Company Ownership and Performance during the Czech Transformation

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This paper focuses on ownership structure and firm performance following the privatization of state-owned firms in the Czech Republic in the 1990s. The ownership structures produced by Czech privatization are presented in detail, both during the privatization period (1990-1995) and after privatization (from 1996). This presentation goes beyond analyzing what firms were technically "private" to analyze the potential power of the state to control "private" firms. The main conclusion is that the state had a larger control potential than previously suggested. This forms a backdrop for a review of the literature on firm performance in the Czech Republic during and after privatization, exploring the impact of the division of large enterprises before privatization, the relative success of different kinds of owners after privatization, the performance of banks and the supposed benefits of Foreign Direct Investment. The Czech experience leads to the conclusion that there are many institutional factors that determine the success of privatization, and privatization programs currently being put into place in other countries should consider all these factors.

Keywords: Privatization, Corporate performance, Ownership structure, Economic transformation, Banking, Foreign direct investments

JEL Classification: D24, C23, O47

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[**Seoul Journal of Economics** 2008, Vol. 21, No. 2]

I. Introduction

The demise of the centrally-planned economic system in Central Europe brought vital changes to the region in the early 1990s. The Czech Republic embarked on an uneasy path of reform from plan to market in 1990. Because of a complete lack of empirical expertise, the early stages of the transformation were to an extent a "learning by doing" process. The switch from a command system towards a market one required adopting a succession of reforms.[1] One of the most important reforms was related to state versus private ownership. In 1989 the former Czechoslovakia had one of the smallest private sectors among the command economies, employing only about 1.2% of the labor force and producing a negligible fraction of the national output (Hanousek and Kocenda, 2003). Thus, changing the ownership structure towards private sector dominance was set as a major goal and multi-level privatization was selected as a vehicle to achieve it.[2] The privatization process had profound effects on developments in ownership structure and corporate performance among Czech firms. This paper brings forth an account of these developments.

The newly emerged ownership structures are directly related to privatization. One of the important arguments for privatization was efficiency as the transfer of ownership rights was seen as crucial for the efficient allocation of resources and long term economic growth. However, from the political perspective, advocated for instance by Andrei Shleifer, privatization was viewed as necessary even if there were to be no efficiency improvements. This is because from this perspective the principal reason for privatization was to eradicate the command economic system rooted in communist ideology, of which state ownership was the backbone. In this sense privatization was to ensure that the transformation process is irreversible. As *e.g.* Shleifer and Treisman (2005) show, privatization was very successful from the political point of view almost from the outset, but most of the empirical work finds very mixed evidence of the effect of privatization on corporate performance.

Surveys of firm-level studies examining the effects of privatization

[1] Hanousek, Kocenda and Lizal (2006) provide exhaustive details on the reforms adopted during the Czech transformation.

[2] A theoretical analysis and overview of privatization and firm performance in transition is provided by Roland (2000).

on firm performance range from ones that find a large variation of outcomes but no systematically significant effect of privatization on performance (Bevan, Estrin and Schaffer, 1999), to those cautiously concluding that privatization improves firm performance (Megginson and Netter, 2001), to ones that are fairly confident that privatization tends to improve performance (Shirley and Walsh, 2001 and Djankov and Murrell, 2002). Hanousek, Kocenda and Svejnar (2007) argue that the large variation of outcomes is because early studies relied on data covering short time periods immediately before and after privatization, often used small and sometimes unrepresentative samples of firms, were frequently unable to accurately identify ownership, often combined panel data from different accounting systems, and frequently did not control adequately for endogeneity of ownership, so the estimated effects of privatization may be biased. Hanousek, Kocenda and Svejnar (2008a) stress that privatization per se does not guarantee improved performance, at least not in the short run. The type of private ownership, corporate governance, access to know-how and markets, and the legal and institutional system matter for restructuring and performance.

The structure of the paper is as follows. First, privatization in the Czech Republic is briefly presented as it forms a backdrop for the emergence of the post-privatization structures introduced in the following section. Then, company performance is brought forth followed by some conclusions and policy implications.

II. Privatization as a Determinant of New Ownership Structures

Prior to the beginning of transformation the Czech economy was characterized by a heavy dependency on planning within the parameters of a command economic system. Medium and large enterprises dominated the economy and accent was put on the production of industrial goods while consumer goods and services were of low quality and in frequent shortage. The industrial structure of the economy was to a large extent the result of specialization within the former Soviet block. The private sector was virtually nonexistent. Change in the industrial as well as ownership structure was considered imperative for conducting the economic transformation. The privatization of the state-owned enterprises was seen as a natural goal.

The privatization program in the Czech Republic was carried out in the first half of the 1990s under three different schemes: restitution,

small-scale privatization, and large-scale privatization. The first two schemes began in 1990 and were more important during the early years of the transition. Large-scale privatization, by far the most important scheme, began in 1991, was completed in early 1995. Until the transformation began, the state had firms under tight control, which prevented the spontaneous privatization witnessed in some CEE countries (*e.g.* Hungary).

