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COASE V. THE COASIANS

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ABSTRACT

The Coase theorem implies that, in a world of positive transaction costs, any of a number of strategies, including judicially enforced private contracts, judicially enforced laws, or even government regulation, may be the cheapest way to bring about efficient resource allocation. Unfortunately, some Coasians have ignored the possibility that the last of these strategies may sometimes be the best. This paper compares the regulation of financial markets in Poland and the Czech Republic in the 1990s, when the judicial systems remained underdeveloped in both countries. In Poland, strict enforcement of the securities law by an independent Securities and Exchange Commission was associated with rapid development of the stock market. In the Czech Republic, hands-off regulation was associated with a near collapse of the stock market. These episodes illustrate the centrality of law enforcement in making markets work, and the possible role of regulators in law enforcement.

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> There is no reason why, on occasion, such governmental administrative regulation should not be an improvement on economic efficiency.
>
> Coase (1960, reprinted 1988, p.118).

I. Introduction.

At the heart of economists' traditional skepticism about government regulation is the Coase Theorem (Coase 1960). The theorem states that when property rights are well defined and "transaction costs" are zero, market participants will organize their transactions in ways that achieve efficient outcomes. When they can do so, it is not necessary for the government to engage in "corrective" actions through taxes, regulations, or even legal rules. Financial markets are often seen as a great example of the Coase Theorem's potential. Advocates of the regulation of these markets point to a variety of potential failures, such as the ability of security issuers to "expropriate" both potential and existing investors through misrepresentation and profit diversion. Investors' fear of such expropriation prevents firms from raising external funds, and keeps efficient projects from being undertaken. Not so, reply the Coasians. They point out that most securities transactions take place between sophisticated and consenting adults, and that both the buyers and the issuers of securities have available to them a vast range of private arrangements to achieve efficiency, including contracts such as corporate charters, certification by intermediaries, and various forms of bonding. Such contracts render most laws and regulations unnecessary (Stigler 1964, Easterbrook and Fischel 1991). In fact, regulations can be positively detrimental to economic welfare if, as Stigler (1964, 1971) has warned, the regulators are captured by the incumbent firms and use their power to deter entry.

On the face of it, the Coasians' argument is extremely powerful. Yet it relies on some crucial assumptions, including so-called "zero transaction costs." Economists have identified a number of reasons why transaction costs are positive, including asymmetric information, large numbers of contracting parties, etc. (Kaplow and Shavell 1999). But perhaps the single most important "transaction cost" in many countries is the cost of contract enforcement. Most centrally, courts often have only a limited ability to enforce both existing property rights and efficiency-enhancing contracts.

In many countries, courts are underfinanced, unmotivated, unclear as to how the law applies, unfamiliar with the economic issues, politicized, or even corrupt. Such courts cannot be expected to engage in costly verification of information necessary to enforce contracts. Rather than relying on court-enforced contracting, it may then be socially efficient to provide a detailed legal framework which standardizes contracts and tells judges what facts to look for and how to interpret them in light of the law. Even with such a framework, however, the laws may be vague and the body of precedents undeveloped, making it too costly for a court to learn enough about a situation to figure out how the law actually applies. Statutes typically rely on broad language, such as "honest trading" or "material information," and leave it to the courts to decide whether specific conduct constitutes a violation. Yet assessing honesty of trading or materiality of information is often difficult and expensive. As a consequence, even clean courts are unable to make up their minds and simply postpone decisions.

On occasion, then, it may be better from the social viewpoint to go further and create a regulatory framework, which not only prescribes certain rules, but also empowers a regulator rather than a judge to interpret and clarify them, as well as to decide, within limits, what conduct constitutes a violation. At least in principle, such a regulator may have greater incentives, resources, and expertise to enforce the law than do the courts. This is not to say that a regulator is always superior -- an excessively powerful regulator may do more harm than an unmotivated judge -- but the possibility exists that regulation is superior to judicial enforcement (see Glaeser and Shleifer 1999 for an analysis of this problem).

Ironically, even though regulation restricts the range of allowable contracts, it can actually expand enforceable private contracting opportunities available to market participants. If some rights are protected by the regulators, there are fewer rights that market participants must enforce privately or through courts. Their options for enforceable contracts might actually be broader since courts (and reputations) must take care of fewer possible violations and breaches.

Coase is clearly aware of the possibility of favorable regulation, although he does not emphasize judicial failure. In the introduction to his collected essays, he indicates that some markets must depend on "the legal system of the State" (Coase, 1988, p. 10), and in fact he discusses government regulation at some length in the "The Problem of Social Cost" (Coase, 1988, pp. 117-118). Still, we have been unable to find an example in Coase's writings where he felt that government regulation was the best way to go when "transaction costs" were positive. It is not surprising then that the Coasians have not focused on the possible benefits of regulation.

In the case of financial markets, courts in many countries, even when they are uncorrupt, have difficulty interpreting complex financial contracts. When does front-running by a broker violate his fiduciary duty to clients? When is non-disclosed information material? When does a corporate transaction "abuse" minority shareholders? In the meantime, the expropriation of outside investors can -- and does -- take place in many countries through outright theft, diversion of corporate opportunities, transfer pricing, related lending, failure to disclose relevant information when issuing securities, failure to report earnings properly, etc. In this context, it is worth considering the possibility that the legal and regulatory framework can improve matters. Company and security laws can perhaps protect minority shareholders from some expropriation, thereby broadening the opportunities for private contracting between investors and entrepreneurs. Moreover, it is theoretically possible that in financial markets a regulator and not just the courts can protect the property rights of outside investors and thereby foster market development.

The idea that regulatory enforcement may be preferred to judicial enforcement in the context of securities markets has been forcefully argued by James Landis (1938), the architect of securities regulation in the United States. He argued that concerns about the limited expertise and weak incentives of courts applied to the U.S. judiciary in the 1930s with enough force to warrant the creation of a powerful regulator. Landis of course was an champion of regulation. Yet his concerns about courts have more force in emerging markets than they do in the U.S.

In this paper, we discuss one instance in which this theoretical case in favor of regulation appears to be empirically valid as well, namely securities market regulation in Poland. We compare this case to the failure of regulation in the Czech Republic, where the Coasian -- as opposed to Coase's -- reasoning may have encouraged an inappropriate regulatory framework. This comparison does not show that regulation is always better when the judicial system does not work well. But it does suggest that regulation should be considered as a public policy option.

Poland and the Czech Republic (we refer to the Czech Republic for simplicity even though until the separation from Slovakia in 1993, it was part of Czechoslovakia) emerged from communism in 1989, and both aggressively started building market economies. The Czech Republic was richer and had fewer economic problems at the start, although the difference was modest compared to a shared legacy of communism. Both countries embraced all the standard liberalization policies. If anything, the Czech Republic in the early 1990s was viewed as more pro-market than Poland.

As part of their reforms, both countries attempted to build financial markets, yet they used very different regulatory approaches. In the early 1990s, both countries passed or revised their company and securities laws. In these laws, Poland adopted stringent regulations of securities markets, whereas the Czech Republic took a laxer legal and regulatory stance. These differences were reflected not just in the general philosophies of regulation, but in the statutes and the mechanisms of law enforcement. In particular, Poland adopted legal rules more protective of minority shareholders than did the Czech Republic, and created a powerful regulator to enforce them. The two countries therefore present a fascinating case study (or natural experiment) for thinking about regulation and its effects.

From the analytical point of view, this comparison of the effects of regulation is extremely illuminating for two reasons other than the general similarity of the two countries. First, at the time the reforms began, and more generally through the 1990s, neither country had an effective or sophisticated judiciary, especially as compared to the advanced market economies. The possibilities for elaborate private contracts or complex legal rules enforced by the judiciary -- the standard solutions to market failure -- were therefore limited. From the purely theoretical perspective, then, there may have been a need for some regulation. Second, both countries created the basic regulatory infrastructure of securities markets prior to privatization and therefore prior to the formation of well-organized interests striving to shape their regulatory environment. This fact alleviates Stigler's concerns about the capture of the regulators. In fact, the differences in regulatory approaches between Poland and the Czech Republic were arguably shaped by ideological differences between the two governments -- both focused to a large extent on public interest -- on the question of optimal regulation. This comparison thus presents an ideal way to examine the structure of prudential regulation of the financial markets.

We find that the stringent -- and stringently enforced -- regulations in Poland, expressed in both company and securities laws, have stimulated rapid development of securities markets, and enabled a number of firms to raise external funds. The expropriation of investors has been relatively modest, and the qualitative evaluations of the Polish market have been very positive. In contrast, the lax – and laxly enforced – regulations in the Czech Republic have been associated with low liquidity and a notable absence of equity finance by either new or existing firms. The expropriation of investors has been rampant, and has acquired a new Czech-specific name: tunnelling. Consistent with these concerns, the qualitative assessments of the Czech market have been poor.[2] Starting in 1996, the Czech government has sharply tightened its regulations.

These results support recent findings of the benefits for financial development of legal protection of outside investors from expropriation by security issuers and intermediaries (La Porta et al. 1997, 1998, 2000, Johnson et al. 2000, Beck et al. 2000). The Polish law specifically focused on such protection, in terms of both its actual statutes and the enforcement mechanisms. In contrast, the Czech law was by design unprotective of minority shareholders, and accommodated massive expropriation.

In the next section, we overview the economic conditions in Poland and the Czech

[2]There have now been a number of studies discussing investor expropriation in the Czech Republic, and relating it to the legal environment. See in particular Coffee (1996, 1998), Weiss and Nikitin (1999) and Pistor (1999). We discuss some of this work below.

Republic at the beginning of reforms, and show that if anything the initial evaluations of market reform favored the latter. In Section III, we discuss the commercial codes adopted in the two countries, and in Section IV, we focus on securities laws. Section V presents some data on the development of financial markets in the two countries. Section VI considers alternative interpretations of the evidence. Section VII concludes with some possible lessons for the economic theories of regulation in general and the regulation of capital markets in particular.

