

IV. MICROECONOMY

IV.1 Current Privatization Status

Since 1998, no significant progress has been made in the transfer of state property into private hands, with a few exceptions. However, several interesting issues have arisen during 1999.

First of all, so-called spontaneous privatization that peaked during 1998 is over. With the exception of several firms operating in the coal mining industry, the state was able to defend its majority against hostile takeovers. The NPF has used state-owned companies to buy the shares of the remaining endangered companies, namely of utility distributors, to increase the state's stake to over 50 per cent in order to maintain control. This is usually presented as corrective action to undo the wrongs of the previous privatization method that were detected as a result of poor legal protection of minority shareholders.

Secondly, after a year of discussion, the Czech government publicly announced the final version of its "revitalization" plan for large industrial enterprises and holding companies.

Finally, the shift in the governmental privatization strategy towards favoring public tenders and direct sales to strategic investors was sustained. The motivation to repeat the successful deals of the past, modeled on such ventures as Škoda automobilová-Volkswagen, Rakona-Procter & Gamble, and Barum-Continental, resulted in the sale of the majority stakes of one of the large banks, ČSOB, to the Belgian KBC, which currently holds 65.69 per cent of the stakes. A similar deal is expected to be signed between the NPF and Erste

Bank on the sale of the majority stakes of Česká spořitelna.

There was no significant change in the status of privatization of either strategic companies or other industrial companies. Moreover, current governmental "privatization" strategies for the electric and gas utilities are questionable. The government proposes to sell the remaining shares of regional distributors to the nation-wide state-controlled dominant export-import contractor. Then, after several years, this huge monopolistic distributor should be privatized. Since only large consumers would be free to select their utility supplier, this proposal excludes households from participating in the competition in the future. Such an idea is contrary to the EU plans for network industries; the consumers should be free to choose.

Czech Top 10 in 1997 and 1998

Rank	Sales			
	1998	1997		
1	1	Škoda auto, a.s.	105	90
2	3	ČEZ, a.s.	55	55
3	2	UNIPETROL, a.s.	50	66
4	x(5)	Transgas, s.p.	44	39
5	5	SPT TELECOM, a.s.	40	35
6	x(6)	České dráhy, s.o.	36	34
7	6	Nová huť, a.s.	30	30
8	4	Česká rafinérská, a.s.	27	39
9	8	ŠKODA, a.s.	26	23
10	7	OKD, a.s.	24	24

Sales are in billions of CZK

x: not included in 1997, () estimated rank

Škoda, a.s., is not affiliated with Škoda auto, a.s.

Source: Czech Top 100, 1999

Liberalization of the Energy Sector: Electricity

(Based on Kočenda, E. and Čábelka, Š.: Liberalization in the Energy Sector: Transition and Growth. Osteuropa Wirtschaft, 44 (1999), 104-116)

The transition process in Central and Eastern Europe has shown gradual progress, even though a certain slowdown and weaknesses have been observed. Despite this, a number of obstacles still must be overcome before transition economies can embark fully on the path towards sustainable long-run growth. One task which lies ahead is the liberalization of the energy sector.

The energy sector is closely connected to economic growth because it generates and supplies energy to manufacturers and households. Thus energy enters the classical growth model as an input as well as technology. The level of this technology and its efficiency in a competitive environment also mirror the stage of technological progress. The liberalization of the energy sector will help create a more competitive environment in this industry and also facilitate the development of more efficient technologies and their application in the form of investment.

The liberalization of the energy sector poses a difficult task in a developed market economy, not to mention one in transition. For this reason it would be beneficial for the transition countries to take heed of some of the more feasible suggestions offered by western countries which have already experienced at least some degree of energy sector liberalization. This is also important in light of the eventual accession of CEE countries to the EU.

