

POLICY OF TRANSITION: INDUSTRY IN THE ESTONIAN SSR DURING THE FIRST POST-WAR FIVE-YEAR PLAN (1946–1950)

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The goal of this article is to examine the industrial changes in the transition period from a market economy to a command economy under the conditions of the first post-war five-year plan (1946–1950) and test the Soviet official statistics about the industrial growth rates. The paper is based on Estonian archival sources mainly from the Council of Ministers, the State Planning Committee, the Statistical Office, the Communist Party of ESSR and literature.

FIVE-YEAR PLAN ON INDUSTRIAL DEVELOPMENT FOR 1946–1950

World War II seriously damaged the economy of Estonia. The war claimed thousands of lives; hundreds of social and municipal buildings and dwelling houses, industrial enterprises and power stations lay in ruins; agriculture suffered seriously, having lost nearly one fifth of livestock. Industry as a whole lost 45 percent of its pre-war productive capacity. Some branches such as fuel, textiles, timber, woodworking, pulp and paper suffered losses of 60–90 percent.¹

The autumn of 1944 witnessed the return of the Estonian SSR governmental and party functionaries in the wake of the Red Army, to reclaim their political and economic power. Extensive preparatory work had been done for their return in the Soviet rear by training personnel and drafting plans for economic reconstruction and future development. Already in February 1944, the Estonian authorities had requested deputy chairman of the Council of People's Commissars² of the USSR, Vyacheslav Molotov, to allocate raw materials and return part of evacuated industrial equipment and means of transport, in order to be able to start the industrial recovery immediately after the Germans' defeat.³ In August 1944 the

¹ Valge raamat. Eesti rahva kaotustest okupatsiooni läbi 1940–1991. Eesti Entsüklopeediakirjastus, Tallinn, 2005, 129.

² In March 1946 the Council of People's Commissars was renamed the Council of Ministers.

³ Eesti Riigiarhiiv (ERA), f R-1, n 5, s 81, l 14, 15.

planning that had been introduced in the ESSR in the last quarter of 1940 was restored: a recovery plan of the ESSR economy in the last three months of 1944 was drafted and sent to Moscow for approval. In January 1945 implementation of economic recovery began under the annual plan despite the fact that the 4th session of the Supreme Council of the ESSR (the state administration's highest legislature) formally adopted the plan of 1945 only in June, a delay of six months.⁴ In view of future developments, at the beginning of February 1945, the top policy-making body – the Bureau of the Central Committee of Estonian Communist (Bolsheviks) Party (CC of ECP(b)) decided to send the delegation of the State Planning Commission of ESSR headed by the chairman of the commission, the member of the CC of ECP(b), Oskar Sepre, to the State Planning Commission (since 1948 the State Planning Committee) of the Soviet Union (Russian acronym *Gosplan*) in Moscow to outline the five-year plan for economic development of the ESSR.⁵

This was not the first time for Estonia to face long-term planning. The first major project of the five-year planning for the years 1941–1945 was introduced in 1941 and concerned the development of the strategically important Estonian oil shale industry. In five years the mining of oil shale had to triple (from 2.7 million to 8.0 million tons), the production of oil had to increase 3.7 fold (from 182 thousand to 670 thousand tons) and the number of workers about 3.3 times (from 8.6 thousand to 28.3 thousand persons).⁶ After the 18th Congress of CPSU(b) in 1939, the Central Committee requested the *Gosplan* to formulate a 15-year program of economic development designed to lay the foundations of communist society. Certain that in the near future all the Soviet republics would get the same task, the State Planning Commission of the ESSR, founded in August 1940 and subordinated to the Council of People's Commissars of the ESSR, decided in early June 1941 to start with the preparatory work for drafting the long-term, i.e. a 15-year program of economic development of the ESSR.⁷ This perspective was disrupted by the Nazi invasion.

After the Moscow visit in February 1945, intensive work on the plan started. Within a month the State Planning Commission prepared a draft of the five-year plan (1946–1950), which was approved by the bureau of the CC of ECP(b) and was sent to both *Gosplan* and the Council of People's Commissars of USSR in order to contribute to all-union planning.⁸ At the beginning of August 1945 the Kremlin had officially announced that the economic planning would be restarted and the fulfillment of the Fourth Five-Year Plan would start in January 1946 and terminate on 31 December 1950.⁹ *Gosplan* was instructed to draft the five-year

⁴ ERA, f R-3, n 3, s 434, l 1–99.

⁵ Eesti Riigiarhiivi Filiaal (ERAF), f 1, n 4, s 163, l 4.

⁶ ERAF, f 1, n 4, s 64, l 5–17, 125–127; Pihlamägi, M. Eesti tööstus murrangulisel 1940.–1941. aastal: turumajanduselt plaanimajandusele. – Acta Historica Tallinnensia, 1997, 1, 171.

⁷ ERA, f R-10, n 1, s 19, l 33–41.

⁸ ERAF, f 1, n 4, s 202, l 149.

⁹ Review of the month: the fourth five-year plan and the crisis in Soviet economy. – In: Fourth International, September 1946, 7, 9, 262. Transcribed, edited & formatted by T. C. D. Walters in 2008 for ETOL. <http://www.marxists.org/history/etol/newspape/fi/vol07/no09/soviet.htm>.

plan with the aim to exceed the pre-war output by 1950.¹⁰ Seven month later, on 18 March 1946, the Supreme Soviet of the USSR legally adopted the law “Five-Year Plan of reconstruction and development of the national economy of the Soviet Union for 1946–1950”¹¹.

The Fourth Five-Year Plan focused on the restoration of economic structures in the territories that had previously been under German occupation, simultaneously aiming at reaching and even exceeding the pre-war levels in industry and agriculture. The industrial output of the Soviet Union was to increase by 48 percent as compared to the pre-war year of 1940 through preferential development of heavy industry: machine-building, metallurgy, fuel and electrical industry.¹² A substantial share of financial and material resources, as well as labour resources was to be channelled into these industries. For 1950, the plan targeted production volumes in natural indicators for fifty-three crucial categories of industrial products, including iron and steel, oil, passenger and freight cars for railways, locomotives, agricultural and industrial machinery, cotton and woollen cloth, leather footwear, meat, butter, fish and sugar.

One of the goals of the Five-Year Plan was the economic reconstruction and industrialisation of the territories that had been annexed to the Soviet Union in 1939–1940. Industrial development in the ESSR was to be based on heavy industry: oil shale mining and processing, electrical power, and machine-building industries. In light industry¹³, priority was given to the cotton textile industry, disregarding the opinion of the Deputy Chairman of the ESSR Council of the People’s Commissars, Arnold Veimer, who considered the restoration of the local cotton textile industry ill-advised, particularly the Narva Kreenholm Cotton Mill, because of the excessive costs of raw material transportation from distant locations (Central Asia) and the shortage of a local workforce.¹⁴ Veimer suggested that instead the cotton textile and timber industries could be used to prop up heavy industry under the circumstances where Estonian labour resources were relatively scarce.¹⁵

¹⁰ **Nove, A.** *An Economic History of the U.S.S.R.* Benguin Book, Harmondsworth, 1986, 290.

¹¹ *Seadus NSVL rahvamajanduse taastamise ja arendamise viie aasta plaanist 1946–1950.* Riiklik Kirjastus, Poliitiline Kirjandus, Tallinn, 1946. The process of formation of Plans in USSR see **Granick, D.** *Management of the Industrial Firm in the USSR.* Columbia University Press, New York, 1955; **Berliner, J.** *Factory and Manager in the USSR.* Harvard University Press, Cambridge, 1957; **Nove, A.** *The Soviet Economic System.* 3rd ed. Boston, 1986; **Gregory, P. R.** *The dictator’s orders. – In: Behind the Façade of Stalin’s Command Economy: Evidence from the Soviet State and Party Archives.* Ed. P. R. Gregory. Hoover Institution Press, Standford, 2001, 11–33.

