Management and Employee Buyouts in the Context of Mass Privatization in Romania

by

Calin Valsan

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APPROVED:

G. Rodney Thompson, Chair

Donald M. Chance　　James E. Littlefield

Douglas M. Patterson　　Nicolaus Tideman

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G.Rodney Thompson, Chairman

Department of Finance, Insurance and Business Law

Abstract

The purpose of this research is to present privatization in Romania, and in particular to analyze Management and Employee buyouts as a variety of insider privatization that is unique to Romania.The institutional setting and a short chronology of privatization from 1991 to 1995 is presented. The question of why outsiders consistently pay premiums above book value when acquiring state-owned companies while insiders pay only approximately book value is investigated. Based on the available evidence it is contended that adverse selection prevents uninformed outsiders, foreign companies, and national residents as well, from investing on a large scale in the companies offered for sale. Outsiders are willing to buy the companies only when they have enough information, acquired either from insiders or using their own business skills. It is very likely that outsiders seek investment opportunities rather

than assets already in place, because information on assets already in place is relatively more difficult to obtain. When outside investors are interested in taking over a company, they bid up the price and crowd out capital constrained insiders. In the absence of competition from outsiders, book value is the default price, and workers and managers are the only potential buyers. Workers and managers are granted preferential financing from the government in order to acquire state-owned firms. When interpreted in the broader context of mass privatization, this approach might be preferred by the government because it is populist and relatively expedient. When other methods failed to produce satisfactory results in Romania, Management and Employee Buyouts appeared to be the only method that keeps privatization going.

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CHAPTER I. INTRODUCTION

The privatization of the state-owned sector is an objective necessity in former communist countries. It is the key element in reforming the economy. The superiority of private ownership over state ownership has been proven by the failure of planned economies worldwide. There is no controversy on whether to privatize, only on how and when.

The economic literature is growing richer with papers discussing this issue. Some recommend a rapid and large scale privatization. Others argue for a gradual approach. Some advocate the sell-off of state-owned enterprises in combination with tight budget constraints. Others believe that "taking capitalism to the people" represents the best solution. Obviously there are significant disagreements, not only in the literature, but also in the Parliaments of various countries. Amid these controversies, post-communist Eastern-European governments have chosen eclectic approaches based on the economic, political, and cultural situation specific to each country. After four years of transition it remains unclear whether there is a "right way" to privatize the large stocks of productive capacity. Romania exhibits a distinct pattern of privatization. As in some of its neighboring countries, the Romanian government has chosen to combine cash sales with voucher privatization. Unlike in most countries, Management and Employee Buyouts (MEBOs) have become a common occurrence.

The purpose of this research is to: a) present Management and Employee Buyouts in the context of mass privatization in Romania, and compare and contrast the Romanian privatization program with other programs in Eastern Europe; b) explain why we observe outside investors (especially foreign investors) consistently paying a premium above book value when acquiring state-owned companies, while workers and managers pay approximately book value when taking over their companies.

I.1. On Privatization in Romania

In the summer of 1991, after many debates and controversies, the Romanian Parliament finally passed the first mass privatization law. The law set up the legal and institutional framework for privatizing over 6000 state-owned companies. It called for the creation of 5 Private Ownership Funds (POF), one State Ownership Fund (SOF), and the National Agency for Privatization (NAP). It also called for the issuance of over 15 million vouchers, referred to as Certificates of Ownership (COs), to Romanian citizens aged 18 and older. The holders of these COs would have an opportunity to exchange their certificates for 30% of the stock offered during privatization. This solution was designed to allow the vast majority of the population to become part of the process.

The Romanian privatization program bears several similarities with other privatization programs in Eastern Europe. As in the Czech and Slovak Republics, Poland, and Russia, mutual fund-like financial intermediaries have an important role to play. As in the Czech and

Slovak Republics, and Russia, privatization combines asset sales with giveaway schemes. As in Russia, the face value of the Certificates of Ownership is denominated in currency and the vouchers are freely tradable.

The privatization process in Romania began with an experiment conducted by the government on a sample of 22 companies. The companies were privatized using various approaches, even before the institutions mentioned by the law became operational. During this period the unions and the government started contemplating the alternative of selling state-owned companies to their employees and managers. Inspired by the British experience of the 1980s [Moore (1992), Harbury (1990)], the concept of Management and Employee Buyouts (MEBOs) brought about a new wave of debates and controversies. A few MEBOs took place, and were favorably received by the media as well as by public opinion.

By the beginning of 1993 it became clear that privatization had reached an impasse. Less than 200 state-owned companies had gone private, while the ambitious initial plan called for more than 900 each year. At this pace it would take over 30 years, instead of the desired 7, to sell-off all the companies from the government's list.

It appeared that the elaborate mechanism conceived in 1991 was not only complicated but also flawed. There were too many institutions and their attributions quite often overlapped [Earle and Sapatoru (1992, 1993), Munteanu (1994)]. Some of the people who were supposed to implement the privatization program did not fully understand the complex regulations and did not know their responsibilities. The legislation had many loopholes and allowed for conflicting interpretations. There were rivalries and a lack of cooperation among government agencies and newly established ownership funds. The population became confused and began selling their COs in the unorganized market. "Street investors" concentrated a large volume of COs acquired at deep discount prices, which in the opinion of the government defeated the purpose of issuing the certificates.

The principal way in which privatization progressed was through MEBOs. By 1995, more than 1,300 companies had gone private. Of these, the large majority had been taken over by mangers and employees. Thus, it seems that both the government and an important segment of the population found MEBOs an acceptable solution for achieving privatization. The direction taken by privatization in Romania was somewhat different from what was initially intended, and certainly represents an intriguing case of insider privatization [Earle and Estrin (1995)].

Insider privatization did not occur only in Romania. Poland and Russia [Hashi (1995), Earle and Estrin (1995), Earle, Estrin, and Leschenko (1995)] had similar experiences. However, MEBOs have been extensively used only in Romania, and have become the standard method of privatization. “Privatization through liquidation” in Poland, and voucher auctions in Russia have been the most frequently used methods of insider privatization in those former communist countries. By contrast, the Czech and Slovak Republics, Hungary, and Bulgaria rejected insider privatization on grounds of fairness and economic efficiency.

Management and Employee Buyouts are direct sales of state-owned firms by the State Ownership Fund (representing the government) to the managers and workers employed by these companies. The sales are negotiated and any interested investors can participate in the negotiations. The rules for allocating the companies to competing investors are not very transparent, but it appears that the highest bidder is more likely to prevail. Most frequently, the initiative of selling the companies belongs to the SOF. The POFs, managers, employees, and outside investors can initiate negotiations as well. When competing for their state-owned firms, insiders organize themselves in a legally separate entity (referred to as "Programul Asociatia Salariatilor"-PAS) from the company, which represents their interests during negotiations. When the companies are acquired by insiders, the PAS receives the shares from the SOF and distributes them among its members. If the acquisitions are financed by the SOF (usually at preferential rates of interest), the PAS withholds the shares until the debt is repaid from the firms' profits (the expected repayment period is 5-7 years). The PAS is dissolved after the extinction of all financial obligations of insiders associated with the acquisition.

I.2. On the MEBO Controversy

Opponents of insider privatization in Romania criticize MEBOs on grounds of fairness. They argue that some of the state-owned companies are viable while others are not. Using their inside information, managers and employees buy the good companies and leave the lemons to outsiders. The most often invoked evidence to support this assertion are the prices at which different investors acquire the firms. Insiders buy companies at approximately book value, while outsiders consistently pay a premium above book value. The above argument is flawed because price differences might reflect differences in firms' characteristics.

In the absence of other information, this so-called evidence offers little insight on the "fairness" of MEBOs. However, it is legitimate and interesting to explain why outsiders pay premiums above book value when acquiring Romanian state-owned companies. Addressing this problem will probably not clarify the issue of fairness but might offer some insights into why MEBOs have become so popular.

This dissertation contends that outsiders probably perceive privatization in Romania as a market for lemons. Following the rule of adverse selection, outside investors are not willing to buy companies at any price, unless they have some information about them. Information about the value of assets in place is difficult to obtain. Insiders have this information, but it is relatively difficult to convey to outsiders. However, information on firms' investment opportunities refers to more than the value of assets in place. It pertains to general market conditions (demand for the product, distribution channels etc.), and in particular, to the cost at which firms can finance investment projects [Miller and Modigliani (1961)]. Hence, skilled outside investors are more likely to identify firms having valuable investment opportunities requiring additional investment in real assets, than those having valuable assets in place. In particular, the companies having a history of international business activities are more likely to offer more information about their potential. This is true because their presence in international markets contributes to establishing a business reputation that is a substitute (to a certain extent) to other forms of public scrutiny. Foreign investors (especially foreign corporations) are more likely to be able to identify the companies with valuable investment opportunities because they have easy access to the global market. Also, their cost of capital is relatively low when compared to Romanian investors. For example, a company exporting industrial equipment might be a good candidate to be taken over by a foreign investor. The investor could upgrade and expand the productive capacity of the Romanian firm, introduce its own technology and patterns and export its products taking advantage of the Romanian firm's brand name and its distribution channels. Another good example of a company offering good investment opportunities would be a hotel resort in the mountains of Transylvania. One could modernize the resort, improve the quality of its services, build additional facilities, such as ski slopes and ski lifts, and take advantage of the magnificent location.

In the absence of any information about the value of the companies, the SOF sets the privatization price equal to book value. When outsiders are interested in acquiring stakes in Romanian state-owned companies, they bid up the price as long as the price remains below their reservation price, crowding out capital constrained insiders. Romanian investors in general, and insiders in particular, are capital constrained. This is true because the barely emerging financial market in Romania is not integrated in the global market, and because the hectic post-communist economic environment renders uncertainty extremely high.

When investors seeking investment opportunities compete for state-owned companies, one should see higher privatization prices associated with higher promised investment activity. When investors seeking investment opportunities, i.e. outsiders, prevail, one should see higher stakes of outside ownership associated with higher promised investment activity. Since outside financing is prohibitively high, insiders do not seek investment opportunities. They are willing to acquire their companies to ensure job security, and for the earning power of assets already in place. However, they cannot compete against cash-rich outsiders, and even when there are no other investors with whom to compete, they cannot acquire their companies unless the SOF finances the acquisition at preferential rates of interest.

I.3. Data and Methodology

The sample used in this study consists of 107 companies privatized between 1991-1994. The source of information is the State Ownership Fund, the National Agency for Privatization, the Romanian Development Agency, and several private consulting companies. The specific information that is available for each of these companies is the book value at privatization, overall transaction price (price per share times the number of outstanding shares), gross sales in the year prior to privatization, the relative weight of international trade in gross sales in the year prior to privatization, number of personnel, the combined percentage of managers' and employees' stake in the company, planned future capital expenditures (as made public by the firm's investment plan immediately after privatization), and net profit in the year prior to privatization. The data are limited, but is the most comprehensive information available to date.

It is argued that state-owned companies that are more internationally oriented are more likely to be taken over by outsiders. This is because they offer more information on their business opportunities. According to this hypothesis one should expect to find a negative relationship between inside ownership and relative weight of international trade in gross sales. It is contended that when investors compete for state-owned companies in order to take advantage of their investment opportunities, higher price premiums above book value should be associated with higher promised investment activity subsequent to privatization. According to this assertion one should expect a positive relationship between price deviation from book value and planned capital expenditures (which is a proxy for promised investment activity subsequent to privatization). It is hypothesized that when outside investors seeking growth opportunities prevail in the bidding competition, this higher outside ownership should be associated with higher promised investment activity subsequent to privatization. That is, one should expect a negative correlation between planned capital expenditures and inside ownership.

In general, the results are consistent with the hypothesises and the theoretical arguments presented above. Insiders appear to be the residual buyers of state-owned companies. The willingness of the government to subsidize MEBOs reflects the political choice of keeping privatization going at any price. The balance of this dissertation is organized in four chapters. Chapter two overviews mass privatization programs in other Eastern European countries. Chapter three presents the institutional framework, a brief history of mass privatization in Romania, and describes MEBOs in more detail. Chapter four presents the most controversial aspects of MEBOs, the hypotheses discussed earlier and the empirical evidence. Concluding remarks are presented in Chapter five.

CHAPTER II. ON MASS PRIVATIZATION IN EASTERN EUROPE

Privatization is an old remedy to a variety of economic problems. Many times during the last three decades governments from countries worldwide have decided to sell off their state-owned companies in order to improve competition among firms, induce efficient microeconomic restructuring, increase exposure to market discipline, reduce government interference, and raise revenues for their treasuries.

II.1. The Privatization Experience Before 1989

In Western Europe the most widely known privatization programs have taken place in the UK and France [see Jenkinson and Mayer, (1988)]. The British program, carried out under the conservative leadership of Margaret Thatcher, called for the sell off of several large, state-owned enterprises [see Thompson, Wright, and Robbie (1989) and Harbury (1990)]. The privatization of British Telecom, in 1984, raised 7 billion dollars and created 2.25 million new shareholders in the UK alone.

The British experience also brought to the attention of economists the concept of popular capitalism (see John Moore (1992); the concept was first mentioned by Austrian economists in the late 1940s; it influenced the privatization of Volkswagen in West Germany, in the early 1960s). In the context of British privatization, Harbury (1990) contends that popular capitalism was aimed at raising the proportion of the population owning common shares. A related objective aimed at improving labor force motivation was to extend share ownership by employees in the company in which they worked. This idea significantly impacted the conception and design of privatization programs in Eastern Europe and especially in Romania. However, it was also emphasized that achieving popular capitalism, maximizing revenues from sales, and improving economic efficiency might represent conflicting goals.

In France the conservative government of Jacques Chirac came to power in 1986. During a period of less than 2 years of "cohabitation" with the socialist president Francois Mitterand the conservative government was able to privatize over 20 state-owned companies and raise 12 billion dollars in revenues. In Latin America, Mexico, Chile, and Argentina launched ambitious privatization programs that are presently strengthening the private sectors of these economies, making their countries more attractive to foreign investors, and improving their overall economic performances. In Japan the government decided to sell off its Nippon Telephone & Telegraph in 1987. Canada chose to privatize Air Canada and 1988. There are many other countries involved in such privatization efforts.

