

**UNRISD Project on Poverty Reduction and Policy Regimes
Country Overview Paper No. 3**

**Development Strategy, Welfare Regime
and Poverty Reduction in the Former
Soviet Union**

**Alastair McAuley
Department of Economics
University of Essex**



The **United Nations Research Institute for Social Development (UNRISD)** is an autonomous agency engaging in multidisciplinary research on the social dimensions of contemporary problems affecting development. Its work is guided by the conviction that, for effective development policies to be formulated, an understanding of the social and political context is crucial. The Institute attempts to provide governments, development agencies, grassroots organizations and scholars with a better understanding of how development policies and processes of economic, social and environmental change affect different social groups. Working through an extensive network of national research centres, UNRISD aims to promote original research and strengthen research capacity in developing countries.

Research programmes include: Civil Society and Social Movements; Democracy, Governance and Well-Being; Gender and Development; Identities, Conflict and Cohesion; Markets, Business and Regulation; and Social Policy and Development.

A list of the Institute's free and priced publications can be obtained by contacting the Reference Centre.

UNRISD, Palais des Nations
1211 Geneva 10, Switzerland

Tel: (41 22) 9173020
Fax: (41 22) 9170650
E-mail: info@unrisd.org
Web: <http://www.unrisd.org>

Copyright ©2008 United Nations Research Institute for Social Development (UNRISD).

This is not a formal UNRISD publication.

1. Introduction

The former Soviet Union was one of the largest countries in the world—accounting for between a sixth and a fifth of the landmass of the world. For much of the twentieth century its economy and society were governed by principles that differed radically from those found in most other industrialized economies and in many, if not most, developing countries. This paper sets out to describe the institutions, through which the economy was administered, the strategy that the leaders adopted to secure industrialization and their success in securing increases in living standards and a reduction in poverty.

The Soviet Union came into existence as a result of the *bolsheviks*' successful overthrow of the tsarist regime in 1917 (and their defeat of the allies and the so-called White Russian forces in the subsequent civil war). War and revolution left the country exhausted, however, and for much of the 1920s no attempt was made to launch a coherent industrialization drive. It was not until 1928 that the first five year plan was adopted under Stalin and it was really only after 1932, or even 1935, that the planned economy assumed its definitive form.

Some progress was made in developing heavy industry in the 1930s and the Soviets succeeded in defeating Hitler's attempt to overrun the country between 1941 and 1945. But the country remained at best semi-developed. The real achievement of the Soviet industrialization model—and its weaknesses—are to be seen in developments that occurred after 1945, or even after the death of Stalin in 1953.

The remainder of this paper is divided into five sections. In Section 2, I describe the Soviet model of industrial transformation—based on state ownership of the bulk of the means of production and central planning. Section 3 contains an account of the effectiveness of this model in mobilizing resources. Section 4 is devoted to a description of the institutional framework of what I call the Soviet Welfare State, while Section 5 analyzes the extent of poverty and the impact of poverty reduction policies under Soviet socialism. Finally, in Section 6, I provide an account of the reasons why I think that the Soviet system collapsed at the end of the 1980s.

2. The Soviet Model of Industrial Transformation

Between 1928 and 1953 the Soviet authorities carried out an enormous programme of modernization: in a quarter of a century, a backward agrarian state was transformed into an industrial economy with the capacity to produce the full range of modern machines and weaponry. This was achieved by the mobilization of human and material resources and their concentration on a limited number of high-priority projects and sectors. The institutional arrangements through which this was achieved constitute the Soviet planning system.

The best-known feature of economic administration under Stalin is the sequence of five-year plans that were adopted. But there are widespread misconceptions about their nature and role. Five-year plans should be seen as statements of government objectives, primarily in the area of capacity expansion (five years being chosen as the likely gestation period for major investment projects).

The core of early five-year plans is to be found in the specific major development projects that they contain—although some attempt was made to spell out implications for remaining sectors of the economy and for macro-economic aggregates. For the most part, capacity

expansion was achieved by the construction of a limited number of large plants on green field sites. These plants usually adopted—or imitated—imported best-practice US or German technology, at least in their basic processes (although in other areas they were designed to make use of abundant unskilled labour).

The plans had the effect of establishing the government's priorities, of providing guidance to lower-level institutions about which objects and projects should take precedence. Because they were ambitious (taut) they encouraged managers to “seek out reserves” (i.e. encouraged mobilization). But because they were inadequately articulated they often led to bottlenecks and under-fulfilment. Thus, the five-year plans constituted a “blueprint for development”. The task of ensuring that the blueprint was realized, of ensuring that resources were in fact concentrated on the plan projects fell to other components of the Stalin model.

After experimenting with a variety of different hierarchical systems of subordination, the ministerial system was introduced in 1932-1933 and, with the exception of the period 1957-65, was preserved until 1991—or even later. Formally, the ministerial system displayed the following features: in principle, all enterprises producing a particular product were subordinated to the same ministry; the ministry exercised certain planning and development functions in a centralized manner; it was responsible for relations with Gosplan (the central planning authority) and with other ministries—that is, it restricted horizontal links between enterprises. Further, it had the power to redistribute inventories, accumulated profits, depreciation reserves and production tasks between its subordinates. On a political level, the adoption of the ministerial system increased the likelihood that individual projects would be completed by giving them the “clout” of the minister in charge of the industry/ministry. It also identified the institution or individual who could be held responsible for non-fulfilment. This was achieved at the expense of a considerable increase in the centralization of decision-making authority. At the same time, the creation of relatively self-contained production hierarchies created—or at least increased—the need for co-ordination between them. That is, it greatly enhanced the role of Gosplan's short-run planning function.

The need to ensure that specific projects received the resources they required led to the emergence of a number of politically controlled, centralized production hierarchies. In consequence, the rest of the economy was organized on similar lines. Hierarchical subordination precluded horizontal (market) links between subordinates. Some other mechanism had, therefore, to be introduced to ensure co-ordination. This was achieved by Gosplan's planning of supply.

Analytically, one can identify two components to this: the system of material balances by means of which the authorities attempted to ensure that their plans were consistent. The *zayavka-naryad*¹ system by means of which the authorities attempted to ensure that specific production units obtained the resources they required to fulfil their plans.

The system of short-term planning described above operated largely in physical terms. Prices and monetary magnitudes were largely irrelevant. But it did not prove possible to do without a system of financial control. The central authorities required some synthetic indicator of overall ministerial performance. Ministries, equally, required some synthetic indicator of

¹ A *zayavka* is an indent (a request for a given amount of a rationed or funded input.) A *naryad* is an allocation certificate (a document specifying that a named enterprise was entitled to obtain a specified amount of a rationed input from a named supplier). It was through the issuing of *naryady* that Gosplan sought to ensure that priority was accorded to the fulfilment of planners' preferences.

enterprise performance. Further, wages—and also prices—were used to obviate the need for the rationing of consumer goods and the direction of labour.