¹² *Seadus NSVL rahvamajanduse taastamise, 6.* Capital goods industry was called heavy industry in the Soviet Union.

¹³ Consumer goods industry was called light industry in the Soviet Union.

¹⁴ **Veimer, A.** *Eesti NSV majanduse ülesehituse probleemidest.* 13. mail 1944. – In: **Veimer, A.** *Eesti NSV majandusprobleeme.* Riiklik Kirjastus, Tallinn, 1945, 87. In 1940–1941 attempts were made to raise the production capacity of the Kreenholm Cotton Mill (reorganised into an all-Union enterprise) to the tsarist era levels by increasing the number of workers to 10,000 predominantly from workforce recruited from other republics.

¹⁵ **Veimer, A.** *Eesti NSV majanduse ülesehituse probleemidest,* 86.

In harmony with the development trends in industry, the Five-Year Plan specified the 1950 production targets in natural indicators for the ESSR in twelve main categories of industrial output: electricity, oil shale, peat, paper, cement, windowpanes, timber, cotton cloth, butter, meat, spirits and fishing.¹⁶ The figure for oil shale (8.4 million tons in 1950) was almost the same as had been predicted in the pre-war five-year plan for the development of oil shale industry. The 1950 target figures for butter and fish were actually below the production of 1940 as the statistics demonstrate (Table 1). The enterprises of cotton textile industry had to produce 121.4 million metres of cotton fabrics in 1950. The inspiration for setting such a huge figure for production came probably from tsarist period, when two Estonian cotton spinning and weaving mills produced annually 80 million metres of cotton fabrics. The industrial output of the ESSR (in the constant prices of 1926/27¹⁷) was to triple by the end of the five-year period as compared to 1940.¹⁸ Such a production growth rate would exceed considerably the Soviet Union average.

The Five-Year Plan designated 3.5 billion roubles to the Estonian SSR for capital investment, with one fifth of the sum, or 708 million roubles, to be spent on the economic sector subordinated to the republic. 60 percent of the total capital investment was to be invested into the industrial sector, especially into the projects of the all-union ministries: Ministry of Coal Industry of the Western Territories (450 million roubles), Ministry of Armed Forces (309 million roubles), Ministry of Shipbuilding Industry (200 million roubles) and Ministry of Textile Industry of the USSR (154 million roubles).¹⁹ A large share of investments planned for the reconstruction of industrial enterprises and several new building projects such as the construction of the shale gas plant in Kohtla-Järve and the 260 km gas pipeline from Kohtla-Järve to Leningrad for supplying gas to Leningrad, the oil shale mines in Ahtme and Sompa, the refinery in Kiviõli, several power stations, a peat briquette plant, the paper mill in Kehra, the hosiery factory in Tallinn, the brewery in Jõhvi and the fish canneries in Pärnu and Narva.

The directions contained in the all-union Five-Year Plan were to be used to work out the elaborate plan for reconstruction and development of the national economy of the ESSR. The joint decree "Drafting the project of the five-year

¹⁶ Seadus NSVL rahvamajanduse taastamise, 61.

¹⁷ Unchanged prices of 1926–27 officially used in the USSR for the indexes of industrial production, national incomes and some others since the First Five-Year Plan introduced in 1928. These prices were originally the actual prices of 1926–27. Soon the practice developed of placing high prices on new goods and new models of old goods and nevertheless treating these increased prices as unchanged 1926–27 prices. See **Jasny, N.** Soviet Economy during the Plan Era. Stanford University Press, Stanford, 1951, 10; **Harrison, M.** Prices, planners, and producers: an agency problem in Soviet industry, 1928–1950. – *Journal of Economic History*, 1998, **58**, 4, 1032–1034.

¹⁸ NSVL rahvamajanduse taastamise ja arendamise 1946.–1950. a. viisaastaku-plaan. NSVL Riikliku Plaanikomisjoni esimehe N. A. Voznessenski aruanne. – *Plaanimajandus*, 1946, 2, 88.

¹⁹ ERA, f R-1, n 5, s 121, l 119.

Table 1. Targets and fulfilments of the Fourth Five-Year plan by principal industrial goods of the ESSR*

Product	Unit	1940	1950 Target	1950 Fulfilment	1950 Percentage fulfilment	1950 1940 = 100
Five-Year plan of USSR:						
Electricity	Million kWhs	190	395	435.3	110.2	229.1
Oil shale	Thousand tons	1892	8410	3543	42.1	187.2
Peat	Thousand tons	283	319	470	147.3	166.1
Paper	Thousand tons	216	35	37.7	107.7	174.5
Cement	Thousand tons	70.9	160	90.6	56.6	127.8
Lumber	Thousand cubic metres	1348	2050	1908	93.1	141.5
Window glass	Thousand sq. metres	602	1400	470	33.6	78.1
Cotton fabrics	Million metres	22.8	121.4	26.8	22.1	117.5
Butter	Thousand tons	13.2	9	9.4	104.4	71.2
Meat	Thousand tons	16.7	20	8.8	44	52.7
Fish	Thousand tons	22.8	20	26.4	132	115.8
Spirits	Thousand decalitres	594	600	432	72	72.7
Five-Year Plan of ESSR**:						
Bricks	Millions	59.6	138	83.8	60.7	140.6
Lime	Thousand tons	37	70	71.1	101.6	192.2
Roof tiles	Thousands	1673	6120	3254	53.2	194.5
Cellulose	Thousand tons	101.8	55	45.6	82.9	44.8
Radio apparatus	Thousands	10.1	20	20	100	198
Nails	Thousand tons	2.7	3.4	2.7	79.4	100
Rubber shoes	Thousand pairs	137	400	1031	257.8	752.6
Leather shoes	Thousand pairs	599	923	1191	129	198.8
Woollen fabrics	Million meters	1.1	0.9	1.3	144	118.2
Linen fabrics	Million metres	2.3	4	3.2	80	139.2
Silk fabrics	Million metres	1.5	0.8	1.0	125	66.7
Socks and stockings	Thousand pairs	1584	1140	2224	195.1	140.4
Bread	Thousand tons	26.9	90	100.4	111.5	373.2
Sweetmeat	Thousand tons	3.9	6	9.8	163.3	251.2
Soap	Tons	1230	3610	2518	69.7	204.7

* Sources: Seadus NSVL rahvamajanduse taastamise ja arendamise viie aasta plaanist 1946–1950. RK Poliitiline Kirjandus, Tallinn, 1946, 61; Seadus Eesti NSV rahvamajanduse taastamise ja arendamise viie aasta plaani kohta 1946.–1950. a. – Eesti NSV Teataja, 1946, 39, 332, 649–668; Eesti NSV rahvamajandus. Statistiline kogumik. Eesti Riiklik Kirjastus, Tallinn, 1957, 49–51.

** Selected principal products the target fulfilment of which can be followed.

plan of the reconstruction and development of the economy of the ESSR (1946–1950) by counties, cities and enterprises” was issued on 9 April 1946 by the Council of Ministers and the CC of ECP(b) and established the procedures to be followed. The ministries and local authorities were obliged to draft plans within their jurisdictions and disseminate planning data to the subordinate enterprises

and, after co-ordination process, send the planning data to the State Planning Commission of the ESSR. The Commissioner of *Gosplan* of the USSR in Estonia had to send the control figures on development of all-union enterprises functioning in Estonian territory to the Council of Ministers and the CC of ECP(b). The deadline for the State Planning Commission to submit the drafted five-year plan to the Council of Ministers and the CC of ECP(b) was 10 May 1946. The plan was enacted into law on 13 July 1946 when the Supreme Council of the ESSR endorsed it.²⁰

The first part of the plan, named “Principal Tasks”, repeated the tasks assigned to the ESSR on the all-Union level. Part Two of the plan, designed by the ESSR State Planning Commission, committed the republican and local industries to increasing industrial output by 67 percent, to 531 million roubles²¹ (in constant prices of 1926/27) as compared to 1940 by the year 1950. The plan also stipulated the 1950 production volumes for the 38 principal categories of industrial production in natural indicators. Investments in the industrial sector were set at 367 million roubles, or nearly half of the total investments (708 million roubles) envisaged for the economic sector subordinated to the republic.²²