II.2. On the Concept of Mass Privatization

As ambitious and impressive as privatization programs might have looked before 1989, they are no match for the historic endeavor facing the Eastern European countries after the fall of communism. The reforms that started at the end of the 1980s raised the problem of converting the former communist countries to free market economies. For Eastern European governments it was clear that private ownership had proven superior to state ownership, and that privatization was the key element of economic reform. As pointed out by Boycko, Schleifer, and Vishny (1993) the experience of Western countries (even of Third World countries) is qualitatively different from mass privatization in Eastern Europe. The sheer number of the companies to be sold-off is probably the most striking element that makes mass privatization unique. Privatization programs in France or the UK called for the sell off of 20-30 state-owned companies over a period of several years. By contrast, Romania wants to privatize 6,000 companies, Russia 15,000 companies etc., over comparable periods of time.

The objectives of mass privatization in Eastern Europe are also significantly different from the objectives of other privatization programs. While until 1989 privatization programs were aimed mainly at boosting sluggish or declining economies, the governments of former communist countries desperately needed to rescue economies that were crumbling at a very rapid pace. As noted by Bos (1993) "Qualitatively, privatization in the West is embedded in the market economic system. In post-communist countries, privatization signals the change of system," (p.3).

The methods of achieving mass privatization are also different. Western countries had financial markets and a strong banking infrastructure that allowed sell offs to take place. At the beginning of 1990, even Third World countries had more developed financial markets and banking infrastructure than those of the former communist countries.

Given the above considerations, it is evident that the knowledge and experience accumulated before the fall of communism cannot answer many of the questions raised by mass privatization. Until the 1990s, economic research addressed the problems of relative efficiency of public and private enterprises [Caves and Christensen (1980), Atkinson and Halvorsen (1986), Boardman and Vining (1989)], privatization methods and techniques [Candoy-Seske and Palmer (1988), Vuylsetke (1988)], privatization and industrial competition [Oullet (1989), Slovin, Sushka, and Bendeck (1991), Megginson, Nash, and van Randenborgh (1994), and Eckel, Eckel, and Singal (1993)], and other topics relevant for countries with market economies and financial infrastructure. After 1990, increasingly more studies began recognizing that Eastern European countries face a different situation and mass privatization is a new type of process [Blanchard et. al. (1991), Bolton and Roland (1992), Kikeri, Nellis, and Shirley (1992), Bos (1993), and Boycko, Schleifer, and Vishny (1993)].

II.3. The Eastern European Privatization Experience

At the beginning of the 1990s, the Eastern European governments chose to embark on ambitious programs of mass privatization [for a comprehensive presentation of these programs see Frydman, Rapaczynsky, and Earle (1993)]. An outline of the elements of each privatization program is presented next.

Bulgaria. In 1990, Bulgaria was among the last of the Eastern European countries to abandon communism. The first law on privatization was adopted in 1992. The institution designed to undertake the initiative of privatizing state-owned companies is the Agency for Privatization. The agency is governed by 11 members appointed by the government and the Parliament. The tasks of the Agency for Privatization are to carry out the sell off of state-owned firms and coordinate the overall privatization process. Besides privatizing state-owned companies the government adopted a land reform and a restitution program aimed at returning the assets confiscated by the communist government after World War II to their original owners.

The privatization process was scheduled to start with the sell off of state-owned gas stations and continue with offerings of shares in larger companies. Of 300 gas stations scheduled to be sold in 1991, only 10 were prepared for privatization, and only 4 were actually sold in the 2 years that followed. By 1993, 65 public offerings and 56 auctions raised about 4 million dollars for the government. Employees could buy up to 20% of the stock in their company at discount prices.

A special type of privatization was the so-called "quiet privatization." Under this approach, the assets of state-owned companies were sold or leased to insiders (mostly managers, for a period of 3-5 years). When some of the transactions that took place in 1991 and 1992 were proven to be illegal, the public outcry and the accusations of corruption rendered this method less popular. Overall, to this point in time, the Bulgarian privatization program is not considered to be a success.

Czech and Slovak Republics. Czechoslovakia was one of the wealthiest communist countries. The "Velvet Revolution" that toppled the hardline communist regime in the fall of 1989 opened the way for economic reform. Privatization legislation, enacted in 1991, called for the formation of three Funds of National Ownership, three Ministries of Privatization, and the issuance of 8.5 million vouchers to national citizens. Unlike in Romania, the face value of these vouchers was denominated in points instead of currency. A voucher is a booklet providing a total of 1,000 investment points. The investment points could be bid for shares of stock in any of the state-owned companies to be privatized or in any of the financial intermediaries that emerged after 1990. Every eligible citizen could buy one voucher for 35 dollars (which roughly equaled 1/3 of the average monthly real income in 1991).

Privatization in Czechoslovakia was comprised of "small" and "large" privatization. The government also emphasized the importance of the so-called "reparation privatization" aimed at returning the assets nationalized after World War II to their original owners. Small privatization started in 1991 and its goal was to sell over 120,000 small enterprises (restaurants, retail shops, barber shops etc.). Public auctions and leasing were the methods allowed by law to privatize these firms. Any national citizen could participate in these auctions. There was no limit imposed on the size of the companies to be sold off, however, those firms already on the government's large privatization list were excluded.

Large privatization started in 1991 and its purpose was to sell off the overwhelming majority of medium and large state-owned companies. The first privatization phase included

2,210 large companies (the second phase started in 1993, after the separation of the two republics).

A special role in the Czech and Slovak privatization scheme was played by competing privatization plans. The initiative of privatizing state-owned companies belongs to their managers, government, or outside investors (including foreigners). Anyone interested in acquiring state-owned companies had to present a privatization plan and compete with other interested parties. In the first phase of the privatization program, over 11,000 privatization plans have been submitted to acquire the 2,210 companies from the government list. Insiders, mostly managers, accounted for 28% of the proposals, while outside foreign investors accounted for 40%. Any privatization method was taken into consideration, including direct sales to insiders or outsiders. Unlike in Romania and Poland, however, the government has shown very little interest (and caution) for direct sales, especially to insiders.

The sell off of state-owned firms (excluding those privatized through direct sales) was conducted in five bidding rounds. In the first round, the government arbitrarily set the price of one share in any state-owned firm at 33.3 investment points (one share represented 1,000 crowns of book equity). The holders of vouchers could exchange their investment points for shares either directly or through the financial intermediaries that emerged after 1991.

If the demand for the shares of a company was higher than 125% of the available shares, the state-owned company would not be privatized and its shares would be held to be sold at higher prices in the second round. If demand was between 100-125% of the available shares, the government would fill individual orders first with the remaining shares rationed among institutional investors. If the demand was less than the available shares, the unsold shares would be held to be sold at lower prices in the second round.

The bidding process would continue, forcing investors to compete for state-owned firms, and allowing the government to adjust shares prices as a function of demand, from one round to another. Eventually, in the fifth round, the remaining shares would be sold at the prices needed to clear the market.

Before the start of the privatization process only a few investment funds were in existence. By 1994 over 430 investment funds had obtained 72% of all the investment points (the ten largest funds had concentrated 40% of all investment points). By 1993, over 700 companies had been privatized. The political separation between the Czech Republic and Slovakia, however, resulted in a temporary slowdown of the privatization process. In spite of this, the Czech and Slovak programs are considered by far the most successful mass privatization programs in Eastern Europe.

Hungary. Hungary has the longest experience with economic reforms among the Eastern European countries. Measures aimed at decentralizing its economy were taken starting in 1968. The mass privatization program began in 1990. Its main goal was to reduce the state ownership in the economy under 50% by 1995. Unlike other former communist countries, Hungary has the least populist approach, i.e. rejects the use of voucher privatization, although employees and managers can purchase up to 10% of the shares offered in their companies, at discount prices. However, insider privatization never became a popular method of privatization in Hungary. Several insider privatization transactions that took place after 1989 raised concerns of corruption and fraud, hence the government imposed severe restrictions and regulations on this particular method starting in 1991.

The Hungarian privatization program probably was the most decentralized program in Eastern Europe. The institution in charge of the coordination of the sell offs is the Agency for State Ownership. Although the 12 members of its Board of Directors are appointed and can be revoked by the prime minister, the agency has significant independence from the government. The Agency for State Ownership is responsible for its activities in front of the Parliament, and its decisions cannot be contested by the government.

Like in the other Eastern European countries, corporatization preceded privatization. Unlike in Romania or Czechoslovakia this process began before the demise of the old communist regime. In 1987 a legal loophole was discovered that allowed mangers to divest parts of their state-owned firms and create new incorporated companies using the assets of the state-owned companies. The financial obligations of the original state-owned companies were not transferred to the newly created companies. In addition, in the first three years of activity, these firms benefited from a 50% profit tax reduction.

Very soon, a significant number of newly incorporated companies, owning the assets of the old state-owned firms, came into existence as a result of the above mentioned legal provision. Many old state-owned companies ended up without any employees, excepting the management, and without any real assets, but holding the stock of their spin-offs. After 1990, corporatizations became more extensively regulated and new and simplified procedures were issued by the post-communist government.

Similar to the Czech and Slovak approach, the Hungarian program differentiates between the privatization of small enterprises and the privatization of large industrial companies. The procedure for selling off restaurants, retail shops, garages, cafeterias etc. is usually more expedient and simpler. The method of choice is public auctions in which any Hungarian citizen or foreign investor can participate. In the early 1990s, roughly half of these auctions failed to transfer the ownership of small firms to private hands. This happened mainly because the Agency for State Ownership set minimum opening prices too high, and because privatizing the enterprises did not imply selling the land on which these firms were residing. As a result, the auctions attracted very few investors interested in acquiring them. After 1991, a new privatization procedure gave outside investors more freedom in initiating the process and more flexibility in negotiating the prices.

The privatization of large enterprises was also conducted mainly through public auctions and direct sales. The policy of the Hungarian government was to approach the sell offs on a case-by-case basis. Maximization of revenues from sales was considered to be a more important objective than speed. Outside investors had significant flexibility in taking the initiative of acquiring stakes in the companies offered for sale. Overall, the Hungarian privatization is considered to be slow. By 1993, more than 700 companies had been privatized.

<u>Poland.</u> Poland started economic reform in the 1980s, after the powerful labor union Solidarity gained significant influence in the Polish society. The first post-communist government expressed its intention in adopting a "shock therapy" to radically change the structure of ownership and turn Poland into a traditional capitalistic economy.

The main institution in charge of coordinating privatization in Poland is the Ministry for the Transfer of Ownership (The Ministry of Privatization). State-owned companies are privatized through public offerings, negotiated sales, Management and Employee Buyouts, privatization through liquidation, and investment funds (an approach similar to that used in Czechoslovakia, Russia, and Romania).

The mass privatization program began in the summer of 1991. The most frequently used methods of privatization have been negotiated sales, public offerings, and privatization through liquidation. Privatization through liquidation is a form of insider privatization that became significantly more popular than Management and Employee Buyouts (by 1992 only two companies had been privatized through MEBOs, although it was expected that this method would become extremely popular). The use of the term "liquidation" might be deceiving. One could infer that only bankrupt companies were liquidated, and their assets sold. In reality, this approach has been applied to a variety of state-owned companies, ranging from those with very good financial standing and operating performances to those near bankruptcy.

Privatization through liquidation became popular because it is expedient and involves granting special advantages to insiders. Instead of incorporating the firm, which implies undergoing a relatively complicated bureaucratic procedure, the government liquidates the companies and sells their assets to a successor. The successor is a private company set up by managers and employees. Along with their assets, the liquidated companies pass on to their successors all outstanding financial obligations. A version of privatization through liquidation is when the assets of the state-owned companies are leased instead of being sold to the successor. The lease contract can also specify the right of the lessee to buy the assets being leased at the expiration of the contract.

The initiative of privatization through liquidation belongs to the branch ministry or to insiders, but in each case requires the approval of the Ministry for Privatization (the approval process cannot take longer than 12 days). When the branch ministry is the initiator of the process, the consent of workers and managers is also needed. The terms of payments are negotiated between government and insiders. Usually the National Bank of Poland gives loans to managers and employees at preferential fixed rates of interest. The loans are repayable from future profits of the companies. Failure to meet the scheduled payments can entail bankruptcy, with all the consequences associated therewith.

Although privatization through investment funds, public offerings, and direct sales accounted for a significant number of privatized companies, privatization through liquidation has been the most popular method by far. This approach was responsible for the privatization of over 600 companies by the end of 1992.

Russia. The Russian mass privatization program started after the collapse of the Soviet Union. It is similar to the Czech approach by calling for the formation of several privatization funds, and by distributing approximately 80% of shares through vouchers (50% to insiders and 30% to outsiders). The Russian government has used public auctions, negotiated sales, assets sales, and leasing contracts to transfer the ownership of state-owned companies into private hands. Essentially, privatization in Russia is a massive giveaway scheme in which insiders have consistently obtained controlling stakes. It seems that regardless of the method of privatization, managers and employees always end up owning large blocks of stock.

Blasi (1994) reports that in a sample of 127 privatized firms, over 90% of the companies had majority employee ownership. The average inside ownership was 65% but only a very limited number of companies had low inside ownership (the sample of 107 Romanian companies presented in chapter 3 bears striking similarities with this survey). Earle and Estrin (1995) claim that "under the circumstances faced by reformers at the beginning of the 1990s, in which managers had accumulated tremendous political influence and enterprises had gained significant autonomy and de facto property rights, it is generally argued that no politically feasible alternative form of privatization was available," (p.63).

Another feature of the Russian mass privatization program is the remarkable speed. According to the Financial Times (June 27, 1994), cited by Earle, Estrin, and Leschenko, (1995) by 1994 Russia's privatization program "sold more than 11,000 state owned enterprises, accounting for around 70% of Russian industry, in exchange for cash and 148 million freely distributed vouchers."

As in the case of Romania, Russian vouchers were denominated in currency (each voucher had a face value of 10,000 rubles) and were freely tradable. The most popular privatization method appeared to be voucher auctions, in which the investors simply tender their vouchers in exchange for shares in the companies offered for sale. The ratios at which vouchers were exchanged for shares were dictated by supply and demand. If 100,000 shares were auctioned by a state-owned company, and 20,000 vouchers were tendered, each voucher would buy five shares of stock.

