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PRICES, COSTS AND FINANCE IN THE SOVIET UNION, 1933-1939: A SURVEY

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Abstract. This paper examines the development of the price system in the period from the end of the first five-year plan to the eve of the second world war. It examines the major reforms to retail, wholesale and '1926/27' prices; the attempts to control the costs of production and investment; and to stabilise the currency, and considers the contradictions and difficulties which emerged.

I BACKGROUND

When the mixed market economy of the 1920s broke down (or was destroyed) in the course of 1927-9, and gave way to comprehensive state planning, the Soviet leaders had no clear idea of the main features of the system which was emerging. In 1930, the dominant view was that all the main parameters of the system would be controlled from the centre: both producer and consumer goods, including agricultural products, would be distributed by rationing (increasingly referred to as *snabzhenie*) without the intervention of the market. Labour as well as goods would be allocated by a plan, and would be rewarded by receiving consumer goods in kind. It was usually assumed that money and finance was no longer be needed.

By the conclusion of the first five year plan at the end of 1932, many of these assumptions had been discarded. Money and finance were recognised as essential to a planning system, at least as a means of record and management; and the view that currency must be stable or even improving in value, firmly held by all schools of thought in the mid-1920s, again became a fixed dogma. Even in the inflationary year of 1931, the presence of inflation was denied and the rapid increase in consumer prices was half-heartedly concealed. It was also soon accepted that rationing of consumer goods should gradually be replaced by a system in which the consumers could choose which goods they purchased. Wages would reflect the difficulty, complexity and productivity of the work; and in practice most workers would be free to move between jobs. By the spring of 1932 the authorities also accepted – with some reluctance – that for the time being both individual and collective-farm peasants could sell any produce in excess of the state plan on the market at market prices.

These measures were all modifications to a system in which major principles of central planning remained intact. All means of production were state or cooperatively owned. Capital investment, and the production of producer goods, were determined by the state plan. All prices, including the prices of consumer goods, were determined by the state (with the temporary exception of the prices at which peasants sold their surpluses).

II THE SECOND FIVE-YEAR PLAN.

In 1932 and 1933, when the second five-year plan was being compiled, the economy had been through five years of acute inflation. Rationing of food and consumer goods at fixed prices was introduced in 1929, but in subsequent years some goods were sold by state and cooperative shops at higher prices. The compilers of the second five-year plan were

confronted with a plethora of retail prices, including (1) so-called 'normal' state-determined prices of rationed goods; (2) higher rural prices; (3) even higher 'commercial' prices for goods off the ration (also fixed by the state); and (4) much higher prices on the kolkhoz market. By 1932 retail prices in socialised trade had increased on average to 2 to 2½ times the 1928 level, and in 1933 they increased further. On the legal kolkhoz free market in food, prices had risen to eleven times the 1928 level in 1932, and by February 1933 they reached a peak of sixteen times the 1928 level¹. Grey or black-market prices of food sold 'from the hand', which were even higher, were duly recorded by Soviet statisticians.

Within the state sector, goods were exchanged at 'wholesale' or 'transfer' prices, also determined by the state. In the mid-1920s these prices were set out in price lists, and these lists became known as the 'fixed' or 'unchanging' prices of the economic year 1926/1927. During the first five-year plan the costs of industrial production rapidly increased, particularly in labour-intensive industries such as coal and steel. The losses which resulted were partly compensated by subsidies from the state budget. At the same time wholesale prices gradually drifted upwards, rising above 1926/27 prices. According to a western estimate, the wholesale prices of basic industrial goods were 24 per cent higher in 1932 than in 1928, and 52 per cent higher in 1935.² A further complication, particularly in the rapidly-growing machinery industry, was that 'fixed' 1926/27 prices moved upwards as new or modified products were added to the lists, often determined by the costs reached when the products were added.

The compilers of the second five-year plan treated with some circumspection the prices with which they were confronted in 1932-3. The plan set targets for cost reductions which varied according to the branch of the economy. Industrial costs were planned to fall by 26 per cent, building costs by as much as 40 per cent.³ Achieving these reductions would have reduced the need for subsidies, but the need for some subsidies would still have remained. In April 1933, the Politburo rejected proposals to increase wholesale prices to take account of the rise in costs⁴. Prudently, the plan had nothing to say about the future of wholesale prices or of subsidies.

The plan also included five-year targets for retail prices on the consumer market. Since the spring of 1931 the authorities had been committed to the ultimate abolition of consumer rationing.⁵ The five-year plan merely stated that the growth of production would 'prepare for' the abolition of rationing. Forming part of this preparation, during 1933-7 the production of agriculture and the consumer industries would at least double. This would enable retail prices in socialised trade to decline by 33 per cent as compared with 1933, while prices on the kolkhoz market would decline to one third or one quarter of the existing level.⁶ The implication was that rationing would not be abolished until sometime after 1937, when the growth of production was sufficient to enable commercial prices and kolkhoz market to be reduced to the level of ration prices.

¹ See R. W. Davies, *Crisis and Progress in the Soviet Economy, 1931-1933* (Basingstoke and New York, 1996) p. 453.

² *Journal of Political Economy* (1956), 322 (Bernaut and Turgeon).

³ *Vtoroi pyatiletnii plan razvitiya narodnogo khozyaistva SSSR, 1933-1937gg.*, vol. 1 (Moscow, 1934) (1934), i, 435-6. An earlier version of the plan set the reduction of industrial costs at 22 per cent (RGAE, 4372/92/30, 512).

