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Lessons from the Czech Transition: An Inspiration for Iraq?

Ondřej Schneider*

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Abstract:

This paper was written on invitation from the U.S. Department of State to prepare a paper describing the Czech experience during the transition process and addressing issues that might be applicable to the rebuilding of Iraq. The aim of this paper, thus, is not to provide an extensive and complete overview of the Czech transition experience. Rather, we focus on several issues that may be relevant in the Iraqi context.

We first discuss the privatization methods used in the Czech Republic and their merits. Then we study the financial sector developments, namely dominance of large banks and absence of significant equity market. We show how the Czech transition was tarnished by rampant corruption and how the interplay between the weak financial institutional basis and widespread corruption led to escalation of privatization costs. These costs influenced public budgets, but we show that budgets are threatened more by too generous social benefits that destroy working incentives. Lastly, we discuss the Czech experience with the environmental damage left by the previous regime and policies employed to deal with it.

Keywords: economic transformation, privatization, public budgets, environmental policies **JEL Classification:** L1, P2, P3

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Introduction

As observed from admittedly oversimplified economic point of view, the dominant purpose of the tectonic changes that took place in Central and Eastern Europe in 1989 was to get rich. Or richer, at least. The old, socialist state dominated system was seen as inefficient, corrupt and doomed. The "revolution" was supposed to bring, alongside the goodies as free democratic election, free speech and the demise of the Communist Party, prosperity and robust economic growth. As we show below, these hopes have been only partially satisfied. The countries that have embarked on transition 14 years ago are now indeed freer, more democratic and largely richer. Still, there is a lingering feeling of disappointment among their population as many people feel that they "should have done better".

The paper analyzes several aspects of the Czech transition process with a special respect to the applicability of these aspects to the Iraqi situation. Therefore, we do not attempt to provide exhaustive analysis of the transition process. Rather, we look at several specific areas where the Czech experience could be relevant. The paper is organized as follows: after a brief general discussion of the transition stratagems, we turn to the list of specific issues. First we examine the Czech privatization experience, specifically the voucher privatization experiment. Second, we study the Czech financial and capital markets in transition process and show what moral hazards the Czech way entailed. Third, we endeavor into the political economy and illustrate how corruption has become endemic during the transition and how it severely hampers economic development of the Czech Republic. Fourth, we will explore the Czech public sector, namely its mushrooming social sector, inefficient labor market policies and burgeoning public budget deficits that stem from a combustible mixture of high social spending and high costs of bailouts of inefficient Czech banks. Last but not least, we look briefly on the environmental issues and illustrate how has the Czech Republic's badly damaged environment recovered from the communists' quagmire.

General transition "theory"

The transition toward a market economy was in all Central and Eastern European countries motivated, to a different extent, by their disastrous experience with the former socialist system. The Czech Republic at the end of the 1980's was a typical, if rather extremist case: its private sector was non-existent, the country suffered from the hypertrophy of heavy industry with extremely high energy consumption. The Czech economy also suffered from extremely distorted foreign trade links that were subjected to the political will, mostly Moscow's, and did not respect the country's economic needs.

At the same time, the late Czechoslovakia did not suffer from many macroeconomic policy excesses that were so frequent in some other "socialist" countries. Inflation, both official and unofficial were relatively modest, country did not accumulate significant foreign debts and had a firm tradition of balanced public budgets. To sum up, while the Czech Republic had a relatively positive starting position vis-à-vis its macroeconomic situation, its microeconomic foundations were almost totally destroyed by the socialist system.²

The Czechoslovakia was further lucky in having very resolute and reform minded government to start with in 1990. The successive governments acted very quickly and made some crucial systematic changes as (almost complete) price liberalization, tax reform, foreign trade liberalization. These helped the Czech economy to recover relatively quickly from the initial recession and to start growing in 1994. Unfortunately, the Czech(oslovak) authorities did not fully reflect the dichotomy in the macro- and microeconomic foundations. The consequent Czechoslovak and Czech governments focused on macroeconomic policies, kept tight monetary and fiscal policies, but they did not act rigorously enough to enact change the microeconomic relations within the economy.

Most importantly, the Czechs neglected the most important cliché of transition, and indeed the whole economics: people respond to incentives. If people do not have the right incentives they will divert to suboptimal activities. If governments do not have the right incentives, they often adopt policies that hamper growth. And indeed, people had extremely bad incentives under the old regime.

The system, seemingly run by the Communist Party, was a large patronage machine, where personal ties were everything and merits were unimportant. Stealing was rampant and widespread.³ The efficiency was not rewarded by higher profits but by cutting funds provided by the center. Education was sought not as an empowerment tool, nor as a route to higher wages, but as the easy way to avoid unpleasant bureaucratic procedures, including the mandatory draft for males. Government officials were not motivated by higher profits or better delivery of goods and services but by administrative measures, often degenerated to meaningless accounting exercises.

Shortly, the socialist economy was inherently inefficient and had created strong inertia within the society towards autarky, aversion to risk, extremely low dispersion of incomes and lack of entrepreneurship. These instincts, no doubt present in all transition countries and most likely strong in Iraq as well, needed to be changed to more market-friendly open-mindness, appetite for entrepreneurship and tolerance towards rising inequality.

¹ The Czech Republic was a part of Czechoslovakia, until its dissolution at the end of 1992.

² For detailed discussion see Dlouhy (2000).

³ Illustrated by the "socialist proverb": "Those who don't steal, impoverish their families."

According to this analysis, and to other authors⁴, this sweeping change of attitudes has been the most difficult part of the whole transition process. Inflation may go up and down, currencies fluctuate all the time and budget deficits may have tendency to grow, but all these are easy problems, compared to the attitude re-orientation. Old habits of turning to comrades, using patronage, evading markets whenever possible and even submerging into shadow economy may re-emerge very quickly and may severely distort fragile market structures being just built. The government must be aware of this trap and must act quickly and must provide market reforms robust enough to channel the bulk of activity into the newly built market system.

There is no rulebook how a government may achieve the change in attitudes. There are, however, plentiful examples as to what such a government should not do and we will discuss some of these below. The most important, though, is the government's very understanding of this process and its acknowledged role in it. The Czech Republic long suffered from the government's ignorance and indeed denial of the microeconomic dimension of the transition. This negligence allowed some mechanism that diverted people's incentives toward unproductive activities to develop. Corruption and embezzlement have come to be associated with privatization, capital markets witnessed some massive and outright thefts, and banks became easy targets for abrasive corporate raiders that used them as their private piggy banks.

The government, often paralyzed by its minority or weak majority status in the Parliament, retreated to the internal feuds and power games and scheming. Some important reforms were sidelined. For example, it took a fall of a (center-right) Czech government to establish a Security and Exchange Commission in 1997. Later, a center-left government ran a spending spree, facing down any critique. Similarly, the social sector have hampered the Czech labor markets, as it provided often comfortable social security net as an alternative to active labor market participation. Low earners often face steep implicit taxes and low rewards for accepting a job.

None of the issues mentioned above is fatal on its own or in unique to the Czech Republic. However, their combination may be very dangerous and any country embarking on a transition (or development) project should be aware of them. We will, thus, study these issues in more detail below.

General economic development

Here we present a brief and incomplete overview of the Czech economic developments since conception of its economic reforms in 1990. For a much more detailed discussion, see Dlouhý (2001), or Svejnar (2002). The Czech economic reform, as it was envisaged and enacted by the governments in the first half of the 1990's, was based on three basic pillars:

- A. Systemic changes as price and foreign trade liberalization, tax reform;
- B. Macroeconomic stabilization through low inflation and surplus public budgets, competitive exchange rate;
- C. Privatization.

As the country was socially and politically stable, the government could push the reform agenda very quickly. It certainly helped that the country was seen as a strong industrial center with skilled labor force. As indicated above, the absence of microeconomic foundations of a market was overlooked in the early 1990's.

3

⁴ See, for example Roland (2000).

The Czech economy withstood relatively robustly the first transition shock when traditional "markets" of the former Soviet Union and its satellites disintegrated and when Slovakia left the Czechoslovak federation, shrinking the already depressed market by one third further. Still, the country managed to start growing again in 1993 and reached a robust 5.9% growth in 1995 – see Table 1 where other transition countries' indicators illustrate the region developments. All the better, the Czech Republic's growth was accompanied by extremely low unemployment – the Czech unemployment level was on average below 4% until 1997.