By 1993, over 4,000 auctions had been held. Unlike in the Czech and Slovak Republics, the auctions were decentralized. Earle and Estrin (1995) and Boycko, Schleifer, and Vishny (1993) argue that in Russia managers had significantly more political and economic influence than in other former communist countries. Hence, the design of voucher auctions had to concede some privileges to managers. In a very centralized auction scheme, managers' interests are more likely to clash with those of a central authority. A more decentralized approach gives managers a greater flexibility in using their influence and power. It appeared that, although fairness was and is a big concern among Russian citizens, the political constraints dictated the methods of choice.

As pointed out at the beginning of this chapter, all privatization programs highlighted above have several things in common. In every Eastern European country privatization calls for the transfer of state ownership into private hands on a massive scale. From an historical perspective, the period for achieving this transfer is very short. All countries have set up similar types of financial institutions designed to facilitate various financial transactions. Their role is less prominent in countries such as Bulgaria, and more prominent in countries such as the Czech Republic. The majority of privatization programs combine giveaway schemes with more traditional privatization methods to various extents. At one end of the range, Hungary is very reluctant to give away shares and prefers auctions and public offerings as the standard privatization approach. At the other end of the range, Russia has set a massive voucher scheme responsible for the privatization of the large majority of state-owned companies (several former communist countries have not been included in this brief survey; there is very little data available on the former Soviet Republics, Albania, and Mongolia). The next chapter presents mass privatization in Romania.

CHAPTER III. MASS PRIVATIZATION IN ROMANIA.

III.1. The Legal and Institutional Setting of Mass Privatization in Romania

The privatization process in Romania is regulated by Law 58, enacted by the Romanian Parliament in the summer of 1991. According to that law, the privatization process should:

- create profitable companies, and ultimately increase shareholder's wealth;
- raise funds for restructuring and rehabilitating commercial companies;
- set an example of commercial and entrepreneurial management practice to be followed by other companies;
- provide the foundation for an efficient capital market; and
- educate the Romanian public as to the operations of capital markets in a market economy.

The law sets out that privatization is to be achieved through the following methods:

- sales of shares at a predetermined price to any domestic or foreign person or company (public offerings);
- sales of shares to the highest bidder to any domestic or foreign person or company;

- private sales of shares on the basis of agreed upon terms and price to any domestic or foreign person or company; and
- sales of assets to the highest bidder to any domestic or foreign person or company.

Each time shares and/or assets are sold through public offerings, auctions, or negotiations, the employees and the management have the right, during a limited period of time, to purchase shares at a discount of 10% of the public offering price, or the highest bid. The law calls for the issuance of over 16 million Certificates of Ownership (COs) to be distributed to Romanian citizens aged 18 and older for no cost. In fact, the COs are vouchers with a face value denominated in Romanian currency (in other Eastern European countries, such as the Czech and Slovak Republics the vouchers are sold instead of being given away; also, their face value is denominated in investment points and not in currency).

The holders of the COs can exchange their certificates for shares to be issued by over 6,000 small, medium, and large state-owned companies that the government plans to privatize over a period of seven years. After the seven year period the remaining Certificates of Ownership automatically become shares in one of five private, mutual fund-like, financial intermediaries created by the government at the inception of the privatization process.

Besides the above mentioned five Private Ownership Funds, the law also calls for the creation of the National Agency for Privatization, and the State Ownership Fund. The National Agency for Privatization (NAP) is the government agency that coordinates, controls, and oversees the entire privatization process. It is responsible for the privatization of the state-owned sector as well for encouraging the creation and development of small and medium companies, sales of assets, leasing etc. The National Agency for Privatization is directly under the administration of the government. The president of the NAP is appointed by the Prime Minister and is a member of the cabinet. The NAP has the following tasks:

- to support companies in the process of being privatized with technical assistance provided by own means or by domestic/foreign consulting firms;
- to assist the creation/privatization of small enterprises;
- to coordinate and control the distribution of Certificates of Ownership;
- to formulate the statute and the organizational structure of the five Private Ownership Funds;
- to formulate the statute and the organizational structure of the State Ownership Fund; and
- to conduct feasibility studies, to provide consulting and brokerage.

The State Ownership Fund (SOF) is a semi-public institution responsible for privatizing the shares of the state-owned companies under its administration. Initially, the State Ownership Fund held 70% of the capital of over 6,000 small, medium, and large state-owned companies. The SOF has the following tasks:

- to privatize the entire stock of capital under its administration over a seven-year period;

- to liquidate and restructure the large state-owned companies under its administration;
- to collaborate with the Private Ownership Funds in accelerating the privatization process; and
- to act as a shareholder.

The governing body of the State Ownership Fund is the Council of Administration. The Council is comprised of sixteen directors and a State Secretary for Privatization who is a member of the Romanian cabinet. Of the sixteen directors of the Council of Administration, the President of Romania appoints five members, the permanent Bureau of the Senate appoints three members, the permanent Bureau of the National Assembly appoints three members, and the Prime Minister of Romania appoints five members.

The State Ownership Fund is a "self-financing" institution. Its activities are financed from the sale of shares. Although its budget is completely separate from the state budget, the law acknowledges that after the State Ownership Fund ceases its activity any remaining obligations are assumed by the state budget. The State Ownership Fund does not pay taxes and is not supposed to make any payments to the state budget. The SOF is allowed to make loans to employees and managers buying real assets or securities in the companies offered for sale (this provision has played a crucial role in the shaping of subsequent events and rise of Management and Employee Buyouts).

The Private Ownership Funds (POFs) are mutual fund-like financial intermediaries. Initially, the combined holdings of the five Private Ownership Funds amounted to 30% of the capital of the above mentioned 6,000 state-owned companies. The Certificates of Ownership were claims on this portfolio and could be exchanged for shares in any of the companies offered for sale. After seven years, the remaining COs will automatically become shares in the Private Ownership Funds. The holders of COs are technically the owners of these financial intermediaries.

The Council of Administration of the POFs is comprised of seven members. Initially, the members are appointed by the government and approved by the Senate and the National Assembly. There are no shareholders meetings in the first five years of operation. However, the holders of Certificates of Ownership have the power to remove members from the Council of Administration if the motion has the support of a certain minimum number of holders. The Private Ownership Funds have the Following tasks:

- to maximize the value of the Certificates of Ownership through portfolio management;
- to provide brokerage services for the exchange of Certificates of Ownership for common stock in the state-owned companies offered for sale;
- to contribute to the acceleration of the mass privatization process; and
- to periodically estimate the "market value" of the Certificates of Ownership.

The allocation of state-owned companies to the Private Ownership Funds was an administrative decision, based on geographical considerations. The five funds are similar in size and operate one in each major geographical region of Romania (in contrast to this approach, in the Czech and Slovak Republics the financial intermediaries compete along with individual investors for the shares of the companies that are privatized; in Poland the allocation process is random). Companies that are judged by the government to be in a difficult financial situation are allocated as evenly as possible across the five funds. The same thing happens with companies that are believed to be of critical importance to the Romanian economy (however, there are state-owned companies like military contractors, utilities etc. that most probably will never be privatized; these companies do not appear on the government's privatization list).

III.2. The Beginning of Mass Privatization in Romania (1992-1993)

The launch of the privatization program was preceded by the incorporation of the state-owned companies in the summer of 1990. Over 2,000 state-owned companies were split into over 6,000 smaller units and incorporated (besides these 6,000 companies an indefinite number of companies did not undergo the incorporation process and remained under state control without any perspective for privatization). The incorporated companies were included on the privatization list of the government. Tables 1 and 2 present the size distribution of the state-owned companies to be privatized, before and after incorporation. The overall result of this restructuring was to decrease the overall size of the state-owned companies (as measured by the number of personnel) with the declared intention to make them more attractive for potential buyers.

Large-scale privatization started at the end of 1992. The government first chose to conduct an experiment on 22 state-owned companies in order to assess how the complex privatization mechanism functioned. According to the National Agency for Privatization the results were "encouraging." Unexpectedly however, 15 of the 22 companies were entirely, and another four were partially, bought by managers and employees.

By the end of 1993 it was clear that the privatization process had reached a dead end. Less than 250 companies were in the process of being privatized while the ambitious initial plan called for more than 900 each year. At this pace it would take over 30 years to sell off all the companies from the government's list.

III.3. The Stalemate of Mass Privatization (1993-1994)

The failure of the mass privatization program to function as intended generated debates and controversies among Western and Romanian economists. Observers of the privatization process contended that the deficiencies were due to either too much or too little involvement of the government in the privatization process. Everyone agreed, however that the poor design of the institutions and regulations played a decisive role.

Murrell and Wang (1993) recognize that state ownership of medium and large scale enterprises is prolonged and privatization slow in all Eastern European countries, not only in Romania. It is considered that this slow pace can be viewed as a natural response to the poor resource and institutional conditions that a transitional economy inherits from a communist economy. Schenk (1992) suggests that a faltering reform process is the expression of the resistance to change, which is a property of any economic system.

Earle and Sapatoru (1992) contend that "an examination of East European privatization experience thus far indicates that the strength and centralization of state power in the transition indeed seems to be greatest in those East European countries adopting the most radical privatization policies. For instances, the centrally planned and initiated programs of Czechoslovakia and Romania can be counterposed to the much more decentralized processes in Hungary and Poland," (p.1). Thus, it appears that centralization might in fact be beneficial for privatization, if there is political determination. By contrast, Munteanu (1994) considers that highly centralized privatization and restructuring processes represent a structural-type new dimension of the pathological gradualism in Romanian economic reform, and that the activist role of the state in privatization and restructuring acted towards subverting or delaying the implementation of effective reforms.

According to Earle and Sapatoru (1993) mass privatization in Romania faces an institutional design deficiency. The authors conclude that financial intermediaries in Romania (POF and SOFs) experience similar types of problems with mass privatization as in other Eastern European countries. The initial organization of the funds is very bureaucratic, exacerbated by the continuing involvement of the state in their governance and operation. Further, it appears that the design of appropriate financial intermediaries has emerged as a key problem in the privatization process in all of Eastern Europe not just in Romania. The study emphasizes the importance of the design of specific incentive contracts for the managers of the intermediaries. It is contended that, while in developed countries executive compensation schemes represent only one side of corporate governance, in transitional Romania executive compensation schemes might have a much greater importance in controlling the behavior of financial intermediaries (since all the other mechanisms, i.e. competition, reputation, monitoring etc. are absent in the case of Eastern European countries).

Governance problems are also aggravated by the poor design of institutions' responsibilities. The tasks that the SOF, POFs, and NAP have to perform are sometimes conflicting and not well defined (their attributions overlap in key issues). For example, it is not clear why the SOF and POFs should be interested in privatizing the state-owned companies if they also have to act as shareholders of the companies to be privatized? Shareholders act in their best interest, which might be conflicting with that of privatizing the state-owned companies (the SOF might wish to adopt a rent-seeking policy, like the communist government did in the past). Also, restructuring is not a task shareholders carry out because of government regulations, but because they choose to do so, when they believe it is appropriate.

Earle and Sapatoru (1992) note that "all of the SOF tasks are framed as commands to be executed. This is natural if the SOF is conceived as a state institution, but, according to the Privatization Law it is supposed to operate according to commercial principles. This seems to confuse the SOF's proper role: is it state or is it private? Revenue maximization is not supposed to be an important objective in privatization sales, but the SOF is nevertheless supposed to be self-financing and commercial," (p.11).

Since 1991, many economists and politicians have formulated countless opinions criticizing the institutional design and the excesive centralization of privatization in Romania. The most illustrative samples of criticism have been presented above. Obviously, there are many other aspects that deserve to be addressed.

III.4. The Case of Certificates of Ownership

An important source of controversy is the Certificates of Ownership. COs have a nominal value, the POFs periodically announce their "market value," and in the open market they trade at yet another. The so-called "market value" of COs estimated by the POFs on a periodic basis has nothing to do the real market value of the asset. These evaluations are in fact merely revising the face value of the COs and are intended for the "guidance" of investors (they do not represent mandatory prices as often interpreted by some people).

When COs were initially issued, their nominal value was determined by dividing the combined book value of all the state-owned companies to be privatized by the total number of certificates to be issued. However, Romania experienced high rates of inflation after 1990. The government felt the need to periodically adjust the book value of the state-owned companies to reflect the evolution of the rate of inflation. The revisions in the value of COs follow the revisions in the book value of state-owned firms, therefore the use of the term "market value" is unfortunate. The confusion of Romanian citizens is somewhat legitimate.

Imagine what would happen if the Wall Street Journal quoted the price of Microsoft stock at, let us assume, 50 dollars, but when investors contacted a broker with the intention of selling the stock, they only received 10 dollars. If this were to happen systematically, rational investors would quickly learn to disregard the information published in the Wall Street Journal. However, at the beginning one might suspect the broker of fraud or abuse, but in the future it is very likely that any other information published in the same forum would be considered (by association) unreliable and discarded at once (even if in reality it were accurate).

In the case of Romania, the improper use of terminology could not mislead rational investors for too long, but it did create a climate of disbelief and suspicion. In the long run, investors learned to distrust the very institutions that are supposed to be the pillars of the mass privatization process. Eventually, all this added to the uncertainty and already high confusion, rendering the valuation process of the assets to be privatized even more difficult.

Another issue that raised concerns and fueled the uncertainty about the privatization process was the question of "what if a few investors end up concentrating large holdings of COs?" The COs are freely tradable (foreigners cannot theoretically use the certificates to acquire shares in the state-owned companies to be privatized), yet, the government is concerned that excessive concentrations of COs by a small number of investors would defeat the populist spirit of the reform.

After the COs were initially issued, many citizens rushed to sell them for cash. For about two years the COs were selling in the unorganized market (literally on the street; later, several banks started quoting and trading COs as well) at a price equal to 10-15% of their face value. Everyone was selling and very few were buying. By 1994, when privatization seemed to accelerate, and Management and Employees Buyouts became the standard method of privatization, the price of the COs started to go up. The media publicized several cases in which an extremely large number of certificates were held by a small number of individuals. These individuals were immediately labeled as "speculants," and the public outcry against corruption and profiteers of the old regime erupted.

In an uninspired move to divert any possible destabilizing speculations, the government decided to issue a regulation setting the price at which a CO could be traded for stock at a given maximum level (previously, COs were freely exchanged for stock at ratios dictated by the market price of the COs; for example if a certain stock was offered at 1,000 lei/share and a CO was selling at 20,000 lei, one could buy 20 shares of stock with it). In addition to this, a new generation of COs was issued to compensate those who had sold their old COs at very low prices.