The large-scale privatization allowed for various privatization techniques.[3] Small firms were usually auctioned or sold in tenders. Many medium-sized businesses were sold in tenders or to predetermined buyers in direct sales. Most large and many medium-sized firms were transformed into joint stock companies and their shares were distributed through voucher privatization (almost one-half of the total number of all shares of all joint stock companies were privatized in the voucher scheme), sold in public auctions or to strategic partners, or transferred to municipalities. Voucher privatization was chosen by the government for its speed and as a method preferred to the extensive sale of the property to direct investors. These preferences have been the subject of debate ever since.

The voucher scheme itself was part of the large-scale privatization process.[4] Two waves of voucher privatization took place in 1992-93 and 1993-94. The privatization of each state-owned firm was decided

[3] The Czech privatization process has been extensively described and analyzed. We introduce only the essential facts here. For details see Valbonesi (1995), Hanousek and Kroch (1998), and Kocenda (1999), among others. It has to be noted that in the early 1990s privatization was widely considered one of the keystones of the entire transition process. The policy arguments were based upon a theoretical foundation (see *e.g.* Vickers and Yarrow, 1988; Bos, 1991) and successful experience in developed economies, notably the United Kingdom (see Bishop and Kay, 1988; Vining and Boardman, 1992).

[4] A general outline of a mass privatization using vouchers emerged in 1988. Lewandowski (1997) explains it thus: "Mass privatization was a unique response to the post-communist challenge. The idea of distributing vouchers to promote equitable popular participation in privatization was elaborated by market-oriented advisers to the Solidarity movement in Gdansk, Poland, in mid-1988. Vouchers were intended to make up for insufficient supply of capital; as a special type of investment currency, they would be allocated to all citizens and tradable for shares of privatized companies. The concept was presented at a conference in November 1988 — when communists were still in power — in response to a solicitation for proposals on how to transform the Polish economy." A description of the method was published by Lewandowski and Szomburg (1990). The voucher scheme was creatively adopted in several European transition countries including the Czech Republic.

on the basis of an officially accepted privatization project. According to the law, all state-owned enterprises were selected for either the first or second privatization wave, or they were temporarily exempted. Each selected firm had to submit an official privatization proposal that was usually crafted by the firm's management under the tutelage (and responsibility) of its sector ministry. Any domestic or foreign corporate body or individual was allowed to present a competing project that was to be considered on an equal footing as the official one.

During the scheme, a total of 1664 firms were privatized: 988 in the first wave, and 676 firms in the second wave.[5] The voucher scheme was open to all Czech citizens over the age of 18 who resided in the Czech Republic. For each wave every eligible citizen was authorized to buy a voucher book that contained 1000 investment "points" for 1000 crowns (about a week's wage). The "points" were used as an artificial currency. Citizens used them in a bidding process to acquire shares of companies at a proxy stock market during a succession of auctions. A formal description of the auctions in the voucher scheme can be found in Aggarwal and Harper (2000), while Hanousek and Kocenda (2005) provide a detailed narrative. Before the bidding started, individuals had the option of assigning none, some, or all of their points to Privatization Investment Funds: newly established financial firms vaguely similar in their scope of activities to closed-end mutual funds.[6] In the first wave more than 72% of all voucher points were deposited into these private funds, but for the second wave that share dropped to under 64%.

The resulting ownership structures after both waves were more or less an outcome of the logistics of the voucher scheme's administration. In this respect voucher privatization merely resulted in a formal change of ownership from the state to a large number of uninformed shareholders and failed to generate the new capital necessary to restructure companies strategically or concentrate ownership (Fungacova and Hanousek, 2006). Besides the fact that the state did not allow complete privatization, almost one-half of the total number of all shares of all joint stock companies was privatized in the voucher scheme. The subsequent post-privatization ownership structure emerged

[5] 185 firms were privatized in both waves in various proportions of their assets.

[6] Kotrba, Hanousek and Kocenda (1999) provide a detailed account of the extent to which privatization funds participated in the voucher scheme along with their corporate governance.

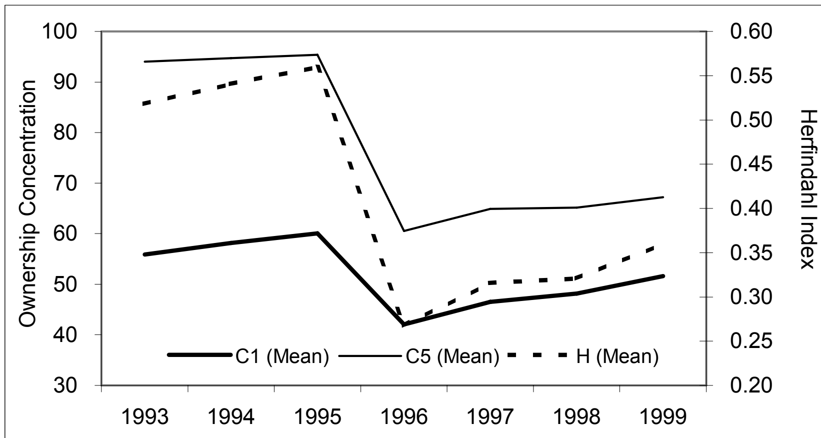
as shares from the second wave were distributed in early 1995 and began to be traded at the stock market.[7] A rapid reallocation of shares across new owners took place in 1995-96 during the so-called "third wave" of privatization in which new owners, including the privatization funds, reshaped their initial post-privatization portfolios of acquired companies. Depending on the investor, the swapping of shares in 1995-96 was aimed at (a) portfolio diversification, (b) obtaining concentrated ownership in specific firms and industries and/or (c) achieving conformity with legal requirements aimed at preventing excessive stakes being held by privatization funds.[8] The 1995-96 ownership changes were massive, unregulated and frequently unobservable to outsiders, including researchers. Investors, especially the privatization funds, engaged in direct swaps of large blocks of shares, and off-market share trading was common (Hanousek, Kocenda and Svejnar, 2007).