⁴ See Davies (1996), pp. 296-7, 323, 343-6.

⁵ See *ibid.*, pp.61-4.

⁶ *Vtoroi* (1934), i, 33-4.

III THE OUTCOME

(i) *Prices*

The deflationary assumptions of the second five-year plan were overturned by the major reforms of retail, wholesale and 1926/27 prices, which involved large increase in prices and costs.

(i) *Retail prices.* The most far-reaching reform was in retail trade. During 1934, while the five-year plan was still being finalised, the general level of prices in retail trade was further increased by raising ration prices and greatly increasing the proportion of food sold off the ration at higher commercial prices (see above). These increases mitigated but failed to prevent the increasing difficulties in obtaining adequate revenue for the state budget. On October 22, 1934, Stalin, responding to proposals from the financial and trading authorities, took the dramatic decision to abolish bread rationing immediately (see pp. above); this involved substantial increases in 'normal' ration prices. This decision was publicly announced on November 25, only eight days after TsIK and Sovnarkom had officially approved the final version of the five-year plan, with its much more modest proposals about the future of rationing.⁷ A year later, in October 1935, all remaining food rationing was abolished, and on January 1, 1936, the rationing of industrial consumer goods was also abolished.⁸ Then on April 28, 1937, a decree of Sovnarkom announced a new phase in retail price policy:

The successes of industrial production and the achievement of the second five-year plan ahead of schedule have enabled the accumulation of new resources by the state, and have created the possibility of a further reduction in the prices of industrial mass-consumption goods.

Accordingly, retail prices of textiles and footwear were reduced from June 1, 1937, by percentages varying between 5 and 15 per cent for different items.⁹

The ending of food rationing was accompanied by the abolition of the supply of food in kind to areas producing industrial crops. In compensation the prices which the state paid agriculture for these crops were greatly increased. Both this reform and the continual expansion of kolkhoz trade resulted in a much higher degree of monetisation of the economy.

When the reports on the results of the second five-year plan were prepared in 1937 and 1938, there was much disagreement and confusion behind the scenes about the changes in retail prices which had resulted from all these measures. The basic price data seem to have been common ground. Between 1932 and 1937, state and cooperative prices increased by 40-45 per cent, while the much higher kolkhoz market prices decreased by 37.7 per cent, and retail prices as a whole increased by about 29 per cent. In comparison with the higher retail prices of 1933, prices as a whole (including kolkhoz market prices) increased by 10.7 per

⁷ *Pravda*, November 25, 1934

⁸ *Sobranie zakonov* (henceforth SZ), 1935, art. 421 (dated September 25) and GARF, 5446/1/109, 369-370 (Sovnarkom art, 2733, dated December 25).

⁹ SZ, 1937, art. 116.

cent.¹⁰ The plan to reduce retail prices by 35 per cent as compared with 1933 had failed. A report to Voznesenskii dated May 5, 1938, stated: ‘bearing in mind that the plan proposed a reduction by 35 per cent [as compared with 1933] the conclusion can be drawn that the real level of prices was 70% greater than the planned level (110.7 against 65.0)’¹¹ However, another report, anxious to avoid this blunt conclusion, brashly claimed that ‘the correct comparison is with unrationed trade (including commercial trade)’, conveniently ignoring the lower normal or rationed prices of 1933. In these terms retail prices had not increased, but declined by 45 per cent!¹² In the event, the published report on the five-year plan dealt with these difficulties by saying nothing whatsoever about prices.¹³

While food prices in state and cooperative trade increased by 84 per cent between 1932 and 1937, the prices of industrial consumer goods increased by only 11.6 per cent. With food products, the bad harvest of 1936 led to a temporary hitch in the improvement of the correspondence of supply with demand, but by the end of 1937 free-market food prices were usually no higher than the prices of state and cooperative trade, and were sometimes even lower.¹⁴ But industrial consumer goods remained in short supply, as a result of the failure to raise their retail prices sufficiently. The attempt on June 1, 1937, to resume the price-reduction policy of 1927 exacerbated shortages. A report to Voznesenskii dated April 29, 1938, pointed out that ‘a huge mass of money is seeking to obtain goods in short supply – textiles, clothing and footwear’, this had led to ‘the intensification of demand for these commodities and the failure to meet it’. While the ratio of cash in circulation to monetary transactions had declined during the second five-year plan, it was still high.¹⁵

Nevertheless, in drafting the third five-year plan Gosplan assumed that the price-reduction policy could be resumed. On May 10, 1938, its finance department in a draft directive on ‘currency circulation in the third five-year plan’ stated that retail prices should decline by 20 per cent between 1937 and 1942 (the prices of food products by 25 per cent, and of industrial consumer goods by 10 per cent).¹⁶ In the course of preparing the plan, it became obvious that the attempt to achieve this reduction would result in considerable financial tension. Nevertheless, in a memorandum to Voznesenskii from within Gosplan, dated October 23, 1938, the proposal was only slightly modified: retail prices would decline by 17 instead of 20 per cent.¹⁷

When the Gosplan proposals were discussed in Gosbank on January 25, 1939, the participants were much more sceptical about the prospects for price reduction even by a lower figure than 17 per cent. N. N. Rovinskii (1887-1953), a senior financial specialist who had been active since NEP days, characterised this as ‘a major political question’, and asked rhetorically:

¹⁰ These increases are far lower than Western or later Soviet estimates: Malafeev (1964), 407, claims that state and cooperative prices in 1937 were 210 per cent of the 1932 level.