The liberalization of the energy sector requires, besides the reform of the current obsolete and inefficient legislature, a break-up of state monopoly giants into smaller and less dependent units throughout the whole line of production, transfer, and distribution. The newly established companies are not likely to be fully private entities, at least not in the first stage of such a process. They may well remain in large part under state ownership. However, they are likely to act and operate in a more efficient way than is possible under the original state-monopoly structure. Such behavior can be observed in the experiences of Western European countries.

IV.2 Enterprise Restructuring

After more than one year, debate on the form and scope of the so-called “Revitalization Program” has formally ended. On October 19 the program was officially created. A state-controlled agency, the so-called Revitalization Agency, was established, and together with Lazard Bank, which was selected as an advisor, its major partner is Konsolidační Banka. This is another state-owned bank institution which bought a vast amount of non-performing loans from commercial banks during the past at prices well above the market value, at about five or even more times above the value on average. It could be considered a transparent program if these two state-controlled institutions would be the only players. However, Konsolidační banka was established as one of the institutions to ease the initial loan burden together with similar institutions like Česká Inkašná, Českomoravská Hypotéční a Záruční Banka, and Česká Finanční. All these off-budgetary institutions are mainly warehouses for closets full of various types of financial skeletons.

The Revitalization Program was intended to help the overdebted, large industrial companies. The major idea was to select promising companies in (temporary) distress or need and promote the usual debt-equity swap, which would allow the state to increase its influence, exercise corporate governance and restructure the firms under state governance.

Leave aside the discussion of problematic state-governed restructuralization and the government’s direct influence on semi-private companies. There are even more

severe problems which critics point out. The current Czech legislation does not easily allow for such debt-equity swaps; the owners have to agree with such an arrangement since such a deal limits their ownership rights. The other possibility is to declare bankruptcy – but then the whole bankruptcy process is under the governance of appointed liquidators of the local courts and under court control, and the state (and hence the Revitalization Agency) has no influence over the process. To sum it up, the whole process would have been, at least partly, started by commercial banks to recover their bad loans in the past if it would be easier than engaging in problematic Czech bankruptcy procedures.

There were nine companies selected for the program and the unofficially estimated costs are at least 60 billion CZK. However, after the announcement of some of the selected companies, several of them publicly declined their involvement in the program. This clearly means that the government has selected the companies without consulting their management or owners.

Governmental Suggestion on Inclusion in the Program

AliaChem
 ČKD Dopravní Systémy
 Spolana Neratovice
 Škoda Plzeň
 Tatra Kopřivnice
 Vítkovice
 Zetor Brno
 ZPS Zlín

