterly average returns and quarterly increases or decreases in the ICRG political risk indicator: emerging countries receiving upgrades are characterized by significantly higher average returns than those being down graded. Erb et al, using the same measures of political risk as we do in our analysis, find that this relation between up- and downgrades holds as well for the CCR and the other ICRG ratings. In agreement with our results, these authors also find that among the four indicators, changes in the CCR and the ICRG political risk ratings display the most pronounced correlation with returns.

We checked for the presence of outlier effects by excluding countries with extreme market development patterns (Portugal and Indonesia) from our analysis; results are similar. In addition, we excluded all observations where the growth in stock market development was more than four standard deviations away from the mean. This reduces the size of the coefficients somewhat, but only affects the statistical significance for the ICRG political risk coefficient in the traded value regression, which becomes significant at the 10% level only. The pattern of significance remains the same for all other regressions. The coefficient for the privatization sales over GNP variable now has the expected positive sign, but it is still insignificant (even at the 10% level). We also included inflation in the analysis, but the results are almost identical.<sup>27</sup>

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<sup>26</sup> Excluding privatization sales as a control variable provides similar results for the size and significance levels of the coefficients of the political risk indicators.

<sup>27</sup> The regressions in Table 3 show that growth in GNP per capita is positively related to the CCR rating. The results in Table 5 are not driven by the correlation between the CCR and growth in GNP per capita. Excluding this last variable doesn't affect the significance (or size) of the CCR coefficient in the regressions, other than that in the turnover ratio regression the CCR coefficient is now significant at the 10% level.

**Table 5: Stock market development and political risk.**

The sample consists of all countries classified as an emerging stock market by the IFC and for which the Emerging Stock Markets Factbook provides data on stock market capitalization and traded value on the stock market from 1988 on. This sample consists of 31 countries: the 22 countries we classified as privatizing (see Table A1 of Appendix 1) and 9 additional countries. For the latter group of countries we use market development data from 1988 to 1995. For the countries included in our sample of privatizers we use market development data for the years as reported in Table A1 in Appendix 1. The yearly data for the 31 countries are then pooled into one sample after which we regress our five different measures of stock market development on political risk improvement. The regressions for the growth in number of firms include country dummies. t-values are calculated using White heteroskedasticity-consistent standard errors and are in parentheses.

<b>Panel A</b>	<b>Dependent Variable: Growth in Market Capitalization over GNP</b>			
Constant	***0.25 (5.64)	***.24 (5.18)	***.23 (5.03)	***.26 (5.53)
Growth in GNP Per Capita	-.54 (-1.23)	-.21 (-.46)	-.27 (-.58)	-.25 (-.52)
Growth in Exports Per Capita	*.68 (1.86)	*.66 (1.77)	.58 (1.60)	*.66 (1.80)
Real Depreciation	*-.56 (-1.72)	*-.54 (-1.65)	-.45 (-1.30)	-.50 (-1.56)
Privatization Sales/GNP	-2.78 (-.82)	.05 (.02)	.78 (.27)	-.10 (-.03)
Improvement in:				
Country Credit Rating	***1.89 (3.36)			
ICRG Political Risk		**1.04 (2.59)		
ICRG Financial Risk			1.02 (1.42)	
ICRG Economic Risk				.45 (.81)
Adjusted R-sq.	.05	.02	.04	.01
Prob. F-value	.00	.04	.01	.14
N	301	292	292	292

<b>Panel B</b>	<b>Dependent Variable: Growth in Traded Value over GNP</b>			
Constant	***.53 (5.25)	***.49 (4.50)	***.48 (4.20)	***.54 (4.95)
Growth in GNP Per Capita	-.00 (-.00)	.63 (.53)	.59 (.49)	.55 (.43)
Growth in Exports Per Capita	*2.91 (1.96)	*2.97 (1.93)	*2.84 (1.92)	**2.94 (2.02)
Real Depreciation	-.65 (-1.21)	-.59 (-1.07)	-.40 (-.72)	-.53 (-.98)
Privatization Sales/GNP	-10.33 (-.92)	-4.18 (-.42)	-3.19 (-.33)	-4.63 (-.44)
Improvement in:				
Country Credit Rating	**3.73 (2.42)			
ICRG Political Risk		**1.65 (2.03)		
ICRG Financial Risk			*1.79	