A major goal was to enlarge the state and co-operative sectors in industry and fully liquidate the private sector (small undertakings), which at the start of 1946 provided 7 percent of the total industrial output.²³

The Estonian SSR followed the form and content of the post-war five-year plan of the USSR, which did not differ very much from the earlier five-year plans. The production volumes were designated only for the so-called principal commodities. In his book “The Political Economy of Stalinism”, Paul Gregory summarizes the results of the earlier discussions on this matter and offers an explanation based on two factors. Firstly, no central planning institution could set output targets for hundreds of thousands of products; and secondly, the control of the output of a few key industries in the Soviet Union such as pig iron, chemicals, ores and grain would mean the control of the entire economy.²⁴ According to Leninist principles not all aspects of economic life needed to be controlled, only the most important: heavy industry, transportation and defence. These, however, were not the only reasons. In his article “The need to raise the

²⁰ Seadus Eesti NSV rahvamajanduse taastamise ja arendamise viie aasta plaani kohta 1946.–1950. a. – Eesti NSV Teataja, 1946, 39, 332, 649–668.

²¹ This figure was 81 million roubles higher than the target assigned to the republican and local industry of the ESSR on the all-Union level (450 million roubles in constant prices of 1926/27). Using 531 million roubles as base, the total industrial output in 1940 was 317 million roubles in constant prices of 1926/27.

²² Seadus Eesti NSV rahvamajanduse taastamise, 654–655.

²³ **Veimer, A.** Kõne Eesti NSV Ülemnõukogu esimese koosseisu VI istungjärgul 12. juulil 1946. – In: **Veimer, A.** Uuest stalinlikust rahvamajanduse taastamise ja arendamise viie aasta plaanist. Riiklik Kirjastus, Tallinn, 1946, 66; **Veimer, A.** Sõjajärgse stalinliku viisaastaku teise aasta ülesandeid. Kõne ENSV Ülemnõukogu II istungjärgul 2. aprillil 1947. – In: **Veimer, A.** Sõjajärgse viisaastaku probleeme Nõukogude Eestis. Riiklik Kirjastus, Tallinn, 1947, 22.

²⁴ **Gregory, P. R.** The Political Economy of Stalinism: Evidence from the Soviet Secret Archives. Cambridge University Press, Cambridge, 2004, 112.

quality of planning”²⁵, published in 1946, head of the Soviet Estonian government, Arnold Veimer, describes planning as an awkward process at all levels, mostly due to the shortage of basic materials, the lack of information on the productive capacities of industrial enterprises, the non-existence of standard costs per unit of product for fuel, energy, labour resources and raw materials essential for planning the material requirements in any enterprise, and the lack of an overview of demand, or what goods and commodities and in what quantities needed to be produced.²⁶ Anders Åslund explained the importance of quantitative physical production targets among the multiple plan indicators as a result of communist abhorrence of profit as a narrow capitalist aim of production.²⁷

The most important problem, however, raised in the context of the Five-Year Plan was a deficiency of basic data that would enable one to follow the implementation of the plan. Mere information that the total industrial output of the ESSR will triple by the end of the five-year period, and that the 1950 production volume of industrial enterprises subordinated to the republic (in the constant prices of 1926/27) had been planned at 531 million roubles, is not sufficient for economic analysis. Such a rapid growth projection was extremely questionable, considering the war-time damages, and the lack of material resources, particularly the inadequate labour resources that were available in the ESSR. According to the latest estimates, made by Aigi Rahi-Tamm, Estonia’s population losses between 1940–1945 were 270,000 people.²⁸ Archival sources, however, can shed some light on the intentions of policy-makers to fill labour shortages by migrant workers. Within the five years of the plan, the population of the ESSR was to increase by nearly half a million, reaching 1.3 million in 1950, whereas the number of working people, or the economically active population, was to increase by 200,000, predominantly by means of an imported labour force.²⁹ The forecast did not come true. According to the population census of 1959, 1,196,791 people lived in the Estonian ESSR.³⁰

Particularly significant production tasks were assigned to enterprises of all-union subordination, whose share in the total industrial output of the ESSR was to increase from 20 percent in 1946 to 45 percent in 1950.³¹ The ESSR authorities, however, had no say in planning the labour resources or production volumes of enterprises of all-union subordination. Even the management of enterprises of mixed union-republic subordination (25–30 percent of total production) was based on

²⁵ **Veimer, A.** Vajadus tõsta plaanimistöö kvaliteeti. – In: **Veimer, A.** Uuest stalinlikust rahvamajanduse taastamise ja arendamise viie aasta plaanist. Riiklik Kirjastus, Tallinn, 1946, 45–64.

²⁶ *Ibid.*, 46.

²⁷ **Åslund, A.** *Building Capitalism. The Transformation of the Former Soviet Bloc.* Cambridge University Press, Cambridge, 2001, 26.

²⁸ **Rahi-Tamm, A.** Deportation und Verfolgung in Estland 1940–1953. – In: *Vom Hitler-Stalin-Pakt bis zu Stalins Tod. Estland 1939–1953.* Hrsg. von O. Mertelsmann. Bibliotheca Baltica, Hamburg, 2005, 212–213.

²⁹ ERA, f R-973, n 5, s 18, 19.

³⁰ *Итоги всесоюзной переписи населения 1959 года. Эстонская ССР.* Госстатиздат, Москва, 1962, 11.

³¹ **Veimer, A.** *Eesti NSV tööstus tõusuteel.* Riiklik Kirjastus, Tallinn, 1949, 49.

principles introduced by the respective Union-Republic People's Commissariat of the USSR, even though the enterprises formally functioned according to a dual subordination system. They were subject to the ESSR Council of People's Commissars and the USSR Union-Republic People's Commissariat supervising the respective industry. This trend tells that the attempt was toward replacing the territorial management of the industry with the centralized one.

In 1944 the government of the ESSR made an attempt to take control of industrial management, seeking for Moscow's permission to create new republican people's commissariats, and the return to local subordination enterprises handed over to the central government in 1940–1941.³² The central government policy, naturally, could not allow a dilution of centralised control. However, permission was indeed given to create two new republican people's commissariats – those of building and building materials industry, and oil shale and chemical industry – both of which were launched in 1944. Part of the oil shale industry was nevertheless transferred to all-union subordination. In June 1945 the Estonian Oil Shale Works (Eesti Põlevkivi, or *Estonslanets*) was established on the basis of the Kukruse and Käva II mines, and was subjected to the People's Commissariat for Coal Industry of the USSR Western Territories. In 1946 it obtained another oil shale mine, the Viivikonna mine, which was supposed to supply oil shale to the gas plant to be established in Sillamäe.³³

The request for transferring the industrial enterprises that had been handed over to the all-union people's commissariats in 1940–1941 – the Volta Electrical Engine Works, the machine-building plants Punane Krull and Ilmarine, the Tartu Telephone Factory and the Luther Plywood and Furniture Factory – to local management was only partially met. Ilmarine and Punane Krull (renamed the Tallinn Machine-Building Plant) were handed over to the People's Commissariat for Local Industry at the end of 1944, yet in 1946 the Tallinn Machine-Building Plant was again reorganised into an enterprise of all-union subordination. Local authorities also resisted the central government's plan to restructure the railcar plant Dvigatel in Tallinn into an all-union aircraft factory, which was to reach its projected capacity of three heavy transport aircraft a day – thus at least 1,000 a year – by the end of 1945. In the end no aircraft factory was established in Tallinn.³⁴ In 1946 Dvigatel, along with its production facilities, was handed over to the newly-erected secret enterprise, Sillamäe uranium plant (called Plant No. 7) under all-union jurisdiction.³⁵ After reconstruction in 1947–1948 Dvigatel specialized in machine building, fulfilling the orders of nuclear industry.³⁶

³² See ERA, f R-1, n 5, s 91, l 6–7.