The investors concentrating large holdings of old COs were seriously disadvantaged by this regulation. Over time the "street value" of their investment had more than quadrupled (according to some unofficial estimation). After setting limits on the price at which COs could be exchanged for stock, the value of these holdings plummeted sharply. The government contends that even after the drop in value, the value of the COs continues to be significantly above the value at which they were initially purchased (this claim is probably true but it does not acknowledge the fact that while nominal returns are positive, it is very likely that real returns are negative. Yearly nominal returns of 50%-60% are deceiving when the yearly rate of inflation is 60-70%).

The government's decision to impose price ceilings on the initial COs, and issue a new series of COs gave a serious blow to the barely crystallizing credibility of the privatization institutional setting. Although it is too early to estimate the long lasting impact of these measures, it is very likely that they created confusion and raised the uncertainty with respect to how often the government is willing to change the rules of the game according to political considerations.

III.5. Management and Employee Buyouts as the Standard Method of Privatization

The lessons of the pilot program showed that MEBOs are a relatively convenient and expedient method of privatization. By 1993, the government issued new regulations consecrating MEBOs as the standard method of privatization in Romania. The State Ownership Fund became an active promoter of this approach and the speed of the privatization process increased significantly over the next two years. By 1995, over 1,300 state-owned companies had been privatized. Over 80% of them were taken over by managers and employees.

MEBOs are the result of direct sales of state-owned companies by the government. The initiative of privatizing the companies usually belongs to the State Ownership Fund. The Private Ownership Funds, employees and managers, and even outside investors can also have the initiative of triggering the process (the "Shareholder Agreement" signed by the SOF and POFs in 1993 gives to the POFs more responsibilities and more flexibility in initiating the privatization procedure). Once privatization has started, negotiations between the interested parties begin. An outside consulting firm agreed to by the government elaborates a tentative evaluation of the firms' value (the fees for the consulting company are usually paid by the companies to be privatized). Each interested party presents a privatization plan outlining their own post-privatization restructuring policies. When the companies are sold, the new owners have the obligation to disclose the planned capital expenditure to be made over the next 3-5 years (this is a somewhat approximate measure of the promised investment activity).

Although this type of negotiations involves more than one party interested in acquiring the state-owned companies, there are a few characteristics that differentiate them from auctions. Auctions are more transparent and the rules of allocating the companies to the highest bidder are made public in advance, and hence known by everyone. Since auctions are publicized in advance, potential outside investors arrive simultaneously. Negotiations are not transparent and they are not publicized in advance. Outside investors arrive sequentially, therefore the gains to the seller derived from the competition taking place among potential buyers are greatly diminished. Many outsiders are not even aware of negotiations taking place unless they are invited by either the government or insiders (this lack of transparency generates intense controversies; as it will be shown later, critics of MEBOs argue that this privatization approach favors insiders to the detriment of outsiders).

One particular characteristic of Management and Employee Buyouts in Romania is that insiders are initially organized in a trust-like legal entity called "Programul Ascociatia Salariatilor" (PAS, i.e. the Program for Shareholder-Employee). PAS is an employee run, non-profit organization, separate and independent from the newly privatized state-owned companies (current and former employees have the same status and the same rights within the PAS). The main attribution of these PAS is to negotiate the acquisition of the firms, to determine the principles of share distribution among employees and managers, and to participate in the governance of the companies.

The law gives these PAS significant freedom in establishing how to allocate the property rights within the firms. This flexibility has produced quite a variety of arrangements among the privatized companies. Little data is available on how shares have been distributed among workers and managers. Earle and Estrin (1995) cite a survey of 58 companies for which comprehensive information is available. It appears that 96% of the shares are employee owned, but the ownership distribution among employees shows significant variance. There are cases in which workers concentrate the majority of the shares, while in other cases managers have a clear majority. There are also cases in which the shares are approximately evenly distributed among managers and workers. The principles of share distribution are usually determined by the amounts of cash and/or Certificates of Ownership invested by each individual, level of salary, and position.

Regardless of how the shares have been distributed among employees, decisions within the PAS are taken based on the one member-one vote principle. This institutional particularity makes insider blockholding less important as long as the PAS remains in existence. As noted by Earle and Estrin (1995) "the configuration of ownership rights typically put MEBO firms somewhere in the space between traditional producer cooperatives, majority ESOP firms and open joint stock companies, with some of the characteristics of each," (p.43).

When becoming members of a PAS, workers and managers pay with COs or cash. The remaining amount needed to finance the transaction is borrowed by the PAS from the State Ownership Fund. The debt is repaid over an expected period of 5-7 years (usually at preferential interest rates). The PAS remains in existence until the debt is repaid in full. The preferential interest rates might be an incentive, however, to unnecessarily prolong the existence of the PAS. In some cases, the shares purchased from the SOF are held by the PAS until the debt has been completely repaid, while in other cases the shares are gradually distributed to workers and managers.

The shares are not freely tradable while they are held by the PAS. Once the debt is repaid, workers and managers can dispose of the shares at their free will. It follows that outsiders cannot acquire stakes in the newly privatized insider-owned companies until all financial obligations towards the SOF are extinguished (in the case of insider privatization in

Poland, there is no employee association interposed between the owners of the companies and the state treasury; the shares are freely tradable immediately after privatization). Many economists have openly criticized this restriction imposed on the tradability of the shares. It has been argued that it hinders the development of financial markets in Romania and the process of restructuring the privatized companies. Earle and Estrin (1995) point out that "it seems unfortunate that the state regulation of this privatization process has tended to encourage collective ownership and non-tradability of shares, thereby diminishing the flexibility of decision-making and the possibilities for further evolution of the ownership structure," (p.46).

III.6. On the Economics of Transition in Romania

There are several facts that are important in understanding the economics of transition in Romania. These facts are not entirely specific to the Romanian environment.

The post-communist Romanian society is polarized between the government bureaucracy and labor unions. Romania had one of the most centralized economies in Eastern Europe. As a result, those involved in the transition period must deal with a very entrenched, powerful, and self-sustainable bureaucratic system. The bureaucratic establishment represents one of the two most influential interest group. The other influential interest group is the labor unions. The fall of the old regime was tumultuous and violent. The upheaval of the population, mainly of the industrial workers, played a central role in the shaping of events. Therefore the workers have become aware of their economic and political bargaining power. Up to a certain point government bureaucrats and workers share common interests. They each rely on the other. Workers provide political support for the government. Their demand for state jobs and heavy regulation give legitimacy to the rent-seeking policy of the bureaucracy. Workers seek job security and welcome only populist reforms. They are afraid that a government bureaucracy not so entrenched might use radical measures to restructure the economy. There should be no surprise that, to a large extent, the current privatization solutions reflect the interests of these two social groups. Beyond a certain point, however, economic reform has become a conflict between the government bureaucracy and labor unions with disruptive effects for the entire economy. Given the current economic and political instability, there are incentives for both sides to adopt an attitude of confrontation. Countless labor disputes have already ended with the government yielding to unions. On the other hand, bureaucrats make sure that the concessions granted to workers and other state employees are watered down with all sorts of regulations.

Financial markets and intermediaries are almost nonexistent in Romania. There is no infrastructure able to sustain a large-scale, Western-style privatization program. Although the banking system is growing at a rapid pace, it is far from being fully developed. Transactions carry large costs and there is significant potential for fraud and corruption. Moreover, the population, including business professionals, are not fully familiar with the modus operandi of a modern investment banking system. The stock market opened recently in Bucharest, and became fully operational by the end of 1995. Stock market personnel continue to be inexperienced and market regulations remain in the process of conception. In the case of a massive stock sell off program, it is very likely that for the near future, the street will continue to play a major role in the secondary market.

Romania was among the least developed and poorest communist countries and the population remains cash-poor. It is known who is selling the state-owned companies. A looming question is who is buying them. There are several categories of potential investors:

1. The population is the first natural candidate. Privatization in the UK showed that the population can be the most important investor. However, the Romanian population is extremely cash poor. The large majority works for state-owned companies and earns very little. Since the cost of living is high, savings are thin. It is unlikely that there is enough liquidity to absorb the volume of securities the government could throw in the market. As pointed out by Boycko, Schleifer, and Vishny (1993), the state concentrates virtually all assets, whereas the wealth of the population is modest. There is a huge discrepancy between the potential supply for assets and the demand for assets. Bolton and Roland (1993) estimate that in the case of Czechoslovakia the wealth of the population available for the purchase of assets represents between one to ten percent of the book value of all the assets in state hands.

2. Ex-communists and black market profiteers are believed to have obtained sizable amounts of wealth during communism. However, this category of investors is repudiated by the government, the media, and the population. There is a lot of debate on how to prevent the profiteers of the old regime from laundrying their money and gaining economic benefits and influence. Critics say setting up eligibility criteria for buying assets based on personal history is not feasible, given the realities of the transition. Trying to identify who is entitled to participate in privatization would transform the process into a witch hunt, similar to that of the Stalinist period. From an economic point of view it is unlikely that this category of investors can have the capacity to absorb the huge supply of companies. There are legitimate reasons for such an argument. A decision-making position in a communist economy is not the right place to amass a fortune in cash (there are a few exceptions, however). There are benefits from such a position, mainly the privilege of perks consumption. However, this privilege is only an all-that-you-can-eat buffet. One cannot store perks or cash them.

3. Institutional investors are represented by domestic and foreign companies. Given the uncertainty and turmoil within the former communist countries, foreign investors have adopted a very cautious attitude, waiting for more developments. Domestic companies do not yet have the resources to make acquisitions. As privatization progresses it is likely that Romanian and foreign institutional investors might be willing to buy stock offered by the state-owned companies. Trying to explain the reluctance of domestic/foreign investors to participate in the privatization process and the slow pace of mass privatization in Eastern

Europe, Laban and Wolf (1993) present a model based on positive spillover between aggregate privatization and the investors' return to privatization. The model is derived from a potential populist backlash if reforms do not produce sufficient aggregate privatization. The model allows for the simultaneous existence of a pessimistic zero-privatization trap and an optimistic full privatization equilibrium defined in terms of a critical mass of expected privatization. The authors argue that the value of an individual industrial enterprise offered for sale in the former communist economies depends positively on the overall success of the privatization program. In other words, a critical mass, or a sufficiently large aggregate volume of privatization may be required to make the acquisition of enterprises attractive to investors.

III.7. Political Reality vs. Financial Theory

The government's preference for a giveaway scheme (through Certificates of Ownership) is one of the elements that adds to the complexity of the process. As mentioned earlier, COs are vouchers issued by the government and distributed for free to all Romanian citizens aged 18 or older. During privatization COs can be exchanged for stock issued by the state-owned companies. However, COs can buy only some fraction of the stock (initially this fraction was 30% and was increased recently to 60%). Part of the stock held by the government is in this way given away and the rest is sold. This solution reflects a pragmatic approach chosen by the government in order to reconciliate two opposite views of how to achieve fairness and efficiency.

The Pro Large-Scale Giveaway Scheme View. In the opinion of some economists, privatization should allow every citizen to become part of the process. Thus, it would be fair if the stock of the companies to be privatized were given away. There are several arguments in support of this view. First, it is argued that all Romanian citizens contributed over the years more or less equally to the development of the state-owned sector and therefore their share of capital is already purchased. Secondly, nothing would be left to invest in the restructuring of the newly-privatized companies if the population had to spend their slim cash holdings in order to get stock. Third, a massive giveaway scheme is the only feasible solution, given the political and economic realities of the transition. It has been argued that without perfect capital markets, the only realistic choice remains to give away the assets. Boycko, Shleifer, and Vishny (1993) make the point that this is clearly a political choice that does not necessarily lead to sacrificing economic efficiency. Giveaway schemes have the merit of solving the problems of firm valuations and of the lack of purchasing power. Moreover, they appear to guarantee the irreversibility of the reform process [Bos (1993)].

Supporters of giveaway schemes argue that selling the assets through traditional methods only is simply not feasible. Letting the "market" decide how to allocate resources works only in a certain type of economic environment. There are condition that must be met. There has to be a minimum of financial infrastructure, broad access to information, and market rules and regulations must be in place and enforceable. Romania is lacking in each of the above. Moreover, as pointed out earlier, the large majority of the population is cash-poor and cannot afford to purchase stock. From a political perspective, there are significant risks to be incurred. Selling stock through a public offering at a high price can result in undersubscription and may lead to failure to privatize. This, in turn, can shatter even further the already shaky confidence the public has in the way the government handles reform, and increase uncertainty. Selling stock through a public offering at a low price might create the impression of companies being given away to profiteers of the old regime, or cash-rich foreign investors.

Finally, as Bolton and Roland (1992) point out, an important issue is how to allocate the assets to the highest value user. In a market economy, all potential buyers show up simultaneously, and the problem is solved by selling the asset to the highest bidder. In post-communist economies, sell offs cannot have the same efficiency. When buyers appear sequentially, the matching of owners to assets is more likely to be done on a first-come-first-served basis.

The Pro Western-Style Privatization View. An opposite view states that sell offs and participation contracts should be the only way to privatize state-owned corporations. Market forces should decide how to allocate resources and who will obtain control. It is believed that paying for stock generates greater concentration of ownership and increases the probability of future restructuring of the firm [Demougin and Sinn (1993)]. Moreover, selling companies for cash would benefit the state treasury. The government could redirect proceeds towards the restructuring of state-owned firms, or towards social programs that are short of funding.

Bos (1993) challenges the virtues of giveaway schemes and contends that popular capitalism is not a good instrument for distributional policies. According to him, the goal of popular capitalism is to take from the rich and give to the poor. However, shares are risky investments not necessarily suitable for the average citizen. The average citizen likes fixed interest rate investments. Hence, popular capitalism would distribute from the risk-averse to the risk-loving. Since the poor typically cannot afford to take risks, redistribution would go the wrong way.

Other supporters of Western-style privatization argue that giving the stock away is nothing other than a populist approach aimed at strengthening the political position of the current political regime. Transforming the vast majority of Romanians into shareholders is tantamount to reinstalling a communist-type collective ownership in which no one is responsible for anything. And, as can be argued based on sound theoretical arguments, excessive dilution of ownership would generate huge agency costs and restructuring delays.