			(1.82)	
ICRG Economic Risk				.89 (.38)
Adjusted R-sq.	.04	.02	.03	.02
Prob. F-value	.01	.04	.02	.06
N	301	292	292	292

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**Panel C**                      Dependent Variable: Growth in Traded Value over Market Capitalization

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Constant	***.28 (4.43)	***.28 (4.17)	***.26 (4.00)	***.28 (4.31)
Growth in GNP Per Capita	.18 (.38)	.29 (.60)	.25 (.52)	.30 (.60)
Growth in Exports Per Capita	.49 (.99)	.49 (.95)	.43 (.85)	.51 (.97)
Real Depreciation	.13 (.74)	.13 (.69)	.17 (.93)	.13 (.70)
Privatization Sales/GNP	-.68 (-.15)	1.01 (.22)	1.24 (.27)	1.28 (.29)
Improvement in:				
Country Credit Rating	.96 (1.55)			
ICRG Political Risk		.28 (.72)		
ICRG Financial Risk			*.61 (1.95)	
ICRG Economic Risk				-.10 (-.16)
Adjusted R-sq.	-.00	-.00	-.00	-.00
Prob. F-value	.43	.77	.49	.80
N	299	290	290	290

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**Panel D**                      Dependent Variable: Growth in Number of Firms

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Constant	***-.10 (-3.49)	***-.10 (-3.29)	***-.12 (-3.04)	***-.10 (-3.10)
Growth in GNP Per Capita	.14 (1.46)	*.17 (1.72)	*.16 (1.66)	*.18 (1.79)
Growth in Exports Per Capita	.08 (1.13)	.08 (1.09)	.06 (.84)	.10 (1.21)
Real Depreciation	-.04 (-.88)	-.04 (-.74)	-.02 (-.35)	-.04 (-.78)
Privatization Sales/GNP	-.04 (-.05)	.12 (.14)	.34 (.42)	.36 (.46)
Improvement in:				
Country Credit Rating	*.19 (1.94)			
ICRG Political Risk		.15 (1.27)		
ICRG Financial Risk			.20 (1.56)	
ICRG Economic Risk				-.07 (-.99)

Adjusted R-sq.	.15	.14	.15	.13
Prob. F-value	.00	.00	.00	.00
N	294	285	285	285

<b>Panel E</b>		Dependent Variable: MSCI-World Index Adjusted Returns			
Constant		-.002 (-.60)	-.003 (-.88)	-.003 (-.69)	-.002 (-.41)
Growth in GNP Per Capita		-.009 (-.36)	.021 (.88)	.020 (.79)	.016 (.63)
Growth in Exports Per Capita		.004 (.20)	.007 (.31)	.007 (.30)	.003 (.15)
Real Depreciation		***-.073 (-5.95)	***-.064 (-4.81)	***-.061 (-4.61)	***-.061 (-4.46)
Privatization Sales/GNP		-.32 (-1.13)	.005 (.02)	.085 (.39)	-.030 (-.12)
Improvement in:					
Country Credit Rating		***.160 (3.83)			
ICRG Political Risk			** .068 (2.26)		
ICRG Financial Risk				.029 (1.12)	
ICRG Economic Risk					.060 (1.46)
Adjusted R-sq.		.23	.14	.13	.14
Prob. F-value		.00	.00	.00	.00
N		188	182	182	182

\*\*\* denotes significantly different from zero at the 1% level  
\*\* denotes significantly different from zero at the 5% level  
\* denotes significantly different from zero at the 10% level

We find the differences in explanatory power among the different political risk indicators intriguing. The qualitative indicators that relate to the political process proved to be most valuable. The more quantitative indicators (ICRG financial and economic risk indicators) provided little evidence for an influence of these factors on market development. It is possible that the more quantitative indices use conventional, backward-looking economic measures which are less informative on the underlying risk and opportunity factors than perceived risk and confidence. The differences between the significance of the CCR and the ICRG economic risk indicators confirms our earlier claim that the CCR is a valuable measure for the markets' perception of the credibility of government policy.