II. Initial conditions.

Basic Similarities

In broad terms, Poland and Czechoslovakia share similar histories over the past 50 years. Both countries turned communist and became Soviet satellites shortly after World War II, and spent the next 40 years building socialism. In 1989, both countries spearheaded the anti-communist revolution. In Poland, Solidarity won overwhelming support in the June 1989 elections, and by September 1989 was able to form a government. In Czechoslovakia, the communists gave up their "leading role" in the country in the face of massive protests in November 1989, and the communist President resigned in December. Free elections in June 1990 completed a sequence of events that came to be known as "the velvet revolution."

Table 1 presents the basic characteristics of the two economies at the beginning of reforms. Poland had a larger population of 38 million people, compared to 10.3 million in the Czech Republic. The Czech Republic in 1989 had significantly higher per capita income: in constant 1995 US dollars, it was $5727 compared to $3045 in Poland. Both countries were fully industrialized, with an industrial structure largely shaped by decades of Soviet-style central planning. Agriculture took up 7.8% of GDP in Poland, and 6.3% in the Czech Republic, although a much higher share of the Polish population (27.7% vs. 11.4%) was employed in agriculture. Both countries border on Western Europe and in particular Germany, although Warsaw is 569 miles from Frankfurt while Prague is only 261 miles away.

Both countries initiated economic reforms immediately after shedding communism. In Poland, critical legislation on liberalization was passed in the fall of 1989, and the key measures came into effect on January 1, 1990. Small-scale privatization began in May 1990, although large scale privatization started with a whisper in 1991, ran into political obstacles, and spread over most of the 1990s. In Czechoslovakia, reforms were also initiated in early 1990, with the devaluation of the crown, budget cuts, and banking reform. The formal reform package, including price increases, started on January 1, 1991. The law on large scale privatization was adopted on February 1, 1991. Privatization through vouchers took place in two waves: in 1992 (completed in mid 1993), and 1993 (completed in 1994). Most rules of privatization, including those on Investment Privatization Funds, were developed in 1991 (Coffee 1996).

Table 2 summarizes the World Bank's assessment of the progress with early reforms in the two countries. Here the score of 1 would correspond to the completion of reforms. Table 2 shows that, by 1992, both countries were 90% of the way toward complete internal and external liberalization, 80% of the way in the case of the Czech Republic and 70% of the way in the case of Poland toward completing privatization, and over 80% of the way toward completing basic reforms according to the summary index. By 1994, the two countries were virtually finished with basic reforms. The similarity between Poland and the Czech Republic should be contrasted with the difference between them and most other transition economies, particularly those in the former

Soviet Union, which in the early 1990s were much further behind in their reform programs.

Table 3 presents later data from the European Bank for Reconstruction and Development, which also points to enormous progress with reforms in Poland and the Czech Republic, as well as a dramatic similarity in the assessments of the two countries. Although the Czech Republic had moved more rapidly on large scale privatization and consequently had a somewhat higher share of its GDP generated in the private sector, in matters such as small scale privatization, governance and restructuring, price and trade liberalization, competition policy, banking reform, and financial institutions, the countries are neck in neck and very far advanced.[3] In short, both countries have been rapid and thorough reformers in their emergence from communism, especially in comparison with other transition economies.

There are, however, two differences which we come back to in our subsequent discussion. First, the Czech large scale voucher privatization was faster and more extensive than privatization in Poland, which over time utilized a variety of methods from direct sales to share transfers to mutual funds. As a consequence, the number of publicly held companies in the early 1990s was significantly higher in the Czech Republic than in Poland. Second, during this period, Poland had grown faster but also had higher inflation than the Czech Republic. The assessments of growth rates depend on exactly how they are calculated. The level of GDP in Poland in 1997 stood at 110 relative to 100 in 1989, whereas in the Czech Republic it stood only at 90. Using constant 1995 dollars, however, Poland's advantage is smaller.[4] During 1992-1997, the Czech inflation

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[3]In 1997, the EBRD gave Poland a 3+ relative to the Czech Republic's 3 on securities markets and financial institutions. We argue below that the difference should have been larger.

[4]The World Bank reports the level of real GDP using constant 1995 prices but calculates growth rates using the GDP deflator. Given the large changes in relative prices during reforms, it

averaged 13.9% per annum, while Polish inflation was significantly higher at 26.5%.

In legal development, the two countries again appear similar. In the universe of transition economies, both get perfect or nearly perfect scores, although these scores have only been kept after 1995. The European Bank for Reconstruction and Development scores transition economies on the extensiveness of laws (since 1996), effectiveness of laws (since 1996), and overall legal development (since 1995). Table 4, Panel A, presents the scores for Poland and the Czech Republic, which get as high a set of scores as any transition economy. In the effectiveness of laws, Poland gets a 3 compared to the Czech 4 in 1996, although it jumps to 4+ , ahead of the Czech Republic in 1997, perhaps as a result of the events described in this paper. Table 4, Panel B presents related rankings from the Wall Street Journal. The two countries are exactly the same in 1995 and 1996, although Poland moves slightly ahead in 1997 and 1998. Both countries are again close to each other, and sharply ahead of other transition economies.[5]

These high evaluations in the context of transition economies hide the fact that, relative to the advanced market economies, the legal systems of the two countries remain underdeveloped. Freedom House generates an index of "equality of citizens under the law and access of citizens to a non-discriminatory judiciary." In 1995-1996, both Poland and the Czech Republic received scores of 5 out of 10, compared to 7.5 or 10 for the rich industrial countries.[6] The 1999 World

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is hard to know which measure is better. On every available measure, however, Poland has had more growth since 1989, and grew significantly faster during the 1995-1998 period.

[5]Pistor (1995) assesses the extent of legal development in a number of transition economies. She gives Poland and the Czech Republic the same score, the highest (shared with Hungary) among all the transition economies she studies.

[6]These numbers are reported in Economic Freedom of the World 1997, by James Gwartney and Robert Lawson, a publication of The Fraser Institute, a conservative think tank in

Competitiveness Yearbook (IMD 1999) in its question on fairness in the administration of justice, gave Poland 2.9 out of 9 and the Czech Republic 2.8. This compares to 8.9 for the world leader, New Zealand (and over 8 generally for rich industrial countries), and the low 1.9 for Indonesia and 1.3 for Russia. Finally, the 1996 Global Competitiveness Report (World Economic Forum 1996), in its question on confidence in the fair administration of justice, gives 2.93 out of 6 to the Czech Republic and 2.92 to Poland. This compares to 5.78 for New Zealand at the top, and 1.77 for Russia at the bottom. All the surveys tell the same story: the judicial systems in the two countries are extremely close to each other in terms of their level of development, ahead of the laggards like Russia, yet far behind the developed industrial countries.

These results are echoed by the concerns of knowledgeable observers about the state of the judicial system in the two countries in the early stages of reform (Gray et al. 1993). With respect to Poland, Gray et al. (1993) write: "Many of the newly appointed judges lack experience.... Developing such expertise will take time. Lack of experience and expertise creates uncertainty in the business population...(p. 109)." With respect to the Czech Republic, Gray et al. (1993) note: "As in other CEE countries, judicial institutions in the Czech Republic are ill prepared to cope with the rapidly emerging challenges of the market economy... Incapacity in the court system is likely to be a constraint for some time to come (p. 59)." While good by the standards of transition economies, the judicial systems of the two countries during the 1990s have significantly lagged the standards of the rich industrial economies.

In summary, the economies and the economic policies of Poland and the Czech Republic share some remarkable similarities during the 1990s. The two countries emerged from socialism

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Canada.

with a need to massively reorganize their economies, and both proceeded to do so both rapidly and effectively. In many crucial respects, they followed similar policies toward this goal, and achieved similar results, especially compared to other, less successful, transition economies.

An Important Difference

Despite the many crucial similarities, the two countries followed different approaches to reform in terms of the government's interest in regulatory intervention. This difference did not escape the early observers of the two countries, who viewed Polish economic policy as less laissez-faire than Czech economic policy. For example, in each of the three years 1994-1996, the conservative Heritage Foundation gave the Czech Republic a perfect (from its perspective) score of 1 and Poland a mediocre score of 3 on its measure of "regulation" – the extent to which government restricts economic activity.[7] Along similar lines, Euromoney considered Poland to be sharply riskier for foreign investment and lending than the Czech Republic, in part because property rights were less secure from government intervention.

These observers had every right to form such opinions based on the pronouncements about markets and market reform coming from economic officials in the two countries. Vaclav Klaus, the Czech Finance Minister and later Prime Minister, was both tremendously articulate and unabashedly anti-government in his vision of reforms: " We knew that we had to liberalize, deregulate, privatize at a very early stage of the transformation process, even if we might be confronted with rather weak and, therefore, not fully efficient markets... Conceptually it was -- at

[7]It however gave the Czech Republic a slightly inferior score of 4, compared to Poland's 3.5, on the extent of corporate and individual taxation. In later years, Poland continued to score lower than the Czech Republic.

least for me -- rather simple: all you had to do was to apply the economic philosophy of the University of Chicago (Klaus 1997, from a 1995 speech)." Leszek Balcerowicz, the champion of Polish reforms, was a bit more cautious: "The capacity of the state to deal with various problems varies, mainly because of varying informational requirements. On this basis, one can distinguish on the one hand, the sphere of the state's natural competence (legislating and enforcing the law, dealing with other states, for example) and on the other hand, its sphere of natural incompetence (a massive and detailed industrial policy, for example) (1995, p. 176)."

One area in which these differences revealed themselves most clearly has been the regulation of capital markets. Our analysis below first documents these differences in legal rules governing financial markets and the mechanisms of their enforcement between the two countries. We then show that, at least in this area, the Polish approach appears to have worked better. The legal rules discussed in the next two sections are those adopted in the early 1990s, and therefore shaping financial markets during the 1990s. As we show in section V, some of these laws were revised later in the decade in response to market developments.