Table 1: GDP growth in CEE countries in 1991–2002

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Czech Rep.	-11.5	-3.3	0.6	3.6	5.9	4.3	-0.8	-1.0	0.5	3.3	3.1	2.0
Hungary	-11.9	-3.1	-0.6	2.9	1.5	1.3	4.6	4.9	4.2	5.2	3.8	3.3
Poland	-7.0	2.6	3.8	5.2	7.0	6.0	6.8	4.8	4.1	4.0	1.2	1.3
Slovakia	-14.6	-6.7	-3.7	4.9	6.7	6.2	6.2	4.1	1.9	2.2	3.3	4.4
Slovenia	-8.9	-5.4	2.8	5.3	4.1	3.5	4.6	3.8	5.2	4.6	3.0	3.2

Source: EIU Country Data, World Development Indicators, Czech National Bank (preliminary data for 2002)

The worrying signs appeared, though, in 1995 when the trade balance sharply deteriorated. The government chose to ignore the issue and even ignited the situation by a preelection spending bonanza. This eventually led to a spiraling current account deficit that reached almost 7% of GDP in 1996, sparking the currency crisis in the spring of 1997. The crisis was weathered rather successfully as the central bank floated the currency and the government slashed budget spending, but it was too late too little for the center-right government that collapsed in autumn 1997.

Too passive a government?

What is perhaps more interesting that this well known episode in the Czech economic history is the extent to which this development was facilitated by the persistent distortions within the microeconomic foundation of the Czech economic reform. The most important lesson from the 1997 crisis is that the government's passivity (for fear of voters retribution) may take an even higher price.

The Czech government almost stopped moving in 1995 as the voucher privatization was completed.⁵ The government seemingly resigned on its role in most of the development areas. It is widely accepted⁶ that government has several roles in facilitating economic growth. It should maintain macroeconomic stability, build strong institutions underpinning market economy and encourage investment both in physical, but more importantly in human capital. The Czech government failed in most of these tasks.

While the macroeconomic stability was maintained until 1996, the government was unable to react on worsening trade balance that eventually led to the exchange rate crisis. The same inability appears to be hampering the Czech economy now, as the current government is unable to rein into its ballooning budget deficits that will, eventually, lead to a difficult adjustment and macroeconomic turbulences.

⁵ More on the privatization and the voucher technique applied in the Czech Republic later in the paper.

⁶ See, for instance, theories of endogenous growth in Romer (1990) or Aghion, Howit (1992). Their findings have been echoed by various IMF reports on the country development.

The subsequent Czech governments have also failed in fostering human capital accumulation. While the Czech labor force remains to be skilled and technically savvy, the country does not invest enough in education and research. Budgetary pressures and sheer negligence led to falling real budgets for universities and stagnant, and low, budget for research institutions. The governments seem to be perplexed by the issue and regularly dismiss attempts to bring private funds to contribute paltry public expenditures. As table 2 illustrates, the Czech Republic has the lowest share of university educated workers, and the Czech level is only a half of the Germany's one. Only 20% of the relevant age cohorts study at a university, while the share approaches one half in most EU countries and is as high as 80% in the U.S.

Table 2: Labor force – education groups (% of total)

	Year	Elementary	High school	College	
Czech Rep	. 1994	13.2	76.8	9.9	
	1999	9.8	79	11.2	
Slovakia	1994	14	74.2	11.7	
Hungary	1994	26.8	59.7	13.5	
	1999	19.7	64.8	15.5	
Poland	1994	23.2	63.9	12.8	
Slovenia	1994	26.3	58.3	15.3	
	1999	21.6	62.7	15.7	
Germany	1999	17.9	58.4	23.7	

Source: World Development Indicators

However, as we show later, the government's biggest failure was incomplete privatization and neglect of the capital market institutions that left banks under the government's patronage but exposed them, at the same time, to all risks of modern financial markets. Inexperienced bankers, coupled with even less competent politicians accumulated a record-high level of non-performing loans. Moreover, the government toppled its passivity vis-à-vis the bank privatization by its negligence of the capital markets regulation. Even though the voucher privatization "threw" hundreds of firms on public markets, there was no watchdog agency until late 1997, when a large portion of privatization assets was already expropriated by unscrupulous fund managers.

Inefficient investment

The mixture of the government patronage over the banks, low transparency of capital markets and too slowly raising human capital demonstrate themselves in low efficiency of investment in the Czech Republic. The country spends a lot, about 25-30% of GDP is saved every year. These monies, however, are invested very inefficiently. As table 3 illustrates, the Czech Republic has the highest investment rate from all the countries, but it also has the lowest investment efficiency from among the transition countries and only depressed Japan and Germany have lower efficiency of investment than the Czech Republic.

⁷ The same holds for the health sector, that remains to be almost completely state financed. This reliance on state funding is perhaps a reflection of the traditional Czechs' aversion to (perceived or real) inequality and does not necessarily applies to other countries in similar situation.

⁸ At one moment, the share of classified loans, i.e. those with payments at least six months overdue, was reaching 35% of the total portfolio of Czech banks. That is probably the highest share ever recorded for a banking sector.

⁹ The trend is downward, as households are more comfortable with using financial markets and often indebt themselves, and as the government tuns ever rising public budget deicits.

Table 3: Investment rate and efficiency in selected countries

	a) Investments (sl	hare in GDP, %)	b) Eficiency of investment			
	average 95-98	average 99-02	average 95-98	average 99-02		
Czech Republic	32.7	33.4	0.10	0.07		
Slovakia	31.5	29.2	0.21	0.09		
Slovenia	21.6	25.5	0.20	0.15		
Poland	22.4	24.8	0.34	0.11		
Hungary	21.6	24.3	0.13	0.14		
France	18.6	20.4	0.11	0.14		
Italy	18.8	20.5	0.11	0.09		
Germany	24.3	23.4	0.06	0.06		
Spain	22.3	24.6	0.16	0.15		
United Kingdom	17.3	18.1	0.18	0.13		
Belgium	20.2	20.8	0.12	0.10		
Netherlands	21.1	21.8	0.17	0.10		
Portugal	24.7	27.4	0.16	0.09		
Austria	23.4	22.7	0.10	0.08		
Japan	28.0	26.7	0.05	0.03		
USA	16.0	17.7	0.26	0.15		

Note: Efficiency of investment = change in GDP in year (t) / average capital investment in years (t-1) to (t-3)

Source: Czech National Bank

Table 3 suggests that the Czech Republic, due to its undeveloped financial markets and history of fraud waste a substantial part of savings. For example, the U.S. economy manages to get as much growth stimulus from about a half investment rate than the Czech Republic. In other words, Czechs waste about 16% of GDP in inefficient savings allocation process. This is such a huge loss, that it should be priority to spruce up the capital markets for any country aspiring to high growth rates.

Inconsistency of government policies

The brief Czech history has been already full of ups and downs. Modifying slightly Dlouhý (2001) we may split the first transition decade into four periods. In 1990-1994 the Czech reform was very successful as it realized initial reforms steps with vigor. "Stagnation" period of 1995-1997 was dominated by the government inability to continue reform efforts and by slow but pertinent deterioration of economic indicators. Third period 1997-1998 was dominated by quick stabilization and by significant tightening of macroeconomic policies of both the government and the central bank. Last period, since 1999, is marked by rapid relaxation of fiscal policy, more cautious but pronounced monetary policy easing, by gradual build-up of regulatory obstacles to economic growth and by only modest recovery.

Privatization

Background

There is a substantial empirical literature examining the relative performance of public and private enterprises mostly motivated by the notion that private ownership leads to better

incentives to monitor managers which in turn would raise enterprise performance¹⁰. The evidence remained mostly anecdotal until large privatization programs in Mexico and the United Kingdom in the mid-1980s. In the majority of cases, privatization occurred in a small number of utility enterprises (telecoms, airlines, oil refineries) that operated as regulated monopolies or oligopolies. The utility privatization do not provide a useful test of the benefits of privatization since these enterprises still fall under often-unchanged government regulatory frameworks. Hence the effect of privatization cannot be measured separately since the effects of (lack of) changes in the regulatory framework confound productivity gains. The more recent empirical literature on privatization focuses on developing countries (La Porta and Lopez-de-Silanes, 1997; Picot and Kaulmann, 1992) or on a cross-section of industrialized countries of firms in competitive sectors. Privatization is found to have a positive effect on profitability, labor productivity, and new investment flows in all three studies.

With the collapse of central planning in Central and Eastern Europe and the (then) Soviet Union interest in the theory of privatization emerged. The path breaking study in this literature (Boycko et al., 1996) was motivated by (and influenced) the Russian mass-privatization program. The model, and its subsequent refinements (Shleifer and Vishny, 1994 and 1997), focuses on the separate impact of privatization, deregulation, and stabilization, as well as corruption on enterprise performance. It identified a number of specific empirically testable hypotheses. The model cast doubt on the robustness of previous empirical findings that did not account for deregulation, stabilization, and corruption, and narrowly focused on privatization.

