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Abstract

Securities markets are important for economic growth, providing a channel for savings flows from sectors of the economy with surpluses to sectors where the investment opportunities exceed current resources. This study describes the emergence and evolution of securities markets in three small transition economies: Estonia, Latvia, and Lithuania. While these markets are still in early stages of development, much of the requisite institutional and regulatory framework are already in place. The equity market has developed most rapidly in Estonia. In Latvia and Lithuania, the financing needs of the central government have prompted development of treasury-bill markets. Work on integrating the equity markets is underway, part of a general trend toward integration of the securities markets in the three Baltic states.

Key words: securities markets, privatization, Estonia, Latvia, Lithuania

JEL classification: G10, G20, G28, P2, P5

1 Introduction

Securities markets are generally important for the long-term development of an economy. They offer companies a source of financing for investment projects and a savings outlet for households. The public sector can also make use of securities markets. Government budgets need not be exactly balanced each period, and thus economic shocks do not make it necessary to alter taxes and/or expenditures every period.[1] Although the banking sector can also provide these services, it is generally the case that large-volume securities markets can offer financial intermediation at lower costs, provided informational asymmetry problems can be effectively resolved, i.e. that market participants have the necessary information to adequately assess investment risks.[2] Moreover, securities markets offer investors a way to allocate risks efficiently.

1.1 The importance of securities markets for economic growth

Continuing economic growth requires investments in production capacity, and these investments in turn benefit greatly from an efficient financial system. Perhaps the earliest proponent of the importance of the financial sector for economic growth was Schumpeter (1911). During recent years this hypothesis has been tested extensively, facilitated by the availability of reasonably large data sets. A common finding of these studies is that the level of financial sector development positively correlates with per capita GDP growth over the long run. Moreover, King and Levine (1993) find that GDP growth is positively correlated with the ratio of M3 to GDP.[3] Rajan and Zingales (1996) find that market capitalization of equities is also positively correlated with economic growth, and further argue that the causality runs precisely from financial sector development to growth. They claim this effect comes about because of lower costs of external finance to companies unable to finance their investment projects internally. Rajan and Zingales also find evidence that the size of the equity market has positive effects on economic growth over and above the effect captured by the size of the financial aggregates. They conjecture that better risk sharing via equity markets may reduce the cost of capital for companies.

Financial systems differ. There are many variants of the tradeoff between direct bank lending and enterprise ownership by banks (the “German” model) and systems based on corporate governance and financial intermediation via financial markets (the “Anglo-Saxon” model). While the Rajan and Zingales’ study suggests that the Anglo-Saxon model is more conducive to rapid economic growth, it is clearly possible to attain high standards of living under either regime. It should be noted that even in countries where direct bank lending and ownership is common, securities markets are important. Securities markets provide economic agents with valuable information about prices in the economy and offer a means of reallocating risks.

1.2 Securities markets in the Baltics

In many respects, the Baltic countries occupy the middle ground among former socialist countries. Their output decline was larger and some of their reforms slower than in countries such as Poland and the Czech Republic. On the other hand, among the countries of the former Soviet Union, the Baltic countries are clear leaders. The same pattern is discernible in the development of Baltic securities markets. Securities markets in the Visegrad countries (Poland, Hungary, Czech Republic and Slovakia) liberalized earliest and now have developed securities markets (at least in terms of infrastructure and absolute volume). In relation to size of its economy, at least, Estonia has also gone far in developing its securities markets.

Baltic equity markets developed late in the transition process. Lithuania's stock exchange started operations in 1993 with a large listing of privatized and new companies. There was practically no trade in the vast majority of these companies until recently. The bulk of trading activity was in treasury bills. Only now has the emphasis shifted to equities, so Lithuanian securities markets have yet to fulfill their role as intermediator of funds from investors to the private corporate sector. The Lithuanian equity market took off in 1996 when trading picked up sharply and prices rose. Although the market capitalization of the Lithuanian equity market is fairly large, the poor liquidity of most shares is still a serious problem. In Latvia and Estonia, the stock exchanges were even slower getting started. The Riga Stock exchange was established in March 1995 and the Tallinn Stock Exchange in May 1996 (although in Estonia trading in equities was active earlier).

In Latvia, and even more in Lithuania, the emphasis in the securities markets has been on treasury bills. This is not surprising, given the fairly large central government budget deficits in Latvia and especially Lithuania have incurred during the transition years. Although government deficits may have been somewhat detrimental for private investment, they have necessitated creation of functioning domestic markets for government debt instruments. This has fostered development of an infrastructure for securities trade that should benefit private issuers of debt in the future. In addition, interest rates on government securities provide the market with a suitable and almost risk-free reference rate. In Estonia, the situation is different, since the central government is constitutionally barred from running budget deficits. Nevertheless, the Bank of Estonia issues a modest volume of 28-day treasury bills for liquidity management purposes (Hansson 1994). During recent years, auctions of these securities have attracted weak interest from Estonian banks.

The Baltic securities markets will likely continue to grow. Despite present economic difficulties, the long-term prospects for economic growth remain fairly solid throughout the region, and this should increase companies' investment opportunities. Although bank lending (both domestic and foreign) will likely be used to finance a large portion of these investments, it is not inconceivable that the larger Baltic companies might also seek to raise money from capital markets. New equity issues would increase the scope for investors in Baltic equity markets, which have until now been heavily dominated by commercial bank shares. The emergence of a properly functioning market for corporate debt lies farther down the road.

In the next section we review the process of privatization. Privatization is important for the development of securities markets as it provides the basis for equity markets. The third section reviews the institutional development and regulatory framework of Baltic securities markets, while fourth section concerns the actual trading in these markets. In the fifth section some recent trends in securities markets of transition economies are surveyed and sixth section offers concluding remarks.