III. Post-privatization Ownership Structures

More stable and more economically meaningful patterns of ownership

[7] Voucher privatization was not driven by the objective of developing the capital market but the development of the capital market was partly shaped by the privatization program. As a consequence of the voucher scheme, large numbers of shares were put on the market without reference to listing requirements. In fact, instead of developing the capital market, the program may have had the opposite effect, as witnessed by the massive delisting of companies from the stock exchange in the Czech Republic. Fungacova (2007) investigates the determinants of delisting and shows that it was possible to prevent it if various privatization-related performance factors were employed to decide which firms to place for public trading in the first place. In general, stock markets in transition economies during the 1990s were often characterized by insufficient regulation, institutional fragility and weak minority shareholder protection (EBRD, 1998; Bonin and Wachtel, 2003).

[8] The regulation of privatization funds evolved gradually through Decree no. 383/1991, its Amendment No. 62/1992, and Act No. 248/1992. The most important clauses restricted each privatization fund from investing more than 10% of the points acquired in the voucher scheme in a single company and obtaining in exchange more than 20% of the shares in any company. Privatization funds established by a single founder were allowed to accumulate up to 40% of the shares in a given company, but this cap was later reduced to 20%. Many privatization funds circumvented the cap through mergers. The Act also prohibited privatization funds founded by financial institutions from purchasing shares of other financial institutions to prevent excessive concentration of financial capital (for details see Kotrba and Svejnar, 1994).



Notes: C1 measures the percentage of equity owned by the single largest owner and C5 that held by the five largest owners. H stands for the Herfindahl index of ownership concentration. Source Kocenda and Valachy (2002).

FIGURE 1
EVOLUTION OF OWNERSHIP CONCENTRATION

structure began to emerge in Czech companies in 1996. The changes in ownership structure in firms listed on the Prague Stock Exchange during the years 1993-1999 before and after privatization can be seen in Figure 1. It charts ownership concentration development in terms of the following measures: the percentage of equity owned by the single largest owner (C1), the percentage of equity owned by the five largest owners (C5), and the Herfindahl-Hirschman index of ownership concentration (H).[9] There is an initial increase in ownership concentration, followed by a drop in concentration from 1995 to 1996. This is even more accentuated in terms of the C5 index that dropped from 94% to 67%. Moreover, the Herfindahl-Hirschman index, which is more sensitive to ownership concentration, fell from 0.52 to 0.36.

[9] The Herfindahl-Hirschman index was developed independently by Hirschman (1945) and Herfindahl (1950). This index is calculated as the sum of the squared shares of each owner. In the literature, a higher concentration index for the ten largest owners (C10) is sometimes calculated. Since C5 reaches quite high values in our case (63% on average), we omit the C10 index since it would not provide any additional insight.

Such a picture is in line with the development of the "third wave" of privatization mentioned earlier. After 1996 the concentration begun to increase again, although at a slower pace, as it started to reflect the economic intentions of owners for the future development of firms. Following 1999 the concentration stabilized at large. During the post-privatization period an increase in ownership concentration was also self-preserving as firms that achieved higher ownership concentration rarely diluted it (Kocenda and Valachy, 2002).

In terms of ownership type, six key types of owners can be distinguished: industrial companies, banks, individual owners, investment funds, portfolio companies, and the state.[10] Kocenda and Valachy (2002) report that the industrial company is the most stable type of single largest owner, followed by the individual owners, investment funds, the state and banks, while the least stable type of owner is the portfolio company. Despite the fact that ownership concentration was capped by the law for investment funds, these and portfolio companies (as single largest owners) exhibited the highest average concentration increase between 1996 and 1999 while only banks lowered their ownership stakes in other firms. When ownership structure is related to industry sectors, the firms do not exhibit excessive differences among sector-specific attributes with respect to the proportion of the stake held by a single largest owner immediately after privatization. Later they do, though. The mechanical engineering and service sectors are correlated with higher ownership concentration while the trade and construction and building materials sectors dominate the area of lower ownership concentration.

IV. Private Ownership *vs.* Control Potential of State

The voucher scheme did not fulfill its main mission to cut the ownership link between the state and firms since a large amount of residual state property was left in the hands of the state after the voucher scheme ended and a large potential control of the state persisted over a substantial part of the economy. This unhappy outcome

