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# Republic of Estonia: Selected Issues and Statistical Appendix

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INTERNATIONAL MONETARY FUND

REPUBLIC OF ESTONIA

# Selected Issues and Statistical Appendix[1]

Prepared by a staff team consisting of Ishan Kapur (head), Françoise Le Gall, Dennis Jones, Nita Thacker, and Richard Stern (all EU2)

Approved by the European II Department

November 26, 1997

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[1]These papers on selected issues and the statistical tables provide background information to the Staff Report on the 1997 Article IV Consultation and Request for Stand-By Arrangement (EBS/97/212, 11/25/97) for Estonia.

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## Estonia: Basic Data

| Social and demographic indicators 1/ | |
|---|---|
| Area | 45,227 sq. km. |
| Population | 1.4621 million |
| Urban | 70.0 percent |
| Rate of population growth | -1.0 percent per year |
| Life expectancy at birth | 69.9 years |
| Infant mortality rate (per 1,000 births) | 10.4 |
| Hospital beds (per 10,000 inhabitants) | 76.5 |

| | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|
| **GDP** | | | | |
| Nominal GDP (in million of EEK) | 22,373 | 30,179 | 41,290 | 52,346 |
| GDP per capita (in US$) | 1,123 | 1,563 | 2,455 | 2,983 |
| Real GDP (percentage change) | -8.2 | -1.8 | 4.3 | 4.0 |
| **Sectoral distribution of GDP** | | | | |
| | (In percent of GDP) | | | |
| Agriculture, hunting, forestry, and fishing | 10 | 9 | 7 | 6 |
| Mining, manufacturing, and energy | 22 | 21 | 20 | 19 |
| Construction and services | 57 | 57 | 61 | 62 |
| **Trade** | (In millions of EEK, unless otherwise specified) | | | |
| Total exports of goods | 10,763 | 17,142 | 21,315 | 24,871 |
| (in percent of GDP) | 48 | 57 | 52 | 47 |
| Total imports of goods | 12,688 | 21,817 | 29,230 | 37,637 |
| (in percent of GDP) | 57 | 72 | 71 | 72 |
| **General government** | | | | |
| Total revenue | 8,603 | 12,466 | 16,467 | 20,431 |
| (in percent of GDP) | 38.5 | 41.3 | 39.9 | 39.0 |
| Total expenditure | 8,261 | 11,606 | 16,833 | 21,219 |
| (in percent of GDP) | 36.9 | 38.5 | 40.8 | 40.5 |
| Net lending | -487 | -476 | -146 | -41 |
| (in percent of GDP) | -2.2 | -1.6 | -0.4 | -0.1 |
| Overall surplus(+) or deficit(-) | -144 | 384 | -512 | -811 |
| (in percent of GDP) | -0.6 | 1.3 | -1.2 | -1.5 |
| **Money and credit (end period)** | | | | |
| Net foreign assets | 5,692 | 6,874 | 7,629 | 7,159 |
| Broad money (M3) | 6,080 | 7,880 | 10,344 | 14,154 |
| Domestic credit | 2,326 | 3,251 | 5,301 | 10,506 |
| Claims on general government (net) | -577 | -1,306 | -1,719 | -1,429 |
| **Other selected indicators** | | | | |
| | (Annual percentage changes) | | | |
| GDP at current prices | 82 | 35 | 37 | 27 |
| Consumer prices | 89 | 48 | 29 | 23 |
| Average nominal wage | 99 | 61 | 41 | 25 |

Sources: Estonian authorities; and Fund staff estimates.

1/ Data for 1996 or latest available.

# I. Developments in Intergovernmental Fiscal Relations[1]

1. Intergovernmental relations in Estonia have been marked in recent years by a strong push in the direction of fiscal decentralization. This trend has been part of the broader process of structural change, including privatization and liberalization of markets, in Estonia. While different from these reforms, decentralization is based on a similar thesis, namely that decisions over the production and delivery of goods and services should be allocated to the lowest unit capable of capturing the associated costs and benefits.

2. There is general agreement in Estonia on the virtues of decentralization, but also a growing awareness of its pitfalls.[2] Because decentralization has increased the number of actors and budgetary accounts, Estonia faces additional challenges as it sets out to consolidate the impressive gains made in stabilizing the economy. The complexities involved in this task are best summarized in the diverging fiscal performance of the central and local governments during 1993–96; while the central government deficit declined from 1.8 percent to 0.2 percent of GDP, the local government position swung from a surplus of 0.2 percent of GDP to a deficit of 1.1 percent of GDP.[3] Intergovernmental relations mainly affect macroeconomic developments through three channels: the assignment and sharing of tax bases and expenditures, the design of transfers to local governments, and the level of local government borrowing. This note examines each of these issues within the Estonian context.

## A. Structure of Government

3. The current structure of government in Estonia is the embodiment of the twists and turns in its history over the past 75 years. Between 1920 and 1940, the territory was divided into 11 counties, and by the end of the 1930s, following considerable debate over the organization of local government, a set of reforms reduced the number of municipalities from 365 to 248.[4] But the reforms had no time to take hold before the start of the Soviet regime in 1940. A high degree of centralized control over all decisions, including public finances, characterized the next 50 years of government. Under the Soviet system, the little power there was at the local level was concentrated in collective farms.

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[1]This note draws heavily upon a comprehensive study by the World Bank, *Estonia: Financing Local Governments,* Report No. 14925-EE, December 1995.

[2]For a summary of the advantages and disadvantages of fiscal decentralization, see World Bank (1997), Chapter 7; and Arora and Norregaard (1997).

[3]These figures are on an unconsolidated basis.

[4]Unless indicated otherwise, the terms *local government* and *municipalities* are used interchangeably in this note.

4. The move toward decentralization began again in late 1989 with the Law on the Foundations of Local Government. As Estonia took the first steps to a democratically-elected government and a market economy, the government structure remained heavily influenced by the Soviet system. There were two levels of local government: the first consisted of 15 counties and 6 republican cities with the status of county, and the second encompassed the towns and municipalities dependent on the county governments or larger towns such as Tallinn.[5] In subsequent years, the counties became increasingly important and exercised almost complete control over municipal budgets, though a few of them transferred most powers to their municipalities.

5. A major package of reforms in 1993 introduced a degree of decentralization to the government structure that harked back to the pre-Soviet days of the 1930s; it also reflected the view that the transfer of powers to local governments within a number of counties had already yielded significant gains in efficiency and welfare. The two tiers of local government were effectively eliminated as counties lost their status as autonomous units of local government, becoming instead representatives of the central government, and the republican cities were merged with their surrounding counties. In addition, the municipalities gained control of their budgets with effect from 1994.

6. There are now 254 local governments all with the same status, ranging in size from Tallinn with 420,500 inhabitants to Ruhnu with 63 inhabitants.[6] Over two-thirds of these local governments have populations under 3,000.

## B. Expenditure Assignments

7. Local governments spent roughly EEK 4.6 billion in 1996, i.e., 22 percent of consolidated government expenditures and 9 percent of GDP (Table 1).[7] The lion's share of local government expenditures, 42 percent of the total, was devoted to education; the "economic sphere," including road construction and maintenance, and communal services,

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[5]The cities of Tallinn, Tartu, Kohtla-Jarve, Narva, Parnu, and Sillamae.

[6]Data for 1996 in Statistical Office of Estonia (1997).

[7]Consolidated general government expenditures in Estonia, at roughly 40 percent of GDP, are high and may seem to be at odds with a market-based economy and with a relatively low degree of importance attached to the state. However, it is important to keep in mind that the enlarged public sector activities in Estonia are very small compared to other transition economies.

accounted for 28 percent of local spending; and administration another 12 percent.[8] The scale of spending by local governments in Estonia attests to their importance, but it is interesting to note that the expenditures of the Social Insurance Fund (including the Child Support Fund) are higher still. From a cross-country perspective, the share of local government expenditures in Estonia is at the lower end of the range (23–30 percent of general government expenditures) found in such diverse countries as Ireland, the Netherlands, and Hungary, but well below the shares registered throughout Scandinavia (Figure 1).

8. The formal assignment of expenditures under the Law on Local Government Organization (June 1993) indicates that, prima facie, there is no blatant mismatch of economic assignments from the perspective of the standard textbook division of central and local government (Table 2).[9] Many services, such as local public transport, road maintenance, garbage collection, that should be provided by local governments on the basis of the "benefit principle" are indeed assigned to local governments.[10] Furthermore, typical central government functions such as defense and foreign economic relations are the responsibility of the central government.

9. Yet a closer examination of the assignment of responsibilities and its functioning reveals at least two issues of concern.[11] First, the principle of assigning all components of service delivery to one level of government is not observed in the education sector, which undermines cost management. For example, textbooks and the salaries of primary and secondary school teachers are the responsibility of the central government, while all other expenditures, including maintenance of schools come out of local budgets. Second, according to the Union of Local Governments, up to 167 laws and regulations assign expenditure activities to local governments outside the norms established by the Law on Local Government Organization. In one example, the local government reforms of 1993 gave responsibility for fire and emergency services to the central government, while the Law on Fire Protection states that local governments must provide these services. This might be less of a problem if the additional assignments were backed up by adequate revenue sources and institutional capacity at the local level to implement and monitor programs. In practice, however, there is a risk that such services fall between the cracks and become a function of intergovernmental bargaining over the budgets.

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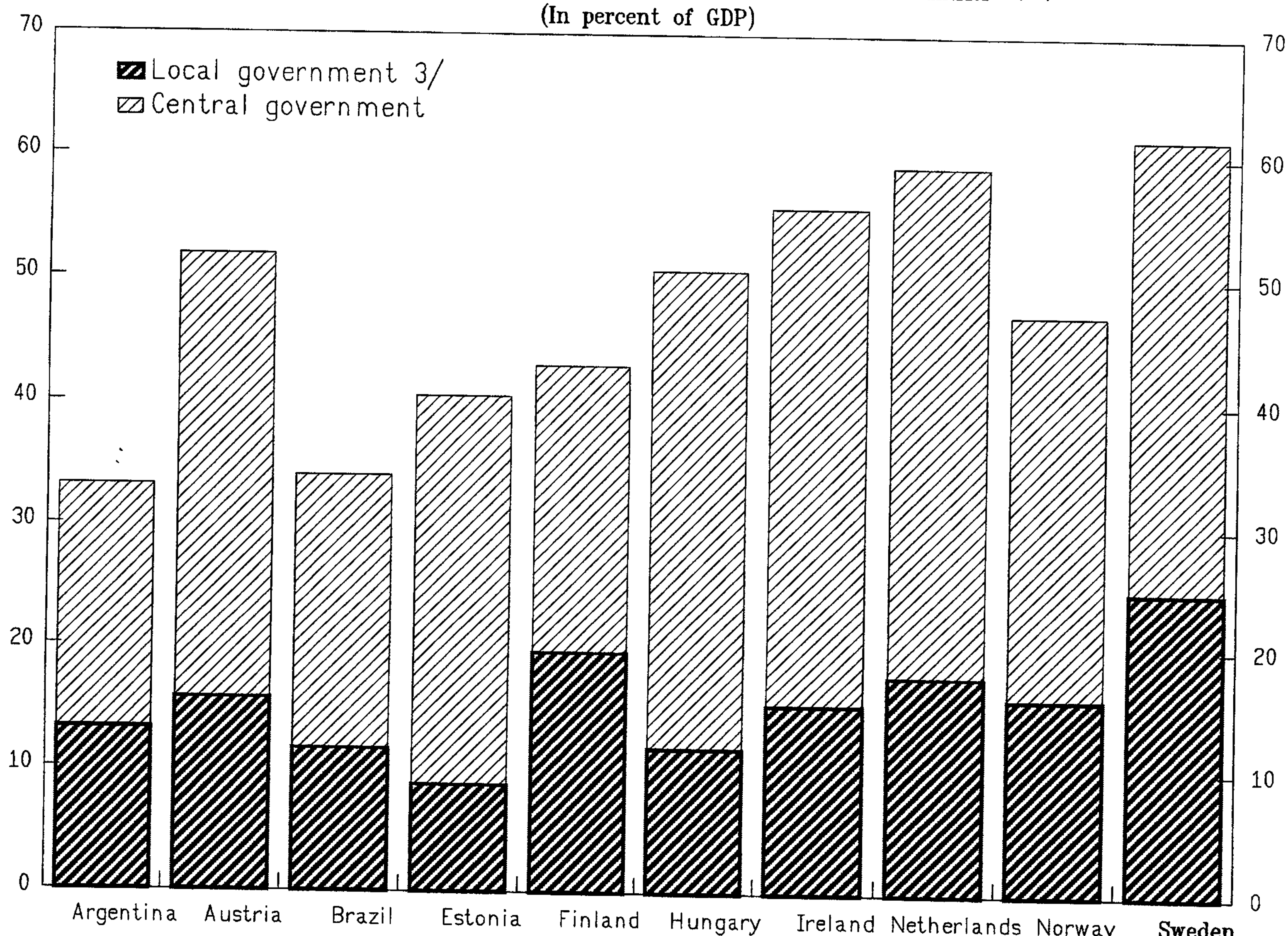
[8]These shares relate to local government expenditures excluding those financed by foreign borrowing through the central government.

[9]For example, see Ahmad et al (1997).

[10]This principle suggests that a given service should be offered by the level of government most closely representing the region that benefits from such service.

[11]The detailed examples given here are based on arrangements through 1995. See World Bank (1995).

Figure 1. Estonia: Expenditure by Government Level in Selected Countries 1/2/
(In percent of GDP)




Sources: Ehtisham Ahmad et al (1997); and Fund staff estimates.
1/ Average of three years ending in 1987, except for Norway (1986) and the Netherlands (1988). The data for Hungary and Estonia refer to 1995 and 1996, respectively.
2/ Includes social security and welfare which, with the exception of Argentina, is included solely under central government spending.
3/ Includes state government in Argentina, Austria, and Brazil.

## C. Revenue Assignments

10. Local governments have three main sources of revenue: (1) local taxes, fees, and charges; (2) revenue sharing in central government taxes; and (3) transfers from the central government. Under current arrangements, the central government shares only two major taxes, the personal income tax and the land tax, and keeps the revenues from indirect taxes.[12] Shared revenues and transfers have been the two key sources of revenue at the local level throughout the transition, but since 1994 when far-reaching local government reforms took effect, there has been an increase in the importance of shared revenues and a corresponding decline in that of transfers.

### Local Taxes

11. The Law on Local Taxes (October 1994) allows local governments to levy nine different taxes, notably a poll tax payable by residents between the ages of 18 and 65; a local corporate income tax payable by enterprises and insurance companies registered in the municipality;[13] a local sales tax payable by individuals and enterprises engaged in business activities in the municipality; and six other minor taxes on luxury boats, on advertising, on keeping domestic animals, on closing streets for construction or events, on entertainment, and on motor vehicles.

12. The proportion of local tax revenues in total revenues (including transfers) of the municipalities is small, an average of 9 percent during the period 1993-96 (Table 3). Another way to measure this fiscal imbalance is to calculate the share of local government expenditures financed with revenues under the control of local governments. Two calculations of a coefficient of vertical imbalance can be undertaken, one which considers only own local revenues to be under the control of municipalities, and the other which also includes revenues from revenue sharing in this category. A value closer to zero indicates greater fiscal imbalance. These coefficients suggest that the degree of vertical imbalance in Estonia, while still important, has declined considerably (Table 4). According to the first coefficient, the degree of vertical imbalance in Estonia was very high in 1994, but by 1996, had fallen to levels that had prevailed several years earlier in a number of western European countries; when shared taxes are included in revenues controlled by local governments, the coefficient for Estonia is closer still to the figures for those countries.

13. Despite the improvements brought in by the 1994 legislation, local governments in Estonia do not have an adequate level of tax autonomy, i.e. one that would allow them to

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[12]Revenues from the tax on water use are also shared with local governments (Law on Environmental Protection, effective 1993).

[13]The local income tax may not exceed 2 percent of taxable income or 0.4 percent of premia for insurance companies.

finance a large share of their expenditure needs through own taxes, thereby raising the efficiency and accountability of the municipalities. Many of the local taxes are no more than "nuisance charges," and a vehicle registration tax, generally a tax that is equitable and a good source of revenue, has not been widely used outside Tallinn.[14] There are other problems with some of the taxes introduced in the 1994 legislation. First, on the basis of principles of tax assignment, it is not generally appropriate to impose a corporate income tax at the local level—municipalities have the opportunity to export taxes (i.e. to tax goods and services provided to the entire county to finance local government services), and apportioning the corporate income of businesses deriving income in more than one region is difficult. Second, the current local sales tax is a turnover tax with adverse cascading effects. Third, the additional local insurance premium tax, which is paid by residents throughout Estonia, is basically a tax for the city of Tallinn because insurance companies are concentrated in the capital.

**Shared Taxes**

14. Current revenue sharing arrangements give local governments 56 percent of the personal income tax revenues and 100 percent of the national land tax (collected by the National Tax Board). The central government keeps all the revenues from the other principal taxes, i.e. the VAT, excises, and the corporate income tax. There has been considerable change in tax revenue sharing over the years. From 1990 to 1993, the personal income tax revenues were assigned in their entirety to local governments, an allocation which undermined the central government's control over fiscal aggregates; since then, they have been shared between the central and local governments in a ratio of 48:52 during 1994–95, and in a ratio of 44:56 as of 1996. And initially, both the corporate income tax and the land tax were shared between the two levels of government.[15]

## D. Transfers and Equalization

15. The Law on the Correlation between Municipal and Town Budgets and the State Budget in force from January 1, 1994 sets out the current system of intergovernmental transfers. It calls for the overall level of transfers from the central government to be decided in negotiations between central government representatives and those of local governments, including the Union of Local Governments. However, if the negotiations fail, the central government alone is to decide upon the transfer amount.

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[14]A national car tax, superseding Tallinn's local tax, is to be introduced in 1998; all of its revenues will be channeled to the local governments.

[15]The corporate income tax was shared between the central and local governments in a ratio of 65:35 during 1990–92 before reverting back to the central government. The land tax was shared in a ratio of 63:35 during 1990–92, and of 50:50 during 1993–95.

16. There are five different types of transfers in Estonia: (1) transfers to achieve equalization support; (2) transfers to compensate local governments for losses in revenue sharing owing to personal income tax exemptions; (3) transfers from the Support Fund designed to cover the gap between actual revenues and prescribed minimum expenditure norms, to support those local governments with unanticipated losses in revenues, and to support local governments in special circumstances; (4) transfers paid out for central government services actually delivered by the local governments; and (5) transfers to support capital investment needs of smaller local governments (the largest five cities are excluded), which are distributed on a discretionary basis.

17. The system of transfers places considerable emphasis on equalization in view of the highly uneven distribution of fiscal resources: the National Tax Board (NTB) collects more than three quarters of all tax revenues in the city of Tallinn, which represents approximately 30 percent of the population.[16] In 1995 and 1996, equalization transfers of EEK 759 million (1.8 percent of GDP) and EEK 703 million (1.3 percent of GDP), respectively, were distributed to local governments.

18. The calculations underlying equalization transfers were initially based on the Correlation Law: first, local governments were ranked by the ratio of their qualifying revenues per capita to the national average;[17] second, each local government was classified into one of 12 categories according to the ratio of its revenues to the national average; third, a "smoothing" factor was defined for each class ranging from 1.15 for those with ratios below 10 percent of the national average to 0.05 for those local governments with ratios above 110 percent; fourth, individual local government claims to the total funds available for equalization were derived by multiplying the smoothing factor by the population of the respective local government; and fifth, the actual equalization transfer to a local government was obtained by multiplying its relative claim (the ratio of its claim to total claims) by the total fund available for equalization. A new formula for determining equalization transfers was adopted in 1996:

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[16]The concentration of fiscal resources in Tallinn is to a large extent due to the concentration of VAT revenues collected from imports, and to a lesser extent, to the collection there of the personal income tax, the corporate income tax, and other indirect taxes.

[17]Qualifying revenues included the land tax and shared revenues from the personal income tax plus transfers for compensation for exemptions; the latter were suspended in 1995. See World Bank (1995).

$$T = (m \times a_k - a_n) \times 0.9 \times c_{t-1}$$

where

$T$ = level of equalization transfers to individual municipality
$m$ = coefficient of support for each municipality
$a_k$ = average level of qualifying revenues per capita
$a_n$ = level of qualifying revenues per capita of municipality
$c_{t-1}$ = population of municipality at beginning of previous year

The coefficient of support is based on agreement between the central government and municipality, and is not expected to change unless the municipality's circumstances do (e.g. expenditure assignments). This revised methodology is an improvement in two important ways, namely, it is much simpler than the previous one, and it does not allocate resources to Tallinn (which is characterized by a high level of qualifying revenues per capita).

## E. Local Government Borrowing

19. Local government borrowing, which consists of own borrowing and of foreign borrowing through the central government (i.e., the use of foreign resources on-lent by the central government), has expanded rapidly in recent years, albeit from a very low base.[18] Before 1994, borrowing by local governments at their own initiative was limited to domestic bank credits to bridge revenue shortfalls. In 1994, the stock of commercial bank loans to local governments increased to EEK 108 million, up from EEK 1.5 million in 1993, and thereafter increased by more than 250 percent to EEK 393 million in 1996.[19] At the same time, bond issues became an increasingly important channel for local government borrowing. In 1996, bond issues represented 80 percent of own borrowing, though this includes a foreign bond of EEK 480 million (DM 60 million) issued by the city of Tallinn; domestic bond issues were roughly on a par with borrowing from domestic financial institutions (Table 5). The data for 1996 are indicative of the disproportionate share of total local government borrowing undertaken by the city of Tallinn.

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[18]The data on local government borrowing remain weak. In the only systematic overview of local government borrowing, a survey launched by the Ministry of Finance in April 1996, the data are incomplete in that some municipalities do not respond; are not up-to-date; are not presented consistently (some municipalities include municipal enterprises, others do not); and are not consistent with banking data.

[19]Based on banking data. Domestic bank loans outstanding to local governments amounted to EEK 478 million (3.4 percent of domestic bank credit) at end-June 1997.

20. Local governments in Estonia have considerable autonomy. Within this framework, the central government has followed a rules-based approach to keeping municipal borrowing in check; one such rule restricts borrowing to investment projects (the so-called "golden rule" adopted in a number of countries). However, the limits on local government borrowing incorporated in the Law on Municipal and Town Budgets (effective January 1, 1994) proved to be inadequate owing mainly to their ambiguous wording. Also, this rules-based approach can end up fostering practices aimed at circumventing the regulations, e.g., the reclassification of expenditures from current to capital, and the use of local government-owned enterprises to borrow for purposes that should be funded through the budget.[20]

21. To remedy these shortcomings, the government introduced amendments to the law, which were adopted by parliament in May 1997. According to the revised legislation, the stock of outstanding debt of local governments—excluding all loans and transfers from the state budget—cannot exceed 75 percent of revenue projected for the current budget year, and debt service cannot exceed 20 percent of revenue projected for the current year. Furthermore, local governments must forward a copy of the decision to take a loan to the county governor within three days after it becomes effective, and send a copy of the loan contract to the Ministry of Finance within thirty days after the contract has been signed. In addition, in August 1996, the Government of Estonia issued a decree clarifying that the central government would not extend state guarantees—implicit or explicit—against municipal borrowing. By comparison, the other two Baltic countries have instituted strict administrative controls. In Latvia, local governments can borrow only from the Treasury for investment projects deemed worthy, and in Lithuania, local governments can borrow to finance investment expenditures only after receiving central approval (from the State Loan Commission).

## F. Conclusions

22. Estonia has made considerable progress in carrying out fiscal decentralization. Just about five years ago, it began the transition to a market economy with a highly centralized system of public finances, local governments acting mainly as administrative units with no independent fiscal responsibility. Since then, its system of intergovernmental relations has promoted institutional settings and processes that allow for the articulation of interests and policy-making based on consensus-building, issues that are raised, for example, in the European Charter of Local Government of 1985.[21] There has also been a move to match public services more closely with local demands. The design of transfers from the central to the local governments, with its emphasis on equalization, attempts to place limits on the level of open-ended transfers that could create incentives to attract and self-generate local demand.

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[20]See Ter-Minassian and Craig (1997).

[21]See World Bank (1997).

Moreover, detailed analysis by the World Bank indicates that the transfer mechanism in Estonia has served to reduce the horizontal imbalances of the fiscal system. It lessens the fiscal disparities among local governments with different tax bases and closes the revenue gap of local governments (i.e. the imbalance between expenditure responsibilities and the funding available).

23. The system of intergovernmental relations needs, however, to exploit more fully the benefits of fiscal decentralization. It must also ensure that local governments support the general effort to increase public savings, and that budget constraints are enforced at each level of government. Given the passive role of local government over a fifty year period, this will require in part a concerted move to build up local capacity and a local civil service trained to design, monitor, and implement expenditure programs in its areas of responsibility. Against this backdrop, there are a number of steps that the authorities could take:

- First, consolidation of local governments and increased cooperation among them in the delivery of public services would improve the efficiency of municipalities. In this regard, the 1998 draft state budget allocates EEK 50 million to get the process started (it will no doubt take a long time to complete): the first ten municipalities to merge into larger units will each receive EEK 3 million, and those that follow will each receive EEK 1 million.[22]

- Second, in the case of expenditure activities that are subject to overlapping or competing jurisdictions, the appropriate level of responsibility needs to be clarified. In addition, local capacity to monitor and implement programs under the jurisdiction of municipalities will have to be built up.