2 Privatization – laying a foundation for securities markets

Privatization is a main pillar of transition and embodies the major institutional change needed for development of a well-functioning market economy. While there is compelling empirical evidence that privatization tends to enhance firms' profitability, sales, operating efficiency and capital investment, the way the privatization is carried out is very important (World Bank 1996). Among the Baltics, Estonia has privatized most extensively. By 1995, an estimated 65 % of GDP was produced by the private sector in Estonia, compared to about 58 % in Latvia and 55 % in Lithuania (EBRD 1996). By 1997, the share of private sector in GDP had risen to 70 % in Estonia and Lithuania, and 60 % in Latvia. One should note that the apparent acceleration of the privatization process in Lithuania in 1996 and 1997 has been enhanced by the growth of *de novo* private firms. In 1998 the share of the private sector rose to 65 % in Latvia, and remained at 70 % in Estonia and Lithuania (EBRD 1999).

Privatization lays the foundation for development of securities markets. On one hand, it creates most potential entrants to the securities markets. Privatization is typically accomplished through share sales, and this method is naturally more feasible if securities can be traded on secondary markets. The overall strategy, speed, extent and methods of privatization influence the development of securities markets and determine certain processes involved. As part of the capital market, securities markets can also play an important role in satisfying the needs of an emerging private sector for financing restructuring and growth. Securities markets cannot function and serve this need properly unless privatization and liberalization have previously created an environment that promotes financial mobility of investors and firms. In this way, privatization can be both a precondition and contributing factor in the development of securities markets.

We distinguish three types of targets for privatization: small enterprises, large enterprises and large infrastructure enterprises. In the Baltics, privatization started with of small enterprises and has now reached the final phase, divestment of infrastructure enterprises. Privatization of state assets other than infrastructure companies has been more or less completed in all Baltic countries. However, in Estonia and Latvia the August 1998, the Russian crisis toppled banks, which have now been taken over by the central banks. These banks will eventually be privatized, but the timetable is still open. In Lithuania, the state still holds a majority stake in two large banks, and so far attempts to find buyers for these have proved futile.

Privatization of small enterprises began in 1991 in the Baltics. In all countries, competitive auctions have comprised a major instrument in the privatization of small enterprises. Initially, privatization of small and large companies was treated differently by Estonian and Latvian privatization laws and managed by separate privatization bodies. In Lithuania, there were no such strict institutional distinctions (except for different privatization techniques) from the start. After some delay, both Estonia (June 1993) and Latvia (March 1994) abolished its two-tier regulatory framework.

Privatization of small enterprises has been, by all accounts, rather impressive and rapid in all three Baltic countries. In Lithuania, for example, privatization of about three-quarters of the small enterprises slated for privatization was completed by mid-1993; in Estonia privatization of small enterprises was practically completed by mid-1995. All in all, approximately 1,200 such companies were sold (Estonian Privatization Agency, 1999).

For development of securities markets, of course, privatization of large enterprises is what counts. The shares of large enterprises interest institutional investors and they are traded on secondary markets. All three countries have established the requisite institutions for privatization of large enterprises.

In the early stages of reform in Latvia, privatization of large production facilities received less attention than other reform measures. During 1991-1993, privatization was mainly managed by branch ministries, which apparently lacked incentives for rapid privatization. By March 1994, 128 large state-owned facilities (out of a total of some 2000, of which 700 were designated in 1993 for privatization) had been privatized. The major privatization method was the long-term lease with an option to purchase.

The situation improved with the establishment of the Latvian Privatization Agency and State Privatization Fund. During 1995, the LPA sold off 230 enterprises and seven units of state-owned real estate. In terms of volume, 41.5 % of sales were for cash and the other 58.5 % were for privatization vouchers. In January-February 1996, the government transferred 318 state companies and other units of state property to the privatization list – more than in all of 1995. The State Privatization Fund was liquidated, and subsequently state companies were privatized 1) by public offerings wherein companies were mainly sold for privatization vouchers, and 2) by inviting tenders from international investors. By the beginning of 1998 64 companies had been sold in public offerings and 79 companies in international tenders for USD 40 million. (Latvian Privatization Agency 1998.)

Large-scale privatization in Estonia started after the establishment of the Estonian Privatization Enterprise in September 1992. The organization followed the example and was helped by the German Treuhand. Prior to that, privatization had been organized by the Department of State Property, which had operated since October 1990.

The main privatization methods in Estonia included tenders with preliminary negotiations, public or restricted auctions, and public share offerings. International competitive tenders soon came to dominate as the approach put all potential buyers on equal terms. The only advantage grated to companies with majority Estonian ownership was the right to pay for the purchase in installments.

In 1993, after enactment of the new privatization law, the two institutions merged and the Estonian Privatization Agency was established. The result was an intensification of the whole privatization process. In 1993, 306 state assets with a total value of EEK481 million (USD 36.4 million) were privatized. In 1994, the corresponding figures were 341 and EEK1398 million (USD 107.5 million). Thereafter, the number of privatizations and their value declined until 1997 when several large projects took the value of privatization sales that year to EEK1,456 million (USD 107.4 million). By the end of 1998, Estonia had sold 483 enterprises or structural units in tenders with preliminary negotiations for EEK 4.7 billion and 1,368 objects in auctions for EEK8 93 million (Estonian Privatization Agency, 1999). The total privatization revenue up to the end of 1998 was approximately USD 400 million. By the first half of 1996, the private sector already accounted for some 75 % of GDP, compared to 5-10 % in 1991 (IMF, 1996).