III. Company Law.

Poland and the Czech Republic have somewhat different histories of adoption of commercial codes. Poland's law dates back to the code of 1934, which was modified repeatedly through the communist era and in the early 1990s. The Polish commercial code has both German and French influences and hence scholars found it difficult to determine unambiguously its legal origin (Gray et al. 1993, Pistor 1999). Although the Czech Republic also had a commercial code from the 1930s, its laws were "more thoroughly abrogated" than those of Poland during communism, and it accordingly adopted a new commercial code on January 1, 1992 (Gray et al. 1993). Like the Polish code, the Czech commercial code had many influences, although the principal one was evidently German.

La Porta et al. (LLSV 1998) propose 6 dimensions to evaluate the extent to which the commercial code (or company law) protects minority shareholders against expropriation by the insiders.[8] First, the rules in some countries allow proxy voting by mail, which makes it easier for minority shareholders to exercise their voting rights. Second, the law in some countries blocks the shares for a period prior to a general meeting of shareholders, which makes it harder for shareholders to vote. Third, the law in some countries allows some type of cumulative voting, which makes it easier for a group of minority shareholders to elect at least one director of their choice. Fourth, the law in some countries incorporates a mechanism which gives the minority shareholders who feel oppressed by the board or the general assembly of shareholders the right to sue or otherwise get relief from the decision. In the United States, this oppressed minority mechanism takes the very effective form of a class action suit, but in other countries there are other ways to petition the company or the courts with a complaint. Fifth, in some countries, the law gives minority shareholders a preemptive right to new issues, which protects them from dilution by the controlling shareholders who could otherwise issue new shares to themselves or to friendly parties. Sixth, the law in some countries requires relatively few shares to call an extraordinary shareholder meeting, at which the board can presumably be challenged or even replaced, whereas in other cases a large equity stake is needed for that purpose. LLSV (1998)

[8]These dimensions are defended at some length in LLSV (1998). Here we only briefly describe them. Empirically, the index of anti-director rights obtained from these data has worked well in a number of studies as a proxy for minority shareholder rights.

aggregate these 6 dimensions of shareholder protection into an anti-director rights index by adding a 1 when the law is protective along one of the dimensions and a 0 when it is not.

Table 5, Panel A presents the components of this index and the index itself for Poland and the Czech Republic, based on the information contained in their first post-reform commercial codes. Neither country allows proxy-by-mail (score zero), each requires that shares be blocked before the annual meeting of shareholders (score zero), and neither gives shareholders a preemptive right to new share issues (score zero). They each require 10% of the votes to call an extraordinary shareholder meeting (score 1), and each provide the minority shareholders with some opportunities to protest certain majority decisions (score 1). The two laws differ in one important dimension using this classification: the Polish law allows a significant (20% and in some cases less) minority shareholder to elect a director, whereas under the Czech law, 51% of the votes are enough to appoint all directors. Overall, Poland ends up with a score of 3 out of 6 on anti-director rights, and the Czech Republic with a score of 2.

To put these scores in perspective, the highest actual shareholder rights score in the LLSV (1998) sample of 49 countries is 5. Several common law countries, such as the U.S., the U.K, and Canada receive this score. Belgium is the lowest in the sample, with a score of 0, but several countries including Italy, Jordan, Mexico and Germany get a score of 1. The average in the sample is 3. Thus Poland is in the middle in the world in protecting shareholder rights through the company law, while the Czech Republic is below the middle. In the LLSV (1998) data, there is no association between a country's level of economic development and its anti-director rights score, but a strong association between the score and the size of the stock market.

An examination of some of the additional rules in the commercial codes, not studied by

LLSV (1998), points to other instances of somewhat greater protection of minority shareholders by the Polish code. Table 5, Panel B presents some of the comparisons. The main difference is that Poland gives important rights to significant minority shareholders (those with either 20% of the votes or 20% of share capital). In Poland, but not in the Czech Republic, this group can demand the appointment of an additional board of auditors, and not just a seat on the supervisory board. This group can also check the list of attendance at the general shareholders' meeting, making sure that the management is not manipulating the total number of the available votes. Both countries generally require supermajorities for important decisions, such as the change in the objectives of the company. Poland grants a shorter term in office to directors (3 years) than does the Czech Republic (5 years). In one interesting regard, the Czech law is more protective of minority shareholders. Article 185 of the Czech 1992 Commercial Code requires that a quorum of 30% of the total possible votes be present at a general meeting of shareholders. The Polish Commercial Code does not set any such quorum (Article 401).

In summary, Poland's company law is somewhat more protective of minority shareholders than is the Czech law. The oppressed minority mechanisms have played some role in stopping investor expropriation in both countries, largely because a company cannot expand its capital while a complaint from minority shareholders is being litigated. This restriction has given large minority shareholders in some disputed situations in both countries some power. The ability of a significant minority shareholder in Poland to elect a director has apparently also proved useful to some large domestic and foreign investors, who have put their candidates on the boards. At the same time, the exercise of some of these minority rights, such as the oppressed minority mechanism, relies on the judicial system which is not particularly effective in either country.

Although, as we show below, company laws have played some role in protecting minorities from expropriation, in Poland they have done so largely in conjunction with an elaborate system of securities regulation.

IV. Securities Law and Regulation.

The Polish "Law of Public Trading in Securities and Trust Funds" was adopted on March 22, 1991 and became effective in early April 1991. The Czech "Securities Act" was adopted in 1992, and became effective on January 1, 1993. Although the passage of the Act in the Czech Republic occurred after privatization had started, financial institutions, such as Investment Privatization Funds (IPFs), apparently did not lobby for or against the Act. In fact, the Czech rules were established before privatization started and before the IPFs existed, and only codified later. The rules are a product of the government's economic philosophy, not lobbying.

We analyze securities law and regulation in two steps. First, we show that there are significant differences in the institutions of securities regulation in the two countries. In particular, similar to the U.S. model established in the 1930s, much of securities regulation in Poland takes place through tight administrative regulation of intermediaries operating in the securities markets. The Czech regulation of such intermediaries is less stringent. Second, we show that the Polish regulation of the issuers themselves is more extensive as well. In the area of securities regulation, the two countries appear to be very far apart.

The idea of focusing the regulation of securities markets on intermediaries is sometimes credited to James Landis, a contributor to the 1933 and 1934 Securities Acts in the United States (Landis 1938, McCraw 1984). Landis reasoned that the U.S. Securities Commission could monitor neither the compliance with disclosure, reporting and other rules by all listed firms, nor the trading practices of all market participants. Rather, the Commission would regulate intermediaries, such as the brokers, the accounting firms, the investment advisors, etc., placing on them the burden of assuring compliance with regulatory requirements by the issuers and the traders. Moreover, by maintaining substantial power over the intermediaries through its administrative relationships, including the power to issue and revoke licenses, the Commission could force them to monitor market participants.

From this perspective on regulation, an examination of securities laws in Poland and the Czech Republic reveals profound differences. To begin, the two laws differ in the identity of the government body supervising securities markets. In Poland, it was an independent Securities Commission. In the Czech Republic, such a commission was not established initially, and markets were supervised by the Capital Markets Supervisors Office of the Ministry of Finance. The Ministry of Finance during this period was first under Klaus, and later, when he became Prime Minister, remained indifferent to regulating securities markets. Both supervisory bodies received the power to generate various regulations, to issue and revoke some licenses, and to impose fines for violations of security laws and regulations, but had to refer criminal cases to the public prosecutor. Although the criminal channel was available to both regulators, it has been unimportant in both countries, largely because of the relative ineffectiveness of courts in complex commercial matters. For instance, although the Polish authorities have referred a large number of insider trading cases to courts, there have only been a few convictions in this area.

Table 6 compares the two laws from the perspective of the regulation of financial intermediaries. In the regulation of individual brokers, Poland has instituted relatively elaborate licensing requirements, accompanied by tests. Brokers were supposed to engage in "honest trading" as interpreted by the Commission, and could lose their license. The Czech Republic had much more pro forma licensing of brokers, with easy exams, no warning concerning "honest trading" and evidently no real power of the Commission to revoke licenses. The Polish Commission used the broad "honest trading" requirement, and its own power to interpret it, to discourage brokers' practices that might not have served the interests of clients.

Brokerage firms were also licensed in both countries, yet they faced considerably stiffer regulations in Poland. For example, the regulator received the right to access and inspect the books of brokerage firms, and these firms had to disclose their ownership structure, stay away from trading in the securities issued by a parent or a subsidiary company, and retain organizational and financial separateness from banks that owned some of them. These regulations did not exist in the Czech Republic. It is clear that the Czech Republic adopted a very hands-off stance toward brokers and brokerage firms, while Poland did not.

The Czech Securities law contained no regulation of investment advisors; the Polish law contained substantial regulations, including licencing. The Polish law restricted trading to take place on a stock exchange, and regulated these exchanges to ensure some transparency in trading. The Czech law did not include such regulations. The Polish law contained detailed regulations of mutual funds, and in fact for several years the entry into this activity was severely limited. The Czech law took a much more lenient approach again. Finally, the Polish law contained stringent regulations of custodian banks, which are an important checkpoint for changes in ownership that might facilitate tunnelling. The Czech law again was less restrictive.

Perhaps most importantly, the Polish Securities law, to a much greater extent than the

Czech law, had established administrative procedures, whereby the securities market regulator could discipline the intermediaries without recourse to the judicial system. The intermediaries could then appeal the decisions of the regulator to courts with administrative jurisdiction, but then they, rather than the regulator, had to face the delays and the inefficiency of the judicial system. Fortunately, in neither country is the judiciary corrupt, and hence the regulators had relatively little fear of their lawful decisions being overturned. In its focus on the administrative oversight of intermediaries, the Polish law corresponds closely to the U.S. regulations, which also stress the administrative powers of the Securities Commission.

Table 7 compares the two original laws from the perspective of the regulation of security issuers. Perhaps the most interesting difference between the two laws is in the amount of disclosure they require. In Poland the introduction of securities to public trading requires both a permission of the regulator and a prospectus, neither of which is required in the Czech Republic. The Polish law requires monthly, quarterly, semi-annual, and annual reporting of financial information; the Czech law only the annual results. The Polish law requires disclosure of all material information; the Czech law only that of significant adverse developments.