- Third, in order to increase the accountability of local governments and enhance their flexibility to meet the demand for services, a greater share of local expenditures should be financed with local taxes—as distinct from shared taxes which represent a transfer from the central government (albeit out of an earmarked revenue source). One option, already adopted in a number of countries, would be to give each local government the right to apply its own tax rate on the national income tax base.[23] A local income tax surcharge would offer local governments a powerful revenue tool and increase the link, at least at the margin, between local public services and taxes payable. This would not exclude the use of supplementary equalization transfers for poorer municipalities. Another option would be to increase municipal user fees.

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[22]In addition, the central government would undertake to pay at least as much in support to the merged local units as they received before the merger. Each municipality that becomes part of a larger unit would also be entitled to EEK 400,000 for merger costs, and EEK 8 per resident for the costs of new local elections.

[23]This system is applied, for example, in Scandinavian countries. See Norregaard (1997).

- Fourth, the new method for determining equalization transfers, while simpler and better at targeting local governments with per capita revenues lower than the national average, leaves the door open for considerable bargaining between the central government and individual municipalities—the authorities will have to ensure that such negotiations do not undermine the objective of reducing fiscal disparities across regions.

- Fifth, the borrowing activities of local governments need to be better monitored and the legal restraints on debt obligations vigorously enforced. The authorities have recently taken steps to address this issue. In addition, as part of its prudential responsibilities over the banking system, the Bank of Estonia will require (effective December 1, 1997) that banking groups obtain in advance a letter of no-objection from the Ministry of Finance (which will not represent either an explicit or implicit guarantee) for each additional financial claim acquired on local governments.

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Table 1. Estonia: Expenditure by Level of Government, 1993-96
(In millions of kroons)

| | | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|---|
| Consolidated general government | | | | | |
| Expenditure | | 8,261 | 11,606 | 16,833 | 21,219 |
| Central government | | 4,114 | 6,899 | 8,980 | 10,943 |
| Of which: | | | | | |
| Transfers to local governments | | 650 | 687 | 768 | 896 |
| Current | | ... | ... | ... | 767 |
| Capital | | ... | ... | ... | 129 |
| Transfers to Social and Medical Insurance Funds | | 561 | 716 | 766 | 910 |
| Transfers to other government bodies | | 162 | 155 | 0 | 0 |
| Local governments | | 2,609 | 2,151 | 3,618 | 4,649 |
| Transfers to central government | | 243 | 0 | 0 | 0 |
| Transfers to local governments | | 0 | 35 | 69 | 86 |
| Extrabudgetary Funds | | 3,152 | 4,148 | 5,874 | 7,519 |
| Social Insurance Fund | | 1,961 | 2,611 | 3,714 | 4,941 |
| Transfers to central government | | 0 | 0 | 36 | 0 |
| Share of local govts. in general govt. consolidated expenditures (in percent) | | 28.6 | 18.2 | 21.1 | 21.5 |
| Memorandum item: | | | | | |
| Share of local governments in general government expenditure in: 1/ | | | | | |
| Austria (1987) 2/ | 30.6 | | | | |
| Denmark (1986) | 52.9 | | | | |
| Finland (1987) | 45.3 | | | | |
| Hungary (1995) | 23.1 | | | | |
| Ireland (1987) | 27.5 | | | | |
| Netherlands (1988) | 29.9 | | | | |
| Norway (1986) | 33.6 | | | | |
| Sweden (1987) | 40.2 | | | | |

Sources: Estonian authorities; Fund staff estimates; and Ahmad et al (1997), Table 3.

1/ Average of three years ending in the year shown in parentheses, except in the case of Hungary for which the figure refers to 1995.

2/ Includes state government.

Table 2. Estonia: Expenditure Assignments

| | Central Government | Local Government |
|---|---|---|
| Defense | Entire responsibility | |
| Justice/Internal security | Entire responsibility | |
| Foreign economic relations | Entire responsibility | |
| Education | All universities and research institutions; teacher training; salaries and social security of teachers in primary and secondary schools, and textbooks; some investment grants. | Construction, operation and maintenance of primary and secondary schools, kindergartens and art schools, sport facilities, houses of culture, and community centers; vocational, hobby and sport schools. |
| Health | Research medical institutes; special service hospitals and tertiary hospitals. | Capital investment and maintenance for municipal hospitals; and polyclinics. |
| Roads | Construction of national highways; maintenance of state highways and roads linking cities and villages. | Maintenance of local networks and town streets. |
| Public transportation | Intercity buses by state enterprises; airports; subsidies for railway and local transportation | Local public transport |
| Fire protection | All fire protection services and emergency services | |
| Libraries and other | National Library and museums | Local libraries, cultural centers, and museums |
| Police services | National militia and traffic police | |
| Sanitation | | Garbage collection and street cleaning |
| Water and sewage | Some investment grants | Operation and capital expenditures |
| Public utilities | Electricity and gas provided by state enterprises | District heating |
| Housing | | Housing maintenance and communal services. |
| Social welfare | Unemployment benefits; subsidies to local governments for other welfare, including housing and living allowances. | Care for the elderly, home visits and other social services. |
| Environment | National environment issues | Local environment issues |

Source: World Bank, *Estonia: Financing Local Governments,* Report No. 14925-EE, December 1995, based on Law on Local Government Organization (June 1993).

1/ The Medical Insurance Fund covers individual medical expenses.

Table 3. Estonia: Structure of Local Government Budgets, 1993-96
(In percent)

| | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|
| Revenue and transfers | 100.0 | 100.0 | 100.0 | 100.0 |
| Revenue | 75.8 | 66.8 | 73.0 | 75.9 |
| Own source revenues | 6.8 | 7.5 | 8.5 | 11.5 |
| Environmental taxes | 0.3 | 0.3 | 0.3 | 0.0 |
| Taxes and fees | 3.1 | 1.2 | 0.9 | 2.8 |
| Enterprise and property income | 0.0 | 2.0 | 3.2 | 4.8 |
| Other nontax revenue | 3.4 | 4.0 | 4.1 | 3.9 |
| Shared revenues | 69.0 | 59.4 | 64.5 | 64.4 |
| Personal income tax | 68.3 | 55.0 | 61.1 | 59.2 |
| Land tax | 0.6 | 4.3 | 3.4 | 5.2 |
| Transfers | 24.2 | 33.2 | 27.0 | 24.1 |
| From central government | 24.2 | 31.4 | 24.7 | 22.1 |
| Current | ... | ... | ... | 18.9 |
| Capital | ... | ... | ... | 3.2 |
| From local governments | 0.0 | 1.8 | 2.3 | 2.1 |
| Expenditure | 100.0 | 100.0 | 100.0 | 100.0 |
| Current | 84.2 | 84.7 | 77.9 | 72.4 |
| Goods and services | 59.5 | 78.8 | 75.1 | 70.6 |
| Wages and salaries | 19.1 | 34.4 | 24.6 | 24.6 |
| Other goods and services | 40.4 | 44.4 | 50.5 | 46.0 |
| Subsidies and current transfers | 24.7 | 5.8 | 1.9 | 1.8 |
| Subsidies | 10.5 | 4.0 | 0.0 | 0.0 |
| Transfers | 14.2 | 1.7 | 1.9 | 1.8 |
| To households | 4.9 | 0.1 | 0.0 | 0.0 |
| To other levels of government | 9.3 | 1.6 | 1.9 | 1.8 |
| Other | 0.0 | 0.2 | 0.9 | 0.0 |
| Capital | 15.8 | 15.3 | 22.1 | 27.6 |
| Own budget | 9.9 | 13.3 | 14.3 | 24.1 |
| Financed by foreign borrowing through central government | 5.9 | 2.0 | 7.7 | 3.5 |

Sources: Estonian authorities; and Fund staff estimates.

Table 4. Estonia: Measurement of Vertical Fiscal Imbalance, 1994-96 1/

| Country | Coefficient 1 | Coefficient 2 |
|---|---|---|
| Estonia 2/ | | |
| 1994 | 0.048 | 0.671 |
| 1995 | 0.165 | 0.769 |
| 1996 | 0.202 | 0.796 |
| Selected International Comparisons (1991) | | |
| Austria | 0.186 | 0.717 |
| Belgium | 0.156 | 0.512 |
| Denmark | 0.172 | 0.611 |
| Finland | 0.191 | 0.654 |
| Germany | 0.244 | 0.794 |
| Netherlands | 0.288 | 0.345 |

Sources: World Bank (1995), Table 4; Estonian authorities; and Fund staff estimates.

1/ Coefficient 1= Share of local government expenditure covered by own revenues; Coefficient 2=Share of local government expenditure covered by both own and shared revenues.

2/ The land tax is included in shared revenue; transfers to local governments and expenditures financed by foreign borrowing through the central government are excluded from local government expenditures.

Table 5. Estonia: Local Government Borrowing, 1996

(In millions of kroons)

| | 1996 |
|---|---|
| Own borrowing 1/ | |
| Bond issues | 617.6 |
| Foreign 2/ | 480.0 |
| Domestic 3/ | 137.6 |
| Domestic financial institutions | 150.4 |
| Commercial banks | 117.4 |
| Other | 33.0 |
| Subtotal | 768.0 |
| Foreign borrowing through central government | |
| EBRD (energy sector) | 60.9 |
| World Bank (energy sector) | 56.0 |
| EIB (energy sector) | 26.4 |
| BITS (Sweden) | 19.5 |
| Sub-total | 162.8 |
| Total | 930.8 |

Sources: Estonian authorities; and Fund staff estimates.

1/ These data are based on a survey conducted by the Ministry of Finance.
2/ Bond of DM 60 million issued by the city of Tallinn in April 1996.
3/ Residual.

# II. EVOLUTION OF THE FINANCIAL SECTOR

24. After five years of moderate growth, the financial market in Estonia has entered a period of rapid expansion: bank credit to the nongovernment sector has increased at a particularly fast pace, the equity market has evolved considerably from its modest beginnings, and new financial instruments such as leasing and options have come into operation. This note analyzes the developments in the financial sector—both bank and nonbank financial institutions—in Estonia, focussing on the role of institutional arrangements. It also examines the regulatory issues that have emerged as a result of the changing nature of the financial system and the rapid growth of lending activities, and the policy response of the authorities. The note is organized as follows: the first section provides an overview of the banking sector, with an emphasis on the principles of the universal banking model which underlies Estonia's financial system, and on recent banking developments; the second section looks at the evolution of nonbank financial institutions; and the third section discusses the steps the authorities are taking, including a number of new measures recently announced by the Bank of Estonia, to ensure that the financial system continues to make a positive contribution to economic development.

## A. The Banking Sector

### The Universal Banking Model

25. The financial system in Estonia is founded on universal banking practices. This model allows banks to create, wholly own, and hold controlling interests in other banks, nonbank financial institutions (NBFIs), and enterprises.[24] Unlike the equity-market based "Anglo-Saxon" model, universal banking ensures that banks will remain at the core of the financial sector as it grows and nonbank financial instruments develop.[25]

26. A universal (or "German") banking system is centered around holding companies and bank institutions that are providers of long-term capital (instead of public markets). The number of banks tends to be small, and in practice, NBFIs are associated with one or more

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[24]See Walter (1993) for a concise comparison of financial system models.

[25]In a pure "Anglo-Saxon" system as found in the United States and the United Kingdom, banks are prohibited from engaging in equity, leasing, insurance, and investment fund activities, and are restricted in their level of ownership of nonbank financial institutions. As a result, the role of banks in financial markets is limited and equity markets tend to be the primary source of investment capital.

banks.[26] Because most capital is raised through banks and NBFIs, equity markets are small in terms of capitalization to GDP ratios.[27] The universal banking system promotes institutionalized relationships between borrowers and lenders based on intermediaries (banks), and in this way, conflicts of interest between shareholders and their creditors are minimized, and credit is directed and tied to restructuring or specific projects. Bank lending usually involves long-term financing through rolling lines of credit or long-term fixed credit. Since the bank is the sole source of funds over an extended period of time, it closely monitors the firms' behavior and conditions future investment on performance and a continuous flow of information. Diamond (1984) shows that concentrated monitoring of clients via banks can reduce the cost of lending and thus be efficient, especially in economies where capital is scarce and its cost is high. The tightly secured nature of debt allows for leverage ratios that are above the average for market-mediated systems. Finally, in times of financial crisis, the bank-mediated system is more suited to immediate action as it provides a direct form of negotiation and reorganization.

27. Subsidiaries of banks tend to proliferate quickly in a "German" system since banks use these NBFIs to diversify risk, broaden their market base, and take advantage of loopholes in regulations that apply to banks, but not to NBFIs. In nascent financial sectors, where banks are the only financial intermediaries, bank subsidiaries are often the first NBFIs to enter the market, thus enjoying the advantages of limited competition and an established client base from which to begin operations.

**Banking Developments in Estonia**

28. Estonia's financial system has evolved within a policy framework that essentially rests on three pillars: the currency board, the absence of controls over domestic and international financial transactions, and universal banking. The currency board arrangement, combined with unimpeded financial flows, has eliminated the premium usually given to foreign currency-denominated assets and has encouraged the inflow of substantial amounts of capital. While traditional banking operations have been the mainstay of the financial system in Estonia, the adoption of universal banking has allowed for considerable financial widening given that banks can own, finance, and monitor other bank and nonbank financial institutions; they can also purchase and sell securities on their own account. There are now 11 banks in Estonia, down from 16 at the beginning of 1996. Table 6 presents a list of the financial sector subsidiaries of the major banks, highlighting the range of banks' activities.

29. Banks in Estonia are substantial shareholders in most financial institutions. Although they are limited to using a maximum of 15 percent of their own assets to purchase other

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[26]See May (1992).

[27]Market capitalization in Germany is approximately 21 percent of GDP compared to 84 percent in the United Kingdom and 60 percent in the United States (1995 figures).

financial or nonfinancial institutions, banks face no restrictions on the level of ownership. Moreover, banks and their subsidiaries can join together in owning a controlling interest, which limits the exposure of any one financial institution. The data available suggest that direct cross-ownership has reached the legal limit; there are no figures on indirect ownership, i.e., shares held in banks by other banks' subsidiaries (especially nonbank institutions), but it likely forms an extensive web, making supervision of financial institutions more complicated.

30. Since the beginning of 1997, banks have engaged in substantial borrowing from abroad and in foreign currency lending. They have been earning large profits through their margins as the average spreads on these transactions range from 5 to 7 percentage points. But profits from such arbitrage activities may become smaller because in July 1997 the Bank of Estonia (BOE) extended the 10 percent reserve requirement to banks' net foreign position on the interbank market, effectively raising the cost of borrowing abroad and on-lending domestically.

31. Data on capital flows indicate that banks are increasing their long-term foreign borrowing (maturities of more than one year) in particular. But at the same time, nonbanks are continuing to borrow short term from abroad. Specifically, long-term foreign borrowing (net) by banks shifted from an outflow of US$8 million in 1995 to an inflow of US$37 million in the first half of 1997, while their short-term borrowing (net) remained broadly unchanged at about US$40 million. Nonbanks' short-term foreign borrowing (net) swung from an outflow of US$14 million in 1995 to an inflow of US$117 million in the first half of 1997; their long-term borrowing (net) has remained insignificant throughout the period.

32. Bank lending to the nongovernment sector has been accelerating in recent years; it grew by 54 percent in 1995, by 70 percent in 1996, and by about another 60 percent (to EEK 19.7 billion) in the first nine months of 1997. Credit to other financial intermediaries (mainly leasing companies that are bank subsidiaries) has increased even more rapidly (by 119 percent in the first nine months of 1997), and now constitutes about one-fourth of all loans (Table 7). Household equipment and repairs, industry (manufacturing, and wholesale and retail trade), and real estate and renting constitute the next most significant categories obtaining loans (18 percent, 17 percent, and 13 percent, respectively, of total loans). The level of credit to construction and agriculture is relatively low. In the former case, this may partly reflect a divergence between the stated purpose and actual usage of the credits and, in the latter, banks' reluctance to extend long-term rural financing.

33. The maturity profile of banks' balance sheet liabilities, notably foreign nonbank deposits and interbank borrowing, has been lengthening as a result of increased confidence in the banking system and expectations that inflation will continue to fall. Domestic term deposits have gained in importance, representing 13 percent of broad money at end-September 1997 compared to 9 percent at end-1995 and 12 percent at end-1996. On the asset side, the maturities of loans to households (mainly for housing) has been increasing, especially in the case of loans of more than ten years (now about 25 percent of loans to households

compared to 18 percent at end-1996). The maturity of loans to enterprises has changed little since end-1996, except that banks have now begun to extend loans of more than ten years.

34. Within the framework of a rapidly expanding banking system and a highly competitive environment, banks may have an incentive to take on riskier loans in order to maintain market share. Furthermore, the entry of banks into the securities market and the real estate sector could make them more vulnerable to asset price movements.

35. In response to the rapid growth of domestic credit, the BOE has taken several important steps to rein in credit expansion. In July 1997, it extended the reserve requirement to net liabilities of domestic banks vis-à-vis nonresident financial institutions, effectively reducing distortions in the cost structure of banks' funds. In November 1997, the BOE introduced an additional requirement on banks' reserve holdings at the central bank by establishing a compulsory monthly minimum on banks' balances in excess of required reserves. This requirement was set at 2 percentage points over the reserve requirement base level, and will be raised to 3 percentage points in December 1997. In addition, the Bank of Estonia has doubled the daily minimum reserve requirement held at the central bank from 20 percent to 40 percent of the general requirement, as of November 1, 1997.

## B. Nonbank Financial Institutions

36. Nonbank financial institutions in Estonia consist mainly of leasing firms, investment funds, and insurance companies; 35 of them are directly owned by banks as of end-June 1997.[28] Although an NBFI need not be associated with a bank, 90 percent of NBFIs are presently either owned or controlled by the 6 largest banks. More specifically, 87 percent of leasing companies, 100 percent of investment banks and open-ended funds, and 30 percent of all insurance companies are wholly-bank owned. Further, NBFIs have become important participants in the stock market since May 1997, and their increased presence partially explains the rapid growth of capitalization and turnover of the Tallinn Stock Exchange (TSE).

37. Leasing company assets rose from EEK 0.5 billion at end-1995 to EEK 4 billion at end-September 1997. The expansion of leasing activities, especially during 1997, is in large part due to the nature of the assets involved, which are usually movable and can be fully collaterized and thus pose less risk than other types of loans. Estonian leasing companies have opened offices in Latvia and Lithuania where they are becoming integral parts of these foreign markets. Investment funds have also grown significantly, owing in particular to the privatization process. Five closed-ended funds (with a limit on the number of investors who can buy the investment fund shares) were created in 1993 to handle privatization vouchers; their share of total investment fund activities is currently 15 percent and falling. The 14 bank-owned, open-ended funds (with no limit on the number of investors who can buy investment

[28]There are also 47 brokerage and 10 asset management firms, again mostly bank-affiliated.

fund shares) have played an increasingly prominent role in Estonia since mid-1996, as they have become key agents for stock market transactions.

38. The securities market in Estonia was set up in February 1994 (after passage of the Securities Market Act in 1993) with the establishment of the Central Depository for Securities (CDS). The CDS acts mainly as an umbrella organization that keeps the central registry for all securities issued in Estonia, regardless of whether they are traded on the Tallinn Stock Exchange. It also registers bond market and investment fund activity.

39. The Tallinn Stock Exchange began operations in June 1996. Core trading on the TSE revolves around the "primary list," which effectively consists of quoted equities issued by six banks, though there are a few firms trading as well. The TSE also includes the Compensation Fund (related to privatization) and an investment firm. Government securities, for which there is no secondary market, are the only major asset not traded to date. In its short history, the TSE has grown very rapidly as evidenced by the following developments:

- The value of shares traded rose by more than 350 percent from June 1996 to September 1997; turnover grew from EEK 5 million to more than EEK 300 million per day, and the number of companies from 5 to 25 over the same period (Figure 2).

- Capitalization of the stock market increased from about EEK 4.7 billion (9 percent of GDP) in September 1996 to EEK 20 billion (30 percent of GDP) in September 1997.

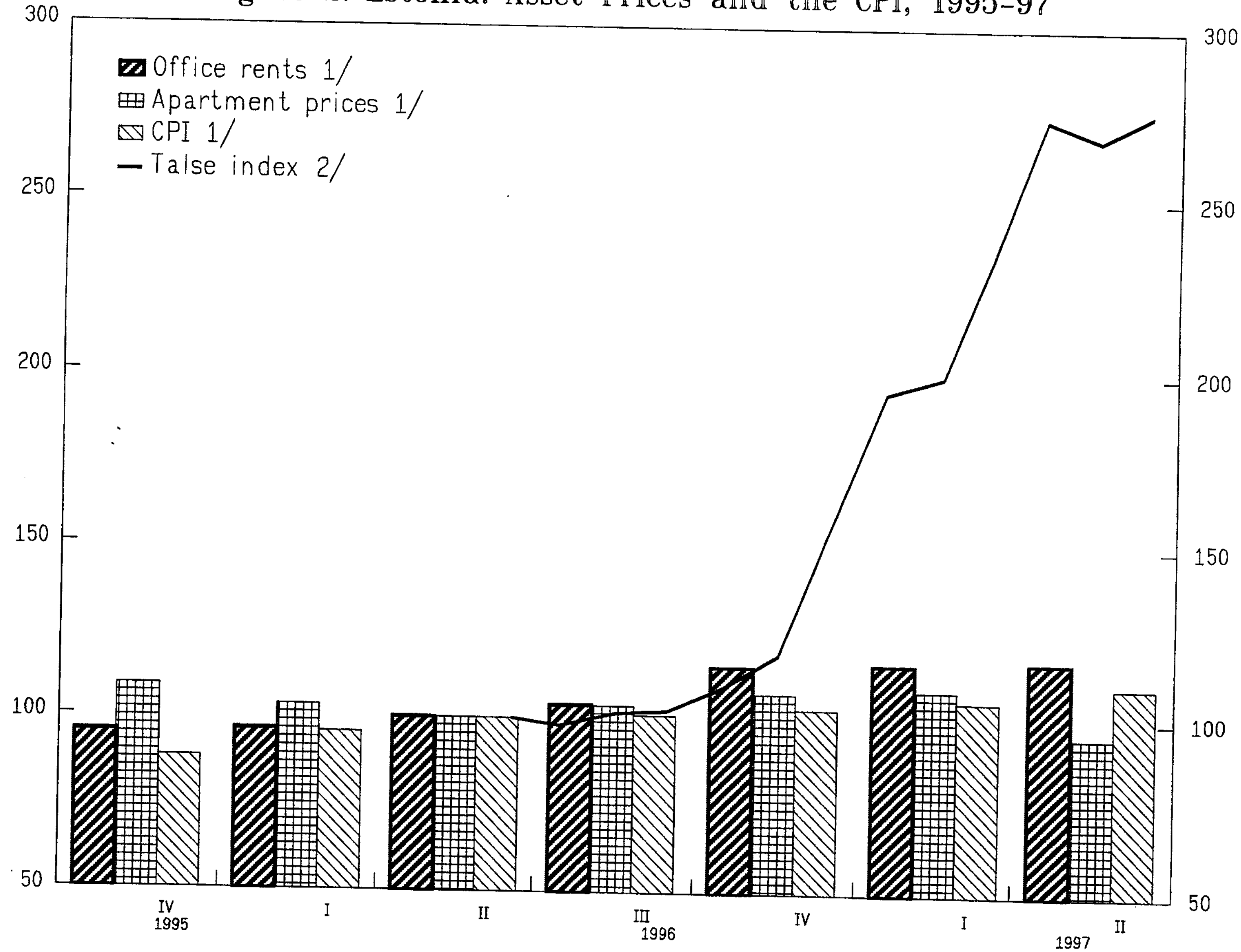
- The P/E ratio, especially of financial sector equities, grew from about less than 10 at the end of 1996 to a peak of almost 16 by end-June 1997.

- The TSE is dominated both in volume (74 percent of total) and number of transactions (58 percent of total) by five large banks; these are not only the largest issuers of traded equity, but also active participants in the market (Table 8). Moreover, in the past six months, bank-owned investment funds have become more active traders of shares on behalf of their clients, with their share in the market having increased from less than 1 percent of the total in January 1997 to over 7 percent in September 1997.

40. It should be noted that the level of "reverse-repo" deals with banks remains high (i.e., money is borrowed to buy securities, which are collateralized by other securities). There is also a growing options market, though all trades are conducted on an over-the-counter basis. Once proper regulations are in place, the TSE will permit options trading on the exchange.