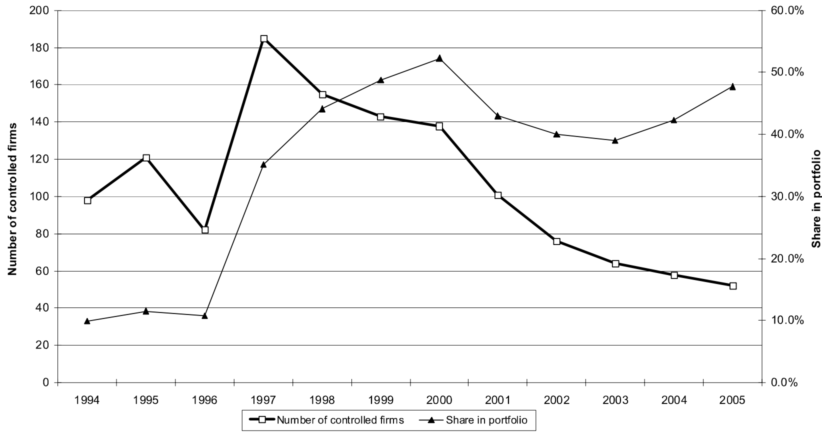
[10] The difference between an investment fund and a portfolio company is as follows. An investment fund buys shares of a certain company in order to exercise voting rights and to acquire profit from the company later. A portfolio company buys shares of a certain firm to sell these shares for a higher price in order to realize a capital gain. The portfolio company does not attempt to exercise voting rights or extract corporate profits.

prompted a wide discussion on privatization-related corruption issues.[11] During the years 1996-1999 the share positions of the state in the (already) voucher-privatized companies remained large (Kocenda, 1999) and only recently and slowly residual state property has begun to diminish.

Hanousek and Kocenda (2008) analyzed the extent of the control potential of the state in the Czech firms privatized in the mass privatization scheme. The property remained for an extended period in the hands of the state and was administered by the National Property Fund (NPF), which was set up as a special agency to protect the economic interests of the state. During the period from 1995, when the shares from the second wave of the voucher scheme were distributed, until 2005, when the NPF was dissolved, the state was in the position of an important owner and co-owner in already privatized companies.

The state control in a firm may be exercised by various means. The simplest method of control is through the number of shares held by the state that represent the associated voting rights. Another way is embodied in the "golden" share. Such an instrument, in the form of a single share with a special status, allows the state to prevent any major changes in a company where the state holds such a share. Further, a number of companies were declared strategic firms and enjoyed a special status that was embedded in related legal provisions. Similarly to the golden share instrument, in legally declared strategic firms the state was able to exercise greater control than would correspond to its ownership rights derived from the extent of its share holdings. Also, in some companies the two instruments of indirect control were combined. All of the feasible means of control combined together allow an evaluation of the effective control power of the state over the Czech privatized companies. The development of the combined control potential is shown in Figures 2 and 3. It is shown that at its peak in 1997, nearly 60% of firms and close to 90% of the assets of the firms in the NPF portfolio was under the effective control potential of the state. The extent decreases slowly and only after 2002 the amount of

[11] Extensive involvement of the state in the economy, inefficient government bureaucracy, and less-than-transparent public tenders are among the prominent factors affecting the state of corruption in the transformation process. See Lizal and Kocenda (2001) for an account on the Czech Republic.



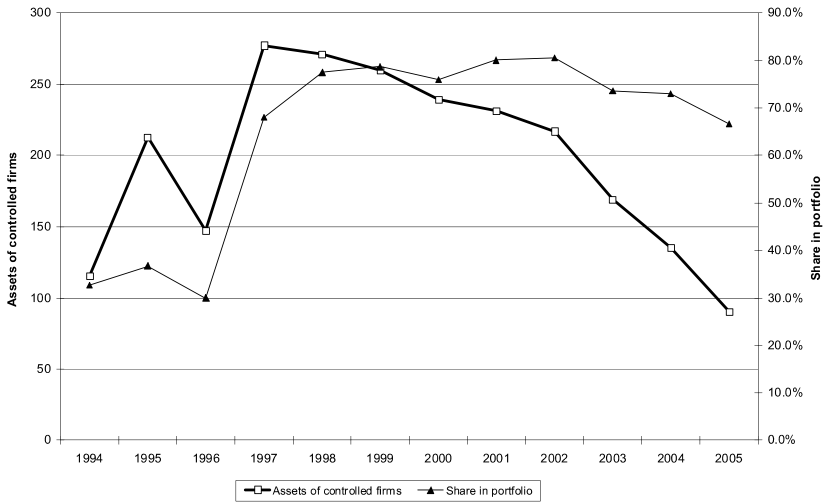
Source: Hanousek and Kocenda (2008)

FIGURE 2

COMBINED CONTROL POTENTIAL: ABSOLUTE AND RELATIVE NUMBERS OF FIRMS IN THE NPF PORTFOLIO (IN BILLIONS OF CZK)

assets of firms within the state control potential decreases faster. This evidence is supported by Kocenda and Valachy (2002) who document that for the years 1996-1999 the stakes of the state tended to increase over time while the number of stakes the state owned decreased. This is in accord with the aim of the state to sell residual state property but to maintain power in companies of special interest.

Surely, the extent of state control potential should not be overestimated. On the other hand, Hanousek and Kocenda (2008) show that a substantial part of the private sector composed of medium and large-sized companies privatized in the large-scale privatization was not truly in the private economy over the period 1994-2005. Specifically, in 1997 the ratio of assets of firms under combined control of the NPF to the assets of all Czech joint-stock companies was above 21% and declined to about 3% in 2005. These firms became truly private only after the state sold the remaining shares it possessed and the golden shares were liquidated; the state control potential consequently declined.



