Erik Hansen

LIVING CONDITIONS ON THE KOLA PENINSULA

A FAFO - SOTECO Report

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Preface

FAFO INTERNATIONAL A.S. hereby publishes the results from the Kola Peninsula Living Conditions Survey, carried out in cooperation with SOTECO, the Russian-Norwegian Social Technologies Company, Moscow, in the spring and summer of 1992.

The report is the first of its kind to provide detailed economic and social information on household level from a representative sample of the population of the Kola Peninsula, a fact which would have been unthinkable only very few years back. This in itself is evidence of the profound changes which have swept the former USSR with almost inconceivable speed over the last years. The report presents a society in transition, where the old order is rapidly vanishing, and a new order slowly emerging.

In Norway, as in most other countries in the world, the transformation of the USSR from a totalitarian to a democratic state is followed with more than keen interest. Media reports on current politics and economic policy has naturally created a demand for more detailed information on the life of the average citizen. How do people actually live, and how are they affected by the ongoing political transformations? In this report, we will attempt to provide at least some answers to these and other questions.

It is our hope that the report can contribute to the cooperative efforts recently inaugurated through the establishment of the Barents Region, comprising the northern counties of Finnland, Sweden and Norway, as well as Murmansk and Arkhangelsk counties in Russia. We wish that the information provided in this report can serve to promote cross-border contacts, and thereby contribute to a re-establishment of historical ties in the European North.

The report is aimed at a broad readership, and is intended to serve both as an introduction to the Kola Peninsula for those who are less familiar with this region, as well as give insights into the social sphere and welfare distribution in the region for those who have more specific information requirements. Hopefully, this book can act as a guide for businessmen seeking for investment opportunities, for policymakers both in Russia and in the neighbouring countries, as well as for development agencies and NGOs operating in the region. Finally, we also believe that academics and specially interested individuals will find the report worthwhile.

A number of institutions and individuals have contributed to making this report possible. First of all, we would like to thank our

financiers, The Royal Norwegian Ministry of Foreign Affairs and The Royal Norwegian Ministry of Defence, which kindly supplied the required funding. Particular thanks goes to Mr. Øyvind Nordsletten, presently Norway's Ambassador to the Ukraine, for his enthusiastic support throughout the survey period.

We would also like to express our deepest appreciation to Mr. Leonid B. Gurevich, People's Deputy from Murmansk County to the Parliament of the Russian Federation, who through his personal engagement in this project made an invaluable contribution to its realisation. We would also like to thank the administration of Murmansk County, who kindly granted us the permission to carry out the survey, in particular Mr. A.A. Malinin, who signed the survey contract on behalf of the county authorities.

A special word of thanks goes to Mr. Oleg L. Shahnazarov, General Director of SOTECO, who expertly handled local project administration and negotiations.

Also, the main author wishes to thank Mr. Rune Castberg of The Fridtjof Nansen Institute, Oslo, who has made his near-inexhaustible fund of knowledge on economic life on the Kola Peninsula available on several occasions.

This said, it remains to state that the content of the report is the responsibility of the main author, and none of the above mentioned persons should be held accountable for any factual or other errors which may occur.

Oslo 16. june 1993
Erik Hansen

Chapter 1
Introduction to the Kola Peninsula Living Conditions Survey

The present report contains an analysis of living conditions on the Kola Peninsula, based on a representative sample of the population from 1992. The data used in the analysis were collected during spring and summer 1992. The purpose of the study was to take a "snapshot" of living conditions, in order to capture variations in social and economic life. The uses of such a picture are several.

At the most general level, a better understanding of social dynamics and distribution of wealth can help bring about targeted efforts to improve living conditions for particularly vulnerable groups, as well as policies aimed at the population as a whole.

More specifically, the basic information provided by such a survey can serve as a background for policy-makers in the public as well as the private sector, within the survey region and abroad. Survey results can provide a valuable supplement to aggregated statistics for regional or national authorities, as they in a more direct way show distributions of welfare on household level. Surveys can also reveal connections between various welfare components, crucial in social planning. Further, if repeated at regular intervals, they can help monitor social development, and thereby effects of current policies.

The newly-established regional cooperation agreement in the Barents Region, comprising the northern counties of Norway, Sweden and Finland, as well as the north-western counties of Murmansk and Arkhangelsk in Russia, has further created new demands for information. Hopefully, the present report can act positively in this context, in the identification of both concrete areas, as well as in establishing priorities for regional cooperation.