41. There are no obvious signs at this juncture of a shift in investments from the securities to the real estate market. Moreover, from the perspective of banks, real estate loans are fully

Figure 2. Estonia: Asset Prices and the CPI, 1995-97




Sources: Bank of Estonia; and Fund staff estimates.
1/ Index 1996QII = 100.
2/ Index 1996 June = 100.

collateralized and pose little risk to banks.[29] The real estate market has indeed grown quickly owing to privatization as well as restitution of housing. Yet, a large jump in real estate prices, a symptom of an overheating financial market in many countries, has not taken place in Estonia. Real estate prices have been stable since mid-1996; residential rents only increased by about 5 percent between 1996Q2 and 1997Q2,[30] while office rents remained relatively flat between 1996Q2 and 1997Q1, and fell sharply in 1997Q2.

## C. Regulatory Issues

42. Prudential regulations in Estonia encompass banking activities and include a few provisions (such as connected lending rules) aimed at preventing insider trading; in general, they affect NBFIs only indirectly. Therefore, the BOE has recently announced significant changes to financial sector regulations.

### Banking Regulation

43. Existing regulations meet the Core Requirements set by the Bank of International Settlements. In addition, most of the quantitative regulations meet the more stringent EU standards (see Table 9 for a complete list of prudential regulations and comparison with EU standards).

44. With the aim of expanding the scope of prudential regulations to cover the diversified activities of banks, the Bank of Estonia has made two significant changes to the calculation and coverage of the capital adequacy requirement (CAR). These changes are designed to increase the cost of capital, and thus to raise the quality of loans (by discouraging banks from extending risky loans) and reduce the volume of future loans.

45. The first change, an increase in the capital adequacy ratio from 8 to 10 percent of risk-weighted assets, took effect on October 1, 1997. The new level exceeds the 8 percent standard of EU countries as well as the recommendations set by the Basle Committee on Banking Supervision. The second change involves adding a market (instrument) risk component to the existing capital adequacy requirement. This amendment, based on the EU's capital adequacy laws and the *Capital Accord to Incorporate Market Risks* of the Basle Committee on Banking Supervision, is to be implemented by end-March 1998. It defines market risk as interest rate risk, equity position risk, foreign exchange risk, commodities risk, and options risk. Although the current CAR incorporates interest rate and foreign exchange risks (explicitly for the latter as a result of changes in 1996, and implicitly for both in terms of

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[29]Data on real estate prices are from the Bank of Estonia.

[30]This modest increase in residential rents followed a rise of about 20 percent between 1995Q4 and 1996Q2.

the calculation of loan risk), it does not fully cover equity risk, nor does it take into account commodities and options risks. Against the backdrop of the rapid expansion of financial instruments in Estonia, including the sharp rise in the market value and stock market volume, the additional requirement will oblige all banks to calculate and report the risk exposure of their entire portfolio. The change in regulation will apply to present and future situations: it will cover instruments that are just starting to be used in Estonia ("reverse repos" and options) as well as instruments that have not yet been developed (commodity and foreign exchange futures and options).

**Regulation of Nonbank Financial Institutions**

46. The regulation of NBFIs in Estonia is being changed with the aim of removing certain weaknesses. The investment fund law, adopted in April 1997, lacks provisions on implementation of a capital adequacy directive; leasing companies are not under the purview of a supervisory agency; and activities on the securities market are subject only to the rules set out by the TSE, which is a limited-liability company (members are not legally liable in the event of improper behavior, although their trading rights can be suspended).

47. The Ministry of Finance, in cooperation with the Ministry of Justice, the TSE, and the Central Securities Depository, is in the process of drafting a new securities law (consistent with EU standards) which will address the following issues: the legal definitions of primary and secondary markets; the legal description of participants in the market; codes of conduct and insider trading; regulations on public offerings and securities exchange; and capital adequacy directives and minimum capital requirements for investment firms. The law is to be submitted to the government by end-March 1998 and is expected to be implemented in mid-1998. The Securities Inspectorate (part of the Ministry of Finance) will continue to supervise the stock market.

48. Moreover, the BOE intends to monitor banks on a consolidated basis (i.e., examining bank groups rather than individual institutions) in order to bring transparency to the complex relationships between banks and their subsidiaries. Thus, the strong prudential regulations and supervision facing banks will be extended to all financial market instruments and institutions regardless of whether they are part of a bank group.

## D. Summary

49. The financial sector in Estonia has grown significantly in recent months. Before 1997, the domestic financial market was dominated by traditional banking operations, and the number and activities of bank subsidiaries and nonbank financial institutions were small. Since the beginning of 1997, two key developments have taken place. First, bank lending to the non-government sector has grown at a very fast past. Second, financial widening has taken hold as nonbank financial institutions (NBFIs) and market instruments have become increasingly important. In keeping with a universal banking system, Estonia's financial widening and

deepening has been led by commercial banks. But in contrast to other universal banking systems (as in Germany and Austria), the role of the equity market in Estonia has expanded considerably. At the same time, the growth of the stock market is being driven by banks and their subsidiaries, effectively making the equities market another bank instrument. The rapid expansion of the financial system in Estonia has prompted the BOE to implement a series of measures to strengthen further the banking system. These measures require banks to increase their reserve holdings with the BOE; to better account for and provision against the risks that they take on; to improve the quality of loans; and to bring bank subsidiaries under closer watch through consolidated supervision.

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Table 6. Estonia: Subsidiaries of Major Banks as of July 1997

| | Foreign Subsidiaries | Insurance Companies | Leasing Companies | Asset Management Companies | Investment Funds |
|---|---|---|---|---|---|
| Hansabank | 3 | 1 | 1 | 1 | 3 |
| Savings | | 1 | 1 | 1 | 3 |
| Union | 1 | | 1 | 2 | 2 |
| Tallinna | | 2 | 1 | 2 | 6 |

Source: Bank of Estonia.

Table 7. Estonia: Sectoral Composition of Bank Loans, 1997

(In percent)

| Sector | End-April 1997 | End-July 1997 |
|---|---|---|
| Agriculture and fishing | 5.6 | 3.8 |
| Construction | 2.7 | 2.8 |
| Industry | 18.3 | 17.3 |
| Finance | 16.4 | 24.8 |
| Real estate and renting | 15.2 | 12.5 |
| Household equipment and repairs | 19.4 | 18.2 |
| Other | 22.4 | 20.6 |

Source: Bank of Estonia.

Table 8. Estonia: Total Average Trading Volume
of Tallinn Stock Exchange by
Five Largest Banks as of July 1997

| Bank | Percent of Total Volume |
|---|---|
| Hansabank | 34 |
| Hoiupank | 20 |
| Forekspank | 9 |
| Uhispank | 24 |
| Tallinna Pank | 8 |
| Other | 5 |

Sources: Estonian authorities; and Fund staff estimates.

Table 9. Estonia: Regulatory Framework for Commercial Banks

| Type | Prudential Regulation | Comparison With EU Standards 1/ |
|---|---|---|
| **I. Basic Requirements** | | |
| Capital adequacy ratio | 10 % (risk-weighted) | 8% (risk weighted) |
| Liquidity indicator | Maintain liquid assets not below 35 % of total current liabilities | No liquidity indicator |
| Total amount of large exposures | Up to 800% of bank's equity funds | Up to 800% of bank's equity funds |
| **II. Connected Lending Restrictions** | | |
| Limits on lending (as % of own capital) Credit concentration per client (group of connected clients) | 25% | 25% |
| Connected lending (aggregate) | 15% | 20% |
| Limit on equity position in nonbank financial institutions | Maximum 15% of bank's equity funds | No EU-wide directives |
| Total participation in other nonbank financial institutions | Maximum 60% of bank's equity funds | No EU-wide directives |
| Limits on net open foreign exchange positions (as % of own capital) | No limits on OECD country currencies but large positions require higher capital adequacy ratios; DM-denominated funds exempted. Some CIS currencies face some restrictions | >2%, excess multiplied by 8 to get capital adequacy |
| **III. Loan Classification and Provisioning** | | |
| Loan classification Provisioning | Banks set their own classification system (approved by the BOE) | No EU-wide directives |
| **IV. Licensing requirements** | | |
| Minimum capital requirement | EEK 60 million as of January 1997 EEK 75 million (approx. ECU 5 million) as of January 1998 | ECU 5 million |
| Minimum registered capital (for new banks) | EEK 35 million, but must be increased to ECU 5 million by January 2000 | ECU 5 million |
| **V. Other requirements** | | |
| Audited annual reports | According to international standards and approved by Bank of Estonia | External comprehensive audits |
| Quarterly balance-sheet publication | No requirement, but banks must publish balance sheets in a local newspaper at least once a year | No explicit rules obligating banks to submit quarterly balance sheets, but most do |

Sources: Bank of Estonia and Fund staff.

1/ EU regulations reported are the minimum standards.

# III. TRADE POLICY AND PROTECTION

50. This note examines current trade policy in Estonia, focussing on the level of protection afforded to the agricultural sector, the proposed changes to existing policy, and their implications for the economy and negotiations on accession to the WTO and the European Union (EU). In order to give a wider context to the discussions taking place in Estonia, the note also includes a brief overview of the theory and measurement of protection, and compares trade policy in Estonia to that in other transition economies, the EU, and the United States.

## A. Background on Protection

### Theory of Protection

51. In the case of a small, open economy, like Estonia, which is a price taker in the world market, the literature on trade policy suggests that a tariff or equivalent quantitative restriction generates the following results:[31]

- A tariff drives a wedge between domestic and world market prices, raising the domestic prices and thus affecting both resource allocation and demand.
- The protected domestic producers generally benefit from the imposition of a tariff owing to the rise in output price without (necessarily) a commensurate rise in input prices.
- Consumer welfare is usually reduced on account of the price increase. The effect on demand is a function of the price elasticity of demand.
- The welfare of the economy is reduced on average owing to the deadweight loss (loss of efficiency and market distortion) incurred.
- The effectiveness of a tariff (and hence its impact on the economy) depends in large part on its coverage.[32]

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[31]For a concise treatment of the effects of trade policy, see Krugman and Obstfeld (1994).

[32]The issue of coverage refers in part to the source of the import. If a country has a free trade agreement (FTA) with a number of countries and the import originates in countries outside as well as within the FTA, the tariff will affect the countries outside the FTA and not the FTA countries. This situation generates two results. First, it will shift imports from the countries outside the FTA to the FTA countries; and second, it will potentially set up an arbitrage

(continued...)

- The government may gain in terms of revenues generated. Calculation of tariff revenues must also take into account the cost of implementing, administering, and monitoring the tariff.

- At the macroeconomic level, trade restrictions may affect the trade balance if there is a drop in demand for the good and no increase in substitutes imported from other countries. This effect is magnified if demand falls for goods complementary to the item subject to the tariff.

52. Subsidies distort the production process directly, but allow the domestic and international markets to determine the demand response. Also, the potential exists for the subsidized industry to grow using the wrong price signals, making it dependent upon the subsidy for its viability (analogous to the criticisms of the "infant industry" argument for protection). Moreover, subsidization imposes a potentially high financial cost on the government.[33]

**Measurement of Protection**

53. Measurement of protection varies from a simple calculation of the effect of tariffs on prices to determination of the total cost to the economy of a trade policy package. This note considers three groups of protection measurements: simple tariff calculations, effective rates of protection, and the cost of sector-support policies.

54. The basic tariff calculation requires knowledge of the *ad valorem* rate (or *ad valorem equivalent* rates, in the case of a specific tariff). In transition and developing economies, where data are sparse or unreliable, knowledge of basic nominal tariff levels may be the only way of measuring protection. No further information is needed to determine the effective rate of protection if the tariff is applied to the finished product and the inputs are tariff free, if the good is itself an input, or if the good is both the input and the output. Weighted averages represent a way to undertake cross-country comparisons of the level of protection afforded a particular sector. The choice of weighting schemes, which include trade weights, production weights, or CPI-share based weights can have a significant impact on the outcome. In many cases, the choice of the tariff weighting scheme depends upon the data available.

55. Determining the effective rate of protection involves a more complicated set of calculations, which provide information on the total level of protection when there are tariffs

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[32](...continued)
opportunity for re-export from the FTA.

[33]The financial cost to the government could be especially high for transition economies which are undergoing fiscal tightening.

on both the inputs (or intermediate goods) and the output. In general terms, effective rates of protection are determined by:

$$ERP = \frac{V_t - V_w}{V_w} = \frac{P_t\,[t_o - t_c]}{[P_t - P_w]}$$

where:

$V_t$ = Value added in the sector targeted by trade policy and evaluated at internal market prices
$V_w$ = Value added in the sector at world market prices
$P_t$ = Output price of the good given protection
$P_W$ = Output price of the good valued at world market prices
$t_o$ = *Ad valorem* tariff on the finished good
$t_c$ = *Ad valorem* tariff on the inputs

56. To measure the cost of production assistance to a sector, the OECD has formulated two measures that capture the actual amount of transfers to producers and to consumers.[34] The *production subsidy equivalent* (PSE) is an indicator of the value of monetary transfers to agriculture resulting from agricultural policies in a given year. Direct transfers from government budgets (both central and local) and implicit transfers from consumers (through market prices) are included. This statistic captures market price supports, direct payments, reduction of input costs through subsidies, transfers of services, in-kind transfers, and other local or municipal government support. The basic calculation is relatively straightforward:

$$PSE = Q\,[P - Pw_{ref}] + DP - LV + OS - FA$$

where:

Q = Volume of production
P = Domestic producer price
$Pw_{ref}$ = World (reference) price at the border in the domestic country
DP = Direct payments
LV = Levies on production
OS = Other budget financed support
FA = "Feed adjustment" to eliminate double accounting of transfers within the agricultural sector

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[34]The methodology was created to normalize the level of subsidization for cross-country comparison of agricultural sector protection. For a more detailed description of the OECD methodology and results, see OECD (1997b).

57. Similarly, the *consumer subsidy equivalent* (CSE) measures the value of monetary transfers to consumers resulting from policies in a given year. This indicator takes into account market transfers (price support policies paid for by consumers, which enter into the calculation negatively) as well as budgetary (compensatory) transfers. The basic CSE is computed as follows:

$$CSE = Q\,[Pw_{ref} - P] / OT$$

where:

$Q$ = Volume of consumption
$Pw_{ref}$ = World (reference) price at the border in the domestic country
$P$ = Domestic producer price
$OT$ = Budgetary subsidies to consumers resulting from agricultural policies

58. These two subsidization measurements are used to calculate the total cost of protection of a particular good to the economy, which is given by the sum of total tariff revenue, the PSE, and the CSE. Though this composite measure does not take into account intangible factors (deadweight loss and loss of consumer surplus with a tariff), it gives a first best approximation of the cost (and hence viability and sustainability) of a proposed set of trade policy measures.

## B. Trade Policy Developments in Estonia

### Trade Policy to the Present

59. Estonia maintains one of the most liberal trade regimes in the world. By late 1992, the only tariffs remaining were on imports of vehicles and fur goods, and in November 1993, these as well as special tariffs on Russian agricultural goods were abolished. Tariffs on goods such as alcohol and tobacco were converted to excise taxes, and all quantitative restrictions have been abolished. All imports are subject to the VAT and receive the same treatment as domestically produced goods. Quantitative restrictions, licensing requirements, and export surcharges have not been in existence since January 1994.

60. Since independence, Estonia has signed free trade agreements with Latvia and Lithuania (Baltic Free Trade Agreement, 1996), the European Union (1995, in the context of the Association Agreement)[35] as well as with the Czech Republic, Norway, the Slovak

[35]The Association Agreement, unlike the Baltic Free Trade Agreement, is not a free trade agreement, but the treaty makes it extremely difficult to impose tariffs against imports from the EU. Imposition of any trade restriction must be cleared by a joint committee and only on a
(continued...)

Republic, Slovenia, Switzerland, Turkey, and Ukraine. It should be noted that most agricultural imports into Estonia originate either from the EU or the Baltics; tariffs on agricultural products would probably have a minimal economic impact on Estonia owing to the free trade agreements in force.

61. Regarding other forms of protection, subsidies for production processes are limited to the agricultural sector. In particular, fuel for farm machinery is subsidized, and a minimum price floor on specific grains, meat products, and milk was agreed to by the government in 1996. The OECD estimates that, in 1995, the producer subsidy equivalent to agriculture in Estonia as a whole was negative (minus EEK 105 million), meaning that producers are hurt by current policy mainly because production costs, on average, are higher than the world prices of agricultural goods.[36] The net consumer subsidy equivalent from the entire agricultural sector to consumers amounted to EEK 190 million in 1995.

62. The Estonian government has recently been reviewing its methods of support for agriculture. In 1996, it sought to introduce a system of minimum reference prices on agricultural goods (at approximately 25 percent below world prices), but this scheme was not implemented because of opposition from individual countries during Estonia's bilateral negotiations under the WTO accession talks. In April 1997, a special Commission on Agricultural and Rural Development issued a series of recommendations for promoting agricultural development. These recommendations, which are under study, include direct subsidies to producers of grain and milk, introduction of tariffs on a few selected food goods, regional development programs, and tax incentives.

**Proposed Trade Policy in 1998**

63. The 1998 draft budget incorporates a variety of programs under the Ministries of Agriculture, Finance, and Internal Affairs designed to promote agriculture and rural life. Amounting to almost EEK 365 million (0.5 percent of GDP), these include agricultural production subsidies, funds for breeding and soil improvement, investment projects, and rural development programs.

64. In October 1997, parliament passed a new Customs Tariff law, approving a list of 10,000 groups of commodities eligible for tariff protection. The law does not automatically introduce tariffs; rather, it provides a legal basis for tariffs, and in the context of accession to the EU, allows Estonia to implement tariffs so as to harmonize its external policy with that of the EU's Common External Tariff regime.

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[35](...continued)
specific set (and small number) of products.

[36]This number has dropped from negative EEK 814 million in 1993, owing principally to a sharp rise in market prices. The source for all PSE and CSE figures: OECD (1996).

**Effect of Proposed Changes on WTO and EU Accession**

65. Estonia's trade regime is considerably more liberal than that of other prospective WTO candidates (as well as existing members) or than the EU's Common External Tariff (CET). Its proposed agricultural support policies have not placed a barrier to accession negotiations with the WTO and the EU.

66. In the case of WTO accession, negotiations are on track and expected to be concluded by March 1998. Binding rates at the time of accession (which are still being negotiated) are currently lower than the EU's CET.[37] Estonia is likely to be among the first wave of six countries invited to conduct negotiations, scheduled to begin in 1998, on EU membership. In this regard, the trade policy and agricultural support components of EU accession represent a complex issue. Estonia has been negotiating higher initial binding rates (15 percent for industrial goods and approximately 40 percent for agricultural goods) for WTO accession so that it can more easily harmonize its external tariff schedule to the CET; this would also have the effect of bringing down the level of compensatory tariff reductions the EU would have to pay Estonia for raising tariffs to CET levels.[38]

## C. Comparative Trade Policy in Transition Economies

67. This section presents selected agricultural tariff data from a few transition economies, the EU, and the United States.[39] The purpose is to give a rough means of comparing relative magnitudes of tariff policies, and accordingly, the numbers should be interpreted with the

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[37]A country is not obliged to impose the binding rate. The binding rate represents a tariff ceiling above which the country must make compensatory reductions in other tariffs. Thus, in practice, tariffs may be below binding rates.

[38]The EU must compensate new members for the domestic impact of the cost of raising tariffs to EU levels in order to be harmonized with the CET.

[39]Data in Table 10 are the latest available. The maximum tariff is used for any product subcategory in the calculations. The weighting scheme employs import weights from Estonia as the reference (1996). In areas such as the United States and EU, specific tariffs have been converted to *ad valorem* equivalents wherever possible. The producer subsidy equivalent and consumer subsidy equivalent are presented in U.S. dollar per capita terms for comparability. For the PSE and CSE measures, a positive number indicates a transfer to producers or consumers, respectively, and a negative number indicates implicit subsidization by producers or consumers, respectively, via the output price. Thus, if the output price is higher than the input prices, then producers are subsidizing consumers. Similarly, if consumers face output prices that are marked up above input prices, then consumers implicitly subsidize producers. Finally, the tariff levels listed are assumed to be the rates external to free trade agreements or areas.

following two caveats. First, many countries have nontariff barriers in place (e.g. licensing requirements, minimum standards criteria, and health certifications) along with tariffs. Because these nontariff barriers are not easily quantifiable, the true level of protection may be understated. Second, since the measures used only apply to trade and not to production, the data represent just part of the effective protection.

68. Trade policy in all transition economies has been formulated keeping in mind WTO (and in some cases EU) accession. Many transition economies, like Estonia, have tariff rates that are well below the EU common external tariff level. In many cases, the existence of free trade agreements minimizes the impact of the external tariffs because most of the trade in these commodities originates from within the free trade area. In Estonia, for example, approximately 75 percent of all imports originate from countries with which Estonia has a free trade agreement.[40] The same is true of the other Baltic countries as well as Poland and the Czech Republic.

69. The data in Table 10 show that tariffs on meats tend to be high relative to other agricultural products. Trade-weighted averages reveal that transition economies with a large agrarian base have high average tariffs on agricultural goods. The Czech Republic and Poland, in particular, strongly protect agriculture from foreign competition, and at the same time, heavily subsidize domestic production.[41] In the United States and EU, protection is mainly carried out through subsidies rather than trade restrictions.

70. As for supply-side policies, Table 10 reveals that support for agriculture, as measured by the *per capita* production and consumer subsidy equivalent measures (PSE and CSE), is especially high in developed countries. The burden of support is distributed, though not equally, between the government budget and consumers. Among the Baltic countries, Estonia and Latvia currently have low levels of subsidization in per capita terms as well as in percent of GDP. Both producers and consumers receive small amounts of support, mainly in the form of transfers. In Lithuania, overall subsidization (in percent of GDP) is high compared to all other countries studied with the exception of Poland; producers receive transfers from consumers through the local market prices. Poland, which is a highly agricultural country, provides substantial support to agriculture both in PSE terms and in percent of GDP. Though PSE and CSE figures for Russia are not available, the World Bank estimates that cost/sales

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[40]Approximately 62 percent of all imports in the first five months of 1997 originated in the EU, 5 percent in the Baltics, and an additional 8 percent from other countries with free trade agreements.

[41]This is the case for "out-of-quota" rates, which refer to the higher tariff applied to a good after a certain quantity has been imported.

ratios for private farmers dropped from 1.74 in 1990 to 0.67 in 1993.[42] This change implies that Russian agriculture switched from a situation where producers implicitly subsidize consumers to one where consumers subsidize production through high output prices.

71. Subsidizing production has proven to be an expensive way to develop and protect agriculture. In the United States and the EU, agricultural support has remained high, with producer subsidies totaling about US$17.4 billion and US$95.8 billion, respectively, in 1995. Under the Common Agricultural Policy, support for agriculture in the EU makes up approximately 58 percent of total EU budget expenditures (1993). In transition economies, political pressures have made agricultural subsidies among the most difficult transfers to cut, but as developed economies have found, supply-side support of agriculture has not led to the development of an efficient sector. Instead, it has resulted in over-production and a system dependent upon subsidies to maintain incomes. Consequently, there is pressure in many countries to reduce agricultural support, both in response to fiscal needs and to the push for globalization and harmonization of economic activities (such as through the creation of WTO).

## D. Summary

72. Estonia's liberal trade policy has facilitated high levels of trade, stimulated foreign direct investment (owing to the ability of foreign investors to import inputs and export outputs), and exposed the domestic economy to world market forces. Because of its open trade policy and relatively low levels of subsidization (compared to other transition economies, the EU, and the US), Estonia has effectively imported the world relative price level for tradeables.[43] Thus, domestic industries (in theory) face world relative prices, which in turn should promote the rapid restructuring of markets. In brief, Estonia's fast pace of transition and strong economic recovery since independence is partly attributable to its rapid integration into the world economy.

73. To the extent that Estonia's openness has contributed to an accelerated process of reform in the foreign sector and the domestic economy, a higher degree of protection could slow down the pace of economic transition or perhaps reduce the gains already generated by the existence of markets with few distortions. Although the impact of tariffs on a few food products would be minimal (given that Estonia's imports come mostly from countries with which it has free trade agreements), the introduction of further subsidies to agriculture could have a negative impact on the economy through the fiscal costs and a slowdown in agricultural restructuring.

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[42] A ratio of less than 1 implies that sales revenues exceed production costs. Figures from Brooks et al (1996).

[43] Economic theory states that under a fixed exchange rate regime and with minimal price distortions due to trade policy, an economy's internal relative price level for tradeables should converge to the world relative price level for tradeables.