Shleifer and Vishny focused on the political economy aspects of privatization. In particular, the focus is on the interests of politicians to have state enterprises employ excess people at above market wages (or to charge prices below marginal factor costs to favored consumer groups or be inefficient more generally) so as to obtain more political support. Their model separates the effects of control rights and cash flow rights. Four types of firms are distinguished: state enterprises, i.e., with control rights and cash flow rights in the hands of the state; commercialized state enterprises, i.e., with control rights with managers but cash flow rights with the state; regulated private firms, i.e., with control rights but no cash flow rights with private owners; and private firms, i.e., with control rights and cash flow rights with private owners.

The model indicates a number of specific hypotheses. First, with full corruption, the allocation of control and cash flow rights does not influence the resource allocation. Basically, a Coase Theorem holds as managers and politicians internalize all benefits and costs and obtain an efficient allocation of resources. Privatization alone will not change the resource allocation. A necessary condition for privatization to generate efficiency gains is a simultaneous improvement in the overall legal and judicial framework leading to a reduction in corruption. Second, privatization in itself may not have the desirable consequences of lowering excess labor and improving efficiency. Only when privatization is accompanied by allocation of control rights to managers, deregulation and increases in competition, will there be positive impacts. Some of these positive effects, however, may be due to hardening of the budget constraint. A cross-country comparison through a panel approach would correct for differences in overall monetary tightness.

Third, corporatization can promote enterprise restructuring, even though it may soften the budget constraints enterprises face. Fourth, corruption may have stimulative effects on enterprise restructuring as it allows managers and politicians to "contract" in achieving more

¹⁰ See Claessens and Djankov (1998) for an excellent discussion.

efficient allocation of resources. Fifth, stabilization, i.e., a reduction in subsidies and soft credits from the central bank to enterprises, will have large allocative and efficiency benefits.

These hypotheses already suggest a number of simple comparisons between stateowned and privatized enterprises. State enterprises should have higher costs, receive more subsidies, employ relatively more labor, and have generally lower labor productivity than privatized enterprises.

Shleifer and Vishny suggest a number of clear predictions of the effects of privatization on profitability, labor and efficiency. Under full corruption excess labor is not reduced and efficiency does not change with privatization. The only affected variable is soft financing which decreases as politicians incur higher cost in handing out subsidies.

Most importantly for the Czech privatization experience, Shleifer and Vishny's model shows that the effects of privatization in the absence of deregulation and without stabilization are likely to be perverse. While in a public firm the politician needs to pay for excess employment through politically costly subsidies, in a regulated privatized firm he can force the managers to pay for the increase in excess labor and decreased efficiency. This suggests that, in the absence of full corruption, regulation might be an even greater problem than public ownership. Privatization with deregulation, but without stabilization increases soft financing, as the managers are in a better position to extract favors from politicians. Only with both stabilization and deregulation there is an improvement in efficiency and transparency.

The Czech(oslovak) privatization experiment

At the time of the "velvet revolution," almost the entire economy of the former Czechoslovakia was state owned. The Czechoslovak government embarked on an ambitious privatization strategy and started to auction about 24,000 smaller firms as early as in 1991. The government also converted many of the medium and large enterprises, about 1,700 firms, into joint stock companies and divested them through a combination of methods dominated by a voucher privatization scheme. The state retained majority ownership of the large utilities and the banks. We present here only a brief summary of the Czech voucher privatization mechanism. There were 1,664 companies that had some or all of their equity included in voucher privatization. Voucher privatization took place in two waves. The first wave involved shares in 988 firms. The second included shares in additional 676 firms plus unsold shares in 185 firms carried over from the first wave. The total book value of the equity-privatized through vouchers was more than \$14 billion, about 10 per cent of the Czech Republic's national wealth.

All Czech citizens over the age of 18 were eligible to acquire 1000 voucher points, the artificial currency used in the process. Approximately 75 percent of eligible Czechs participated in each wave, making the book value of the shares available slightly more than \$1,400 per participant in the first wave and \$1,000 in the second wave.

Participants could bid for shares themselves or assign their voucher points to an investment privatization fund (IPF) in return for a share in the fund. ¹³ In the first wave 72.2 percent of participants turned their points over to one of 265 IPFs. In the second wave a somewhat smaller 63.5 percent of participants assigned their points to one of 349 funds. In addition to those who assigned their points to the funds, between 1.5 and 2 million individuals

¹¹ For a more detailed discussion see Filer and Hanousek (2000).

¹² There was a nominal charge of 1000 crowns (about \$35 or one week's wages for the average worker) to cover administrative costs.

¹³ Any fraction of an individual's points (in multiples of 100 points) could be turned over to a fund but this transaction had to be done prior to the start of the first round of bidding.

bid their points themselves. Each wave involved several rounds of bidding (five in the first wave and six in the second).

The administrative authorities announced share prices and participants submitted bids for the number of shares desired at the announced price. If the bids for a firm did not exceed its supply of available shares, these demands were satisfied and the remaining shares were deferred to the next round. If the demand for a firm's shares exceeded supply by less than 25% and the market could be cleared by prorating of the IPFs' demand, then individual investors had their demand met while IPFs were rationed proportionally to their bids. ¹⁴ In such a case, all shares were sold and the firm was not available in the succeeding rounds. If demand exceeded supply by more than 25%, then no bids were accepted and all shares were deferred to the next round. The price, expressed as voucher points per share, was set by the Price Committee according to an unknown algorithm based on the ratio of demand to supply in the previous round and some other variables.

For the first round, share prices were set uniformly across firms at 3 shares per 100 points in Wave 1 and 2 shares per 100 points in Wave 2 according to the accounting value of the firm, so that each share represented the same book value (about 1200 crowns for both waves) for every enterprise. Clearly these prices were far from equilibrium, so that in the first wave the ratio of demand to available supply in round 1 ranged from less than 1 percent to 14,540 percent. After the first round there were substantial price changes. By the third round of the first wave, for example, the lowest price was 1.03 points per share while the highest price had reached 1000 points per share.

Empirical results of the privatization in CEE

Eventually, all the vouchers were used and all shares allocated. The crucial point, though, was not to allocate shares to voucher-holders, no matter how complex task it was. The ultimate outcome should have been reaching of the benefits of private ownership indicated above. How the Czech (and other Central European countries) have fared in this respect?

As reported in Claessens and Djankov (1999) privatization in a sample of more than 6,000 firms from the Czech Republic, Bulgaria, Hungary, Poland, Romania, Slovakia and Slovenia, privatization did lead to an improvement in the privatized firms' performance.

The authors report five statistics that relate to efficiency and enterprise financing. First, they show that a reduction in excess labor takes place as a result of privatization. Indeed, enterprises that have been privatized early in the period have shed the most labor. Labor productivity improved most in enterprises that have been privatized for over two years while it did not in the state-owned enterprises.

Claessens and Djankov then compare the extent of bank financing across ownership categories and show that state-owned firms greatly increased their bank borrowing, while privatized firms borrowed significantly less. Subsidies were also distributed predominantly to state-owned enterprises. Therefore, state owned firms remained to be a drag on public finances.

Also, costs as a share of revenues for still state-owned firms were increasing steadily. On the other hand, firms privatized for three or more years have reduced their variable cost. Finally, the authors document the mean (median) statistics for TFP-growth in each of four ownership groups over time. The most striking fact emerging from the data is that enterprises that have been privatized for more than three years show an increase in TFP that is five times higher than that of enterprises which have remained state-owned (13.2% versus 2.6%).

¹⁴ In the first wave, IPF participation could be prorated only if their demand did not have to be reduced by more than 20%. For the second wave, this condition was removed.

Enterprises that have been privatized for shorter periods also outperform state firms, albeit to a lesser degree (4.9% and 6.2% versus 2.6%).

Thus, there is a strong supportive evidence for higher efficiency of privatized firms. State-owned enterprises employ more labor, have lower labor productivity, receive more financing and direct subsidies, and have higher variable costs than privatized firms, particularly compared to those firms privatized for more than three years. State-owned enterprises also show much lower productivity growth that privatized enterprises. These differences cannot be attributed to the overall environment in which enterprises operate nor to the selection bias introduced in the privatization programs. Over time the role of politicians in allocating bank financing and subsidies appears to have declined, however, and the importance of banks in allocating resources (efficiently) increased. Finally, the overall institutional environment appears to have improved in almost all countries, suggesting that the influence of corruption has declined over time.

The results of Claessens and Djankov's study demonstrate the beneficial effects of privatization in the presence of stabilization and decreasing corruption. Similar results were obtained by Frydman, Gray, Hessel and Rapaczynski (1997) when they studied a sample of more than 500 firms from Czechoslovakia, Poland and Hungary. They show that privatization stimulates growth of revenues (privatized firms recorded growth by 5% while non-privatized firms saw their revenues to plummet by 14%). Also, privatized firms managed to stabilize their labor force, while non-privatized firms were shedding labor by 6% annually. Combined, privatized firms recorded a positive (by 6%) growth of revenues per employee, while non-privatized firms oversaw a fall of about 5% in revenues per worker, even though they destroyed much more jobs.