¹¹ RGAE, 4372/92/159, 53; similar conclusions were drawn in a report dated May 11, 1938, which also pointed out that kolkhoz market prices had not fallen as much as the two-thirds or three-quarters stipulated in the five-year plan (RGAE, 4372/92/101, 225).

¹² RGAE, 4372/92/81, 301.

¹³ *Vypolnenie vtorogo pyatiletnego plana razvitiya narodnogo khozyaistva SSSR, 1933-1937gg* (Moscow, 1939), *passim*.

¹⁴ RGAE, 4372/92/101, 221-240 (preliminary report on results of second five-year plan).

¹⁵ RGAE, 4372/92/159, 68.

¹⁶ RGAE, 4372/36/430b, 25-26 (signed by Martynov, deputy head of the department).

¹⁷ RGAE, 4372/92/173, 63-70 (the document was unsigned, but is believed to have been prepared by N. Margolin, head of the currency circulation group in Gosplan –see , p.111).

Does it seem sensible to go to the government and state that we can reduce prices during the third five-year plan by 10 per cent when the calculations (I don't mean just the arithmetic) lead me personally to the conclusion that it is better to reduce prices at the end of the five-year plan than to declare a reduction and not carry it out. In the second five-year plan we declared a reduction of 35 per cent, and in 1939 we had to increase prices.

Bulganin, head of Gosbank, noted that Gosplan was proposing a price reduction of 10 per cent and 'the preliminary opinion in the government is 10 per cent', but that Voznesenskii himself believed that such a reduction 'will cause great tension', and favoured 5 per cent. Bulganin suggested that in its submission to Sovnarkom Gosbank should favour a price reduction but also state that this would require new sources of revenue from the budget and Narkomfin.¹⁸ Two days later, the Gosbank memorandum to Sovnarkom which followed this meeting acknowledged that a reduction of 10 per cent would be 'desirable', but insisted that the resources available would be much less than Gosplan estimated. A reduction of 10 per cent would require 21,000 million rubles of additional revenue.¹⁹

Eventually, Gosplan erred on the side of caution. The draft third five-year plan submitted to Sovnarkom, and sent to press on March 14, 1939, just before the XVIII party congress, did not mention price reduction.²⁰ It was not until 1949 that Stalin was again able to launch the price-reduction policy.

(ii) *Wholesale prices* The second major reform not anticipated in the five-year plan was the substantial increase in the wholesale prices used for transactions within industry and between industry and the other sectors of the economy. A determined effort to reduce industrial costs reached its climax in the drive in 1935 to eliminate subsidies in the iron and steel industry. Industrial production costs declined, but far less than planned.

Losses by the four industrial commissariats and the sovkhozy were estimated at 2,893 million rubles in 1932 (see vol. 4, p. 296). In June 1935 losses (defined as 'the gap between wholesale prices and costs') were estimated to have risen to 5,000 million rubles.²¹ In 1935 Gosplan prepared a major reform of wholesale prices, with the strong support of Narkomfin.²² A 'sub-committee on prices and costs' was chaired by G. I. Smirnov, a deputy chair of Gosplan, and included representatives from Narkomtyazhprom, Narkomput' and the State Bank; it was also attended by representatives of Narkomfin and other commissariats. The crucial meeting of the sub-commission, held on July 4, 1935, resolved:

prices shall be based on the planned cost of 1935; unified prices shall be established for the products of an industry, but within an industry accounting prices (*raschetnye tseny*) may be fixed for particular enterprises.

Thus different factories would receive different prices from the industry, depending on their costs, but the industry as a whole would receive the approved unified price.²³ These proposals

¹⁸ RGAE, 2324/30/122, 1-53 (book 90-2).

¹⁹ RGAE, 2324/30/122, 107-120 (book 98-102)

²⁰ *Tretii pyatiletnii plan razvitiya narodnogo khozyaistva SSSR, 1937-1942 gg* (Moscow, 1939), the only published volume on the plan.

²¹ RGAE, 4372/33/546, 2-4 (dated June 17, 1935).

²² For the initial memorandum from Borilin, the key Gosplan official, to Mezhlauk, its chair, see RGAE, 4372/33/153, 66-58 (dated June 28, 1935).

²³ RGAE, 4372/33/153, 181-177; see *ibid.* 196-188 for the minutes of other sittings of the sub-commission.

were not adopted by the government in 1935, but a slightly revised reform was eventually carried out on June 1, 1936.²⁴ By this time losses amounted to more than 6,124 million rubles.²⁵ The total cost of production in 1936 for the branches of heavy industry listed in the decree was planned at 16,454 million rubles including price increases planned at 5,536 million rubles, an increase of over one third.

The main loss-making industries were coal and iron and steel, which between them accounted for 53 per cent of the price increases in heavy industry. In the industries producing fuel and basic materials, prices were increased between 60 and 98 per cent (see Table). In 1936 rail charges were increased by 1,020 million rubles, about 25 per cent.²⁶ Oil and power prices were not generally increased at this time, but in 1937 the prices of oil and power were increased along the lines of the 1935 reforms. The prices charged to industry for imports, previously valued at low so-called 'world prices', were increased to correspond to actual world prices. At this time the privileged prices charged to the defence sector for its inputs from industry were also increased; no details have been available.

