

**STOCK EXCHANGES IN EASTERN EUROPE:
WARSAW ISN'T BUDAPEST!**

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SUMMARY

**STOCK EXCHANGES IN EASTERN EUROPE:
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Hungary underwent a gradual transition to a market economy, the foundations of which were laid in 1968 with the 'New Economic Mechanism'. In Poland, on the other hand, shock therapy was needed in early 1990, in response to the collapse of the centrally planned economies of Eastern Europe.

Both countries, which have been travelling the same road over the past few years, but with a different sense of urgency, have had a stock exchange for some time. Hungary was first but, perhaps inevitably, as one of the penalties of being first in the field, the operation of the price mechanism in the share market has been completely disregarded since the euphoric price rises witnessed in 1990. Until recently all shares were overpriced and special facilities such as cheap loans had to be offered to make investing in shares more attractive to residents. In Poland, by contrast, the price mechanism has been used to generate a flood of investors to the market. Shares have been pitched at an attractive price level. Demand, mainly from local investors, resulted in substantial price rises.

The conclusion we can draw, however, is that it has cost the Hungarian government a lot of money to let the local investor return to the stock market. In Poland the stock market is becoming quite popular despite of the high price level. Polish privatisations can now make use of the stock market at high price-earnings multiples and without any incentives like cheap loans to convince the local investor!

For the foreign investor both stock markets can be considered real emerging without any substantial correlation with their home market.

**Les bourses des valeurs en Europe de l'Est :
Varsovie n'est pas Budapest !**

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Résumé

La Hongrie a connu une transition graduelle qui l'a menée à une économie de marché dont les fondations ont été jetées en 1968 par le "Nouveau mécanisme économique". En Pologne, par contre, une thérapie de choc s'est révélée nécessaire au début des années 1990 pour répondre à l'effondrement des économies planifiées d'Europe de l'Est.

Les deux pays, qui ont évolué dans la même direction au cours de ces dernières années, mais avec un sentiment d'urgence différent, possèdent une bourse des valeurs depuis un certain temps. La Hongrie a été la première, mais, de manière peut-être inévitable, et c'est là l'une des pénalités qui frappent les pionniers dans ce domaine, le fonctionnement du mécanisme des prix dans le marché des actions a été complètement ignoré depuis la hausse euphorique des cours à laquelle on a assisté en 1990. Jusqu'à une date récente, toutes les actions étaient surévaluées et des facilités spéciales telles que des prêts à taux concessionnels devaient être offertes pour rendre les placements en actions plus attrayants pour les résidents. En Pologne, en revanche, le mécanisme des prix a été utilisé pour amener un flux d'investisseurs au marché. Les titres ont été offerts à des prix attrayants. La demande, provenant principalement des investisseurs locaux a provoqué une hausse substantielle des cours.

La conclusion que nous pouvons tirer, toutefois, est que le gouvernement hongrois a dû dépenser beaucoup d'argent pour amener l'investisseur local à revenir au marché boursier. En Pologne, le marché boursier devient très populaire malgré le niveau élevé des cours. Les privatisations polonaises peuvent maintenant recourir à ce marché avec des PER élevés et sans avoir à consentir des incitations telles que les prêts concessionnels pour convaincre les investisseurs locaux !

Du point de vue des investisseurs étrangers, ces deux marchés boursiers peuvent être considérés comme véritablement naissants et sans corrélations substantielles avec les marchés de leurs pays d'origine.

STOCK EXCHANGES IN EASTERN EUROPE: WARSAW ISN'T BUDAPEST!

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INTRODUCTION

A common feature shared by the stock exchanges of Eastern Europe (in Budapest and Warsaw) is that both are operating under extremely difficult circumstances. Their Eastern neighbours, once so important, are no longer major trading partners and the recession in the West is eroding their export markets. Add the civil war in former Yugoslavia, and the recipe for disaster is complete.

Two capital markets are nevertheless developing successfully in the East. Hungary, which a few years ago was leading the way in Eastern Europe, is now paying the price of being the first in the field. Poland, on the other hand, altered course drastically on 1 January 1990 and, contrary to what many expected, the shock therapy administered by Mr. Balcerowicz, the former Minister of Finance, has worked.

This analysis will first give a brief outline of the way in which these two Stock Exchanges have developed and will then examine the reasons why they have developed in such different ways.