Frydman et al. also shows that the domestic privatization funds, somewhat contrary to many presumptions, were the most eager re-structuring agents. Firms controlled by privatization funds experienced fast increase in labor productivity (by 16%) and revenues (by 27%). The second most aggressive group of owners were managers: they increased revenues almost as fast as privatization funds, but they run rather relaxed job policies, increasing number of workers by 7% thus achieving only mediocre results in labor productivity gains.

Foreign investors provided less of an edge than might have been expected. Although foreign ownership brings a significant improvement of revenue performance, its impact was no stronger than that of domestic investors. This result is somewhat unanticipated, as financial resources, managerial know-how, and corporate governance expertise of foreign strategic investors were often seen as giving an instant advantage to firms in which they invest. Foreign investors moreover managed to keep employment almost unchanged. However, the strong foreign direct investment inflows in the late 1990's have changed the picture. The Czech industry is now foreign capital dominated and firms controlled by foreign capital do report best results with respect to their productivity growth, revenues and profits – see figure 1.

1 400 000 180 000 160 000 1 200 000 140 000 1 000 000 120 000 800 000 100 000 mil. Kč 80 000 600 000 60 000 400 000 40 000 200 000 20 000 93/1 111 94/1 111 95/1 111 96/1 111 97/1 111 Příliv PZI (pravá osa) — Stav PZI

Figure 1: Inflows and stock of FDI in the Czech economy

Source: Balance of payments, Czech National Bank.

Privatization: necessary but not sufficient

The importance of privatization for the success of the postcommunist reforms has been a subject of some controversy. Early in the reform period, some assumed that macroeconomic stabilization -- budgetary discipline, low inflation, price and trade liberalization, and hard budget constraints for enterprises -- would create a sufficiently competitive environment for most viable enterprises to restructure and for others to shrink or go out of business. The impact of ownership on the performance of large enterprises (in which ownership and management tend to be separated) was also sometimes believed to be quite attenuated, so as to make managerial reforms more important than rapid privatization, and the strength of the postcommunist economies was expected to come primarily from smaller, new businesses. A number of observers in fact believed that devoting too much resources and attention to rapid privatization carried a danger of creating "phony owners" and distracting from the more important task of fostering startup investments (Kornai (1990)).

Others, and much public opinion in Central and Eastern Europe, feared that rapid privatization would lead to serious dislocations, including high unemployment, and cause many potentially viable enterprises to go bankrupt. The experience of Central Europe suggests that private ownership dramatically improves the most essential aspects of corporate performance in the countries undergoing post communist transition – see the previous chapter. In particular we may say that there is no evidence of any "privatization shock" which afflicts the behavior of the firms undergoing rapid ownership change. On the contrary, privatization provides a stimulus for firms. Also, there is no evidence that privatization adds to the social dislocations of the transition process. On the contrary, research indicates that once the system of pervasive subsidization is stopped or significantly reduced and the macroeconomic reforms are in place, privatization is the dominant employment strategy in transition.

From empirical studies follows that outsider-owned firms perform better that insider-owned firms on most performance measures. ¹⁵ There are, however, enough differences

¹⁵ See, for example, Frydman, Gray, Hessel and Rapaczynski (1997).

between employee-owned and manager-owned firms to suggest that the common practice of putting all insiders under a common umbrella is unjustified. While the effects of managerial ownership are ambiguous, putting employees in control appears to offer no advantages over state ownership on any performance measure, and to bring a distinct disadvantage to employment performance.

Among outsider owners, there is considerable evidence that privatization funds do as well at revitalizing the privatized companies as other outsider owners; in particular, there is no robust evidence that they are less effective than "strategic" investors. Foreign investors provide perhaps less of an edge than might have been expected; in particular, their impact appears no stronger than that of major domestic outsiders.

The transition is a traumatic experience for former state owned firms. They have to reduce the bloated employment of the past, look for new markets once the old captive customers are gone, to improve their previously shoddy products, and to cut down on the incredibly wasteful uses of energy and materials. Research provides strong evidence that private owners restructure more effectively than the state. It is not perhaps the most surprising finding, but one can take comfort from the fact that it has been empirically proved.

Financial sector

As we have seen in the previous chapters, the Czech economy has been plagued by its low ability to transfer high level of saving, and investment, into high and sustainable growth rate. We have suggested that the reason for this inability is inefficient financial sector. The sector has been beset by its historical burden, as dominant financial groups used all to be a part of the former monobank, catering for the whole socialist financial sector. The second burden of the Czech financial sector is its role in transition whereby Czech banks played infamous role culminating in their privatization saga. The Czech financial sector very lucidly demonstrated inefficiencies of partially privatized banks still controlled by politicians. In this part of the paper we will seek to demonstrate the most significant shortcomings in the formation of the Czech financial sector.

The Czech banking sector¹⁶

The Czech banking sector emerged from the previous monobank, State Bank of Czechoslovakia (SBCS) in January 1990 when the SBCS transferred its commercial banking to three newly established banks: Komercni banka (KB), Vseobecna uverova (VUB), and Investicni banka (IP, which in 1993 merged with Post office banks as IPB and that was bankrupted in 2000 and eventually sold to another bank, CSOB). New laws on central and other banks from 1993 established the independence of the national bank from the government and gave the SBCS the authority for banking supervision.

On January 1, 1993, the Czech National Bank (CNB) took over the functions of the SBCS as a result of the split of Czechoslovakia. The laws on banks also contained clearly specified rules for granting licenses, and defined a general regulatory framework. Unfortunately, the conditions for obtaining banking licenses were quite soft, requiring a minimum subscribed equity capital of only CZK 50 million (US\$2 million). This low requirement was increased in April 1991 to CZK 300 million (US\$10 million). The "Law on Foreign Exchange" walled the local market against foreign competition preventing firms from directly acquiring capital abroad.

With such low capital requirements the number of new banks literally exploded from early 1990, when there was a central bank plus seven banks licensed for universal banking to

¹⁶ For a much more comprehensive discussion see Hanousek, Roland (2001).

23 by the end of 1990. This trend continued with 36 banks by the end of 1991 and by 51 by the end of 1992. These newly established banks were small, with the only significant exception being Agrobanka. ¹⁷ In 1993, the rate of new bank creation slowed, with only 8 new banking licenses granted. Since mid-1994, the CNB has not granted any new bank license to a Czech subject, most likely in a response to failures of small and medium-sized banks.

Due to very soft licensing procedures and insufficient screening of license candidates, many newly formed banks lacked a sufficient capital base, as well as employees equipped with proper managerial skills and business ethics. Because of their lack of capital, small and medium-sized banks began to finance clients carrying out the riskiest projects, which other banks had refused to finance. Due to the standard adverse selection problem, a higher interest rate only served to attract high-risk clients. In addition, several new banks were using deposits to extend credit to other activities of the bank's owners, or simply "tunneling" the deposited money out of the bank. Regardless of whether the main reason was incompetence or theft, the overall effect on the cash flow and balance sheets of these banks was seriously damaging.

Several bank failures beginning in December 1993 up set public trust in the banking sector and had a strong influence on the stability of small and medium-sized banks. As a reaction to the first three bank failures, the law on banks was amended to include obligatory insurance on deposits. This insurance covered only the deposits of citizens up to 100,000 CZK per head and per bank with the premium being limited to 80 percent of the deposit balance on the day of a bank's closure. The amendment also increased the extent and authority of banking supervision granted to the CNB. The CNB could now impose sanctions for non-compliance ranging from enforcing corrections and imposing fines to the revocation of banking licenses and, as the fall of the fourth-biggest bank in the country witnessed, the CNB is ready to use its power. ¹⁸

After the introduction of deposit insurance, another bank, Ceska banka, filed for bankruptcy and the new law was applied to its clients. However, when a series of additional failures soon followed in the election year of 1996, the CNB became far more generous, with individual clients of the failed banks recovering their full deposits up to 4,000,000 CZK in contradiction to the law precessions. This generosity plagues the CNB even in 2003, as witnessed by claims of clients of yet another failed bank – Union Bank – who demand full repayment of their deposits, regardless that meanwhile the insured sum was raised to EUR 25,000.

Table 4: Number of banks operating in the Czech Republic

Number of banks	1991	1994	1997	2000	2002
TOTAL	24	55	50	40	37
- Large banks	6	6	5	4	4
- Small banks	14	21	9	8	8
- Foreign banks	4	12	14	12	12
- Foreign bank branches	0	8	9	10	9

Source: Czech National Bank

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¹⁷ Agrobanka, founded in 1990, became the fifth largest bank in the Czech Republic within a year. It collapsed in 1993, owing to its excessive portfolio of bad loans (often to bank' own shareholders).