As Russia at present is in the process of breaking out of previous isolation, international actors likewise require information on local conditions, in order to better formulate policies for efforts in this

region. These information requirements concern identification of target areas for possible development aid, as well as private investment. Variations in local conditions will evidently influence such policy decisions. Further, it is paramount to have information on structural conditions, which will influence long-term prospects for development.

In Norway, there is a pronounced interest for this region as a neighbouring area, and the Norwegian Government has made the region its prime target for policy initiatives with respect to the countries of the CIS.

However, there is still a profound lack of systematic and reliable information on social and economic conditions in the Murmansk region. This fact has acted as a brake on development of economic relations between Norway, particularly the northern region, and the adjacent areas on the Russian side. The present report will concentrate on policy relevant facts and conditions, with a particular view to analysis of phenomena of present-day Russia which tend to occur as strange to foreign observers.

Description of the survey

The sample

The survey was based on a two-stage probability sample of the population of 18 years or older of the cities of Murmansk and Severomorsk, and the settlement Nikel. More precisely, the population was defined as the enfranchised citizens, or those who had the right to vote in the presidential elections in the spring of 1991.

Murmansk is divided into 144 electoral districts, on average of approximately 3,200 voters each. From the list of electoral districts, every seventh district was drawn in the first stage, resulting in a total sample of 20 electoral districts. From this population, respondents were drawn using the fixed interval, random starting point method (systematic sampling). A similar procedure was used in *Severomorsk* and *Nikel.*

The selection of study area, i.e. Murmansk, Severomorsk and Nikel, was based on several considerations. Mainly due to the heterogenous structure of economic life in the region, obtaining representative data for the region as a whole is a very complicated task. Many of the towns and townships are so-called "company towns", centered around only one factory or mine, which dominates local life

more or less totally. This is sometimes even reflected in names of places, like Nikel (nickel) or Apatity (apatite). Hence, survey results from one area are not representative for other areas, as living standards and conditions may vary considerably, depending on the character and success of the local plant. Thus, a selection had to be made. It is also known that the peninsula contains still-secret towns, which do not appear on maps of the area, and where secret research projects were, and still are, carried out. Heavy military presence on the peninsula has given rise to much secrecy, and many areas are still subject to very restricted access. Access is also restricted by the very poor conditions of – or even total absence of – communication, particularly roads. On the other hand, the studied area covers roughly 50 per cent of the population of the Kola Peninsula, and it also comprises the part of the area which is of particular policy interest.

Therefore, it must be emphasised that the findings of the present survey are representative only for the studied area, constituting the north-western part of the peninsula.

Non-response and final sample

The final gross sample consisted of 2,070 respondents, with 1,484 from Murmansk city, 387 from Severomorsk, and 199 from Nikel. The net sample (those actually interviewed) consisted of 1317 respondents from Murmansk, 382 from Severomorsk and 196 from Nikel. Another 22 respondents were excluded from the analysis due to incomplete interviews, bringing the final net number of respondents to 1,863, or a net response rate of 90 per cent, which was considered very satisfactory. The patterns of non-response and deletions are described in table 1.1 and 1.2.

The reasons for non-response varied. The main group of those refusing to participate stated no reason for doing so (81 persons). According to reports from interviewers, a majority of these seemed to suspect that their personal data could be abused, and did not have confidence in the declaration of guaranteed anonymity presented to them. This should come as little surprise, in the light of the coerciveness previously characterising the relation between the Soviet state and its citizens. This legacy of coercion and suspicion, executed mainly by the notorious security organs, has not been forgotten. Others were obviously afraid of letting strangers into their apartments, probably as a consequence of the much-publicised rising crime rates. Still others

did not want to, or had no opportunity to spend one hour on the interview, which was the normally required time.

The second largest group consisted of people who were absent from their homes during the entire interview period. For many, the reason for their absence could not be established. This group also included people who were away on vacation, or were away due to the character of their profession, as fishermen and sailors.

Some respondents could not be reached, either because they had moved out of the region, due to an unregistered change of address, or because they had rented out their flat to another family.

Finally, a very small group (6 respondents) consisted of persons who were physically unfit to be interviewed, due to disease, old age, or – in two cases – even permanent intoxication. One of the drawn respondents turned out to be actually deceased.