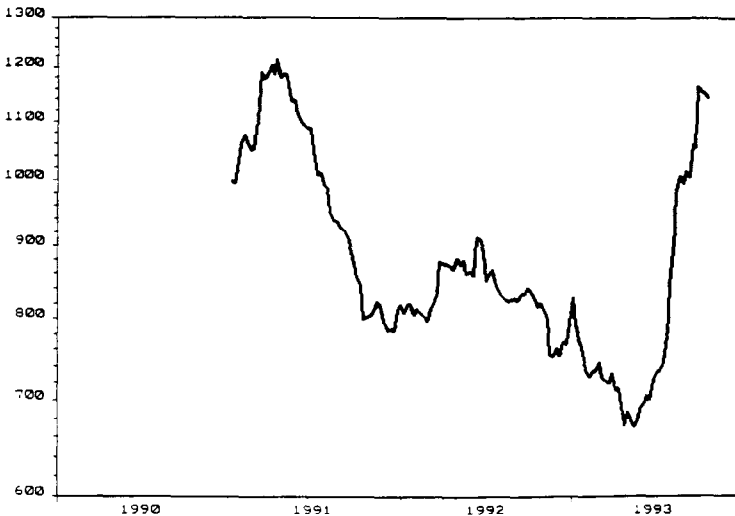
THE HUNGARIAN STOCK EXCHANGE

After having been closed for over 40 years, the Hungarian Stock Exchange reopened for business on 21 June 1990. A semi-official market had been operating since March 1990 and provided the legal framework for trading in shares and bonds. Share prices on the exchange rose rapidly, especially in the initial phase of this semi-official market. In 1991, however, the market rebounded from this price explosion and, with only brief remissions, prices fell steadily.

A stock which exemplifies the trend in prices is IBUSZ, once the darling of the Hungarian stock exchange, which dropped from a high of HUF 12,500 in 1990 to a low of HUF 800 (-94%).

In May 1993, the index staged a fragile recovery, helped by more attractive pricing after several years of downward adjustment. The Budapest market probably also received a boost from the spectacular gains in Warsaw. The exchange distinguishes between listed companies (currently 11) and traded shares (14 at present). In contrast to Poland, the Hungarian exchange provides continuous listing.

BUDAPEST STOCK EXCHANGE INDEX IN HUF (Oct. 1993)



The Hungarian exchange has not really got off the ground since its explosive start and by year-end 1992 market capitalisation amounted to only USD 600 million, with 25% growth in 1993 (in USD).

Number of listed stocks and market capitalisation on the Budapest Stock Exchange:

<u>YEAR</u>	<u>NO. OF STOCKS</u>	<u>MARKET CAPITALISATION</u>	
		<u>HUFx10⁹</u>	<u>USDx10⁹</u>
1990	6	-	-
1991	20	38.2	0.5
1992	23	47.2	0.6
1993(October)	25	71.7	0.8

1992 was virtually a wasted year for the Hungarian Stock Exchange, with only two new companies being admitted to listing at the end of the year: PICK, a salami producer in Szeged, and DANUBIUS, a hotel chain. Stock market turnover in 1992 was only HUF 6 billion, compared with HUF 12.7 billion in 1991. Most of the business on the exchange was in fixed-interest securities (government bonds and treasury bills). The activity on the stock exchange does not involve either the public or foreign investors, and hence the most active players are the banks and insurance companies. The development of the Budapest Stock Exchange is being held back by companies having dual listings on the Budapest and Vienna exchanges. Many Hungarian companies have an OTC listing in Vienna as well as their listing in Budapest. Foreign investors in particular prefer trading in Vienna, choosing to avoid the less efficient Budapest exchange. The result is that transaction volume in Vienna is often significantly greater than that in Budapest. Evidence that not all listed companies in Hungary are prospering is given by the fact that three of them have already gone into liquidation: TERRAHOLDING, KONTRAX IRODATECH and KONTRAX TELEKOM, and there are fears for survival of MÜSZI, which is active in the consultancy and real estate sectors.

The table summarises the data for the listed Hungarian companies as at October 28, 1993. Remarkably, the company which has performed best has been trading at a loss for some considerable time. The table also shows that no projections of 1993 results are available for many companies. Consequently, research on Hungarian shares is extremely sketchy and the available research is very limited.