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# Table 10. Estonia: Protection in Agricultural Products in Estonia, the European Union, and Selected Countries

(In percent, unless otherwise noted)

| | | Baltics | | | CIS | | Central Europe | | Other Countries | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Weight | Estonia | Latvia | Lithuania | Russia | Georgia | Poland | Czech Republic | European Union | United States |
| I. Tariffs | | | | | | | | | | |
| Sausages | 2 | 0 | 55 | 14 | 20 | 12 | 35 | 20 | 24 | 8 |
| Meat | 18 | 0 | 55 | 30 | 15 | 12 | 60 | 30 | 24 | 31 |
| *Of which:* Pork 1/ | 11 | 0 | 55 | 30 | 15 | 12 | 60 | 32 | 24 | 32 |
| Dairy | 21 | 0 | 40 | 20 | 15 | 12 | 80 | 30 | 13 | 20 |
| Butter | 16 | 0 | 55 | 45 | 20 | 12 | 40 | 32 | 13 | 10 |
| Sugar 2/ | 24 | 0 | 20 | 35 | 5 | 12 | 40 | 50 | 20 | 15 |
| Eggs | 1 | 0 | 40 | 30 | 10 | 12 | 45 | 20 | 12 | 0 |
| Potatoes | 1 | 0 | 40 | 20 | 25 | 12 | 50 | 10 | 21 | 0 |
| Poultry | 17 | 0 | 40 | 25 | 15 | 12 | 60 | 18 | 10 | 0 |
| Weighted average | 100 | 0 | 40.6 | 30.2 | 13.6 | 12 | 55.5 | 32.3 | 16.4 | 15.1 |
| II. Subsidies | | | | | | | | | | |
| Producer Subsidy Equivalent 3/4/ | n.a. | -6 | 8 | 42 | n.a. | n.a. | 55 | 40 | 273 | 66 |
| Consumer Subsidy Equivalent 3/4/ | n.a. | 11 | 31 | -35 | n.a. | n.a. | -46 | 4 | -157 | -28 |
| Total transfers to agriculture 5/ | n.a. | 0.4 | 0.9 | 2.2 | n.a. | n.a. | 4.3 | 0.5 | 1.1 | 0.9 |

Sources: Country authorities; and Fund staff, except where noted.
1/ Calculated as ad valorem equivalent of a specific tariff for the United States.
2/ Specific duties also apply for Latvia and Lithuania.
3/ Figures US$ per capita 1995, using period average exchange rate.
4/ Source: OECD, *Agricultural Policies in OECD Countries(1977) and Review of Agricultural Policies: Estonia, Latvia, and Lithuania (1996).*
5/ In percent of GDP, 1995.

## IV. EUROPEAN UNION ACCESSION AND ECONOMIC POLICY

74. The European Commission announced in July 1997 that Estonia would be among the first wave of countries invited to conduct negotiations on membership in the European Union (EU), with the opening round set to begin in 1998. Against the backdrop of the Commission's announcement, this note summarizes recent developments in Estonia's move toward EU accession. The first section presents an overview of the events leading up to Estonia's inclusion in the first group of countries to conduct membership negotiations; the second section chronicles Estonia's progress in preparing for accession; and the third section offers a brief analysis of the implications of EU accession for Estonia.

### A. Background

75. The Estonian authorities have a strong political commitment to integration with the European market economies, and have put at the center of their economic and political objectives a strong wish to join the EU in the first wave of new accession countries. All three Baltic countries applied formally for EU membership in the fall of 1995.

76. The framework for EU membership is set by accession criteria based on economic and political conditions determined by the European Council, as enshrined in Association (or Europe) Agreements signed in June 1995.[44] These criteria are: (1) stability of institutions guaranteeing democracy, the rule of law, human rights, and respect for and protection of minorities; (2) the existence of a functioning market economy, and the capacity to cope with competitive pressures and market forces within the EU; and (3) the ability to take on the obligations of membership (the *acquis communautaire*, i.e., the approximation of laws and standards), including adherence to the aims of political, economic, and monetary union.[45]

77. The process of determining which countries would be invited to become new members began with the EU intergovernmental conference, which opened in March 1996 and concluded at the Amsterdam Summit in June 1997. The EU had asked all associated members to complete an extensive questionnaire to determine which of them would be included in the first wave of membership negotiations. Following analysis of the questionnaires, the EU prepared a package ("Agenda 2000") comprising four important sets of documents on

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[44]The Europe Agreements cover trade-related issues, and political, economic, and cultural cooperation. A key element of the Europe Agreements is the series of bilateral meetings between the EU and each partner country concerning, inter alia, implementation of the pre-accession strategy and intra-regional cooperation.

[45]In addition, the EU itself should show that it can handle new members without slowing the momentum of European integration.

enlargement that set out: (1) the European Commission's (EC) view on individual country applications; (2) an evaluation of the impact of enlargement on EU policies, notably on the Common Agricultural Policy and the regional funds; (3) a draft budget to run from the year 2000 taking into account the prospect of enlargement; and (4) a composite paper bringing together the Commission's overall analysis of the applicants' readiness for membership and the likely effects on the EU.

78. Prior to any Commission decision, the Estonian authorities had strongly insisted that economic not geographical or political factors determine the speed of entry of new members; they had also stated that the Baltic countries need not be admitted as a block, arguing that early admission of one country from the region would benefit all three. In July 1997, the EC recommended that Estonia be invited to begin negotiations in 1998 as one of the first wave of new member countries.[46] This recommendation must be ratified by the existing member countries through the EU Council, which will meet in December 1997; there is now intense lobbying by current members and associated countries not in the first wave for changes to the Commission's recommendation.[47] The EU has not set a firm timetable for accession, but many commentators believe that the earliest accession may not be until the year 2002.

79. As measured by a number of indicators, Estonia has reached an "advanced" stage of transition in terms of status of reforms and development of a solid market-oriented policy framework.[48] For instance, EBRD indicators suggest that the position of Estonia is in keeping with the status of most associated members in central and eastern Europe (i.e., Bulgaria, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, and Slovenia), and contrasts favorably with the status of many other transition economies in the Baltics, Russia, and other republics of the former Soviet Union still at early or intermediate stages of transition.

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[46]The other countries in this category are Cyprus, the Czech Republic, Hungary, Poland, and Slovenia.

[47]Latvia and Lithuania were not chosen to be in the first wave, and have formally taken issue with the Commission's recommendations.

[48]See EBRD *Transition Report 1996*. Since 1994, the EBRD has published a number of indicators of progress in market-oriented reform for 25 countries in central and eastern Europe, the Baltics, and the Commonwealth of Independent States. The indicators, which measure the status of reform rather than the pace of change, cover privatization and enterprise restructuring, price liberalization, the trade and foreign exchange system, competition policy, banking reform and interest rate liberalization, nonbank financial institutions, and the legal framework for investment.

## B. Progress in Transition and Preparation for Accession

### Legislative and Administrative Aspects

80. Estonia has begun work on approximating its legislative framework to move toward economic freedoms that are the basis of the EU's internal market. The EU endorsed in June 1995 a "white paper" on its internal market to help countries make preparations as rapidly and efficiently as possible.[49] In response to the white paper, the Estonian government drew up in June 1996 its "activity plan for joining the European Union", which is a detailed list of all legislative initiatives needed for implementation of the *acquis*. Comprehensive measures in anticipation of membership have been taken, and administrative structures have been established to ensure policy coordination.[50] In particular, the prime minister chairs a ministerial commission that formulates general policy toward the EU and submits proposals to the government.

81. A great challenge for Estonia in the context of EU accession is the large number of administrative and legislative initiatives that are needed at the same time, a task of coordination that will be difficult for the administrative machinery to absorb. These initiatives will mainly have to come in the areas of company legislation and contract enforcement; laws relating to the operation of the financial systems; protection of intellectual property rights; and competition policies. And among the burdens faced by prospective members is the need for EU laws to be translated into their own languages. Estonia's laws must still be aligned with at least 1,000 EU directives, an undertaking that is estimated to cost some EEK 400 million (0.6 percent of GDP).

### Selected Economic Aspects

82. In the EU's view, Estonia has several comparative advantages on the economic front that would help it compete in the single market. The general principles governing the three Baltic Association Agreements are broadly the same, but there is one important exception: in the areas of trade liberalization and competition, Latvia and Lithuania have a transitional

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[49]The white paper is divided into 23 sectors. These sectors cover the free movement of capital and persons, the free movement and safety of industrial products, competition policy, social policy, agriculture, transportation, audio-visual policy, the environment, telecommunications, direct and indirect taxation, public procurement, financial services, personal data, company law, accountancy, civil law, mutual recognition of professional qualifications, intellectual property rights, energy, customs duties and excise taxes, and consumer protection. Also, countries must take account of 1,400 directives that regulate the European common market as well as the EU's voluminous array of legal acts.

[50]To cite just one example, banking prudential regulations in Estonia have been framed to meet or exceed EU standards. See Chapter II on the evolution of the financial sector.

period ending December 31, 1999, whereas Estonia, given the economy's openness, has no transitional period, and set up a free trade area with the EU as of January 1, 1995. In addition, Estonia's light industry is already expanding rapidly (especially in textiles and wood processing); foreign direct investment from Nordic neighbors is helping to modernize the production base; and skilled labor at relatively low wages is abundant. The degree of trade integration and the nature of trade with the EU also imply that Estonia will be well placed to cope with the single market's competitive pressures. However, one should not underestimate the economic progress still to be made (e.g., in the development of the financial sector).

83. The EC's opinion of selected elements of Estonia's economic and financial affairs has, in some cases, a close bearing on Fund policies and programs. Its focus on fiscal issues is mainly on the appropriateness of tax legislation; the EC believes that direct taxes pose no significant problems, but that considerable effort will be needed for the VAT and excises to comply with the *acquis*. Moreover, according to the EC, free movement of goods and capital will not be an obstacle to accession. Much of the legislation in Estonia on free movement of services applies to financial services, and also to the opening of domestic markets in sectors traditionally monopolized (e.g. energy, telecommunications). Although Estonia's financial services sector is well developed, the approximation process is rather slow, both in terms of enactment and actual implementation of regulations; this may make it difficult to integrate to the EU financial market without some reasonable delay. And while Estonia's banking system is governed by legislation based on the EC's Banking Directive, some elements do not fully correspond to EU requirements and must be amended considerably in order to be in full harmonization. The securities market in Estonia is relatively new, and legislation governing its activities requires substantial change, particularly a strengthening of regulatory bodies, before it meets EU requirements in the medium term.

84. The level of banking services in the Baltic countries is lower than that found in western Europe, but in Estonia it is expanding rapidly with the wide availability of automatic teller machines, credit and debit cards, and the advent of banking through the Internet. Estonia had its major banking crisis earlier in the transition process than was the case in Latvia and Lithuania, and the position of Estonian banks appears to have stabilized. They have now begun to widen their sphere of geographical operations by expanding into banking and nonbank financial activities in the neighboring Baltic countries, while the reverse has yet to occur. In terms of asset size, Estonia's top three banks have the largest balance sheets among all Baltic banks, accounting for about 25 percent of total assets in the region.

85. The development of securities markets and nonbank financial institutions in the Baltics has been slower than in other spheres. As a result, there is a clear need for an improved legal and regulatory framework to promote issuance and trading of private enterprise securities. Nonetheless, Estonia has a more vibrant stock exchange than its Baltic neighbors, with rapidly expanding turnover (an average of EEK 200 million per day) as of October 1997 and market capitalization (EEK 20 billion, equivalent to about 30 percent of GDP compared to some 7–10 percent in Latvia and Lithuania). Since 1994–95, many Estonian private and municipal

entities have issued domestic currency bonds and commercial paper.[51] More companies are seeking quotations on the Tallinn stock exchange where the range of available trading instruments continues to widen. Much work is still necessary to harmonize the operating practices of Estonian securities markets with the standards of western European countries. In 1996, and especially in 1997, nonbank financial institutions such as leasing companies, investment funds, and private insurance companies have expanded rapidly in Estonia, sometimes with involvement from foreign institutions, but not always within a well regulated framework (see Chapter II).

86. EU membership implies acceptance of the goals of the European Monetary Union (EMU). Hence, Estonia will have to meet the Maastricht convergence criteria, though not necessarily on accession. These criteria, which must eventually be fulfilled by new members on a permanent basis, are important points of reference for macroeconomic policies. For current EU members to qualify for the EMU (which is due to start on January 1, 1999), the following broad conditions must be met in 1997:

- the rate of inflation cannot be more than 1.5 percentage points above the average of the three best-performing member states;
- long-term interest rates cannot be more than 2 percentage points above the same benchmark;
- the overall fiscal deficit cannot exceed 3 percent of GDP;
- public debt cannot exceed 60 percent of GDP;
- the exchange rate should have observed the normal margins of the Exchange Rate Mechanism of the European Monetary System for the two preceding years.

87. It is premature to judge whether Estonia will be in a position, at the time of accession, to participate in the euro area. However, the EC is of the opinion that Estonia's participation in the third stage of the EMU as a nonparticipant in the euro area should pose few problems in the medium term. In particular, its central bank legislation is already fully compatible with EU rules in that it explicitly prohibits budget deficit financing.

[51]The central government has not made recourse to domestic financing, and the only securities issued by the national government were bonds related to bank recapitalization after the 1992–93 banking crisis.

**Financial Support to Facilitate Accession**

88. In its move towards EU accession, Estonia has taken, and will continue to take, advantage of the PHARE program.[52] The program provides grants, plus policy advice and training, to support partner countries in the process of transforming their economies and strengthening their democracies. Through research studies, capital grants, guarantee schemes, and credit lines, the program acts as a catalyst by unlocking funds from other donors for important projects; it also invests directly in infrastructure together with international financial institutions. The program has been implemented in cooperation with other international institutions to ensure consistency in policy and sector strategy, and to avoid duplication of effort.

89. The PHARE budget is determined by the European Parliament and the EU Council, and after 6 years of operation (1990–95), a total of ECU 5.4 billion (about US$6.2 billion) had been made available to 11 partner countries.[53] The Baltic countries, in the PHARE program since 1992, received ECU 302 million (about US$345 million) during the period 1992–95, mainly in technical assistance for education, training, and research; financial assistance (credit lines for small and medium-sized firms, and financial sector support in the case of Latvia and Lithuania); and limited supplies of equipment. Of this amount, Estonia received ECU 68 million (US$78 million) which went to programs focused initially on macroeconomic stabilization and restructuring, and financial sector development. The program for Estonia also included several strategic studies in energy, the environment, and transportation.

90. For 1996–99, the European Council agreed to raise PHARE's budget to ECU 6.7 billion (US$7.6 billion). Within this budget, the amount allocated to the multi-annual indicative programs (MIPs) prepared for the Baltic countries totals ECU 430 million (US$490 million). These programs, which will be more concentrated than in previous years, are to focus on pre-accession preparations, e.g., medium-term restructuring, infrastructure investment, and regional cooperation. Within a budget of ECU 84 million (US$ 96 million) for 1996–99, Estonia's MIP will emphasize achieving the *acquis communautaire*, and completing market reforms, industrial restructuring, and modernization of the economy.[54] Sector programs will support this work, which will be divided across the fields of European

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[52]PHARE is the acronym for *Poland and Hungary: Aid for Restructuring of Economies*, but the program now covers all central and eastern European associated member countries. Both PHARE and the European Investment Bank are listed under the Europe Agreements as providers of financial assistance.

[53]Data are taken from "The European Commission: The Phare Programme Annual Report 1995."

[54]See "European Commission: Programme and Contract Information 1996 - Estonia."

integration (22 percent), export development (10 percent), regional development (22 percent), public service management (24 percent), and infrastructure development (22 percent).[55]

## C. Implications of EU Accession for Estonia

91. Accession to the EU will open up potential economic benefits and costs to Estonia. First, being part of a large single European market will provide a ready outlet for goods that are already succeeding in penetrating this market, and will continue to impose quality and marketing standards that will strengthen Estonia's competitiveness in other markets. Second, Estonia is likely to feature even more as an attractive location for inward foreign investment (both direct and portfolio) from EU countries. The favorable view of Estonia held by foreign investors will no doubt be enhanced as Estonia obtains international credit ratings and makes clear progress towards EU membership. Third, if Estonia eventually joins the European Monetary Union, it will enjoy the benefits of being in a single currency area. These include exchange rate stability, reduction of currency-related transaction costs, and credibility and discipline in monetary policy.[56] By operating a currency board arrangement, Estonia already derives some of these benefits and may therefore have a smoother transition to the EMU than other countries.

92. Institutions in Estonia will also be strengthened as the process of harmonizing its economic and legal framework with that of the EU is accelerated; in many cases, Estonia is likely to adopt best western European practices. Estonia may also gain from the notion that it has become part of a group of advanced industrial countries, and has done so in a relatively short period of time.

93. The costs to Estonia are related in part to the single currency area and attendant loss of sovereignty over the conduct of monetary policy, which tends to be set by the dominant economic power in the currency area. This may represent a lower cost for Estonia than for other countries given the current link between the kroon and the deutsche mark (and the intention to transfer the link to the euro at whatever euro: deutsche mark exchange rate is established when the single currency is introduced).

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[55]By contrast, Latvia and Lithuania are placing more emphasis on private sector development, agriculture, and social sector and human resources development. All three Baltic countries need to develop better social protection and modern fiscal systems, which will also be supported by assistance through the PHARE program.

[56]A comprehensive review of the issues is provided in Peter B. Kenen (1969), "The Theory of Optimal Currency Areas: An Eclectic View", in *Monetary Problems of the International Economy*, ed. Robert A. Mundell and Alexander K. Swoboda, Chicago, University of Chicago Press, pp. 41-60.

94. Other costs pertain to the need for Estonia to accede to the EU's policy regime with regard to agriculture and external trade. The liberal and open trading system that Estonia adopted at the start of the transition has been an important element in its successful economic development during the 1990s. Estonia will need to decide what level of protection will be consistent with its overall objective of maintaining a liberal and open economic system; similar considerations prevail in the area of external trade.[57] Two key issues will bear upon these decisions, i.e., first, there are valid social reasons to protect people involved in the agriculture sector; and second, significant reform and restructuring of agriculture is needed for it to operate effectively in a competitive environment. It would be preferable that such support be designed in a way that minimizes distortions, and is transparent and well-targeted.

[57]See Chapter III for a fuller discussion of issues related to Estonia's trade policy.

## V. Some Competitiveness Indicators

95. Two commonly used measures of competitiveness are calculated for Estonia in the sections below.[58] The first measure examines competitiveness in terms of the real effective exchange rate (REER), and the second, in terms of labor costs. The evolution of both the REER and labor costs in Estonia is compared with that in selected other countries in order to assess relative loss or gain in competitiveness. The analysis suggests that, although the real exchange rate has appreciated substantially against most trading partner currencies, Estonia is still competitive, mainly as a result of large increases in the productivity of its labor force.

96. *Real Effective Exchange Rate*. Figure 3 shows the nominal and real effective exchange rate with weights corresponding to the share of each country in Estonia's trade. An increase in the real exchange rate index implies an appreciation of the kroon in real terms. The REER indicates that, with the exception of a brief period in the second half of 1995, the kroon has been appreciating against the currencies of Estonia's major trading partners, with an overall appreciation equivalent to about 45 percent between 1994 and the first half of 1997 (Table 11). However, currencies of the other Baltic countries and Russia have also appreciated during this period. The litai (Lithuania) appreciated by 28 percent, the lats (Latvia) by 17 percent, and the ruble (Russia) by 42 percent. Yet, the path of appreciation has been very different across the four countries. Although the kroon appreciated much more than the Latvian or Lithuanian currencies in both 1995 and 1996, the rate of appreciation has slowed down in recent months (Table 12).

Table 12. Estonia: Real Effective Exchange Rate, 1994-97

(Change in percent)

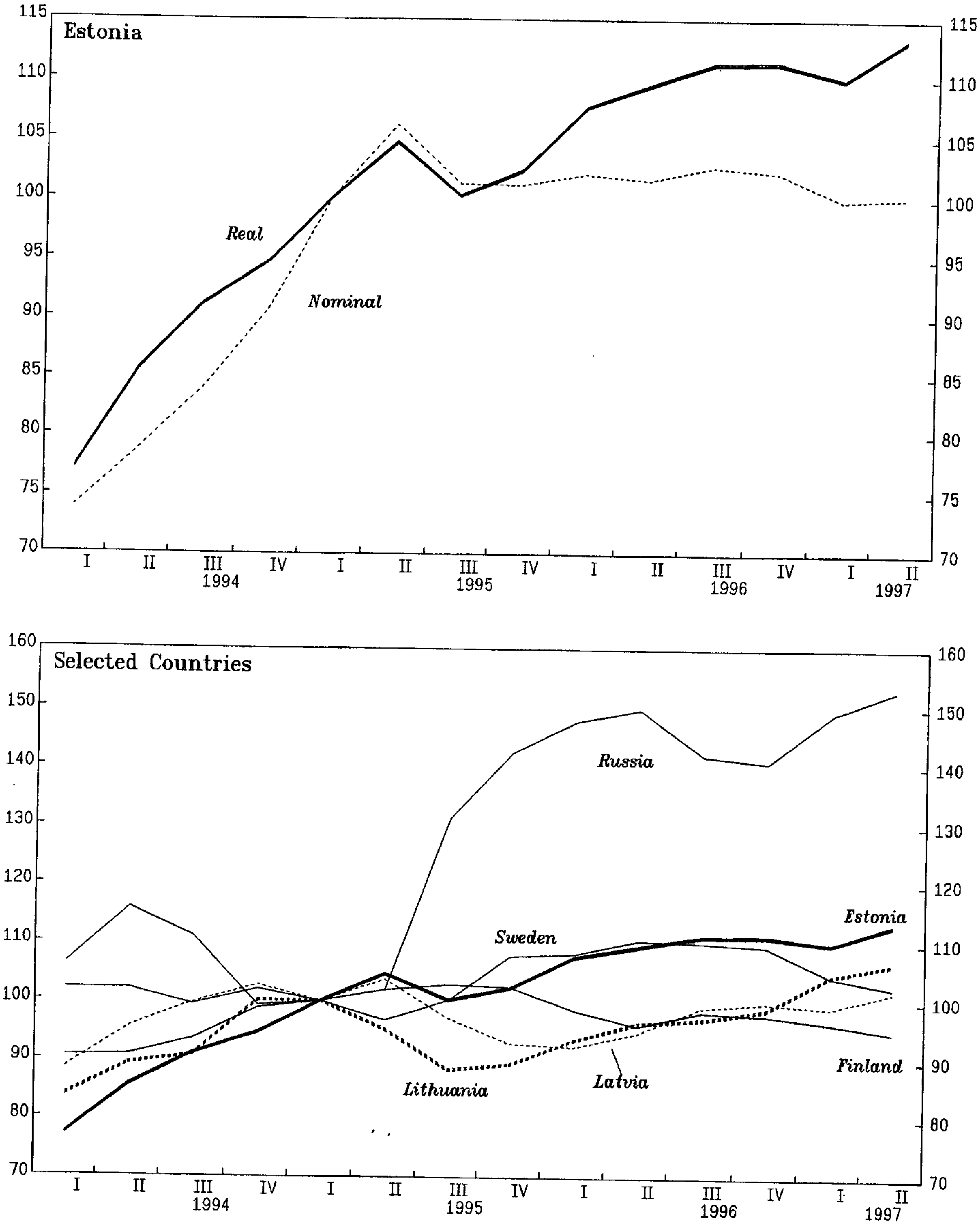
| | Estonia | Latvia | Lithuania | Russia |
|---|---|---|---|---|
| 1994 | 14.6 | 3.4 | ... | ... |
| 1995 | 17.0 | 1.9 | 2.5 | 9.9 |
| 1996 | 8.3 | -1.9 | 3.5 | 22.1 |
| 1997 1/ | 2.4 | 7.3 | 19.3 | 1.6 |

Source: International Financial Statistics.

1/ January-June 1997 compared with January-June 1996.

[58]Measuring competitiveness is a complex issue, particularly in transition economies undergoing structural changes. In this note, we have chosen two relatively simple indicators to examine the underlying trend in Estonia's competitiveness.

Figure 3. Estonia: Real Effective Exchange Rate, 1994-97 1/




Source: Fund staff calculations.
1/ Index 1995Q1 = 100.

97. *Labor Cost Indices.* To better capture the effect of costs, this section looks at competitiveness in terms of labor costs. Table 13 shows U.S. dollar wages, and Table 14 real wages for Estonia, Latvia, Lithuania, and Russia. Dollar wages in Estonia are still low by western standards, though they are higher than in the other Baltic countries and Russia. The same is true of real wages: while real wages increased by about 16 percent in the other two Baltic countries and declined in Russia between 1994 and the first half of 1997, they increased by 28 percent in Estonia during this period. At the same time, labor productivity in Estonia rose by over 20 percent during this period so that unit labor costs have increased only marginally (Figure 4). This remarkable growth in labor productivity is mostly attributable to enterprise restructuring which has resulted in the replacement of old capital with modern machinery and equipment, financed in large part by foreign direct investment coming through joint ventures with a number of countries (principally Finland, Sweden, and Germany).