Lithuania's privatization bodies were established in 1991, and until July 1995 the leading privatization agency was the Lithuanian Central Privatization Commission. In autumn 1995, new privatization bodies were established: a State Privatization Agency, which conducted actual sales, and a State Privatization Commission, which acted as an independent institution supervising the overall privatization process. The initial privatization program involved 6,644 (78 %) of 8,457 state enterprises. A total of 5,714 enterprises, representing 88 % of the book value of all state-owned companies slated for sale, were sold by the end of 1995. The revenue from this first phase of privatization was LTL3.9 billion (USD 975 million). In 1996 and 1997, the pace of privatization slowed considerably, and the privatization revenue during these two years was only LTL84 million (USD 21 million). In total, 319 entities were privatized (State Property Fund 1999). In November 1997, Lithuania introduced a new privatization law, which among other things established the State Property Fund. As earlier in Estonia, the control of companies to be privatized was transferred from the branch ministries to the Fund. With the exception of Lithuanian Telecom, the privatization of the large remaining companies has proven controversial.

On the whole, Lithuania and Estonia went further than Latvia in implementing privatization programs for large companies. Lithuania and Estonia differed on terms of privatization instruments and on the order of the process. Lithuania, after completing its primary privatization program (September 1991 - July 1995), based mainly on a voucher system, is now taking conducting privatization sales on a cash basis only. By contrast, Estonia, after selling controlling stakes in its most attractive enterprises via international competitive auctions (November 1992 - November 1994), was actively selling minority stakes for vouchers after the end of 1994.

Due to differences in privatization techniques, the current situation differs in the three countries. During Lithuania's first privatization program about 93 % of privatization vouchers were used, whereas by late 1995 in both Estonia and Latvia over 90 % of such vouchers were still unused.

Regarding methods of privatizing large enterprises, Estonia is the most active and experienced of the Baltics in organizing competitive international tenders. During 1991-1996, Estonia held more than 10 competitive tenders. The tender list usually included 30-50 enterprises, but since the end of 1994 the Estonian Privatization Agency has decided to sell off the remaining "best sellers" in small groups or one by one. In 1996, several large industrial and service companies were privatized in this way, including the national airline, Estonian Air, as well as Estonian Insurance and the Estonian Shipping Company. The partial privatization of Estonian Telecom brought in substantial revenue to the state coffers. Many infrastructure companies are still to be privatized, but currently the Estonian government hopes to end this phase of the privatization by the end of 2000. Most international tenders aimed at a strategic core investor have been organized with the help of the German Treuhand Osteuropa Beratungsgesellschaft. Each bidder was required to present a concise and realistic business plan covering at least three years, including employment and investment guarantees.

Latvia's approach since late-1994 has been largely the same as that of Estonia. The first international competitive tender round for 45 enterprises was announced in December 1994. By October 1995, the largest shares of privatization bids received by country were Germany (22 %), Latvia (17 %), the UK (16 %) and the US (8 %).

Lithuania's first privatization program was intended to benefit small domestic investors. Privatization tenders or "best-business-plan competitions" were carried out only in cases where public subscription for shares or controlling blocks of shares failed to attract buyers at auction. In 1993-1995, 15 large industrial enterprises were privatized via tenders. These went to local investors (mostly investment companies formed by management) that had put together adequate amounts of domestic investment funds. Since 1993, Lithuanian privatization authorities have also organized international tenders, whereby enterprises were sold either to foreign buyers or to local investors for foreign currency. Since completion of voucher privatization in 1995, all sales have been open to both foreign and local buyers, without restrictions or distinctions.

Public share offerings have been the main privatization method in Lithuania since September 1991. Shares were initially offered at a fixed price, related to the book value of the enterprise and the degree of privatization. Bidding was closed if the subscription rate was 80-110 % of the number of shares offered. Otherwise a price adjustment procedure was applied in order to equate demand and supply within the predefined range, with the same selling price for all buyers (a minimum of 5 % of the price was payable in cash).

Public privatization for vouchers in Estonia and Latvia began in early 1995. More precisely, the first public share offering in Estonia was held between November 1994 and March 1995 for the country's largest department store, while in Latvia minority stakes in three medium-sized enterprises were first traded publicly for vouchers in January 1995. Privatization agencies in both countries have adopted similar procedures whereby public subscription is for only a fixed minority of shares, before or after the core investor has been determined. The right to decide the degree of adherence to the core investor principle has been left to the national privatization agencies. These privatization bodies are also authorized to set the percentage breakdown between cash and voucher payments accepted in each particular privatization case. In Estonia, up to 50 % of the payment could be made in vouchers, and in most cases investors took advantage of this possibility. The Latvian Privatization Agency continues the policy, whereby both cash and vouchers can be used as payment media, because a large amount of vouchers in both countries still have not been used. Latvia recently postponed the deadline for using the remaining vouchers to the end of the year 2000, and some analysts speculate that the deadline will have to pushed even further. Estonian privatization vouchers expired at the end of 1998, although they were still usable for acquiring bonds of the Compensation Fund during 1999.

3 Securities market institutions and legal and regulatory frameworks

3.1 Institutional developments

The collapse of the Soviet Union was marked by shortages of goods and disruptions in delivery systems. In early 1991, the system of centralized deliveries began to be rapidly replaced by commodity exchanges throughout the Baltics. In 1991-1992, when commodities were bought from Russia and profitably resold in Baltic or Western countries, some 15-20 exchanges were established in each of the three Baltic countries. Most were “universal” exchanges, handling not only different commodities, but also various money market instruments.

In June 1992, the twenty commodity exchanges operating in Lithuania established the Lithuanian Exchange Association (later renamed the National Commodity Exchange in March 1994). Its 1993, its turnover slightly exceeded by that of the Baltic Commodity Exchange. Exchange associations were also formed in Estonia and Latvia, to promote the efficient development of the markets.