The reform also sought to remove some other major anomalies in wholesale prices, with the object of providing incentives for efficient economic performance. As with 1926/27 prices, industry managed to obtain high wholesale prices for new production, and for modifications to existing production, by fixing prices at the cost when the new products were first introduced. The decree of March 2, 1936, ruled that the prices of new types of locomotive which were now mass-produced must be reduced. But no general reform of the system for fixing prices for new production seems to have been adopted, in spite of pressure from Gosplan. In November 1937 Gosplan pointed out to Sovnarkom that a piece of machinery could 'remain in the category "new output" for an exceedingly long time', simply as a result of making minor changes in it. It accordingly submitted a draft decree which proposed that only products produced in the USSR for the first time or modified to the extent of at least 15 per cent of their costs should be classified as 'new production' – and they should be considered 'new' only if 50 or less items were produced (10 in the case of large items). The prices of new production should be fixed by contract between producer and purchaser, and operate for only six months without revision.²⁷ But no decree was adopted. Six months later Gosplan again complained that 'very frequently' small changes in design led to old output being categorised as new.²⁸

The failure of wholesale prices to stimulate production in the variety needed by the customer was particularly obvious for goods sold on the retail market. The wholesale price of cheap tumblers was fixed so that they incurred a loss of 50 per cent. Hence what a Soviet economist described as the 'systematic shortage at the end of the 1930s'.²⁹

Some attempts were made to manipulate the new wholesale prices so as to encourage the production of scarce products and discourage their use, and to discourage the use of scarce resources. The decree of March 2, 1936, ordered that a tax should be charged per tree

²⁴ RGAE, 4372/36/191, 1-5 (dated May 29, 1937), printed in *Istoriya tsenoobrazovaniya 1929-iyun' 1941* (Moscow, 1973), 150-4.

²⁵ If the higher wholesale prices of power, fuel and high-quality steel already introduced in 1934 are taken into account are taken into account, the total price increase was 6,478 million rubles. These figures exclude the armaments industry, and the oil and power industries, in which prices were not changed in 1936.

²⁶ RGAE, 4372/36/191, 1-5 (dated May 29, 1937).

²⁷ RGAE, 4372/37/230, 11-12 (dated November 10, 1937).

²⁸ RGAE, 4372/36/364, 190-190a (memorandum to the Economic Council dated May 9, 1938).

²⁹ A. N. Malafeev, *Istoriya tsenoobrazovaniya v SSSR, 1917-1963gg* (Moscow, 1964), 212, n. 3.

felled (reintroducing a tax charged in the 1920s), and that the charge should be higher for trees in poorly-wooded central Russia.³⁰ On September 6, 1936, Sovnarkom reprimanded Narkomtyazhprom for using oil in excess of the plan, and instructed the commissariat to increase oil prices from October 1 'in order to create an economic incentive for transfer to other fuels'.³¹ When in 1937 the wholesale prices of oil and electricity were generally raised, this was stated to be on the grounds that this would encourage economising in fuel and power'.³² Within the iron and steel industry, 'the profitability of different kinds of metal output has been arranged in the light of the need to stimulate to the maximum the production of the most scarce and complicated grades, profiles and dimensions.' The price of high-speed steel was fixed high so as to encourage the use of substitutes.³³ But administrative orders were still of course the main means of controlling industrial activity. Confronted with a shortage of electricity in the last months of 1936, Sovnarkom resolved that simultaneously with an increase in the cost of power, industrial power consumption should be reduced by 10 per cent in October-December 1936 as compared with the rate of consumption in the first six months of the year, and that even though the price of electricity supplied to private households would not be increased, the power used for lighting should be 15 per cent less than in 1935.³⁴

The reform was nevertheless much more modest than the reform of retail prices. The reformed retail price was intended both to enable the consumer goods industries to produce at a profit and to balance supply and demand on the retail market. But the wholesale price reform did not generally seek to equalise supply and demand within industry, following the rejection in 1932 of Birbraer's proposal to abolish the central allocation of producer goods.³⁵ Nor was any attempt made to incorporate into wholesale prices a charge related to the capital input into the product.³⁶ Costs continued to incorporate only a modest 'amortisation mark-up', nominally reflecting the expected life of the product. A Gosplan report summarised the purpose of the reform: 'the establishment of new transfer prices at the level of costs, providing branches of the economy with the possibility not merely of working without a loss, but also of working profitably'.³⁷ Once this price for a product was approved, the industry concerned paid different internal prices to different factories depending on the cost at the factory, with the intention that each factory, if working efficiently, would make a profit.

The reform greatly improved the price structure, but did not wholly reach its own objectives. The prices approved in 1936 assumed that the cost reduction plans for 1936 and 1937 would be achieved in full. In practice several industries which had received large subsidies continued to make losses. The production cost of coal increased from 20r65k in 1936 to 24r22k in 1937, partly as a result of the decision to increase the wages of lower-paid workers from November 1, 1937.³⁸ But the transfer price of coal was fixed at only 19r10k in

³⁰ GARF, 5446/1/112, 205-212. The tax was expected to yield 200 million rubles annually.

³¹ GARF, 5446/1/122^b, 67-68. A proposal that Narkomtyazhprom and Narkomput' should impose a charge five times the normal price on enterprises which consumer oil in excess of the plan was crossed out.