98. *Growth in Exports and Competitiveness.* Finland, Sweden, and Russia are the three major trading partners of Estonia, accounting for almost 50 percent of total exports. The kroon has appreciated in real terms against both the currencies of Finland and Sweden, and has remained fairly constant with respect to that of Russia. Yet Estonia has gained market shares in Finland and Sweden vis-à-vis other European countries (Table 15). Exports (in kroon terms) to Finland and to Sweden increased by 46 percent and 63 percent, respectively, during the first half of 1997 compared with the same period last year. Estonia's market share in Russia has declined marginally. The consistent increase in the share of and rapid reorientation of trade to industrial countries suggests that Estonia has been able to increase its competitiveness, and that labor productivity gains have outweighed the effects on exports of real effective exchange rate appreciation.[59]

Table 15. Estonia: Market Share of Exports to Major Trading Partners, 1994-96 1/

(In percent)

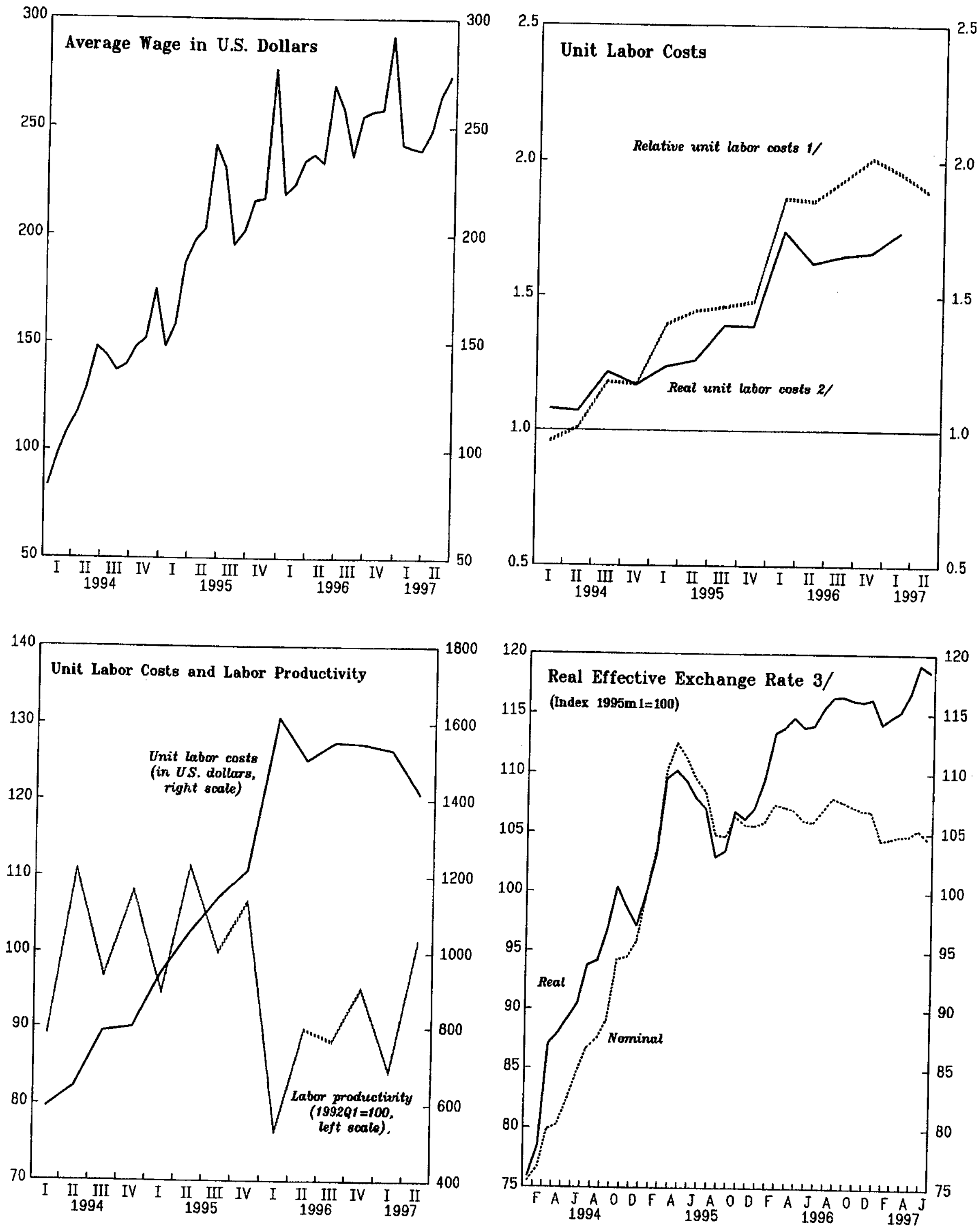
| | 1994 | 1995 | 1996 |
|---|---|---|---|
| Finland | 17.5 | 20.4 | 19.6 |
| Sweden | ... | 3.9 | 4.4 |
| Russia | 1.3 | 1.4 | 0.8 |

Source: *Direction of Trade Statistics.*

1/ Measured as ratio of Estonian exports to exports from Europe.

[59]The rapid appreciation of the U.S. dollar vis-à-vis the deutsche mark—and thus the Estonian kroon which is pegged to the DM—complicates the interpretation of balance of payments developments in 1996. However, the relative stability of the DM with respect to the other currencies of the European Union (which represents an increasing share of Estonia's trade) transfers significant benefits to Estonia and will continue to do so following EMU.

Figure 4. Estonia: Competitiveness Indicators, 1994-97 1/




Sources: OECD; Estonian authorities; and Fund staff estimates.
1/ Based on major trading partners' unit labor costs (in U.S. dollars).
2/ Kroon unit labor cost deflated by the consumer price index (1993 Q1=100).
3/ Based on trade weighted CPI.

## Table 11. Estonia: Real Exchange Rate Index, 1994-97
(1995Q1 = 100)

| | Germany | United States | Finland | Russia | Sweden | Latvia | Lithuania | Czech | Poland |
|---|---|---|---|---|---|---|---|---|---|
| 1994 | | | | | | | | | |
| Q1 | 131.4 | 151.7 | 125.5 | 133.0 | 140.2 | 114.4 | 108.5 | 129.4 | 131.2 |
| Q2 | 118.2 | 131.5 | 112.2 | 120.9 | 124.9 | 106.2 | 100.9 | 115.6 | 117.1 |
| Q3 | 112.8 | 118.3 | 107.7 | 110.7 | 113.6 | 102.3 | 97.3 | 109.7 | 109.4 |
| Q4 | 106.4 | 110.8 | 107.9 | 99.6 | 111.0 | 99.9 | 98.8 | 105.9 | 106.6 |
| 1995 | | | | | | | | | |
| Q1 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Q2 | 94.7 | 89.6 | 95.3 | 98.0 | 90.8 | 99.0 | 93.8 | 94.3 | 95.7 |
| Q3 | 90.3 | 87.6 | 92.5 | 124.2 | 89.8 | 95.5 | 95.9 | 91.4 | 92.8 |
| Q4 | 84.8 | 82.3 | 86.7 | 129.7 | 90.6 | 91.8 | 97.4 | 87.3 | 89.4 |
| 1996 | | | | | | | | | |
| Q1 | 78.9 | 79.1 | 78.3 | 131.1 | 85.1 | 92.0 | 101.1 | 83.9 | 89.1 |
| Q2 | 75.8 | 79.0 | 74.7 | 132.0 | 85.0 | 92.5 | 104.0 | 82.7 | 87.6 |
| Q3 | 75.3 | 77.5 | 75.9 | 124.4 | 83.6 | 91.9 | 102.1 | 85.2 | 84.9 |
| Q4 | 74.1 | 78.6 | 75.6 | 124.0 | 83.7 | 94.1 | 104.3 | 85.7 | 86.2 |
| 1997 | | | | | | | | | |
| Q1 | 72.6 | 83.5 | 74.1 | 133.1 | 79.8 | 98.7 | 114.7 | 88.4 | 90.9 |
| Q2 | 69.8 | 82.6 | 70.8 | 133.8 | 76.1 | 98.0 | 114.4 | 80.2 | 87.3 |

Sources: Estonian authorities; and Fund staff estimates.

Table 13. Estonia: Nominal Wages, 1994-97
(In U.S. Dollars)

| | Estonia | Russia | Latvia | Lithuania |
|---|---|---|---|---|
| 1994 | | | | |
| Q1 | 102 | 93 | 113 | 83 |
| Q2 | 131 | 100 | 132 | 87 |
| Q3 | 140 | 110 | 144 | 92 |
| Q4 | 169 | 94 | 167 | 105 |
| 1995 | | | | |
| Q1 | 176 | 77 | 168 | 109 |
| Q2 | 214 | 87 | 192 | 125 |
| Q3 | 206 | 118 | 187 | 132 |
| Q4 | 237 | 143 | 197 | 151 |
| 1996 | | | | |
| Q1 | 226 | 146 | 181 | 163 |
| Q2 | 247 | 158 | 198 | 167 |
| Q3 | 250 | 160 | 203 | 173 |
| Q4 | 269 | 164 | 218 | 185 |
| 1997 | | | | |
| Q1 | 236 | 150 | 211 | 187 |
| Q2 | 263 | 160 | 225 | 205 |

Sources: International Financial Statistics; and Fund staff estimates.

Table 14. Estonia: Indices of Real Wages, 1994-97 1/
(1995Q1 = 100)

| | Estonia | Russia | Latvia | Lithuania |
|---|---|---|---|---|
| 1994 | | | | |
| Q1 | 91 | 143 | 92 | 96 |
| Q2 | 100 | 144 | 99 | 95 |
| Q3 | 95 | 155 | 101 | 95 |
| Q4 | 109 | 137 | 111 | 99 |
| 1995 | | | | |
| Q1 | 100 | 100 | 100 | 100 |
| Q2 | 108 | 103 | 103 | 103 |
| Q3 | 102 | 107 | 101 | 103 |
| Q4 | 109 | 116 | 103 | 104 |
| 1996 | | | | |
| Q1 | 99 | 111 | 90 | 107 |
| Q2 | 107 | 119 | 97 | 107 |
| Q3 | 105 | 124 | 98 | 109 |
| Q4 | 115 | 129 | 103 | 110 |
| 1997 | | | | |
| Q1 | 106 | 115 | 101 | 107 |
| Q2 | 116 | 121 | 106 | 112 |

Sources: International Financial Statistics; and Fund staff estimates.

## SUMMARY OF THE TAX SYSTEM[1]
(As of October 1, 1997)

### I. Personal Income Tax
(Income Tax Law, effective January 1, 1994)

#### A. Tax Base

1. Residents pay tax on their worldwide income. Taxable income includes, in particular, income from employment (salaries, wages, bonuses and other remuneration); business income; investment income (interest,[2] royalties, and rent); gains from disposal of assets; pensions and scholarships (except state pensions and state scholarships) and alimony payments received.[3] Taxable income does not include dividends, which are subject to a final tax as part of enterprise income. Unilateral relief for double taxation, if income derived from abroad, is available in the form of ordinary tax credit for tax paid abroad. The credit is limited to the Estonian tax computed on the item of income. If the income is derived from several foreign countries, the computation is made separately for each country.

2. Nonresidents pay tax on their income from Estonian sources as listed in the Income Tax Law: income from work under a labor contract or contractor's agreement in Estonia; income from a business carried on in Estonia; dividends paid by Estonian companies; interest payable by the Estonian state and residents; income from loans secured by immovable property located in Estonia; royalties (authors' remuneration, income from the sale or other use in Estonia of a patent, work protected by copyright, trade mark, software, information, and know-how); income from the lease of assets located in Estonia; and gains from disposal of assets located in Estonia.

#### B. Exemptions

3. For resident persons, there is a basic exemption of EEK 6,000 (since January 1, 1996, formerly EEK 3,600) during the period of taxation. The following income of such persons is not subject to tax: dividends taxable under the Income Tax Law; certain capital gains; state pensions and state scholarships; fringe benefits; indemnification paid to an employee for work accidents; per diem and accommodation reimbursements for business trips; compensation for the use of private vehicles; amounts paid to employees to cover representation costs; insurance

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[1]This summary reflects comments from the Ministry of Finance.

[2]Provisions for taxing interest paid to resident persons by credit institutions became effective on January 1, 1995.

[3]The enterprise or employer pays income tax on the price of fringe benefits provided; for persons, fringe benefits are tax-free.

proceeds and other payment received under insurance contracts; child allowances and other subsidies and compensation paid from the State, local, or Social Insurance budgets; inheritances and gifts received; assets restituted in the course of property reform; and lottery winnings; compensation prescribed by law or established by the Government of the Republic of Estonia and international cultural and scientific awards and prizes; assets distributed in the course of property reform; expropriation payments and compensation received for expropriation.

4. Persons whose income is not subject to taxation comprise: foreign diplomatic representatives, consular representatives, special or diplomatic missions, representatives of international or intergovernmental organizations and cooperation programs exercising their official functions in Estonia, plus persons employed with them who are not citizens or permanent inhabitants of Estonia. The above mentioned persons, with the exception of the members of representations of cooperation programs must, be registered in the Ministry of Foreign Affairs.

5. Not subject to tax is the documented taxable income derived by a natural person from the realization of self-produced, unprocessed agricultural products in 1995 up to the amount of EEK 35,000.

## C. Rate Structure

6. There is a general flat rate of 26 percent of taxable income. Since January 1, 1996, interest income paid by resident credit institutions to natural persons is subject to a flat rate of 10 percent. The withholding tax rate on rental payments is 5 percent. The withholding tax rate on royalties, payments to nonresidents for services provided in Estonia, and payments to nonresident artists and sportsmen is 15 percent. The period of taxation is the calendar year.

7. Employment income is subject to a withholding tax at the general rate of 26 percent. The withholding agent (enterprise or employer) has the obligation to remit the relevant amounts to the tax authority monthly. A tax payer who has only income from one place of employment on which income tax has been withheld or whose annual income does not exceed EEK 6,000 has no obligation to file a tax return. Otherwise, tax returns are due by March 31 of the year following the period of taxation.

## D. Tax allocation

8. From January 1, 1996, tax revenue from income tax of persons accrues by 44 percent of the yield to the state budget and by 56 percent of the yield to the local budget of the local authorities of the place of residence of the taxpayer. Formerly, the allocation was 48:52 percent, respectively.

## II. Enterprise Income Tax

(Income Tax Law, effective January 1, 1994)

### A. Eligibility

9. Resident or nonresident enterprises whose income is subject to taxation under the Income Tax Law. Legal entities are residents in Estonia if they are registered there. Limited partnerships are taxed as separate taxable entities. Income on a general partnership with more than 10 partners or with a nonresident partner, are also taxed as separate taxable entities.

### B. Tax Base

10. Residents pay tax on their worldwide income (see I above). Dividends are subject to a final tax at the general rate of 26 percent, but the company making the distribution will be entitled to set off any tax charged against its corporate tax liability during the same tax year or following tax years. Also a company owning 5 percent or more of the capital stock of another company or investment fund establishes a dividend account into which it shall add the net amount of dividends (dividend on which income tax has been charged) distributed to the company as the owner, by the other company. When making dividend distributions to its own stockholders or shareholders the amount of dividends to be distributed is deducted from the dividend account, whereby the amount is not subject to income tax. Dividends received by a resident company from abroad are generally taxable in Estonia and credit is granted for withholding tax paid abroad. Fringe benefits provided are subject to withholding tax at the flat rate of 26 percent.

11. In making dividend distributions to shareholders, an enterprise is obliged to pay income tax equal to 26/74 of the amount of the dividends.

12. Nonresidents pay tax on their income from Estonian sources, as listed in the Income Tax Law (see I above).

### C. Deductions

- Documented expenses incurred in relation to entrepreneurship during the taxation period, including expenses for training and retraining of employees as well as losses from disposal of assets, and tax withheld on dividends distributed.

- Annual depreciation of fixed assets used in entrepreneurship: up to 8 percent for each building, construction and their structural components; up to 40 percent of the "adjusted cost" of the pool of other depreciable assets (less the selling price for assets disposed of).

- Expenses made to improve, repair, and supplement fixed assets may be deducted up to 5 percent of the adjusted cost (on the last day of the previous tax period) of the fixed asset/pool of fixed assets.

- Charitable contributions, up to 10 percent of taxable income after deductions to societies, associations, and other organizations not generating income.[4] Reserve funds created by credit institutions to cover losses up to 5 percent of loan portfolio: as the loan portfolio is reduced, the amount of the "excess" tax exempt reserve fund is treated as income.

- Entertainment expenses and other expenses not directly related to entrepreneurship are regarded as expenses not directly related to entrepreneurship. Up to 2 percent of such expenses (less allowable deductions) may be deducted.

13. If deductions exceed income in taxation period, the excess may be carried forward up to five tax periods.

## D. Exemptions

- Non-profit societies, associations and organizations.

- Production enterprises of societies for disabled persons.

- Intergovernmental organizations and representations of cooperation programs; non-profit associations and foundations established by foreign governments under intergovernmental agreements and registered in such foreign countries, operating in Estonia.

## E. Rate Structure

14. Flat rate of 26 percent of taxable income. Insurance companies pay 4 percent tax on premiums accrued during the period (except life, pension, and health insurance, where the tax is 1 percent of insurance payments). The period of taxation is the calendar year or business year (if different to the calendar year). Advance payments of taxes are made monthly. From January 1, 1997, advance payments are 1/12 of the income tax calculated in the income tax return for the previous tax period.[5]

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[4]The list of these organizations is confirmed by the Government.

[5] Prior to this date, first and second quarter payments were equal to 1/9 of the income tax calculated in the income tax return for the first 9 months of the previous period of taxation; third and fourth quarter payments were equal to 1/12 of the income tax calculated in the annual tax return for the previous period of taxation.

### F. Incentives

15. None.

### G. Tax Allocation

16. Tax accrues wholly to the state budget. Tax is administered by the National Tax Board.

## III. VALUE-ADDED TAX (VAT)

(Law on Value-Added Tax, effective January 1, 1994)

### A. Eligibility

17. Enterprises whose taxable supply exceeds EEK 250,000 in a calendar year.

### B. Tax Base

18. Tax is charged on transactions in goods and services in Estonia and on importation of goods (excluding exemptions).[6]

### C. Exemptions

- Services exempt are: education; public mail; medical and health-related; funeral and related; banking and insurance; organization of gambling; lottery tickets; letting of housing; and treatment of dangerous waste; municipal public sauna services.

- Goods exempt include: medicines, health equipment and medical diagnostic goods.

- Goods imported by persons with diplomatic status, etc., or certain other goods and services purchased by such persons (as determined by the Ministry of Finance). Assets imported for nonprofit purposes (as determined by the Government of Estonia).

- Goods imported by individual persons subject to certain limits set by the Ministry of Finance.

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[6]Transactions include sales, exchanges, disposal of assets, consumption by person liable for VAT, letting, hiring or leasing.

### D. Rate Structure

19. The tax rate is 18 percent of taxable value.[7] The VAT rate is zero for: (1) exports; (2) subscribed periodicals published and printed in Estonia; (3) tickets of theaters registered in Estonia; (4) textbooks and workbooks for basic schools and gymnasiums; (5) goods and services sold to non-profit associations and foundations registered in Estonia, and to budgetary state and local government institutions for money granted to these juridical persons and institutions as foreign loans and as unrecoverable foreign aid by organizations found in a list provided by the Government of the Republic of Estonia; and (6) tickets for concerts of state concert organizations.[8] The tax period is the calendar month and VAT returns are due to be filed by the 20th day of the month following the relevant period.

### E. Tax allocation

20. Tax accrues wholly to the state budget. Registration of enterprises is undertaken by the National Tax Board, which also administers VAT on domestic goods and services. The Customs Board administers the tax for imports.

## IV. SOCIAL TAX

(Law on Social Tax, effective January 1, 1991; major changes effective April 1, 1994)

### A. Tax Base

21. Employers' payments in cash and in kind made to persons. Natural persons pay tax on income derived from entrepreneurship, but for each insurable person able to work not less per month than the amount calculated from the official minimum wage, and not more than the amount calculated from fifteen-fold minimum wage.

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[7]This is either the selling price for goods and services; the "fair market price" (excluding VAT) for goods exchanged without full payment; or the customs value for imported goods. Also, the National Tax Board may determine the fair market price to be the taxable value if it establishes that the reported taxable value is less than the "fair market price".

[8]Until June 30, 1998, the rate of VAT charged on thermal energy sold to the public, churches and institutions financed by the state and local budgets is zero. Until June 30, 1998, the VAT rate charged on peat, briquettes, coal and firewood sold to the public is zero.

### B. Tax Rates

22. Social tax rate is 33 percent of the taxable amount, with effect from April 1, 1994. Taxes are due monthly and paid by the 20th of the following month.

### C. Tax Allocation

23. The rate of the part accruing to the national social insurance budget is 20 percent; the rate of the part accruing to the national health insurance budget is 13 percent.[9] Enterprises of the societies of the disabled, sate and municipal establishments and establishments providing long-term care where at least half of the employees are disabled persons, as well as enterprises engaging in occupational therapy for the mentally disabled, operating under state license, pay 23 percent of the taxable amount (10 percent for social insurance, 13 percent for health insurance). The tax is administered by the National Tax Board and the National Social Insurance Board.

## V. LAND TAX

(Law on Land Tax, effective July 1, 1993)

### A. Eligibility

24. National land tax is paid on all land except: (1) where economic activity is prohibited; (2) land attached to buildings of diplomatic or consular missions of foreign countries; (3) cemeteries and land under churches and temples of congregations; (4) land in state ownership; (5) land used by foreign country or international organization; (6) land in general use and reserve land of the local authority on the decision of the Government of Estonia. In addition, local land tax is not paid on land in municipal ownership or land in general use based on the decision of the local authority.

### B. Tax Base

25. Taxable value determined by Law on Land Value.

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[9]These budgets are adopted by parliament at the same time as the state budget.

### C. Exemptions

26. Arable land for producing agricultural products and natural grassland are exempt from national land tax until December 31, 1997.

### D. Tax Rates

27. Land tax rate is 0.5-2.0 percent of taxable value. Tax on land where economic activity is restricted by law is charged either at 25, 50, or 75 percent of the tax rate. Taxes are paid quarterly, on 15th of February, May, August, and November.

### E. Tax Allocation

28. The tax accrues 100 percent to local budgets of the primary level local authority. The tax is administered by the National Tax Board.

## VI. GAMBLING TAX

(Law on Gambling Tax, effective November 1, 1992; amendments effective February 1, 1996)

### A. Eligibility

29. Income from operating games of skill, totalizator, betting, and lotteries. Gambling boards and machines used for games of chance located on licensed premises.

### B. Tax Base

30. Stakes from which winnings paid out have been deducted. Tax paid by authorized operators. Tax period is on month for lotteries, and games of chance or skill. For totalizator, period is the betting period (which must be within the same financial year). Tax declaration (even if no taxable income) and tax settlement are due by 15th day of calendar month following tax period.

### C. Tax Rate

31. For games of chance rate is EEK 3,000 per gambling machine and EEK 10,000 per gambling board. For operating betting rate is 30 percent; for totalizator rate is 5 percent; for games of skill rate is 18 percent; and for lotteries rate is 16 percent.

### D. Tax Allocation

32. For operating games of chance, skill, betting and totalizer, five percent of tax is transferred to relevant local budget where gambling premises located. Of the revenues accruing to the state budget from these same activities, 30 percent accrues to the Fund of Estonian National Culture, and 7 percent to the Estonian Red Cross, by the 25th of the month after collection. The remaining 63 percent shall be used to support programs directly assisting children, families, the elderly and disabled persons. Revenue from lotteries accrue to the state budget and for targeted use (mainly cultural and communal subsidies). Revenue from lotteries operated to finance specific programs or events shall be used only for those purposes. The tax is administered by the National Tax Board.

### E. Excise taxes[10] [11]

## VII. TOBACCO

(Law on Tobacco Excise Tax, effective January 1, 1995[12])

33. Tobacco products (smoking tobacco, cigarettes, Russian cigarettes, cigars, cigarillos, snuff, chewing tobacco, other unspecified tobacco products) manufactured in Estonia or imported into Estonia are subject to the excise tax.[13]

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[10]The Minster of Finance may raise excise tax rates, whenever he desires, according to changes in the Consumer Price Index.

[11]Excise on fur sales became invalid from January 1, 1996.

[12]Replaced the previous law which had been in effect since August 1, 1992.

[13]Excluding the amounts that persons are allowed to import duty-free.

34. Distribution of tobacco products without tax revenue stamps is prohibited. The sale of tobacco products by piece (except cigars), unpacked or out of an open consumer package is forbidden.

35. Revenue accrues into the state budget: 3.5 percent of the receipts are transferred to the Estonian Cultural Endowment Fund; of this, 0.5 percent goes to the physical culture and sports foundation. Tax is paid by the Estonian manufacturer or the importer, as appropriate. Excise tax is paid upon purchase of tax revenue stamps, the price of which constitutes the excise tax rate. Enterprises licensed to produce, import, or export tobacco products have the right to purchase tax stamps. The Ministry of Finance adjusts the tax rate according to the consumer price index. Excise tax paid is refunded to the purchaser of the stamp upon return of a ruined revenue stamp or in case the tax stamp is destroyed in the presence of a representative of the Tax Board.

36. Excise tax is not charged on tobacco products that are exported; or that are in transit through Estonia; or which are sold upon departure from Estonia after passing, and upon arrival to Estonia before passing, customs and passport controls; or owned by juridical foreign persons and admitted temporarily (subject to re-exportation in the same state) in limited amounts for display at exhibitions, fairs and shows.