Commodities exchanges served as a basis for establishment of the first securities market institutions, i.e. stock exchanges and privatization investment funds as well as brokerage firms and other securities intermediaries.

Due to mass privatization, the need for a functioning securities market became urgent by 1992. Lithuania, after a year of extensive study, chose the continental or “French” stock exchange model, i.e. a unified national stock market in which all securities are dematerialized and recorded in a central securities depository and all transfers thereafter take place on a book-entry basis. The National Stock Exchange of Lithuania (NSEL) was established in September 1992, with the support of the French Depository, SIVOCAM, but actual trading did not start until September 1993. Currently its largest single shareholder is the Lithuanian Ministry of Finance (44.3 % of the shares). The Lithuanian Central Depository was created at the same time, as a part of the NSEL, but since August 1993 it has operated as an independent institution.

Following Lithuania and several other post-socialist countries, Latvia adopted the conceptual model of the French stock exchange with based on dematerialized securities. The Paris Bourse had acquired experience in assisting emerging Eastern European stock exchanges in Warsaw, Prague, and Kiev. The Latvian stock exchange was organized on the basis of the Riga Stock Exchange (RSE), one of the country's most advanced universal exchanges, in March 1995. The shareholders comprise 17 commercial banks and an investment fund. The Latvian Central Depository was founded in January 1995. It stores and manages accounts involving all treasury bills and shares publicly distributed in Latvia.

The first financial instruments were issued and traded in Estonia early in 1993. These comprised commercial paper issued by banks and enterprises and an EEK 300 million (USD 23 million) issue of government bonds. Initially, trading was done with banks acting as brokers. November 1994 saw the opening of the Estonian Central Depository, based on book-entry registration and trading. Initially, when secondary trading of securities took place over the counter, the depository's role was to confirm trades arranged by the brokers themselves. The central depository accommodated both equities and bonds, including those issued by enterprises, banks, municipalities, and the government as well as units issued by investment funds. Privatization vouchers were traded via a separate registry. Trading through the central depository became active in autumn 1995, with daily volumes averaging about EEK10 million.

In May 1996, the Tallinn Stock Exchange (TSE) was opened, providing market quotations for listed shares and establishing minimum capitalization, profitability and reporting requirements for listed companies. A number of banks, investment funds, the Bank of Estonia and the Ministry of Finance established the TSE with an equity capital of EEK3.3 million. At its inception, 11 securities were listed: the shares of five banks and six bond issues of the Compensation Fund. In its first few months of operation, daily trading volumes averaged about EEK 5 million (USD 400,000). Prices were volatile, reflecting the thin trading conditions. The OTC market continued to trade unlisted securities through the central depository.

Securities markets also comprise one of the economic areas in which the Baltic countries have agreed on mutual cooperation. Toward the end of 1994, the central depositories of the three countries held consultations on Baltic securities trade. It was decided that such trade would be based on electronic accounting and standardized transactions. As a startup for the cooperation, the countries agreed to unify their information networks. After this several attempts have been made to make the Baltic stock exchanges more integrated, but so far they remain clearly distinct entities. Perhaps the single most important concrete step toward deeper integration was the sharing of real-time trading information between Tallinn and Riga stock exchanges, which began in July 1999. Later also the NSEL joined this cooperation. Estonian and Latvian securities depositories have had cooperation since 1997, when it became possible to transfer securities between the two depositories. In 1998 also payments transfers between the two institutions began. At the beginning of the year, 2000 the three Baltic exchanges established a common Baltic list, which has 13 most liquid stocks of these exchanges. The common Baltic list is hoped to increase the attractiveness of the Baltic markets for outside investors, but it is not yet clear how much effect the new list will have in practice. Intensifying cooperation with the NOREX alliance (an alliance of Swedish, Norwegian and Danish stock exchanges) may have more practical consequences in the future. The new securities law approved in January 2000 in Estonia gives foreign brokerages a chance to become members in the TSE without establishing themselves in the country.

3.2 Regulatory and legislative frameworks

In Lithuania, the regulatory authority for the securities market is the Securities Commission, which was created by the government in September 1992. The Securities Commission is empowered to authorize and register public offerings of securities, to license broker-dealer and stock exchange activities, and to supervise public trading in securities. Temporary regulations involving the stock exchange, securities issues and public trading of securities where given the status of law in October 1992.

A new law on public securities trading was enacted in January 1996. The law was drafted with the help of international experts and observes European standards. In particular, the new law defines the information that an investor must disclose about itself upon acquisition of more than 10, 33 or 50 % of total shares in a joint stock company. The law also prescribes an obligatory purchase of minority shares by the core investor through the stock exchange at a fixed price. Such a price should be fixed at the average market price for a twelve-month period during the formation of controlling interest, before such interest reaches 50 %. This law was slightly amended in March 1998.

The National Stock Exchange of Lithuania was established by a government degree issued in September 1992, but trading did not start until a year later. Any Lithuanian or foreign natural person or legal entity that has deposited authorized capital in accordance with the provisions of the Stock Exchange Board and thus has became a shareholder can be a member of the Exchange. A shareholder in the NSE is eligible to participate in trading if it meets one of the following conditions: a) it is a brokerage firm; b) it establishes a brokerage firm; or c) it signs a contract with a brokerage firm enabling it to trade on the NSE.

In Lithuania, an issuer that wants its securities listed on the stock exchange (or a brokerage firm on its behalf) submits a written application to the Exchange Board. The applicant whose securities are traded is obliged to submit annual, semiannual and quarterly financial reports. These provisions do not apply to the Ministry of Finance or the Bank of Lithuania. The Law on Bills of Exchange and Promissory Notes was passed in 1992 and amended in 1995.