³² RGAE, 4372/36/191, 1-5 (Gosplan memorandum of May 29, 1937).

³³ GARF, 5446/23/4792, 1-10 (memorandum of People's Commissariat of the Iron and Steel Industry, dated October 22, 1939).

³⁴ SZ 1936, art.429 (dated October 13).

³⁵ See Davies (1996), 225-7.

³⁶ This had been unsuccessfully proposed by Birbraer and others in June-September 1932 (see *ibid.*, p. 265).

³⁷ RGAE, 4372/92/109, 4 (dated May-June 1937).

³⁸ See *Istoriya tsenoobrazovaniya 1929-iyun' 1941* (1973), 344-6. Costs rose still further in 1938 as a result of this decision.

June 1936.³⁹ In the iron and steel industry the main chief administration GUMP worked at a loss, while the administration for special steels Spetsstal' made a profit of 9.9 per cent. Building materials were produced at a loss: the cost of producing cement was 7.5 per cent above its wholesale price. In the machine-building industry, the situation was very mixed. Capital equipment as a whole was produced at a profit of 4 per cent, but heavy industrial equipment made a loss of 13.2 per cent, while chemical engineering products made a profit of 137 per cent.⁴⁰

As Mezhlauk had feared when resisting reform of wholesale prices in 1932-3, the repercussions of the reform spread throughout the economy. A draft report on the results of the second five-year plan explained that in 1933-7 the price index for raw materials, fuel and power had increased by 130 per cent. The prices of raw materials of industrial origin had increased by 80 per cent, rail charges by 25 per cent, and the prices of agricultural raw materials (as a result of the increased payments for industrial crops) had more than trebled.⁴¹ Not surprisingly, the published report on the plan said nothing about costs or wholesale prices in its text, and did not supply data about them in its appendix tables.⁴² The published third five-year plan discussed at some length the proposed reduction of industrial costs by 11 per cent in 1937-42, but kept silent about what had happened to costs and prices in the second five-year plan, and did not make any proposals about changes in retail or wholesale prices during the third plan.⁴³

(iii) *1926/27 prices*. The third reform, the reform of 1926/27 prices, received a great deal of attention in Gosplan and TsUNKhU. This was primarily because these prices were used as a success indicator. Production plans were set both in terms of physical units (tons of coal, etc.) and in terms of the valuation of production in 1926/27 prices. The plan in value terms was particularly important in the many industries which produced heterogeneous goods.

The 1926/27 prices used in the early years of industrialisation were crude. A single price was adopted for a group of goods of varying quality and complexity, so the plan could be more easily fulfilled by producing the lower-quality or less complex item. Mezhlauk, in his memorandum on the proposed price reform, dated October 1, 1934, called for 'the differentiation of 1926/27 prices by the product-mix (*assortiment*), taking into account the quality of production, unlike the practice in a number of branches of the economy of fixing depersonalised average prices which do not take product-mix into account'. He listed many striking examples of anomalies. Glass was simply valued in 18 broad groups on a per-ton basis. In the food industry, pork was overvalued as compared with pig fat, sheep's-milk cheese was wrongly allotted a much higher price per kilogram than Dutch cheese, and a mere five prices covered every type of fish. The reform would deal with the product-mix problem by introducing a much larger number of prices – 50 for fish instead of 5, 1,870 for glass instead of 18. Glass was henceforth to be priced according to the size of the sheet, the thickness of the glass and its grade.

Mezhlauk also called rather cautiously for the 'partial reduction of the excessively high prices of the starting-up period for certain kinds of new output', particularly in heavy

³⁹ See *Istoriya tsenoobrazovaniya 1929-iyun' 1941* (1973), 346.

⁴⁰ RGAE, 4372/92/159, 49-48 (memorandum from M. Bogolepov to Voznesenskii dated May 4, 1938).

⁴¹ RGAE, 4372/92/81, 273-274 (?1938). Another report gave the increase in the wholesale prices of means of production (producer goods) as 120-130 per cent (RGAE, 4372/92/93, 1 – dated May 31, 1938),

⁴² *Vypolnenie vtorogo* (1939 – sent to press March 14).

⁴³ *Tretii pyatiletnii* (1939 – sent to press March 14).

industry. The annual rate of growth between 1926/27 and 1935 was highly publicised as a great achievement of the regime. A substantial reduction in 1926/27 prices to remove the price inflation resulting from the inclusion of new products at higher prices, would have reduced the rate of growth of the economy. Mezhlauk acknowledged this awkward issue: he admitted that sometimes, as in the case of tractors and ball-bearings, the reduction could not be carried out because it would ‘considerably reduce the gross output in value terms for those industries and for the whole of machine-building’.⁴⁴ When the reform was implemented in 1935, it was accordingly more conservative than the reforms of retail and wholesale prices. It applied a rule that the general level of 1926/27 prices should not change by more than one per cent! In consequence, the reform was limited to tidying up anomalies in the current lists of 1926/27 prices, without dealing with their most important defect.⁴⁵

Nevertheless, the lists of 1926/27 prices adopted in 1935-6 were considerably more sophisticated, and improved the extent to which the valuation of production corresponded to the effort to produce it. We have not been able to assess how far the reform improved enterprise performance. Defects certainly remained. In 1938 V. A. Sobol’, the principal Gosplan official concerned with price-setting, complained that ‘disorder in the system of fixed prices has led to the emergence of “advantageous” (*vygodnye*) and “disadvantageous” goods from the point of view of the fulfilment of the state plan’, and this had resulted in violation of the production plan.⁴⁶ In another memorandum to the head of TsUNKhU (the state statistical office) he complained that new production was overvalued, so that by ‘forcing its production the enterprise has the possibility of showing that the plan is fulfilled in total (in fixed prices) but not in reality’.⁴⁷ He went so far as to call for ‘the abandonment of planning and recording production in 1926/27 prices in favour of current transfer prices and costs’.⁴⁸ But this reform was not carried out until many years later.