The objectives of financial control, as spelled out above, were best served by cost-based “constant” prices. And this was true of the Soviet price system. Prices were centrally set, changed at infrequent intervals and cannot be said to have corresponded to relative scarcities, marginal productivity or opportunity costs. As such they did not provide a basis for efficiency calculations.

The system of economic administration that I have described gives rise to a number of observations: because objectives were ambitious and the task of co-ordination enormous, plans were often inconsistent or infeasible. Because of the way in which Gosplan attempted to reconcile these inconsistencies, this appeared as shortages of inputs. Pervasive shortages led enterprises to over-bid for materials. This reduced the quality of information about production possibilities received by Gosplan—and hence its ability to produce realistic plans. It also induced both ministries and enterprises to set up their own production facilities for funded materials (those allocated most rigorously by the central authorities). Insofar as these were of other than optimal size, this raised costs/reduced efficiency. Insofar as it allowed ministries (and enterprises) a degree of autonomy from the constraints of the central *naryad* system, it reduced Gosplan’s (and hence the central authorities’) ability to control the system. The planned economy became partially unplanned!

The specification of targets in physical terms led to various distortions—for example the so-called nails in tons syndrome: These distortions tended to aggravate the problem of shortages and surpluses. The response was to increase the number—and range—of central controls; increases in the number of plan-indicators, however, increased the risk of inconsistencies between them. The difficulty of obtaining accurate and up-to-date information about enterprise production possibilities and the difficulty of analyzing the information that was collected, led to the implicit adoption of the so-called ratchet principle: this year’s target equals last year’s achievement plus x percent. This encouraged enterprises to conceal capacity. To make the system work, the authorities were obliged to tolerate a variety of semi-legal or illegal practices—*blat* and *tolkachi*² for example.

In all of these ways, the Stalin system led to “undesirable” behaviour at the enterprise level. To prevent *ochkovtiratel’stvo* (misreporting) and other practices from getting out of hand, ministries tended to move managers between plants at fairly frequent intervals. This militated against “learning by doing” and tended to encourage the adoption of very short enterprise-level planning horizons (i.e. it discouraged investment in long-term projects, but it did not eliminate managerial attempts to overbid for resources and to conceal capacity).³

It was not only enterprise behaviour that was affected by the planning system. That of ministries also responded to the compulsions of the so-called shortage economy. Since rewards at the ministerial level also depended to a large extent on economic performance, ministries favoured their own plants in the distribution of inputs over which they exercised

² *Blat* refers to informal (and corrupt) deals between enterprise managers—often intended to get around the constraints of the *zayavka-naryad* system. *Tolkachi* (pushers) were agents who sought to ensure that a given enterprise’s orders were fulfilled—often ahead of those of other higher priority enterprises. They achieved this through the use of *blat* or other inducements.

³ For a detailed analysis of the effects of the Soviet planning system on managerial behaviour, see Berliner (1957).

control—in spite of the requirements of the inter-republican and inter-ministerial supply plan. To protect their organizations against the chronic uncertainty of supplies, ministries built up networks of “captive” suppliers—plants producing key intermediate inputs under their direct control. As I have already pointed out, these ministerial empires and the way that they were run in the long term reduced the control over resource allocation exercised by Gosplan—as exemplified by Khrushchev’s railing against “metal-eaters”.

Finally, at the macro-economic level, one can conclude that the system suffered from certain weaknesses. Emphasis on the rationing of physical inputs to a large extent was incompatible with cost-conscious calculation—and hence with static allocative efficiency. This implied that the opportunity cost of the government’s investment programmes was often larger than it need have been. This accentuated the conflict between the goals of economic growth, military security and raising popular living standards. This conflict became increasingly acute in the 1960s, 1970s and 1980s.

Centralization and bureaucratic control tended to stifle managerial initiative and, hence, militated against innovation or the diffusion of new products and processes. Thus neither at the centre nor at the periphery was the system geared to the identification and utilization of new and more efficient ways of doing things. Rather, the emphasis was on the mobilization of identifiable resources and their priority commitment to specified projects. As long as the priorities were few and easily identifiable and as long as there were ample supplies of under-utilized resources to be mobilized, the system was effective. But its very success meant that it was bound to run into problems sooner or later.

As the economy grew in both scale and complexity it became more difficult to apply the priority principle. Resources are necessarily limited and the more effective is mobilization, the more difficult it proves to mobilize marginal units; by the 1950s, the limits had been reached in both these directions. The last thirty or forty years of Soviet planning were devoted to more and more desperate attempts to break out from the straitjacket imposed by the Stalin system. Furthermore, this model was inappropriate for the specific economic conditions of the countries of Eastern Europe and, as a result, almost all these countries experienced intermittent economic crises. Ultimately—in 1989-1991—it was abandoned by both the USSR and the socialist planned economies of Eastern Europe.

3. Resource Mobilization

The institutional framework described in the last section is known as the Stalin model. Supplemented by the collectivization of agriculture,⁴ it was used by the CPSU to achieve the initial industrialization of the Soviet Union. This took place in the thirteen years between the adoption of the First Five-Year Plan in 1928 and the Nazi invasion of the Soviet Union in 1941. As I pointed out above, the industrial capacity installed in this period was sufficient to allow the USSR to defeat Hitler’s armies but the USSR remained at best semi-developed at Stalin’s death in 1953. The Stalin model was effective in mobilizing under-utilized resources. As the availability of such resources diminished—after the death of Stalin, the model became less and less effective in achieving high rates of growth. The CPSU sought to modify the model—both in the 1960s and the 1980s; but, they were unable to break away from its essential characteristics.

⁴ Whether the collectivization of agriculture contributed to Soviet industrial development or was an unmitigated policy disaster is an issue that has stimulated an enormous academic literature that I do not have the space to pursue here. For a brief summary and pointers to the literature, see Gregory and Stuart (1990, especially ch.4).

In Table 1 I show how the level of labour input and the structure of employment changed over the period 1928-1950. The table shows that the disruptions of collectivization and the purges led to a decline in labour force participation in the mid 1930s and that total labour input at the end of the period was little larger than it had been in 1928. Despite the losses incurred during the war, accretion of new territory, population growth and increased participation rates led to a more significant increase in the next decade. There was, however, a significant change in the structure of employment: employment in industry (which includes both manufacturing and mining) more than tripled between 1928 and 1940; by 1950 it had almost quadrupled. Similarly, employment in construction more than doubled between 1928 and 1940; and by 1950, it had also quadrupled. Further, although planners' priorities discriminated against the services sector (non-productive employment in Marxist conceptions) the "Other" sector in the table shows that employment in services almost doubled in the pre-war period and continued to increase—if only slowly—in the next decade. These increases were achieved at the expense of agriculture, where employment fell by a third before the war and declined slightly in the next decade.