Source: Public sources

Regulatory Environment

Residential Telecommunications and Long Distance Carriers

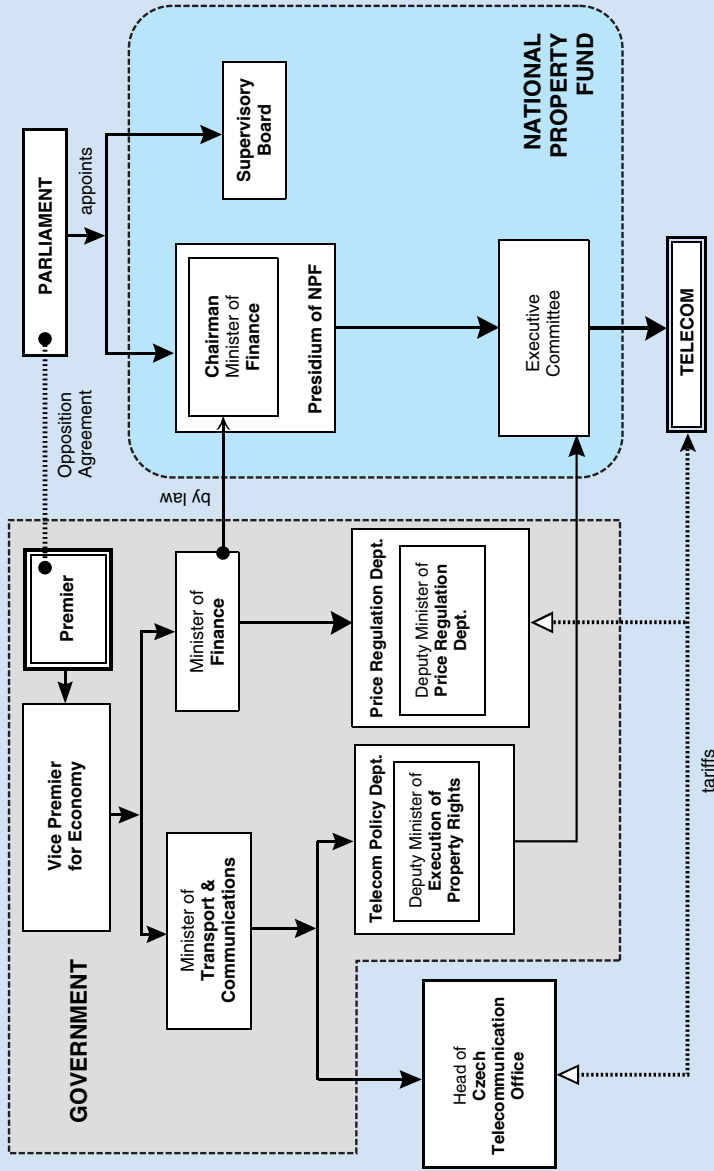
There is only one provider of all fixed-line voice services, SPT Telecom, which is still 51 per cent state-owned. This incumbent has a state-granted monopoly till January 1st, 2001, on all long-distance calls. There are secondary operators in seven selected areas, and so far the incumbent controls over 99.9 per cent of the local services, (OECD, 1998). We can use the telecommunications industry as an illustrative example of the regulatory environment in the Czech Republic.

The price regulation of telecommunication services consists only of price caps set up by the Ministry of Finance and Telecommunications Office. Other regulations (except license conditions set up by the Telecommunications Office) are left to the discretion of the state, which enforces the regulations via its ownership rights. On the other hand, all regulations including the price is in the hands of the government, the major shareholder and tax-receiver. Therefore, there is clearly a conflict of interest; should the government collect taxes, improve services, keep services cheap or defend the consumers and potential new entrants against dominant power abuse?

Interconnection fees are left to commercial agreement and interconnection charges are not public information (i.e., no disclosure is required). Disputes are settled by the Ministry of Finance and Telecommunications Office. As the 97/33/EC directive states, the major focus in telecommunications should be on issues of interconnection. Namely the major tasks are to: 1) introduce competition into public networks; 2) set up effective licensing, interconnection conditions, and universal service; 3) establish interconnection charges as cost-based and transparent; 4) introduce asymmetric regulation to facilitate entry.

The most important items are the last two as was pointed out in several studies. Once we decide to allow competition, we have to set up the rules of the game. The new entrants should be less regulated than the incumbent, and the incumbent should be prevented from siphoning money by applying excessive "access" charges to the unified network (or to the unique essential part left under its control). Otherwise the resulting situation is sort of pseudo-competition; there are competing firms in the sector but the prices are the same as under unregulated monopoly.

TELECOM'S REGULATORY STRUCTURE (Spring 1999)



Privatization Still Ahead

(Based on Kočenda, E.: Residual State Property in the Czech Republic. Forthcoming in Eastern European Economics.

Privatization in the Czech Republic was carried out under three programs: restitution, small-scale privatization and large-scale (or mass) privatization. Restitution restored assets which had been nationalized by the communist regime after 1948 to their original owners or their legitimate heirs. Small-scale privatization dealt primarily with small economic units such as shops, restaurants or smaller industrial enterprises that were sold at public auctions.

By far the most important privatization program in the Czech Republic was large-scale privatization, which began in the spring of 1991. Large-scale privatization was carried out through a combination of several privatization techniques: small businesses were typically auctioned or sold in tender; medium sized businesses were sold in tender or to a predetermined buyer (direct sales). The largest firms were transformed into joint stock companies, the shares of which were distributed through voucher privatization.