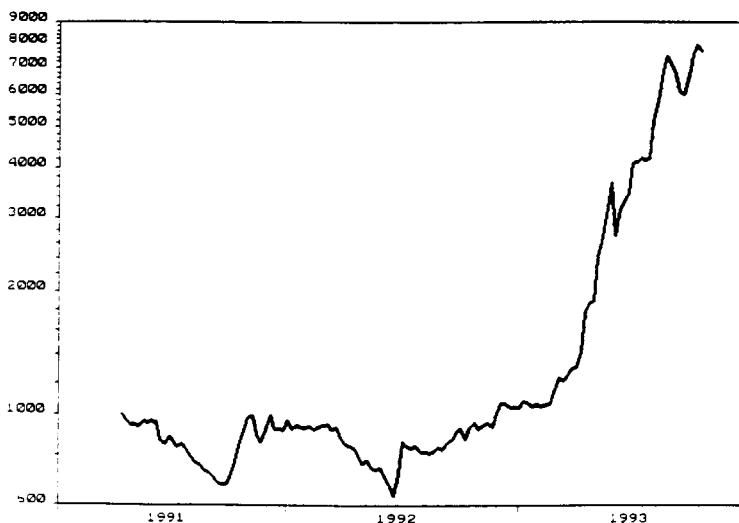
KEY DATA FOR THE POLISH STOCK EXCHANGE as at October 1993

Company	Sector	Capitalisation in PLZ	Share price 28.10.93	Rise/fall 1993 %	Earnings per share			P/E 1993(est.)
					1991	1992	1993(est.)	
BIG	Bank	2,938	179	427	4,237	3,414	6,000	30.0
BRE	Bank	2,290	1,145	503	28,038	70,000	76,000	15.1
EFEKT	Holding company	285	380	567	2,211	6,935	14,000	27.1
ELEKTRIM	Trading	5,625	1,875	842	38,738	105,683	115,000	16.3
EXBUD	Construction	1,150	1,150	311	103,460	66,377	65,000	17.7
IRENA	Glass	396	880	1,560	16,836	4,822	34,500	25.6
KABLE	Cable	320	320	967	-2,738	9,023	5,000	64.0
KROSNO	Glass	561	255	1,033	367	553	2,696	96.7
MOSTOSTAL-Exp	Construction	1,575	1,050	664	21,223	60,958	64,000	16.3
MOSTOSTAL-War	Construction	368	1,050	47	-	28,571	30,860	34.0
OKOCIM	Brewing	1,988	710	576	22,897	36,843	35,000	20.2
OSTROLEKA	Food	135	n.a.	n.a.	-	-	5,480	n.a.
POLIFARB	Chemicals	2,142	700	250	7,029	21,600	40,850	17.1
PROCHNIK	Textiles	825	550	1,567	4,219	15,621	15,300	35.9
SOKOLOW	Food	586	335	52	17,920	10,603	10,300	32.6
SWARZEDZ	Furniture	505	202	446	-15,686	13,016	6,200	32.6
TONSIL	Electronics	357	238	693	-17,175	-39,179	2,330	102.0
UNIVERSAL	Trading	1,950	130	863	-489	218	1,530	84.8
VISTULA	Textiles	1,145	1,145	11	9,410	33,819	81,500	14.1
WBK	Bank	4,448	695	99	-110,405	30,694	39,060	17.8
WEDEL	Food	4,736	1,480	683	50,900	75,250	93,750	15.8
WOLCZANKA	Textiles	750	500	1,438	9,231	16,257	20,000	25.0
ZYWIEC	Brewing	<u>2,200</u>	<u>1,100</u>	<u>780</u>	59,926	49,561	62,500	17.6
TOTAL	WIG	37,275	7,975	666				

THE POLISH STOCK EXCHANGE

The Warsaw Stock Exchange reopened in April 1991 and the initial indications were that the share prices would follow the same downward trend as in Budapest. There was, however, one significant difference between Poland and Hungary: pricing. In mid-1992 the price/earnings ratio for successful companies was only 1.5 to 2.5, but after the initial upturn in mid-1992, stock market valuations rose to between 3 and 4 by early 1993. A cut in the official interest rates at that time prompted many private investors to look for alternatives to time deposits. Share prices, which are not allowed to rise or fall by more than 10% in any session (there are currently three sessions per week), increased sharply. The brief but violent price correction in June, partly in response to the political uncertainties, was taken by many investors as a signal to move into shares. The graph is self-explanatory on this point.

