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The Estonian economy and its development problems¹

by

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This paper discusses the economic situation of Estonia at the end of 1980's. To begin with, the development of Estonian economy as a whole is described. Then a closer look is taken at the structure of economy and the main problems in different branches. Finally, some problems of national economy and its further development are discussed.

1. Recent developments

At the end of 1980's Estonian economy has reached a turning point. The economic mechanisms which have governed our development since mid-forties have proved inefficient in in the whole of the previous Soviet Union.

The economic situation at the turn of 1990's has been the result of the failure of the centrally planned economy and the inadequate economic policy as a whole. Plans which were made exceeded real possibilities and contradicted basic economic laws and interests.

¹The paper describes the situation in Estonia prior to introduction of entirely independent economic policies and own currency (eds.).

The whole attention in planning was paid to economic growth. In rough approximation it may be said that in the fifties and at the beginning of the sixties plans were oriented at maximum growth of gross material production, and from the end of the sixties onwards – to growth of net material production (NMP). One must bear in mind that statistics in the USSR have been organized so that it would not contain data comparable to those of the Western countries. Data about GNP, GDP and national income in the Western meaning are not directly available for Estonia. So, we still have to use the Soviet terminology. In principle, total production is measured as gross material production and it is the sum of output in the field of material production (including intermediate product). National income produced, in the Soviet terminology, is the net material product (the value added) in the same field. So, the economic activity in the field of social services is not reflected in these indicators at all. NMP differs from GNP by exclusion of depreciation and service (except for freight transport and distribution).

Dynamics of total production

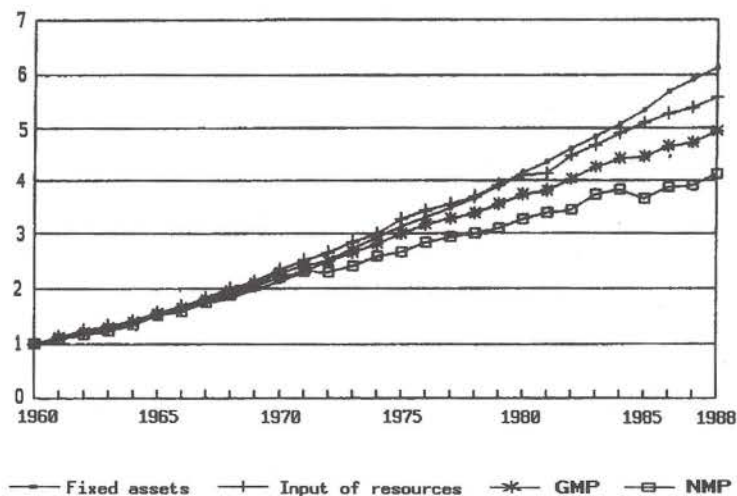


Figure 1.

The dynamics of these main targets of economic policy in Estonia is not what we would have liked to see (Fig. 1). The growth rate of *gross material product* has been exceeding the growth rate of *net material product* since the

beginning of the seventies. In the period of 1971–1988 the gross material product of Estonia increased 2.17 times. *Net material product* has increased in the same period 1.88 times. This was the result of fast increase in the cost of input of material resources (their consumption has increased 2.39 times). Fixed assets used in production have grown 2.7 times in the years 1971–1988. Their growth rate has been the fastest and thus the efficiency of their use has permanently declined.

Annual growth rates

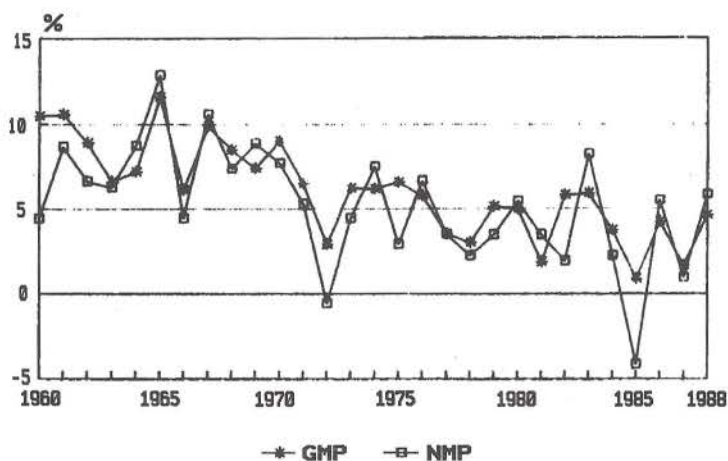


Figure 2.