Financial results are one area where disclosure may be important; ownership structure is another. The Polish law requires disclosure of substantial minority shareholdings; the Czech law does not. Indeed, under the original Polish law, a shareholder crossing 10, 20, 33, 50, 66 and 75 percent ownership stakes must publicly disclose his ownership. The lack of disclosure of minority shareholdings has been widely viewed as a problem in several West European countries, since it enables anonymous large shareholders to collude with management and expropriate minority shareholders (European Corporate Governance Network 1997). Finally, the original Polish law also requires a mandatory bid for the remaining shares when a 50% ownership threshold is reached; the Czech law does not. Such mandatory bids, combined with disclosure of ownership, are intended to prevent the expropriation of minority shareholders in tender offers, since they make an acquirer buy out minority shareholders when he gains control.

In summary, this analysis makes clear that Poland chose to regulate its securities markets much more stringently than the Czech Republic. Poland stressed administrative control of financial intermediaries through licensing, the delineation of their duties to customers, and disclosure by the issuers. In the next section, we examine whether these differences mattered.

V. Outcomes.

Qualitative Assessments

Stable prices, rapid privatization, and openness to the West combined to generate extremely favorable initial assessments of the Czech economic reforms. By 1996, however, there was mounting evidence of systematic expropriation of minority shareholders by IPFs and company insiders colluding with them. Coffee (1996), who first presented his paper in 1994, drew attention to such expropriation -- which came to be known as tunnelling. In a typical scheme, the managers of an IPF holding a large stake in a privatized company would agree with the managers of this company to create a new (possibly off-shore) entity, which they would jointly control. The IPF might then sell its shares in the company to this entity at below market price, thereby expropriating the shareholders of the IPF. The company could also sell some of its assets or its output to the new entity, again at below fair value, thereby expropriating its own minority shareholders. These arrangements between corporate managers and their large shareholders

(IPFs) enriched them at the expense of minority investors in both the firms and the IPFs (see Coffee 1996, 1998 for a discussion of tunnelling in the Czech Republic).

The laxity of the securities law accommodated tunnelling. First, since transactions did not need to take place on an exchange, large blocks of shares could change hands off the exchange at less than the prevailing market price. Even on an exchange, there was no guarantee of price uniformity. Moreover, brokers and brokerage firms had no restrictions on facilitating such transactions, nor did the custodian banks have any regulatory duty to stop them. Second, since there was no requirement of ownership disclosure, the acquirers of large blocks could remain secret. Third, without a mandatory bid, these acquirers had no obligation to buy out the remaining minority shareholders. Fourth, the IPFs appear to have been under no restrictions in pursuing such transactions, since their management did not owe any clearly regulated duty to their investors let alone to the minority shareholders of the companies they tunnelled. Fifth, there was no reason to disclose any financial transactions between the new owner of shares and the company, since such transactions were generally allowed and did not need to be disclosed except perhaps in the annual report several months later. Finally, the minority shareholders had virtually no legal recourse in stopping such expropriation except in a very few cases when the oppressed minority mechanism came into play, and even substantial minority shareholders could not elect their own directors to represent their interests.

During the mid 1990s, the heyday of tunnelling in the Czech Republic, the regulators did very little to stop it. Part of the problem may have been a lack of interest. But equally important, most tunnelling was probably legal under the existing Czech law.

By 1996, it became widely believed that something had gone wrong with the regulation of the Czech financial markets. In March 1996 the Central European Economic Review, a publication of the Wall Street Journal, surveyed assorted brokerages and fund managers on corporate governance in four transition economies. The results are presented in Table 8. The survey asked respondents to comment on the disclosure of large shareholdings, transparency of markets, quality of reporting, protection of small shareholders, and insider trading. The Polish market came out as the best of the four, followed by the Hungarian market. The Czech market came third, ahead of the Russian market, which received the lowest score on every dimension. The Polish market outscored the Czech market on every dimension, with large spreads on the disclosure of ownership and transparency. Consistent with this general assessment, the International Federation of Stock Exchanges admitted the Warsaw Exchange as a full member as early as 1994 on the grounds that the regulation of securities markets met its standards. As of this writing, the Prague Stock Exchange still had not been admitted even as an associate member.

An examination of financial scandals in Poland suggests that they are typically less egregious than those in the Czech Republic, and often invite an aggressive regulatory response. Perhaps the best known Polish scandal involves a failure of a large conglomerate, Elektrim, to reveal in a prospectus an existing agreement to sell some shares in a valuable subsidiary to a third party at below market price (allegedly as a payment for services). When the existence of the agreement came to light, Elektrim's shareholders complained, and the Securities Commission quickly referred the case, which is still underway, to a public prosecutor. The top manager of Elektrim was forced to step down. The Elektrim case illustrates the crucial interaction between the corporate and securities law in the enforcement of investor rights. The failure by the company to disclose possibly material information in a prospectus was the source of the Commission's investigation under the securities law. This failed disclosure also brought about an effort by the outside shareholders to change the board of directors using the commercial code, which ultimately brought down the CEO. This pattern of interplay between the securities law and the company law appears in other countries as well: the securities law forces disclosure, which in turn invites shareholder activism using the provisions of company law.

The Polish regulator has also been aggressive in its administrative oversight of the intermediaries. In 1994, Bank Slaski, one of the largest Polish banks which owned the largest broker at the time, was privatized. In response to the evidence that the brokerage arm of the bank favored the insiders in allocating shares in privatization, the regulators took away its brokerage license. This was done even against opposition from the Ministry of Finance.

The available evidence shows that the Polish regulators relied on the actual legal rules to protect investors; it was not just their ideology that made a difference. In the cases we examined, they relied on specific rules to promote disclosure and investor rights that did not exist in the Czech law. A comparison with Russia may illustrate this issue as well. In the mid 1990s, Russia had a very aggressive securities regulator, who made daring efforts to protect minority shareholders. Yet the Russian regulator had few enforcement powers of his own, and the courts refused to back him up. As a consequence, investor protection in Russia was extremely weak -- and the tunnelling overwhelming -- despite the best intentions of the regulator.

These qualitative assessments are broadly consistent with the message of the legal rules: the Polish regulations are more stringent than those in the Czech Republic. This message confirms the usefulness of examining statutes as a way of assessing the regulatory stance. The next question is whether this matters for actual market performance.

Quantitative Assessments

Table 9 presents some basic indicators of stock market development in Poland and the Czech Republic. In terms of market capitalization, the Czech market in 1994 was twice as large as the Polish market, thanks to the more than 1,500 firms listed on the Prague stock exchange as a result of privatization. Since the Polish economy is significantly larger than the Czech economy, the Czech market in 1994 was five times larger than the Polish market as a share of GDP. Over the following five years, the Polish market shows substantial growth, increasing almost seven-fold in valuation by 1998. The Czech market valuation increases until 1996, but then falls and the market ends up at roughly double its 1994 value. Over this period, the Polish market rises to 14.1% of GDP, although the Czech market capitalization remains a larger share of GDP, at 24.2%.

Table 10 presents statistics on the number of listed companies in Poland and the Czech Republic. Panel A looks at the total number of listed companies in the two countries. It separates the Czech companies into those trading on the main market (most liquid), those trading on the secondary market (with more limited disclosure and occasional trading), and those listed on the free market (with hardly any disclosure and infrequent trading). The listed Polish companies are separated into those trading on the main market and those trading on the parallel (again, less liquid) market. Table 10 shows that the vast majority of Czech companies barely trade, and that most of the firms trading on the free market were delisted by the late 1990s. The number of firms on the main market, having risen to 62 in 1995, fell all the way down to 10 by 1998, with most of the firms being transferred to the less liquid secondary market. By 1998, most listed Czech firms emerging from privatization had been either delisted or transferred to an exchange with only limited liquidity. In contrast, despite a much lower initial level, the number of listed Polish firms has risen steadily over time, and hardly any firms have been transferred to the parallel market. If the number of actively trading securities is a measure of success, then the Polish market has significantly outperformed the Czech market over this period.

Panel B of Table 10 and Figure 1 report the number of Czech and Polish stocks over time included in the IFC Investable Index compiled by World Bank's International Finance Corporation, a maker of standard emerging market indices. The IFC Investable Index generally includes only the stocks liquid enough that foreign investors can "practically" take positions in them. This Index for Poland starts out with 9 stocks in 1992 and rises to 34 stocks in 1998. In the Czech Republic, the Index includes 5 stocks in 1993 and only 13 in 1998. Perhaps most interestingly, almost all of these 13 stocks are either government or foreign controlled. Furthermore, as Figure 2 shows, the value of the IFC Investable Index in Poland, having started below that in the Czech Republic, has by the end of 1998 far surpassed it.

Perhaps the most significant indicator of success of a financial market is how effectively it enables firms to raise capital. Table 11 presents data on the number of initial public offerings (for cash as opposed to vouchers) in the Czech Republic and Poland. It also distinguishes between offerings of shares in privatizing companies coming into public ownership through flotation, and offerings by new private companies -- the latter being perhaps a more effective indicator of a market's effectiveness. Between 1991-1998, no Czech company sold equity for cash as part of initial privatization, whereas 50 Polish companies did.[9] This is not surprising, since the Czech

[9]A foreign controlled mobile phone company, Ceske Radiokomunikce, raised $134 m in 1998 by issuing Global Depositary Receipts in London.

Republic has followed a non-cash privatization strategy. At the same time, the data show that no private Czech company has done an IPO on the Prague exchange. By comparison, 136 non-privatizing companies had gone public on the Warsaw exchange. This is perhaps the strongest evidence of the differential effectiveness of the two markets.