In Estonia, the Securities Market Law of June 1993 (amended in 1996) serves as a basis for regulation of the securities market. The law provides a legal basis for approving the following normative acts in October 1993: Charter of the State Securities Board, Rules on Issuing State Operating Licences to Professional Participants in the Securities Market, Procedures for the Public Issue of Securities, and Procedures for Public Registration of Securities. The Order of Supervision and Licensing of Investment Funds and Holding Companies was passed in August 1994, and the regulations on stock exchange trading took effect in 1996. The Securities Market Law was further amended at the beginning of 2000, when e.g. access of foreign brokerage companies to the TSE was relaxed. The new law also requires an investor acquiring a majority stake in a company to make a takeover bid with equal terms to the remaining shareholders.

The legislation regulates only publicly traded securities. According to the Law on Securities Market, supervision of securities business is the task of the State Securities Board, established in October 1993 and in operation since in January 1994. Being under the jurisdiction of the Ministry of Finance and covered in the state budget, it determines qualification requirements and grants licenses to individual and professional market participants, including financial intermediaries, investment funds and the stock exchange.

Estonia follows strict disclosure that extends beyond the circle of potential issuers and obliges the issuer of publicly traded securities to release information about itself, based on findings of external auditors. The disclosure principle holds even after the public offering is completed, since it obliges the issuer to report annually to investors via the SSB on its financial performance.

In contrast to its Baltic neighbors, who have enacted new securities laws, Latvia also revised and reinforced its prewar laws on securities market regulation. Latvia also adopted new laws, among them the Law on Exchanges (January 1992) and the Law on Bills of Exchange (August 1992). The Ministry of Finance approved temporary regulations on securities trade (April 1993), licensing of professionals (June 1993) and natural persons participating in the securities market (April 1994). Existing regulations were significantly improved with the passage of the Law on Securities in January 1995, which was amended in August 1995, when four laws relating to the securities markets were enacted. These laws regulate the operations of the securities market, the stock exchange and the central depository. They also provide for the establishment of a Securities Market Committee to monitor market developments and implementation of the law. The Securities Market Committee actually started its operations in November 1996. Operations involving privatization certificates are regulated by the Law on Privatization Certificates (first version November 1992, revised version March 1995). In December 1997, Latvia adopted a new law on investment companies.

In all three Baltic countries, the securities market supervision is handled by a separate agency, which is usually associated with the Ministry of Finance. However, in all countries there are plans to merge at least banking and securities markets supervision agencies. However, it is unclear whether these new supervisory agencies would be associated with central banks (who currently handle banking supervision), or whether they would be completely separate and independent entities. There have also been some suggestions to combine insurance market supervision under the new supervision authority.

4 Trading on Baltic stock exchanges

Although the Tallinn Stock Exchange (TSE) is newer than the stock exchanges in Vilnius and Riga, it has been the most active Baltic stock exchange since its inception. For example, in June-December 1996 turnover on the TSE was USD 191.2 million compared to USD 142.4 million in Vilnius and USD 12.4 million in Riga. However, the market capitalization of the National Stock Exchange of Lithuania (NSEL) exceeded (and still exceeds) that of the TSE. At the end of 1996, the market capitalization of the NSEL was USD 1,525 million, the TSE was USD 727 million and the Riga Stock Exchange (RSE) was USD 150 million. As can be seen, the turnover was much livelier at the TSE than at the NSEL, which had significantly higher market capitalization (of which approximately 80% was equities and the rest government T-bills).

Table 1 Market capitalization at year's end and annual turnover, USD million

	1996	1997	1998	1999
Tallinn Stock Exchange				
Total market capitalization	727	1134	505	1823
Total turnover	*	1571	947	305
Equity market turnover	*	1565	758	283
Riga Stock Exchange				
Total market capitalization	150	337	397	392
Total turnover	13	84	85	50
Equity market turnover	12	84	85	43
National Stock Exchange of Lithuania				
Total market capitalization	1525	2551	3356	3471
Total turnover	127	366	372	576
Equity market turnover	47	240	223	309

** not in operation for that year*

The apparent contradictory between turnover and capitalization figures is explained by differences in privatization methods (see above) and listing requirements. These factors lead to a situation wherein trading in Tallinn was marked by relatively few shares, each the object of relatively strong public interest, and in Vilnius a large number of shares, each of moderate public interest. Also, treasury bills boost the market capitalization and the liquidity of the Vilnius Stock Exchange. Recently, turnover on the NSEL has also increased, but it should be noted that the bulk of trading occurs as block trading, not continuous trading during the day. As a general rule, the liquidity in the Baltic stock exchanges has tended to be highest when share prices are rising. The bear market of 1998 clearly decreased liquidity. There are some signs in Lithuania that liquidity is starting match the large market capitalization.

During recent years, the Baltic stock exchanges have tightened their listing requirements. For example, in 1996 the company's market capitalization for listing on the TSE main list must have been at least EEK 100 million (about USD 9 million), but now this limit is EEK 300 million (about USD 20 million). In 1996, the corresponding limit for the RSE official list capitalization need be only about USD 0.9 million (LVL 500,000), but currently companies must float share worth at least LVL 3 million (USD 5 million). In 1996, the NSEL official list only required market capitalization of USD 187,500 (LTL 750,000), but today the minimum is one million euros. Table 2 gives the listing requirements for different lists in the Baltic stock exchanges.

In addition to capital requirements, listing on the main TSE list requires that the issuer submit annual accounts for the three previous years and the latest year must show a profit. Also the RSE requires annual reports covering three years while the NSEL requires financial statements and profits from two years before admission to the official list.

Issuers applying for the secondary list of the TSE must present annual accounts for the two previous years. The difference compared to the main list is that these companies do not need to show a profit for the last year. The RSE and NSEL have not set requirements regarding pre-listing history for companies applying for secondary listing, except that to be eligible for the second list the company must have been in operation for a full accounting period.