During the whole period described we can see the fluctuating and declining growth rates (Fig. 2). There have been failures in agriculture in 1961, 1972, 1978, 1981, 1985 and 1987. Unsuccessful years in construction were 1962, 1974, 1981 and 1987. The amount of net material product produced in industry declined in the years 1982–1984. This was partly caused by introduction of new prices in 1982–1983.

In the years 1961–1965 the average annual growth rate of gross material product was 9.0%, in the years 1966–1970 — 8.2%. The growth rates of net material product were 8.6% and 7.7%. In the years 1986–1988 the average annual growth rate of gross material product fell to 3.5% and that of net material product to 4.1%.

We should also bear in mind that these data (fixed assets excluded) are in current prices, thus, part of the growth is due to price dynamics. In 1971–1988 the growth rate of gross material product in fixed prices was only 2.05 times. There are no reliable data about price dynamics for the whole period. The price index increase for 1987 was estimated at 1.7% by the Estonian Statistical Office (ESO) and 5.3% for 1988 (calculated on the basis of net material product). It turns out that the growth of net material product in 1988 (5.8%) is equivalent to almost nothing. There are also calculations for the whole Soviet Union showing the average annual inflation rate for the commodity sector to be 5.7% in 1981–1985, 7.0% in 1986–1988 and it is said to have been 8.4% in 1988. According to the report of ESO the average prices of consumer goods rose by 3.1% in 1989, including food (0.2%) and other commodities (5.8%). From the fourth quarter of 1989 to the first quarter of 1990 in Estonia the prices of food rose by 11.6%, other consumer goods by 6.0% and the prices of services by 1.4%. There has been an escalation of inflation going on. And it has been eating up even those small growth rates which have remained.

The price dynamics has not favored Estonian economy. Prices of imported goods have risen faster than the prices of Estonian production. The terms of trade have been well under 100%. This is also reflected in the shares of net material product and input of material resources in the total cost of production. Thus, if in fixed prices we can follow the decreasing share of input of material resources (more efficient use of resources), then in current prices the share of input of material resources has increased. Growth rate of input of material resources in fixed prices was 2.07 times in the period of 1971–1988 (and 2.39 times in current prices).

These basic economic data for Estonia are even quite good if we compare them to the average level of the area of the former Soviet Union. Net material product per capita exceeded the average level of the Soviet Union by 20% industrial production — by 33% and agricultural production — by 46% in 1988. Trade between Estonia and other republics was almost balanced. But the volume of exports to foreign markets in internal prices was about 3 times and in foreign market prices about 2 times smaller than the volume of imports. So, there was a permanent shortage of foreign currency, especially of convertible currency. It was partly the result of the foreign economic policy of the whole Soviet Union in which easy earnings from export of natural resources and raw materials have pushed production of technologically more complicated sectors

to the background. These sectors were underdeveloped and they were not able to compete on the world market. Most of our industrial output could not successfully compete on foreign markets because of its low quality. Export was to be subsidized and the demand for imports was unlimited. Unrealistically high exchange rate for rouble supported increasing demand for imports and created a need to introduce various supporting systems in exports, which have been pushing cost efficiency analysis to the background.

After the World War II there were periods of intensive investments into Estonian economy. *Fixed assets* of Estonian economy reached almost 20 billion roubles in 1988. They included assets of 12.5 billion roubles in the productive sectors of economy and assets of 6.7 billion roubles in the social sector. These assets, though, are becoming old and outdated. If in 1970 the industrial fixed assets were paid for or worn out in 27%, in 1985 they were worn out already in 48%. In construction these data were, respectively, 35% and 48%. The main reason for abnormal replacement of fixed assets has been the scarcity of technological equipment on the Soviet market and impossibility to convert the financial resources available in roubles into foreign currency to purchase technology from the world market. Thus, the use of outdated and worn out technological equipment has been one of the main reasons for our economic backwardness.

But the main problems in Estonian economy are not connected with growth rates. The economy has turned out *unbalanced*. There are shortages even in these sectors of economy which have had quite reasonable growth rates. The market of consumer goods has been totally out of balance, different measures of rationing had to be introduced. The amount of goods sold with official retail prices declined. For instance, at the end of 1989, the market prices for vegetables exceeded fixed official retail prices by up to 10 times, and the so-called contract prices — by 2 to 6 times. The network of retail trade enterprises operating with the so-called “commercial” prices, which were considerably higher than official retail prices, expanded.