Table 1: The Structure of Employment - USSR, 1928-1950
(Annual average employment, including *kolkhozniki*, millions)

	1928	1937	1940	1950
Economically Active Population	64.5	56.5	65.5	68.9
<i>Of which:</i>				
Industry	4.3	11.6	13.1	15.3
Construction	0.8	1.9	2.0	3.3
Agriculture	51.6	31.5	35.4	33.1
Other	7.7	11.3	15.1	17.2

Notes and Sources: calculated from Trud v SSSR (1988: 14 and 30).

Other includes Transport and Communications, Trade, Health, Education and Administration.

Changes in the structure of employment were mirrored in changes in the composition of output. As Table 2 shows, the share of agriculture in net national product declined from approximately a half to less than a third between 1928 and 1940. The share of industry, *per contra*, increased from little more than a quarter to almost a half. The share of services was virtually unchanged.

Table 2 also brings out the changes in end use that accompanied the big push towards industrialization in the Soviet Union. Household consumption plummeted—falling from more than four fifths of net national product in 1928 to less than a half in 1940. At the same time, net domestic investment doubled from 10 percent to 19 percent of NNP. The share absorbed by government (which includes both expenditure on such services as education and armaments) quadrupled. Table 2 also confirms the emergence of autarchy; Soviet foreign trade was not particularly significant in 1928. By the end of the next decade, it had virtually ceased altogether.

Finally, the table confirms that the changes brought about by central planning led to significant increases in output. Over the pre-war period, output grew at an annual rate in excess of 5 percent.

Table 2: Structural Change in the Soviet Economy: 1928-1940

	1928	1937	1940
Sectoral Shares of NNP (percent)			
Agriculture	49	31	29
Industry	28	45	45
Services	23	24	26
End Use Shares of NNP (percent)			
Household Consumption	82	55	49
Government	8	22	31
Net Domestic Investment	10	23	19
Foreign Trade			
(Exports+Imports)/NNP (percent)	6.2	1	na
Economic Growth (average annual; percent)			
Total product (1928-1940)		5.1	
Per capita Product (1928-1940)		3.9	

Sources: Cols. 2-3 Gregory (1981: 39); Col. 4 Gregory and Stuart (1990: 95).

How was this resource mobilization and re-allocation achieved? I believe that the collectivization of agriculture played an important part in the process. Collectivization allowed the authorities to assume control over both what (and how much) to produce and over the disposal of the harvest. They used this control to reduce peasant consumption. This led to significant rural-urban migration—particularly of younger (and more educated) cohorts. This process was assisted by the offer of higher money wages—even for unskilled labour in urban areas. At the same time, however, urban consumption was contained—even reduced. This was achieved by inflation and taxation. Over the period, the consumer price index increased tenfold. The authorities also imposed a substantial (and regressive) turnover tax.

The Stalinist Legacy: When Stalin died, in 1953, the Soviet economy—and Soviet society—were seen to be militarily strong; in this respect, the USSR had caught up with the economies of Western Europe. But agriculture was backward; yields were often lower than they had been in 1913; the Soviet population was worse fed than it had been in 1927—or 1913. Civilian industry was backward; the Soviet economy had not come to terms with the internal combustion engine—so that automotive industries were under-developed; the same was true of chemicals and electronics—despite the fact that sputnik was to be launched only three years later. Soviet society suffered from numerous problems—broken families, high rates of divorce, poverty, high rates of infant mortality and so on. This set of problems constituted the political agenda that confronted Khrushchev—and other contenders for supreme power—after Stalin’s death. The policy innovations of the next decade can be seen as attempts to grapple with them.

Khrushchev’s Response: There was an attempt to change the climate of international relations with the doctrines of peaceful coexistence and polycentrism or separate roads to socialism; but this attempt was derailed: events in Poland and, more seriously, the Hungarian uprising threatened Soviet control over the East European glacis. The U2 incident and, more seriously the Cuban Missile Crisis showed that the USA was not prepared to forego its claims to *Pax Americana* despite Soviet military progress. US obduracy—and suspicion of Soviet *bona fides*—increased as America became mired down in Viet Nam.

Domestically, Khrushchev attempted to resolve some of the problems which the economy (and society) faced. There was an attempt to change the incentives facing agricultural producers and to increase the resources committed to the agricultural sector: state procurement prices were

raised substantially and continually throughout the Khrushchev period; The MTS (machine tractor stations) were abolished and farms given more control over production decisions. The Virgin Lands campaign was intended to bring about a discontinuous increase in sown areas—and output. Although output increased significantly under Khrushchev, agriculture continued to be the Achilles' heel of the economy.

Khrushchev initiated a number of campaigns designed to modernize the performance of Soviet industry: the publication of *referativnye zhurnaly* to inform managers of innovation in the west failed because it did not change incentives to innovate. The chemicalization campaign, where the central authorities sought to change techniques and the composition of output, also failed (at least partially) because it did not change production incentives. The *sovnarkhoz* reform—where the principle of sectoral subordination was replaced by that of regional control—failed because the resulting system was incoherent.

The Brezhnev Period and After: Khrushchev was replaced by Brezhnev and Kosygin in a palace coup in October 1964. The increasingly erratic (hare-brained was the term used subsequently by Party propagandists) nature of the policies advocated or adopted by Khrushchev persuaded his colleagues to replace him. At the same time, however, they recognized the nature of the economic problems with which he had been grappling: agricultural failure—leading to the import of grain; slow-down in the rate of growth; conflict between civilian investment and military procurement—aggravated by growing US involvement in Viet Nam. Also, it was apparent that the system experienced difficulty in transferring the fruits of military R&D to the civilian sector; and difficulty in moving from research to mass production of high-tech products.

As a result, Khrushchev's replacement was accompanied by what was intended to be a far-reaching reform of the economy, devised under the guidance of the prime minister, Alexei Kosygin. In line with the ideas of Evsei Liberman (a Soviet academic specialist in management) the intention was to reorganize the planning system so that what was good for the country was "profitable" for the enterprise. The *sovnarkhoz* structure was replaced by a system of industrial ministries but enterprises were to be given much more autonomy: The amount of detailed intervention in managerial decisions by planners was reduced. Enterprises were to determine investment plans by calculating a pseudo "rate of return"—the recoupment period. Managerial incentives—and enterprise social expenditures—were linked to enterprise profitability. The procurement prices for a range of agricultural products were increased sharply.