This comprehensive privatization program resulted in a remarkably high share of GDP being eventually produced by the private sector. Often cited as one of the major success stories of the transition in Eastern Europe, the Czech privatization program resulted in almost 75 per cent of productive capacity being transferred to the private sector by the first quarter of 1995, at which time the mass privatization program was completed. Was it a true private sector though?

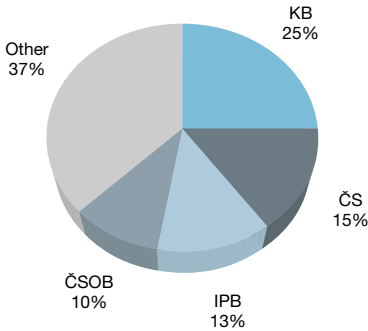
Despite the massive scale of the voucher privatization program, there still remains a substantial number of companies where the state is involved. The total number of 1,849 companies with a total book value of 367.5 billion CZK entered both waves of voucher privatization. By the end of 1998 the state had still kept its involvement in 369 companies which had an overall book value of more than 440 billion CZK. The book value of the state share in these companies amounted to almost 177 billion CZK. A great number of these companies were "privatized" through voucher privatization, but the state did not privatize them entirely. Translated from absolute numbers, the portfolio of the Fund of National Property has shown that 76 per cent of the assets of the companies under the influence of the state represent 332.7 billion CZK.

Even though the state is able to control only a limited number of Czech companies, the book value of this part is no longer unimportant. The state is able to control an enormous part of the economy. One cannot help to conclude that, despite the voucher privatization program, the state sustained its influence over a significant part of the economy. In view of the facts, it seems legitimate to question the official success of the voucher privatization program.

There exists a clear consensus that further privatization of the residual state property is both necessary and inevitable. The future will tell the results.

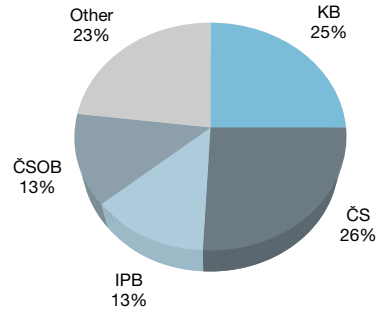
IV.3 Bank Privatization Issues

Total Customer Loans



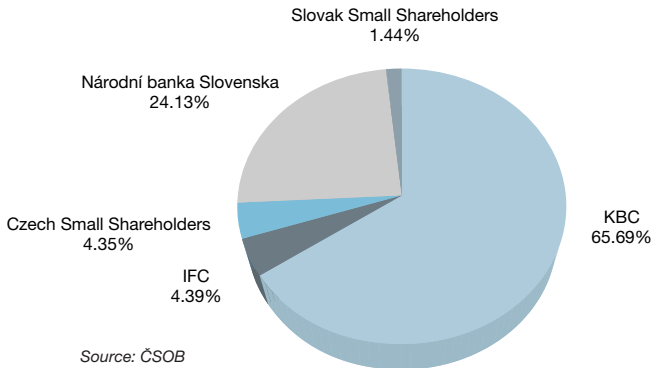
Source: Public sources

Total Customer Deposits



Source: Public sources

Stakes in ČSOB



Source: ČSOB

During 1999 a second major bank was privatized. After IPB, which became part of the Nomura Group in the beginning of 1998, ČSOB was sold to the Belgian bank KBC. The deal was sealed on March 31st and the final price paid for the majority stake was 40 billion CZK.

The remaining two major Czech banks, KB and ČS, are still controlled by the state

by means of the NPF. In the fall of 1999, the government decided to privatize the state share of 52.07 per cent of ČS to Erste Bank (Erste Bank der Österreichischen Sparkassen). According to the current official announcements, the deal should be signed by January 31st, 2000.