Limitations and centralized allocation of resources in the field of investment goods and material resources for production have always been in use as an important part of planning and means for controlling economy. Now, for controlling the consumer goods market and in order to defend the interests of local consumers, various kinds of rationing were introduced in retail trade too. It had brought us to the situation in which the Soviet rouble was not only inconvertible on the foreign markets but was no more accepted on the internal market of the

Wages, savings and retail trade (per capita)

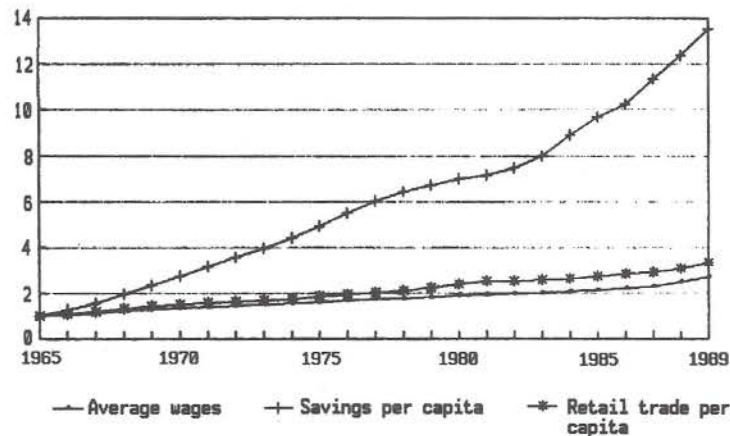


Figure 3.

USSR, either. The monetary system was totally out of order.

As the population have had no possibilities for proper use of their incomes, the *deposits* in saving banks have risen (see Fig.3). For the last 5–10 years people had been intuitively aware that the average interest rate paid on savings (about 2.5%) was under the inflation rate on consumer goods market. Hence, the rapid growth of savings should not be treated as the result of improvement in the standard of living but as an indicator of disorder in economy. People simply did not have better possibilities to locate their earnings.

The *differences in incomes* have increased. In 1960 the average wage per month was 81.9 roubles, maximum wages – 94.1 roubles — were in construction, and minimum — 53.1 — in culture. Then maximum wages exceeded the average by 15% and the minimum ones were 57% of the average. Minimum wages were on comparatively high level in the second half of the sixties when they reached 68% of the average. Since then, the minimum level has declined to 60% in 1988. Maximum wages have all the time been increasing faster than the average ones. In 1988 the wages in construction were 319.1 roubles and exceeded by 28% the average level of wages (249.9 roubles). Thus, the income policy has all the time favored construction, industry and agriculture. The income level in the social service sectors has been considerably lower. In 1990 a proposal for the increase

of wages in the field of social service up to the average level was made, but due to the deficit in the state budget it has been carried out step by step. In 1990 wages in social service should have been increased on an average by 50 roubles.

2. The structure of economy

The leading part in Estonian economy belongs to industry, accounting for 61% of gross material product and 44% of net material product in 1988 (Tables 1 and 2). With this regard there have been no principal changes in the structure of economy during the last 20 years. But as gross material product and net material product do not include services the whole structure of economy can be better described by employment data (Table 3). In this connection we can indicate the increasing share of employment in trade, housing, medical care, education and other social services. The number of employees in agriculture was permanently declining while the number of persons occupied in industry had been increasing up to 1986 and then began to decline.

There were about 300 independent state-owned *industrial* enterprises in Estonia at the turn of 1990's, and more than 460 small enterprises subordinated to them, to construction organizations or to municipal authorities. A lot of cooperatives – out of their total number of 2000 – were engaged in industrial production as well. A little more than 200 thousand people were employed in the state-owned industrial enterprises (the average being 700 employees per enterprise). In addition, there were about 65 thousand persons employed in auxiliary industrial production in construction and agricultural enterprises. So, the total number of people employed in industrial production was about 270 thousand. This was 33% of the employees and 17% of the total population of Estonia. Employment in industry had been increasing up to 1986 (274.4 thousand) and then began to decline slowly.

As a matter of fact, many industrial enterprises were formed by mergers of smaller production units. The opposite trend started to dominate now — these small enterprises in rural regions would become independent and some of them passed into municipal ownership. Numerous small enterprises have been established during the recent years. A lot of joint-venture enterprises with participation of foreign firms were established as well. So, there has been a process of deconcentration going on in industry and it should be supported by privatization and by creation of joint stock companies.