As it can be seen, mass privatization in Romania is a very complex process. The amplitude and the depth of the changes obviously affects many aspects of the economic and social life. The dismantling of the planned economy and the radical transition have taken place over a short period of time (from an historic perspective). There are many pitfalls in this transition, and hence many criticisms. The shaping of the events depends on factors specific to Romania, and on factors affecting all former communist countries. The type of institutional design is similar to that encountered in Czech and Slovak Republics, Russia, and Poland. The drive towards insider privatization is also present in Poland, Russia, and to some extent in Bulgaria. However, Management and Employee Buyouts are a characteristic of the Romanian privatization process only. A more in-depth disscussion of Management and Employee Buyouts is presented next.

CHAPTER IV. AN ECONOMIC ANALYSIS OF MANAGEMENT AND EMPLOYEE BUYOUTS IN ROMANIA

Critics of MEBOs claim that insiders consistently buy companies at or below their book value, paying less than outsiders. Hence, it is argued, managers and employees are taking over companies with "the better potential" leaving the rest to outsiders. Although this assertion contains a reasoning flaw and does not clearly define "good potential," it is worth investigating the possible economic and political implications of the privatization process.

What is the origin of this widespread belief among the Romanian public and economists? For over 40 years communist propaganda has instilled the belief that all citizens are equal owners and beneficiaries of the national wealth. The fall of communism did not demolish this strong egalitarian spirit. In the wake of the reform process some politicians reinforced the assertion that every Romanian is entitled to his/her fair share of the assets owned by the state.

In Romania a strong current of opinion has pushed for an egalitarian transfer of ownership rights since 1990. Certificates of Ownership (discussed earlier) were designed in part to satisfy the demand for "fairness." In this context, the rise of MEBOs appealed to many politicians and economists as well to labor unions.

The main criticism of MEBOs is based on the assertion that given the lack of transparency inherent in the transition period and the corruption-prone environment, insider privatization results in managers and employees getting the lion's share of the assets that are privatized. This view appealed to many people working for state-owned institutions or companies that for various reasons cannot be privatized (government agencies, health care units, schools, utilities companies, national defense contractors, etc.). These and other people living on fixed income (mainly retirees) fear they are excluded from the privatization process. Bos (1993) considers that "employees' shares in post-communist countries are not equitable" (p. 15). According to him, employees in good firms realize high windfall profits, whereas employees in nonviable firms and other outsiders receive nothing. Blanchard et al. (1991) also contend that, on grounds of equity, giving workers a special claim in their own firm is not fair (p. 51). The authors argue that it is not clear why those who happen to work in factories should receive more than those in agriculture or services. Moreover, workers get claims highly correlated with their other source of income. Workers in "dinosaur" firms are likely to loose their jobs and their investment at the same time.

IV.1. Recent Evidence on Insider Privatization from Poland

It seems that the recent experience of other Eastern European countries such, as Poland, has fueled the concern that insiders are favored in the process of privatization. A very popular method of insider privatization in Poland is the so-called "privatization through liquidation." By 1995 more than 2,000 state-owned enterprises had been privatized through this method. Under this approach an employee-owned company takes the place of a state-owned company, which legally ceases to exist. The assets of the state-owned company are sold or leased to the newly created employee-owned firm. The new firm receives loans from the government, repayable from future profits. Unlike in Romania, the employees are not organized in separate entities from the company.

Earle and Estrin (1995) offer some preliminary evidence from Poland about the relative performance of different ownership forms. The data suggest that the newly created insider-owned firms have a smaller proportion of machinery older than 15 years and a better financial standing when compared to outsider-owned and state-owned firms. Given the particularities of the privatization legislation, i.e. workers having the power of veto over the privatization procedure, the authors of the study conclude that "...the actual ownership structure chosen was selected by the workers themselves in the light of the financial situation of the firm, with outsiders only being permitted an ownership stake in firms where economic prospects of the firm were too poor to support the debt required in an employee buyout" (p. 69).

Hashi (1995) also finds evidence suggesting that, in spite of investing far less than other companies, insider-owned firms in Poland outperform outsider-owned and state-owned firms. His research is conducted on a sample of 20 Polish companies. In the short run, insider-owned firms have better productivity, a better financial standing, and better labor-management relations than outsider-owned firms. Based on these findings, Hashi discards the conventional theoretical wisdom of Ward (1956) and Vanek (1970) claiming that employee ownership results in less efficient management of the firm. However, his very crude empirical evidence is also consistent with many claims voiced by critics of insider privatization. It could simply be that insiders buy the companies that are in better shape.

Eventually, the theoretical debate and the empirical evidence crystallized in post-communist Romania in the form of a theory asserting that employees and managers pay less, and hence buy the companies having the "better potential." It should be noted first that simply because insiders pay less than outsiders does not necessarily imply that managers and employees are getting a better deal. It could simply be that higher prices correctly reflect some differences in firms' characteristics. Conversely, employees and managers getting the "better" companies does not necessarily imply we should see differences in prices. Who is paying a fair price and who is buying the firms with "better potential" might be separate questions.

The terminology "good potential" has been used casually and sometimes even formally to describe the state-owned companies that are attractive to investors. The government often identifies a company with good potential as a company that is viable. That is, the firm is not bankrupt, nor does it appear to be in danger of going bankrupt in the near future. The political rethoric uses this terminology to address the question of fairness by dividing the companies to be privatized into two groups: good companies and lemons. The implications for the privatization process depend on who is perceived to be buying the lemons. If it appears that insiders get the lion's share of the good companies while outsiders end up buying the lemons, the political backlash might undermine the entire privatization program.

IV.2. Defining the Problem

While the political debate has no need for a rigorous definition of a "good company," economic analysis and practice does. Miller and Modigliani (1961) consider the approach to valuation from the standpoint of an investor proposing to buy and operate an already-going concern. For such an investor, it would be worthwhile to buy the right to operate the firm depending on the following factors: a) the rate of return from investing in the securities, b) the earning power of the physical assets already in place, and c) the opportunities that the firm offers for making additional investment in real assets that will yield more than the market rate of return (positive net present value projects). Miller and Modigliani point out that the latter opportunities, frequently termed "good will," arise from any number of circumstances like special locational advantages, patents, distribution networks, or other monopolistic advantages. While there is no doubt that the majority of Romanian investors, managers, workers, and even government officials understand the concept of going concern value, finding a reliable methodology for assessing such a value is a serious hurdle.

It is clear that there is no practical method to asses the value of the companies to be privatized. In a transitional economy like Romania the markets are barely emerging. There is no information available for investors to form a base for their expectations, there are no traded financial assets, and it is very difficult to asses the value of real assets like equipment and inventory. Without a good measure of firms' value it is very difficult to question the fairness of the distribution of assets. Still, it is legitimate and meaningful in this early phase of the transition process to attempt to explain why we see consistent differences (if any) between the prices paid by outsiders and insiders when acquiring state-owned companies. Investigating whether the price differences are associated with some objective characteristics of the firms and of the investors might help understand why we see MEBOs emerging as the standard method of privatization in Romania.

At the outset, one should establish whether insiders consistently pay less than outsiders when acquiring state-owned companies, as claimed by some observers of the privatization process. In order to answer this question a sample of 107 Romanian companies privatized between 1992-1994 is used.

IV.3. The Data

One of the most difficult parts of researching privatization in Romania continues to be gathering microeconomic data for empirical studies. Although most often considered to be unreliable during the years of communism, national statistics are slowly improving and are now available to provide more accurate, more detailed, and more reliable aggregate macroeconomic data than ever before. When it comes to microeconomic data, however, the situation continues to leave much room for improvement.

The sample used in this study consists of 107 companies privatized between 1992-1994. The source of information is the State Ownership Fund, the National Agency for Privatization, the Romanian Development Agency, and several private consulting companies.

The specific information that is available for each of these companies is the book value at privatization (BV), overall transaction price (price per share times the number of outstanding shares, P), gross sales in the year prior to privatization (S), the relative weight of international trade in gross sales in the year prior to privatization (INTL), number of personnel (PERS), the combined percentage of manager and employees stake in the company (C), planned future capital expenditures (as made public by the firm's investment plan immediately after privatization, FINV), and net profit in the year prior to privatization (NP). Sample statistics are presented in Table 3.

The book value (BV) has an average point estimate of 1,700.5 thousand dollars, ranging from 116 to 9,865 thousand dollars. The mean is apparently driven by a few companies from the upper end of the range which have an extremely large book value. The median value is only 761 thousand dollars, less than half of the size of the mean.

The overall privatization price (P) has an average point estimate of 1,406.7 thousand dollars, ranging from 49 to 10,556 thousands dollars. With a value of 862 thousand dollars, the median is much lower than the mean. It might appear that the state-owned companies are typically sold at around book value. In reality, of the 107 companies in the sample, less than 40 have been sold at above book value, and of those 40, less than 20 companies have been sold at prices exceeding book value by 50%.

Gross sales (S) have an average point estimate of 4,550.9 thousand dollars, ranging from 12 to 48,760 thousand dollars. The median is only 2,564 thousand dollars. Gross sales have a noticeable variability of 6,396.9 thousand dollars, as measured by the standard deviation. Gross sales per person (SPERS) have an average point estimate of 8.8 thousand dollars, a median of 2.9 thousand dollars, a standard deviation of 23.2 thousand dollars, and range from 0.1 to 221.7 thousand dollars. Net profits (NP) have an average point estimate of 135.8 thousand dollars, ranging from -6 to 2,613 thousand dollars. The mean is almost four times as high as the median which is only 35 thousand dollars. The sample distribution of this variable is very skewed and has a high variability, 315 thousand dollars, as measured by the standard deviation.

The privatized companies have on average 1,036 employees. The smallest two companies in the sample have only 22 and 26 employees respectively. The largest company has almost 9,000 employees. The median is 560 employees and the standard deviation of 1,213 employees. The majority of the companies in the sample have between 400 and 1,200 employees. They approximate well the size distribution of the general population of companies to be privatized. It should be mentioned that before privatization numerous very large companies have been divested and many other large and medium companies have undergone some form of restructuring (Centrally planned economies had a tendency for oversizing and concentrating the companies beyond the optimal size).

The relative weight of international trade (INTL) is defined as the ratio of international transactions to gross sales. The average point estimate of this variable is 14.3% and its standard deviation is 11.8%. The variable ranges from 0 to 81% (median value of 10%). Since data on this variable is available only for the last year prior to privatization it does not correctly reflect the historical long run presence of Romanian companies in international markets. After 1990, the international market share of Romanian firms shrank dramatically. While in 1985 Romania's international trade accounted for 0.5% of world trade, in 1992 it accounted for only 0.2%. This sharp decline was due to a severe economic recession that affected Romania in the late 1980s. The recession was the result of internal causes, and led to an overall decline in industrial output and productivity. In spite of the communist regime's sustained efforts to encourage exports, the competitiveness of Romanian products on international markets failed to improve (exports were vital to the communist government because they were an important source of hard currency; companies producing for export markets were usually subsidized to a larger extent than other state-owned firms). After 1990, the dramatic changes taking place in the Romanian society had contributed to the worsening of the economic situation. In 1992, industrial output fell by more than 40% in comparison to 1989, and real income fell by more than 25% in comparison to 1990. In addition, the shortage of consumer goods forced producers to redirect their products towards the domestic market where demand was stronger relative to export markets. The decline of demand on export markets was partially caused by the dismantling of the Soviet Union, and by the economic problems experienced by the other former communist countires. Communist block countries traditionally accounted for 30-50% of Romania's international trade. This figure is relatively low when compared to other countries such as Bulgaria, for which communist countries acounted for up to 70% of its international trade. It should be noted that the sharp decline in Romania's international trade occured while imports increased dramatically after 1990 to expand the domestic supply of consumer goods.

The ratio of net profit to book value (NPBV) has an average point estimate of 13.5% and a median of only 6.5%. The variable ranges from -1.05% to 255.5% and has a standard deviation of 27.8%. Net profit per employee ranges from -0.23 to 13.7 thousand dollars. The median, 0.06 thousand dollars, is much lower than the mean, which is 0.26 thousand dollars. The ratio of price to net profit (PNP) is a crude approximation of the price/earnings ratio. The average point estimate of this variable is 46.9, and it has a standard deviation of 114.4. Positive values range from 1.04 to 972 and the median value is 16.4.

Inside ownership (C) has a mean of 80% and a median of 100%. The large majority of the companies in the sample (83) are controlled by managers and employees, while the rest (24) are controlled by outsiders. Seventy seven companies are entirely owned by insiders, while 7 are entirely owned by outsiders. In 23 cases outsiders own variable blocks of stock.

Planned capital expenditures (FINV) are a measure of promised investment activity subsequent to privatization. With an average point estimate of 1,033 thousand dollars and a median of 0, the sample distribution of this variable is very skewed. Only one fourth of the companies in the sample are promising to undertake some investment after privatization.

IV.4. Book Value as a Benchmark

In order to estimate the premiums/discounts investors pay relative to book value, a measure of the price deviation from book value is presented:

$$DIFFA = \frac{P - BV}{BV} \qquad (i)$$

where P is the overall privatization price and BV is book value. One might question the use of book value as a benchmark for price comparison. Obviously, book value is a poor measure of firm value. Accounting practices in Romania, heavily regulated by the government, define book value as the difference between assets and outstanding debt. However, assets are recorded at their replacement value, which in fact is a historic cost determined by bureaucrats, reflecting central plan requirements. Historic costs are anything but a good measure of value, especially in the case of a planned economy environment. Many entries from the left side of the balance sheet might give misleading information. For example, a large portion of accounts receivable could be bad debt not yet written off. On the right side of the balance sheet, entries that are referred to as "bank debt" are mainly obligations to the government owned and controlled banking system. None of the firms being privatized have market valued debt contracts, because there are no financial markets.

While book value is a bad measure for firm value it remains the best available benchmark for the purpose of this research. No matter how arbitrarily it reflects value, accounting practices are standardized and hence, any bias should be systematic. That is, any bias should affect all the companies in the same manner regardless of the buyer. Moreover, any arbitrary measure is as good as any other so long as it is widely accepted. Book value is widely accepted by the Romanian public and even by government economists as a "fair" price, in the absence of any better alternative. This variable constitutes a good benchmark because it reflects everyone's expectations about firm value in the absence of other information.