IV.4 Business Environment in the CEE

The country CI Score measures the degree of corruption perceived by businesspeople, risk analysts and the general public and ranges between 10 (highly clean) and 0 (highly corrupt).

Since the ranking may vary year to year due to different compositions of the sample, the main indicator is the score. In 1999 the score for the Czech Republic is again quite close to the scores of other transition countries, namely Hungary, Poland and Slovakia.

Looking at the past scores for the Czech Republic, the pattern is quite disturbing. Over the last four years the score fell from 5.37 to 4.6. Although this change is not statically significant, nor are there differences among the three listed countries, the constantly declining pattern for the Czech Republic and Poland is alarming. Unfortunately, so far the time series are too short to give us a clear answer, but we should treat the pattern as a signal and warning.

Corruption Perception Comparison

Country		1996	1997	1998	1999	Probability of no change, %
Czech Republic	index	5.37	5.20	4.8	4.6	96.73
	<i>std. error</i>	1.45	0.47	0.8	0.8	
Hungary	index	4.86	5.18	5.0	5.2	99.97
	<i>std. error</i>	1.48	1.29	1.2	1.1	
Poland	index	5.57	5.08	4.6	4.2	92.85
	<i>std. error</i>	1.91	1.46	1.6	0.8	
Probability of equality, %		99.11	99.96	99.76	90.05	99.97

Source: Transparency International

IV.5 Czech Capital Markets

The structure of the Czech capital markets has been to a large extent determined by voucher privatization in the Czech Republic. About 1,700 firms were privatized during the two waves of voucher privatization. As a byproduct, the majority of Czech citizens became shareholders of previously state-owned firms. To allow people to trade shares acquired through voucher privatization, two capital markets opened soon after the end of the first wave of voucher privatization. While, by its institutional design, the RM-System (from its opening in May 1993) was more suited to the trading needs of small individual shareholders, the Prague Stock Exchange (which opened in April 1993) hoped to attract institutional investors.

Despite the increasing total volume of trade on both markets, we can see the role of the central markets decreasing; in other words the price discovery process has led to higher inefficiencies. It can be easily affirmed that at the beginning the volume of trade on both central markets represented about one quarter of the total volume of trade in a particular market; since 1997, these figures have dropped below 5 percent. The high number of securities, traded in

varying volumes and frequencies, market capitalization, varying information disclosures, and the non-transparency of the market in general, resulted in several attempts to restructure the PSE:

1. *Segmentation.* New segments of the PSE were introduced on September 1, 1995, when the PSE market was split into three main tiers. The listing requirements for each trading group are summarized in Table 1.

2. *Delisting.* The following criteria were applied: volume of trade, market capitalisation, number of days traded per year. By September 1997, 1303 companies had been de-listed from the PSE in the following steps: March 1997 – 100 stocks, April 1997 – 391 stocks, June 1997 – 509 stocks, September 1997 – 303 stocks.

3. *Dealers Market.* The SPAD system supporting the market for stocks and bonds is a trading segment. It is based on market makers maintaining continual quotations of bid and ask prices for selected issues. Trading under SPAD is divided into two parts: the open phase with obligatory quotation of prices by appointed market makers; and the closed phase without obligatory quotation of prices by appointed