	1970	1988
Industry	3178.9	6687.0
Construction	456.9	937.0
Agriculture	940.4	2081.3
Transport	179.5	528.3
Trade	132.9	331.2
Other	161.8	393.3

Table 1. Structure of GMP (million roubles)

	1988
Industry	1793.8
Construction	447.2
Agriculture	974.6
Transport	265.1
Trade	266.2
Other	314.9

Table 2. Net material product (million roubles)

In 1988 29% of industrial output was produced by enterprises subordinated to all-Union ministries, 57% by enterprises subordinated both to all-Union ministries and to Estonian government and 14% by local industry subordinated directly and only to Estonian government. This situation has, of course, quite changed recently.

The structure of industry for the same year is shown in Table 4. There are 3 leading branches of industry: light industry, food industry and machinery (including metal processing). They are holding the shares of 28%, 24% and 15% respectively of the total industrial output. These 3 branches account for some 60% of industrial employment.

	1970	1988
Industry	245.8	270.2
Agriculture	109.4	91.8
Transport, communication	64.8	73.4
Construction	65.2	78.1
Trade	58.1	74.8
Education, culture	62.3	95.5
Health care	33.5	46.1
Housing	23.5	38
Other	35.7	46

Table 3. Employment structure (thousands of employees)

	1988
Food	24%
Light industry	27%
Building materials	4%
Timber, wood, pulp and paper	9%
Machinery	15%
Chemistry and petrochemistry	9%
Fuels	3%
Power	6%
Other branches	5%

Table 4. Structure of industrial output

Light industry is based on imported raw materials. Cotton, wool, silk, hide and leather are imported from other republics of the USSR or from abroad.

The main problem in Estonian light industry is unsatisfactory product quality. Enterprises seem to prefer to produce huge shipments of goods of medium or low quality and put it on the Soviet market. They are not interested in improving quality and in meeting local sophisticated demands. This situation, to a certain extent, is also due to low quality of raw materials. Shortages in foreign currency have cut the share of imported commodities to minimum. Trade with other republics is quite limited because of the scarcity of their resources and, as a matter of fact, the wholesale trade has not been really interested in creating competition on local markets, either. This formed favorable conditions for creating cooperatives. Many cooperatives acting sewing or purchasing and selling consumer goods have been performing very well. This caused some increase in prices of consumer goods but their share is too small to balance the market. There are some joint ventures created (particularly in cooperation with Finnish firms) and they are starting to operate². So, the internal market in Estonia is unbalanced and due to low quality of products the possibilities of entering the world market are limited.

In *food industry* the most important branches are fish industry, and milk and meat industries which are based on local agriculture. As the fish resources of the Baltic Sea are limited, the share of Atlantic fish is permanently increasing. Estonian tinned fish is on sale almost everywhere in the area of the former Soviet Union. The problem is that the taste of the Atlantic fish does not satisfy the traditions of local demand. Therefore attempts are made to improve taste quality of fish products. In case of successful technological developments and advances in improvement of quality there may be some possibilities for entering international markets. If we do not succeed in entering the world market, we may face the necessity of reducing our capacities in fishing.

Milk and meat industries are based on local agriculture. About 1/3 of its production is exported to the area of the former Soviet Union. Main problems in this field are concerned with economic mechanism. Subsidies paid from the budget to agriculture have been over 1/2 billion roubles per year. There was an idea of abolishing these subsidies, amounting on the average to 28 roubles per capita per month. Development depends on whether we could succeed in the world market competition with so high costs of production. The trade with

²In the middle of 1992 garment exports from Estonia to Scandinavian countries have been high enough to warrant apprehensions from the side of the competition in importing countries (eds.).

the post-Soviet area turning into hard currency, we may face world market competition within this area too. On the other hand, some kind of subsidies or import restrictions are obviously necessary in order to defend local agriculture from competition of the world market and to remain self-sufficient.

The most important branches of machine production are related to electronics (including radio electronics and devices for controlling technological processes), electrical engineering (electric motors, wires and cables), and equipment for other branches of economy (excavators, oil and gas processing installations, equipment for food industry, agriculture etc.) The share of repairs (including repairs of ships, cars and tractors) is also considerably large. Excepting the repair branch all the other ones are working basically for the post-Union market and a very small part of production is needed for Estonia. The main problem in machinery is to improve the technical level of production to meet the quality levels of international market and to find niches in the world market for entering it.