³³ ERA, f R-1, n 17, s 106, l 10–12; **Vesiloo, P., Sander, H.** Viivikonna põlevkivikarjääri ajalugu. – In: 90 aastat põlevkivi kaevandamist Eestis. Tehnoloogia ja inimesed. Koost N. Varb, Ü. Tambet. GeoTrailKS, Tallinn, 2008, 96; **Пяртель А.** “Эстонсланец” вчера и сегодня. Ээсти Раамат, Таллинн, 1986, 78–79.

³⁴ **Veskimägi, K.-O.** Kuidas valitseti Eesti NSV-d. Eestimaa Kommunistliku Partei Keskkomitee büroo 162 etteastumist 1944–1956 vahemängude ja sissejuhatusega. Varrak, Tallinn, 2005, 94.

³⁵ ERAF, f 1, n 5, s 8, l 1.

³⁶ As-I Dvigatel 105 aastat. Dvigateli tööstuspark: Dvigatel. – Infoleht, 2004, 6, 3.

PROBLEMS PERTAINING TO THE IMPLEMENTATION OF THE FIVE-YEAR PLAN

The implementation of the plan targets encountered many problems from the very beginning. The process of reconstruction and production was influenced by a shortage of electrical energy, raw materials, fuel, building materials, machinery, although industrial equipment was brought from Germany as part of German war reparations to the Soviet Union for the damages, transportation facilities, labour force and housing.

In addition, the planning process in industrial enterprises did not appear to work very smoothly because of permanent changes in targets.³⁷ As a result, both 1946 and 1947 witnessed long-lasting work stoppages and scheduling failures in construction work. Government and party leaders were particularly worried about productivity in the enterprises subordinated to all-union ministries. Their share in the total industrial output in 1948 had reached a mere 37.9 percent of the level planned for 1950.³⁸ The slow growth rate in these enterprises was a result of delays in construction projects including housing construction and in the commencement of operations at the oil shale processing plants (both refineries and gas plants). Some 680,000 tons of mined oil shale was awaiting the completion of refineries. The use of oil shale as dry fuel, however, was considered inexpedient from the point of view of national economy. A substantial part of the operating capital of the all-union enterprise Eesti Põlevkivi, as well as several enterprises subjected to the ESSR Ministry for Oil Shale and Chemical Industry, was held up by the idle oil shale resources, causing major problems.

Beside the delays in construction, a shortage of electrical energy hampered the rapid growth of production. During the first three years of the five-year period the construction of new power stations had been too slow, especially in the oil shale basin, and an energy deficit was thus an obstacle to normal work.³⁹

To reduce labour shortages, prisoners of war were exploited as workforce. Some 2.5 million prisoners of war were used in the Soviet Union, in addition to the virtually free labour provided by millions of labour camp detainees.⁴⁰ Estonia used prisoners of war predominantly for reconstruction work in the oil shale, peat and textile industry, and building projects in north-eastern Estonia.⁴¹ In December

³⁷ **Mertelsmann, O.** Was there a Stalinist industrialization in the Baltic Republics? Estonia – an example. – In: *The Sovietization of the Baltic States, 1940–1956*. Ed. O. Mertelsmann. Kleio, Tartu, 2003, 163; **Mertelsmann, O.** Der stalinistische Umbau in Estland. Von der Markt- zur Kommandowirtschaft. Dr Kova, Hamburg, 2006, 229–230.

³⁸ See **Veimer, A.** Eesti NSV tööstus tõusuteel, 44.

³⁹ *Ibid.*, 46.

⁴⁰ See **Иванова Г. М.** История ГУЛАГа 1918–1958. Социально-экономический и политико-правовой аспекты. Наука, Москва, 2006, 284, 317, 339, 373; **Filtzer, D.** Soviet Workers and Late Stalinism. Labour and the Restoration of the Stalinist System after World War II. Cambridge University Press, Cambridge, 2002, 22–29; **Applebaum, A.** GULAG. A History of the Soviet Camps. Allen Lane, London, 2003, 515–522.

⁴¹ ERAF, f 1, n 5, s 4, l 1–3.

1944 preparations were made to exploit the labour of the so-called special contingent, or 5,200 prisoners of war, in launching oil shale mines and two shale oil plants.⁴² In 1945 the ESSR had at its disposal 38,000, and in 1946, nearly 46,000 prisoners of war, including Germans, Austrians, as well as ethnic Estonians.⁴³ Freed prisoners of war were partially replaced by detainees of correctional labour colonies.⁴⁴ In 1946, 26,000 people, most of them prisoners of war and criminal inmates, were engaged in the construction of uranium factory.⁴⁵ War evacuees returning to Estonia from the eastern regions, repatriates from Europe who were first sent to filtration camps, and demobilised soldiers, also replenished the workforce.

In the first post-war years the organized workforce recruitment from the rural population of the ESSR and demobilised soldiers for industry and construction played an important role. The newly established administration – the Labour Accounting and Distribution Bureau by the Council of Ministers of the ESSR, was responsible for the fulfilment of the labour recruitment plan to ensure the fulfilment of economic reconstruction plans.⁴⁶ In Estonia the bureau mediated the recruitment of 10,384 people in 1945–1948.⁴⁷ In 1949 the bureau was replaced by the Organised Labour Recruitment Office of the ESSR (*orgnabor*), subjected to the Ministry for Labour Reserves of the USSR.⁴⁸ Despite the forced collectivization of 1949, the target set in the recruitment plan for the years 1949–1950 among the rural population was only partially met. In the remaining two years of the Five-Year Plan period, 7,640 people were added instead of the planned 10,800 people.⁴⁹ Only 71 percent of plan targets was fulfilled. One of the most important reasons for this was that the industrial and construction enterprises were unable to fulfill the stipulation in the compulsory written labour contract to provide the housing for the recruited workman and his family because of delays in the housing construction.

The biggest addition to the local labour pool was, however, the workforce arriving to Estonia from other regions of the USSR. Olaf Mertelsmann argues, that the peak of immigration to Estonia coincided with the period of 1945–1949, when the annual influx was 20,000 people; during the next five years the annual immigration amounted to nearly 10,000. According to Mertelsmann the immigration was predominantly spontaneous and self-initiated.⁵⁰ Mertelsmann's figures are remarkably smaller than the numbers presented by other researchers. According

⁴² ERA, f R-1825, n 1, s 4, l 22–24.

⁴³ **Mertelsmann, O.** Turumajanduselt käsumajandusele. – In: Eesti NSV aastatel 1940–1953. Soveti-seerimise mehhanismid ja tagajärjed Nõukogude Liidu ja Ida-Euroopa arengute kontekstis. Koost T. Tannberg. (Eesti Ajalooarhiivi Toimetised, 15 (22).) Eesti Ajalooarhiiv, Tartu, 2007, 448.

⁴⁴ **Vseviõv, D.** Kirde-Eesti urbaanse anomaalia kujunemine ning struktuur pärast Teist maailmasõda. Tallinna Pedagoogikaülikooli Kirjastus, Tallinn, 2002, 40.

⁴⁵ **Maremäe, E.** Sillamäe uraanitehaste asutamine ja töö aastatel 1946–1952 (1973). Eesti diktüoneemakilda kasutamine. – Akadeemia, 2000, 3, 484.

⁴⁶ ERA, f R-1, n 5, s 121, l 27–30, 62–64.

⁴⁷ **Mertelsmann, O.** Der stalinistische Umbau in Estland, 103.

⁴⁸ ERA, f R-1854, n 1, s 3, l 1–3.

⁴⁹ ERA, f R-1854, n 1, s 8, l 17.