Listing Requirements for the PSE (1996), in CZK

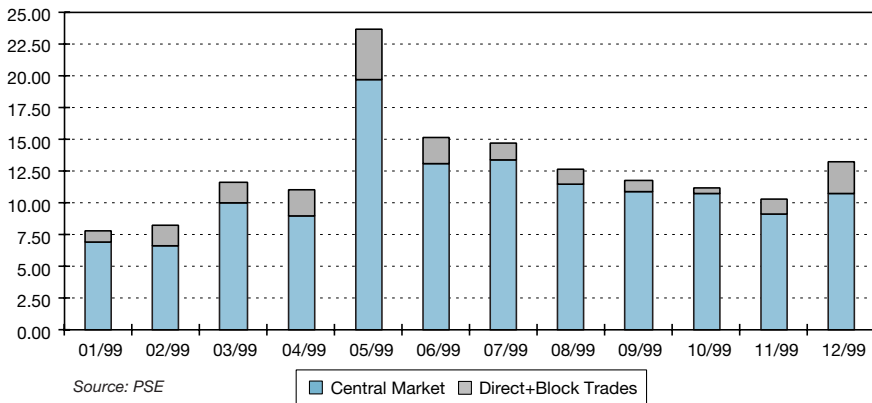
Trading Group	Disclosure	Requirements Liquidity*	Capital**
Tier one	Quarterly	> 300,000	Public offer > 200 mill. Registered capital > 500 mill.
Tier two	Semi-annually	N/A	Public offer > 100 mill. Registered capital > 250 mill.
Tier three	Annually	N/A	N/A

* Average volume per session (last five months)

** Capital requirements vary for firms (public offer) and for investment trusts and units (registered capital)

Source: PSE

Monthly Trade Values in Central Market and in Direct and Block Trade – Shares and Units (billions of CZK)



market makers. Traders wishing to conclude a trade in one of the SPAD securities has the option of choosing either another trader as its counter-party or the market maker. Currently only blue chips are included under the SPAD system.

Notes. It was expected that the above introduced market segments and trading groups (1), supported by delisting (2), will increase the transparency of the market, attract foreign investors and significantly increase liquidity. Probably the main reason why this attempt failed was the fact that shares were quite heavily traded off-market. The SCP Control Department noted that the vast majority of off-market trades were actually settled by registered brokers. Therefore, since mid 1997 the PSE members

were not authorized to conduct trades at the SCP. Nevertheless, this motion did not increase liquidity at the central market either. The only change observed was that a significant part of off-market transactions turned into direct trades, in other words, transactions occurred in an off-market nature without any influence on the central market price. On the other hand, the introduction of a market-maker system (SPAD) for the most liquid shares has substantially increased trading on the central floor of the Prague Stock Exchange. It will be interesting to see if these reforms (and other proposed changes by the World Bank Mission 1998) can restore the initial advantageous position of the Czech market.

The Trading Volume on Registered Capital Markets (billions of CZK)

Trading volume (CZK billion)	1993*	1994	1995	1996	1997	1998	1999
PSE Central market	2.0	16.0	22.0	28.8	22.1	72.1	142.3
PSE – direct and block trades	7.0	46.0	173.4	364.4	657.5	788.1	1,045.2
RMS Central market	2.9	4.4	5.8	9.5	7.6	7.5	6.4
RMS – direct and block trades	–	–	19.4	90.9	151.1	458.8	103.7

* April-December (PSE), July-December (RMS) Sources: PSE, RMS

Relationship between Stock Market Returns and Economic Factors for Visegrad Countries.

(Based on Hanousek, J., Filer, R.K.: The Relationship between Economic Factors and Equity Markets in Central Europe. CERGE-EI Discussion Paper 1999-28)

Formal stock markets have existed in Hungary and Poland since the beginning of 1991 and in the two parts of the former Czechoslovakia since mid 1993. The scopes of these markets are very different, however. The Czech and Slovak stock markets were created as a by-product of the voucher privatization scheme launched in former Czechoslovakia. This has had several implications. Since the voucher privatization program operated on a large scale, the new Czech stock market had one of the largest market capitalizations in the region. On the other hand, the enormous number of equities overran the market's capacity. The administrative decision to trade shares of all privatized companies on the stock exchange meant ignoring standard listing requirements. This fact, in combination with an inadequate legal framework, made the Czech and Slovak stock markets the least transparent in the region.