One may argue that it is possible that privatization only affects stock market development through direct listings and through the risk sharing and liquidity externalities of these listings, and that these benefits are picked up by our political risk indicators. We believe that our results indicate a direct causality running from political risk to stock market development. First of all, the importance of political risk for stock market development is

established using a sample of privatizers and non-privatizers: around 40% of the observations are from countries that did not privatize or from periods more than two years before privatization started. We also find the gradual pattern in stock market development hard to explain only in terms of indirect risk sharing benefits of new listings and increased trading and find that we attribute them to the gradual resolution of political risk. Since the stock market is a forward-looking indicator, if market conditions were expected to improve as a result of announced privatization sales, prices and trading volume should immediately anticipate these benefits.<sup>28</sup>

Finally, including privatization sales in our regressions captures any direct effect from share issues such as any anticipated risk sharing and liquidity benefits reflected in market development measures. Interestingly, the inclusion of privatization sales hardly affects the coefficients of political risk indicators or their significance. It is therefore unlikely that the political risk indicator simply picks up the effect of privatization sales on market development from channels other than political risk.

We conclude therefore that political risk improvements, correlated with the progress of a sustained privatization program, appear to be an important factor in the rapid development of emerging stock markets. Their economic significance is quite dramatic. The coefficient for the CCR in the traded value regression indicates that if political risk improved by 1% in a year, we expect that this led to an increase of nearly 4% for the traded value over GNP! From Table 3, we know that during years of privatization, the growth rate of the CCR was on average 0.029 higher in emerging countries that did privatize vis-à-vis those that didn't. Combined with the regression results in Table 5, this implies that on average, the yearly growth rate of traded value over GNP increased with 0.108 during privatization (i.e. an increase of the growth rate with 10.8 percentage points) as a direct consequence of political risk reduction. Also, monthly stock returns were on average 0.46 percentage points higher during privatization because of the associated improvements in political risk, which indicates an extra return of almost 6% on an annual basis.

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<sup>28</sup> Trading and diversification gains may also be incorporated gradually, of course, if there are fears that the privatization process may be halted or reversed; such concerns do belong to our definition of political and policy risk.

## V Concluding remarks

We have presented evidence that the resolution of political risk through sustained privatization has been an important source for the recent growth in emerging stock markets. It seems that sustained privatization has gradually strengthened the institutional framework by forcing a resolution of political and legal uncertainties which till then hinder equity market development. This ultimately leads to an increase in investor confidence. On average, this process seems to take place gradually as privatization proceeds.

An interesting empirical issue is the robustness of our results. Our sample may reflect a set of relatively successful privatizing countries, for which the early 1990s were a privatization stage, just when emerging stock markets generally performed quite well. However, our argument is that is no coincidence: emerging markets performed so well *because* they manage to convince many investors of their own reliability through radical economic reforms such as privatization. Ultimately, this is an empirical question which can be addressed at best once a longer historical experience becomes available.

It is possible that privatization, perhaps because it establishes more broad-based ownership, can by itself resolve political risk by helping to overcome political resistance to market reforms and their effect. Biais and Perotti (1997) develop a simple model of how a large privatization program may be designed so as to reduce political risk of future policy reversals. A market-oriented party may increase the probability of being re-elected by implementing a series of underpriced sales, where excess demand is rationed so as to ensure a broad diffusion of shareholding and to reward long term holdings. A wide diffusion of shares may have the effect of shifting the preferences of the middle class. This structural shift in the political equilibrium creates stable political support for market reforms and reduces political risk for equity investment, reducing the equity premium and increasing market capitalization. Jones et al (1998) find significant empirical support for these conclusions by analysing the pricing and share allocations affiliated with privatization sales.

In our view these observations and the results in our paper point to a strong potential for research developments in the area of political economy and corporate finance. Privatization, just as nationalization, has strong redistributive effects and tends to cause political conflict, whose outcome is most informative for investors.

## Appendix 1

**Table A1: Sample of countries and sample years.**

Country	Before Privatization	Start Privatization	End of Sample
ARGENTINA	86	90	95
BANGLADESH	85	89	95
BRAZIL	87	91	95
CHILE	81	85	95
COLOMBIA	87	91	95
COTE D'IVOIR	87	91	95
GREECE	86	90	95
INDIA	87	91	95
INDONESIA	87	91	95
JAMAICA	82	86	95
MALAYSIA	81	85	95
MEXICO	81	85	95
NIGERIA	85	89	95
PAKISTAN	86	90	95
PERU	87	91	95
PHILIPPINES	85	89	95
PORTUGAL	85	89	95
SRI LANKA	85	89	95
TUNESIA	84	88	95
THAILAND	88	92	95
TURKEY	84	88	95
VENEZUELA	86	90	95