(ii) *Costs*

Industrial costs. According to a draft report on the results of the second five-year plan, the prices of producer goods increased by as much as 120-130 per cent during 1933-7. These price changes had led to an increase in industrial costs by as much as 48-50 per cent, plus the wage mark-up of 3- 3.5 per cent when bread rationing was abolished.⁴⁹ Industrial costs in real terms (when price changes are deducted) declined by 10.3 per cent (as compared with the 26 per cent planned in the five-year plan). Measured in current prices, industrial costs had increased by some 39.5 per cent (51-53.5 minus 10.3 per cent).

The report examined in some detail the decline in industrial costs in real terms. It claimed that the decline had primarily been due to the reduction of inputs per unit of output by 11-12 per cent and of administrative costs by 18-20 per cent. Wage costs, however, had increased by 5-6 per cent per unit of output. The reduction had mainly been achieved by heavy industry, where costs had fallen by 27 per cent, as compared with 7 per cent in the food industry. In light industry costs increased by 7 per cent and in the timber industry by as much as 15 per cent. In heavy industry cost changes had varied considerably between industries.

⁴⁴ RGAE, 1562/1/809, 17-5 (memorandum to Sovnarkom).

⁴⁵ For a full discussion, see M. Harrison in *Journal of Economic History*, vol. 58 (1998), 1032-62.

⁴⁶ RGAE, 4372/38/370, 2-11 (dated November 5, 1938).

⁴⁷ GARF, 1562/3/153, 80-83 (no date [1938]).

⁴⁸ RGAE, 4372/38/370, 2-11 (dated November 5, 1938).

⁴⁹ According to another report, in current prices heavy industry costs fell slightly, by 0.8 per cent, but they increased by 47 per cent in the timber industry, and doubled in the light and food industries (RGAE, 4372/92/81, 273 (1938?)).

Costs had increased by almost 130 per cent in the oil industry and by almost 34 per cent in the coal industry. The increase in the cost of coal had mainly been due to the increase in wages per ton of coal by as much as 50 per cent. These increases in the extractive industries had been compensated by the large reduction of costs in machine building by 46 per cent. Considerable economies of scale had taken place, and the decline in costs also resulted from the high investment in machine building. But the report acknowledged that the reduction was mainly due to the decline in the cost of new products. (This was partly spurious, reflecting the decline in costs of new products which had been overvalued when first introduced.) The report also mentioned a familiar feature of the last year of the plan: In 1937 there was a change for the worst - the costs of inputs and overheads had not been reduced.⁵⁰

Investment costs. The cost of investment, according to a TsUNKhU estimate, increased between 1932 and 1937 by 3.9 per cent, measured in current prices. The main components of investment are building and installation, which in the 1930s were together responsible for about two-thirds of investment expenditure, and capital equipment (machinery, including implements and tooling).

Index of investment costs at current prices 1933-7
(1932=100)

	1933	1934	1935	1936	1937
Building	104.3	103.4	99.6	100.9	105.3
Equipment	103.3	100.2	98.3	103.0	101.0
All investment	104.0	102.4	99.5	101.7	103.9

Source: RGAE, 4372/92/101, 73-76 ('Explanatory memorandum on the estimates of the results of the II five-year plan', May 11, 1938, unsigned)

Note: we have calculated the index for 'All investment' using the ratios of building and equipment given in this memorandum. The memorandum assumes that the ratio in 1937 was the same as in 1936.

The index shows a very small increase in the cost of equipment, following the pattern of machinery costs in general. The increase in building costs was also much smaller than the increase in industrial costs. This was due to two major factors. First, the increase in costs between 1932 and 1937 was much smaller for building materials (about 39 per cent) than for materials used in industry (120-130 per cent). Secondly, wage costs per unit of output, which had increased in industry, declined in the building sector. The substantial increase in the amount of building in real terms (about 58 per cent, according to the Powell index) was obtained by a smaller labour force (the total building labour force declined by about 25 per cent, from 3.14 to 2.25 million).⁵¹ The official index also showed a decline in overheads and in administrative costs.⁵² While building costs increased fairly slowly, they were much higher than planned. The five-year plan optimistically assumed that building costs would decline by 40 per cent during the five years, and the annual plans usually required a reduction of 12-15 per cent...

⁵⁰ RGAE, 4372/92/93, 1-13 (dated May 31, 1938, may have been written by Turetskii).

⁵¹ RGAE, 4372/92/101, 102 (1938?). The 1937 figure is preliminary.

⁵² These data are particularly likely to have been manipulated in response to the unrelenting pressure to reduce these costs. For the Powell index, based on the cost of building materials, see R. P. Powell, *A Materials-input Index of Soviet Construction, Revised and Extended* (Santa Monica, Cal., 1959). RAND Corporation Memorandum, RM-2454.