By way of contrast, Poland and Hungary opted for a standard process of creating a capital market by applying a range of regulations and listing requirements to provide for a step-by-step expansion of the market. Thus, it is interesting to compare the Visegrad stock markets to see how these differences in regulations, disclosure requirements, initial market size, and trading and settlement mechanisms affect efficiency. Several repercussions are obvious. While the Czech Republic began with the highest market capitalization, this has decreased over time. On the other hand, capital markets in Poland and Hungary started with a smaller market capitalization, but have increased in size over time so that by the end of 1997 both countries' market capitalization exceeded the Czech Republic's market capitalization.

At the end of 1997, over 300 companies were being traded on the Prague Stock Exchange, with a total market capitalization equal to 24 per cent of Czech GDP. Despite the large number of traded firms, the market was dominated by a few firms. The 50 firms included in the PX-50 index amounted to about 85 per cent of total market capitalization in 1997. In the Hungarian market, 49 traded firms had a total market capitalization equal to about 33 per cent of GDP. In Poland, the 143 firms traded on the Warsaw Stock Exchange were valued at about 9 per cent of GDP, a figure similar to the 872 traded firms in Slovakia.

The overall conclusion is that while the newly established markets in the Visegrad countries reflect the movement in economic fundamentals, they do so with a lag. Thus, none of the markets can be said to be semi-strong efficient, although these results suggest that the Czech market may have come closer to achieving such a result than the other three countries. This last conclusion does not hold up if we examine the development of the relationship between real factors and equity markets over time.

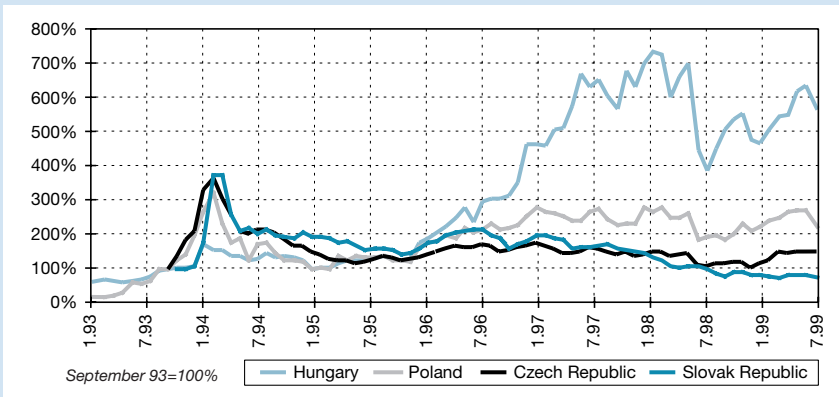
In fact recent patterns suggest that price movements in the Czech market have become almost divorced from reality.

There are a number of reasons why this may have happened. As press reports have increasingly focused on the lack of regulation in the Czech market, a self-fulfilling prophecy may have been created whereby rational investors have abandoned the market, leaving it to those who do not treat stocks as conventional instruments for investment purposes, but rather as artificial chips to be used in a game of financial manipulation.

In addition, trading patterns have shifted so that prices on the PSE may have become less indicative of true values. Almost 30 per cent of all transactions at the beginning of trading went through the PSE central market, while by the end of 1997 this figure fell below 5 per cent. Moreover, approximately 70 per cent of trading in Budapest and 30 per cent in Warsaw involves foreign investors as compared with only a trivial fraction of trading in Prague. Insight into the possible foreign influence on the Visegrad equity markets can be obtained by examining the relationship between these markets and leading western markets as represented by the DAX (German) and Dow-Jones Industrial (US) indices.

The striking result is that while the Hungarian market is strongly linked to the European (German) and US markets, both instantaneously and with a lag, and although there is evidence of a connection between the Polish and Hungarian markets and the market in the US, there is no evidence whatsoever of a link between Czech equity markets and their counterparts in the West. Again, in the first years of trading on the PSE, Hanousek and Filer found a contemporaneous link to the German market and a lagged link to the Dow-Jones average. Thus, yet again there is strong evidence that the Czech market has become increasingly divorced from the real world over time.