## Appendix 2: Overview of the ICRG indicators

**Table A2: Composition of the International Country Risk Guide Indicators**

<u>Political risk indicator</u>	<u>Weight</u>
Economic expectations vs. reality	.12
Economic planning failures	.12
Political leadership	.12
External conflict	.10
Corruption in government	.06
Military in politics	.06
Organized religion in politics	.06
Law and order tradition	.06
Racial and national tensions	.06
Political terrorism	.06
Civil war risks	.06
Political party development	.06
Quality of bureaucracy	.06
<u>Financial Risk indicator</u>	
Loan default or unfavorable loan restructuring	.20
Delayed payment of supplier's credits	.20
Repudiation of contracts by government	.20
Losses from exchange controls	.20
Expropriation of private investments	.20
<u>Economic Risk indicator</u>	
Inflation	.20
Debt service as a % of exports	.20
International liquidity ratios	.20
Foreign trade collection experience	.20
Current account balance as % of goods and services	.20
Parallel foreign exchange rate market indicators	.20

## References

- Balcerowicz, L. and A. Gelb (1994), "Macropolicies in Transition to a Market Economy: A Three Year Perspective", *Proceedings of the World Bank Annual Conference on Development Economics*, 21-44.
- Bartolini, L. and A. Drazen (1997) "Capital-Account Liberalization as a Signal", *American Economic Review* 87, 138-54.
- Bell, S. (1995) "Privatization Through Broad-Base Ownership Strategies", World Bank Discussion Paper, Washington, DC.
- Bekaert, G. (1995), "Market Integration and Investment Barriers in Emerging Equity Markets", *The World Bank Economic Review* 9, 75-107.
- Biais, B. and Perotti, E.C. (1997) "Machiavellian Underpricing", mimeo, University of Toulouse.
- Boubakri, N. and J-C. Cosset (1998) "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries", *Journal of Finance* 53, 1081-1110.
- Candoy-Sekse, R. (1988), "Techniques of Privatization of State-Owned Enterprises (Vol III)", World Bank Technical Paper no 90, Washington, DC.
- Cherian, J.A. and E.C. Perotti (1998), "Option Pricing and Foreign Investment under Political Risk", mimeo, University of Amsterdam.
- Claessens, S. (1995), "The Emergence of Equity Investment in Developing Countries: Overview", *The World Bank Economic Review* 9, 1-17.
- Claessens, S. and S. Djankov (1997), "Politicians and Firms: Evidence from Seven Central and Eastern European Countries", mimeo, World Bank.
- Demirgüç-Kunt, A. and R. Levine (1994), "The Financial System and Enterprise Reform", World Bank working paper, Washington, DC.
- Demirgüç-Kunt, A. and V. Maksimovic (1998), "Law, Finance and Firm Growth", forthcoming in *Journal of Finance*.
- De Santis, G. and S. Imrohorglu (1997), "Stock Returns and Volatility in Emerging Financial Markets", *Journal of International Money and Finance* 16, 561-79.
- Dewenter, K.L. and P.H. Malatesta (1997), "Public Offerings of State-owned Enterprises: An International Comparison", *Journal of Finance* 52, 1659-79.
- Diamonte, R.L., J.M. Liew and R.L. Stevens (1996), "Political Risk in Emerging and Developed Markets" *Financial Analysts Journal*, 71-76.
- Edwards, Sebastian (1990), "Capital Flows, Foreign Direct Investment, and Debt-Equity Swaps in Developing Countries", NBER Working Paper No. 3497.
- Erb, C.B. C.R. Harvey and T.E. Viskanta (1996a), "Expected Returns and Volatility in 135 Countries", *Journal of Portfolio Management*, 32-48.
- Erb, C.B. C.R. Harvey and T.E. Viskanta (1996b), "Political Risk, Economic Risk and Financial Risk", *Financial Analysts Journal*, 29-46.
- Euromoney (1993-4), Guide to World Equity Markets, and special supplements.
- Galal, A., L. Jones, P. Tandon and I. Vogelsang (1994), *Welfare Consequences of Selling Public Enterprises: An Empirical Analysis*, World Bank, Washington, DC.
- Grandy, Christopher (1989), "Can the Government Be Trusted to Keep Its Part of a Social Contract? New Jersey and the Railways 1825-1888", *Journal of Law, Economics and Organization* 5, 249-69.
- Grinblatt, Mark and Hwang, Chuan Yang, (1989) "Signalling and the Pricing of New Issues", *Journal of Finance* 44, 393-420.
- Hachette, D. and R.J. Lüders (1993), *Privatization in Chile: An Economic Appraisal*, ICS Press, San Francisco, California.
- IFC Review (1994), Private Pension Reform in Latin America, IFC, Washington, DC.