The Kosygin reform failed. It was doomed, I think, because of its internal contradictions; but it also suffered from changes in political circumstances—and from what one may call contingent bad luck. The decentralization—and increased autonomy for enterprises were largely illusory. Planners continued to set prices arbitrarily; so-called economic calculations were meaningless—if not positively misleading. The so-called *zaiavka-nariad* system was retained in its essentials; enterprises were still not free to obtain the inputs they wanted; nor did they have to worry about selling what they had produced. As a consequence both innovation and quality suffered. In the face of patently irrational decisions on the part of enterprises—often no more than a reflection of managerial ignorance about economy-wide scarcity—ministries intervened more and more in the day-to-day management of enterprises. Lack of market-clearing prices blunted the effect of monetary incentives; the economy suffered from queues, black markets and corruption.

It appears that even in 1965, Brezhnev was not particularly enthusiastic about the Kosygin reform: it undermined the central planning system and risked challenging the authority of the Party. These doubts were reinforced by the deteriorating political situation of the late 1960s:

there were the events in Eastern Europe culminating in the Prague Spring—and the August invasion! There was an intensification of the Viet Nam war—and thus of the US-Soviet rivalry. Finally, Kosygin was a sick man—he was suffering from cancer—and was not able to defend his policies; the reform was largely a dead letter by 1968-70.

The failure of the Kosygin reform was followed by a long period in which the Party continued to make small changes to institutions and the way that they operated—what Gertrude Schroeder called the "treadmill of reform" and what Gorbachev subsequently referred to as stagnation, *zastoi*. The planning system—and the regime—was probably prolonged by windfall gains from the OPEC crises of the 1970s. Brezhnev also invested heavily in agriculture—to no avail: food shortages and the need to import grain continued to plague his government. The ultimate failure of Brezhnev's policies set the scene for Andropov, Gorbachev and *perestroika*; that is for the crisis which led to the collapse of the Soviet system.

By crisis, I mean that the legitimacy of the Communist Party—and hence of the state which it created—is undermined. The legitimacy of the Party (at least in the second half of the twentieth century) rested on the following three claims: that it was capable of ensuring internal and external security; that it was capable of “catching up and overtaking” the advanced industrial powers economically; and that it ensured a greater degree of social justice than was possible—or achieved—under capitalism. The second and third of these claims were predicated on the assertion that socialism and central planning were a superior form of economic organization to capitalism and the market economy.

In the 1980s, if not earlier, all of these claims were found to be doubtful or false. The military security of the USSR was called into question by the inadequate performance of the Red Army in Afghanistan and by the inability of Soviet defence industry to match American production of sophisticated weapons—as shown, *inter alia*, by the poor performance of Soviet armour in the hands of the Egyptian army, when pitted against American-made tanks used by Israelis. The economic performance of the country was shown to be inadequate by industry's inability to match the west's production of new products (for example in IT) or fashionable consumer goods and by persistent and increasing shortages of foodstuffs, housing and so on. The greater social justice of the socialist system was also shown to be false as Soviet citizens came to learn more about welfare provisions in Western Europe and as Soviet citizens learnt more about the privileges enjoyed by the political elite in their own country. As the economic superiority of socialism was called into question, so was the Party's right to rule.

Since all “productive” capital was publicly owned, most if not all savings and fixed capital investment was public. As I have already suggested, a major function of the planning system was to determine the scope and direction of this investment effort. There are three features of this system that merit comment: although public savings (that is non-consumption) remained high under Khrushchev and his successors, a significant volume of resources was devoted to defence—and thus did not contribute to growth and development. According to some estimates, defence spending accounted for between a fifth and a third of GDP.

Soviet planners devoted considerable resources to research and development but were not particularly successful at identifying or at disseminating innovations: As I have already mentioned, they were late in coming to terms with the automotive revolution and they experienced difficulty in disseminating innovations in both the chemicals and electronics industries. Further, the absence of market clearing prices and an ideological objection to rational calculation hindered the search for efficient resource utilization.

Table 3: Average Annual Employment (million persons)

	1940	1950	1960	1970	1975	1980	1985
State Employees	33.9	40.4	62.0	90.2	102.2	112.5	117.8
<i>Of which:</i>							
workers	23.9	29.0	46.2	64.9	72.3	78.8	81.7
Other state employees	10.0	11.4	15.8	25.3	29.9	33.7	36.1
Kolkhozniki	29.0	27.4	21.8	16.6	15.0	13.1	12.5
Total	62.9	67.8	83.8	106.8	117.2	125.6	130.3

Source: Trud v SSSR (1988: 26)

At the same time, however, the Soviet system devoted considerable resources to human capital formation. In the interwar years the authorities undertook extensive literacy campaigns and ensured universal primary education. After the Second World War, attempts were made to ensure universal secondary education and to increase the proportion of successive age cohorts that went on to further education. Particular emphasis was placed on the expansion of technical and engineering. Also, great efforts were made to ensure that women as well as men received such training.

The Extent of Structural Transformation

Some idea of the impact of this model of industrial transformation upon the level and structure of employment may be gained from Tables 3 and 4. It is worth pointing out that during the 1930s, urban unemployment was reduced to negligible levels—and that there was a sharp increase in female employment. At the same time a majority of the rural population, who had previously been engaged in peasant farming, were coerced into joining collective farms *kolkhozy*, where all adult family members were obliged to work a certain number of days per year. As a result, participation rates for both men and women increased to levels that were significantly higher than in most European states; at the same time, unemployment rates, while not zero, were on average much lower than in other developed—and developing—economies. These characteristics of the Soviet labour market were preserved until the collapse of the system at the beginning of the 1990s.

Table 4: Distribution of the Occupied Population (in percent, excluding students)

	1940	1950	1960	1970	1975	1980	1985
Agriculture and Forestry*	54	48	39	25	23	20	20
Industry and Construction	23	27	32	38	38	39	38
Trade, Transport and Communications	10	10	13	15	17	17	17
Health, Education and Social Security	6	8	11	16	16	17	18
Other (including Administration)	7	7	5	6	6	7	7
	100	100	100	100	100	100	100

Notes and Sources: Trud v SSSR (1988: 14).

* includes state farmers, collective farmers and those employed on personal subsidiary agricultural activities (private plots.)

As can be seen from table 3, total employment (including *kolkhozniki*) more than doubles between 1940 and the end of the Soviet Union. State employment proper more than triples. Table 4 shows that there was a continued increase in employment in manufacturing until the late 1970s. This was accompanied by a decline in agricultural employment. This remained much higher, however, than in most industrialized economies. There was, however, a shift from *kolkhoz* to state farm employment which is not fully brought out by the figures in the tables (the conversion of *kolkhozy* into state farms was undertaken to raise farm incomes). In consequence, the services sector remains under-developed.