Both TSE lists require that the public holds at least 25 % of the company's shares. The 25 % limit also applies to the RSE and NSEL main lists. These exchanges have not set any special requirements on pre-listing history or distribution of ownership of shares to be listed on secondary lists, except that in the RSE companies listed on the second list must have at least 100 share-owners. The only other condition is that the issue must be registered as a public issue with the Securities Commission.

Table 2 Listing requirements for shares on the Baltic stock exchanges

	Tallinn Stock Exchange	Riga Stock Exchange	National Stock Exchange of Lithuania
MAIN LIST	Main list	Official list	Official list
Capitalization	Market capitalization of listed securities at least EEK 300 million (approx. USD 20 million).	Market capitalization of listed securities at least LVL 3 million (approx. USD 5 million) & share capital of LVL 5 million.	Market capitalization of listed securities at least EUR 1 million (approx. USD 1 million).
History	Audited annual reports for preceding three years and net as well as operating profit in the preceding year.	Audited annual reports for preceding three years and the preceding year according to International Accounting Standards.	Audited financial statements and profits from the two preceding years.
Division of shares	At least 25% of the shares must be offered to the public.	At least 25% of the shares must be offered to the public.	At least 25% of the shares must be offered to the public.
SECOND LIST	Secondary list	Second list	Current list
Capitalization	Market capitalization of the listed securities at least EEK 10 million (approx. USD 0.7 million).	Issuer's paid-in share capital at least LVL 500,000 (approx. USD 850,000).	Issuer's minimum authorized capital LTL 4 million (USD 1 million).
History	Audited annual reports for preceding two years	The company has been in operation for at least a full accounting period.	
Division of shares	At least 25% of the shares must be offered to the public.	The company has at least 100 shareholders.	

At the start of 1997 six companies were listed on the main list of the TSE, two were on the secondary list, and eight were traded in the free market. By the end of 1997, the total number of stocks listed at the TSE had risen to 28. During 1998 and 1999, the number of companies declined slightly as several banks exited the stock exchange via mergers. Over the years, the number of companies listed on the main list of the TSE has remained remarkably constant at six or seven companies. The main list also provides the bulk of market capitalization and trading in the TSE.

Total market capitalization of 34 RSE listed companies was USD 150 million at the end of 1996. Market capitalization of most companies on the secondary list was rather small and these companies attract little public interest. During 1997, both the number of companies listed and the market capitalization of the RSE increased significantly, so at the end of the year 50 companies were listed. The upward trend in the number of companies listed lasted until the end of 1998, when 68 shares were listed, of which 10 on the official list. At the end of 1999, the number of listed companies was 67. One noteworthy feature during 1999 was the mass migration of companies from the second list to the less-demanding free list.

Up until the end of 1997 the NSEL has the most listed companies of all the Baltic stock exchanges. At the end of 1996 market capitalization for the NSEL was USD 1525 million. Over 400 shares were listed on the NSEL, but during only about half of them were quoted at all. Of these only about 30-40 companies are actively traded. The number of companies listed increased also during 1997, but then changes in listing requirements drastically decreased the number, and at the end of the year 1999 only 54 companies were listed in the NSEL. As the market capitalization has continued to increase, it is obvious that the companies exiting the NSEL have been quite small indeed.

During the past few years the market capitalization has fluctuated as the prices of shares have changed. New listings sometimes increase the market capitalization quite considerably, e.g. Estonian Telecom. At the end of 1999, the market capitalization of the TSE was USD 1.8 billion, the RSE was USD 0.4 billion, and the NSEL was USD 3.5 billion (approximately one-third equities listed on the two main lists and almost 60% equities on the NSEL's unlisted category).

Shares of banks still account for a significant part of turnover on all the Baltic stock exchanges. Only lately has the privatization and listing of large utilities companies changed the dominance of banks. In addition to this, the acquisition of controlling shares in the largest Baltic banks by foreign financial institutions has decreased the amount of equities available for trading. This has naturally lead to lower liquidity in the markets.

Treasury bills still account for much of the turnover on the NSEL. Shares in some investment companies are listed, but trading in these is insignificant. Investment companies were created in the process of mass privatization. In contrast to the NSEL, T-bill trading on the RSE is negligible. Latvian treasury bills are mainly traded on the OTC market. Trading in debt instruments is quite insignificant also on the TSE. Their share of total turnover was approximately one % in 1996-1998, but rose to slightly more than two % in 1999. Even so, trading on the TSE is very much concentrated on equities.

Prices in the Baltic stock markets have fluctuated considerably in recent years. In Latvia, the cycle of boom and bust has been most pronounced. Charts 1a-c Show the developments in the market indices of the three Baltic stock exchanges. The Talse index increases four-fold in little over a year, but by end-1998 it in back to the level of June 1996. Thereafter, prices increase slightly. Riga's RICI index was introduced in April 1996. By September 1997, it had increased nine-fold! Also Latvia was hit by the crisis in the emerging markets and within a year the index had decreased by 75% from the all-time high. When the Russian crisis broke out in August 1998, the exposure of many Latvian banks to Russian capital markets became evident and Latvian equity prices sank. Prices have since recovered, but the RSE can hardly be described as a bull market after the Russian crisis. In Lithuania, the price movements depicted by the Litin-G index (which covers all companies listed in the NSEL) are not quite as volatile as in the other two Baltic countries, but also there 1996 saw a sharp rise in Lithuanian equity prices, and the Litin-G index rose about 2.5-fold. Since then, Lithuanian stock prices have generally declined, and they currently stand roughly at the same level as at the beginning of 1996. Curiously, not even the Russian crisis in August 1998 caused any noticeable effects in the Lithuanian stock market, even though Lithuanian companies have definitely been hurt by the implosion of the markets in CIS countries.