Index of costs of 'pure building' by type of expenditure, 1933-7
(1932=100)

	Total costs	Building materials	Labour			Overheads on labour	Administration and maintenance	Other
			Total	Wages	Output per man day			
1933	103.3	107.2	90.7	96.6	106.5	123.1	98.7	110.8
1934	105.2	111.0	95.2	113.1	118.7	137.5	82.4	110.9
1935	100.5	114.3	88.6	138.1	165.9	122.7	74.7	94.1
1936	101.0	129.4	86.1	164.6	191.1	98.4	65.1	81.5
1937 ^a	105.4	133.8	95.5	176.0	183.5	91.6	73.5	71.7
1937 ^b	105.6	136.5			209.1	121.1	69.5	58.5

Source: RGAE, 4372/92/101 (May 11, 1938), except 1937^b: *Industrializatsiya SSSR 1933-1937gg: dokumenty i materialy* (Moscow, 1970), 240-1 dated December 16, 1938

Notes:

The index of total costs differs slightly from the index in the previous table; it was estimated separately by the TsUNKhU officials

^a Preliminary figures

^b Final figures

In the remaining pre-war years, building costs seem to have increased more rapidly than during 1933-7. In these years actual costs were compared with the estimate costs for 1936, and we have not been able to estimate the relation between these estimate costs and the actual costs. But the results for 1939, for example, state that the amount of construction (the ob'em) reached only 80 per cent of the annual plan, but the provision of finance reached 88 per cent of the plan.⁵³

(iii) Finance

In the new context of large increases in retail and wholesale prices, the authorities nevertheless continued throughout the second five-year plan to seek to reduce costs and prices, and to restrict currency issue. It was only in the first austerity year of the plan, 1933, that the amount of currency in circulation was actually reduced. In 1934 and 1935, in spite of the revolutionary price increases which were taking place, the annual plans insisted - with no realistic prospect of success - that no currency should be issued. In fact currency in circulation increased by 12.7 per cent in 1934 and 25.5 per cent in 1935. In 1936, the Politburo conceded that its expansionist plan required an increase in currency by 13.4 per cent; in practice the increase amounted to 15.9 per cent. In 1937, currency in circulation increased by a further 20.7 per cent.

The increase of currency in circulation thus amounted to 61.9 per cent between January 1, 1933, and January 1, 1938. In spite of this unplanned increase, Gosbank and the financial department of Gosplan, in reviewing the results of the five-year plan, were convincingly able to claim that these figures reflected a considerable improvement in the financial health of the economy. In 1932 the monetary demand of the population greatly exceeded the available supply of goods, and in consequence both goods and money were hoarded throughout the economy. Between 1932 and 1937 the money incomes of the population greatly increased, but the supply of goods at prevailing retail prices increased more rapidly. The draft report on the second five-year plan prepared in April 1938 set out the following approximate but quite accurate figures (in thousand million rubles):

⁵³ See *Industrializatsiya SSSR, 1938-1941gg: dokumenty i materialy* (Moscow, 1971), 32 (document dated September 9, 1940).

	1932	1937	1937 as per cent of 1932
Money incomes of population	63	150	238
Retail trade (including kolkhoz trade) ^a	46	139	302

^a These figures differ slightly from those in other sources. In this table kolkhoz trade is assumed to be 5,600 million rubles in 1932 and 15,300 in 1937; and socialised trade in 1937 is assumed to be 124 thousand million rubles. The resulting index number (1937: 1932) does not differ much from the other sources.

In consequence, while shortages remained, demand corresponded much more closely to supply. The amount of currency held by the population (known in Russian as *tezavratsiya* - hoarding) declined from 75 per cent of total currency in circulation in 1932 to 60 per cent in 1936. The report of April 1938 also emphasised that the velocity of circulation increased: commodities sold per ruble of currency rose from 7r30k in 1932 to 11r41k in 1937.⁵⁴ Another report expressed the increased velocity in terms of the number of days in which money was returned to Gosbank: 1932 58.8 days; 1933 52.6; 1934 44.4; 1935 38.4; 1936 35.0; 1937 35.8; 1938 40.5.⁵⁵ These figures reflect both the rapid improvement in 1932-6 and the decline from 1936. A contributor to a Gosbank discussion pointed out that the situation deteriorated from the second half of 1936 onwards.⁵⁶ In 1937 the income of the population grew more rapidly than the supply of goods, and a more rapid increase in currency in circulation resulted. This situation continued in 1938 and 1939. In 1940 currency in circulation declined for the first time since 1933, a development which requires further investigation.

Annual increase of currency in circulation, 1933-1940
(per cent)

1933	-18.4
1934	12.7
1935	25.5
1936	15.9
1937	20.7
1938	26.7
1939	29.7
1940	-0.5

Source: Derived from table in Khlevnyuk and Davies, *Europe-Asia Studies*, vol.51 (1999), 595, where the absolute figures may be found.

Following the failure of the attempt to establish a 'unified financial plan' during the first five-year plan, the second five-year plan did not present an integrated set of financial proposals, and did not give specific targets for currency issue or for state revenue and expenditure. The Politburo and Sovnarkom confined themselves to approving an elaborate annual state budget plus quarterly state budget plans, and annual and quarterly plans for currency issue and credit. The budget was widely publicised; the plans for currency and credit remained almost entirely secret.