Source: Hanousek and Kocenda (2008)

FIGURE 3

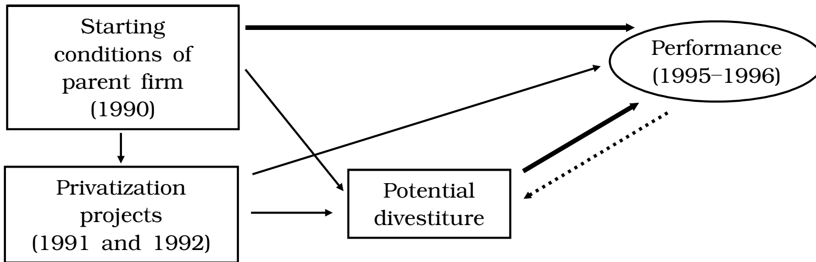
COMBINED CONTROL POTENTIAL: ABSOLUTE AND RELATIVE VALUES OF TOTAL ASSETS OF FIRMS IN THE NPF PORTFOLIO (IN BILLIONS OF CZK)

V. Company Performance

A. Divide et impera

As part of the restructuring process the government initiated divisions of large companies prior to privatizing them. These divestitures were considered one of the mechanisms of corporate restructuring as the Czech Republic's corporate sector was at the beginning of transformation dominated by large state-owned enterprise conglomerates. The decisions on divestitures were taken by the relevant government ministries in conjunction with the government privatization authority.[12] During the period 1991-1992, 44 large companies

[12] The decision for each firm was based on he winning privatization project that outlined the proposed framework for the divestiture(s). The management of each enterprise was obliged by law to submit a privatization proposal, but any domestic or foreign firm, institution or individual could present a competing privatization project. On average almost 9 projects were submitted per firm (the median was 5); the projects were approved at an average rate of close to 3 per firm (the median was 2. Decisions were reflected, at least



Source: Hanousek, Kocenda and Svejnar (2008b)

FIGURE 4
A STYLIZED MODEL OF CORPORATE DIVESTITURE

were broken up into 131 new firms that subsequently entered the first wave of the voucher scheme. A stylized model summarizing the above process of corporate divestitures is presented in Figure 4.

Hanousek, Kocenda and Svejnar (2008b) analyzed the effect of these break-ups on firm performance and whether the nature of the effect depends on the type of the new post-privatization ownership structure. Parent firms could be clearly linked with divested units and performance data and firm characteristics were available for all the units both after the division and before, when they were still part of the original parent enterprise. Ownership data allowed distinguishing the extent to which each firm was owned by an industrial (*i.e.*, non-financial) firm, financial company, individual owner, or state.[13]

They model the post-divestiture and post-privatization corporate performance as a function of the presence or absence of a divestiture and the (subsequent) change in the ownership structure, controlling for the possible endogeneity of these explanatory variables. Formally, the following model of corporate performance is estimated:

$$\pi_i = \alpha_0 X_i + \alpha_1 DIV_i + \beta OWN(_{DIV})_i + \gamma OWN(_{NoDIV})_i + \chi dL_i + \delta dK_i + \varepsilon_i, \qquad (1)$$

partially government objectives (see Kotrba and Svejnar, 1994).

[13] Thus, out of the 988 firms that entered the first wave of voucher privatization Hanousek, Kocenda and Svejnar (2008b) use 131 newly created firms as a result of numerous divestitures, plus 780 firms that did not experience division and constitute control group. This means that there are only 77 firms (8% of the total) for which the data are dubious due to legal problems associated with privatization and are not included in the sample.

where index i denotes firms; π_i is a measure of corporate performance (measured as labor costs over sales, operating profit over labor costs, and operating profit per share) of firm i after both divestiture and privatization occurred (*i.e.*, in 1995-96); X_i captures the pre-divestiture, pre-privatization (1990) economic situation in the parent firm measured by assets, liabilities, sales, profit, and number of employees; and DIV_i is a dummy variable coded 1 if the enterprise is a divested unit and 0 if it is a firm that did not experience division. The variables $OWN(_{DIV})_i$ and $OWN(_{NoDIV})_i$ measure the post-privatization (1995-96) ownership structure in companies that experienced divestitures and those that did not, respectively, while β and γ are the associated coefficients. Finally, there are indicators of the extent of each divestiture defined as the percentage shares of pre-divestiture capital and labor (dK_i and dL_i) that each new unit appropriates from the parent (broken up) firm at the time of its division.[14]

As a robust check on the baseline model, they construct a DID estimator, using the fact that divested units in 1995-96 can be exactly matched with their predecessor enterprise operating units in 1991. Having comparable data for both of these periods on sales they employ this performance indicator as a proxy for the extent of the firm's operation. Technically, for sales they examine the difference in performance between 1995-96 and 1991 as a function of a divestiture and ownership change, controlling for the possible endogeneity of the explanatory variables.

The general finding of Hanousek, Kocenda and Svejnar (2008b) is that divestitures affect performance positively.[15] The average divestiture

[14] Corporate performance is modeled as a function of the presence or absence of a divestiture and the type of ownership structure. Since the explanatory variables related to divestitures and ownership structure may be endogenous, instrumental variables are used in estimation. The logit equation models the divestiture of a company and the subsequent changes in its ownership structure, with the explanatory variables being predetermined and exogenous with respect to the divestiture and privatization. Then the predicted values from the logit serve as instruments in the model (1). To address the selection bias arising from data attrition over time, the Heckman (1979) procedure is used to estimate a selection equation and then the resulting Mills ratio is used as a regressor in the corporate performance equation (1).