- IFC, *Emerging Stock Markets Factbook*, IFC, Washington DC, Various Issues.  
 Institutional Investor, Various Issues.
- Jones, S.L, W.L. Megginson, R.C. Nash and J.M. Netter, (1998) "Share Issue Privatizations as Financial Means to Political Ends", forthcoming in the *Journal of Financial Economics*.
- Laporta, R., F. Lopez-de-Silanes, A. Shleifer and R.W. Vishny (1997), "Legal Determinants of External Finance", *Journal of Finance* 52, 1131-50.
- Laporta, R., F. Lopez-de-Silanes, A. Shleifer and R.W. Vishny (1998), "Law and Finance", *Journal of Political Economy* 106, 1113-55.
- Leeds (1991) "Privatization Through Public Offerings: Lessons from Two Jamaican Cases" in R. Ramamurti and R. Vernon (eds) *Privatization and Control of State-Owned Enterprises*, World Bank, Washington DC.
- Levine, R. (1991), "Stock Markets, Growth and Tax Policy", *Journal of Finance* 46, 1445-65.
- Levine, R. (1997), "Financial Development and Economic Growth", *Journal of Economic Literature* 35, p. 688-726.
- Levine, R. and S. Zervos (1998), "Stock Markets, Banks and Economic Growth", *American Economic Review* 88, 537-558.
- Lüders, R.J. (1991), "Massive Divestiture and Privatization: Lessons from Chile", *Contemporary Policy Issues* 9, 1-19.
- Megginson, W.L., R.C. Nash, J.M. Netter and A.L. Schwartz (1998), "The Long-Run Return to Investors in Share Issue Privatizations", mimeo, University of Georgia.
- Modigliani, F. and E.C. Perotti (1997) "Corporate Law Enforcement and the Development of Security Markets: Theory and Evidence", forthcoming in *Managerial and Decision Economics*.
- Pagano, M. (1989), "Endogenous Market Thinness and Stock Price Volatility", *Review of Economic Studies* 56, 269-288.
- Pagano, M. (1993a), "Financial Markets and Growth: An Overview", *European Economic Review* 37, 613-622.
- Pagano, M. (1993b), "The Flotation of Companies on the Stock Market; A Co-ordination Failure Model", *European Economic Review* 37, 1101-25.
- Perotti, E.C. (1995), "Credible Privatization", *American Economic Review* 85, 847-859.
- Perotti, E.C. and S.E. Guney (1993), "The Structure of Privatization Plans", *Financial Management* 22, 84-98.
- Perotti, E.C. and F. Huibers (1998), "The Performance of Privatization Stocks in Emerging Markets: The Role of Political Risk", forthcoming in *Advances in Financial Economics*.
- Rock, K. (1986), "Why New Issues Are Underpriced", *Journal of Financial Economics* 15, 187-212.
- Roland, G. and T. Verdier, 1994, "Privatization in eastern Europe: irreversibility and critical mass effects", *Journal of Public Economics*, 161-183.
- Rodriguez, F. (1992), "The Mexican Privatization Programme: An Economic Analysis", *Social and Economic Studies* 41, 149-71.
- Sader, F. (1993), "Privatization and Foreign Investment in the Developing World 1988-92", World Bank Policy Research Working Paper, Washington, DC
- Sader, F. (1995), "Privatizing Public Enterprises and Foreign Investment in Developing Countries, 1988-93", Occasional Paper 5, IFC and World Bank, Washington, DC
- Sanchez, M. and R. Corona (1993), *Privatization in Latin America*, Inter-American Development Bank, Washington, DC.
- Schmidt, Klaus, "The political economy of mass privatization and the risk of expropriation", CEPR Discussion paper, 1997
- Singh, A, (1995), "Corporate Financing Patterns in Industrializing Economies", IFC Technical Paper number 2, World Bank, Washington, DC
- World Bank (1993), *Argentina's Privatization Program; Experience, Issues, and Lessons*, World Bank, Washington, DC
- World Bank (various years), *World Debt Tables; External Finance for Developing Countries*, World Bank, Washington DC.