The relative price deviation from book value (DIFFA) has an average point estimate of 18%, a standard deviation of 65.1%, a median equal to 0%, and ranges from -80% discount to 667% premium. Overall, of the 107 privatized companies, 49 were sold above book value, 5 below book value and 51 at book value.

IV.5. Comparing Insider-Owned and Outsider-Owned Firms

The firms in the sample are divided into those that are controlled by outsiders and those that are controlled by insiders after the completion of the privatization. Statistics of the two subsamples are presented in Tables 4 and 5. Difference tests between the two groups of companies are presented in Table 6.

The difference in book values (BV) between the two subsamples is not statistically different. The average point estimate of the price (P) paid for the firms acquired by outsiders is significantly higher. Consistent with this difference, outsider-controlled companies also have more employees. While the t-test does not show a significant difference between the average point estimates of the number of personnel (PERS) of the two subsamples, non-parametric tests show this difference to be significant at 10% and below.

Gross sales per employee (SPERS), a crude measure of productivity, appears to be significantly higher for those companies taken over by insiders. P-values are below 5% for the t-test, and for three of the non-parametric tests. The relative weight of international transactions (INTL) appears to be significantly higher for the outsider controlled sample.

The average point estimate of net profit (NP) appears to be significantly higher for the outsider controlled subsample. When adjusted by book value (NPBV), profitability remains slightly higher for those companies taken over by outsiders, but the differences are no longer significant as shown by parametric and non-parametric tests.

For the outsider controlled sample planned capital expenditures (FINVA) have an average point estimate of 4,581 thousand dollars per company (median value of 480 thousands dollars). This translates to 7.6 thousand dollars per employee (median value of 500 dollars). By contrast, for the companies taken over by insiders, the average point estimate of planned capital expenditures is only 7.3 thousand dollars per company (median value of 0). This translates to only 10 dollars per employee (median value of 0). The differences are significant at the 0.001% level. Outsider-controlled companies display a much higher promised investment activity than their insider-controlled counterparts.

It appears that outsiders pay a higher premium over book value than do insiders. For the outsider-controlled subsample the relative price deviation from book value (DIFFA) has an average point estimate of 162.4% (median value of 103.3%), a standard deviation of 181.6%, and ranges from -24% discount to 667% premium. Of the 24 privatized companies in this subsample, 22 were acquired at a premium, while the remaining two were acquired at a discount.

For the insider-controlled subsample the relative price deviation from book value has an average point estimate of 18% (median value of 0), a standard deviation of 65.1%, and ranges from an -80% discount to a 386% premium. Of the 83 companies in the subsample, 27 were acquired at a premium, 3 at a discount, while the remaining 50 were acquired at book value.

IV.6. Outsiders Consistently Acquire Companies at Premiums Above Book Value.

The t-test and all nonparametric tests show that the difference in the relative price deviation from book value (DIFFA) between the two subsamples is significant at the 0.001% level. Unequivocally, insiders consistently pay less for taking over the companies to be privatized. This conclusion is strengthened even more when taking into consideration the way these transaction are financed. As mentioned earlier, insiders receive loans from the government repayable over an expected time interval of 5-7 years from firms' profits. These loans are made at preferential fixed rates of interest. It follows that the present value of the price paid by insiders is even lower than that displayed by the present data. This makes the differences between the prices paid by insiders and outsiders even larger.

The average point estimate of the price-to-net-profit ratio is higher for the outsider-controlled subsample, but the difference is not significant. However, the overall conclusion that outsider-controlled companies are more expensive remains valid. Next, several theoretical arguments are presented in an attempt to explain these differences.

IV.7. When Do Outsiders Bid Up the Price?

As pointed out earlier, when considering acquiring a going concern, investors take into account their cost of capital, the earning power of the assets already in place, and the opportunities of investing additional capital in real assets. In the early stages of the transition process in Romania, information remains extremely scarce and unreliable. Most of the time, outside investors perceive privatization as a market for lemons. Because of the lack of information, they cannot reasonably assess the value of the assets in place, nor identify the opportunities that the firm might have for making additional investment in real assets. Fearing that the Romanian government is attempting to get rid of the nonviable companies, outsiders prefer to adopt a cautious, wait and see attitude.

In a few instances, however, outsiders learn enough to decide it is worthwhile acquiring the company. One instance is when one can obtain detailed information from insiders about the earning power of the assets already in place. Another instance is when, having a minimal information set about the company to be acquired, skilled outside investors can identify business opportunities associated with an available firm, requiring their particular expertise. Acquiring the latter type of information might be less expensive for outside investors who have good access to international markets, as well as to the Romanian market, and some minimal information about the company to acquired.

Outside investors may be attracted mainly by investment opportunities because information is easier to obtain, and because it appears that the value of assets already in place is low when compared to the value of growth opportunities in the case of the state-owned firms to be privatized [Hingorani, Lehn, and Makhija (1995)]. When the companies are privatized, insiders prevail over outsiders offering the same price. In order for outsiders to acquire some stake in the company they must either form an alliance with the employees and the managers, or they must defeat them in a bidding war. It is the contention of this research that, when sufficient information about investment opportunities is available, outsiders bid up the price and crowd out capital constrained insiders.

IV.8. Estimating the Value of the Assets Already in Place

In order to assess the value of the assets already in place, investors need to have reliable information about the firms. According to the law, all state-owned companies that have been chosen to be privatized have to make available for public scrutiny their accounting and financial statements. This regulation genuinely contributes to a greater transparency of the privatization process and of the economic and social climate in general. However, conveying accurate and reliable information to the public requires efficient (low cost) distribution channels accessible to everyone and some mechanisms capable of penalizing deception. There are several reasons why information is not widely available.

The search costs for information are prohibitively high. Although accounting and financial statements are available to the public, very few Romanian citizens, or even companies, have a chance to cautiously investigate them. There are no established channels for distributing this type of information. In the informational bombardment and confusion following the fall of communist censorship it might take months before finding the physical site, the publication etc. making available the desired information.

Accounting and financial statements are opaque. Sometimes these statements are not complete or not very detailed. Most Romanians do not know how to read and interpret this information. Even for institutional investors who use specialized personnel, the data can be misleading. Accounting data can easily manipulate or disguise important information, and by its nature has a limited informational content. Moreover, foreign investors who are not familiar with the ever-changing accounting practices and the economic culture of the transitional environment find it very difficult to select the relevant information.

There are no alternative sources of information. Unless the companies disclose their accounting and financial situation, there are no other institutions (like bond rating agencies) that scrutinize or certify them. Several government agencies have the responsibility of investigating the accounting and financial practices of the public companies. However, their scrutiny is directed towards reinforcing government regulations, rather than endorsing and making the information available to the public.

One can argue that insiders are in a position to estimate the earning power of the assets in place much better than outsiders. However, it is seldom that insiders (the managers in particular) can credibly convey this information to outsiders. The managers of state-owned companies belong to the post-communist bureaucratic establishment. They have developed and maintained connections among themselves in order to protect their interests as a social group. Information is transmitted much more efficiently among the members of this professional category. Unfortunately, bureaucrats are almost as capital constrained as any other Romanian investors, except for those cases when they manage private firms and have the necessary liquidity to acquire state-owned companies. However, this situation is very unlikely in the early stages of the transition process.

Managers can also develop and maintain business and personal connections with foreign companies. Take the case of the Romanian state-owned companies with significant presence in international markets. Their CEOs are familiar figures for their foreign partners. Over time, durable and trustworthy business and even personal relationships have been established. When the company is prepared for privatization, these managers can convey credible information to foreign outsiders, which in turn can disclose valuable information about their cost of capital, market opportunities, available technology etc. However, under communism, although companies were granted special incentives to increase their international market shares (to maximize hard currency revenues), they were not allowed to have extensive contacts with their business partners. International trade was conducted only by a handful of specialized companies acting as intermediaries between the producers and the foreign partners. As a result, only a small percentage of insiders were able to develop the above mentioned type of business and personal relationships. Moreover, after the fall of communism, the 2,000 companies chosen to be privatized have been restructured and split into approximately 6,000 smaller units. As a result, many in the management teams of the state-owned companies have been replaced, transferred from one company to another, or started their own private business. Hence, they are no longer in the position to possess inside information and have some form of control over the companies to be privatized. The argument here is that, although possible, conveying information about assets in place by insiders to outsiders is rather the exception than the rule. Overall, outsiders can learn very little about the value of assets already in place.

IV.9. Forecasting Cash Flows

In order to assess the growth opportunities of the firm one has to use discounted cash flow techniques, hence one needs to have the ability to forecast. Noise and the lack of economic stability inherent in this phase of the transition make cash flow valuation problematic.

Consider the case of a company selling industrial equipment to the Romanian electronics industry. The demand for its products might currently be strong but can change dramatically over short periods of time. The opposite can happen as well. The demand for a product can significantly increase from one month to another. In addition to fluctuations in the demand for the product, other things can happen. Business partners might not meet their financial obligations because of strikes or poor management. Suppliers might not ship their products in time because of financial difficulties, riots, or power shortages. Hyperinflation can render raw materials and other supplies much too expensive. Of course any of these things can occur in Western countries as well, but their probability of occurring there is much smaller and easier to plan for and insure against. Unlike in developed countries, where economic cycles have a more predictable pattern, economic upturns and downturns in Romania can occur overnight. The improvements can be steep and the recessions can be catastrophic. Even more stable developing countries experience this type of rollercoaster economic activity. The 1995 economic crash in Mexico is a good example.

Now, consider the case of a company that has several years experience selling industrial equipment for the electronics industry in the international market. A western company in the same industry, interested in switching its operations abroad (in order to take advantage of cheap labor, for example) can much more easily assesss the firm's future cash flows. The quality of the exported product is known. The outside foreign investor can better predict the demand in a market less likely to crash overnight. One might have proprietary information about new technologies, a monopolistic position, and other information inaccessible to insiders and other outsiders. One might ensure that the quality of the raw materials and supplies is adequate. Another good example of a company offering investment opportunities would be a hotel resort in the mountains of Transylvania. One could modernize the resort, improve the quality of its services, build additional facilities, such as ski slopes and ski lifts, and take advantage of the magnificent location. The point here is that, in general, more internationally oriented state-owned companies can provide outsiders with more information on their business opportunities.

IV.10. The Cost of Capital

The cost of capital has a very important role to play in the privatization process. Foreign investors have the comparative advantage of cheaper capital. Romanian investors in general, and insiders in particular, are capital constrained. Their cost of capital is prohibitively high. Investment projects must be extremely profitable in order for Romanian investors to consider borrowing money at such high rates of interest.

Romanian investors are capital constrained because the barely emerging Romanian markets are not integrated with the international financial markets. According to the Hecksher-Ohlin (1991) classical theory of international trade the factors of production should flow from countries where they are cheaper to countries where they are more expensive until comparative advantages disappear. Under this prediction, capital, which is cheap in developed countries, should flow to developing countries. However, the original theory does not allow for market imperfections. Mundell (1957) acknowledges that trade barriers and other policy measures can distort international trade. Aharoni (1973) and Lucas (1990) point out that information asymmetry and the uncertainty associated with it are the main obstacles in the way of integration of capital markets. Romania is a typical case to illustrate the theory of comparative advantage under market imperfections assumptions. Capital is a scarce production factor in Romania, and thus expensive. However, foreign capital is not flowing in because of information asymmetry. Nevertheless, in some cases this information barrier is overcome and we observe foreign investors taking over Romanian companies.

In particular, the reason borrowed capital is so prohibitive for Romanian workers and managers is the same reason outsiders, especially foreign investors, are not willing to invest in the companies to be privatized: the severe lack of information about the investment opportunities. Insiders who sometimes might have information about firms' opportunities cannot credibly convey this information to outside lenders. When the cost of outside capital is prohibitively high, there are practically no investment opportunities worth pursuing.

The only time insiders can obtain relatively convenient debt financing is when the government lends money to managers and employees in order to acquire their companies. As will be argued later, the government agrees on lower interest rates not because it has better information about firms' opportunities but because it pursues other objectives. However, this happens only when there are no outsiders bidding up the prices. One factor that certainly contributed to making outside financing inaccessible to the newly insider-privatized companies has been the incapacity or unwillingness of the government to enforce bankruptcy procedures in the early 1990s. In 1990 and again in 1991, over 50% of all state-owned companies became insolvent. The government chose to write off the bad debt (the losses were incurred by the National Bank of Romania) instead of enforcing bankruptcy. By 1995 the parliament had enacted new bankrutpcy regulations, but the fear that political consideration might prevail in situations when bankruptcy should be the outcome persisted among investors. More specifically, investors feared that an insider-owned company which is not able to meet its financial obligations (the government being among its creditors) might be renationalized instead of undergoing bancruptcy procedures (hence, placed under government protection against its creditors; this is more likely to occur before a PAS has repaid the debt associated with the takeover).

IV.11. The Profile of Outsider-Owned Companies

Up to this point it has been contended that outsiders bid up the price when they have information about profitable investment opportunities of the companies to be privatized. The most likely type of outsiders would be cash rich foreign investors, or Romanian companies very familiar with the domestic and international business environment, and having a relatively low cost of capital.

Outsiders hold stakes in 30 of the 107 privatized companies in the sample. In 24 companies they hold over 50% of the stock, and in seven they hold 100% of the stock. Overall, there are 39 institutional outside investors. An indefinite number of individual outside investors hold shares in three of the 30 companies. Of the 39 institutional investors, 20 are foreign companies from Germany, Italy, France, Switzerland, Greece, and Hungary. In eight of the remaining 19 Romanian private companies, foreign companies hold various stakes. Two other companies are controlled by insiders (managers) in some combination with foreign investors.

It is also contended that companies more involved in international trade are more likely targets for outsiders. In order to test this prediction a regression model is specified. The model attempts to explain the percentage of inside ownership (C) using several characteristics of the firm. The independent variables are gross sales per person (SPERS), the ratio of net profit to book value (NPBV), and the relative weight of international transactions. This last measure controls for the extent of the firms' presence on the international markets (INTL). The form of the equation is:

$$C = a_0 + a_1 SPERS + a_2 NPBV + a_3 INTL + \epsilon \quad (1)$$

The theory offers no clear expectation with regard to the relationship between inside ownership and the first two independent variables. If outsiders are more interested in firms' growth opportunities, their investment decision should be only marginally influenced by variables that approximately measure firms' past performance. However, a negative correlation between the percentage of inside ownership and firms' degree of involvement in international trade is expected. Price and planned capital expenditures are not in the regression model because these variables are jointly determined upon privatization.