⁵⁰ **Mertelsmann, O.** Der stalinistische Umbau in Estland, 130; **Mertelsmann, O.** Turumajanduselt käsumajandusele, 451.

to Tõnu Parming, at least 180,000 non-Estonians came to Estonia in the second half of the 1940s.⁵¹ Tõnu Tannberg argues that at least 180,000 immigrants arrived in Estonia during the first three post-war years 1945–1947.⁵² The changes in the number of population confirm these estimates. During 1945–1950 the population of Estonia increased by 242,700 people – from 854,000 to 1,096,700.⁵³ In the process of increase, the considerable share of immigration (96%) was noted.⁵⁴ Following the massive influx of non-Estonians in 1945–1950, the native share in the population of Estonia dropped sharply.

This was not a new labour policy for Estonia. In the first year under Soviet rule the central government in the course of restoring tsarist era large-scale enterprises, which had operated below full production capacity or had gone bankrupt in the 1920s, faced also the problem of labour shortage. As native reserves were inadequate to meet the needs, the workforce from other regions of the USSR was brought in.⁵⁵

Qualified labourers were scarce among the immigrants, who arrived to Estonia looking for better jobs and living conditions. Likewise, Estonia attracted large numbers of vagrant petty thieves and criminals, especially in 1946 when Russia was suffering from famine.⁵⁶ In 1946–1948, somewhere between 1 and 1.5 million people died of starvation or famine-induced diseases.⁵⁷

Massive immigration boosted the number of employees in industry by nearly 10,000 each year between 1945 and 1950, with the exception of 1949. The average number of industrial employees grew from 54,572 in 1945 to 98,651 in 1950.⁵⁸ The industrial expansion in Estonia resulted in rapid urbanization. The share of urban population increased from 31 percent in 1945 to 47 percent in 1950.⁵⁹

The immigrants brought their own mentality and habits, which began to badly affect the Estonian traditions and work culture. A major problem that emerged in industry was excessive workforce instability and a low level of work discipline, including drinking and theft at workplace. Thousands of people recruited from various locations in the USSR to work at construction sites in the ESSR never stayed put, preferring employment by republic run enterprises that could offer higher wages and better working and living conditions. In 1947 alone, nearly three fourths (74.2 percent) of the workers changed jobs.⁶⁰ Absence from work was

⁵¹ **Parming, T.** Population changes in Estonia, 1935–1970. – *Population Studies*, 1972, 26, 58, 60.

⁵² **Tannberg, T.** Hilisstaliniistlik Eesti NSV. – In: *Eesti ajalugu*, VI. Vabadussõjast taasiseseisvumiseni. Peatoim S. Vahtra. Ilmamaa, Tartu, 2005, 287.

⁵³ *Eesti NSV ajalugu*. III kd. 1917. aasta märtsist kuni 50-ndate aastate alguseni. Eesti Raamat, Tallinn, 1971, 601; *Eesti Nõukogude Entsüklopeedia*. 2. kd. Valgus, Tallinn, 1987, 297.

⁵⁴ *История рабочего класса Советской Эстонии*. Ээсти Раамат, Таллинн, 1985, 160.

⁵⁵ ERA, f R-1, n 1, s 43, l 253.

⁵⁶ **Зубкова Е.** Прибалтика и Кремль 1940–1953. *Российская политическая энциклопедия*, Москва, 2008, 156.

⁵⁷ **Filtzer, D.** *Soviet Workers and the Restoration of the Stalinist System after World War II*. University Press, Cambridge, 2007, 47.

⁵⁸ ERA, f R-10, n 18, s 1, l 30, 65, 159.

⁵⁹ *Eesti NSV ajalugu*, 601.

⁶⁰ **Veimer, A.** ENSV tööstus tõusuteel, 184.

also rampant, showing low work discipline. In 1947 absenteeism caused a loss of nearly 13.6 percent in working hours.⁶¹

Under Soviet planning it became a general problem in the ESSR, as was the case in the USSR that enterprises fulfilled the plan in terms of value, but not in terms of assortment, thus badly affecting the choice of goods.

The best examples in this context are the enterprises subject to the ESSR Ministry for Local Industry as the main producers of consumer goods. Of the 96 articles on the production categories list, only 31, or one third were actually in production.⁶² This situation could arise because enterprises preferred to turn out expensive products, thus guaranteeing financial execution of the plan, and also because of a lack of appropriate raw materials. The procurement of raw materials from other republics, which were also undergoing a reconstruction process, was thwarted by an inoperative supply and distribution system fettered by excessive bureaucracy.

As a result, even the coupon rationing system (in effect until December 1947) proved unable to supply people with bare essentials, as the questions raised at various lectures and other mandatory Soviet propaganda events illustrate: “Why is it that the coupon says “woollen material”, while what we actually get is cotton? Why is there a shortage of footwear while newspapers write that our footwear factories are constantly exceeding the plan? Where does the footwear go?”⁶³ The answers to the above questions would be, that under the Stalinist economic development strategy which gave priority to heavy industry, consumer goods producing industries were neglected and did not meet the demands of the growing population. Also the decision to not rebuild Hiiu-Kärdla and Narva cloth mills, Narva flax mill, Türi paper mill and other enterprises which damaged in wartime badly affected consumer goods supplies. In addition, consumer goods export to other republics was excessive. The share of food and consumer goods in total exports of the ESSR increased from 59 percent in 1945 to 78 percent in 1948.⁶⁴ To make things worse, the quality of available consumer goods was low. The falsification of production figures was also responsible for shortages. Some enterprises, which failed to fulfil the goals, reported a higher number of products than were actually produced. Among such enterprises was even a top secret uranium factory.⁶⁵

However, all these problems could not prevent the ESSR party and government leaders from proclaiming in their annual speeches – on the “birthday” of the ESSR and the anniversary of the October Revolution – that enterprises were successfully fulfilling and even exceeding the production plans. Performance was expressed in the form of percentages, but each of these reports also contained some criticism of the ministries that were unable to meet the plan targets.

⁶¹ Ibid., 185.

⁶² Veimer, A. Sõjajärgse stalinliku viisaastaku teise aasta ülesandeid, 13.

⁶³ Зубкова Е. Прибалтика и Кремль, 154.

⁶⁴ Veimer, A. Eesti NSV tööstus tõusuteel, 55.

⁶⁵ Maremäe, E. Sillamäe uraanitehaste asutamine, 491.

RESULTS OF THE FULFILMENT OF THE FIVE-YEAR PLAN (1946–1950)

The first to report successful fulfilment of the Five-Year Plan was the ESSR Ministry for Local Industry on July 20, 1949.⁶⁶ According to Deputy Minister Nikolai Prokhorov, the next top priority task was to meet also the assortment and quality indicators of the plan.⁶⁷ The assumption was that until then the ministry had been implementing the plan optionally, by producing expensive goods that guaranteed successful plan performance in value and ignoring the assortment plans and disregarding quality despite the instruction of 1947, which established all these criteria for evaluating the success of each industrial firm. A. Veimer announced that the practice by which the firms fulfilled or overfulfilled their production targets by means of violating their assortment plans, led to problems in the development of other firms. Only hundred percent fulfilment of all criteria: value of products, as well as the quality and assortment requirements would guarantee the fulfilment of the distribution plan, which had a predominant role in the total supply structure.⁶⁸ Despite the permanent discussion and criticism on this matter, the situation did not change very much.

In January 1951, the Central Statistical Board of the ESSR compiled the statistical report⁶⁹ on the results of the fulfilment of five-year plan of the ESSR. The figures for the principal categories of industrial production in 1940 in physical indicators were included. On 25 January 1951 the report was sent to the CC of the ECP(b). On the basis of this report, the secretary of the ECP(b), Ivan Käbin analysed the achievements of the economy in his speech⁷⁰ on 11 April 1951 at the VI congress of the Estonian communists. He announced that the post-war Five-Year Plan of the ESSR for 1946–1950 had been fulfilled ahead of time and that in 1950 the total industrial output exceeded the 1940 level 3.4 times. Also the output in all the important production categories considerably surpassed the 1940 level. Actually the production of electric engines increased 7 times, electric energy 4, oil shale oil 1.8, peat 1.7, bricks 1.5, cement 1.3 and cotton fabrics 1.5 times in 1950 compared with 1940. The technical progress and socialist competition ensured a substantial rise, more than 2 times, in labour productivity.