¹⁸ The CNB was given the authority force to fulfill several obligatory rules; approve/change bank management; give a penalty up to 50 mil. CZK; enforce reduction of shareholder's capital and its transfer to reserves if these were not sufficient; and withdraw or freeze banking licenses.

The frequency and scale of the banks' failures forced the government and the central bank to set up special workout agencies in 1996. However, most of bad loans were dumped into the "hospital bank", Konsolidacni banka (KoB)¹⁹. When the government was selling the three large banks – Komercni, CSOB and Sporitelna – it moved bad loans with book value as high as CZK 200bn to the KoB. The KoB paid 60% of the book value of these loans, but when it is able to recover 1-6% of the book value. Therefore, the KoB provided the Czech banks with a subsidy of about CZK 100bn.

The most serious blow came in 2000 when the country's fourth largest bank, IPB was closed after it failed to get its books audited and could not come with estimated CZK 10bn needed to fill the hole in its balance sheet. The bank was seized by the police, bankrupted and sold to the third largest Czech bank, CSOB, over the weekend. The financial costs of the IPB failure are estimated anywhere in between CZK 150-200bn, i.e. almost 10% of the country's GDP.

The IPB failure demonstrated flaws in the Czech banking regulation system and exposed the bank's auditors to critique and judicial prosecution. While the Czech National Bank was apparently aware of the IPB's problems, it had hands tied and could only "ask" the bank for explanations. The central bank hesitated until the last moment to use its final weapon, i.e. the forced closure of the bank but the Czech finance ministry showed strong determination and pushed the bankruptcy. While the case is not finished yet, the IPB failure shows how easily the financial sector can be threatened and how important it is to equip the regulator with competences so it can actually act when needed and does not need to wait until it is too late, as is often the case in the Czech banking sector.

Indeed, the Czech banks' bailouts and costs of closing reached as much as CZK 350bn in nominal terms, i.e. more than 15% of the 2003 GDP. It made the Czech banking saga the relatively most expensive experiment in history of banking. It even provoked the European Union to scrutinize back the Czech government assistance to Czech banks, as the sum seems extravagant.

Formation of the securities market

The Czech securities market is still under the spell of its formation. The Prague Stock Exchange (PSE) opened in April 1993, four months after the first wave of the voucher privatization was completed. At that year, trading was taking place only once a week, but more than 1,000 firms were enlisted. The PSE moved than to two trading days a week in 1993 and to three days in 1994. Regular trading was launched in 1995. However, an "alternative" trading vehicle, so called RMS system was launched as early as in July 1993 and the schism of the Czech capital markets has begun. Ever since, it has been possible to get different quotes from the PSE and the RMS and the trading was taking place mostly through "informal" means, when price was not published. This nontransparent setting was convenient mostly for traders and fund managers who were selling or buying securities on behalf of funds they managed. These infamous trades were often done on obscene terms and gave rise to the term "tunneling" whereby funds are "tunneled" – or embezzled – for the benefit of fund managers and to the costs of fund investors.²⁰

In perhaps most scandalous event, a privatization fund first change all its assets into liquid cash, then change owners several times in a single week, and bought shares of an obscure poultry farm for all the cash it held. The transaction then culminated in the fund's

¹⁹ More on the infamous "transformation institution" and their role in the Czech fiscal policy in the fourth chapter.

²⁰ Johnson, La Porta, Lopez-de-Silanes and Shleifer 2000 defines tunnelling as "the transfer of assets and profits out of firms for the benefit of their controlling shareholders."

decision to sent money to an offshore fund. The transaction was labeled as "suspicious" by the fund depository bank and the Finance ministry was asked for an approval. To the shock of fund investors, the ministry approved the transfer, after the fund managers visited the ministry and "discussed" the issue with the relevant officer.

While the example above may seem extreme, the PSE has been plagued by more pervasive distortions. As noted above, the voucher privatization generated more than 400 investment funds, when often a single investment company managed several funds. Moreover, the largest investment companies have been subsidiaries of large Czech banks. These companies were very reluctant traders and have preferred insider trading and in-house settlement to the open market deals. This behavior further undermined price creation as many shares were fluctuating widely, often manipulated by the fund managers.

Due to the links between the investment companies and large banks, the investment funds became effectively the most important owners on the Czech equity market. While they could not hold more than 20% of any issue, investment companies often cooperated with each other and divided controlling roles in various firms among themselves. Indeed, 11 funds controlled by largest Czech banks collected 44% of all vouchers issued in the first wave of the voucher privatization. They controlled 55% of all shares distributed via the vouchers.

Evidently, with history like this, the Czech security market is not held in high esteem by Czech retail investors who still keep bulk of their (substantial) savings on time deposits.

Institution building and corruption

It is widely acknowledged, as well as supported by numerous studies, that corruption has a negative impact on economy and society. The economic and social transformation in Central and Eastern European (CEE) countries inevitably created and enhanced opportunities where corruption could easily flourish. Corruption in the transition countries has become more severe as these countries increase their openness and involvement in international communities and organizations.²¹

With a dramatic change in the Czech political regime in 1989, the whole process of social and economic transformation initiated changes in the environment of corruption. There exist particular shifts in corruption from one area to another that occurred along with economic and legal transformation, which sometimes led to a growth in large-scale corruption. Corruption shifted primarily from the sphere of general services and sales to the region of state administrative services.

However, the former approach based on the services, small gifts, and small financial bribes has sustained up to date, and is the norm of behavior and negotiation in state administration. In the past, the general public perceived any part of the state administration as a repressive body. Since the state was an "enemy" small-scale misuse and theft of public goods and services became part of the passive opposition against the communist regime. Of course, after forty years such behavior had to become not only a socially acceptable norm but also sometimes a norm of behavior.

Notably, the general public does not perceive state administration at any level as a socially prestigious and valuable occupation. The income of the administration is relatively low and almost no income differentiation exists. Consequently, the state administration is not a competitive job opportunity on the labor market, and does not attract skilled people. Furthermore, semi-private institutions, like major health insurance companies, are mimicking the state administration behavior.

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²¹ For an extensive discussion see Kocenda, Lizal (2001).

The most dangerous form of corruption entails financing of political parties and their election campaigns, parliamentary lobbying, and public tenders at any level of state administration. However, low-level corruption involving mid and low level bureaucrats remains profound as well. According to an EBRD survey (EBRD, 1999), the main obstacles to the growth of small and medium enterprises (SME) are anti-competitive practices and corruption, followed by taxes and business regulations. A priority for the next decade of transition is to embrace competition policy that focuses on reducing barriers to business startups, introducing measures to combat corruption and crime and hardening the budget constraints on declining industrial enterprises.

Further, spread of corruption embraces direct economic activities as well as less direct ways through the administrative processes. On the macroeconomic level the costs of corruption should be emphasized in terms of economic growth. During the transition process the fight against corruption is expensive and cannot be seen as being independent from the reform of the state. If certain reforms are not made, corruption is likely to continue to be a problem regardless of actions directly aimed at curtailing it.

Privatization and Corruption

The Czech Republic has increasingly become an example for critics of its privatization program. They argue that the voucher privatization of free transfer of shares in state owned enterprises to citizens produces bad corporate governance. These critics agree that poor corporate governance and weak rule of law gave managers (and/or dominant owners) an opportunity to strip assets from the firm for their sole benefit, rather than exert extra effort to secure future economic returns that might have to be shared with minority owners, a process known as "tunneling."

Czech firms had no single concentrated owner who was motivated and capable of exercising control over managers (see our discussion of the voucher privatization above). This separation of ownership and control was exacerbated by the fact that most voucher shares were held by investment funds. Claessens and Djankov 1999, Weiss and Nikitin 1998, and World Bank 1998 agree that the poor performance of many privatized firms is due to tunneling. Cull, Matesová and Shirley show that looting arises when a government guarantees a firm's debt obligations, such that owners can borrow heavily, extract funds from the firm, and default on the debt without penalty. Looting is likely where there is poor accounting, lax regulation, and low penalties for abuse, the same weaknesses that also make asset stripping possible. Unlike tunneling, where most of the cost of bad behavior is borne largely by non-controlling shareholders, looting spreads costs to taxpayers as well. Another serious problem, especially for a transitional economy, is that looting diverts credit from more productive firms, choking off new entrants and slowing the transition.

Both looting and tunneling occur in many, similar ways. Funds can be extracted by owners paying themselves large dividends or high salaries, or by the firm making loans or investments in straw companies set up by the owners, buying assets from the straw at inflated prices or selling assets at deep discounts, or making concessional loans to owners. It could, but does not necessarily, involve fraud.