What about the total amount of capital raised on the stock exchange, by both already listed and newly admitted companies? Table 12 presents the data since 1996. These numbers are more difficult to interpret since there have been several rights offerings in the Czech Republic, for which data are not available. The data again show that no new or already listed Czech company raised equity funds on the exchange through a public offering. In contrast, the Polish data show rapidly growing equity financing by both new and already listed firms. In 1998, over US $1 billion of new equity funds was raised on the Warsaw exchange.

This evidence is consistent with both the reading of the laws and the qualitative assessments. The regulated Polish stock market has grown faster, has maintained greater liquidity, and has been a better source of capital for firms than the less regulated Czech market.

By 1996 and especially 1997, the Czech stock market had become severely criticized by domestic and foreign investors, as well as the Czech legislature. The initial government response to this criticism was hostile, yet slowly the government introduced a number of measures protecting minority shareholders. Table 13 summarizes some of these measures, which included disclosure of blockholdings, greater regulation (through disclosure and otherwise) of investment funds, some separation of investment and commercial banking, and the creation of a new Securities Commission to regulate financial markets.

VI. Discussion.

The quantitative and the qualitative evidence both point to significant problems in the Czech financial system. Still, we only have one comparison, and our analysis of even this case is subject to alternative interpretations. Here we discuss some of these interpretations.

To begin, our assessment of the Czech situation may be unduly harsh. The performance of the Czech economy during the 1990s has overall been good, and nearly all the international agencies have given the country's transition high marks. Is the stock market such a big deal? Perhaps the Czech firms raised capital elsewhere.

Although we do not have direct evidence that the lack of access to equity finance has severely undermined investment by Czech firms, there is no evidence of effective substitute sources of external finance. The Czech banks have lent predominantly to the largest firms, and have themselves been subject to significant governance problems and tunnelling, as evidenced by their huge non-performing loans. If anything, the banking problems exacerbated rather than cured the lack of equity finance. Similarly, the venture capital industry is much more developed in Poland than in the Czech Republic.

If the growth of industrial production is some indication of real performance of the two countries' corporate sectors, the evidence strongly favors Poland. The index of industrial production in the Czech Republic has fallen from 113.3 in 1991 to 109.7 in 1998. Over the same period, it rose from 73.6 to 127.4 in Poland. Interestingly, much of the growth of industrial production in Poland came from new firms, which often rely on external equity finance. Along similar lines, the available evidence from other countries suggests that stock market development is associated with faster economic growth and better resource allocation (Levine and Zervos

1998, Beck, Levine, Loayza 2000, Wurgler 2000).

A second concern holds that the Czechs may have only followed a different strategy of stock market development: float all the companies you can through privatization, and then see which ones survive market selection. Even if this strategy results in massive delisting of shares and investor losses in many firms, the fittest survive. Such Darwinian arguments were made by the Czech reformers in the early 1990s. Consistent with this more positive assessment, the Czech market still has more listed companies than Poland's, and their aggregate value is still higher as a share of GDP. Is this approach to market development obviously inferior?

We believe that it is. In the 1990s, the Czech market saw not some Darwinian selection of the fittest firms, but rather tunnelling – the theft (both legal and illegal) of assets from both good and bad firms. The survival of the firms which have best withstood theft is not an efficient mechanism of economic selection. In fact, the most efficient firms might be the most attractive targets for tunnelling, making them the least rather than the most likely to survive. Such tunnelling is not what was expected either by the Czech reformers or the investors in the Czech firms. Moreover, the cost of tunnelling has been the inability of both new and existing firms to raise equity capital, which is perhaps the market's main function. It is hard to consider this outcome a success even if the government had expected Darwinian selection.

Even if one agrees that the Czech stock market has not functioned admirably, one can still object to our inference that the lack of regulation is to blame. There are many other potential culprits. The Czech economy has in fact grown slower than the Polish economy, which may account for some of the delistings and a lack of equity issues. As importantly, the Czech government used the stock market primarily as a way to list privatized firms, many of which were expected to fail. The poor performance of the market may be a consequence of the errors in the privatization program rather than of the lack of regulation. One such error might be the creation of Investment Privatization Funds, which were instrumental to much of the tunnelling. With all these other problems, why blame the lack of regulation?

The lack of growth argument is unpersuasive. After an initial decline in the early 1990s, the Czech economy in fact grew in mid 1990s, although not as fast as the Polish economy. The privatized firms needed capital. The demand for funds was not lacking, but the stock market was not used to meet this demand.

Blaming privatization for the lack of stock market development is also peculiar. If anything, privatization jump started the Czech stock market and, had tunnelling been controlled, this market might have been more vibrant. Privatization in the Czech Republic has generally been successful, with privatized companies outperforming the firms remaining in government hands (Claessens 1997, Claessens and Djankov 1999, Frydman et al. 1999). In this respect, the Czech Republic is similar to other countries in the world, where privatization has been a great success (Megginson et al. 1998). Yet in the Czech Republic, as elsewhere, the privatized firms needed external funds to restructure, and would have presumably used the stock market if the terms were attractive. The lack of any such activity suggests that investors were not willing to fund firms in the existing environment, pointing to the deficiencies in investor protection. More broadly, blaming the poor development of the market on privatization rather than the lack of investor protection contradicts a large body of research from around the world, which shows that poor investor protection -- and not private ownership -- is responsible for the expropriation of investors that undermines markets (La Porta et al. 1997, 1998, 2000). If this evidence bears on the Czech situation, it puts the blame squarely on the lack of legal protection of investors.

Finally, blaming Investment Privatization Funds just points to another failure of securities regulation in the Czech Republic; Poland's tighter regulation of the intermediaries seems to have worked better. This assignment of responsibility is also not quite legitimate since at least some of the tunnelling in the Czech Republic took place without the help of the funds.

Assuming that the regulation of financial markets was indeed inadequate in the Czech Republic, and that this inadequacy had some costs, why hasn't the system adapted in other ways to this regulatory failure? Several such adaptations come to mind. Perhaps private associations of market participants could have been created to enforce good conduct among members. Perhaps the Czech companies could opt into more protective legal regimes, including those abroad, thereby committing themselves to good conduct and accessing external finance. Relatedly, perhaps the Czech companies could individualize their corporate charters and incorporate good standards of conduct into these charters: in principle, a Czech company could agree to adhere to the Polish law in its charter. Finally, why didn't the Czechs reform their judiciary and thereby avoid the need for regulation altogether?

An examination of the Czech record, as well as the experiences of other countries, points to problems with each of these adaptation strategies. First, the Czech investment funds have indeed formed associations, but some of their powerful members were themselves engaged in tunnelling and opposed strong self-regulation. As a consequence, these associations were not a strong force against tunnelling in the mid 1990s. The brokers in the Czech Republic, perhaps for related reasons, were unable to form an effective association. Second, some of the companies from the first wave of the Czech privatization have indeed listed shares in Vienna and Berlin, but none raised capital there. They listed for the convenience of foreign traders, and the listing had no consequences for corporate governance since the underlying corporate and securities law remained Czech. Third, non-standard corporate charters need to be enforced by courts, whose limitations we have already discussed. If rules from Poland are incorporated into a charter of a Czech firm, the Czech courts still need to interpret the Polish statutes, which even the Polish courts have trouble doing. In a world of limited judicial enforcement, customized charters are hardly a solution to the corporate governance problem.

The argument, then, boils down to the possibility of radical improvement of the courts. But in reality, transition economies still have a long way to go before their judiciaries achieve the efficiency levels of those in rich industrialized countries. In the meantime, regulation -- at least in principle -- can serve as a substitute for the enforcement of private contracts. This conclusion is broadly in harmony with Coase's own reasoning, and in particular with his observation that regulation may be in some cases be efficient when transaction costs are not zero.

VII. Conclusion.

Based on our analysis of the "natural experiment" of financial regulation in two countries, we can tentatively draw two conclusions. A narrower conclusion deals with the content of the prudential regulation of securities markets. Recent research argues that one potentially fruitful focus of such regulation is the legal protection of outside investors -- both shareholders and creditors -- from expropriation by security issuers and financial intermediaries. This indeed has been the focus of the Polish financial regulations in terms of their emphasis on disclosure and the oversight of the intermediaries. While far from decisive, this evidence represents yet another independent piece of information that investor protection is an important element of corporate governance, and a potentially fruitful area of its reform.

Our broader conclusion is that the conditions under which the regulations of a particular market are undertaken matter a great deal for what the effect of these regulations is likely to be. Many regulations are undertaken in situations in which market participants have significant opportunities to get around the potential inefficiencies on their own, as Coase (1960) maintained. Still more regulations are shaped by industry incumbents and have the effect of raising their profits rather than social efficiency, as indicated by Stigler (1971). Yet important circumstances arise where contracts do not get around the inefficiencies. In economies with developing judicial systems, private contracting opportunities may be severely limited, and the cost of regulatory enforcement may be lower than that of judicial enforcement. Regulation may then be a more efficient way to protect property rights. Moreover, in some economies, interest groups are not sufficiently organized, and the policy makers have enough independence and interest in public welfare (to get voting support, presumably) that they can pursue prudential regulations. These occasions present the best case for regulatory intervention, particularly in markets -- such as the securities market -- where substantial inefficiencies can obtain. The Polish regulation of securities markets presents one example of such evidently beneficial regulation taking place precisely under the circumstances which Coase would predict.

Perhaps the most interesting question about these episodes is how the Polish regulators could remain powerful, yet fail to become overbearing, corrupt or captured by the industry. Some casual evidence suggests that other regulatory agencies in Poland did not escape these more conventional fates. One possible reason is that the regulatory framework for capital markets in

Poland was established before the industry was developed enough to capture the regulator. Another possible reason is that the Polish democracy included sufficient checks and balances. Of course, we have only seen the first decade of the Polish financial regulation. Its longer run evolution remains to be observed.