Ivan Käbin also expressed criticism in pointing out the main problems during five years. He was certain that the economic progress of the ESSR would have been considerably higher if everybody had used all the opportunities at their disposal, had worked better in all areas, had demonstrated more self-respect

⁶⁶ ERA, f R-1, n 17, s 426, l 99.

⁶⁷ Ibid.

⁶⁸ **Veimer, A.** Eesti NSV tööstus tõusuteel, 58.

⁶⁹ ERA, f R-10, n 18, s 1, l 53–89; ERAF, f 1, n 72, s 33, l 37–40. This statistical report was the base for the first post-war statistical handbook (The National Economy of Estonian SSR. Statistical Handbook) issued in 1957.

⁷⁰ See ERAF, f 1, n 4, s 1096, l 120–159; Rahva Hää, April 18, 1951.

and intolerance towards the shortcomings and weaknesses. He blamed the party organizations for not having learned enough about the economy of enterprises and not using their right to control the activity of administration.

According to Käbin, the plan of investments was not fulfilled and the construction organizations were responsible for that. He also stressed mistakes in investment policy: instead of focusing on the most important industrial facilities, capital was provided to a wide variety of enterprises. A number of enterprises were not able to meet the assortment plan of products. Among the causes of shortcomings Käbin listed the double planning, falsification of indicators, reduction of annual and quarterly plan targets by the State Planning Commission of the ESSR, weak cooperation between industrial ministries and enterprises, and mistakes in management.

The resolution of the VI party congress accused the former secretary of the CC of ECP(b) Nikolai Karotamm (dismissed in 1950 and replaced by Käbin) and the Chairman of the Council of Ministers Arnold Veimer (forced to leave his post in early 1951) of seriously hampering the development of industry. Their activities led to the separation of the republic industry from all-union industry and hindered the process of forming union-republic ministries and the transfer of enterprises from the republic jurisdiction of the ministries to the all-union jurisdiction.⁷¹ These accusations against Karotamm and Veimer were presented already at VIII Plenum of the CC of ECP(b), which was convened on 21 March 1950 to discuss the decree of CC of Communist Party of USSR, “About shortcomings and mistakes in the work of the CC of the ECP(b)”.⁷²

The official document – “Statement of the State Planning Committee and the Statistical Board of the ESSR on the results of the fulfilment of the first post-war Five-Year Plan of the Estonian SSR for 1946–1950”⁷³ was compiled and sent on 21 April 1951 to Moscow for approval. Authorities in Moscow modified the report, making it slightly more general, and removed or adjusted some numerical data. The endorsed statement was published in the leading newspaper *Rahva Hää* (Voice of People) of 15 June 1951. The statement started with the announcement already known from the speech of Ivan Käbin that the post-war Five-Year Plan of the ESSR for 1946–1950 has been fulfilled ahead of time and that in 1950 the total industrial output exceeded the 1940 level 3.4 times. The performance was traditionally expressed in percentage form in comparison with 1940 or in some cases with 1945, while the 1940 and 1945 statistics were withheld. Thus it was claimed that the output of oil shale surpassed the 1940 production levels by 87 percent,

⁷¹ ERAF, f 1, n 4, s 1096, l 229; **Zubkova, J.** Baltimaad ja kreml 1940–1953. Varrak, Tallinn, 2009, 229.

⁷² This decree was first published by J. Zubkova in Germany (see: Beschluss des ZK der KPdSU (B) “Über die Mängel in der Arbeit des ZK der KP(B) Estlands”, 7 März 1950. – In: Terror, Stalinistische Parteisäuberungen 1936–1953. Hrsg. von H. Weber, U. Mähler. Paderborn, München, 1998, 254–257). In Estonian see **Tannberg, T.** Kuidas Moskvast valmistasid ette 1950. aasta märtsiploenumit. – Tuna, 2010, 1, 121–123.

⁷³ ERA, f R-973, n 2, s 7, l 2–6.

the output of peat by 50 percent, paper by 80 percent, cement by 28 percent, lime by 96 percent, cotton fabrics by 17 percent, electricity production was 1.1 times higher, rubber footwear 7.5 times, leather footwear 2.5 times, butter three times, etc.⁷⁴ However, the statement never mentions the 1940 output of these goods and commodities, rendering the provided statistics worthless. Likewise, the report does not give any relevant information on how the production tasks set in the plan for 1950 were fulfilled. The composition and performance of this document was not unique for the Estonian ESSR. The statement followed simply the union standard, which had been published in *Rahva Hääl* on 17 April 1951.⁷⁵

Now let us check the five-year plan performance, using the 1940 and 1950 production volumes (in natural indicators) for the principal categories of industrial commodities as published in the first post-war statistical handbook⁷⁶ issued in 1957 and plan targets set for 1950.

The data contained in Table 1 indicate that of the production tasks set by the central government for 1950 in 12 principal commodities, Estonian industry was able to fulfil merely five: electricity, peat, paper, butter, and fish. The production indicators of the remaining seven products – oil shale, cement, lumber, window glass, cotton fabrics, meat and spirits – fell short of planned targets. The production of window glass, butter, meat and spirits did not even reach the pre-war levels of 1940. As mentioned above, the 1950 production target for butter had been set below output data of 1940. The enterprises of republic and the mixed union-republic subordination did not meet the production plan of bricks, roof tiles, cellulose, nails, linen fabrics and soap, whereas cellulose and silk fabrics production never reached the pre-war levels. It appears that the worst failure to meet the goals occurred in the building materials industry, which badly hindered construction work and in the consumer goods industry, especially in the textile industries. Even though there is no denying certain achievements in the reconstruction of the industrial sector, the above figures inevitably confirm that the industrial output of the ESSR grew since 1946 much less than was officially claimed.

The data concerning the growth of industrial total output between 1945 and 1950 (with 1940 as the basic year) provided in the statistical handbook in terms of percentages support the claim contained in the statement that by 1950 the total production of the ESSR had increased 3.4 times from 1940.⁷⁷ Judging by this information it can be said that the Five-Year Plan's target of tripling the industrial total output was even slightly exceeded. The data provided by the handbook are still in use. In the Estonian National Archives, however, one can find absolute figures of the total industrial production in 1926/1927 constant

⁷⁴ *Rahva Hääl*, June 15, 1951.

⁷⁵ See: NSV Liidu Riikliku Plaanikomitee ja NSV Liidu Statistika Keskvalitsuse teadaanne NSV Liidu neljanda (esimese sõjajärgse) viie aasta plaani a. 1946–1950 täitmise tulemustest. – *Rahva Hääl*, April 17, 1951.

⁷⁶ Eesti NSV rahvamajandus. Statistiline kogumik. Eesti Riiklik Kirjastus, Tallinn, 1957, 49–51.

⁷⁷ Eesti NSV rahvamajandus, 39.

prices as the base for the growth rate calculations (see Table 2). These figures show that the disclosed growth rates indices did not reflect economic reality. The total value of industrial output was in reality the gross output, which included the value of materials and operating costs used to produce the output. Normally, the value added or net output of industry provides a measure of the total value of all new goods produced. The problems also derive from the utilization of 1926/27 constant prices. How can we convert into the 1926/27 constant prices something that was not manufactured before the war? In 1951 the Soviet authorities dropped the 1926/27 constant prices as the reference base for the value index of industrial output. However, the “false index” of industrial output (in effect in 1928–1950) was not adjusted, but was instead adopted as the base for the production index to which it was converted on 1 January 1951.⁷⁸ We know that monetary reform which started in November 1940 was carried out by March 1941 (the rouble replaced the kroon). O. Mertelsmann has dealt with the methods used for recalculation of production value into 1926/27 unchanged prices of the USSR. According to him the industrial output of 1940 in constant prices of 1939 in kroons were converted into unchanged rouble prices of 1926/27 according to the official exchange rate of the kroon (1 kroon = 1.25 roubles), which is an underestimation of the base year 4.8 times.⁷⁹

Already the announced results of the first Soviet Five-Year Plan led Western researchers to conclude that the Soviet Union was overstating the results. The results of the first post-war plan were, likewise, examined by several Western economists,

Table 2. Total industrial output and the number of industrial employees of the ESSR 1940, 1945–1950*

Year	Total industrial output, thousand roubles at constant 1926/27 prices	Percentage increase	The number of industrial employees	Percentage increase
1940	334 590	100	89 193**	100
1945	244 223	73.0	54 572	61.2
1946	404 554	120.9	66 208	74.2
1947	558 961	167.1	77 539	86.9
1948	765 569	228.1	87 514	98.1
1949	929 382	277.8	90 329	101.2
1950	1 138 939	340.4	98 651	110.6

* Sources: ERA, f R-10, n 18, s 1, l 58; Eesti NSV rahvamajandus. Statistiline kogumik. Eesti Riiklik Kirjastus, Tallinn, 1957, 49–51.