Table 5: Labour productivity in Industry and Earnings

	1940	1950	1960	1970	1975	1980	1985
Productivity of Labour in Industry 1950=100	69	100	204	338	452	529	619
Average Monthly Money Earnings of State Employees (rubles)	33.1	64.2	80.6	122.0	145.8	168.9	190.1
Estimated Value of the Social Wage (rubles)*	7.5	18.2	27.1	42.5	53.1	63.8	78.7

Notes and Sources: Row 1: Trud v SSSR (1968: 157). Trud v SSSR (1988: 236). Rows 2-3: Trud v SSSR (1988: 223).

*The Social Wage includes holiday pay, pensions and allowances, expenditure on education, health and housing subsidies.

Table 5 reports Soviet estimates of increases in labour productivity. These are based on Soviet methods of national income accounting, which most western statisticians believe overstate rates of growth. Nevertheless, the table records a significant increase in the post-war period. However, labour productivity increases at a diminishing rate in the post-war period. The table also shows that both money and personal incomes increase during the period covered by the table. Furthermore income differentials remain moderate—even if somewhat larger than in Eastern Europe.

Finally, table 6 reports changes in the level and structure of exports since 1940. Unfortunately the figures are in current prices. It is true that there has been significant inflation in Soviet export prices over the period covered by the table, but there has also been a significant expansion in the volume of exports. The other striking feature about the table is the continued—indeed growing—dependence on exports of primary products, particularly petroleum and petroleum products after 1970. Soviet exports of machinery went primarily to Eastern Europe and the Third World (it is not clear whether arms exports are included in the table).

Table 6: USSR: structure of exports, 1940-1985 (*including re-exports*)

	1940	1950	1960	1970	1980	1985
Total Exports (prices of the corresponding year; million rubles)	240	1615	5007	11520	49634	72664
<i>Of which (percent)</i>						
Machinery and Equipment	2.0	12.3	20.7	21.5	15.8	13.9
Fuel and Electricity	13.2	3.9	16.2	15.6	46.9	52.7
Metallic ores and concentrates	4.1	10.8	20.2	19.6	8.8	7.5
Chemical products, fertilisers and rubber	3.0	4.0	2.9	3.5	3.3	3.9
Timber and paper products	6.4	3.1	5.5	6.5	4.1	3.0
Textiles	18.1	11.2	6.5	3.4	1.9	1.3
Foodstuffs	27.7	21.1	13.1	8.4	1.9	1.5
Manufactured consumer Goods	7.8	4.9	2.9	2.7	2.5	2.0
Other	17.7	28.7	12.0	18.8	14.8	14.2

Sources: Row 2 Narodnoe khoziaystvo SSSR (1987: 640). Rows 3-11: (*ibid*: 647).

4. The Soviet Welfare State

There are three ways in which the Soviet conception of social policy and the welfare state differed from that to be found in the developed industrial economies of Western Europe. First, the state was the main, if not the only employer. Furthermore, it was the state that set wage rates and salary scales. These two features of the Soviet system exercised a major influence on the so-called primary distribution of income (that is, the distribution of income that arises before whatever redistribution occurs as a result of the state's tax and benefit policies). Certainly, one can presume that earnings differentials reflect the state's preferences. Also, they imply that the need for a progressive tax system is limited. Further, when combined with the Soviet commitment to—and achievement of—full employment, the need for income support policies (and social insurance more generally) is limited. Finally, since the state owned the vast majority, if not all, of those institutions that supplied the population with goods and services, it was free to set prices at which such goods and services could be acquired. The Soviet authorities made extensive use of subsidies and even provided a range of services free of charge at the point of consumption—even though access was frequently rationed by other means.⁵

Second, it is important to recognize that, given the history of the twentieth century and in view of the isolation both sought by and imposed upon the Soviet Union, Soviet ideas about social policy have developed more or less in isolation from trends in social thought that have shaped policies and institutions in western Europe. Soviet academics and policymakers were even isolated from many of the debates that took place in Eastern Europe between the wars and even after 1945.

⁵ Although the authorities made extensive use of subsidies—particularly after 1965—published Soviet statistics do not permit one easily to compute their scale.

Third, Russia in 1917 was a poor agrarian economy. In many respects the Soviet Union remained poor and largely rural in 1950 and as I have pointed out, even in the 1980s the services sector remained underdeveloped. As a result, resources were limited and the scarcity of resources available for social policy was accentuated by Soviet preoccupation with defence. On the other hand, as I have also suggested above, between 1930 and 1960 or 1970, the Soviet Union experienced an industrial revolution. This resulted in changes to the country's demographic and social structure similar to those that occurred in other industrializing economies. And these social and demographic changes were associated with the emergence of range of social problems that prompted the adoption of new social policies under Khrushchev and his successors.

It is possible to identify, if only analytically, two broad objectives for Soviet social policy: the satisfaction of merit wants and the provision of income support for those unable to support themselves. The policies aimed at the first of these were available to both the urban and rural population, to both state employees and the peasantry (if in differing degree) from the mid-1930s if not the early 1920s. The peasantry was largely excluded from coverage by income support policies, however, until the middle 1960s. And even when the state's old age pension scheme was extended to cover collective farmers, in 1965, the terms on which they were entitled to pensions were less favourable than those for state employees and the value of pensions was lower as well.

Turning to the first broad objective of Soviet social policy: the term "merit want" is taken from Richard Musgrave, but Marx himself suggested that a future socialist society would provide for the communal satisfaction of needs such as schooling and health care. In the USSR, the primary elements of such services were education, health care and urban housing.

From the 1960s, education from the age of 7 to 17 years was provided free of charge (under Stalin, some parents had been required to pay tuition fees for secondary education). For those who qualified, tuition was free at institutions of further and higher education. For able and hard-working students, bursaries were also available. But many families were obliged to finance (or subsidize) their children's university education. Most urban children attended kindergartens or day nurseries. In rural areas, availability—and hence attendance—at such facilities was more patchy. In principle, parents were charged for such facilities—although fees depended upon parental income. Further, many establishments were subsidized either directly by the state or indirectly by enterprises.

In urban areas, primary healthcare was provided by a network of polyclinics. Attendance at these was free. In rural areas, polyclinics existed only in larger settlements; they were supplemented by a network of paramedics, *feld'shers*, thus continuing a system that had existed before the revolution. For those referred to hospital, medical consultation was free. Inpatients also received medication free of charge; but both out-patients and those who attended polyclinics might be required to contribute to the cost of any medication prescribed.

There were three forms of housing tenure in the Soviet Union. Most urban families lived in state-owned apartments. Here, standards were poor and there was considerable overcrowding—particularly in the early post-war years. The cost of such accommodation was subsidized although Soviet accounting procedures make it difficult to determine how large such subsidies were. Some more affluent households lived in apartments built by housing cooperatives—particularly after the 1960s. Here standards were higher, overcrowding was less as was the scale of subsidization. Finally, in 1987 somewhat less than a fifth of urban

housing and about two thirds of the rural housing stock was privately owned. In earlier years the share of private housing would have been higher. Facilities in the private housing stock were extremely limited and there was often severe overcrowding. Further, the owners of private housing received no explicit subsidies from the state.