The charts attached reveal the high risks involved in the Baltic markets. Although the Baltic economies have been successful in their transition toward more market-based economic systems, their smallness and the relative infancy of many institutions make them riskier investments than, say, Poland or some other transition countries in the Central and Eastern Europe. The instability connected with economic policies and institutions is set to decrease in the future, but the Baltic countries will remain small, poorly diversified economies, and therefore somewhat risky investments.

Chart 1a Talse index 6/96-12/99 (3 June 1996 =100)

Chart 1b Rici index 4/96-12/99 (2 April 1996 = 100)

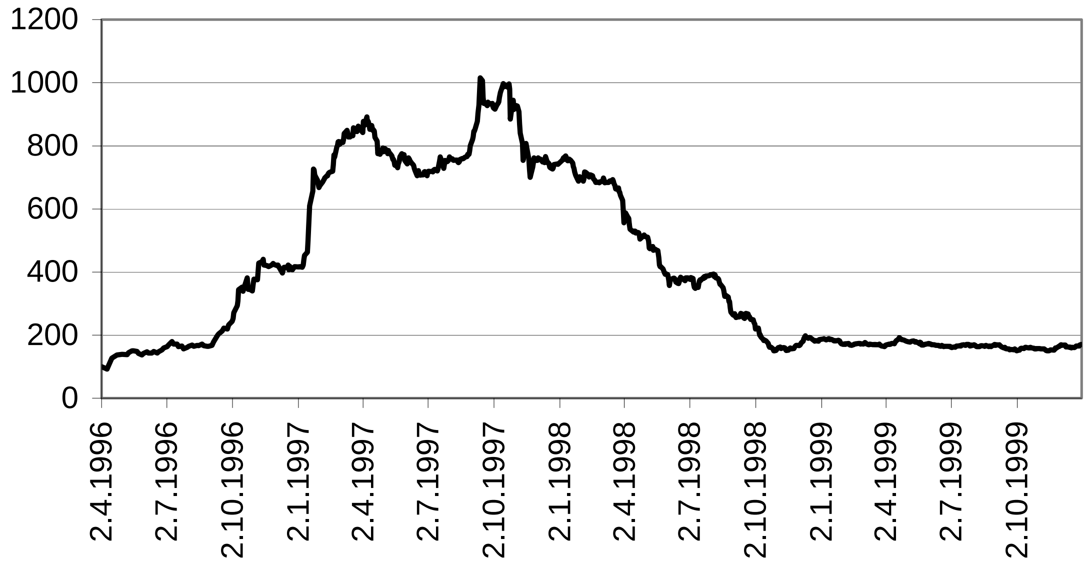
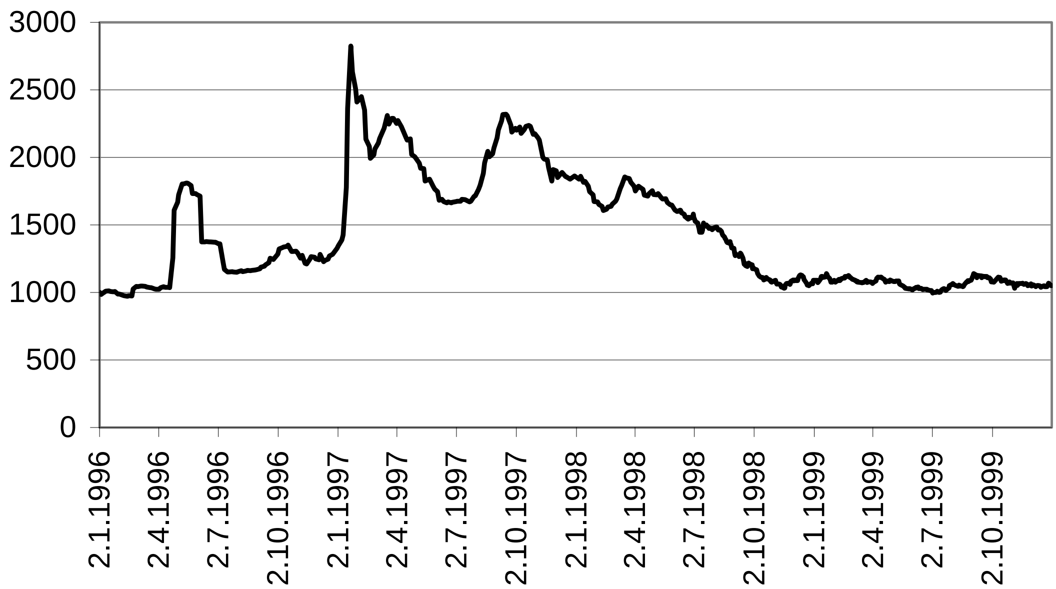


Chart 1c Litin-G index 1/96-12/99 (2 January 1996 = 1000)



5 Recent trends in Central and Eastern European securities markets

Over the past decade, radical structural and technological changes have taken place in all the European securities markets. We have witnessed accelerated globalization of capital markets and rapid development of telecommunications and information networks, which in turn have increased the mobility of capital and hence the volume of capital flows. The fall of Communism stimulated the revival of old stock exchanges and the establishment of new ones. In recent years, stock exchanges in Central and East European countries (CEECs) have made significant progress and now resemble their counterparts in Western countries in most respects.

Until recently direct investments have been the main form of capital inflows to the CEECs, but the volume of portfolio investment is growing. The number of foreign portfolio investors who are interested in the region is increasing, and these are not limited to specialists in the region. Generally the increased interest has been accompanied by rises in share prices. The price/earnings ratios of even the strongest companies in the CEECs are generally below the average for Europe, reflecting the higher risk still associated with the region.