The rate of non-response was highest in Murmansk (12 per cent), and virtually negligible in Severomorsk (5 per cent) and Nikel (3 per cent). This increased the overrepresentation of the two smaller

Table 1.1 Non-response, number of respondents

	Murmansk	Severomorsk	Nikel	**Total**
No reason stated	81	15	3	**99**
Absence	38			**38**
Vacation	23			**23**
Moved	13			**13**
Away at work	6			**6**
Unfit	6			**6**
Deleted	14	5	3	**22**
Total	**181**	**20**	**6**	**207**

Table 1.2 Non-response distribution, number of respondents

	Gross sample	Non-response	Deleted	Net sample
Murmansk	1,484	167	14	1,303
Severomorsk	387	15	5	367
Nikel	199	3	3	193
Total	**2,070**	**185**	**22**	**1,863**

settlements in the final sample. To adjust for such biases, the various regions have been unequally weighted before processing.

Transition, confusion and contradiction: An analytical perspective on the study of living conditions in a former command economy

The aim of this report is to describe living conditions on the Kola Peninsula, providing baseline information for policy planners in Russia as well as in Scandinavia. At the outset, a Western reader might agree with Winston Churchill, who once stated that "Russia is a mystery, inside an enigma, wrapped in a riddle". In the following, an attempt to unwrap at least part of this riddle will be made, through the presentation and interpretation of statistical data.

Since The October Revolution of 1917, Russia has lived under a totalitarian social order, which only very recently has been replaced by more democratic political practices. A characteristic of a totalitarian regime is the attempt to regulate all of life's aspects according to an ideological prescription. Thus, a totalitarian state goes further than its authoritarian counterpart, which only extracts acquiescence from citizens through the use of coercion. Although the USSR mostly functioned as an authoritarian dictatorship, the effect of ideologically based governmental policies were very much a fact of life for the citizens.

The broad consequences on daily life of this totalitarian period still live on. This makes a survey of living conditions in Russia different from similar undertakings in other socio-political contexts. In interpretations of findings, this has to be consistently taken into account.

The basic difference between market economies and command economies is often described with reference to the authority to make economic decisions. According to theory, a typical market economy consists of a high number of economic actors, all seeking to maximise profits or utility. The total sum of all these decisions of competing actors creates the allocative effect of the "invisible hand", and serves to establish a market equilibrium. In a command economy, the authority to allocate resources and make economic decisions rests with the state, which acts according to a predetermined plan. In practice, features of the command economies included public ownership, a system of physical and financial balances, planned allocation,

production and distribution, and non-competitive trade and industrial organisation (cf. Marer et al. 1992, p. 3).

The two basically different approaches not only create very different types of distribution patterns. This fact also necessitates a modified approach to the study of living conditions in former command economies, in particular with regard to the interpretation of presently observed patterns. The perspective chosen for the interpretations offered in this report is therefore to a large degree structurally oriented.

Such a perspective should, however, not be taken into the extreme. The USSR, including Russia, also had a functioning civil sphere, where people lived their personal lives, built their careers and families, and pursued opportunities provided by society, as in many other societies. Further, as will be seen, in spite of the basically planned nature of the economy, interpretations in market terms quite often yield striking results. Totalitarian rule rarely extended into the private sphere.

During the Cold War, Western media often perpetrated a rather crude image of Soviet society, of a people exposed to a harsh yoke of oppression and coercion, and under a permanent fear of arrest and prison for any minor deviation. People were portrayed as deprived of every joy, and sparsely supplied with consumer goods of very dubious quality. This image, is much too simple as a full description of life under Soviet rule.

The duality between the private sphere and official policies necessitates an analytical perspective supplementing and balancing the dichotomy of *structural coercion versus individual choice.*

Another important fact to keep in mind is that at present, Russian economy and society continue to be in a state of transition. In practice, this means that even if institutions, industrial structures, administrative practices, behaviour patterns, modes of thought, value systems, etc. inherited from the Soviet period still remain and continue to function, new patterns are developing in the life of many Russians. These features, a product of the political and economic reforms, are related e.g. to the slackening of totalitarian control, the introduction of political liberties, and the growth – although slow – in private enterprise. This transformation requires a sometimes painful amount of readjustment and adaption on the part of most people, and not only materially. The regulated and prescribed nature of life under Soviet rule also offered a considerable amount of security, which a typical market- economy system does not necessarily provide to the same

degree. Also, many Russians obviously find it difficult to cope with the fact that yesterday's vices have become today's virtues. E.g. whereas, private enterprise and personal enrichment through use of hired labour formerly was condemned by official ideology as morally wrong and socially unjust, this is presently portrayed as a source of national wealth, and an ideal to be pursued.