Stocks Market Indices



Credit Union Crises

The controversial credit unions of the Czech Republic have recently come under harsh criticism from many. The credit unions seem to bear an uncanny resemblance to the failed savings & loan institutions of the 1980s in the United States. The roughly 100 credit unions of the Czech Republic manage more than one billion CZK. Much of the criticism has been on the unreasonably high interest rates offered on deposits to its members. These interest rates are as high as 14.8 per cent. This is in a market where the prevailing bank rate is only around 4 per cent on similar deposits. These credit unions operate outside the supervision of either the Ministry of Finance or the Czech National Bank.

The credit unions themselves have their own supervisory board, the Association of Credit Unions. However, many critics have dismissed this association as serving no real role in any form of regulation over the industry. Some of the credit unions are not even registered with this or any other organization.

Increasingly the country is seeing these institutions fall under the forced administration of the Office of Credit Unions. Many times this has occurred because the credit unions lack the liquidity required for their venture – which is 15 per cent of deposits.

Three of the largest credit unions including První Družstevní Záložna have fallen into problems of this nature. Many experts point to the lack of experience of the managers as the main cause. Managers of these institutions are not subject to review and are not required to have any previous banking experience. Another critique has included the lack of transparency of the institutions. Some have pointed to the hiring of local accounting firms as a sure sign indicator that these credit unions are not serious about keeping their books in proper order.

Although the credit unions themselves have been promising to improve their regulations and even introduced a new guarantee fund, no new policies have been implemented. With both the capital markets and the nation's banks now rectifying past poor management practices of the transition, a credit union crisis could leave yet another stain on the already blemished Czech financial sector.

A Note on the Efficiency of the Czech Financial Markets

(Based on Podpiera, R.: Response of Czech Financial Markets to Macroeconomic Releases. CERGE-EI Discussion Paper 1999-23)

The Czech financial markets have developed rapidly during recent years. While the equity market continues to be plagued by problems of insufficient liquidity and low trust of investors, the other segments of the financial market appear to function rather well. The crown is one of the most liquid and favorite currencies in Central and Eastern Europe. The development of the financial market naturally poses the question of market efficiency. One possible measure of efficiency is the way the market reacts to news announcements.

Financial markets react to economic news releases of various kinds. Inflation or GDP announcements can serve as the most prominent examples. The basic question to ask is whether the Czech financial markets react to new macroeconomic information at all and to what extent they react efficiently. If a market is efficient, immediately after a news announcement, prices of financial instruments should adjust to the new information. Any lagged adjustments suggest market inefficiency. An efficient market should not react to the expected portion of announcements, but only to genuinely new information, that is, to the surprising recently released figures.

Clearly, in order to test for market reaction, we need to obtain an estimate or a proxy for market expectations. We rely on the Reuters analyst poll as an approximation of market expectation, since this poll is the most representative survey available. At the same time, the predictions of the poll are broadly accessible to market participants. The reaction of the Czech crown exchange rate, inter-bank interest rates, the equity market index and government bond yields to monthly releases of inflation data (both consumer price index and industrial producer prices), industrial production and foreign trade figures was explored.

Our findings suggest that, in terms of financial market reaction, the CPI is the most important economic release. At the same time, it appears that the reaction of the financial market is by far not efficient. The market does react to news announcements, however, its reaction is by no means immediate. Our results suggest that the market needs several days to adjust to new information. Moreover, the market appears to react not only to surprising news, but also to the expected news in the release. This reaction to the expected news is often stronger than the response to the surprising news.

Inter-bank interest rates, and to a lesser extent the foreign exchange market, appear to be the most responsive to macroeconomic releases. Bond yields respond less. The results show that the Czech interest rates react in line with expectations derived from theoretical models. However, we could not find any significant reaction of the stock market index to any kind of macroeconomic release. This poses the question as to what are the driving forces behind its development.