Results of estimating the coefficients are presented in Table 7. As expected, the firms' presence in international markets is significantly associated with lower stakes of inside ownership. The relationship between inside ownership and gross sales per person is direct but not significant. The relationship between inside ownership and profitability as measured by net profits to book value ratios is negative, but also not significant. Overall, the regression results show that the higher the involvement in international trade activities the more likely to the be acquired by outsiders.

IV.12. The Determinants of the Variations in the Privatization Price

If investors bid up the price when they intend to take advantage of firms' growth opportunities, higher prices should be associated with higher levels of promised investment activity subsequent to privatization. In order to test this proposition, a second regression model is formulated. Relative price deviation from book value (DIFFA) is specified as a function of gross sales per person (SPERS), planned capital expenditures adjusted by the number of personnel (FINVA), and the ratio of net profit to book value (NPBV). The equation is:

$$DIFFA = a_0 + a_1 SPERS + a_2 FINVA + a_3 NPBV + \epsilon \quad (2)$$

A positive relationship between price premiums and promised investment activity is expected as discussed above. And, indeed, the results show a very strong and significant direct relationship between price premiums and promised investments subsequent to privatization. It appears that investors who bid up the price are more likely to promise more investments. The coefficient of the ratio of net profit to book value ratio is positive and significant. The results seem to indicate that investors, insiders and outsiders as well, pay more in order to buy ownership stakes in companies with higher profitability relative to book value. The relationship between price premiums and gross sales per person is negative but not significant.

The interactive version of this model is more informative but yields similar results. The equation is:

$$DIFFA = a_0 + a_1 D + a_2 SPERS + a_3 SPERSxD + a_4 FINVA + a_5 FINVAxD + a_6 NPBV + a_7 NPBVxD + \epsilon \quad (2')$$

D is a dummy variable that equals 1 when C (percentage of inside ownership) is greater than 50% and 0 otherwise. The coefficient of the intercept dummy is approximately equal in size but opposite in sign to the estimated intercept coefficient. Outsiders, as well as insiders pay more as a function of planned capital investments. Consistent with the original model, the coefficients of the variable measuring profitability relative to book value is not significant.

If outsiders, seeking to purchase companies mainly for their investment opportunities, prevail in the bidding competition then higher promised investment activity should be associated with lower inside ownership (it was argued above that these opportunities might not exist for capital constrained investors). In order to test this proposition, a third model is specified. This model investigates the relationship between planned capital expenditures adjusted for firm size (FINVA), inside ownership (C), gross sales per person (SPERS), net profit to book value (NPBV), and the variable controlling for firms' international business activities (INTL). The equation is:

$$FINVA = a_0 + a_1 C + a_2 SPERS + a_3 NPBV + a_4 INTL + \epsilon \qquad (3)$$

It is expected that the coefficient of C will be negative and the coefficient of INTL will be positive (investors target companies more involved in international trade because it is easier to assess their business opportunities). The results presented in Table 7 are consistent with the theoretical arguments and the univariate tests presented above. Firms more likely to promise more investments after privatization have smaller inside ownership (the coefficient is significant at the 3% level).

IV.13. Why Do Insiders Take Over State-Owned Companies?

If insiders are capital constrained, it is not likely that they could invest in potential positive net present value projects. Even if the acquisition is subsidized by the government through preferential interest rates, after privatization the firm most likely would not have access to outside financing. However, insiders do purchase state-owned firms. There appear to be two logical reason to explain why managers and employees are willing to take control of their firms.

The earning power of assets already in place. Some companies might posses valuable assets of which outsiders have no knowledge. If the firm is reasonably well managed and does not require any major investment in revamping and restructuring to maintain its operation at the same level as before, insiders can realize windfall profits as shareholders.

Maintaining employment. In a recent survey of insider privatization in Poland, Hashi (1995) reports that the most frequent reasons for taking over their companies, mentioned by the interviewed employees (workers and managers as well) are: fear of losing employment under a private owner, taking control of own enterprise, job security, retention of links with their companies, higher earnings associated with the private sector, freedom from state control, and wage flexibility. In Romania, economists working for the National Agency for Privatization acknowledge the same reasons. Most of the time insiders acquire state-owned companies in order to maintain their employment.

IV.14. Further Implications

The empirical evidence seems to be consistent with the theoretical arguments presented earlier. It is argued that skilled outsiders who identify positive net present value projects available to the companies to be privatized (sometimes one can obtain information about the value of assets in place as well) bid up the price during negotiations. However, the probability of this happening is relatively low. Insiders taking over their companies is the rule rather than the exception. Of the 107 companies in the sample, only 24, i.e. less than one third ended up under outsiders' control. The overwhelming majority were acquired by insiders. As of November 1995, over 1,300 state-owned companies have been privatized. Of these, over 1,000 transactions were Management and Employee Buyouts.

It is also evident that insiders are capital constrained and need government's financial support to acquire the control of their companies. This happens only when there are no outside investors interested in bidding for the firms. Hence, it appears that insiders are the residual buyers. This implication contradicts the contention that outsiders are the residual buyers (Earle and Estrin, 1995).

A legitimate question arises: why does the government subsidize privatization? Why not let the market decide how to allocate the country's productive assets, following the example of other countries, such as Hungary (the Hungarian government is not very sympathetic towards subsidizing insider privatization)? There are reasons to explain this approach. When outsiders perceive privatization as a market for lemons, with the exception of the situations mentioned above (which occur roughly 25% of the time), there is no equilibrium price at which the government can sell state-owned companies. Insiders have access to significantly more information than do outsiders, but as already mentioned, they are capital constrained. At times they might have just enough capital to finance the acquisition of the most productive assets (mostly the managers), but not enough to buy the companies as going concerns.

However, strong political reasons prevent the government from liquidating the companies on a large scale and selling their assets separately. The government simply cannot close down the companies that do not attract buyers. The government simply cannot tell the workers, who believe that over the years their hard work had earned them rights over their firms, to go home, while the most valuable assets of the companies are auctioned to other investors.

IV.15. MEBOs as a Political Alternative

Blanchard et al. (1991), and Bolton and Roland (1992) consider that debt financing of privatization by Eastern European governments is just an answer to breaking the stock-flow constraint. They show that if even all the wealth in private hands, as measured by the entire stock of savings, was used to purchase the stock of assets the state would recover only approximately 10% of the historic costs of state assets in the case of the Czech and Slovak Republics, and 1% in the case of Poland. "Debt gives the government some leeway to extract payments out of the firm by threatening to close the firm in case of default. Another potential advantage of letting the government hold debt is that it may induce the new managerial team to run the firm as efficiently as possible in order to reduce the risk of financial distress," (p.51).

The alternative explanation proposed by the present research is that, in the case of Romania, maximizing revenues from sales is only of secondary importance to the government. Deep discounting the price of the companies and selling them to outsiders, especially to foreign investors, is politically unfeasible. Many already consider that, as is, the companies are sold to outsiders at bargain prices. The willingness to subsidize acquisition by insiders reflects the political decision to keep privatization going at any price while not exacerbating the already serious social problems such as unemployment.

One can argue that the government should wait until there are enough private domestic companies interested and able to acquire the state-owned companies or until more information would become available to foreign investors and other outsiders. However, there are huge costs associated with waiting. Mismanagement and asset stripping by managers and other employees would continue until there would be nothing left to privatize. Since 1990, the Romanian economy has been in a very difficult situation. Without a minimum of economic performance, the very social and political stability of the country would be jeopardized. It is clear that communism has failed to ensure a normal functioning economy. Now that centralized control has lost its vigor and potency, the economy is in danger of disintegrating. Only a strong private sector can keep the economy afloat. Privatization is a matter of survival. A populist approach, such as the use of Certificates of Ownership, aimed at ensuring fairness and popular support was conceived and implemented in 1991. However, the program failed to accomplish its goals as intended. Management and Employee Buyouts appear to be second best, i.e. an acceptable alternative to not privatizing at all. Their most important benefit to the government is that of allowing privatization to continue.

IV.16. The Question of Fairness Readdressed

Although populist by nature (obviously with union support), Management and Employee Buyouts raised fairness concerns, nevertheless. The empirical and theoretical arguments presented in this research cannot give a complete answer to the question of fairness. The data are consistent with the assertion that insiders are the residual buyers, in spite of the fact that they enjoy various privileges and facilities in order to invest in their companies. Part of the time workers and managers might end up buying very valuable assets, hence experiencing windfalls. Part of the time they might end up buying lemons. Hingorani, Lehn, and Makhija (1995) investigate voucher privatization in the Czech and Slovak republics. Their paper contends that the value of assets in place is relatively low when compared to the present value of growth opportunities of the state-owned companies (due mainly to mismanagement during the communist regime). Assuming the same might be true for Romania, it appears that it is more likely for insiders to acquire companies with modest earnings potential. This conclusion is reinforced even more when taking into account that in the years preceding privatization state-owned companies have undertaken little investment to modernize their technological base. Moreover, in the hectic climate created after the fall of the communist regime, it is very likely that managers and employees as well have frequently stripped and plundered the state-owned firms of their most valuable assets.

To summarize, it is contended that whether insiders acquire companies paying approximately the book value while outsiders consistenly pay premiums above book value has little to do with fairness. Rather, the variation in price reflects differences in the marginal valuation of firms among outsiders and insiders. This also suggests that the Romanian markets, although primitive, show promising signs of efficiency. There is no secret that insiders are granted preferential treatment by the government (preferential interest rates on credits, discounts up to 10% for limited periods of time when buying the stock). As pointed out earlier, whether this is fair remains debatable. It would certainly be unfair if, beyond the facilities granted by the law, insiders used unlawful methods to influence the distribution of assets to their benefit. However, this is a totally different issue, and beyond the scope of this research. One certainly cannot rule out bribes and corruption altering the privatization process, but there is no data available to establish whether this constitutes a consistent pattern.

IV.17. MEBOs and Economic Efficiency

Mass privatization is undertaken to redistribute the country's productive assets to private owners for a more efficient use. Many economists make the case that employee ownership does not lead to competent management of privatized firms. Ward (1958) and Vanek (1970) suggest that employee owned firms tend to maximize average earnings per worker, which leads the firms to restrict future employment in order to increase wages. Another short-term tendency is the output-reducing effect, better known as the "perverse effect."

Hansmann (1990) contends that the corporate governance costs of employee run firms are higher, the greater the heterogeneity in skills, interests, and abilities of the employees and the larger the firm. Hansmann believes that decision costs are also likely to be higher when ownership collective and voting is based on the one worker-one vote principle (which is the situation in the case of MEBOs, at least until the debt of the PAS is repaid in full). Hansmann suggests that manager-controlled firms incur lower governance costs than worker-controlled firms. Boycko, Schleifer and Vishny (1993) also contend that management ownership is good, outside blockholder ownership is better, but worker ownership is the worst from the standpoint of efficient restructuring.

Earle and Estrin (1995) stress that employee-owned firms isolate themselves from most sources of outside financing, relying mostly on retained earnings to finance new investment projects. If retained earnings are directed to pay higher wages and higher benefits to shareholders, the investment activity might be less than optimal.

Estrin, Jones, and Svejnar (1987), and Russell (1985) suggest that employee ownership and control has a positive impact on firms' productivity and governance costs. It is not the purpose of this research to establish whether Management and Employee Buyouts are an economically efficient form of distributing Romania's productive assets. One should note, however, that the Romanian government pursues this privatization approach because it believes employee ownership and control is Pareto superior to maintaining the status quo, i.e. maintaining state ownership and control over the companies.

CHAPTER V. CONCLUDING REMARKS

Mass privatization in Romania is the cornerstone of the historic transition process aimed at transforming the country into a striving market economy. As in other former communist countries, the Romanian government chose a populist approach to privatization in order to ensure the political survival of the reform process. The program called for a mix of methods combining giveaway schemes, public offerings, and direct sales. Six mutual fund-like financial intermediaries were set up, and over 16 million vouchers were distributed for free to eligible Romanian citizens.

After more than four years of reforms, the results seem confusing and dissapointing. The complicated insitutional framework performed poorly, and privatization is often described as "faltering." The standard method for privatizing state-owned companies, Management and Employee Buyouts, accounts for 75-90% of all privatization transactions to date. MEBOs are well regarded by labor unions and officals working for the State Ownership Fund, but are heavily criticized by political opponents and a large number of economists. The main criticism stems from the alleged lack of "fairness" of this approach.

Overall, the scarce empirical evidence on MEBOs is consistent with the depiction of a process in which outside investors compete for the state-owned companies offered for sale in order to take advantage of their investment opportunities. Nevertheless, it appears that outsiders are willing to do so only when they have sufficient information about the companies to be privatized, which happens rather unfrequently. The most likely type of companies to attract outsiders are those with an established reputation in the international markets because there is more information available on their activities. The most likely type of outside investor to be interested in acquiring these state-owned companies has a broad knowledge of international markets and relatively low cost of capital. In the early stages of the transition process foreign corporations were the only ones matching this profile. As privatization progresses, increasingly more Romanian private companies should be able and interested in competing for the companies to be privatized.

Insiders who have information about the values of assets already in place, and who seek job security are able to purchase their companies only when they are not crowded out by outsiders. In some cases they end up with valuable assets, in other cases with poorly performing companies. The government probably encourages insiders to acquire their companies because there is no strong demand for the 6,000 state-owned firms scheduled to be privatized before the end of the decade. In the absence of MEBOs privatization would most likely stall completely, with unforseen economic and political consequences for transition in Romania. The decision to subsidize MEBOs and keep privatization going appears to be a political choice.

Whether insiders have an edge over outsiders is still debatable. It is well known that workers and managers enjoy preferential treatment in the process of acquiring state-owned companies. It is unclear if this regulatory advantage translates to real economic gains. In spite of the preferential treatment, insiders appear to be the residual buyers as suggested by the evidence presented in this research. Of course, as more data becomes available, further analysis will allow more in-depth investigation into this topic.

Table 1. Size Distribution of Industrial State-Owned Companies in Romania Before Incorporation (1990).