The most serious ecological problems are connected with *fuel and power* industry. Some 23–24 million tons of oil-shale is mined in seven mines and four opencast pits in North-East Estonia. About 90% of this is used in power generation. About half of the power generated in Estonia is transmitted outside, especially to Latvia. Oil-shale mining spoils the earth and damages groundwaters.

Power generation is responsible for emitting into atmosphere of more than half a million tons of pollution. All damages to nature have remained the burden to Estonia, our neighbours getting clean energy (electric power). It is quite obvious that the volume of power generation should be reduced in the following years together with power transmission to the outside world. In the beginning of the next century Estonia may face power shortage and then new generating capacities meeting ecological standards will be badly needed.

Chemical industry is not highly developed in Estonia. But the phosphorite pit near Tallinn and production of mineral fertilizers in Maardu and Kohtla-Järve are still adding ecological problems and tensions. As the phosphorite resources near Tallinn are going to be exhausted, mining should be ended there in a few years. There are quite rich phosphorite resources in North-East Estonia, but up to now we are lacking the technology for ecologically acceptable and economically efficient use of them. There has been some advancement in the field of manufacturing of plastic goods, but the problems of packaging are not

solved and a lot should be done in it by the chemical industry.

Timber, woodworking, pulp and paper industries are among the oldest in Estonia. Volume of felling is approximately $3.1-3.2 \cdot 10^6$ cu. meters annually, covering about 90% of demand for timber. There has been rapid development in production of furniture, but the quality of production tends to fall. To some extent this is due to low quality of chemical materials used in chip and fiber board industry and to declining share of natural wood. Up to now Estonian furniture is in high demand on the post-Union markets and a part of it is also exported to other markets. Pulp and paper industry has long traditions too. It is facing reconstruction and environmental consistency problem.

Production of *building materials* has stagnated. For quite a long period of time investments into this branch of industry have been insufficient. Fixed assets are depreciated (worn out) by more than 50%. Total production of some building materials has declined. Some resources of natural building materials are coming to be exhausted. Reconstruction of capacities in cement production is badly needed. Underdevelopment of this branch has caused tensions and failures in construction and is restricting the development of the whole economy.

Agriculture gives 18% of total production and 22% of net material product. Employment in agriculture is about 100 thousand. This accounts for 12% of employment and 6% of total population of Estonia. We used to have about 300 collective and state farms, i.e. on the average about 300 active employees per farm. This situation resulted from mergers of smaller agricultural productive units which lasted up to the middle of eighties. The trend was disrupted then and there was a tendency of dividing huge agricultural units into smaller ones. During a few recent years about 1000 private farms have been established. So privatization of agriculture is in process. Its results are still miserable. Private farms have been created, but they are not functioning with full capacity. There is shortage of equipment for small farming, of building materials etc. On the other hand, a lot should be done in the field of legislation. This concerns first of all legislation concerning land and taxation, and creation of social guarantees and social security for owners of private farms. Disaggregation of collective and state farms should support more efficient use of land and other resources, introduction of principles of soft agriculture, improvement of quality of production and creation of possibilities for entering foreign markets.

Economic problems in agriculture do not concern only proportions between the state purchasing prices and retail prices. Even if the subsidies are abolished

and free prices introduced, this would not solve all the problems. The trouble is that Estonian agriculture can compete quite successfully on the markets of the former Soviet Union as our cost of production is the lowest (see Fig. 4). This, however, will change as trade turns into hard currency and encounters world competition.

Cost of agricultural production (roubles)

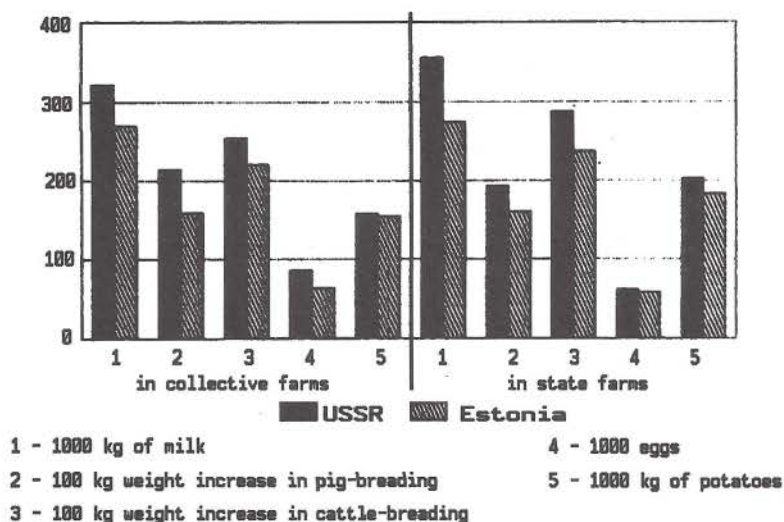


Figure 4.