[15] In terms of methodology Hanousek, Kocenda and Svejnar (2008b) show that it is important to control for changes in ownership when analyzing the effect of divestitures and to control for endogeneity, selection and data attrition when analyzing the effects of divestitures and privatization.

increases the firm's profitability and scale of operations (sales), while the effect of privatization depends on the resulting ownership structure. Industrial firms as owners on new divested firms improve or do not hamper performance. Financial companies and individuals as owners are mostly associated with no improvement and in some cases significant declines in performance. Reducing state ownership during privatization is positive on the profitability of firms that did not experience divestitures, while the effect on newly emerged units is insignificant. The effects of privatization are hence found to be less positive and less clear-cut than was suggested in many of the early studies.[16]

B. Corporate Performance Under New Owners

A major issue that has received renewed attention is whether concentrated or dispersed ownership is more conducive to good corporate performance. The issue is also related to the question of whether private firms perform better than state-owned enterprises and whether post-privatization ownership structures lead to improvements in corporate performance over time. Hanousek, Kocenda and Svejnar (2007) analyze the effects of different types of ownership, changes in ownership and the concentration of ownership on corporate performance using an almost complete population of firms in the Czech Republic that went through mass privatization.

In particular, they examine the effects of six types of domestic and two types of foreign ownership that may have differing implications for corporate objectives, constraints and governance. The six types of domestic owners are the state, industrial (*i.e.*, non-financial) companies, banks, investment funds, portfolio companies, and individuals, while the two types of foreign owners are industrial (non-financial) companies and all other foreign owners. In terms of ownership concentration they distinguish several blockholder categories: *majority* ownership (more than 50% of shares), *blocking minority* ownership (more than 33% but not more than 50% of shares) and a *legal*

[16] An early attempt to analyze divestitures in the Czech Republic is presented in Lizal, Singer and Svejnar (2001). The limited data available at the time of this study did not allow exact identification of divestitures or linking the divested units to the parent firms. Moreover, the authors can follow the firms only during the year of the breakup (1991) and the following year (1992). The serious data limitations prevent any coherent comparison with Hanousek, Kocenda and Svejnar (2008b).

minority ownership (at least 10% but not more than 33% of shares). Overall, the majority and blocking minority represent different degrees of concentrated ownership, while the legal minority may be viewed as a form of moderately dispersed ownership. A special control instrument is when the government keeps a golden share in a given firm that gives it the right to veto certain managerial decisions, such as the subject of business activities and sales of assets, and indirectly influence all managerial decisions. Institutional evidence suggests that the golden share may be an important mechanism enabling the state to exert a degree of influence over firms in which it no longer holds a sufficient ownership stake.[17]

Hanousek, Kocenda and Svejnar (2007) specify a panel-data treatment evaluation procedure to estimate corporate performance depending on a richly specified ownership structure. In particular, letting y_{ijt} be the percentage change of a firm's performance indicator (X_{ijt}) from year *t-1* to year *t*, the estimating equation is specified as:

$$y_{ijt} = \alpha + P_{ij1}\beta_j + X_{ij1}\gamma_j + \Delta P_{ij\tau}\delta_j + P_{ij\tau}\theta_j + D\phi + \varepsilon_{ijt}, \quad (2)$$

where P_{ijt} denotes the ownership type j of firm i in year t, constant α captures the performance effect of state as the single largest owner or state majority ownership (depending on ownership categorization), and all dummy variables in equation (2) are coded relative to α.[18] Column vector β_j thus reflects the effects on performance of all the other types of 1996 (initial post-privatization) ownership P_{ij1} relative to state as the single largest owner or state majority ownership.[19]

[17] The golden share was introduced by Act No. 210/1993, modifying Act No. 92/1991. The act set the conditions for property transfer from the state to others with the aim of protecting the special interests of the state in firms privatized in large-scale privatization. The veto rights associated with the golden share usually relate to the scope and line of business activity and depend on each company's charter. When the state sells its golden share, it gives up its rights in the company and the golden share ceases to exist. The instrument of the golden share in the Czech Republic does not conform fully to that found in other countries since it is limited to being solely an instrument of state control and does not serve as a means of attracting free or less expensive credit.

[18] The results on the relative effects are unaffected by which ownership category is selected as the base.

[19] Coding the ownership dummy variables so that the effects of non-state ownership forms is measured relative to the effect of state ownership is useful because firms in which the state retains ownership are the ones that

Vector γ_j in turn captures the time-varying effect of the 1996 level of performance X_{ij1} on subsequent performance. Similarly, vector δ_j captures the time invariant (instantaneous) effect on the level of performance of a firm changing its 1996 ownership to a new ownership category $P_{ij\tau}$ in a given year τ after 1996. Complementing δ_j, vector θ_j reflects the time-varying effect on the performance brought about by the new type of ownership $P_{ij\tau}$ established in the firm at time τ. Finally, vector ϕ represents the time-varying effects of industry and annual dummy variables D as well as dummy variables reflecting the form of privatization of the firm (first or second wave, both waves, or outside of the voucher scheme), and ε_{ijt} is the error term.