Turning now to the second broad objective of Soviet social policy—income maintenance: In the first instance and for the bulk of the urban population, the provision of a job for all who were willing and able to work—and, indeed, the legal requirement that all men and childless women be in employment or on a registered course of study—was the first component of Soviet social policy. Employment provided a wage. One’s place of work often also served as the channel through which one gained access to other social benefits—cultural and leisure facilities, pre-school child care and so on. Enterprises were also responsible for building, servicing and maintaining a substantial share of the housing stock—particularly in industrial towns in the provinces.

Table 7: The Composition of Social Consumption Expenditure, 1940-1985

	1940	1950	1960	1970	1980	1985
Social Consumption (bn rubles)	4.6	13.0	27.3	63.9	117.0	147.0
As percent of net material product	-	18	19	22	26	26
<i>Of which (as percent of Social Consumption):</i>						
Welfare Services	65	54	50	49	47	44
<i>including</i>						
Education and culture	39	34	27	27	25	24
Health care	22	17	18	16	15	14
Housing subsidies etc.	4	4	6	6	7	6
Cash Transfers	35	4	49	51	54	54
<i>including</i>						
Holiday pay and stipends	17	18	14	16	16	13
Pensions and Allowances	6	18	31	32	34	36
Child Support	11*	9*	4	2	3	5
Other			0.4	1	1	1

Notes and Sources: McAuley (1991: 203). Narodnoe khoziaystvo SSSR (1987: 435).

As I pointed out earlier in the paper, the planners were responsible for setting prices charged in state (and cooperative) retail outlets. In the 1930s, this power was used to impose a degree of forced savings on the population. But, from the 1950s on, the prices of basic consumer goods—particularly foodstuffs—paid by the population increased more slowly than the prices paid by the state to producers. In effect, the Soviet authorities came to provide an extensive programme of price subsidies. Although the availability of supplies at these prices was often compromised, particularly in small towns and distant provinces, this price policy ensured a basic but adequate standard of living for the mass of the population.

From the 1930s on, Soviet leaders argued against egalitarianism, *uravnilovka*, and for the maintenance of sufficient differentials to provide an incentive for Soviet workers to acquire the skills and to undertake the work that they believed was essential for the industrialization of the country. From the mid-1950s, however, there was a tendency to reduce earnings differentials both between skilled and unskilled workers and between blue-collar and white-

collar workers. At the same time, the authorities continued to provide—or even to extend—the range of material privileges for favoured groups in the population, the so-called *nomenklatura*.

Until the 1950s, protection against poverty was provided primarily through the state’s policy of full employment and its control over the prices of basic consumer goods. There was also compensation for state employees who experienced temporary or permanent loss of working capacity. First, state employees were entitled to an old age pension on reaching the age of 60 years (55 years for women) provided that they had worked for a sufficient number of years. Workers in certain occupations and women who had given birth to a large enough number of children were entitled to retire at an earlier age. The value of the pension was linked to the level of one’s earnings in the last few years of one’s working life. As mentioned above, this system of social security was extended to collective farmers in 1965—on somewhat less favourable terms.

Second, state employees were entitled to an invalidity benefit if they suffered an industrial accident or contracted an occupational disease that reduced their working capacity or rendered them incapable of work. Such benefits were also available to those who were incapacitated for other reasons. Again this system was extended to collective farmers in the 1960s. Third, state employees were entitled to sick pay if they were temporarily unable to work. Such incapacity had to be certified by a doctor.

Finally, from the 1930s, all women giving birth to four or more children were entitled to child allowances until the child’s fifth birthday. Women also received a lump sum payment on the birth of their third child. Single mothers continued to receive child allowances until the child’s sixteenth birthday. Parents with dependent children received a “widow’s pension” on the death of a spouse. In the 1950s, the USSR introduced maternity benefits for employed women while they were on maternity leave. The terms on which such benefits were paid gradually became more generous over the next thirty to forty years.

Table 8: The Distribution of Earnings: USSR, 1956-1986
(Measures of location and dispersion)

	1956	1961	1970	1981	1986
Mean earnings (rubles/month)	69.6	83.1	115.5	172.5	195.6
Median earnings (rubles/month)	62.2	70.2	101.4	129.0	163.5
<i>As % of median</i>					
D ₁	40.7	47.4	58.6	66.2	54.6
Q ₁	62.9	69.6	76.0	84.1	71.9
Q ₃	150.6	143.8	142.8	155.0	139.3
D ₉	200.0	203.0	184.3	212.0	186.9
D ₉ /D ₁	4.9	4.3	3.1	3.2	3.4
Q ₃ /Q ₁	2.4	2.1	1.9	1.8	1.9

Sources: cols. 2-4 McAuley (1979: 222). Cols 5-6 calculated from Trud v SSSR (1988: 146, 149).

There was, however, no published poverty line and there is little to suggest that the authorities undertook secret research into the scale of poverty during the Stalin period. But, from the mid-1950s on, there is increasing evidence that Soviet researchers and policymakers came to accept that there was extensive poverty in the Soviet Union, that poverty was an

undesirable social phenomenon and that its causes were more complex than a mere unwillingness to work, *tuneiadstvo*. As a result, attempts were made to establish a formal poverty line, to determine how many families had incomes below that line and what the reasons why they were in poverty were. Much of this research remained unpublished at the time—and, indeed, until almost the last years of the Soviet Union—some of it was classified as secret. But the research did lead to changes in policy.

Table 7 provides estimates of the scale and composition of social expenditure in the Soviet Union between 1940 and 1985. In current prices, such expenditure triples between 1940 and 1950—but much of this increase is a consequence of inflation. It doubles in each of the following decades and much of this growth is real. Growth in social expenditure slows somewhat in the first half of the 1980s with the onset of the economic crisis that leads to the collapse of communism and the break-up of the Soviet Union. In real terms, social expenditure increases from about a fifth to a quarter of net material product over the period 1950-1985.