The main obstacles to closer integration of Central and East European (including Baltic) securities markets with Western European markets are the small size of the former markets and their relatively modest role in the economic development of these countries. With the progress of privatization and creation of necessary institutional and legislative infrastructure, the importance of these securities market should grow.

How do the Baltic securities markets presently compare with other securities markets in Europe? Various indicators can be used to characterize the development of a securities market. The most widely used is market liquidity, measured as the proportion of securities traded in the market per unit of time. Liquidity is an important indicator for foreign investors deciding whether to participate in a market, because high liquidity means low trading costs and an ability to move quickly in and out of the market. Table 3 shows the market capitalization and liquidity for some of the stock exchanges in the transition countries of Europe. The three Baltic countries naturally have smaller absolute level of market capitalization than in the three larger (the Czech Republic, Hungary and Poland) transition countries. Market capitalization was also larger in Slovenia, although its population roughly comparable to the Baltic countries. However, the size of the Slovenian economy is clearly larger. The ratio of market capitalization to GDP was still quite low in comparison to most EU countries, and in Latvia the share was lowest of the countries assessed here. However, the largest differences can be observed in the liquidity of the markets, and here the TSE emerges as one of the most liquid stock exchanges in the region. It should be noted that the 1999 figures have changed, and the calculated liquidity of TSE has suffered as the market capitalization has increased thanks to the partial privatization of the Eesti Telekom.

Although Estonia was the last Baltic country to establish a stock exchange, its securities market development has not lagged. One possible reason for this was the difference in the securities trading system used in Estonia earlier. In contrast to Latvia and Lithuania, where securities trading been based on auction, the Estonian securities market is based on a dealer system, which seems to be better suited to small markets and conducive to higher liquidity. Some other countries have also become aware of the advantages of the dealer system and are making efforts to introduce a similar system. Now both Latvia and Lithuania have switched their trading models.

It is quite natural that the most prominent banks and firms established in the Baltic securities market will sooner or later seek access to other European securities markets. A few of them have already gained such access. Two large Estonian banks, Hansapank and Ühispank, were listed on the Helsinki Stock Exchange in 1996. Hansapank was listed on the free market of Bavarian Stock Exchange in January 1997. The shares of Hansapank have been listed on the free market of the Frankfurt Stock Exchange since October 1996. A recent privatization of Eesti Telekom has also meant that its shares are listed in London as well as Tallinn.

Table 3 Market capitalization and liquidity of equities listed in some stock exchanges

Stock exchange	Market capitalization at the end of 1998, USD million	Market capitalization, % of GDP	Liquidity, turnover/market capitalization
Tallinn	505	10%	188%
Riga	397	6%	21%
Vilnius	3356	31%	11%
Warsaw	20757	14%	86%
Budapest	14022	29%	230%
Prague	13369	24%	41%
Ljubljana	3897	19%	28%

Source: Stock exchanges and national authorities

Ever since the establishment of the TSE, there has been speculation about the possibility of a Baltic list on the Helsinki Stock Exchange. One motive behind this idea is to make Baltic companies more attractive to foreign investors and to gain a wider reputation abroad. The Helsinki Stock Exchange has said it would consider a Baltic list if enough firms were included. This development now seems less likely since the three Baltic stock exchanges established their own Baltic List containing the largest Baltic companies.

Baltic stock exchanges have also intensified cooperation. Indeed, the real-time data feed between Tallinn and Riga stock exchanges could be considered a first step toward a unified Baltic exchange. However, a single Baltic stock exchange is in all likelihood still many years away, if it becomes reality at all.

6 Concluding remarks

The Baltic securities markets have seen rapid development during recent years. The most important aspect of this development has been the establishment of a legislative and institutional framework for their securities markets. Now it is crucial for all market participants to be provided with a clear and equitable set of rules. This would ensure that these securities markets operate efficiently in their primary role of allocating funds from surplus sectors of the economy to productive investments. In addition, the Baltics will also benefit from properly functioning securities markets because they convey important information about the state of the economy and the pricing of assets. For example, nominal interest rates contain information about the expected rate of inflation and the price of deferring consumption today.[4] Efficient markets also enable economic agents to reach their desired risk allocation.

Until very recently, Baltic securities market have provided only a few companies with the opportunity to issue securities for financing investments in new production capacity or renovation of old capacity. As the Baltic markets develop, we can expect to see new share issues. The ability of securities markets to function well also depends on macroeconomic stability. In this respect, the Baltic countries appear to be in quite good shape. However, it may be that the rapid integration of the capital markets is already making smaller stock exchanges obsolete, and trading in the largest Baltic companies may very well migrate to larger exchanges in the future.

The development of Baltic securities markets has also been influenced by many other factors. In Estonia the absence of government deficits has precluded the development of a market for government debt. On the other hand, the chosen privatization method (mostly cash-sales) has helped the development of liquid equity market in at least some the shares listed. In addition, the actual trading system employed was much more flexible and suitable for small exchanges in Estonia than in Latvia or Lithuania. Now Latvia and Lithuania have changed their trading systems.

The development of securities market is always influenced by a variety of factors, ranging from the legal system to macroeconomic developments. The present trend is towards greater international integration of different exchanges and market practices, which will also influence the small Baltic markets in the future.

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Notes

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[1] If taxes are thought to be distorting, then tax smoothing is welfare improving; see e.g. Barro (1995).

[2] For recent overviews on the modern theory of banking and financial intermediation in general, see e.g. Bhattacharya & Thakor (1993) and Hellwig (1991).

[3] Other indicators for the level of financial sector development are also used.

[4] Of course, the difficulty lies in separating these two effects on the interest rate.