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Figure 1
Number of Stocks in IFC Investable Index in Poland and the Czech Republic

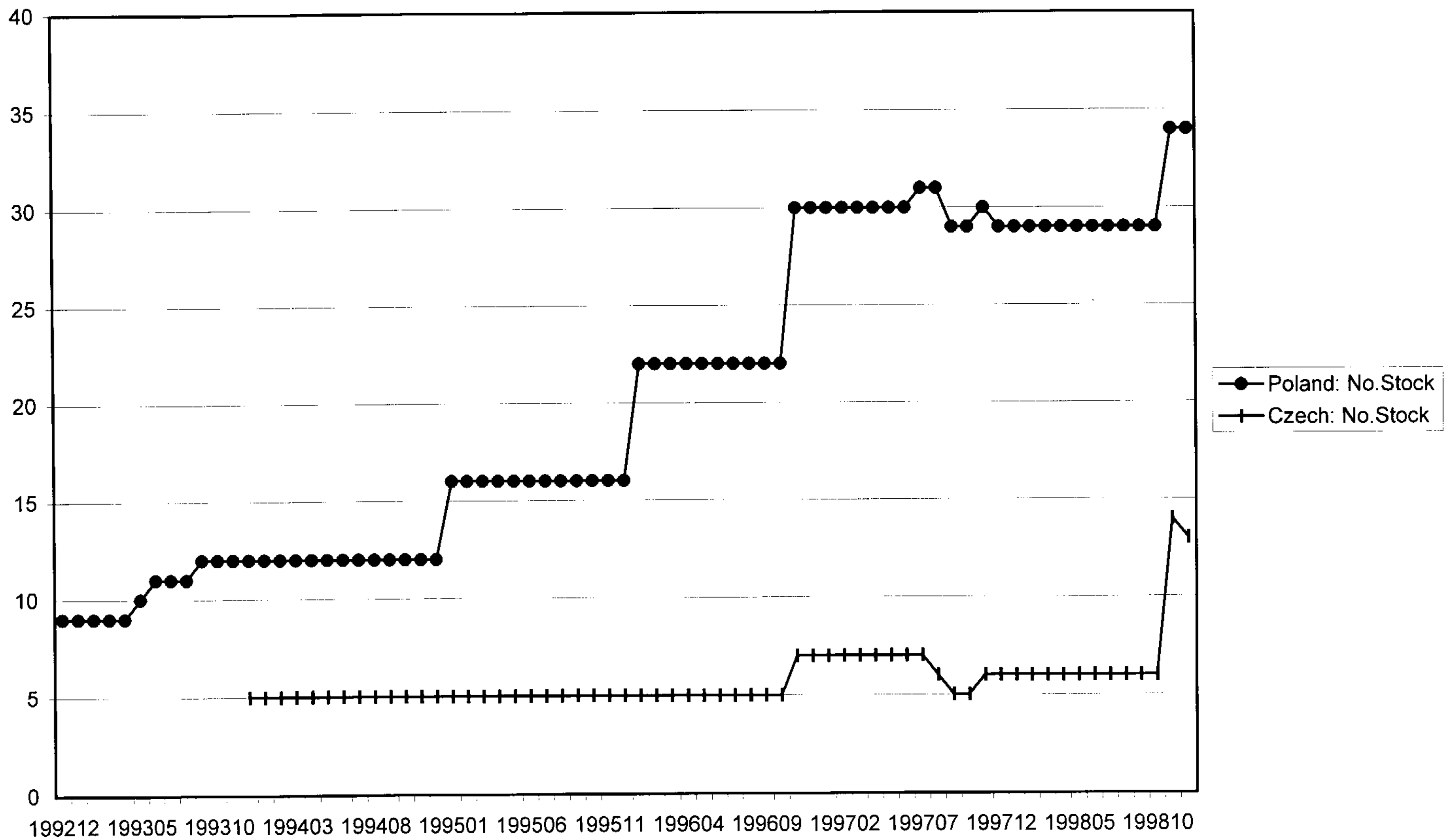

Figure 2
Market Capitalization of Stocks in IFC Investable Index in Poland and the Czech Republic

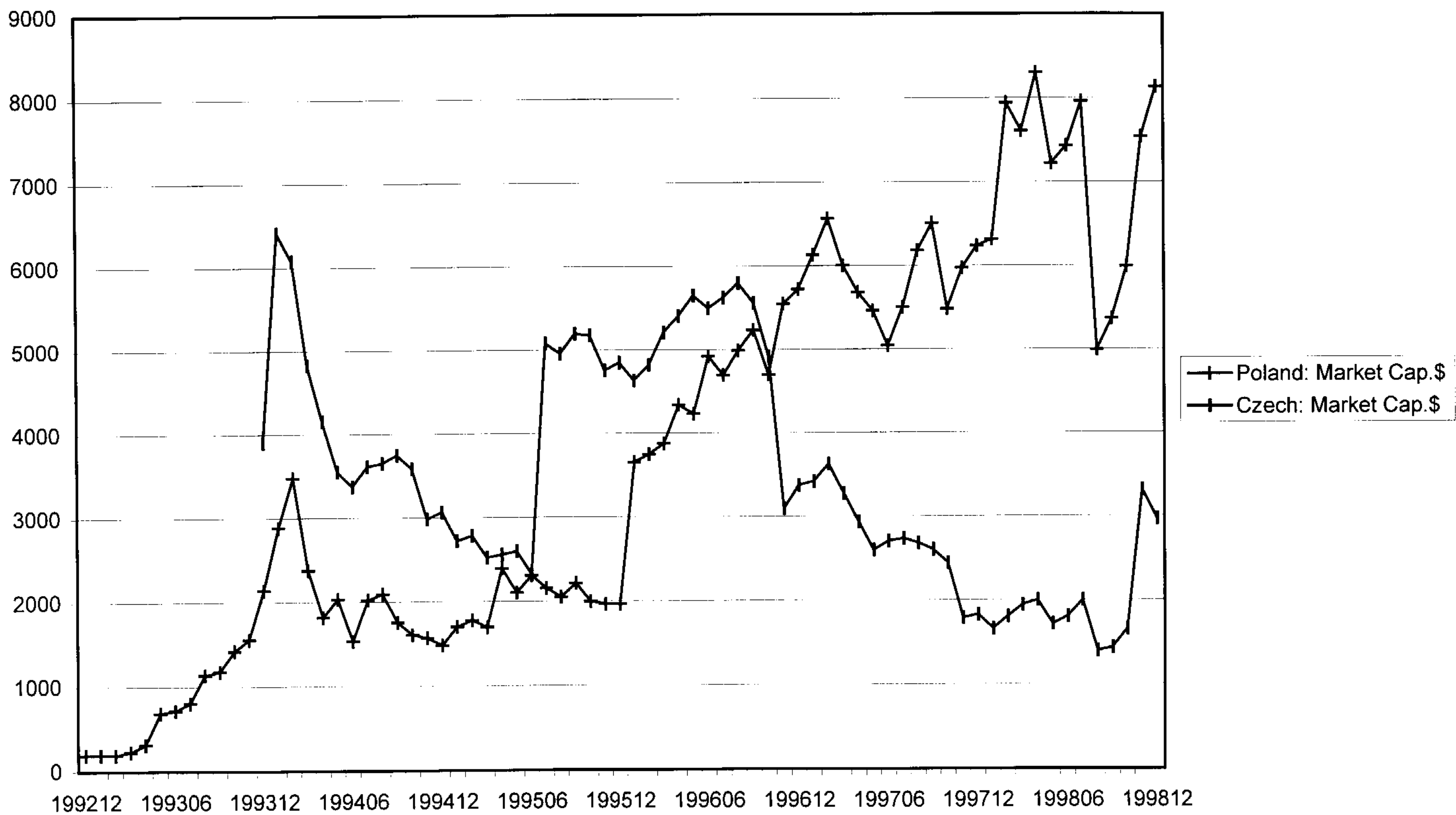

Table 1
Initial Conditions

	Poland	Czech Republic
Population in 1989	38 million	10.3 million (plus 5.3 million in Slovak Republic)
GNP per capita (constant 1995 US$) in 1989	3045	5727
Share of agriculture in GDP, 1989, percent	7.8	6.3
Share of agricultural population in total population, percent	27.7	11.4
Distance of capital from Frankfurt	569 miles	261 miles
Political History	from late eighteenth century: partly in Austro-Hungarian empire, partly in Prussia, partly in Russia	part of Austro-Hungarian empire
Legal Tradition (basis of commercial and civil code)	German and French	German

Source: European Bank for Reconstruction and Development 1995, World Bank's World Development Indicators 1999 (CD-Rom)
Xerox Parc world map and distance calculator

Table 2

The World Bank's assessment of early reforms in the Czech Republic and Poland

	Internal Liberalization		**External Liberalization**		**Privatization**		**World Bank summary index**	
year	Czech	Poland	Czech	Poland	Czech	Poland	Czech	Poland
1989	0	0.2	0	0.2	0	0.3	0	0.24
1990	0	0.7	0	0.9	0.4	0.5	0.16	0.68
1991	0.9	0.7	0.8	0.9	0.7	0.6	0.79	0.72
1992	0.9	0.9	0.9	0.9	0.8	0.7	0.86	0.82
1993	0.9	0.9	0.9	0.9	0.9	0.7	0.9	0.82
1994	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.86
1995	na	na	na	na	na	na	0.93	0.89

0 means no reform; 1 means complete reform
"na" indicates missing data

Source: de Melo et al 1996

Internal Liberalization means the removal of price controls
External Liberalization means removal of restrictions on trade
Privatization means both transfer of ownership to the private sector and removal of restrictions on growth of new firms
The summary index is a weighted average of internal liberalization (0.3), external liberalization (0.3), and privatization (0.4)

Table 3
Comparison of Economic Reform Policies by the EBRD

	Poland	Czech Republic	Poland	Czech Republic	Poland	Czech Republic
	Transition Indicators 1997 EBRD 1997		***Transition Indicators 1996*** EBRD 1996		***Transition Indicators 1995*** EBRD 1995	
Private sector share of GDP	65	75	60	75	60	70
Large-scale privatization	3+	4	3	4	3	4
Small-scale privatization	4+	4+	4*	4*	4*	4*
Governance and restructuring	3	3	3	3	3	3
Price liberalization	3	3	3	3	3	3
Trade and Foreign Exchange System	4+	4+	4*	4*	4*	4*
Competition Policy	3	3	3	3	3	3
Banking Reform and Interest rate Liberalization	3	3	3	3	3	3
Securities Market and Non-bank financial institutions	3+	3	3	3	3	3

Source: European Bank for Reconstruction and Development 1997, 1996, 1995.