37. The Ministry of Finance prescribes the order of issuing, using, returning and paying for tax stamps. The tax is administered by the National Tax Board and the Customs Board. Rates are EEK 3 for each unit of taxable products, which are: filtered, unfiltered, and Russian cigarettes; cigarillos; cigars; smoking tobacco; snuff; chewing tobacco; and other tobacco products.[14]

## VIII. Motor Fuel

(Law on Motor Fuel Excise Tax, effective July 1, 1993)

38. Excise tax is imposed per liter and per kilogram, on petrol (EEK 1.8 per liter and EEK 2.4 per kilogram), diesel oil (75 sents per liter and 89 sents per kilogram), aviation kerosene (EEK 2.3 per liter and EEK 2.87 per kilogram), aviation gasoline (EEK 2.3 per liter and EEK 3.15 per kilogram), liquid gas used as motor fuel (EEK 1.1. per liter and EEK 2.0 per kilogram), compressed gas used as motor fuel (EEK 1.1 per cubic metre and EEK 1.1 per

[14]For cigarettes, cigarillos, and Russian cigarettes rate of EEK applies to a package up to 20 pieces; a package containing 21-40 cigarettes or cigarillos carries two revenue stamps (EEK 6), etc.. For cigars, rate of EEK 3 applies to one cigar. For smoking tobacco, snuff, chewing tobacco and other tobacco products, rate of EEK 3 applies to up to 50 grams of the product; a package containing 51-100 grams is marked with two stamps (EEK 6), etc..

kilogram) as well as lubricated motor oil (20 sents per liter and 22 sents per kilogram) imported into Estonia and produced in Estonia.

39. Tax is imposed on imported motor fuel and oil. Motor fuel produced in Estonia which is exported is exempt from tax, as is fuel contained in vehicle standard tanks. The producer of motor fuel and oil as well as the importer of liquid and compressed gas used as motor fuel pays excise tax upon sale, exchange, transfer (including as fringe benefits), or own-consumption.

40. Refunds are provided to diplomatic and consular missions of foreign countries as well as representatives of international organizations and cooperation programs and persons with diplomatic status.

41. Tax revenue accrues to the state budget. The tax on domestic goods and on imported liquid and compressed gas used as motor fuel is administered by the National Tax Board. The Customs Board administers the tax on imported motor fuel and oil, except liquid and compressed gas used as motor fuel.

## IX. ALCOHOL

(Law on Alcohol Excise Tax, effective April 1, 1992)

42. Excise tax is imposed on all wine, beer, spirits, and alcoholic beverages produced in Estonia or imported into Estonia (less any duty-free allowances). Tax accrues to the state budget; 3.5 percent of excise tax receipts shall be transferred to the Estonian Cultural Endowment Fund.

| **Beer** | **Duty rate per liter (in EEK)**[15] |
|---|---|
| Production < 500,000 decaliters | |
| < 4.7 percent alcohol | 2.00 |
| > 4.7 percent alcohol | 2.50 |
| Production> 500,000 decaliters and < 2 million decaliters | |
| < 4.7 percent alcohol | 3.00 |
| < 4.7 percent alcohol | 2.50 |
| Production > 2 million decaliters | |
| < 4.7 percent alcohol | 3.50 |
| > 4.7 percent alcohol | 3.00 |

[15] As of December 1, 1996.

**Alcoholic beverages and spirits**

*Imported*

| | |
|---|---|
| Sparkling/other wines, alcoholic content < 15 percent | 10.40 |
| Sparkling and other wines (including vermouth), alcoholic content more than 15 percent | 15.60 |

Other fermented drinks and their blends (per one percent volume of alcohol per liter):

| | |
|---|---|
| • Alcoholic content <15 percent volume | 4.90 |
| • Alcoholic content >15 percent volume | 6.50 |
| • Other alcohol | 1.15 |

| | |
|---|---|
| Rectified spirits used in medicine, pharmaceutics, science, study, and production of perfumery (per one percent volume of alcohol) | 0.20 |

43. National Tax Board administers excise taxes on domestic production, while the Customs Board administers excise taxes on imports.

## X. Packaging

44. Packages filled in Estonia and imported into Estonia are subject to the excise tax.

45. Fifty percent of the excise tax receipts accrue to the state budget, and 50 percent to the Environment Fund.

46. The tax is paid by the importer of packages or by the user of packages, i.e. who fills packages with goods.

47. Excise tax exemptions are similar to those for other excisable goods, and in addition, the excise tax is not charged on packages of which at least 40 percent is recovered until December 31, 1998 and on packages of which at least 60 percent is recovered as of January 1, 1998.

48. The National Tax Board administers the tax on domestic packages, and the Customs Board administers the tax on imported packages.

| Taxable packaging | Excise tax rate in EEK 1/ | |
|---|---|---|
| Alcohol packaging | Per packaging | Per litre |
| Glass and ceramics | 0.50 | 2.00 |
| Plastic | 1.00 | 2.00 |
| Metal | 0.75 | 2.00 |
| Other | 0.25 | 1.00 |
| Nonalcoholic beverages packaging | | |
| Glass and ceramics | 0.50 | 2.00 |
| Plastic | 1.00 | 2.00 |
| Metal | 0.75 | 2.00 |
| Other | 0.25 | 1.00 |

1/ Excise tax shall be computed for both rates and added up.

## XI. MOTOR VEHICLES

(effective April 1, 1995)

49. From April 1, 1995 the customs duty on automobiles, snowmobiles and motorcycles was replaced with a motor vehicle excise duty, determined by engine capacity and age of vehicle. Rates are EEK 1 per cubic centimeter (with some minor exceptions) up to 3,000 cubic centimeters and EEK 3 per cubic centimeter thereafter. Rates determined by age are (1) EEK 1000 for new motor vehicles; (2) EEK 100 per year for used motor vehicles, up to 12 years; and (3) for used vehicles, EEK 150 per year for 13 and more years.

## XII. STATE FEES

(Law on State Fee, effective January 1, 1991, substantially amended April 1, 1994)

### A. Eligibility

50. State fees are paid by persons and legal entities according to established tax rates for performing judicial procedures and issuing documents. Namely, filing applications for legal proceedings; witnessing copies, authenticating signatures, and powers of attorney; registration

of deeds relating to personal status; issuing entry visas, residence and work permits; registration and re-registration of enterprises; submitting applications for the import or export of goods and the state operating license; issuance of an operating permit or certificate of registration; issuance of hunting certificate; procedures relation to registering acquisition of real estate; procedures performed in the Patent Department or to keeping in force documents to protect industrial property; registration of ships and civil aircraft; notary and other procedures performed in overseas representations; procedures relating to citizenship and passports; and other specified procedures.

## B. Tax Rates

51. Rates are specified by law and the fee is paid before submitting the application, executing the procedure, or issuing the document. Fees are either a flat amount or a percentage of the value involved. If one party is exempt, the whole fee is paid by the other party.

52. Reimbursement is made: if the fee paid exceeds the required amount; if the court or relevant office returns the application or refuses to accept it or complete the registration; if the court proceedings are stopped or the suit is not reviewed, or if the plaintiff has not complied with a prior order for resolving the dispute, or if filed by person not qualified to dispose of property; if a court decision is invalidated; if the amount claimed, on which fee has been paid, is adjusted; and in other situations determined by the government.

## C. Exemptions

- For court proceedings, plaintiffs in cases relating to labor remuneration, copyright, innovation or invention, alimony payments, or recovery of damages for bodily injury, other ailment or death.

- Social security agencies in cases related to compensation or pension payments.

- Plaintiffs and defendants in civil cases reviewed with criminal cases.

- Plaintiffs and defendants in disputes over recovery of damages because of illegal arrest or security measures, administrative penalty, or conviction under criminal law.

- Persons and legal entities for documents issued to them pertaining to criminal and alimony cases.

- Plaintiffs and defendants in cases pertaining to property restitutions.

- Internal affairs agency plaintiffs in cases related to collection of expenses for searching persons avoiding payments.

- National Tax Board for submitting applications related to special court procedures.

- Citizens for complaints related to errors in the electoral register.

- Plaintiffs in cases related to collection of income derived from forests.

- Prosecuting and governmental agencies, institutions, enterprises, organizations and persons in cases related to protection of individual rights.

- State nature protection agency plaintiffs in cases related to recovering damages for polluting the environment and wasteful use of natural resources.

- State Competition Department plaintiff in cases related to collecting unearned income and penalties from violating price regulations or failure to fulfill compulsory notices.

- Bankruptcy trustee plaintiffs in cases related to recovery of assets under the Law of Bankruptcy.

- For notary procedures performed by municipalities and towns (until November 1, 1995), persons issuing documents for compensations and state pensions, and cases related to tutelage, custody and adoption.

- Public organizations, finance agencies and persons for issuance of certificates related to property inheritance.

- Persons registering births, deaths, adoption, or paternity, where matters fall outside jurisdiction of registry offices; or divorcing missing person or who had been declared mentally incapable of deciding.

- State cadastral registry office and government institutions for procedures pertaining to registering acquisition of real estate.

- Procedures relating to relinquishing ownership of real estate, canceling groundless entry, and entry made on the basis of a court decision.

### D. Tax Allocation

53. State fees accrue to the State budget. Institutions charging fees are controlled by their superior bodies and by the National Tax Board.

## XIII. CUSTOMS DUTIES

(Order of Levying Customs Duty, effective February 19, 1992)

54. A state fee of EEK 200 per customs declaration is levied.

55. Duties accrue to the state budget. The duties are administered by the National Customs Board.

| | Rate of duty (In percent) |
|---|---|
| **Imports** | |
| Furs and fur products | 16 |
| Yachts, motor launches, water motor skis | 10 |
| **Exports** | |
| Items of cultural and antiquarian value, including cars and other motor vehicles (produced before 1950) | 100 |

## XIV. TAXES ON NATURAL RESOURCES

(Law on Environment Protection, effective 1993)

### A. Tax Base

56. Individual taxes covering the exploitation of minerals, building material, peat, oil shale and agricultural land forest, as well as use of water; a pollution tax for pollution of air, contamination of water, and storage of waste.

## B. Exclusions

57. Land reserved for special purposes (e.g., educational, cultural or infrastructural purposes), sea water/waste water/fish breeding water.

## C. Tax Rates

*Minerals, building materials*: 18 different minerals have been identified to which tax rates of EEK 0.10-EEK 3.80 per cubic meter are applicable.

*Peat*: Five different kinds have been identified to which tax rates of EEK 0.20-EEK 0.30 per metric ton are applied.

*Oil shale*: EEK 0.50 per metric ton.

*Water*: Surface water: EEK 0.01-0.02 per cubic meter; subsoil water: EEK 0.02-0.06 per cubic meter; mine water: EEK 0.05 per cubic meter.

*Water pollution*: Tax rates vary from EEK 150 per metric ton (sulfates) to EEK 4,200 per metric ton (phenols).

*Waste storage*: Tax rates vary from EEK 0.10-3,000 per metric ton.

*Nonagricultural land compensation*: Specific rates depending on the nature of land exploitation (e.g., sewer and communications systems, scientific and social/cultural infrastructure), location (in town center, suburbs or other areas of historical/cultural importance), and numbers of persons affected (in four categories from up to 50 persons to up to 500 persons). Where cultural/historical land is involved, rates range from EEK 20-EEK 1,000 per hectare; otherwise, the rates range from EEK 0.6-EEK 42 per hectare.

*Agricultural land compensation*: 75 specific rates ranging from EEK 122-EEK 114,031 per hectare.

*Forest land compensation*: Depending on the type of forests (moss bog, gran bog, wooded heaths and recultivated land, oil shale and other quarries, moldering bog, moor forests, pasture forests and recultivated land, peat bogs, sandy heaths, primeval forests and grove forests), specific rates are applied to two groups: Group I: EEK 940-EEK 6,310; Group II: EEK 6,300-EEK 4,210.

*Pollution tax (EEK/metric ton)*: (1) *Air pollution*: sulfur dioxide: EEK 0.70; carbon monoxide: EEK 0.10; nontoxic dust: EEK 0.50; oil shale: EEK 0.70; grime: EEK 1.00; (2) *Water pollution*: tax rates vary from EEK 150 (sulfates) to EEK 4,200 (phenols).

### D. Tax Allocation

58. Taxes on natural resources accrue to the state budget, except for the tax on water use, which accrues to the State and local budgets. Pollution tax accrues to the Environment Protection Fund.

## XV. Local Taxes

(Law on Local Taxes, in force October 24, 1994; effective January 1, 1995)

59. There are the following local taxes: poll tax, local income tax, sales tax, boat tax, commercial and advertisement tax, tax for closing roads and streets, motor vehicle tax, tax for keeping animals, and entertainment tax.

### A. Poll Tax

60. Charged on inhabitants aged 18-65 of the municipality or town at rates determined by the relevant Council. The tax period is the calendar year. Active military personnel and disabled persons of Group I and II are exempt, as are others determined by the Council. If requested by the taxpayer, the employer is obliged to withhold 1/12 of the annual tax from the monthly salary of the tax payer and remit to the local authority. If tax is not withheld, at least 1/4 of the annual tax due must be paid quarterly.

### B. Local Income Tax

61. Imposed on enterprises located in the municipality or town, whose income is subject to the Law on Income Tax. Non income-generating societies and associations are also liable. The taxable income is as for the Law on Income Tax. The local income tax may not exceed 2 percent of taxable income; or not exceed 0.4 percent of premiums for insurance companies. The taxation period is as for the national income tax. Taxes are paid by the due date for filing returns under the Law on Taxation and accrue to the budget of the relevant local government. Allowances and exemptions may be granted by the local Council.

## C. Sales Tax

62. Paid by enterprises active or registered in the administrative territory of the municipality or town. Tax at a rate of no more than 1 percent is paid on the sale price of goods and services as determined under the Law on Value-added Tax. The taxation period is the calendar quarter. Allowances and exemptions may be granted by the local Council.

## D. Boat Tax

63. Paid by the owners of boats, yachts and launches whose length does not exceed 12 meters. The period of taxation is the calendar year. Rates are determined by the local Council. Allowances and exemptions may be granted by the local Council.

## E. Commercial and Advertisement Tax

64. Paid by persons and legal entities for commercials and advertisements displayed within the administrative area of the local government as well as those on public transport registered to persons or legal entities residing and located within the territory of the local government. Announcements of state and local government institutions and material related to candidates and parties during election campaigns are exempt. Rates and due date of payment are determined by the local Council. Allowances and exemptions may be granted by the local Council.

## F. Tax on Closing Roads and Streets

65. Paid by persons and legal entities in the case of organizing demonstrations, processions and other events, as well as construction work requiring the closure of roads, streets, squares, parks or recreation area. Rates and due date of payment are determined by the local Council.

## G. Motor Vehicle Tax

66. Paid by persons and legal entities owning motor vehicles registered in the national register. Rates are related to engine capacity, tonnage, and number of seats. Vehicles of state and local government institutions, military and Defence League, of those enjoying diplomatic status, etc., and of disabled persons in Groups I and II are exempt. The period of taxation is the calendar year. The due date for payment is established by the local Council.

### H. Tax on Keeping Animals

67. Paid by owners of animals the keeping of which is subject to tax within the territory of the municipality or town, as listed by the local Council. Animals kept for official duties by the police, army, frontier guards, Customs, Defence League, fire and rescue service are exempt. Animals kept within the territory of the local government for less than one month are exempt. The period of taxation is the calendar year. Rates and due date of payment are determined by the local Council. Allowances and exemptions may be granted by the local Council.

### I. Entertainment Tax

68. Paid by organizers of paid recreational activities or owners of recreational establishments within the territory of the municipality or town. Tax is paid on tickets sold, tickets being subject to registration in the territory of the municipality or town. Rates and due date of payment are determined by the local Council. Allowances and exemptions may be granted by the local Council.

Table 16. Estonia: Gross Domestic Product by Expenditure, 1993-96 1/

| | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|
| | | (In millions of kroons) | | |
| Consumption | 17,451 | 24,776 | 34,022 | 44,545 |
| Private | 12,417 | 17,829 | 24,002 | 31,933 |
| Public | 5,034 | 6,948 | 10,020 | 12,612 |
| Investment | 5,821 | 8,742 | 10,881 | 14,395 |
| Private | 5,194 | 7,505 | 8,967 | 11,778 |
| Public | 627 | 1,237 | 1,914 | 2,617 |
| Exports | 15,157 | 23,799 | 31,280 | 38,172 |
| Imports | 16,056 | 27,138 | 34,893 | 44,765 |
| | | (In percent of GDP) | | |
| Consumption | 78.0 | 82.1 | 82.4 | 85.1 |
| Private | 55.5 | 59.1 | 58.1 | 61.0 |
| Public | 22.5 | 23.0 | 24.3 | 24.1 |
| Investment | 26.0 | 29.0 | 26.4 | 27.5 |
| Private | 23.2 | 24.9 | 21.7 | 22.5 |
| Public | 2.8 | 4.1 | 4.6 | 4.9 |
| Exports | 67.7 | 78.9 | 75.8 | 72.9 |
| Imports | 71.8 | 89.9 | 84.5 | 85.5 |
| Memorandum items: | | | | |
| GDP at market prices | | | | |
| (In millions of kroons) | 22,373 | 30,179 | 41,290 | 52,346 |
| GDP deflator (In percent) | 98.0 | 37.3 | 31.1 | 22.4 |
| Real GDP growth (In percent) | -8.2 | -1.8 | 4.3 | 4.0 |

Sources: Estonian authorities; and Fund staff estimates.

1/ GDP data are subject to frequent restrospective revisions. The numbers reported reflect a consolidation of estimates of the Statistical Office of Estonia and Fund staff.

Table 17. Estonia: Gross Domestic Product by Origin, 1993-96 1/

| | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|
| | (In millions of kroons) | | | |
| Agriculture, hunting, and forestry | 2,061 | 2,561 | 2,768 | 3,102 |
| Fishing | 118 | 154 | 173 | 221 |
| Mining and quarrying | 367 | 478 | 601 | 719 |
| Manufacturing | 3,770 | 5,022 | 6,265 | 7,244 |
| Electricity, gas, water supply | 714 | 871 | 1,442 | 1,927 |
| Construction | 1,301 | 1,684 | 2,116 | 2,703 |
| Services | 11,469 | 15,620 | 22,931 | 29,660 |
| Trade | 3,359 | 4,078 | 5,988 | 8,081 |
| Hotels and restaurants | 273 | 311 | 436 | 669 |
| Transport and communication | 2,456 | 3,060 | 3,776 | 4,795 |
| Real estate, renting, business activities | 1,457 | 2,211 | 3,699 | 4,567 |
| Finance and insurance | 560 | 848 | 1,321 | 2,227 |
| Public administration | 681 | 1,194 | 1,690 | 1,858 |
| Education | 1,124 | 1,510 | 2,173 | 2,483 |
| Health and social care | 507 | 947 | 1,460 | 2,115 |
| Other | 1,052 | 1,461 | 2,388 | 2,865 |
| | (In percent of GDP) | | | |
| Agriculture, hunting, and forestry | 9.2 | 8.5 | 6.7 | 5.9 |
| Fishing | 0.5 | 0.5 | 0.4 | 0.4 |
| Mining and quarrying | 1.6 | 1.6 | 1.5 | 1.4 |
| Manufacturing | 16.9 | 16.6 | 15.2 | 13.8 |
| Electricity, gas, water supply | 3.2 | 2.9 | 3.5 | 3.7 |
| Construction | 5.8 | 5.6 | 5.1 | 5.2 |
| Services | 51.3 | 51.8 | 55.5 | 56.7 |
| Trade | 15.0 | 13.5 | 14.5 | 15.4 |
| Hotels and restaurants | 1.2 | 1.0 | 1.1 | 1.3 |
| Transport and communication | 11.0 | 10.1 | 9.1 | 9.2 |
| Real estate, renting, business activities | 6.5 | 7.3 | 9.0 | 8.7 |
| Finance and insurance | 2.5 | 2.8 | 3.2 | 4.3 |
| Public administration | 3.0 | 4.0 | 4.1 | 3.6 |
| Education | 5.0 | 5.0 | 5.3 | 4.7 |
| Health and social care | 2.3 | 3.1 | 3.5 | 4.0 |
| Other | 4.7 | 4.8 | 5.8 | 5.5 |
| | (In millions of kroons) | | | |
| Memorandum items: | | | | |
| Net taxes | 2,574 | 3,789 | 4,994 | 6,771 |
| GDP at market prices | 22,373 | 30,179 | 41,290 | 52,346 |

Sources: Estonian authorities; and Fund staff estimates.

1/ GDP data are subject to frequent.restrospective revisions. The numbers reported reflect a consolidation of estimates of the Statistical Office of Estonia and Fund staff.

Table 18. Estonia: Prices, 1993-97

| | Consumer Price Index | | | | | Producer Price Index |
|---|---|---|---|---|---|---|
| | Overall | Goods | Services | Nonregulated Services 1/ | Regulated Services 2/ | |
| | (In percent) | | | | | |
| 1993 | | | | | | |
| Period average | 89.0 | ... | ... | ... | ... | 75.1 |
| Dec.-on-Dec. | 35.7 | 33.4 | 69.9 | 45.4 | 75.4 | 37.0 |
| 1994 | | | | | | |
| Period average | 47.7 | 33.9 | 89.2 | 43.1 | 100.2 | 36.2 |
| Dec.-on-Dec. | 41.6 | 23.8 | 85.2 | 40.4 | 95.6 | 32.8 |
| 1995 | | | | | | |
| Period average | 28.9 | 17.8 | 45.2 | 26.4 | 57.2 | 25.6 |
| Dec.-on-Dec. | 28.8 | 20.4 | 40.2 | 28.3 | 46.9 | 21.8 |
| 1996 | | | | | | |
| Period average | 23.1 | 19.6 | 27.1 | 27.4 | 31.4 | 14.8 |
| Dec.-on-Dec. | 15.0 | 12.8 | 16.8 | 26.4 | 21.1 | 9.9 |
| | (Percent change on previous month) | | | | | |
| 1996 | | | | | | |
| January | 3.5 | 3.8 | 3.1 | 4.7 | 2.5 | 2.2 |
| February | 3.3 | 3.3 | 3.4 | 0.8 | 4.8 | 0.9 |
| March | 1.6 | 1.3 | 1.8 | 2.1 | 1.9 | 1.3 |
| April | 1.8 | 1.4 | 2.2 | 0.8 | 2.8 | -0.1 |
| May | 0.6 | 0.8 | 0.3 | 3.0 | 0.1 | -0.1 |
| June | 0.7 | 0.0 | 1.4 | 1.0 | 1.5 | 2.1 |
| July | 0.4 | 0.0 | 0.8 | 0.1 | 0.9 | 0.3 |
| August | -0.3 | -1.1 | 0.5 | 0.2 | 0.5 | 0.3 |
| September | 0.6 | 0.3 | 0.9 | 2.9 | 0.5 | 1.0 |
| October | 0.6 | 0.7 | 0.5 | 2.9 | 0.0 | 1.2 |
| November | 0.6 | 0.7 | 0.5 | 1.2 | 0.2 | 0.1 |
| December | 0.7 | 1.0 | 0.3 | 2.5 | 0.4 | 0.3 |
| 1997 | | | | | | |
| January | 1.4 | 1.3 | 1.6 | 2.3 | 1.3 | 0.9 |
| February | 0.9 | 0.6 | 1.3 | 1.1 | 1.4 | 0.8 |
| March | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 |
| April | 1.9 | 1.4 | 2.4 | 4.4 | 2.0 | 0.8 |
| May | 2.0 | 0.7 | 3.5 | 0.5 | 4.7 | 2.4 |
| June | 0.7 | 0.4 | 1.0 | 0.6 | 1.2 | 0.4 |

Sources: Estonian authorities; and Fund staff estimates.

1/ Nonregulated, nontraded goods and services from January 1996.

2/ Regulated, nontraded goods and services from January 1996.

Table 19. Estonia: Average Monthly Wages, 1993-97

| | Nominal Wages in kroons | Real Wages 1/ 1992=100 | Nominal Wages in U.S. dollars |
|---|---|---|---|
| 1993 2/ | 1,093 | 104 | 83 |
| 1994 2/ | 1,694 | 109 | 131 |
| 1995 2/ | 2,356 | 118 | 206 |
| 1996 2/ | 2,986 | 122 | 248 |
| 1996 | | | |
| January | 2,560 | 107 | 219 |
| February | 2,620 | 105 | 223 |
| March | 2,767 | 110 | 234 |
| April | 2,860 | 112 | 238 |
| May | 2,865 | 111 | 234 |
| June | 3,287 | 125 | 269 |
| July | 3,110 | 117 | 258 |
| August | 2,805 | 106 | 237 |
| September | 3,070 | 116 | 255 |
| October | 3,128 | 117 | 256 |
| November | 3,143 | 117 | 260 |
| December | 3,620 | 132 | 292 |
| 1997 | | | |
| January | 3,108 | 112 | 242 |
| February | 3,121 | 111 | 233 |
| March | 3,184 | 112 | 235 |
| April | 3,450 | 119 | 252 |
| May | 3,594 | 121 | 264 |
| June | 3,772 | 125 | 273 |

Sources: Estonian authorities; and Fund staff estimates.