Panel A: absolute numbers

Size of enterprises by number of employees	Number of Enterprises	Number of employees
less than 200	169	24,288
201-500	456	162,505
501-1,000	538	391,386
1,001-2,000	515	723,116
2,001-3,000	245	592,538
3,001-5,000	197	768,760
over 5,000	121	1,039,263
Total	2,241	3,701,856

Panel B: percentages

Size of enterprises by number of employees	% of total number of enterprises	% of total number of employees	% of total production
less than 200	7.6	0.7	1.9
201-500	20.3	4.4	5.2
501-1,000	24.0	10.6	10.7
1,001-2,000	23.0	19.5	18.9
2,001-3,000	10.9	16.0	14.3
3,001-5,000	8.6	20.8	20.6
over 5,000	5.4	28.0	28.4
Total	100	100	100

Source: The National Commission for Statistics

Table 2. Size Distribution of Industrial State-Owned Companies in Romania After Incorporation (1992).

Panel A: absolute numbers

Size of enterprises by number of employees	Number of Enterprises	Number of employees
less than 50	511	10,986
51-200	1,484	189,513
201-500	1,821	553,464
501-1,000	1,129	723,271
1,001-1,500	388	483,468
1,501-2,000	279	441,773
over 2,000	564	1,836,502
Total	6,176	4,238,977

Panel B: percentages

Size of enterprises by number of employees	% of total number of enterprises	% of number of total employees
less than 50	7.4	0.3
51-200	25.8	4.5
201-500	29.9	13.0
501-1,000	17.8	17.1
1,001-1,500	6.9	11.4
1,501-2,000	4.4	10.4
over 2,000	7.8	43.3
Total	100	100

Source: National Agency for Privatization

Table 3. Sample statistics.

The full sample consists of 107 Romanian state-owned companies privatized between 1992-1994

	Mean	*Standard deviation*	*0%*	*25%*	*50% Median*	*75%*	*100%*
Book value (BV) \$ thousands	1101.2	1468	43	476	717	1086	9865
Price (P) \$ thousands	1406.7	1672.6	49	540	862	1547.5	10556
Gross sales (S) \$ thousands	4550.9	6396.9	12	1040	2564	5400	48760
Relative weight of international trade (INTL)%	14.3	11.8	0	6	10	21	81
Personnel (PERS)	1036	1213	22	350	560	1269	8922
Gross sales per person (SPERS) \$ thousands	8.8	23.2	0.1	1.5	2.9	6.5	221.7
Net profit (NP) \$ thousands	135.8	315	-6	12.5	35	132	2613
Net profit to book value (NPBV) %	13.5	27.8	-1.05	2.4	6.5	14.1	255.5
Net profit per person (NPPER) \$ thousands	0.26	1.33	-0.23	0.024	0.06	0.12	13.7
Inside ownership (C) %	79.7	35.2	0	70	100	100	100
Planned capital expenditures (FINV) \$ thousands	1033.1	7595.5	0	0	0	33	78000
Planned capital expenditures per person (FINVA) \$ thousands	1.7	13.1	0	0	0	0.03	134.7
Relative price deviation from book value (DIFFA) %	50.4	118.7	-80.5	0	0	44	666.7
Price to net profit ratio (P/NP)	47	114.4	1.04	8.2	16.4	34.5	972

Table 4. Sample statistics.

Subsample A consists of 24 Romanian state-owned companies privatized between 1992-1994. In all these companies employees and managers retained less than 50% of the total number of shares.

	Mean	*Standard deviation*	*0%*	*25%*	*50% Median*	*75%*	*100%*
Book value (BV) $ thousands	1700.5	2572.7	116	536	761.5	1549	9865
Price (P) $ thousands	2888.4	2665.2	120	939.5	2205.5	4055.5	10556
Gross sales (S) $ thousands	3867.9	5186	18.7	798	1848	4841	21255
Relative weight of international trade (INTL)%	22.1	11	5	11.5	22	33.5	39
Personnel (PERS)	1302	1133	22	557	820	1941	4347
Gross sales per person (SPERS) $ thousands	3.34	4.3	0.13	0.8	1.96	3.7	19.2
Net profit (NP) $ thousands	299	589	-4	21.5	42.5	305	2613
Net profit to Book value (NPBV)%	17	21	-0.5	3.2	10.8	25.6	92
Net profit per person (NPPER) $ thousands	0.21	0.38	-0.006	0.03	0.07	0.1	1.3
Inside ownership (C) %	16.8	12.9	0	0	18.5	29.5	35
Planned capital expenditures (FINV) $ thousands	4581	15778	6.4	99	480	2205	78000
Relative price deviation from book value (DIFFA) %	162.4	181.6	-24.3	27.6	103.3	214.3	666.7
Planned capital expenditures per person (FINVA) $ thousands	7.6	27.3	0.01	0.1	0.5	2.8	134.7
Price to net profit ratio (P/NP)	54.2	83.9	1.04	7.9	14.9	52.1	328.6

Table 5. Sample statistics.

Subsample B consists of 83 Romanian state-owned companies privatized between 1992-1994. In all of these companies employees and managers retained over 50% of the total number of shares.

	Mean	*Standard deviation*	*0%*	*25%*	*50% Median*	*75%*	*100%*
Book value (BV) \$ thousands	928	891	43	450	699	1070	5410
Price (P) \$ thousands	978	892	49	500	751	1132.5	5410
Gross sales (S) \$ thousands	4748	6722	12	1050	2739	5400	48760
Relative weight of international trade (INTL)%	15.9	11.1	0	5	9	16	81
Personnel (PERS)	959	1231	26	312	505	1260	8922
Gross sales per person (SPERS) \$ thousands	10.3	26.1	0.1	1.7	3.5	9	221.7
Net profit (NP) \$ thousands	89	145.7	-6	11	31	112	989
Net profit to Book value (NPBV)%	12.5	29.5	-1.1	2.2	5.8	12	255.5
Net profit per person (NPPER) \$ thousands	0.27	1.5	-0.2	0.02	0.05	0.12	13.7
Inside ownership (C) %	97.8	7.9	61	100	100	100	100
Planned capital expenditures (FINV) \$ thousands	7.3	35	0	0	0	0.2	300
Relative price deviation from book value (DIFFA) %	18	65.1	-80.5	0	0	5	386
Planned capital expenditures per person (FINVA) \$ thousands	0.01	0.04	0	0	0	0.0007	0.22
Price to net profit ratio (P/NP)	44.9	122.3	1.33	8.2	16.5	33.5	972

Table 6. Results of significance tests of differences in the values of variables BV, P, S, INTL, PERS, SPERS, NP, NPBV, FINV, FINVA, and PNP between the two subsamples constructed based on the class variable D.

The variables are defined as follows: **BV** (in thousands of dollars) is the firm's book value upon privatization, **P** (in thousands of dollars) is the overall privatization price, **S** (in thousands of dollars) is the firm's gross sales in the year prior to privatization, **INTL** (in percentages) is the weight of international transactions in gross sales in the year prior to privatization, **PERS** is the number of personnel, **SPERS** (in thousands of dollars) is gross sales per person, **NP** (in thousand of dollars) is the firm's net profit in the year prior to privatization, **NPBV** (in percentages) is the ratio of net profit to book value, **FINV** (in thousands of dollars) is planned capital expenditures as disclosed upon privatization, **FINVA** (in thousands of dollars) is planned capital expenditures per person, **DIFFA** (in percentages) is the relative deviation of the privatization price from book value, **PNP** is the ratio of price to net profit, **D**=0 if **C**<50% and **D**=1 if **C**>50%, where **C** is the percentage of shares held by employees and managers.

	BV	P	S	INTL	PERS	SPERS	NP	NPBV	FINV	FINVA	DIFFA	PNP
PROCEDURE												
T-test	1.4	3.45	-0.59	3.9	1.2	-2.33	1.7	0.8	1.4	1.3	3.8	0.41
p-value	0.16	0.002	0.6	0.01	0.2	0.03	0.1	0.4	0.17	0.2	0.0001	0.2
Wilcoxon's Z												
(2-sample test)	0.93	4.2	-0.8	4.2	2.32	-2.25	1.7	1.4	8.1	7	5.3	0.2
p-value	0.35	0.0001	0.4	0.001	0.02	0.02	0.09	0.14	0.0001	0.0001	0.0001	0.84
V der Waerden												
(2-sample test)	1.24	4.3	-0.66	4.3	2.1	-2.2	1.8	1.4	8.2	7.03	5.2	0.07
p-value	0.21	0.0001	0.5	0.001	0.04	0.03	0.06	0.17	0.0001	0.0001	0.0001	0.8
Savage's Z												
(2-sample test)	1.56	4.9	-0.52	4.4	1.6	-2.13	2.6	1.6	8.3	7.8	5.8	0.66
p-value	0.11	0.0001	0.6	0.01	0.1	0.03	0.01	0.11	0.0001	0.0001	0.0001	0.5

Table 7. Regression Results on a Sample of 107 Romanian State-Owned Companies Privatized Between 1991-1994.

The variables are defined as follows: **DIFFA** (in percentages) is the relative deviation of the privatization price from book value, **SPERS** (in thousands of dollars) is gross sales per employee, **NPBV** (in percentages) is the ratio of net profit to book value, **INTL** is the relative weight of international transactions in gross sales, **FINVA** (in thousands of dollars) is planned capital expenditures per employee, **D**=0 if **C**<50% and **D**=1 if **C**>50%, where **C** is the percentage of shares held by employees and managers.

			Dependent variables	
	C	DIFFA	DIFFA	FINVA
Independent variables				
Intercept	**98.3**	**28.7**	**159.2**	**7.7**
p-value	**0.001**	**0.007**	**0.002**	**0.1**
D	-	-	**-162.9**	-
p-value			**0.0001**	
C	-	-	-	**-0.09**
p-value				**0.03**
SPERS	**074**	*-0.16*	*-4.85*	*0.05*
p-value	**0.004**	*0.78*	*0.22*	*0.58*
D*SPERS	-	-	*-5.52*	-
p-value			*0.17*	
FINVA	-	**5.2**	**3.9**	-
p-value		**0.0001**	**0.0001**	
D*FINVA	-	-	**7.4**	-
p-value			**0.0001**	
NPBV	*-0.9*	**1.07**	*-0.6*	*-0.08*
p-value	*0.37*	**0.04**	*0.44*	*0.26*
D*NPBV	-	-	*1.08*	-
p-value			*0.27*	
INTL	**-1.7**	-	-	*0.15*
p-value	**0.001**			*0.31*
F Value	**3.75**	**19.6**	**18.77**	**3.09**
Prob>F	**0.007**	**0.0001**	**0.0001**	**0.01**
Adj R-sq	**0.09**	**0.34**	**0.54**	**0.09**

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CALIN VALSAN

OFFICE:

1016 Pamplin Hall
Department of Finance
Virginia Polytechnic Institute
& State University
Blacksburg, VA 24061
Tel: (540) 231-4419
fax: (540) 231-4487
valsan@vt.edu

HOME:

1125 South Main Street, # 2-B
Blacksburg, VA 24060
(540) 552-8317

EDUCATION:

Ph.D. candidate in Finance, expected: May 1996, Virginia Polytechnic Institute & State University, Blacksburg, VA.

Dissertation: "Management and Employee Buyouts in the Context of Mass Privatization in Romania."

B.S., International Business, September 1987, Academy for Economic Studies, Bucharest, Romania.

EXPERIENCE:

Instructor, Department of Finance, Virginia Polytechnic Institute & State University, Blacksburg, VA, Summer 1993 and 1995.

-Taught "Financial Management" and "International Financial Management"

Graduate Teaching Assistant, Department of Finance, Virginia Polytechnic Institute & State University, Blacksburg, VA, August 1992 to present.

-Researched investments, international financial management, options and futures
-Assisted in teaching "Investments" and "Futures and Options" courses

Assistant Professor, Academy for Economic Studies, Bucharest, Romania, September 1990 - August 1992.

-Taught "International Economics" and "International Business"
-Consultant to the Government of Romania on privatization and foreign investment issues

Researcher, Institute for World Economy, Bucharest, Romania,
January 1990 - September 1990.

- -Researched international business and international development
- -Consultant to the Government of Romania on privatization and foreign investment issues

Economist, C.M. "Prestarea" Inc. , Sinaia, Romania, 1987 - 1990.

- -Performed financial analysis
- -Developed market strategies and financial policies
- -Responsible for maintenance of accounts

International Tourist Guide, Youth Tourist Bureau, Bucharest, Romania, 1981 - 1987.

PUBLICATIONS:

"Foreign Direct Investment In Latin America: An Application to Guyana," *Journal of International Development Banking*, forthcoming, (with Stephen P. Ferris and G. Rodney Thompson).

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AWARDS/HONORS:

"Entrepreneurship in a Free Market System," granted by the United States Information Agency, September 1990.

Alexander Hamilton Fellowship (Fulbright Scholarship), September 1991 - July 1992.

CONFERENCES:

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"Transition in Eastern Europe," Virginia Polytechnic Institute & State University, Blacksburg, April 1992, panel discussant.

OTHER SKILLS:

-Fluent in Romanian, English, French. Knowledge of Italian.

-Computer Skills: SAS, DOS, Windows, Lotus 1-2-3, WordPerfect, MS-Word, Internet/World Wide Web.

-Oil Painting: Held exhibitions in Washington, DC, New York City, Roanoke, VA, Lynchburg, VA, Radford, VA, Blacksburg, VA.

PROFESSIONAL MEMBERSHIP: Financial Management Association, 1991 - present

REFERENCES:

Dr. G. Rodney Thompson, Professor of Finance (dissertation chair)
Department of Finance, 1016 Pamplin Hall
Virginia Polytechnic Institute & State University
Blacksburg, VA 24061
Tel: (540) 231-6523
fax: (540) 231-4487

Dr. Donald M. Chance, Professor of Finance
Department of Finance, 1016 Pamplin Hall
Virginia Polytechnic Institute & State University
Blacksburg, VA 24061
Tel: (540) 231-5061
fax: (540) 231-4487

Dr. Dilip Shome, Associate Professor of Finance
Department of Finance, 1016 Pamplin Hall
Virginia Polytechnic Institute & State University
Blacksburg, VA 24061
Tel: (540) 231-5403
fax: (540) 231-4487