The above specification focuses on estimating the effects of ownership, while controlling for competition by firm-specific fixed effects, the effect of initial performance interacted with the time trend, and the industry-specific and annual time dummy variables interacted with time. To account for the endogeneity of ownership specification (2) was estimated by employing a two-stage instrumental variable strategy (for details see Hanousek, Kocenda and Svejnar, 2007).

The econometric estimates present a much less confident image than that presented by many of the earlier studies, suggesting that the expectations and early findings of the positive effects of immediate post-privatization ownership structures on corporate performance were premature. The results indicate that the performance effects of privatization and different types of ownership are on the whole surprisingly limited and that many types of private owners do not generate performance that is different from that of firms with state ownership. There are two key exceptions to this overall result. First, concentrated foreign owners (foreign industrial, *i.e.*, non-financial, companies) yield superior performance in terms of growth of sales and in some specifications also profit, thus reflecting the presence of strategic restructuring. Second, concentrated domestic owners (industrial companies and investment funds) reduce employment, thus they engage in defensive restructuring.[20] These findings are consistent

are least privatized and under the null hypothesis also least restructured. More importantly, the approach also reflects the change in performance as firms switch from state to private ownership.

[20] Data limitations do not allow analyzing the effect of insider control.

with the agency theory prediction that concentrated ownership results in superior corporate performance and they go against theories stressing the positive effects of managerial autonomy. Overall, these results highlight the benefits of strategic restructuring accompanied by an inflow of new capital and managerial culture (Hanousek, Kocenda and Svejnar, 2007).

The above findings can be supplemented with some earlier results. Using a different approach Kocenda (2003) reports no effect of domestic owners on firm performance in contrast to their effect on firm characteristics (total assets, long-term bank loans, and cash flow over equity). The effect of foreign owners on performance is found to be positive and limited. Also, Hanousek and Kocenda (2003) report a positive effect of private foreign majority owners on returns on assets during the immediate post-privatization period. The effect of foreign owners but also that of domestic owners is found in Sabirianova, Svejnar and Terrell (2005) who reports a positive effect of both domestic and foreign private owners on total factor productivity. Claessens and Djankov (1999) find a positive effect on profitability by private domestic and foreign financial companies. Both studies use different data samples and cover privatization as well as post-privatization periods, though.

A different perspective on firm performance is presented by Bena and Hanousek (2008) who argue that dividend payments reflect a company's performance as well as the agency problem between shareholders and management and they discuss how this conflict may be related to a conflict among various types of owners. Large shareholders can have a dual impact on firms. Significant owners have a strong incentive to monitor management to ensure that a firm's value is maximized, while on the other hand, their behavior is motivated by the possibility to extract rents and enjoy the private benefits of control. According to this, dividends are paid to all shareholders proportionally, but a dominant shareholder may exert an effort to seek additional private benefits. As controlling shareholders are in power to decide whether and how a firm's profits are distributed, the corporate governance mechanism in concentrated ownership structures should predominantly ensure that all shareholders are equally treated per unit of stake in the firm. The key question is whether rent extraction by large shareholders takes place in the Czech Republic and how substantial it is.

Bena and Hanousek (2008) consider several levels of ownership

concentration and several types of single largest owner, and investigate the difference between domestic and foreign owners in the same manner as Hanousek, Kocenda and Svejnar (2007). They show that dominant shareholders extract rents from firms and do enjoy private benefits of control while significant minority shareholders limit rent extraction by increasing the probability that a dividend is paid and increasing the target payout ratio. The presence of strong minorities shifts the dividend policy in the same direction both for Czech as well as for foreign largest owners. The rent extraction and dilution of minority shareholders seems to be associated predominantly with Czech owners as foreigners pay higher dividends relative to Czech owners in all cases. In general, the findings show that corporate dividend policy in the Czech Republic depends on the concentration and domicile of ownership and minority shareholders play a key role in determining dividend policy.

C. Banking Performance

Along with the industrial and service sectors, the financial sector has been also a target of performance analyses. Banks exhibit specifics that research has to deal with. The commercial banking sector in transformation economies emerged as a result of the breakup of the state bank (monobank) system combined with issuing licenses to new banks. From a transition perspective this is an important feature since banks underwent not only privatization, but some of them emerged as a result of a divestment process. Moreover, after being privatized many banks had to be bailed out by the state and re-privatized.

There exists literature that analyzes the performance of banks after privatization in transforming European economies. The studies of Bonin, Hasan and Wachtel (2005 a, b), Fries, Neven, Seabright, and Taci (2006), and Fries and Taci (2005) provide evidence that the performance of banks improves after their privatization to real owners, chiefly through foreign direct investment. These results are in contrast to the findings of Poghosyan and Borovicka (2007) who use a sample of 282 banks in 19 European and post-Soviet emerging market transformation economies and instrument for the decision of foreign investors to acquire domestic banks. This approach allows them to evaluate the endogeneity bias due to the so-called "cream-skimming" effect. Their main point is that foreign ownership does not

improve the performance of banks, as was documented in previous studies, and argue that such an effect is illusionary and due to the fact that the best banks are privatized to foreigners in the first place ("cream-skimming"). After controlling for this "cream- skimming" effect, it is found that foreign ownership leads to a decrease in cost efficiency.