1/ Nominal wages deflated by CPI.

2/ Period average.

Table 20. Estonia: Average Monthly Wages by Sector, 1993-96 1/

| | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|
| | | (In kroons) | | |
| Agriculture and hunting | 641 | 1,010 | 1,405 | 1,811 |
| Forestry | 908 | 1,601 | 2,419 | 2,590 |
| Fishing | 1,229 | 1,705 | 1,987 | 2,708 |
| Mining and quarrying | 1,487 | 2,362 | 2,968 | 3,944 |
| Manufacturing | 1,036 | 1,784 | 2,421 | 2,991 |
| Electricity, gas, and water supply | 1,467 | 2,432 | 3,262 | 3,872 |
| Construction | 1,264 | 2,047 | 2,568 | 3,195 |
| Wholesale and retail trade | 917 | 1,510 | 2,051 | 2,720 |
| Hotels and restaurants | 786 | 1,196 | 1,570 | 2,128 |
| Transport, storage, and communications | 1,741 | 2,421 | 3,101 | 3,748 |
| Financial intermediation | 2,496 | 3,571 | 4,951 | 6,109 |
| Real estate | 1,031 | 1,748 | 2,562 | 3,213 |
| Public administration and defence | 1,103 | 2,030 | 2,825 | 3,546 |
| Education | 850 | 1,259 | 1,900 | 2,326 |
| Health and social work | 818 | 1,402 | 1,975 | 2,689 |
| Other | 825 | 1,300 | 1,894 | 2,453 |
| Total | 1,066 | 1,734 | 2,375 | 2,985 |

Source: Estonian authorities.

1/ Total average wages may differ from those in Table 19. The numbers here represent a consolidation of estimates of the Statistical Office of Estonia and the Bank of Estonia.

Table 21. Estonia: Average Number of Employees per Month by Sector, 1993-96

| | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|
| | (Actual levels) | | | |
| Agriculture and hunting | 42,368 | 33,937 | 27,673 | 26,063 |
| Forestry | 7,401 | 6,950 | 6,922 | 7,413 |
| Fishing | 8,737 | 4,938 | 3,440 | 3,900 |
| Mining and quarrying | 13,363 | 11,971 | 11,317 | 11,039 |
| Manufacturing | 127,264 | 111,854 | 118,359 | 118,578 |
| Electricity, gas, and water supply | 11,683 | 14,536 | 15,974 | 16,432 |
| Construction | 33,197 | 31,062 | 33,814 | 33,524 |
| Wholesale and retail trade | 55,525 | 50,644 | 56,471 | 70,513 |
| Hotels and restaurants | 11,043 | 10,023 | 9,754 | 10,395 |
| Transport, storage, and communications | 47,367 | 46,076 | 46,086 | 45,024 |
| Financial intermediation | 5,211 | 5,333 | 5,899 | 7,360 |
| Real estate | 23,859 | 22,276 | 25,067 | 28,764 |
| Public administration and defence | 27,837 | 29,249 | 31,019 | 34,804 |
| Education | 48,372 | 47,038 | 47,862 | 51,916 |
| Health and social work | 33,052 | 30,745 | 32,250 | 34,102 |
| Other | 20,240 | 18,022 | 21,483 | 22,175 |
| Total | 516,519 | 474,654 | 493,390 | 522,003 |

Source: Estonian authorities.

Table 22. Estonia: Unemployment, 1993-97

| | Registered Unemployed 1/ | | | Unemployed Job-seekers 2/ | | |
|---|---|---|---|---|---|---|
| | In thousands | In percent of | | In thousands | In percent of | |
| | | Working Age Population | Total Labor Force | | Working Age Population | Total Labor Force |
| 1993 3/ | 18.4 | 2.5 | 3.0 | 34.2 | 4.6 | 5.5 |
| 1994 3/ | 15.1 | 1.8 | 2.3 | 37.3 | 4.4 | 5.4 |
| 1995 3/ | 15.2 | 1.8 | 2.2 | 34.9 | 4.1 | 5.0 |
| 1996 3/ | 18.5 | 2.2 | 2.7 | 37.9 | 4.4 | 5.6 |
| 1996 | | | | | | |
| January | 17.2 | 2.0 | 2.5 | 40.1 | 4.7 | 5.7 |
| February | 18.6 | 2.2 | 2.7 | 40.6 | 4.8 | 5.9 |
| March | 19.5 | 2.3 | 2.8 | 39.7 | 4.7 | 5.7 |
| April | 19.8 | 2.3 | 2.9 | 39.8 | 4.7 | 5.9 |
| May | 19.2 | 2.3 | 2.9 | 39.1 | 4.6 | 5.9 |
| June | 18.3 | 2.1 | 2.7 | 35.1 | 4.1 | 5.2 |
| July | 17.9 | 2.1 | 2.7 | 37.0 | 4.3 | 5.5 |
| August | 17.3 | 2.0 | 2.6 | 34.9 | 4.1 | 5.2 |
| September | 17.3 | 2.0 | 2.6 | 35.9 | 4.2 | 5.3 |
| October | 18.5 | 2.1 | 2.7 | 37.7 | 4.4 | 5.6 |
| November | 19.1 | 2.2 | 2.8 | 37.6 | 4.4 | 5.6 |
| December | 19.7 | 2.3 | 2.9 | 37.3 | 4.3 | 5.5 |
| 1997 | | | | | | |
| January | 21.0 | 2.4 | 3.1 | 39.2 | 4.6 | 5.8 |
| February | 22.1 | 2.6 | 3.3 | 38.2 | 4.5 | 5.7 |
| March | 22.2 | 2.6 | 3.3 | 38.4 | 4.5 | 5.7 |
| April | 21.9 | 2.5 | 3.2 | 38.5 | 4.5 | 5.7 |
| May | 20.5 | 2.4 | 3.0 | 36.4 | 4.2 | 5.4 |
| June | 18.7 | 2.2 | 2.8 | 32.3 | 3.7 | 4.8 |

Sources: Estonian authorities; and Fund staff estimates.

1/ The registered unemployed are defined in accordance with Estonian legislation as persons of working age (16 to pension age) who currently do not have a job, are actively seeking one, have been employed for at least 180 days during the previous 12 months, and have submitted all necessary registration documents. They are entitled to all benefits including unemployment insurance.

2/ Unemployed job-seekers are defined as persons with no income, who are registered at the employment office, and who report to the employment office at least once a month. They have a right to information about vacancies, training and changes in labor market legislation, but do not have a right to unemployment insurance.

3/ Period average.

Table 23. Estonia: Summary of General Government Operations, 1993-97

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan.-June |
|---|---|---|---|---|---|
| | (In millions of kroons) | | | | |
| Total revenue | 8,603 | 12,466 | 16,467 | 20,431 | 11,453 |
| Tax revenue | 8,173 | 11,716 | 15,624 | 19,405 | 10,965 |
| Direct taxes | 5,497 | 7,412 | 9,840 | 11,862 | 6,814 |
| VAT | 1,994 | 3,309 | 4,112 | 5,263 | 2,858 |
| Excises | 403 | 611 | 1,137 | 1,735 | 994 |
| Other taxes | 280 | 384 | 534 | 546 | 299 |
| Nontax revenue | 430 | 750 | 843 | 1,025 | 489 |
| Total expenditure | 8,261 | 11,606 | 16,833 | 21,219 | 11,659 |
| Current expenditure | 7,634 | 10,352 | 14,919 | 18,653 | 10,607 |
| Goods and services | 4,810 | 6,628 | 10,053 | 12,456 | 7,006 |
| Current transfers and subsidies | 2,600 | 3,397 | 4,662 | 6,041 | 3,503 |
| Other 1/ | 224 | 327 | 204 | 156 | 99 |
| Capital expenditure 2/ | 627 | 1,237 | 1,914 | 2,567 | 1,051 |
| Environment/Forestry Fund combined position | ... | ... | ... | 19 | 61 |
| Financial surplus (+) / deficit (-) 3/ | 343 | 860 | -366 | -770 | -145 |
| Net lending (-) | -487 | -476 | -146 | -41 | -18 |
| Overall balance | -144 | 384 | -512 | -811 | -163 |
| Borrowing requirement | 144 | -384 | 512 | 811 | 163 |
| Domestic financing (net) | -317 | -824 | -148 | 297 | 137 |
| Foreign financing (net) | 461 | 440 | 660 | 514 | 26 |
| | (In percent of GDP) | | | | |
| Total revenue | 38.5 | 41.3 | 39.9 | 39.0 | 39.0 |
| Tax revenue | 36.5 | 38.8 | 37.8 | 37.1 | 37.3 |
| Direct taxes | 24.6 | 24.6 | 23.8 | 22.7 | 23.2 |
| VAT | 8.9 | 11.0 | 10.0 | 10.1 | 9.7 |
| Excises | 1.8 | 2.0 | 2.8 | 3.3 | 3.4 |
| Other taxes | 1.3 | 1.3 | 1.3 | 1.0 | 1.0 |
| Nontax revenue | 1.9 | 2.5 | 2.0 | 2.0 | 1.7 |
| Total expenditure | 36.9 | 38.5 | 40.8 | 40.5 | 39.7 |
| Current expenditure | 34.1 | 34.3 | 36.1 | 35.6 | 36.1 |
| Goods and services | 21.5 | 22.0 | 24.3 | 23.8 | 23.8 |
| Current transfers and subsidies | 11.6 | 11.3 | 11.3 | 11.5 | 11.9 |
| Other 1/ | 1.0 | 1.1 | 0.5 | 0.3 | 0.3 |
| Capital expenditure 2/ | 2.8 | 4.1 | 4.6 | 4.9 | 3.6 |
| Financial surplus (+) / deficit (-) 3/ | 1.5 | 2.8 | -0.9 | -1.5 | -0.5 |
| Net lending (-) | -2.2 | -1.6 | -0.4 | -0.1 | -0.1 |
| Overall balance | -0.6 | 1.3 | -1.2 | -1.5 | -0.6 |
| Borrowing requirement | 0.6 | -1.3 | 1.2 | 1.5 | 0.6 |
| Domestic financing (net) | -1.4 | -2.7 | -0.4 | 0.6 | 0.5 |
| Foreign financing (net) | 2.1 | 1.5 | 1.6 | 1.0 | 0.1 |

Sources: Estonian authorities; and Fund staff estimates.

1/ Includes unallocated expenditure, some portion of government operations that may be net lending from domestic budgetary resources, and foreign-financed current expenditure.

2/ Includes capital expenditure from both budgetary and foreign resources.

3/ Includes the combined balance of the Environment and Forestry Funds in 1996 and the first half of 1997.

Table 24. Estonia: General Government Revenue, 1993-97

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan.-June |
|---|---|---|---|---|---|
| | (In millions of kroons) | | | | |
| Total revenue | 8,603 | 12,466 | 16,467 | 20,431 | 11,453 |
| Tax revenue | 8,173 | 11,716 | 15,624 | 19,405 | 10,965 |
| Direct taxes | 5,497 | 7,412 | 9,840 | 11,862 | 6,814 |
| Corporate profits tax | 1,032 | 1,038 | 1,050 | 891 | 681 |
| Personal income tax | 1,832 | 2,388 | 3,593 | 4,352 | 2,388 |
| Social security tax | 1,514 | 2,170 | 2,917 | 3,844 | 2,169 |
| Medical insurance tax | 1,086 | 1,692 | 2,131 | 2,564 | 1,471 |
| Land tax | 27 | 124 | 149 | 211 | 105 |
| VAT | 1,994 | 3,309 | 4,112 | 5,263 | 2,858 |
| Excises | 403 | 611 | 1,137 | 1,735 | 994 |
| Taxes on international trade | 119 | 192 | 63 | 3 | 2 |
| Other taxes | 161 | 192 | 471 | 543 | 297 |
| Nontax revenue | 430 | 750 | 843 | 1,025 | 489 |
| | (In percent of GDP) | | | | |
| Total revenue | 38.5 | 41.3 | 39.9 | 39.0 | 39.0 |
| Tax revenue | 36.5 | 38.8 | 37.8 | 37.1 | 37.3 |
| Direct taxes | 24.6 | 24.6 | 23.8 | 22.7 | 23.2 |
| Corporate profits tax | 4.6 | 3.4 | 2.5 | 1.7 | 2.3 |
| Personal income tax | 8.2 | 7.9 | 8.7 | 8.3 | 8.1 |
| Social security tax | 6.8 | 7.2 | 7.1 | 7.3 | 7.4 |
| Medical insurance tax | 4.9 | 5.6 | 5.2 | 4.9 | 5.0 |
| Land tax | 0.1 | 0.4 | 0.4 | 0.4 | 0.4 |
| VAT | 8.9 | 11.0 | 10.0 | 10.1 | 9.7 |
| Excises | 1.8 | 2.0 | 2.8 | 3.3 | 3.4 |
| Taxes on international trade | 0.5 | 0.6 | 0.2 | 0.0 | 0.0 |
| Other taxes | 0.7 | 0.6 | 1.1 | 1.0 | 1.0 |
| Nontax revenue | 1.9 | 2.5 | 2.0 | 2.0 | 1.7 |

Sources: Estonian authorities; and Fund staff estimates.

Table 25. Estonia: General Government Expenditure, 1993-97

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan.-June |
|---|---|---|---|---|---|
| | | | (In millions of kroons) | | |
| Total expenditure and net lending | 8,747 | 12,082 | 16,979 | 21,261 | 11,677 |
| Total expenditure | 8,261 | 11,606 | 16,833 | 21,219 | 11,659 |
| Current expenditure | 7,634 | 10,352 | 14,919 | 18,653 | 10,607 |
| Expenditure on goods and services | 4,810 | 6,628 | 10,053 | 12,456 | 7,006 |
| Wages and salaries 1/ | 1,586 | 3,191 | 4,237 | 4,932 | 2,842 |
| Other goods and services | 3,224 | 3,438 | 5,816 | 7,524 | 4,164 |
| Current transfers and subsidies | 2,600 | 3,397 | 4,662 | 6,041 | 3,503 |
| Subsidies | 328 | 273 | 202 | 200 | 156 |
| Transfers to households | 2,271 | 3,124 | 4,460 | 5,841 | 3,347 |
| Pensions | 1,440 | 1,970 | 2,908 | 3,964 | 2,294 |
| Family benefits | 479 | 586 | 769 | 865 | 465 |
| Sickness benefits | 156 | 247 | 380 | 460 | 307 |
| Unemployment benefits | 37 | 24 | 28 | 73 | 33 |
| Heating and housing allowance 2/ | 125 | 243 | 226 | 28 | ... |
| Income maintenance | 3 | 38 | 98 | 450 | 248 |
| Other | 31 | 16 | 51 | 0 | 0 |
| Other current expenditure 3/ | 224 | 327 | 204 | 156 | 99 |
| Capital expenditure 4/ | 627 | 1,237 | 1,914 | 2,567 | 1,051 |
| Net lending | 487 | 476 | 146 | 41 | 18 |
| Memorandum item: | | | | | |
| Interest payments | 27 | 76 | 163 | 156 | 99 |
| | | | (In percent of GDP) | | |
| Total expenditure and net lending | 39.1 | 40.0 | 41.1 | 40.6 | 39.7 |
| Total expenditure | 36.9 | 38.5 | 40.8 | 40.5 | 39.7 |
| Current expenditure | 34.1 | 34.3 | 36.1 | 35.6 | 36.1 |
| Expenditure on goods and services | 21.5 | 22.0 | 24.3 | 23.8 | 23.8 |
| Wages and salaries 1/ | 7.1 | 10.6 | 10.3 | 9.4 | 9.7 |
| Other purchases of goods and services | 14.4 | 11.4 | 14.1 | 14.4 | 14.2 |
| Current transfers and subsidies | 11.6 | 11.3 | 11.3 | 11.5 | 11.9 |
| Subsidies | 1.5 | 0.9 | 0.5 | 0.4 | 0.5 |
| Transfers to households | 10.2 | 10.4 | 10.8 | 11.2 | 11.4 |
| Pensions | 6.4 | 6.5 | 7.0 | 7.6 | 7.8 |
| Family benefits | 2.1 | 1.9 | 1.9 | 1.7 | 1.6 |
| Sickness benefits | 0.7 | 0.8 | 0.9 | 0.9 | 1.0 |
| Unemployment benefits | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| Heating and housing allowance 2/ | 0.6 | 0.8 | 0.5 | 0.1 | ... |
| Income maintenance | 0.0 | 0.1 | 0.2 | 0.9 | 0.8 |
| Other | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 |
| Other current expenditure 3/ | 1.0 | 1.1 | 0.5 | 0.3 | 0.3 |
| Capital expenditure 4/ | 2.8 | 4.1 | 4.6 | 4.9 | 3.6 |
| Net lending | 2.2 | 1.6 | 0.4 | 0.1 | 0.1 |
| Memorandum item: | | | | | |
| Interest payments | 0.1 | 0.3 | 0.4 | 0.3 | 0.3 |

Sources: Estonian authorities; and Fund staff estimates.

1/ Wages and salaries of a number of budgetary institutions are included under "other goods and services".

2/ Combined with income maintenance in 1997.

3/ Includes unallocated expenditure, some portion of government operations that may be net lending from domestic budgetary resources, and foreign-financed current expenditure.

4/ Includes capital expenditure from both budgetary and foreign resources.

## Table 26. Estonia: Monetary Authorities, 1993-97 1/

(In millions of kroons, end of period)

| | 1993 | 1994 | 1995 | 1996 | | | | 1997 | |
|---|---|---|---|---|---|---|---|---|---|
| | December | | | March | June | Sept. | Dec. | Mar. | June |
| Net foreign assets | 4,460 | 4,547 | 5,546 | 5,488 | 6,099 | 6,195 | 6,945 | 7,207 | 7,735 |
| Foreign assets | 5,409 | 5,541 | 6,685 | 6,765 | 7,249 | 7,284 | 7,958 | 8,192 | 8,670 |
| *Of which:* | | | | | | | | | |
| Currency board cover 2/ | 3,878 | 4,319 | 5,125 | 5,037 | 5,559 | 5,522 | 6,196 | 6,395 | 6,798 |
| Foreign liabilities | 949 | 994 | 1,140 | 1,277 | 1,149 | 1,089 | 1,013 | 985 | 935 |
| Net domestic assets | -626 | -272 | -455 | -459 | -545 | -679 | -754 | -824 | -943 |
| Net claims on government | 39 | -1 | 3 | 3 | 2 | 3 | 3 | -1 | -1 |
| Claims on financial institutions | 409 | 383 | 73 | 74 | 61 | 61 | 48 | 43 | 32 |
| Claims on non-financial public enterprises | 63 | 15 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Claims on private sector | 5 | 8 | 15 | 16 | 18 | 18 | 19 | 20 | 22 |
| Other | -1,143 | -677 | -546 | -552 | -626 | -763 | -823 | -887 | -997 |
| Base money | 3,834 | 4,275 | 5,091 | 5,029 | 5,555 | 5,516 | 6,191 | 6,383 | 6,792 |
| Currency issue | 2,730 | 3,512 | 4,337 | 4,284 | 4,706 | 4,690 | 4,987 | 4,984 | 5,367 |
| Deposits of commercial banks | 1,044 | 703 | 720 | 695 | 794 | 796 | 1,202 | 1,399 | 1,415 |
| Certificates of deposits | 60 | 60 | 34 | 50 | 54 | 30 | 2 | 0 | 10 |
| Memorandum items: | | | | | | | | | |
| Gross international reserves (in millions of US$) | 388 | 447 | 583 | 573 | 595 | 596 | 640 | 610 | 621 |
| Gross international reserves (in millions of DM) | 669 | 692 | 835 | 845 | 906 | 910 | 995 | 1,024 | 1,084 |

Sources: Estonian authorities; and Fund staff estimates.

1/ Comprises the Bank of Estonia and the External Financing Board.

2/ Currency board cover is equivalent to the sum of base money and kroon liabilities of the Bank of Estonia in its correspondent accounts.

Table 27. Estonia: Banking Survey, 1993-97

| | 1993 | 1994 | 1995 | 1996 | | | | 1997 | |
|---|---|---|---|---|---|---|---|---|---|
| | December | | | March | June | Sept. | Dec. | Mar. | June |
| | (In millions of kroon, end of period) | | | | | | | | |
| Net foreign assets | 5,692 | 6,874 | 7,629 | 6,914 | 7,771 | 7,426 | 7,159 | 7,495 | 8,097 |
| Foreign assets | 6,840 | 8,561 | 10,383 | 10,056 | 11,163 | 11,311 | 11,967 | 13,150 | 14,727 |
| Foreign liabilities | 1,148 | 1,688 | 2,754 | 3,142 | 3,392 | 3,885 | 4,808 | 5,655 | 6,631 |
| Net domestic assets | 388 | 1,006 | 2,715 | 3,963 | 4,464 | 5,584 | 6,995 | 7,759 | 8,945 |
| Domestic credit | 2,326 | 3,251 | 5,301 | 6,414 | 7,247 | 8,507 | 10,506 | 12,250 | 14,130 |
| *Of which:* | | | | | | | | | |
| Credit to nongovernment | 2,903 | 4,557 | 7,020 | 7,824 | 8,873 | 10,139 | 11,935 | 13,719 | 16,176 |
| *Of which:* | | | | | | | | | |
| Households & individuals | 184 | 506 | 753 | 849 | 1,125 | 1,420 | 1,817 | 2,232 | 2,899 |
| Enterprises | 2,710 | 4,039 | 5,638 | 6,148 | 6,727 | 7,245 | 8,091 | 8,987 | 9,777 |
| Nonbank financial institutions | 9 | 12 | 629 | 827 | 1,021 | 1,475 | 2,026 | 2,499 | 3,499 |
| Net credit to general government | -577 | -1,306 | -1,719 | -1,410 | -1,626 | -1,632 | -1,429 | -1,469 | -2,045 |
| Other items (net) | -1,938 | -2,245 | -2,586 | -2,451 | -2,783 | -2,923 | -3,511 | -4,491 | -5,185 |
| Broad money | 6,080 | 7,880 | 10,344 | 10,876 | 12,235 | 13,011 | 14,154 | 15,254 | 17,042 |
| Memorandum items: | | | | | | | | | |
| | (Change as a percent of broad money at beginning of period) | | | | | | | | |
| Net foreign assets | 33.7 | 19.4 | 9.6 | -6.9 | 7.9 | -2.8 | -2.1 | 2.4 | 3.9 |
| Net domestic assets | 24.1 | 10.2 | 21.7 | 12.1 | 4.6 | 9.2 | 10.8 | 5.4 | 7.8 |
| Broad money | 57.8 | 29.6 | 31.3 | 5.1 | 12.5 | 6.3 | 8.8 | 7.8 | 11.7 |
| | (Ratio) | | | | | | | | |
| Base money multiplier | 1.6 | 1.8 | 2.0 | 2.2 | 2.2 | 2.4 | 2.3 | 2.4 | 2.5 |

Sources: Bank of Estonia; and Fund staff estimates.