WARSAW STOCK EXCHANGE IN PLZ (October 1993)



Helped by the admission of new companies to listing and rising share prices, market capitalisation in Warsaw has soared.

Number of listed stocks and market capitalisation on the Warsaw stock exchange:

<u>YEAR</u>	<u>NUMBER OF STOCKS</u>	<u>MARKET CAPITALISATION</u>	
		<u>PLZx10¹²</u>	<u>USDx10⁹</u>
1991	9	1.7	0.2
1992	16	3.5	0.4
1993(October)	22	37.1	1.9

In contrast to the price explosion which marked the opening of the Budapest stock exchange, the price rises in Warsaw were carried mainly by the local market. According to insiders, however, it is only a small number of players who are making the running, and this could make the share prices vulnerable. However, recent evidence shows that foreign interest is increasing. Recent flotations, such as VISTULA and SOKOLOW, took place at attractive (low) valuations of 1.7 and 7.2, respectively, which represent a significant under-valuation compared with the market average. Flotations of this kind help, of course, to sustain interest in equities. Subscribers to these issues cannot lose and every new issue is therefore heavily over-subscribed. Although most of the flotations have involved former state enterprises, it is likely that private companies such as EFEKT, which has an over-the-counter listing, will come to the stock exchange shortly. The following table presents the key data for the Polish stock market as at mid-October 1993. Comparison with the Hungarian figures reveals two striking differences. Firstly, the number of loss-making companies in Poland is much smaller. Secondly, profit projections for 1993 are available for all companies, in many cases produced by their own managements. This makes the Polish market more accessible to investors, in spite of the language problem. The information on the listed companies which the stock exchange itself publishes on a monthly basis is also becoming a significant factor.

KEY DATA FOR THE HUNGARIAN STOCK EXCHANGE (as at 28 October 1993)

Company	Sector	Capitalisa- tion mn in HUF	Share price 28.10.93	Rise/fall 1993 %	Earnings per share			P/E 1993(est.)
					1991	1992	1993(est.)	
DUNAHOLDING	Holding company	3,145.0	18,500	-8.4	4,170.6	-3,980.0	neg	insig
FOTEX	Retailing	14,341.0	371	30.6	22.6	19.6	22.6	16.5
IBUSZ	Tourism	2,832.0	2,145	-38.7	4.9	-1,321.5	-640.0	insig
KONZUM	Stores	495.0	430	26.5	154.3	-221.3	neg	insig
STYL	Textiles	3,186.0	2,700	-2.7	264.3	245.8	211.9	12.7
SZTRADA Sk.	Stores	200.0	6,000	9.1	1,784.4	neg	neg	insig
ZALAKERAMIA	Tile manufacturer	2,880.0	2,135	80.9	80.4	166.1	130.0	16.4
ZWACK UNICUM	Beverages	6,560.0	3,280	36.7	n/a	211.5	235.0	14.0
AGRIMPEX	Trading	3,517.0	26,500	31.8	4,295.4	4,513.9	4,145.0	6.4
BONBON HEM	Retailing	349.0	2,050	57.7	164.7	88.2	neg	insig
BUDAFLAX	Textiles	273.0	610	1.7	134.5	33.7	100.5	6.1
CSEMEGE-J.M.	Retailing	5,018.0	13,500	-27.0	n/a	1,086.9	1,250.0	10.8
DANUBIUS	Hotels	7,200.0	900	-10.9	88.0	63.7	75.0	12.0
GARAGENT	Trading	242.0	12,000	-22.6	1,437.1	1,783.9	neg	6.7
HUNGAGENT	Trading	335.0	3,350	204.6	405.0	neg	neg	insig
KONTRAX Ir.	Trading	368.0	735	-67.3	126.0	36.0	neg	insig
KONTRAX Tel.	Trading	450.0	900	-50.0	66.0	140.0	neg	insig
MARTFUE	Brewing	1,837.0	1,715	55.9	157.8	-56.5	65.4	26.2
MÜSZI	Holding company	53.0	1,200	-55.6	1,620.5	454.6	340.0	3.5
NITROIL	Chemicals	412.0	15,000	0.0	909.4	545.7	1,820.0	8.3
NOVOTRADE	Trading	1,891.0	4,450	680.7	-516.7	115.3	247.1	18.0
PICK	Food	7,832.0	3,450	182.8	182.8	135.4	400.0	8.7
SKALA-COOP	Stores	9,983.0	2,465	148.9	76.7	-261.9	neg	insig
TERRAHOLDING	Trading	43.0	400	0.0	-663.9	-1,430.6	neg	insig
FÖNIX	Stores	132.0	450	-62.5	240.3	-301.0	neg	insig
INDEX	BSE	71,681.0		45.3				