Three factors made static tunneling and dynamic looting probable outcomes of Czech privatization. First, shares in the voucher privatized firms were widely dispersed and sold for virtually no initial capital investment to citizens, which gave Czech minority owners little incentive to monitor and dominant owners or managers little reason not to transfer the firm's assets to their own accounts. Even if minority shareholders were motivated to protect their

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²² For details and a formal model, see Cull, Matesova, Shirley (2001).

interests, lax security laws "accommodated" tunneling, most of which was "probably legal under the existing Czech law". ²³.

Second, the government retained part (40-50%) ownership of the four largest banks and gave them few incentives to be assertive in collecting debts or scrutinizing loan applicants. Some observers argue that the government went further and encouraged banks to lend to the large voucher privatized firms to avoid bankruptcies that might discredit the reform program or lead to politically costly unemployment.²⁴ Third, the "big four" banks had long-standing creditor relationships with the voucher privatized SOEs, which made up the bulk of their portfolios, and had also made equity investment in these firms through their voucher investment funds. Thus, they had a strong incentive to prop up troubled firms through further lending and rollovers.

Public administration corruption

Most cases of corruption that are disclosed are connected with public tenders both at the state and municipal levels. Also, the European Union threatens to block its funds to the Czech Republic, if public tenders are not executed in a more transparent way. Pre-selection of the prospective supplier is one of the most cited flaws. The selection of the pre-selected firm to sign a contract is done by the means of custom-made conditions in the tender, custom tailored weighting of criteria or even by changing the tender conditions during the tender process. The Czech government in 1998-2002 became famous for its disdain for tender procedures as it awarded several major contracts either without a tender at all (D47 highway construction to Ostrava is an example), or with a tender that was manipulated (Internet for elementary schools).

Such a behavior during transition is in line with the exposition of Acemoglu and Verdier (2000) who argue that room for corruption is created by transferring resources from one group to another by government interventions. As corruption often undermines the purpose of the intervention, the government tries to prevent it. By doing so it may create rents for bureaucrats, induce the misallocation of resources, and increase the size of the bureaucracy. Preventing all corruption is excessively costly and may involve a certain fraction of bureaucrats accepting bribes. Moreover, Stiglitz (1999) argues that privatization created an opportunity to collect all expected future bribes in their discounted value at the time of privatization.

Public tenders that lead to public investments may have a negative economic impact due to corruption associated costs. Equally important is an impact on the economy in general. Tanzi and Davoodi (1997) argued that corruption, particularly political or "grand" corruption, distorts the entire decision-making process connected with public investment projects. The degree of distortions is higher with weaker auditing institutions. They present evidence from various countries that higher corruption is associated with higher public investment, lower government revenues, lower expenditures on operations and maintenance, and a lower quality of public infrastructure. The evidence also shows that corruption increases public investment while it reduces its efficiency.

Private sector corruption

The most visible forms of corruption in private (and also semi-private) businesses involve the selection of pre-specified partners in public tenders. In the banking sector

²³ For example, trades did not have to take place on an exchange, ownership did not have to be disclosed, those acquiring large blocks of shares did not have to buy out minority shareholders, self-dealing transactions by shareholders with controlling board seats were hard for minority to even discover, much less overturn. See Johnson and Shleifer (1999).

²⁴ See, for example, Desai 1996; Brom and Orenstein 1994.

corruption is associated with the provision of loans for unreasonable or even nonexistent projects. Such practices even led to the collapse of several banks and the loss of deposits. Bribes associated with corrupt behavior are not marginal and thus represent substantial costs. The distressing scope of such a phenomenon was revealed in the EBRD study (EBRD, 1999), which found that 26.3% of Czech companies admit giving bribes. Czech companies spend, on average, 4.5% of their annual income on bribes.

It would be misleading to think about corruption only in terms of extra monetary costs. Corruption in private businesses is accompanied also with time spent by managers. Kaufmann and Shang-Jin (1999) found that firms that pay more bribes are also likely to spend more management time with bureaucrats to negotiate regulations and thus face higher human capital costs.

Another perspective of corruption in private businesses is associated with hiding parts of their activities in order to reduce tax payments. Such conduct requires additional cover-up steps that involve bureaucratic corruption. We do not have a representative survey for the Czech Republic; however, we can use some proxies from other European transition countries. McMillan and Woodruff (2000) conducted a survey among the private manufacturing firms about the size of hidden unofficial activity. The firm-level regressions for the three Eastern European countries, namely Poland, Slovakia and Romania, documented that bureaucratic corruption is significantly associated with hiding output.

People respond to incentives, even when they get corrupted

Understanding the interaction between corruption and privatization in the Czech Republic is important. If the Czech failures are largely due to the poor design of an idiosyncratic give-away scheme that resulted in weak corporate governance that motivated tunneling, then the main lesson is simple: avoid vouchers/concentrate ownership when privatizing in environments with weak protection of minority shareholders (i.e. most developing countries). If, however, they are due to a combination of weak corporate governance and perverse incentives in the banking system, then the lessons are complex and have much wider applicability.

In the absence of proper institutional mechanisms and sufficient protection of ownership rights the free market creates more opportunities for economic contests and economic manipulation. These are the roots of the problems and the remedies should focus on these underlying problems instead of problematic and ineffective campaigns fighting just the consequences.

The best prevention of corruption is not only to make all procedures completely transparent, simple and lucid, but also, more importantly, to establish such an environment that minimizes the incentives to go around the rules even in the absence of punishment. One final positive example of such a successful change: In the early nineties there were real problems to obtain a passport within several days in case of emergency, and informal ways to speed up the process had to be used. Currently, the people who need a passport to be issued earlier than within the regular 30 days can choose among faster services with different fees. There exist no incentives to go around the rules and even the state is able to collect additional fees.

Public budgets and contingent liabilities

Sound and robust macroeconomic policy remains a must during any successful transformation. While we may, hopefully, assume that monetary policy framework has become so robust in the last two decades that any return to bad old high-inflation monetary policies is out of question. Certainly this seems to be the case with Iraq that will have its

monetary system modelled after the US one and underpinned by the country's strong external position, thanks to its oil reserves. The Czech Republic has been saved excesses of irresponsible monetary policy as well owing mostly to its competent and fast-moving administrations in the first half of the 1990's.

Czech fiscal policy: rising social costs

We will, thus, focus on the other main macroeconomic policy, i.e. fiscal. As illustrated by experiences of many countries, Argentina being just the most recent example, fiscal policy is capable of delivering huge blows to a country's development. It remains of crucial importance to maintain a fiscal balance, build strong fiscal institutions and, at the same time; do not suffocate resources needed for a country's development. As illustrated below, this "cutting-edge" maneuver has not been fully accomplished in the Czech Republic. Low transparency and attachment to high social spending are the main culprits of the current Czech fiscal turmoil.

It is interesting to compare the Czech fiscal policy travails with other transition countries – see table 5.²⁵ The table shows that the Czech Republic's public budget deficits were increasing almost monotically in the period, and are largest with the exception of former federation partner, Slovakia. It should be noted, moreover, that Czechs were using high privatization revenues to prop up their public budgets. Also, some non-standard fiscal operations of the Czech government are difficult to measure and are not, thus, included in the table ²⁶

Table 5 Accession countries: general government borrowing and debt, 1997–2001 (per cent of GDP)

Country	1997	1998	1999	2000	2001	
	Net Borr	Net Borrowing				
Czech Republic	-2.7	-4.5	-3.2	-3.3	-5.5	
Estonia	2.0	-0.4	-4.0	-0.4	0.2	
Hungary	-6.8	-8.0	-5.3	-3.0	-4.1	
Latvia	1.8	-0.7	-5.3	-2.7	-1.6	
Lithuania	-1.1	-3.1	-5.6	-2.7	-1.9	
Poland	-4.3	-2.3	-1.5	-1.8	-3.9	
Slovakia	-5.7	-4.7	-6.4	-12.8	-5.6	
Slovenia	-1.2	-2.3	-2.2	-3.2	-2.5	
Baltic countries average	0.9	1.4	-5.0	-1.9	-1.1	
Central European average	-4.1	-4.4	-3.7	-4.8	-4.3	

Source: European Commission.

Trends in government revenue and primary expenditure provide further insights into the fiscal performance of the Czech Republic. The Czech tax system has proven to be very robust, delivering a stable 40% of GDP in revenues. The country, however, seems to have abandoned (at least temporarily) the drive for reducing the size of government, as the share of primary expenditure started to gradually rebound after 1999. As a consequence the fiscal position deteriorated rapidly in the last years, notwithstanding the milder reduction in the tax burden and the decline in nominal interest rates.