## Table 28. Estonia: Consolidated Account for the Rest of the Banking System, 1993-97 1/

(In millions of kroons, end of period)

| | 1993 | 1994 | 1995 | 1996 | | | | 1997 | |
|---|---|---|---|---|---|---|---|---|---|
| | December | | | Mar. | Jun. | Sep. | Dec. | Mar. | Jun. |
| Net foreign assets | 1,232 | 2,327 | 2,083 | 1,426 | 1,672 | 1,231 | 214 | 288 | 362 |
| Foreign assets | 1,431 | 3,021 | 3,697 | 3,291 | 3,914 | 4,027 | 4,009 | 4,958 | 6,057 |
| Foreign liabilities | 199 | 694 | 1,614 | 1,865 | 2,242 | 2,796 | 3,795 | 4,670 | 5,695 |
| Net domestic assets | 2,468 | 2,481 | 4,457 | 5,640 | 6,348 | 7,646 | 9,669 | 10,666 | 12,064 |
| Domestic credit | 2,213 | 3,228 | 5,283 | 6,395 | 7,226 | 8,485 | 10,485 | 12,231 | 14,109 |
| Net claims on government | -622 | -1,306 | -1,721 | -1,413 | -1,628 | -1,634 | -1,432 | -1,468 | -2,045 |
| Claims on general government | 295 | 405 | 649 | 709 | 745 | 1,050 | 1,007 | 1,149 | 1,078 |
| General government deposits | 917 | 1,711 | 2,371 | 2,122 | 2,373 | 2,685 | 2,439 | 2,616 | 3,123 |
| Claims on nonfinancial public enterprises | 417 | 346 | 334 | 334 | 373 | 322 | 425 | 433 | 442 |
| Claims on private sector | 2,410 | 4,176 | 6,041 | 6,646 | 7,461 | 8,323 | 9,465 | 10,766 | 12,212 |
| Claims on households & individuals | 179 | 497 | 738 | 834 | 1,108 | 1,401 | 1,799 | 2,212 | 2,877 |
| Claims on enterprises | 2,230 | 3,679 | 5,303 | 5,812 | 6,353 | 6,921 | 7,667 | 8,554 | 9,334 |
| Claims on other financial institutions | 9 | 12 | 629 | 827 | 1,021 | 1,475 | 2,026 | 2,499 | 3,499 |
| Other items (net) | 255 | -747 | -826 | -755 | -879 | -839 | -815 | -1,565 | -2,045 |
| Reserves | 1,438 | 1,208 | 1,293 | 1,219 | 1,342 | 1,385 | 1,923 | 2,090 | 2,181 |
| Credit from monetary authorities | 338 | 402 | 89 | 90 | 78 | 63 | 48 | 50 | 33 |
| Capital accounts | 777 | 994 | 1,835 | 1,911 | 2,262 | 2,394 | 2,774 | 3,100 | 3,671 |
| Counterpart funds | 114 | 112 | 102 | 103 | 75 | 76 | 73 | 72 | 73 |
| Government lending funds | 152 | 487 | 819 | 858 | 830 | 856 | 915 | 966 | 850 |
| Other assets (net) | -198 | -39 | -726 | -988 | -1,025 | -1,165 | -1,071 | -534 | -401 |
| Monetary liabilities | 3,699 | 4,808 | 6,540 | 7,066 | 8,020 | 8,877 | 9,884 | 10,958 | 12,430 |
| Demand deposits | 2,847 | 3,249 | 4,400 | 4,540 | 5,314 | 5,745 | 6,514 | 6,864 | 8,030 |
| Nonfinancial public enterprises | 655 | 589 | 529 | 556 | 542 | 553 | 517 | 588 | 613 |
| Private enterprises | 1,404 | 1,659 | 2,187 | 2,072 | 2,347 | 2,662 | 3,012 | 2,980 | 3,458 |
| Households & individuals | 760 | 983 | 1,618 | 1,843 | 2,304 | 2,425 | 2,846 | 3,121 | 3,811 |
| Time & savings deposits | 572 | 684 | 1,015 | 1,318 | 1,435 | 1,736 | 1,835 | 2,146 | 2,417 |
| Nonfinancial public enterprises | 90 | 76 | 70 | 115 | 180 | 88 | 144 | 259 | 384 |
| Private enterprises | 194 | 147 | 236 | 317 | 262 | 478 | 381 | 359 | 345 |
| Households & individuals | 280 | 419 | 634 | 765 | 827 | 948 | 1,082 | 1,285 | 1,426 |
| Foreign currency deposits | 280 | 875 | 1,126 | 1,208 | 1,271 | 1,396 | 1,535 | 1,948 | 1,982 |
| Nonfinancial public enterprises | 58 | 95 | 67 | 124 | 90 | 54 | 50 | 58 | 52 |
| Other | 222 | 781 | 1,060 | 1,083 | 1,180 | 1,342 | 1,485 | 1,890 | 1,929 |
| Memorandum items: | | | | | | | | | |
| Total assets | 6,395 | 10,082 | 14,867 | 15,441 | 17,566 | 19,618 | 21,928 | 25,113 | 29,579 |
| Domestic credit in foreign currency | 227 | 316 | 911 | 1,179 | 1,740 | 2,654 | 3,705 | 5,006 | 7,995 |
| Domestic FC credit as a percent of credit to nongovernment | 8.0 | 7.0 | 13.0 | 15.1 | 19.7 | 26.2 | 31.1 | 36.5 | 49.5 |

Source: Bank of Estonia.

1/ Comprises authorized banks, savings and loan associations, and the Estonian Investment Bank.

Table 29. Estonia: Average Interest Rates of Kroon Deposits and Loans, 1993-97

| | 1993 | 1994 | 1995 | 1996 | | | | 1997 | |
|---|---|---|---|---|---|---|---|---|---|
| | December | | | Mar. | Jun. | Sep. | Dec. | Mar. | Jun. 3/ |
| Deposit rates 1/ | | | | | | | | | |
| Demand deposits | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.5 | 2.5 | ... | ... |
| Time deposits (3 months to over 12 months) | 12.7 | 10.1 | 7.2 | 6.0 | 7.2 | 4.2 | 5.3 | 4.1 | 3.8 |
| Lending rates 2/ | | | | | | | | | |
| Loans up to 1 month | 31.4 | 26.7 | 15.6 | 16.1 | 9.4 | 8.8 | 20.6 | 10.2 | ... |
| Loans up to 1 to 3 months | 29.2 | 23.2 | 15.4 | 13.7 | 12.7 | 11.9 | 10.8 | 10.7 | ... |
| Loans up to 3 months | ... | ... | ... | ... | ... | ... | 13.6 | 10.5 | 8.7 |
| Loans 3 to 6 months | 30.4 | 25.2 | 16.3 | 17.8 | 14.9 | 16.3 | 13.8 | 12.3 | 10.2 |
| Loans 6 to 12 months | 22.1 | 21.3 | 16.1 | 16.6 | 16.5 | 15.6 | 13.8 | 12.1 | 17.3 |
| Loans 1 to 3 years | 21.9 | 19.1 | 16.8 | 17.4 | 16.1 | 17.3 | 17.2 | 13.1 | ... |
| Loans 3 to 5 years | 12.1 | 16.8 | 15.0 | 16.2 | 15.3 | 13.3 | 12.0 | 11.0 | ... |
| Loans over 5 years | 9.6 | 13.0 | 13.0 | 8.4 | 12.4 | 13.3 | 11.1 | 9.3 | ... |
| Loans 5 to 10 years | ... | ... | ... | ... | ... | ... | ... | ... | 12.9 |
| Loans over 10 years | ... | ... | ... | ... | ... | ... | ... | ... | 10.6 |
| Money market rates | | | | | | | | | |
| Bank of Estonia CD auction rate 4/ | 6.1 | 5.6 | 4.4 | 4.4 | 4.0 | 3.9 | 4.2 | ... | 4.7 |
| Interbank overnight loans | 6.3 | 5.4 | 4.3 | 4.1 | 3.4 | 3.4 | 3.6 | 3.8 | 3.3 |

Source: Bank of Estonia.

1/ Weighted average annual interest rates on deposits placed with commercial banks by individuals and companies. Calculation of demand deposit rates based on net deposit balances. Calculation of time deposit rates based on monthly turnover.

2/ Weighted average annual interest rates on loans granted to individuals and companies by commercial banks.

3/ From April 1997, changes in Bank of Estonia reporting requirements resulted in data for a different set of rates being available.

4/ During 1997, there were occasions when no CDs were bought by banks and therefore no rate was set.

Table 30. Estonia: Maturity Structure of Kroon Loans of Banking System, 1994-97 1/

| | 1994 | 1995 | 1996 | | | | 1997 | |
|---|---|---|---|---|---|---|---|---|
| | December | | Mar. | Jun. | Sep. | Dec. | Mar. | Jun. |
| | (In millions of kroons; loans issued during the month) | | | | | | | |
| Total lending | 549 | 853 | 666 | 821 | 752 | 1,151 | 1,018 | 965 |
| *Of which:* | | | | | | | | |
| Loans up to 1 month | 40 | 61 | 75 | 63 | 51 | 89 | 200 | 16 |
| Loans 1-3 months 2/ | 95 | 119 | 101 | 46 | 46 | 223 | 191 | 669 |
| Loans 3-6 months | 73 | 111 | 66 | 109 | 78 | 126 | 116 | 63 |
| Loans 6-12 months | 174 | 268 | 180 | 174 | 131 | 215 | 146 | 58 |
| Loans over 1 year | 168 | 293 | 244 | 429 | 447 | 499 | 365 | 158 |
| | (Percentage of total distribution) | | | | | | | |
| Loans up to 1 month | 7 | 7 | 11 | 8 | 7 | 8 | 20 | 2 |
| Loans 1-3 months 2/ | 17 | 14 | 15 | 6 | 6 | 19 | 19 | 69 |
| Loans 3-6 months | 13 | 13 | 10 | 13 | 10 | 11 | 11 | 7 |
| Loans 6-12 months | 32 | 31 | 27 | 21 | 17 | 19 | 14 | 6 |
| Loans over 1 year | 31 | 34 | 37 | 52 | 59 | 43 | 36 | 16 |

Source: Bank of Estonia.

1/ Excludes interbank loans.

2/ After April 1997, data refer to up to 3 months.

Table 31. Estonia: Maturity Structure of Foreign Currency Loans of Banking System, 1995-97 1/

| | 1995 | 1996 | 1997 | |
|---|---|---|---|---|
| | December | | Mar. | June |
| | (In thousands of kroons) | | | |
| Total lending | 100 | 1,200 | 1,324 | 621 |
| *Of which* | | | | |
| Loans up to 1 month 2/ | 8 | ... | ... | ... |
| Loans 1-3 months | 13 | 805 | 764 | 113 |
| Loans 3-6 months | 14 | 35 | 38 | 33 |
| Loans 6-12 months | 40 | 53 | 106 | 42 |
| Loans over 1 year | 25 | 307 | 417 | 431 |
| | (Percentage of total distribution) | | | |
| Loans up to 1 month | 8.0 | ... | ... | ... |
| Loans 1-3 months | 13.3 | 67.1 | 57.7 | 18.2 |
| Loans 3-6 months | 13.9 | 2.9 | 2.9 | 5.3 |
| Loans 6-12 months | 39.5 | 4.5 | 8.0 | 6.8 |
| Loans over 1 year | 25.3 | 25.6 | 31.5 | 69.4 |

Source: Bank of Estonia.

1/ Data are for loans issued during the month.

2/ From 1996, separate data are not available for "loans up to 1 month".

# Table 32. Estonia: Nonperforming Loans of Commercial Banks, 1993-97

| | 1993 | 1994 | 1995 | 1996 | | | | 1997 | |
|---|---|---|---|---|---|---|---|---|---|
| | December | | | Mar. | June | Sep. | Dec. | Mar. | June |
| | | | | (In millions of kroons; end of period) | | | | | |
| Total | 205 | 159 | 209 | 236 | 252 | 266 | 283 | 247 | 269 |
| Overdue for 1-30 days | 32 | 26 | 53 | 26 | 30 | 32 | 34 | 48 | 42 |
| Overdue 31 days to 3 months 1/ | 11 | 33 | 36 | 45 | 34 | 60 | 38 | 26 | 16 |
| Overdue over 3 months 2/ | 162 | 100 | 120 | 165 | 187 | 174 | 211 | 173 | 211 |
| | | | | (In percent of total loan portfolio) | | | | | |
| Total | 6.8 | 3.3 | 2.9 | 2.9 | 2.8 | 2.5 | 2.3 | 1.9 | 1.7 |
| Overdue for 1-30 days | 1.1 | 0.6 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 |
| Overdue 31 days to 3 months 1/ | 0.4 | 0.7 | 0.5 | 0.6 | 0.4 | 0.6 | 0.3 | 0.2 | 0.1 |
| Overdue over 3 months 2/ | 5.3 | 2.0 | 1.7 | 2.0 | 2.1 | 1.6 | 1.7 | 1.2 | 1.3 |

Source: Bank of Estonia.

1/ From April 1997, this category refers to 30-60 days overdue.

2/ From April 1997, this category refers to over 60 days overdue.

Table 33. Estonia: Balance of Payments, 1993-97

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan-June |
|---|---|---|---|---|---|
| | (In millions of U.S. dollars) | | | | |
| Current account 1/ | 23 | -171 | -185 | -442 | -318 |
| Trade balance | -145 | -361 | -692 | -1,058 | -592 |
| Exports | 812 | 1,329 | 1,861 | 2,064 | 1,298 |
| Imports | -956 | -1,690 | -2,553 | -3,121 | -1,891 |
| Services | 77 | 105 | 378 | 512 | 304 |
| Receipts | 335 | 516 | 876 | 1,108 | 595 |
| Payments | -258 | -411 | -498 | -596 | -291 |
| Factor income (net) 2/ | -14 | -29 | 3 | 7 | -77 |
| Transfers | 105 | 115 | 126 | 97 | 48 |
| Financial and capital account | 222 | 175 | 259 | 565 | 322 |
| Direct investment | 154 | 212 | 202 | 98 | 80 |
| Portfolio investment | 0 | -14 | -16 | 142 | 56 |
| Other medium and long term | 84 | 7 | 48 | 74 | 42 |
| Other short-term | -83 | -40 | 27 | 269 | 160 |
| Capital transfers | 0 | -1 | -1 | -1 | 0 |
| Monetary authorities | 66 | 10 | -1 | -18 | -15 |
| Errors and omissions | -51 | 26 | 32 | -22 | 39 |
| Reserve assets | -195 | -31 | -106 | -101 | -43 |
| Memorandum items: | | | | | |
| Exchange rate (kroon/US$) | 13.2 | 13.0 | 11.5 | 12.0 | 13.5 |
| Current account/GDP (in percent) 1/ | 1.4 | -7.4 | -5.1 | -10.2 | -14.7 |
| Gross international reserves (US$ mil.) | 388 | 447 | 583 | 640 | 621 |

Sources: Estonian authorities; and Fund staff estimates.

1/ The Bank of Estonia is in the process of revising balance of payments data to exclude transit trade. These revisions indicate that the current account deficit was about 9.5 percent of GDP in 1996 and just under 10 percent in the first half of 1997. The staff has been working closely with the authorities and final data on the revised balance of payments should be available in early 1998.

2/ Includes interest income, and from 1997, reinvested profits. The latter are excluded as a debit item in the current account with the counterpart being a net credit for foreign direct investment in the capital account (based on latest change in balance of payments methodology).

Table 34. Estonia: Direction of Trade-Exports, 1993-97

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan. -June |
|---|---|---|---|---|---|
| | (In millions of kroons) | | | | |
| Exports | 10,611 | 17,380 | 21,098 | 24,618 | 17,476 |
| Russia | 2,406 | 3,953 | 3,734 | 4,102 | 2,910 |
| Finland | 2,278 | 3,279 | 4,496 | 4,501 | 2,996 |
| Sweden | 1,004 | 1,810 | 2,263 | 2,815 | 2,006 |
| Latvia | 914 | 1,335 | 1,614 | 2,056 | 1,522 |
| Germany | 851 | 1,157 | 1,511 | 1,715 | 1,141 |
| Netherlands | 432 | 491 | 975 | 724 | 615 |
| Denmark | 247 | 539 | 694 | 892 | 566 |
| Ukraine | 378 | 467 | 793 | 1,257 | 769 |
| United Kingdom | 149 | 408 | 683 | 797 | 659 |
| USA | 197 | 265 | 504 | 548 | 375 |
| Belarus | 121 | 312 | 529 | 485 | 247 |
| Other | 1,634 | 3,365 | 3,300 | 4,727 | 3,670 |
| | (In percent of total) | | | | |
| Exports | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Russia | 22.7 | 22.7 | 17.7 | 16.7 | 16.7 |
| Finland | 21.5 | 18.9 | 21.3 | 18.3 | 17.1 |
| Sweden | 9.5 | 10.4 | 10.7 | 11.4 | 11.5 |
| Latvia | 8.6 | 7.7 | 7.7 | 8.4 | 8.7 |
| Germany | 8.0 | 6.7 | 7.2 | 7.0 | 6.5 |
| Netherlands | 4.1 | 2.8 | 4.6 | 2.9 | 3.5 |
| Denmark | 2.3 | 3.1 | 3.3 | 3.6 | 3.2 |
| Ukraine | 3.6 | 2.7 | 3.8 | 5.1 | 4.4 |
| United Kingdom | 1.4 | 2.3 | 3.2 | 3.2 | 3.8 |
| USA | 1.9 | 1.5 | 2.4 | 2.2 | 2.1 |
| Belarus | 1.1 | 1.8 | 2.5 | 2.0 | 1.4 |
| Other | 15.4 | 19.4 | 15.6 | 19.2 | 21.0 |

Source: Bank of Estonia.

Table 35. Estonia: Direction of Trade-Imports, 1993-97

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan. -June |
|---|---|---|---|---|---|
| | | | (In millions of kroons) | | |
| Imports | 11,921 | 22,554 | 29,383 | 38,366 | 26,580 |
| Finland | 3,975 | 7,902 | 11,241 | 13,902 | 8,237 |
| Russia | 2,020 | 3,316 | 4,532 | 4,953 | 3,892 |
| Sweden | 1,057 | 2,148 | 2,635 | 3,217 | 2,088 |
| Germany | 1,123 | 1,862 | 2,582 | 3,403 | 2,237 |
| Netherlands | 382 | 719 | 1,014 | 1,410 | 1,167 |
| Denmark | 312 | 609 | 837 | 1,140 | 755 |
| Lithuania | 419 | 586 | 575 | 867 | 605 |
| Latvia | 285 | 417 | 976 | 1,270 | 824 |
| USA | 297 | 388 | 420 | 538 | 401 |
| United Kingdom | 211 | 324 | 544 | 1,047 | 605 |
| Other | 1,839 | 4,284 | 4,028 | 6,619 | 5,770 |
| | | | (In percent of total) | | |
| Imports | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Finland | 33.3 | 35.0 | 38.3 | 36.2 | 31.0 |
| Russia | 16.9 | 14.7 | 15.4 | 12.9 | 14.6 |
| Sweden | 8.9 | 9.5 | 9.0 | 8.4 | 7.9 |
| Germany | 9.4 | 8.3 | 8.8 | 8.9 | 8.4 |
| Netherlands | 3.2 | 3.2 | 3.5 | 3.7 | 4.4 |
| Denmark | 2.6 | 2.7 | 2.8 | 3.0 | 2.8 |
| Lithuania | 3.5 | 2.6 | 2.0 | 2.3 | 2.3 |
| Latvia | 2.4 | 1.8 | 3.3 | 3.3 | 3.1 |
| USA | 2.5 | 1.7 | 1.4 | 1.4 | 1.5 |
| United Kingdom | 1.8 | 1.4 | 1.9 | 2.7 | 2.3 |
| Other | 15.4 | 19.0 | 13.7 | 17.3 | 21.7 |

Source: Bank of Estonia.

Table 36. Estonia: Trade by Commodity, 1993-97
(In millions of kroons)

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan.-June |
|---|---|---|---|---|---|
| Exports | | | | | |
| Foodstuffs 1/ | 2,439 | 3,611 | 3,465 | 3,952 | 2,526 |
| Mineral and chemical products | 1,476 | 2,808 | 3,867 | 4,501 | 3,446 |
| Raw hides, skins, leather | 185 | 218 | 240 | 309 | 175 |
| Wood, pulp, and paper | 855 | 1,771 | 2,826 | 3,108 | 2,316 |
| Textiles and related articles | 1,308 | 2,333 | 2,852 | 3,554 | 2,310 |
| Footwear, headgear | 130 | 251 | 305 | 385 | 148 |
| Metals 2/ | 1,450 | 1,748 | 1,848 | 2,004 | 1,377 |
| Machinery, mechanical appliances, and electrical equipment | 818 | 1,830 | 2,765 | 3,327 | 2,830 |
| Vehicles, aircrafts, vessels | 1,134 | 1,475 | 1,466 | 1,584 | 1,174 |
| Optical, photographic, measuring, checking instruments | 161 | 311 | 253 | 397 | 252 |
| Arms and ammunition | 5 | 2 | 5 | 1 | 9 |
| Miscel. manufactured articles | 592 | 956 | 1,204 | 1,495 | 910 |
| Works of art and antiques | 59 | 66 | 2 | 3 | 3 |
| Total | 10,611 | 17,380 | 21,098 | 24,618 | 17,476 |
| Imports | | | | | |
| Foodstuffs 1/ | 1,767 | 3,424 | 4,133 | 5,994 | 4,395 |
| Mineral and chemical products | 2,999 | 5,449 | 6,995 | 8,983 | 5,670 |
| Raw hides, skins, leather | 80 | 190 | 229 | 373 | 208 |
| Wood, pulp, and paper | 337 | 871 | 1,425 | 1,815 | 1,511 |
| Textiles and related articles | 1,248 | 2,230 | 3,157 | 3,611 | 2,217 |
| Footwear, headgear | 120 | 338 | 382 | 462 | 279 |
| Articles of stone, cement, ceramic, glass | 145 | 393 | 617 | 791 | 409 |
| Metals 2/ | 676 | 1,388 | 2,143 | 3,082 | 1,841 |
| Machinery, mechanical appliances, and electrical equipment | 2,123 | 4,685 | 6,279 | 8,395 | 5,623 |
| Vehicles, aircrafts, vessels | 1,681 | 2,241 | 2,324 | 2,862 | 3,236 |
| Optical, photographic, measuring, checking instruments | 287 | 635 | 834 | 933 | 610 |
| Arms and ammunition | 29 | 37 | 12 | 9 | 4 |
| Miscel. manufactured articles | 347 | 647 | 851 | 1,054 | 578 |
| Works of art and antiques | 84 | 25 | 0 | 1 | 0 |
| Total | 11,921 | 22,554 | 29,383 | 38,366 | 26,580 |

Source: Bank of Estonia.

1/ Includes animal and vegetable products, prepared foodstuffs, beverages, spirits, and tobacco.

2/ Includes base metals, precious metals and related articles.

Table 37. Estonia: Foreign Direct Investment (Net) by Sector, 1994-96
(In percent of total)

| | 1994 | 1995 | 1996 |
|---|---|---|---|
| Agriculture, hunting and forestry | 1.3 | 1.8 | -6.4 |
| Fishing | 0.2 | 0.1 | -0.1 |
| Mining | 0.0 | 0.0 | 0.4 |
| Manufacturing | 53.5 | 49.2 | 23.1 |
| Energy, gas and water supply | 0.8 | 0.0 | 0.0 |
| Construction | 0.3 | 0.1 | 1.6 |
| Wholesale and retail trade | 13.4 | 24.8 | 35.2 |
| Hotels and restaurants | 1.4 | 2.6 | 3.2 |
| Transportation, communication, and storage | 18.3 | 14.8 | 9.1 |
| Finance | 3.7 | 6.8 | 22.4 |
| Real estate, renting and business activities | 2.8 | 1.0 | 2.2 |
| Public administration and defense, social security | 0.0 | 0.0 | 0.1 |
| Other | 4.3 | -1.1 | 9.3 |
| Total | 100.0 | 100.0 | 100.0 |

Source: Bank of Estonia.

Table 38. Estonia: Foreign Direct Investment (Net) by Country, 1994-96

(In percent of total)

| | 1994 | 1995 | 1996 |
|---|---|---|---|
| Sweden | 18.9 | 49.3 | 9.9 |
| Finland | 22.6 | 8.3 | 34.7 |
| USA | 5.3 | 8.7 | 25.3 |
| Russia | 15.0 | -2.6 | -0.3 |
| United Kingdom | 3.1 | 7.9 | 2.3 |
| Singapore | 0.0 | 12.6 | 0.3 |
| Denmark | 1.2 | 3.5 | 9.3 |
| Netherlands | 7.0 | -0.4 | 0.7 |
| Austria | 2.0 | 3.6 | 2.9 |
| Germany | 1.3 | 2.4 | 4.4 |
| Norway | 0.1 | 2.5 | 4.2 |
| Ireland | 3.3 | 0.9 | -0.2 |
| Czech Republic | 0.4 | 1.4 | 2.0 |
| Other | 19.7 | 2.1 | 4.6 |
| Total | 100.0 | 100.0 | 100.0 |

Source: Bank of Estonia.

Table 39. Estonia: Composition of Net Capital Flows, 1993-97

| | 1993 | 1994 | 1995 | 1996 | 1997 Jan.-June |
|---|---|---|---|---|---|
| | | | (In millons of U.S. dollars) | | |
| Total capital inflows (net) | 222.2 | 175.8 | 259.7 | 565.5 | 321.8 |
| Non-debt creating flows (net) | 154.1 | 206.1 | 218.0 | 252.1 | 82.3 |
| Foreign direct investment | 154.4 | 212.2 | 202.3 | 98.3 | 79.3 |
| of which: reinvested profits | 27.6 | 42.8 | 15.4 | 1.4 | 56.2 |
| Portfolio investment (equity) | -0.3 | -6.1 | 15.8 | 153.8 | 2.9 |
| Debt creating flows (net) | 68.1 | -30.3 | 41.7 | 313.4 | 239.5 |
| Portfolio investment (debt securities) | 0.1 | -8.0 | -32.1 | -12.0 | 52.5 |
| Long-term flows 1/ | 84.4 | 7.3 | 47.6 | 74.3 | 42.0 |
| Short-term flows 2/ | -82.5 | -39.9 | 27.0 | 268.9 | 160.4 |
| Monetary authority | 66.1 | 10.4 | -0.8 | -17.8 | -15.4 |
| Memorandum items: | | | (In percent) | | |
| Debt-creating net inflows/total net capital inflows | 30.7 | -17.2 | 16.0 | 55.4 | 74.4 |
| Debt creating net inflows/GDP | 4.0 | -1.3 | 1.2 | 7.2 | 10.5 |

Sources: Bank of Estonia; and Fund staff estimates.

1/ Maturity exceeds one year.

2/ With maturity up to one year.