Source

BSE, Delta Lloyd Bank N.V.

n/a : not available

neg : negative

insig : insignificant

CHARACTERISTIC DIFFERENCES BETWEEN THE BUDAPEST AND
WARSAW STOCK EXCHANGES

In the beginning, the shares traded on the Hungarian exchange were mainly shares in companies with a relatively low added value, principally in the service and trading sectors. The situation in Poland in 1991 was quite different, and the first companies to issue shares were all manufacturing companies. In Budapest, it was the trading companies which were faced with major problems due to the loss of the former Comecon markets and the collapse of local purchasing power. The magnitude of the difference is shown by the table:

Analysis of market capitalisation by sector in
Budapest and Warsaw (in %):

	<u>BUDAPEST</u>		<u>WARSAW</u>	
	<u>1991</u>	<u>1992</u>	<u>1991</u>	<u>1992</u>
Services	23.4	33.3	0.0	0.0
Trading	56.8	47.7	0.0	25.2
Manufacturing	19.9	19.0	100.0	63.7
Finance	0.0	0.0	0.0	11.1
TOTAL	100.0	100.0	100.0	100.0

The manufacturing companies on both exchanges are not only among the strongest in their sector but, in Hungary especially, manufacturing performs better than trading or services and this is reflected in the share price trend. Manufacturing companies in Hungary have done relatively well.

Another significant difference between the two exchanges is the quality of the listed companies. Although this is difficult to define, the comparable economic situation in the two countries means that the profitability of the listed companies is a good yardstick. In the table below, the percentage of listed companies ending or expecting to end the year with a profit is analysed for both countries for the years 1991, 1992 and 1993:

Percentage of profitable listed companies:

<u>HUNGARY</u>		<u>POLAND</u>	
1991	90%	1991	67%
1992	57%	1992	94%
1993(est.)	56%	1993(est.)	100%

The differences between the two countries which have already been discussed are further underlined by these figures. The table also shows that the trend is still a little downwards in Hungary, while Poland is showing clear signs of improvement.

Why the Polish Stock Exchange has risen so sharply from its very low initial valuation is easily explained by the better company results. The movement in share prices on the Hungarian stock exchange reflects the poor operating results of the listed companies.

The differences are therefore of a fundamental nature. Due to the protracted falls in share prices, a number of good Hungarian companies have recently become cheap. This explains the recent recovery in share prices. Meanwhile, the Warsaw stock market has started to become very expensive and the market may be poised for a price correction.

THE EAST EUROPEAN STOCK EXCHANGES IN AN INTERNATIONAL CONTEXT

Emerging stock markets have a place in a modern portfolio, not only because they combine high returns with high risks but also, since their correlation with other stock exchanges is often tenuous if not negative. Because of this a portfolio including these countries can on balance generate a higher return at a lower risk level. It is often claimed that 25% of an internationally diversified equities portfolio should be invested in emerging stock markets.

Hungary and Poland clearly belong to the group of emerging stock markets. This has been confirmed by correlating Poland and Hungary with a group of some 20 countries, ranging from the United States and Germany to the Philippines and Indonesia. The data set comprises the monthly returns in guilders for the past 24 months. In this list, the Netherlands has the highest correlation coefficient with France (0.85) and the lowest with Poland (0.14). The correlation coefficient with Hungary is also very low (0.24). Hungary in its turn has the highest correlation with the United States (0.45), but this is not particularly high in absolute terms. Both of these East European countries would therefore be useful additions to a well diversified portfolio. Both countries themselves proved not to be correlated.

Correlation matrix based on monthly returns in guilders for a number of major countries, 1991-1993 (sept.)