** At the end of December 1940. Source: Eesti NSV rahvamajanduse näitarve, 1941, 2, 14.

⁷⁸ **Poom, E. N.** Liidu statistika usaldusväärsusest. – Vaba Eesti, 1961, 5, 64–65.

⁷⁹ **Mertelsmann, O.** Was there a Stalinist industrialization in the Baltic Republics?, 166–167; **Mertelsmann, O.** Der stalinistische Umbau in Estland, 66–68; **Mertelsmann, O.** Turumajanduselt käsumajandusele, 442.

including Naum Jasny and Abram Bergson, as well as the Economic Commission for Europe.⁸⁰ The special research of Dr. Klatt, “Soviet Statistics. A Study in Secrecy and Distortion”, indicates that by 1950, the total industrial output of the Soviet Union increased by 20 percent as compared to 1940, and not by 75 percent, as claimed in the official report. The output in the industries producing means of production increased 1.4 times, not doubled, whereas the production of consumer goods stayed on the 1940 level, even though the official report claimed a growth of 1.25 times.⁸¹ Mark Harrison argues in his article “Soviet Industrial Production, 1928 to 1955” that more recent studies typically found higher growth rates than the earlier studies, while still falling far below Soviet official estimates.⁸² Russia’s economist Grigorii Khanin’s standpoint is that in the first years of the fourth five-year plan the recovery of the Soviet economy was achieved on an extensive basis, by increasing the number of employed and fixed capital used; in the last two years of the fourth five-year plan labour productivity rose and production costs fell quickly. This rapid growth in the efficiency of production delivered exceptionally rapid growth in real income of the population and retail trade turnover. Although the Soviet official data somewhat exaggerated its pace, they nonetheless reflected the trend of this growth. Khanin believes that there was more growth than the Western estimates allowed.⁸³ Still, scholars of the Soviet economy, who have made calculations of the growth in industrial output during the fourth five-year plan period, have found lower growth rates than the official Soviet statistics claimed.

The goal of altering the structure of Estonian industry in favour of heavy industry was achieved. In 1940 the light industry produced 50 percent of the total industrial output. In 1945, light industry made up 32 per cent, its relative importance had dropped further two percent to 30 percent by the end of 1949.⁸⁴

The enterprises of all-union subordination were not able to meet the industrial production targets envisaged in the Five-Year Plan for the ESSR. The plan required them to cover 45 per cent of the total industrial output of the ESSR in 1950, whereas their actual share was 29 percent (332,645,000 roubles in constant prices of 1926/27). Within this industrial subsector there was a significant increase in production by enterprises, whose field of production was unspecified. According to statistical data their share in the total output of the enterprises of all-union industrial sector increased from 5.2 percent in 1946 to 25.2 percent in 1950.⁸⁵

⁸⁰ See **Jasny, N.** The Soviet Economy during the Plan Era, 7; **Bergson, A.** The fourth five-year plan: heavy versus consumers’ goods industries. – *Political Science Quarterly*, 1947, **62**, 2, 195–227; Economic developments in the Soviet Union. – In: *Economic Survey of Europe in 1951*. United Nations. Department of Economic Affairs, Geneva, 1952, 125–147.

⁸¹ The National Archives of the United Kingdom, Foreign Office (FO) 371, ref 100851, N 1102/31.

⁸² **Harrison, M.** Soviet industrial production, 1928 to 1955: real growth and hidden inflation. – *Journal of Comparative Economics*, 2000, 28, 136–137.

⁸³ **Khanin, G. I.** The 1950s – the triumph of the Soviet economy. – *Europe-Asia Studies*, 2003, **55**, 8, 1190.

⁸⁴ Source of calculation: ERA, f R-10, n 18, s 1, l 58.

⁸⁵ Source of calculation: ERA, f R-10, n 18, s 1, l 58; ERAF, f 1, n 72, s 33, l 39–40.

The increase was most remarkable in the last two years of the five-year plan, when a number of secret factories went into operation. This fact may be grounds for surmising that enterprises whose field of production was unspecified in the statistical report, were actually engaged in military production. It is, however, difficult to prove, because there is no information available about the military industry's share in the total industrial output. This fact is not surprising under the Soviet practice of secrecy on military and economic questions. The Cold War influences on Estonia's post-war economy were reflected in the establishment of a military industrial complex. The ESSR participated in the Soviet uranium project as well as in the ten-year warship-building project launched in 1945. The latter involved building secret "numbered" plants in Tallinn: the Shipyards No. 890 and No. 871, defence structures for the Northern Baltic Fleet, and various other objects.⁸⁶ During the implementation of the Soviet uranium project, a top secret uranium factory (*Kombinat No 7*) was erected in Sillamäe, and a test facility, officially called paint factory (*krassilnaja fabrika*), was established in Narva to test and develop the technology of extracting uranium from the Dictyonema shale found in north-eastern Estonia (the average uranium content of Dictyonema shale is 0.028 per cent). It has been suggested that the uranium extracted from Dictyonema shale may have been intended for the first Soviet atomic bomb detonated in 1949.⁸⁷ Both of these factories functioned for 45 years (1946–1991), yet only a handful of people knew about their existence.⁸⁸ The uranium factory had at its disposal the Aseri brickyard, the buildings and infrastructure of the former railcar plant Dvigatel, the Kadestiku limekiln, and the Narva timber processing plant.⁸⁹

During the five years all the small industrial undertakings were expropriated and the private industrial sector came to an end.

According to the figures presented in Table 2, we can calculate that labour productivity in 1950 was 1.9 times higher than in 1946 and that the growth in output was achieved primarily by increasing labour productivity. During the same period the average wages of industrial employees increased from 5953 roubles to 8608 roubles or 1.4 times.⁹⁰ It must be born in mind that workers, engineering and technical personnel did not benefit much from the growth of productivity in the conditions of shortages in consumer goods and housing.

CONCLUSION

The post-war reconstruction of the national economy was used to cover up the continuing reorientation and indeed destruction of the pre-war economic structure of Estonia with the ultimate goal of integrating the ESSR fully into the Soviet economic system. During the post-war five-year plan period the transition from a

⁸⁶ **Veskimägi, K.-O.** Kuidas valitseti Eesti NSV-d, 158.

⁸⁷ **Maremäe, E.** Sillamäe uraanitehaste asutamine, 478.

⁸⁸ Ibid., 479.

⁸⁹ Ibid., 483.

⁹⁰ ERA, f R-10, n 18, s 1, l 64.

market to a command economy was completed. By 1950 the industry of the ESSR was based on state ownership and administrative long-term planning. Although the authorities of the ESSR attempted to make independent decisions, the republic's economic development was based on excessive centralisation; the administrative institutions of the ESSR controlled merely one third of the industry located on its territory. The central government designed and controlled the establishment, production volumes and workforce of enterprises of all-union and mixed union-republic subordination.