Table 9: The Burden of Taxation (billion rubles at current prices)

	1940	1950	1960	1970	1980	1985
Turnover Tax	10.6	23.6	31.3	49.4	94.1	97.7
Direct Taxes	0.9	3.6	5.6	12.7	24.5	30.0
on the						
Population						
State Loans	1.1	3.1	0.9	0.5	0.6	1.4
Total Budget	18.0	42.3	77.1	156.7	302.7	372.6
Revenue						
Share raised	70.0	71.6	49.0	40.0	39.4	34.6
from						
population						
(percent)						

Sources: Cols. 2-5 Narodnoe khozyaistvo SSSR (1971: 730). Col. 6 Narodnoe khozyaistvo SSSR (1987: 628). Col. 7 Narodnoe khozyaistvo SSSR (1990: 611)

In 1940 almost two thirds of such expenditure was devoted to the satisfaction of merit wants and a further 17 percent was taken up by holiday pay and student stipends. A mere 17 percent was allocated to pensions and child support. Even in 1950, these accounted for little more than a quarter of total social expenditure. By 1985, however, there had been a significant change in the structure of social expenditure. The satisfaction of merit wants accounted for a little more than two fifths of the total. Expenditure on pensions had doubled by comparison with 1950 and together with child support, was almost equal to expenditure on health, education and culture.

Table 8 gives some estimates of the scale of earnings differentiation in the USSR. The figures show three trends: until almost the end of the Soviet period, there is an increase in the relative earnings of the least well-off (least skilled). The ratio of the first decile to the median increases from 41 percent in 1956 to 66 percent in 1981. At the same time, there is no clear trend for the ninth decile to fall as a proportion of median earnings. Thus although there is some evidence of a reduction in earnings differentials, this has been achieved by a levelling up of the wages of the least skilled rather than compression at the top of the scale. Finally, there is evidence of a contraction of differentials—particularly after the wage reform of 1968:

the decile coefficient (d_9/d_1) falls from 4.3 in 1961 to 3.1 in 1970, before rising again to 3.4 in 1986.

Table 9 contains data on the burden of taxation. As pointed out above, in the 1930s, little effort was made to introduce a progressive tax system. Rather, the authorities relied upon a regressive sales tax (the turnover tax) supplemented by a range of minor levies and the forced purchase of State loans. In this way, the population was responsible for contributing some 70 percent of budget revenue. After the death of Stalin, there was a change of policy: the relative importance of the turnover tax declined (implicitly, this reflects the growing importance of subsidies on the prices of foodstuffs and other basic consumers' goods). There is an increase in the relative importance of direct taxation (and a decline in the revenue generated by the sale of State bonds—forced or voluntary!) More importantly, there is a decline in the share of budgetary revenue obtained from taxes on the population. Rather, such revenue is derived from the profits of state enterprise

5. Poverty and Poverty Reduction in the USSR

Figures for the distribution of income for the USSR are difficult to come by and are not very reliable. In Table 10, however, I report some western estimates. They are taken from the best source available on inequality and poverty in pre-transition Eastern Europe: Atkinson and Micklewright (1992). The figures in column 2 were originally derived by myself from a graph in a Soviet source and those in column 3 were derived by Ofer and Vinokur from a survey of Soviet émigrés to Israel (for more details see the references cited in Atkinson and Micklewright 1992). Those in the final two columns were derived from the Soviet family budget survey and are the most reliable.

The figures show a steady—even rapid—increase in median income after 1967. They also imply some increase in inequality during the 1980s. But, compared with what happens after the collapse of the Soviet Union, inequality is quite modest. Atkinson and Micklewright report that in 1985 the Gini coefficient for the individual distribution of household per capita income was 0.26 whereas in the United Kingdom it was 0.3 (Atkinson and Micklewright 1992: 112). Of course, the British Gini ratio had started to rise during the 1980s as a result of the Thatcher revolution but the USSR was more equal than Britain. It was, however markedly less equal than many of the smaller socialist economies of Eastern Europe.

As pointed out above, explicit statistics on the incidence of poverty in the Soviet Union were even more difficult to obtain than those on the distribution of income—until the latter 1980s at least. But some western-derived estimates are reproduced in table 11. For 1958, I inferred that Soviet analysts assumed that the poverty line was 30 rubles per month per capita. At this level, some 32 percent of the non-agricultural state employees and their families were poor. I was unable to obtain a reliable estimate of the incidence of poverty among *kolkhozniki* or state employees in agriculture—but it is plausible to assume that it was somewhat higher, perhaps substantially higher.

Table 10: Estimated Distribution of Income: USSR, 1967-1989 (Rubles per month)

	1967	1973	1980	1989 State employees	1989 All
Median	56.0	83	101	143	140
P(5)	-	51	-	-	-
P(10)	57.7	56	53	53	52
P(25)	76.6	73	73	72	72
P(75)	133.6	131	136	136	136
P(90)	176.9	178	174	181	182
P(95)	-	216	200	-	-
P(90)/P(10)	3.1	3.15	3.25	3.4	3.53
Gini	-	0.268	0.245	0.284	0.289

Note: the data for 1967 refer to the non-agricultural population; those for 1973 relate to the European urban population; the data for 1980 and 1989 come from the official family budget survey and relate to households of both state employees and *kolkhozniki*.

Source: Atkinson and Micklewright (1992; table 5.4).

For 1967, the sources are better. It is possible to assert with greater confidence that Soviet analysts operated with a poverty line (or what was referred to as a budget providing a minimum of material security, *minimum material'noi obespechenosti*) of 50 rubles per month per capita. Given this poverty line, some 34 percent of the population was in poverty. Some 25-26 percent of state employees and their families lived in households whose per-capita income fell below this level. Among *kolkhozniki*, the proportion was 61.4 percent.

Table 11: Incidence of Poverty: USSR 1958-1989

	1958	1967	1989
Assumed Poverty Line (rubles per month)	30	50	75
Proportion of the population living in households with a per capita monthly income below the assumed poverty line		34	11
<i>Of which:</i> non-agricultural state employees	32	26.1	
State farm employees		25.4	
<i>kolkhozniki</i>		61.4	

Sources: Columns 2-3: McAuley (1979: tables 4.1 and 4.2). Column 4: Atkinson and Micklewright (1992: 239-40).

By the end of the Soviet period, inflation—and rising real incomes—had resulted in a rise in the poverty line. It was now explicitly stated to be 75 rubles per month per capita. And, according to the family budget survey of that year, only 11 percent of the population lived in households whose per capita income fell below that level. As hinted at above, the sharp fall in the proportion of the population in poverty was achieved by a combination of deliberate policy and inadvertent factors. First, there was a 33 percent increase in the minimum wage in 1968. Second, over the next twenty years, wages continue to increase—and towards the end of the period, they increase at an increasing rate as the authorities begin to lose control of the wage-determination process and the economy experiences increasing inflationary pressure. But, as the figures in table 8 show, differentials do not widen too much: the unskilled saw their wages increase almost as much as the skilled. In fact, by 1989, the economic crisis that led to the collapse of the Soviet economic system had already begun to affect the availability of goods in state stores, so the 11 percent figure probably underestimates the extent of poverty in that year. Nevertheless, the Soviet authorities did achieve a substantial reduction in

poverty in the 25 years or so after 1965. But, as I point out below, this achievement was not enough to save their state socialist system.