<u>COUNTRY</u>	<u>NL</u>	<u>D</u>	<u>FR</u>	<u>GB</u>	<u>US</u>	<u>JP</u>	<u>HU</u>	<u>PL</u>
Netherlands	1.00	-	-	-	-	-	-	-
Germany	0.67	1.00	-	-	-	-	-	-
France	0.85	0.63	1.00	-	-	-	-	-
U.K.	0.75	0.53	0.65	1.00	-	-	-	-
U.S.A.	0.47	0.32	0.32	0.44	1.00	-	-	-
Japan	0.46	0.11	0.42	0.28	0.36	1.00	-	-
Hungary	0.24	0.37	0.18	0.16	0.45	-0.13	1.00	-
Poland	0.14	-0.04	-0.16	0.16	0.27	0.44	0.17	1.00

In this respect both Poland and Hungary are comparable to South-East Asia stock markets like Thailand, Malaysia and Indonesia.

The annualised returns show how widely these countries differ in terms of performance. Poland comes out in front and Austria brings up the rear.

Returns and risks for selected countries, July 1991-September 1993

Country	Average annual performance %	Coeff. of variation	Country	Average annual performance %	Coeff. of variation
Netherlands	8.6	0.24	Australia	2.6	0.04
Germany	1.6	0.03	Japan	1.3	0.01
Switzerland	11.8	0.29	Hong Kong	29.7	0.32
Austria	-9.2	-0.13	Singapore	18.8	0.30
U.K.	-1.1	-0.01	Thailand	29.1	0.32
France	2.5	0.05	Malaysia	30.1	0.39
Italy	3.1	0.03	Indonesia	16.8	0.17
Spain	- 8.9	-0.14	Philippines	38.8	0.40
United States	5.8	0.10	Poland	146.1	0.36
Canada	- 1.9	-0.03	Hungary	- 3.8	-0.05

The table shows that the highest returns are attained by the group of emerging markets, with Poland ranking one! The worst results are recorded by Europe, with Austria scoring -9.2% and Spain averaging an annualised -8.9%. The relative risks are expressed by the coefficient of variation, defined as the average (monthly) return divided by the standard deviation. The higher the coefficient, the better the risk in relation to the average return. Malaysia and the Philippines score well here, and Poland also reaches a good level. In terms of risk profile, Spain, Canada, the United Kingdom, Austria and Hungary are not (and have not been) very attractive. Measuring the risk (standard deviation) in absolute terms, the Netherlands comes out best, due to the absence of currency risks, and Poland carries the highest absolute risk. However, these risk ratings do not have much significance at portfolio level. With the low correlation between the two markets, a mix of Polish and Dutch shares not only produces a higher return than Dutch shares alone, but also offers a lower risk!

Additional incentives and problems for investorsTax aspects

Investing in shares is extremely tax-efficient for Hungarians, because investments in new share issues of up to a maximum of 30 % of taxable income are chargeable against income tax. Attractive finance facilities have also been introduced recently for Hungarian subscribers to share issues.

This is undesirable from the point of view of investment, because it diverts attention away from the provision of equity. The Polish government, in contrast, has opted to pitch new issues at attractive prices and to allow the deduction of bond purchases of up to PLZ 12 million from taxable income.

Both Hungary and Poland have signed double-taxation treaties with most countries, similar to that between the Netherlands and the United States. The rate of withholding tax is 20 % in both countries. Poland has no capital gains tax for the present (at least until 1996). Hungary taxes capital gains by local investors at 20 %.

Repatriation of invested capital and income

There are no restrictions on foreigners converting their dividends and capital gains into their own currency and remitting them to their own countries. In Hungary investors often have to wait about two weeks for their money. It takes at most two days in Poland.

Foreign investor access to shares

Hungary makes certain tranches of share issues available only to local investors. Poland does not make any distinction between local and foreign investors. In both countries, however, foreign investors have only limited access to certain sectors, notably the defence industry, airports and legal services. A special licence is needed if one wishes to acquire a substantial stake in the share capital of companies in these sectors.

CONCLUSION

A great deal is happening in Eastern Europe. Capital markets are developing which present interesting prospects, comparable with those offered by the South-East Asian countries. In a few years the Eastern European stock markets will be recognised as emerging markets. If the aim is to keep ahead of developments, now is the time to participate.

The Polish example how to use the stock market in the transformation proces to a market economy shows how local sources can be tapped when a solid legal framework is combined with both adequate information to investors and demanding price levels! The Hungarian stock market has in this respect a less favourable history.