⁵⁴ RGAE, 4372/92/159, 70-68 (signed by Bogolepov).

⁵⁵ RGAE, 2324/30/125, 113-125 (draft report on third five-year plan, dated January 20, 1939).

⁵⁶ RGAE, 2324/30/125, 1-103 (Kaganov).

The state budget did not publicly acknowledge that by normal measures public finance was in continuous deficit. The political decision that the budget should always be shown as in surplus was already in force in the 1920s, and the practice continued throughout the Soviet period. The deficit in public finance was covered behind the scenes by short-term credits issued by Gosbank, which were augmented by the widespread tendency for factories and other enterprises to fail to pay their suppliers on time, creating unofficial commercial credit.⁵⁷ These increases in short-term credits ultimately resulted in an increase in currency in circulation. During the second five-year plan, as during the first, state budget expenditure increased from 40.2 milliard rubles in 1933 to 93.9 milliard in 1937; this large increase was partly due to the growth of expenditure in real terms, and partly to the growth in prices. The most rapid change took place when food rationing was abolished in 1935. Budgetary revenue increased from 50.8 milliard rubles in 1934 to 67.4 milliard (32.7 per cent) in 1935, largely as a result of an increase in turnover tax from 37.7 to 52.2 milliard rubles. Within this total, with the introduction of a market price for grain, the tax paid by Komztag increased dramatically from 4.57 to 20.73 milliard rubles, rising from 8.2 to 39.7 per cent of the total.⁵⁸

The expansion of public finance in excess of the plan was also reflected in the annual overfulfilment of the revenue and expenditure plans of the state budget. A shift took place in 1937, when both revenue and expenditure were less than planned: this new trend continued in 1938-40. But in every year the fictional 'budget surplus' exceeded the plan...

State budget: plan and fulfilment, 1933-40
(million rubles)

	<i>Revenue</i>		<i>Expenditure</i>		<i>'Surplus'</i>	
	<i>Plan</i>	<i>Actual</i>	<i>Plan</i>	<i>Actual</i>	<i>Plan</i>	<i>Actual</i>
1933	35011	40153	33231	35666	1780	4487
1934	48879	50816	47308	48307	1571	2509
1935	65901	67428	65401	66391	500	1037
1936	78715	83760	78715	81827	0	1933
1937	98070	96572	97120	93921	950	2651
1938	132638	127481	131138	124039	1500	3442
1939	156038	156014	155488	153299	550	2715
1940	183955	180241	179913	174351	4042	5890

Sources: *Otchet Narodnogo Komissariata Finansov SSSR ob ispolnenii edinogo gosudarsvennogo byudzheta Soyuza Sovetskikh Sotsialisticheskikh Respublik za 1933g.* (Leningrad, 1935); *Otchet...1934* (1935); *Otchet...1936* (1937); *Otchet...1937* (1938). For reports on the years 1938-40 see *Industrializatsiya 1938-1941* (1973), 21-41.

IV CONCLUSIONS

1. Major features of the Soviet approach to prices and costs were established by the mid-1920s and, after a brief period of experimentation during the first five-year plan, continued until the collapse of the USSR in 1991.

⁵⁷ Gosbank and commercial credits are discussed in some detail in Gregory and Tikhonov, *The Journal of Economic History*, 60 (2000), 1017-40.

⁵⁸ The figures for turnover tax include the 'special commodity fund' (the tax paid on goods sold at higher prices).

First, in common with the western capitalist countries in the inter-war years, which were dominated by efforts to cling to the gold standard, Soviet financial doctrine held that a healthy economy required a stable currency and stable or falling prices.

Secondly, this was believed to be compatible with a planned state-owned or managed economy (a 'socialist' economy) which sought to maximise capital investment and develop substantial social and welfare services, and adequate defence against the permanent threat from the capitalist powers.

2. The extent to which one or the other of these assumptions prevailed in practice varied considerably.

(a) *Between 1928 and 1932* the drive for rapid industrialisation resulted in inflation and a decline in the value of the currency; prices increased when they were not enforced by the state, and shortages and rationing resulted when prices were imposed. In deference to financial doctrine, the presence of inflation was publicly strongly denied.

(b) *During the second five-year plan*, a substantial effort was made to re-establish a stable currency and prices. The growth of investment was restrained. On the retail market, food prices were greatly increased and rationing was abolished. The velocity of currency circulation increased. But the retail prices of industrial consumer goods were not sufficiently increased, and here shortages continued.

Proposals to balance supply and demand for producer goods were rejected, and physical allocation of these goods continued. But their prices were substantially increased with the intention that subsidies from the state budget should be removed. Planning for maximum production was modified by cost controls, and within this framework output per worker greatly increased, the consumption of fuel and materials per unit of output was reduced, and output per unit of capital increased.

(c) *Between the second half of 1936 and 1940*, the huge increase in defence expenditure coupled with the deterioration in economic management resulting from the repressions of 1936-8 resulted in inflationary pressures. The authorities responded to these pressures reluctantly and with a considerable lag, so these years saw a return (on a lesser scale) of the shortages and related phenomena on the retail market which prevailed during the first five-year plan.

3. In general, planning for maximum investment and output prevailed over attempts to ensure a stable currency and prices. When prices were increased, the increase was almost invariably insufficient to bring about a balance of supply and demand on the retail market; when they were reduced, they were reduced too much. In the longer term, this bias was continued after the second world war.