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²⁵ More details in Kopits, Szekely (2003).

²⁶ More on these below.

Clearly, the market-oriented transition from central planning, compounded by the requirements of EU accession, generates considerable demand for public expenditure especially in the form of infrastructure investment. However, this trend is much shadowed by the high and rising costs of the Czech social sector. The Czech population, as any in Central Europe is aging quickly as people live longer and have fewer babies. Costs of pensions, health care and other social programs thus rise and consume now more than 20% of the Czech GDP – see figure 2.

Budget Expenditures (% GDP)

16%
14%
1993 | 1994 | 1995
1996 | 1997 | 1998
12%
1999 | 2000 | 2001
2002
10%
8%
6%
4%
2%
0%
i.2 Delênse i.4 Education i.5 Health i.6 Social Security Payments Expenditures

Figure 2: Budgetary trends 1993-2002

Source: Ministry of Finance, author's calculations.

Given their present budget imbalance, some remaining transition-related reform tasks and the envisaged negative net fiscal impact of accession, the Czech Republic faces a difficult agenda to meet the fiscal requirements of EU membership, and in particular, of participation in the euro area. Unless a new fiscal strategy is adopted soon, public finances will remain under considerable stress in the medium term. This condition could be exacerbated by future exogenous shocks, for example, as a result of contagion from a financial crisis or the transmission of a sharp recession abroad.

Therefore, a significant fiscal adjustment, incorporating a sizable reduction in the share of public expenditure in the economy, seems inevitable. For this purpose, it is essential to create a broad-based consensus to support the adjustment; absent sufficient consensus, ambitious plans to meet the fiscal reference values are likely to fail under mounting political pressure. Moreover, it is necessary to reach agreement on the appropriate composition and time path of the adjustment, as well as on the overall macroeconomic policy mix, with a view to ensuring a minimum (if any) output loss during the adjustment.

Above all, the adjustment strategy should emphasize growth-inducing measures, precisely in areas that apparently have been neglected in the Czech Republic. Empirical evidence from the adjustment experience of a variety of countries suggests clear differences in growth performance depending on the composition of the adjustment. While fiscal adjustment involving cuts in productive expenditures, mainly on education and investment, or increments in income or payroll tax rates, is likely to be contractionary, an adjustment consisting of cuts in price subsidies, rationalization of the public workforce, efficient targeting of transfers to households or widening of the effective tax base, tend to be expansionary.

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²⁷ See, for example, Alesina and Ardagna (1998) and Kneller et al. (1999).

Along these lines, the annual budget needs to be formulated within a rolling medium-term framework – aimed at narrowing the general government deficit – that incorporates explicitly the cost and timing of the implementation of key structural reforms (concentrated in the areas of public administration, employment, pensions, health care, education, defence, intergovernmental fiscal relations). In order to accommodate the cost of these structural measures and of accession-related expenditures (mostly for environment and transportation) and to facilitate the adjustment, it would be helpful to reduce the rigidities in spending obligations, many of which have been inherited from the past and have outlived their usefulness.

However, given the neglect of the environment and of infrastructure during socialist central planning, the Czech Republic, as well as Iraq, is confronted with an unusually heavy fiscal burden, some of it not yet fully anticipated at this stage. This justifies a more flexible approach to compliance with environmental standards and with transportation infrastructure requirements.

Off-budget institutions and their significance²⁸

Faced with external and domestic pressure governments all around the world have been lowering their fiscal deficits. At the same time, economists are increasingly coming to realize that focusing exclusively on traditional measurements of the fiscal deficit to assess the extent of fiscal adjustment that has been attained can be misleading. Building-up explicit or implicit government contingent liabilities is an important way of reducing the measured (traditional) fiscal deficit while avoiding difficult adjustment. There are many examples of this type of government behavior. In Italy the railways have raised funds through the financial markets to cover their deficits for many years with government agreement and an explicit guarantee from the treasury. Yet, those operations had no impact on the measured fiscal deficit or on the measured stock of government liabilities.

Transition and emerging-market economies face particularly large fiscal risks. Their dependence on private foreign financing, weak regulatory and legal enforcement systems, often-distorted incentive structures, opaque ownership structures, and low information disclosure, elevate failures in the financial and corporate sectors. Such failures, in turn, often generate political pressures on governments to intervene through bailouts.

The Czech Republic has been known for balanced government budgets. In contrast to most countries, however, fiscal performance in the Czech Republic encompasses a significant amount of government activities financed outside the budgetary system. These activities generate fiscal risks. Recently, these off-budget fiscal risks have become more visible, as state guarantees and agencies that are either explicitly or implicitly guaranteed by the government have generated significant claims on the budget. Given the magnitude of off-budget activities, fiscal analysis in the Czech Republic needs to identify all the main activities of a fiscal nature in order to determine the "true fiscal deficit." Excluding quasi- fiscal activities of the central bank, the "hidden" part of the fiscal deficit comprises two main components:

(a) net spending on programs of a fiscal nature by special, off-budget institutions (Konsolidacni Banka, Ceska Inkasni, Ceska Financni29 and the National Property Fund) and (b) implied subsidies extended through state guarantees.

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²⁸ See Polackova, Hafez, Roumeen (1998) or Polackova (1998).

²⁹ Ceska Financni has financed two blocks of programs geared toward bank revitalization. One block, in the total amount of approximately CZK35bn, is financed and guaranteed by the Czech National Bank. The other, called the Stabilization Program, in the amount of about CZK12bn is financed through Konsolidacni Bankia, and thus guaranteedy the government. It is only the latter

As shown in Polackova, Hafez and Roumeen (1998), taking these two areas into account changes the Czech fiscal policy stance significantly. Off-budget operations were, in fact, increasing the government spending by 1-4% of GDP in any given year – see table 6 that shows the components of the "hidden" deficit.

Table 6: Sources of the "Hidden" Deficit in the Czech Republic (CZK bn)

	1993	1994	1995	1996	1997	1998
Konsolidacni Banka (KOB)	7.7	7.3	4.5	0.9	10.6	28.8
net public expenditures						
Ceska Inkasni (CI)	20.1	6.6	4.9	4.8	3.1	2.7
net public expenditures						
Ceska Financni (CF)					0.6	1.8
net public expenditures						
National Property Fund (NPF)	4.2	8.2	4.3	1.9	2.0	2.6
net public expenditures (excl. KOB, CI)						
State guarantees	0.1	-0.4	1.3	14.9	51.5	26.7
Implicit subsidy (risk-adjusted)						
Total (% of GDP)	3.2	1.9	1.1	1.5	4.1	3.5

Source: Polackova (1998)

Until 1993, off-budget programs had mainly dealt with pre-transition problems inherited by the banking sector. These programs had been financed through Konsolidacni Banka. This bank was capitalized by the National Property Fund (the privatization agency whose revenues are derived from asset sales and borrowing on domestic markets), and borrowing from the Czech National Bank. In 1995, the Ministry of Finance established Ceska Inkasni, a non-bank financial institution with the mandate of cleaning- up the portfolio of a state-owned bank, the CSOB. Covered by a guarantee issued by the National Property Fund, Ceska Inkasni obtained a credit from the CSOB and used this credit to purchase CSOB's bad assets at face value.

During 1996-98, a new bank consolidation and stabilization program was launched to deal with newly emerging problems in the banking sector. In order to implement these programs, the Czech National Bank established Ceska Financni, another non-bank financial institution. In 1998, Ceska Financni had in its portfolio non-performing assets purchased at face value from small and medium-sized banks, (in the amount of about CZK50bn, which was 3% of GDP), which it financed through borrowing (one third) from Konsolidacni Banka and (two thirds) from the Czech National Bank.

The Czech National Bank has also financed other bank rescue operations, which have become the source of a further (CZK161bn, over 9% of GDP) addition to its portfolio of substandard assets in 1998. Out of the total amount of sub-standard assets held by the Czech National Bank, the government covers the risk for 12% of the assets. A further, 22% of these assets are in the form of a credit from the Czech National Bank to Konsolidacni Banka and thus are indirectly also covered by government.

Aside from the bank rescue operations, Konsolidacni Banka and, less directly, the National Property Fund have also financed government programs to support troubled insurance companies, public hospitals and the Czech Railways, to build infrastructure, and to

block, which is considered in the "true" deficit calculation. It is included as an activity of Konsolidacni Banka.

clean up industrial enterprises for privatization. The National Property Fund has partly financed these programs from privatization revenues but partly also from its debt issuance.

It turns out that the "true" fiscal deficit in the Czech Republic, though significantly higher that the deficit calculated through conventional methods, is comparable with deficits of other Central European countries. Therefore the Czech Republic's fiscal performance, contrary to the widely accepted view, is not noteworthy for its fiscal restraint. Moreover, if left to grow as in the past, the off-budget risk to future fiscal stability can increase significantly.