Matousek and Taci (2005) examine the cost efficiency of the Czech banking system in the 1990s by applying the distribution free approach model and report that foreign banks were on average more efficient than other banks, although their efficiency was comparable with "good" small bank efficiency in the early years of their operation. Based on the estimated results it is argued that the early privatization of state-owned commercial banks and a more liberal policy towards foreign banks in the early stage of transition would have enhanced the efficiency in the banking system. Poghosyan and Borovicka (2007) on the contrary argue that Czech banks exhibit above average cost inefficiency, the highest in the group of its peers (Hungary, Poland and Slovakia). They argue that since these countries were the most successful in terms of attracting foreign direct investment into their banking systems, this result implies that opening the financial sector to foreign entry does not necessarily assume an improvement in the performance of banking institutions.

The above findings should be paired with the results of Hanousek, Kocenda and Ondko (2007), who show that the completed privatization of the banking sector was an important factor behind a dramatic change in the extent of credit and debit flows not only in Czech banks, but also in Hungary, Poland and Slovakia. Hence, the policy implication would be to adequately privatize the banking sector in other countries where transition still continues or is on the agenda.

D. Foreign Direct Investment

One of the highest priorities of most transition and developing countries is to present themselves as attractive places for investment. Governments in these countries compete to attract foreign investors by offering them various advantages. In 1998 the government of the Czech Republic approved a system of subsidies for foreign investors that was supposed to increase the competitiveness of Czech industry. One of the supporting arguments was that foreign investors would help other domestic companies to improve. However, the actual

impact is questionable. Although there are numerous empirical studies focusing on the effects of FDI on domestic companies in the Czech Republic, their findings are ambiguous and contradictory (Djankov and Hoekman, 2000; Damijan Knell, Majcen, and Rojec, 2003a and 2003b; Kosova and Ayyagari, 2006). These studies suffer from small samples and from their focus on the early transition period, which is characterized by mass privatization and unclear ownership structures. It is well documented now that the main boom of foreign investment came to the Czech Republic only after 1998, which is the last sample year in almost every previous study cited. Therefore, there is no surprise that previous studies often did not succeed in finding any significant spillover effects.

Stancik (2007) has made a substantial improvement over the earlier studies as he analyzed the effects of FDI on the sales growth of domestic companies in the Czech Republic over the period 1995-2003. In particular the study identified the gains from FDI within the same sector (horizontal spillovers) as well as the indirect effects on supplying or purchasing domestic companies from other sectors (backward or forward spillovers, respectively). He also shed light on the sources of identification, studying the time structure of these effects and paying attention to the potential endogeneity of FDI with respect to future industry growth. Contrary to expectations and the arguments supporting FDI subsidies, it is shown that foreign investors contribute negatively to the performance of domestic companies, especially to those in upstream sectors. In other words, domestic companies supplying foreign-owned firms are negatively affected by the presence of foreign investors as a negative backward spillover effect is found. Since foreign investors prefer to import their supplies from abroad, Czech supplying companies oriented mainly on domestic markets suffer. This effect becomes even more evident after accounting for the endogeneity of FDI.

However, one should not understand the above results to suggest not encouraging FDI. Despite the negative spillover effects, the overall impact of FDI may be considered positive. First, there is direct economic evidence that companies receiving foreign investment are typically characterized by higher productivity.[21] Second, there are

[21] For supporting evidence see Evenett and Voicu (2003), Harris and Robinson (2003), Javorcik and Arnold (2005), Hanousek, Kocenda and Svejnar (2007), and Hlavacek and Gersl (2007), among others.

other socially-related positive effects such as newly created jobs or new highways or other infrastructure that can be directly related to FDI.

VI. Concluding Remarks

The transformation experience of the Czech Republic helps to understand developments in firm ownership and performance after the privatization of the formerly state-owned enterprises. The example shows that improved performance is not an automatic result of privatization. The type of private ownership, corporate governance, access to know-how and markets, and the legal and institutional system matter for restructuring and performance. Frequently, foreign ownership tends to have a positive effect on performance among industrial companies but it should not be taken as a universal remedy as its effects are not always clearly or completely positive. The positive effect of privatization for domestic owners usually takes a number of years to materialize. This finding can be inferred also for other former or current transition economies as Hanousek, Kocenda and Svejnar (2008a) provide generally similar results based on a large survey of the empirical literature.

The former command economies have privatized state-owned enterprises and the economies of China, India and Vietnam are in the process of privatization. On the Korean peninsula this issue is also of importance from the perspective of potential unification. With respect to North Korea, Kim, Kim and Lee (2007) argue that reforms must be "far reaching enough to transform the economic system fully toward a market economy." With respect to privatizing state owned enterprises, a complete and deep privatization is imperative. Half-way privatization or just changing the title of ownership with prolonged control of the state does not foster firm restructuring or improvements in corporate performance. This applies for industrial firms, the service sector as well as the banking industry. Foreign investment alone is not a remedy, either, and therefore building institutions that would guarantee the rule of law is also an essential part of transformation. In brief, policy implications center on the importance of good management and corporate governance, access to world markets, and the presence of a functioning legal and institutional framework.

(Received 21 December 2007; Revised 28 January 2008)

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