Scale is from 1 (no reform) to 4+ (full reform)

Table 4: Legal Environment

Panel A	Poland	Czech Republic	Poland	Czech Republic	Poland	Czech Republic	Poland	Czech Republic
	(higher score means more reform)							
			EBRD Legal Transition Indicators 1997		*EBRD Legal Transition Indicators 1996*		*EBRD Legal Transition Indicators 1995*	
Extensiveness of laws			4	4	4*	4	n.a.	n.a.
Effectiveness of laws			4+	4	3	4*	n.a.	n.a.
Overall			4	4	4	4	4	4
Panel B								
Wall Street Journal	(Higher score means better)							
	WSJ's CEER survey							
	December 1997-January 1998		*December 1996-January 1997*		*December 1995-January 1996*		February 1995	
Rule of Law/Legal Safeguards	9	8.7	9	8.8	9.1	9.1	na	na
Legal Framework							9.8	9.8
Corruption	8.2	7.9	na	na	8.6	8.6	na	na

Source: European Bank for Reconstruction and Development 1997, 1996, 1995
Central European Economic Review, a supplement of the Wall Street Journal Europe (issues indicated in table)

Scale for legal extensiveness and legal effectiveness is from 1 (no reform) to 5 (full reform).
Scale for rule of law/legal safeguards, legal framework, and corruption is from 1 to 10 (the highest/best score)

Table 5
Comparison of LLSV dimensions
Shareholder rights from commercial codes

Panel A

	Poland	Comment	LLSV score	Czech	Comment	LLSV score
Proxy-by-mail	No	Article 405 (proxy in person is allowed)	0	No	Article 185	0
Shares blocked before general meeting of shareholders	Yes	Article 399 (one week ahead of meeting)	0	Yes	(one week ahead of meeting)	0
Oppressed minority mechanism	Yes	Articles 409 and 414	1	Yes	Can protest decision of general assembly	1
Shareholders have preemptive right to new issues	No	Not mentioned in Polish law	0	No	Can be excluded by Articles of Association (Article 204(2))	0
Percent of votes needed to call extraordinary general meeting	10%	Article 394	1	10%	Article 181	1
Cumulative voting	**Yes**	Article 379 a combination of shareholders with at least 20% of the share capital can elect a board member	1	No	Articles 186 and 200 51% of the votes is enough to appoint all the directors. 1/3 of seats go to employees if at least 500 workers (Art.200)	0
"Anti-Director Rights" index, calculated as in LLSV			3			2

Source: Polish Commercial Code; Czech Commercial Code

Panel B

	Poland		Czech Republic	
Further Rights of Shareholders				
"One share-one vote" (for ordinary shares) and no limits on votes per shareholder	No	Art.404: can limit votes of large shareholders	No	can set max votes per shareholder (Article 180)
Supervisory board and management board both elected by shareholders meeting	Yes	Articles 377 and 366	Yes	Articles 194 and 200
Shareholders representing at least one fifth of shares can demand an additional board of auditors	**Yes**	Article 377(3) this board can also be elected by groups, guaranteeing that a combination of shareholders with at least 20% of the votes can have representation	No	Not mentioned in Czech law
Shareholders with 10% of share capital represented at general meeting can check the list of attendance	**Yes**	Article 403	No	Article 185
two thirds majority of general assembly or votes cast needed for large purchases (over 1/5 of share capital) within two years of registration of company	**Yes**	Article 389	No	Not mentioned in Czech law
two thirds majority of general assembly or votes cast needed to change articles of association or objects of company	Yes	Article 409 each share has one vote without preferences or restrictions	Yes	Article 187
Term of board of directors (management board)	3 years	Article 366 and 381	5 years	Article 194
Bearer shares allowed	Yes	Article 345	Yes	Article 155 and 156
Preference shares allowed (possibly without voting rights)	Yes	Article 357	Yes	Article 159
Quorum of votes needed to be present	None	Article 401	30%	Article 185

Definitions (from LLSV 1998)

One share-one vote	Equals one if the company law or commercial code of the country requires that ordinary shares carry one vote per share, and zero otherwise. Equivalently, this variable equals one when the law prohibits the existence of both multiple-voting and nonvoting ordinary shares and does not allow to set a maximum number of votes per shareholder irrespective of the number firms of shares owned, and zero otherwise.
Proxy by mail allowed	Equals one if the company law or commercial code allows shareholders to mail their proxy vote to the firm, and zero otherwise.
Shares not blocked before meeting	Equals one if the company law or commercial code does not allow firms to require that shareholders deposit their shares prior to a general shareholders meeting, thus preventing them from selling those shares for a number of days, and zero otherwise.
Cumulative voting or proportional representation	Equals one if the company law or commercial code allows shareholders to cast all their votes for one candidate standing for election to the board of directors (cumulative voting) or if the company law or commercial code allows a mechanism of proportional representation in the board by which minority interests may name a proportional number of directors to the board, and zero otherwise.
Oppressed minorities mechanism	Equals one if the company law or commercial code grants minority shareholders either a judicial venue to challenge the decisions of management or of the assembly or the right to step out of the company by requiring the company to purchase their shares when they object to certain fundamental changes, such as mergers, asset dispositions, and changes in the articles of incorporation. The variable equals zero otherwise. Minority shareholders are defined as those shareholders who own 10 percent of share capital or less.
Preemptive Rights	Equals one when the company law or commercial code grants shareholders the first opportunity to buy new issues of stock, and this right can be waived only by a shareholders' vote; equals zero otherwise.
Percentage of share capital to call an extraordinary shareholders' meeting	The minimum percentage of ownership of share capital that entitles a shareholder to call for an extraordinary shareholders' meeting; it ranges from 1 to 33 percent.

Table 6 (part 1)

Regulation of Intermediaries

	Poland		Czech Republic	
Individual Brokers				
Licensed by securities market regulator	Yes	Articles 18.2 and 14.1	Yes	Section 49
Must pass exam administered by securities market regulator	Yes	Article 14.1(4)	No	Section 49
Required to engage in "honest trading" and act in the interest of clients	Yes	Article 17.1	No	Section 49
Licence can be suspended or revoked by Securities Comission	Yes	Article 16.2 and 16.3	Yes	Section 49
Brokerage Enterprises				
Licensed by securities market regulator	Yes	Article 18.2	Yes	Section 45
Securities market regulator has right of access and inspection	Yes	Article 26	No	Sections 45-48
Licence can be suspended or revoked by securities market regulator	Yes	Article 25.3	Yes	Section 48(2)
Required to engage in "honest trading" and act in the interest of clients	Yes	Article 25.2(3)	No	Sections 45-48
Must not conduct other business with the same name	Yes	Article 18.6	No	Sections 45-48
Must report who has more than 5 percent of voting rights at general meeting of shareholders	Yes	Article 23.2	No	Sections 45-48
Must report any change of voting rights for one person above 2 percent	Yes	Article 23.3	No	Sections 45-48
Bank engaged in brokerage operations must have organizational and financial separateness of department for public trading in securities	Yes	Article 24	No	Sections 45-48
Must not trade securities issued by parent or subsidiary company	Yes	Article 31	No	Sections 45-48
Investment Advisers (firms engaged in advisory activity in the field of public trading)				
Licensed by securities market regulator	Yes	Article 33	No	Not mentioned in the Czech law
Must pass exam set by securities market regulator	Yes	Article 33.3	No	Not mentioned in the Czech law
Securities market regulator has right of access and inspection	Yes	Article 33	No	Not mentioned in the Czech law
Licence can be suspended or revoked by securities market regulator	Yes	Article 33	No	Not mentioned in the Czech law
Required to engage in "honest trading" and act in the interest of clients	Yes	Article 33	No	Not mentioned in the Czech law
Must not conduct other business with the same name	Yes	Article 33	No	Not mentioned in the Czech law
Must report who has more than 5 percent of voting rights at general meeting of shareholders	Yes	Article 33	No	Not mentioned in the Czech law
Must report any change of voting rights for one person above 2 percent	Yes	Article 33	No	Not mentioned in the Czech law
Bank engaged in investment advisory operations must have organizational and financial separateness of department for public trading in securities	Yes	Article 33	No	Not mentioned in the Czech law
Must not trade securities issued by parent or subsidiary company	Yes	Article 33	No	Not mentioned in the Czech law

Source
Poland: Act of Trading in Securities and Trust Funds, 1991
Czech: Securities Act 1992

Table 6 (part 2)

Regulation of Intermediaries (continued)