6. Reasons for the Collapse of the Soviet Model

The Soviet economic model failed, I believe, in part because of systemic weaknesses and in part for contingent reasons. As I have argued earlier in this paper, the Soviet economic system, as it developed under Stalin and his successors, was characterized by the following three features: first, it was bureaucratic and this bureaucratic structure deprived decision-makers of essential economic information. Virtually all productive capital was “owned” by the state and enterprises were organized into product-based ministries. Within ministries, economic decision-making authority was highly centralized. Ministries frequently redistributed both orders and profits between enterprises under their control; ministries were usually responsible for decisions about the location of new plants or the adoption of new processes. Most ministries were located in Moscow and were subordinate to the All-Union authorities; republics enjoyed little economic power—or even autonomy. The system was thus centralized and bureaucratic.

The activities of ministries were co-ordinated by the economic plan—which was formulated centrally. In principle, the plan specified who produced how much of what and for whom. It thus answered the so-called economic problem. Plans were formulated in physical terms in the first instance; prices were also determined centrally; price-setters paid little attention to either marginal cost or demand. Soviet prices were thus largely arbitrary and conveyed little information about scarcity or efficiency.

Planners and ministries depended upon enterprises for information about production possibilities. The incentive structure facing enterprise managers was such as to reward concealment of reserves or misrepresentation of productive capacity. As a result, planners were ignorant about many features of the production structure. Consequently, the economy was unplanned in an essential sense; perhaps it was unplanable!

Second, there was the problem of state ownership: the fact that most enterprises were state owned meant that they could not go bankrupt. This meant that managers were under little pressure to identify and adopt least-cost methods of production; Soviet enterprises were prone to x-inefficiency. Similarly, managers were under little pressure to identify “profitable” investment projects—and to complete them quickly; innovation was often sluggish. As a result, productivity was low and productivity growth was slow.

Third, the absence of meaningful (scarcity) prices meant that managers (and planners) were unable to calculate opportunity costs. The allocation of resources was inefficient. The identification of “profitable” investment projects was often meaningless. Lack of concern for equilibrium (i.e. market-clearing prices) resulted in a so-called sellers’ market. This resulted in a relative neglect of consumers’ preferences. It was thus responsible for reductions in economic welfare. There was thus reason to believe that: socialism was characterized by substantial *systemic* inefficiency; systemic problems were getting worse over time.

Although I believe that systemic factors were primarily responsible for the collapse of the communist economy, the position in the USSR was made worse by some of the political choices made by the CPSU leadership. The CPSU was committed to a doctrine of military parity with the USA. This imposed a very heavy strain on the smaller Soviet economy; it was estimated that in the 1980s, military expenditure consumed more than a quarter of GDP—and its share was

growing. Given the nature of American military effort (the development of high-tech weapons systems) this effort absorbed a disproportionate share of high-quality inputs. Ultimately, failures in the economy meant that the USSR was not able to match American innovations: this was the nightmare threat posed by the so-called Star wars programme. In any case, obsessive and excessive secrecy meant that the civilian economy derived relatively little benefit from space/military R & D (in contrast to the USA: for example, before the collapse of the USSR there were no domestically produced Teflon coated frying pans!)

Second, the CPSU committed the country to a programme of aid to selected countries in the third world and support for socialist regimes in Eastern Europe. The aid programme to the third world was not particularly large—or effective: but it achieved political goals in the 1960s—for example the Aswan High Dam Project. However, in the 1970s and later, It failed to further the socialist cause—as witnessed by the so-called Nkomati Accords. Further, economic support for Eastern Europe involved the supply of cheap (subsidized) energy and raw materials. Given the importance of these items in Soviet trade with the west, this support had a high opportunity cost. On the other hand, it was probably not deliberate or calculated; it was more likely an unintended consequence of the refusal to make use of market prices.

Third, at some stage, the CPSU leadership decided to provide the country's various elites with a range of economic privileges—probably as a means of securing their loyalty; as the gap between west and east widened, these privileges became more extensive. Those at the top of the hierarchy received a wider range of goods and services on special terms. More and more strata received some form of privilege. As privileges became more widespread, their existence became more widely known—and resented. The availability of special goods and services encouraged those without access to seek to obtain it. This resulted in the growth of the so-called second economy (black market) and corruption. The growth of corruption contributed to the climate of moral decay that was evident in the late 1970s and the 1980s.

Thus, the CPSU leadership contributed to the collapse of the communist economic system through the political choices it made: it imposed an excessive military burden on the economy; the cost of support for eastern Europe was substantial; providing privileges for the so-called *nomenklatura* helped to create a climate of moral decay.

Bibliography

- Atkinson, A.B. and Micklewright, J. 1992. *Economic Transformation in Eastern Europe and the Distribution of Income*. Cambridge: Cambridge University Press.
- Berliner, J. S. 1957. *Factory and Manager in the USSR*. Cambridge, Mass: Harvard University Press.
- Gregory, P. R. 1981. "Economic Growth and Structural Change in Czarist Russia and the Soviet Union" in Rosefielde, S. (ed.) *Economic Welfare and the Economics of the Soviet Union*. New York: Cambridge University Press.
- Gregory, P.R. and Stuart, R. 1990. *Soviet Economic Structure and Performance*. New York: Harper Row, 4 ed.
- McAuley, A. 1979. *Economic Welfare in the Soviet Union: poverty, living standards and inequality*. Madison, Wi: University of Wisconsin Press.
- McAuley, A. 1981. *Women's Work and Wages in the Soviet Union*. London: George Allen and Unwin.
- McAuley, A. 1991. "The Welfare State in the USSR" in Wilson, T. and Wilson, D. (eds.) *The State and Social Welfare: the objectives of policy*. London: Longman. pp. 191-213.
- McAuley, A. 1996. "Russia and the Baltics: poverty and poverty research in a changing world" in Oyen, E. Miller, S. M. and Samad, S.A. (eds.) *Poverty: a global review*. Oslo: Scandinavian University Press. pp. 354-384.
- Moskoff, W. 1993. *Hard Times: impoverishment and protest in the perestroika years*. Armonk NY: M E Sharpe.
1971. *Narodnoe khozyaistvo SSSR v 1970*. Moscow: Statistika.
1987. *Narodnoe khozyaistvo SSSR za 70 let*. Moscow: Finansy i statistika.
1990. *Narodnoe khozyaistvo SSSR v 1989g*. Moscow: Finansy i Statistika.
1968. *Trud v SSSR. Tsentral'noe Statisticheskoe Upravlenie*, Moscow.
1998. *Trud v SSSR. Statisticheskii Sbornik Goskomstat SSSR*, Moscow.