There are about 70 thousand persons working in *construction*. This makes for 10% of employment and 5% of population. Nevertheless, the shortage in construction capacities has limited the development of economy. This has postponed construction of many buildings for social needs as productive (mainly industrial) buildings were preferred and abundantly financed. Housing was to be cheap in order to provide maximum amount of living space. This has brought us disbalances in the macrostructure of economy. Mass production of cheap flats with the support of the system of division which favored migrants brought about very high immigration rates.

Overwhelming demand for construction has led to deterioration of quality. New residential areas have an inhumane look. We are facing the situation when for more significant buildings and complicated work mostly foreign firms are used. A lot is done by Finnish firms, our old town in Tallinn is reconstructed mainly by Polish firms. There is the tendency towards abolishing of huge monopolistic construction firms. There are a lot of small enterprises (about 80) and also cooperatives (480). This should introduce some competition in construction. Changes are taking place in housing policy to improve quality of construction, reduce total volumes and change the forms of ownership.

There are 73000 persons occupied in *transport and communication*. This makes for 9% of the total employment and 5% of the population. Yet, transport is overloaded. In railway freight transport there is a permanent shortage of cars. It is also difficult to get tickets on internal railroads and airlines. On the few international lines the situation is even worse.

Communication system is quite outdated and overloaded. There is shortage of usual phones, not to speak of faxes and other telecommunication systems for exchange of information. Unreliable communication system is restricting our possibilities for entering and participating in international trade.

Social services are underdeveloped in spite of considerably good results in comparison with the average level of the post-Soviet area. There are serious problems in the fields of education, health care, housing etc. Social service accounts for about 30% of total employment.

Social services have been suffering in three ways. First, buildings for social needs are quite often excluded from the plans due to shortages in construction capacities. Secondly, when the plans of construction are not fulfilled (and this happens quite often) then the buildings for social needs are left out. And the third stage is that even those capacities that we have in social services do not operate in full because of the scarcity of labor. As mentioned before, the wage level in social services was considerably lower than the average. And only in 1990 more serious attempts were made to solve the problem.

Besides the social service infrastructure there are quite serious problems in organization of the social services. There have to be changes in the organization of medical care, education and culture as well. The main aim is to decentralize the systems, to make social services more human-centered.

3. Conclusions

At the level of national economy we can point out the following most serious problems.

1. Lack of proper monetary system. As the Soviet rouble was not convertible into foreign currencies and its exchange rate was unrealistic we had no basis for international comparisons. It is difficult to estimate our cost levels and compare it to world market prices. We are not able to estimate whether and with which goods we can compete on the world market.

2. Our price system was totally unsuitable for self-accounting, as some enterprises may gain unreasonably high incomes and others need large subsidies. This created great need for redistribution of incomes through the budget. On other hand, wrong prices gave wrong information about allocation of resources. Thus, inefficient economic structure reproduced itself permanently. Attempts to change the structure of economy to meet world market demand are in contradiction with internal interests of enterprises, oriented on and actually operating with current internal prices.

3. Estonian external trade is East-oriented. The share of the former Union republics in our external trade turnover is about 90%, the share of other foreign countries — 10%. We should increase the share of Western countries in our foreign trade to earn hard currency and improve our technological level.

4. We were not sufficiently competent for controlling such economic tools as exchange rates for internal currency, interest rates of deposits and loans, custom tariffs, prices etc. As a temporary solution administrative measures, such as restrictions on foreign trade, centralized allocation of some resources, rationing of consumption, defending local market from consumers outside etc. were used.

The difficulties mentioned above were quite well-known. As a possible way to overcome them the idea of self-accounting Estonia was presented already in the autumn 1987. This idea was partly accepted after difficult discussions by the Supreme soviet of the USSR in 1989. It was opposed by many all-Union organizations and the government of the USSR. As a matter of fact Baltic republics were then given no possibility to carry out their own economic policy.

Separation from the USSR did not mean, however, abolishing of trade and economic cooperation with the post-Union states. We bear in mind the economic position of Estonia as a bridge between East and West.