	Poland		Czech	
Stock Markets				
Trading must take place on a stock exchange	Yes	Article 54.1	No	Section 50 of the Securities Law
Securities regulator controls stock exchange rules	Yes		No	Not mentioned in Czech law
Securities exchange should ensure a uniform market price	Yes	Article 57(1)	No	Not mentioned in Czech law
Securities exchange should ensure dissemination of uniform information on the value of securities	Yes	Article 57(3)	No	Not mentioned in Czech law
Agreements among any groups to artificially raise or lower the price of securities are prohibited	Yes	Article 64.3	No	Not mentioned in Czech law
Mutual Funds				
Mutual funds may be administered solely by mutual fund companies	Yes	Article 89.2	No	Not mentioned in Czech law
Mutual fund companies are licenced by securities regulator	Yes	Article 89	Yes	Section 8
Mutual fund company can be dissolved by securities regulator	Yes	Article 98	Yes	Section 37
Mutual fund companies must be joint stock companies	Yes	Article 90.1	No	Section 2
Only registered shares are allowed in mutual fund companies (no bearer shares)	Yes	Article 92.2	No	Not mentioned in Czech law
Closed-end Funds are allowed	No	Article 104	Yes	
Founder limited to 10% of share capital	Yes	Article 93(1)	No	Not mentioned in Czech law
Founder not allowed to be on Management Board	Yes	Article 93(1)	No	Not mentioned in Czech law
At least 90 per cent of fund must be held in publicly traded securities or government obligations	Yes	Article 107	No	Section 17
No more than 5% of the funds assets can be in securities issued by one issuer	Yes	Article 108	No (20% limit)	Section 17
Custodian Banks (for Mutual Funds)				
All fund assets must be entrusted to a trustee bank	Yes	Article 112.1	Yes	Section 31
Trustee bank must make sure that sale and retirement of participation units in the fund are consonant with the law and house rules of the fund	Yes	Article 112.2(2)	No	Not mentioned in Czech law
Trustee bank must compute the net worth of the fund's assets	Yes	Article 112.2(3)	No	Not mentioned in Czech law
Trustee bank must not execute instructions that are in conflict with the law or house rules of the fund	Yes	Article 112,2(4)	No	Not mentioned in Czech law
Trustee bank must make sure income of the fund is made public	Yes	Article 112.2(6)	No	Not mentioned in Czech law
Trustee bank may not be a founder of the mutual fund company, or a buyer of its securities, or the administrator of the company	Yes	Article 113.1	No	Not mentioned in Czech law
Mutual fund company may not buy securities issued by the trustee bank or a related company	Yes	Article 113.2	No	Not mentioned in Czech law

Source
Poland:
Act of Trading in Securities and Trust Funds, 1991
Czech:
Investment Companies and Investment Funds Act April 1992
Stock Exchange Act 1992

Table 7

Regulation of Listed Companies

	Poland		Czech Republic	
Regulation of Listed Companies				
Introduction of securities into public trading requires permission of the securities regulator	Yes	Article 49	No	Not mentioned in Czech law
Introduction of securities into public trading requires a prospectus	Yes	Article 50.2	No	Not mentioned in Czech law
False statement in prospectus is forbidden	Yes	Article 118	Yes	Section 79
Monthly reporting of financial information	Yes	Regulation of Securities Commission and Stock Exchange	No	Not mentioned in Czech law
Quarterly reporting of financial information	Yes	Regulation of Securities Commission and Stock Exchange	No	Not mentioned in Czech law
Semi-annual reporting of financial information	Yes	Regulation of Securities Commission and Stock Exchange	No	Not mentioned in Czech law
Annual reporting of financial information	Yes	Regulation of Securities Commission and Stock Exchange	Yes	Section 80
Obligation to publish all material information	Yes	Regulation of Securities Commission and Stock Exchange	No just significant adverse developments	Section 80
Constraints on Purchasers/potential controlling shareholders				
Transparency of ownership requirement	Yes		No	Centre for Securities can change ownership without disclosure
Threshold at which must declare stake (percent)				None
10	Yes	Article 72	No	Not mentioned in Czech law
20	Yes		No	Not mentioned in Czech law
33	Yes		No	Not mentioned in Czech law
50	Yes		No	Not mentioned in Czech law
66	Yes		No	Not mentioned in Czech law
75	Yes		No	Not mentioned in Czech law
Form of disclosure required				
to Securities Commission	Yes		No	Not mentioned in Czech law
to Anti-Monopoly Office	Yes		No	Not mentioned in Czech law
to company	Yes		No	Not mentioned in Czech law
Company must announce who owns more than 10%	Yes	in 2 national Polish newspapers	No	Not mentioned in Czech law

Table 7 (continued)

Threshold at which must make general offer				
Must make offer if intend to pass specified threshold for ownership stake	Yes	*Any person who intends to acquire shares in one company, once or by way of repeated transactions, becoming within 12 months the holder of shares in an amount that guarantees him reaching or surpassing 33 per cent of votes at the general meeting, shall be obliged to do so solely by way of public invitation to subscribe for the sale or the exchange of shares... (Article 73)*	No	Not mentioned in Czech law
Must make offer if actual ownership stake passes specified threshold	Yes	*Any person who has become a holder of shares in one company representing over 50 per cent of the votes at the general meeting, shall be obliged, prior to exercising any powers resulting from the right to vote, to announce an invitation to subscribe for the sale or exchange of the remaining shares in that company. (Article 87)*	No	Not mentioned in Czech law
Tender Offer Rules				
Not allowed to hide behind a related company	Yes	cannot hide behind "dependent subject" (Article 72(2),Article 73(2))	No	Not mentioned in Czech law
Transactions in share on the stock exchange should be suspended	Yes	all transactions in this share on the stock exchange should be suspended	No	Not mentioned in Czech law
time limit for subscribing	Yes	25 days	No	Not mentioned in Czech law
must buy all the shares offered	Yes		No	Not mentioned in Czech law
Specified price for purchase		*...the Commission may forbid the announcing of the invitation if... the price offered in the invitation is lower by 10 per cent than the average market price during 3 months immediately preceding the announcement of the invitation." (Article 74)* *The price offered ... cannot be lower than the highest price paid thereby for the shares in the last 12 months, or where no such price was paid -- the average market price in the last 30 days before the announcement of the invitation. The price shall also be regarded as the value of things or rights intended to be given by the inviting person in exchange for shares*		
Conditions under which can "go private"				
Securities Commission must approve	Yes			Not specified

Sources: Polish and Czech Securities Laws

Table 8
WSJ Evaluation of Corporate Governance Dimensions

	Poland	Czech Republic	Hungary	Russia
Disclosure "How strong are requirements making investors reveal large shareholdings?	4	1	2	1
Transparency "How well do listed share prices reflect actual market activity?"	4	2	3	1
Corporate Results "How good are reporting requirements for corporate earnings?"	4	3	3	1
Protection "How well are small shareholders protected from abuses by majority owners?"	3	2	2	1
Insider trading "How free is the market from insider dealing?"	3	2	2	1

Meaning of Scores
4: Excellent
3: Good
2: Passable
1: Shoddy

Source: Central European Economic Review, March 1996, from "assorted brokerages and fund managers"

Table 9
Stock Market Size in Poland and the Czech Republic

	Market Capitalization		Market Cap./GDP	
	Poland	Czech Republic	Poland	Czech Republic
	US $m, end of year			
1991	144		0.19%	
1992	222		0.26%	
1993	2706		3.15%	
1994	3057	5938	3.30%	14.9%
1995	4564	15664	3.84%	30.8%
1996	8390	18077	6.23%	32.0%
1997	12135	12786	8.95%	24.6%
1998	20461	12045	14.10%	24.2%

Source: International Finance Corporation 1997 and 1999

In mid-June 1999, the Polish market capitalization was $27bn.

Table 10

Panel A Number of issues listed

	Czech Republic *end of year*				Poland *end of year*		
	main	**secondary**	**free**	**total**	**main market**	**parallel market**	**total**
1991					9	0	9
1992					16	0	16
1993	3	0	966	969	22	0	22
1994	34	0	990	1024	44	0	44
1995	62	6	1630	1698	65	0	65
1996	42	51	1535	1628	83	0	83
1997	45	58	217	320	143	0	143
1998	10	94	179	283	198	20	218

Sources:
Polish numbers are from the International Finance Corporation 1998 and 1999 and include National Investment Funds
Czech numbers are from the Prague Stock Exchange webpage.

At the end of 1998, there were only 3 issues on the Prague Stock Exchange that were trading in a liquid market (according to the Prague Stock Exchange)

Panel B

	Stocks in IFC Investable Index	
	Poland	Czech Republic
	End of year	
1991		
1992	9	
1993	12	5
1994	12	5
1995	16	5
1996	30	7
1997	29	6
1998	34	13

Source: International Finance Corporation 1999

Table 11
Initial Public Offerings (for cash)

	Czech Republic **Initial Public Offerings**		Poland **Initial Public Offerings**	
	Issued as part of Privatization	Issued by Private companies	Issued as part of Privatization	Issued by Private companies
1991	0	0	9	-
1992	0	0	5	2
1993	0	0	4	2
1994	0	0	8	14
1995	0	0	6	15
1996	0	0	3	15
1997	0	0	10	36
1998	0	0	5	52
Total	0	0	50	136

Note that the 1996 and 1997 figures for Poland do not include the National Investment Funds that were listed on the Warsaw Stock Exchange.
We are not including any public issues for vouchers (i.e., the Czech privatization process).

Source:
Polish data is from the Warsaw Stock Exchange
Czech data is from Pioneer investment fund.

Table 12
New listings and equity capital raised

	New Equity Capital Raised by Domestic Companies millions of US dollars					
	Czech Republic **Total capital raised through public issues**		Poland **Total capital raised through public issues**		Czech Republic **Total capital raised through public issues**	Poland
	Already listed companies	Newly Admitted Companies	Already listed companies	Newly Admitted Companies	on Prague Stock Exchange	on Warsaw Stock Exchange
1996	0	0	319	67.5	0	386.5
1997	0	0	547.4	438.6	0	986
1998	0	0	818.6	328	0	1146.6

Source: International Federation of Stock Exchanges (FIBV), www.fibv.com

Table 13

Amendments to Securities Legislation

Content of Amendments	Poland	Comment	Czech Republic	Comment
Introduction of thresholds for disclosure of stock holdings in a company	No	Lowered in 1997 law	Yes	in April 1996
Require more information from investment companies	No	High levels of disclosure now required from pension funds	Yes	in April 1996
Make it harder to trade off the exchange	No		Yes	in April 1996
Tighten performance standards for investment fund managers	No		Yes	in 1998
New restriction on maximum shareholdings in one company by investment funds	No		Yes	in 1995
New Securities Commission	No		Yes	started April 1, 1998
Separation of investment and commercial banking	No		Yes	in 1998
Simplify bankruptcy procedures and strengthen creditors	No		Yes	in July 1995, October 1995 and June 1996

Source:
Polish and Czech securities laws.
European Bank for Reconstruction and Development 1997 and 1998.