The targets set for Estonian industrial growth during the five-year plan period (1946–1950) were exaggerated, overlooking the limited resources of raw materials, energy and labour resources. By 1950 industry had not fully recovered from war damages.

The major investment over these five years went into heavy industry and it caused structural changes compared with pre-war industry. New branches of chemical and machine building industry were created in the last two years of the five-year plan. At the same time the light industry was neglected. The output of many consumer goods fell short of demand and some were not produced at all. The export of consumer goods and a remarkable increase in the number of population, especially in the cities, worsened the situation. The growth of urban population resulted from an influx from other republics and partly from the countryside where many people had previously taken care of their own needs through the domestic production on the farm. A scarcity of consumer goods and housing undermined the quality of life of the population.

Under Soviet planning, the ESSR faced all the problems common in the Soviet Union: the plans were approved later than they started, the most important problem became procurement, the planners did not know the future development, some enterprises overfilled the targets, others did not, causing bottlenecks, the criteria value of product took priority over the criteria of assortment and quality. A new phenomenon appeared in Estonia – falsification of production statistics.

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ÜLEMINEKUPOLIITIKA: EESTI NSV TÖÖSTUS ESIMESEL SÕJAJÄRGSEL VIISAASTAKUL (1946–1950)

Maie PIHLAMÄGI

Käesoleva artikli eesmärk on käsitleda Eesti NSV tööstuse arengut ja probleeme ning testida nõukogude ametlikku statistikat tööstustoodangu kasvutempo kohta sõjajärgsel esimesel viisaastakul (1946–1950).

1944. aasta viimases kvartalis taaselustati Eesti NSV-s tööstuse planeerimine, millele oli alus pandud 1940. aasta lõpul. 1946. aastal lülitati vabariigi majandus aga esmakordselt NSV Liidu viisaastakute süsteemi.

Esimese sõjajärgse viie aasta majanduse taastamise ja arendamise plaan aastateks 1946–1950 seadis Eesti NSV-le vastutusrikkad ülesanded. Nii pidi tööstuse kogutoodang (NSVL-i 1926/27. aasta püsivhindades) 1940. aastaga võrreldes suurenema viisaastaku lõpuks kolm korda, eelisarendades rasketööstusharusid, mida juhtisid üleliidulised ministeeriumid. Plaan nägi ette, et üleliiduliste ettevõtete toodangu osatähtsus ENSV tööstuse kogutoodangus kasvab viie aasta jooksul veerandi võrra ja ulatub 45%-ni 1950. aastal. Sellest tulenevalt kavandati valdav osa vabariigi majanduse taastamiseks ja arendamiseks planeeritud 3,5 miljardi rubla suurusest kapitaalmahutusest paigutada üleliidulise alluvusega tööstussektorisse. Vabariikliku alluvusega majandussektorisse kavatseti investeerida 708 miljonit rubla ehk viiendik kapitaalmahutuste kogusummast.

Plaani täitmist on raske jälgida, sest viisaastaku plaanis on toodangu kasvu kalkuleerimisel (protsentides) lähtutud 1940. aasta tasemest, kuid andmeid baas-aasta tööstustoodangu väärtuse ja erinevate toodanguliikide mahtude kohta ei esitata. Toetudes arhiiviallikatele ja 1957. aastal esmakordselt avaldatud Eesti NSV ametlikule statistikale tähtsamate toodanguliikide kvantitatiivsete näitajate kohta, saab siiski ettekujutuse plaani täitmisest.

Eesti NSV rahvamajanduse taastamise ja tööstuse arendamise sildi all jätkati sõjaeelse majanduse struktuuride lõhkumist, et sulandada Eesti NSV üleliidulisse majandussüsteemi. Viie aasta jooksul jõudis lõpule üleminek turumajanduselt käsumajandusele. 1950. aastal tugines tööstus valdavalt riigiomandile ja administratiivsele pikaajalisele planeerimisele, erasektor tööstuses oli likvideeritud. Eesti NSV partei- ja valitsusjuhtide püüdlusi saada vabariigi majanduse arendamise küsimustes suurem otsustusõigus saatis ebaedu ning viie aasta jooksul tugevnes tsentraliseerimine. ENSV majandusorganid kontrollisid viisaastaku lõpuks vaid kolmandikku ENSV territooriumil paiknevat tööstust, ainult neid ettevõtteid, mis olid vabariiklikus alluvuses. Keskvalitsus kavandas üleliiduliste ja liidulis-vabariiklike ettevõtete asutamise ENSV territooriumile nii nagu ka nende ettevõtete toodangu ning tööjõu mahu.

Viisaastaku plaanis kavandatud tööstustoodangu kasvutempo ei arvestanud sõjakahjustusi ja piiratud tooraine-, energia-, materiaalseid ning tööjõuressursse ja seetõttu ei suutnud tööstus 1950. aastaks sõja tagajärgedest ka täielikult taastuda. Seetõttu on kaheldav tööstustoodangu kolmekordne kasv sõjaeelsega võrreldes. Eesti NSV suhteliselt väikese tööjõuressursi tingimustes polnud rasketööstusharusid võimalik suurejooneliselt arendada. Tööjõu nappuse probleemi lahendamiseks kasutati sõjavange, eelkõige ehitustöödel ja põlevkivi kaevandamisel, samuti kinnipeetavaid ning tööjõu organiseeritud värbamist. Suurema osa tööjõu juurdekasvust moodustasid aga teistest liiduvabariikidest sisserännanud, kelle hulgas oli kvalifitseeritud tööjõudu vähe. Sisserännanud töid kaasa uued kombid ja harjumused, mis mõjutasid negatiivselt kohalikku suhteliselt kõrget töökultuuri.

Viie aasta jooksul tehtud suured investeeringud rasketööstusharudesse ja mitmete sõjas kannatada saanud tarbekaupu tootnud ettevõtete (Hiiu-Kärdla kalevivabrik, Narva kalevivabrik, Narva linavabrik, Türi paberivabrik jt) taastamisest loobumine muutsid tööstuse struktuuri 1940. aastaga võrreldes rasketööstuse kasuks. Tarbekaupu tootva tööstuse tagaplaanile jätmise ei suutnud kasvava elanikkonna nõudlust rahuldada. Samal ajal näitas toiduainete ja tarbekaupade eksport kasvutendentsi, mis suurendas veelgi defitsiiti ning mõjus negatiivselt inimeste elukvaliteedile.

Viie aasta jooksul kasvas üleliiduliste ettevõtete osatähtsus ENSV tööstuse kogutoodangus planeeritust tunduvalt vähem. 1950. aastal andsid nad kavandatud 45% asemel vaid 29% tööstustoodangust. Üleliiduliste ettevõtete toodangus kasvas viisaastaku viimase kahe aasta jooksul kiiresti määratlemata tegevusalaga ettevõtete toodangu osatähtsus. See annab põhjuse oletada, et tegu oli sõjatoodangut valmistavate ettevõtetega. Väidet on raske tõestada, sest info sõjatööstuse osakaalu kohta tööstustoodangus puudub. Külma sõja tingimustes asutati Eesti territooriumile mitmed salastatud numbritehased, mis täitsid tellimusi nii NSVL-i 10-aastase sõjalaevade ehitamise kui ka aatomirelva projekti raames.

Plaanimajanduse raames puutus Eesti NSV kokku probleemidega, mis vaevasid NSV Liitu esimesest viisaastakust saadik: plaanid kinnitati mitu kuud hiljem, kui need algasid; suurimaks probleemiks oli tooraine, tööriistade ja masinate hankimine; planeerijatel puudus ülevaade nõudlusest ning seega ka tuleviku arenguperspektiividest; ühed ettevõtted täitsid või ületasid plaane, teised jätsid plaanid täitmata. Kõik see tekitas omakorda probleeme jaotussüsteemis. Toodangu mahtude täitmine rahalises väärtuses muutus omaette fenomeniks, eirates kvantitatiivseid ja kvalitatiivseid näitajaid. Viisaastaku jooksul sündis uus fenomen – toodangunäitajate võltsimine.