Presently, there is no institutional mechanism in the country mandated to keep a check on government off-budget obligations and the ensuing fiscal risk. And demands on new guarantees and further programs to be financed through various off-budget agencies are growing.

In the medium to long run, off-budget financing of government activities, guarantees and other contingent liabilities, surface as increases in government debt. In the Czech Republic, the expected increase in public debt by the amount of hidden public liabilities estimated around 13 percent of 1998 GDP is significant but not disastrous. What appears as disastrous was the dynamic in the rise of the hidden public liabilities until 2000-2001. Namely, the levels of new guarantees issued and new government programs entrusted for financing to Konsolidacni Banka were not sustainable. Moreover, off-budget programs contributed only marginally to achieving main policy objectives of the government and, in some instances, might even undermine these objectives.

A brief overview suggests that many off-budget programs, such as bailouts of banks and health insurance companies, have simply paid for failures that were done again and again. Sometimes, programs, which did not qualify for budgetary support (for example an additional subsidy to Railways) did qualify for assistance outside the budget (such as a very risky guarantee extended to Railways). Moreover, often, these programs have implied that government will help again in a case of future failures, and thus have generated moral hazard among market agents, reducing their incentives to improve productivity and competitiveness.

The Environmental Policy During Transition³⁰

Among the very first problems, which faced the former Czechoslovakia after the Velvet revolution was a critical state of the environment. All spheres of the environment were heavily affected by the inefficient and state-controlled economy. The communist regime in coordination with the Soviet Union chose a path of heavy industry - steel production, coal mining, heavy machinery, armaments industry and bulk chemicals. The government sacrificed long-term results to short-term solutions.

The first comprehensive assessment of the environment in the former Czechoslovakia ("Blue Book" published in 1990) characterized environmental conditions as "catastrophic".³¹ The country belonged to those with the worst environmental conditions in Europe and its pollution also heavily affected its neighbors. All spheres of the environment had been heavily polluted – air, water and soil, which had in a first place major impact on health of the population.

Transformation and Institutions

In first years significant reduction of pollution was primarily due to the decrease in industrial production and economic activity. Due to the early legislative and administration

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³⁰ This chapter was prepared by Lukas Posolda of the IES FSV UK.

³¹ See Moldan (2000) for details.

changes and thanks to broad public support further major improvements in protection and quality of environment were achieved.

Sharp decline of most emissions was eminent and it belongs to most important success stories of the transition period. Suspended particulates and sulphur dioxide emissions fell between years 1990 and 2000 by 87 %, solids by 92 %, oxides of nitrogen by 70% (Czech Statistical Office, 2003) and other pollutants decreased also significantly. At the present time the level of air pollution is around the level of EU. The reduction of greenhouse gases is well below the target level as agreed in the Kyoto Protocol (Moldan, 2000). The Czech Republic has also adopted strict legislation on the general use of ozone depleting substances.

Water quality also improved significantly as a result of the construction of new or extended wastewater treatment plants and reduction of pollution from diffuse sources (especially agriculture). Water use followed favorable trends, water abstraction decreased distinctly and today the water consumption per capita is among the lowest in OECD (Moldan, 2000).

Land use was relatively stable although we can observe slight decrease in share of arable land. Forests still suffer from previous period of heavy air pollution, more than half of wooded area is damaged to some extent. Furthermore, forests are mainly artificial monocultures thus they also suffer from other symptoms.

First environment institutions were established in the early 90's. From the beginning the environmental legislation created and set standards according to those similar in the countries of the EU. However, the Czech legislative system for the protection of the environment is very fragmented, it is elaborated to many laws and directives on specific issues and legislation does not have a unified form or central legislative rule, thus it suffers from its complexity. The codex for the protection of the environment, which should cover the issue in general, is being prepared at the present time.

The key laws, which have been passed during the period, are laws for waste management, air pollution (which had major impact on initial reduction of pollution), umbrella law on environmental protection, protection of nature, EIA (Environment Impact Assessment), environmental inspectorate and protection of agricultural soil.

The backbone of the system of environmental protection is the Ministry of Environment. It was established right after November 1989 and it was first institution of this kind in the Czech Republic. Subordinated key institutions are Czech Environment Inspection Agency, administration of nature protection (national park administration, protected landscape area administration) and State Environmental Fund. Right hands of these state agencies are official research and monitoring organizations (water, air, nature, landscape etc.). Czech environmental policy is based on State Environmental Policy, which is an act adopted by the government (last program adopted in 2001).

Since the democratic principles have been adopted by the society, many non-governmental interest groups and not-for-profit organizations have been formed. They have important influence, especially on local level. There are about 30 main public initiatives (including Greenpeace, Friends of the Earth Czech Republic, Children of Earth etc.) and many other with specific local programs. NGOs use the opportunity to become part of the bureaucratic process and they also try to participate in the legislative and policy-making process.

With respect to the new environmental policy, the Czech government eventually adopted a new industrial policy. The new industrial policy is supposed to respect the environmental requirements that have become gradually integrated into it. Great emphasis was placed on the implementation of environmental management systems in firms under the ISO 14000 series of standards and the EU's eco-management and audit scheme.

The state also takes advantage of economic tools that favor protection of the environment. Various environmental taxes have been implemented but their impact is minor. Except the excise taxes on gas fuels there are no other major broadly used taxes or charges.

What remains to be done

In spite of all improvements recent situation of the environment in the Czech Republic is still not satisfactory. The recent major problems are agriculture, residual pollution of soil, wastewater treatment, transport and energy consumption.

The main problem in the Czech energy sector lies in the high-energy intensity of the economy and the high proportion of solid fuels in domestic primary energy consumption. Since 1990 consumption of primary energy sources and intensity of energy use have exhibited favorable trends, but the energy required to produce a unit of GDP is still high at almost twice the EU average.

Agriculture is also a serious issue, where despite a decline in employment, output has increased and the chronic under-supply has quickly changed into the problem of oversupply common to most industrial nations. There are many questions on what will happen after joining the EU.

There is also significant amount of residual pollution of soil with heavy metals and foreign organic substances. Former industrial sites, agricultural soil and forests will require recovery and further investments. Although the quality of surface water is not critical, according to the EU Accession Treaty, municipalities over population of 2000 will have to build wastewater treatment plants if they have not done so.

Transport is the example of wrong or missing policy concept. The Czech Republic has the most dense railway network in the world. Transport patterns are however moving towards the environmentally unfavorable car and lorry-based western model. Although the pollution associated with vehicles has reduced in relative terms (technology reasons), the number of vehicles increased sharply and individual transportation remains a heavy pollutant on a local level. Emissions of CO2 and NOx from road transport are the only example of increased pollution since 1990.

Next step together with further implementation of EU standards will be broader use of environmentally related taxes. There are possibilities to implement new kinds of taxes and charges – e.g. road fees and excise taxes on other fossil fuels and on energy. Public interest in this matter is relatively high so we can expect changes in this field in the near future.

Concluding Remarks

As this study has argued, any country's transition from totalitarian system to a market and democracy-based based is poised to face many challenges and hiccups. Moreover, any country's experiences may be of little relevance in the context of another country.

We have, however, also argued that the most important challenge for *any* transition country is to keep in mind the cliché of economics: *people respond to incentives*. If people do not have the right incentives they will divert to suboptimal activities. If governments do not have the right incentives, they often adopt policies that hamper growth.

And indeed, people used to have extremely bad incentives under the old regime, be it the communist regime in the Czech Republic, or the baasist system in Iraq. In both systems, personal ties were everything and merits were unimportant. Stealing was rampant and widespread. Government officials were not motivated by higher profits or better delivery of goods and services but by administrative measures (in the Czech case) or by fear (in the Iraqi case).

Shortly, the socialist economy was inherently inefficient and had created strong inertia within the society towards autarky, aversion to risk, extremely low dispersion of incomes and

lack of entrepreneurship. These instincts, no doubt present in all transition countries and most likely strong in Iraq as well, needed to be changed to more market-friendly open-mindness, appetite for entrepreneurship and tolerance towards rising inequality.

This sweeping change of attitudes has been the most difficult part of the whole transition process. Inflation may go up and down, currencies fluctuate all the time and budget deficits may have tendency to grow, but all these are easy problems, compared to the attitude re-orientation. Old habits of turning to comrades, using patronage, evading markets whenever possible and even submerging into shadow economy may re-emerge very quickly and may severely distort fragile market structures being just built. The government must be aware of this trap and must act quickly and must provide market reforms robust enough to channel the bulk of activity into the newly built market system.

None of the issues mentioned above is fatal on its own or in unique to the Czech Republic. However, their combination may be very dangerous and any country embarking on a transition (or development) project should be aware of them.

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