Reform efforts of later years have thus created new opportunities for the entrepreneurially-minded, gradually encroaching on former domains of state dominance. For the population at large, the gradual shift to market practices in several spheres of life has resulted in a necessity to learn new patterns of behaviour. An analytical perspective thus suggests that emphasis is put on the tension between *the old order and the new system.*

Finally, it should be borne in mind that value systems, patterns of behaviour, political practices and other aspects of daily life also have a cultural component. Russia has a strong national culture, forged through its thousand year long history, and reinforced by long periods of isolation. Though this factor should not be exaggerated, it sometimes provides a useful supplement to simple, straightforward interpretations.

A short description of the Kola Peninsula[1]

Natural geography

Located on the north-western fringe of the Eurasian continent, almost the entire territory of the Kola Peninsula, covering an area of 145,000 sq. km., is situated north of the Arctic Circle. The warming effect of the Gulfstream serves to keep the port in Murmansk ice-free throughout the Arctic winter, a fact which constitutes one of the main strategic advantages of this location. The climate in general, however, is harsh, and comparable to that of Finnmark county across the Norwegian border, with snow covering the ground for the best part of the year. Average temperatures on the northern coast, directly facing the Barents Sea, range from plus 8 degrees Centigrade in July to minus 8 in January. In the interior of the peninsula, the January average is minus 13 degrees Centigrade, the July average plus 14. In Murmansk, the midnight sun shines from the 23 of May to the 21st of July, and in

1 The first part of this chapter is largely based on information in: *Murmanskoy oblasti 50 let.* Murmanskoe Knizhnoe Izdatel'stvo, Murmansk 1988. pp. 15-40.

winter, the sun disappears completely from the 1st of december until the 13th of January.

Mainly because of the warming effect of the Gulf stream, there are no regions with permafrost on the peninsula. Most of the peninsula is taiga or forest-tundra, with the exception of a tundra zone along the northern and eastern coast. In the interior of the peninsula there are several mountainous areas, and the highest peak (Chasnachor, 1191 meters above sea level) is found in the Khibiny massive.

The peninsula is also rich in flora and fauna. Approximately 600 – 650 plant species are known, as are 3.500 species of animals, birds and fish. Due to human encroachment, pollution and overexploitation, a considerable number of plants and animals have been declared as endangered, and both forestry, fishing and hunting have been reduced during later years.

The region is also particularly well endowed with minerals. It has been said that 75 per cent of all the minerals in the periodic system are found in mineable concentrations on the peninsula. Today, minerals from the peninsula are exploited in metallurgical and chemical industries, as well as in production of construction materials. Recently, another source of mineral wealth has been discovered, in the form of oil and natural gas, under the seabed of the Barents Sea. Among them is the Shtokmanovskoye gas field, considered to be the largest offshore deposit of natural gas known in the world.

History and settlement

Archeological findings bear testimony to the presence of settlements on the Kola Peninsula as early as several thousand years ago. The indigenous peoples on the peninsula consisted mainly of the Saami, Komi and Nenets groups, related to the Saami of Norway, Sweden and Finland.

In historical time, the first Russian settlements on the Kola Penisula dates from the first half of the 15th century, when Russian farmers from Novgorod settled on the south-eastem coast. The area had then belonged to the Novgorod republic already since the 13th century.

With the collapse of the Novgorod republic in 1487, the peninsula along with the other possessions of the Novgorod princes, became part of the unified Russian state, subordinate to the czars of Moscow. Permanent settlement on the western part of the peninsula is registered from the mid-16th century, around the monastery at Pechenga, as well

as in the settlement and fortification on Kola Bay. At the same time, fishery in the region started to develop. The peninsula was known as Murman, and the inhabitants became known as "pomors", literally "people who live by the sea", their number constituting an estimated 2.000. By the 17th century, the coastal zone of the peninsula had developed a lively fishery, as well as trade with other regions and the neighbouring countries. Throughout the 18th century, the monasteries lost most of their possessions, and the region also came into its sombre role as a place of exile for prisoners. The major town in the area, also functioning as administrative centre, was Arkhangelsk. Settlement on the peninsula though, was restricted to a few villages, mainly in the Terskiy region on the southern coast. In the interior, the indigenous Saami, Komi and Nenets peoples lived as reindeer-herders.

The rich fisheries in the Barents Sea were exploited by Russians and Norwegians alike, and around the fisheries the lively "pomor trade" between Northern Norway and Northern Russia gradually grew up. In the late 19th and early 20th centuries, a large amount of the grain consumed in Northern Norway came from Russia, in return for fish. According to some sources, Norwegian fishermen delivered 530 thousand *pud* (roughly equal to 8.700 tonnes) of fish to Arkhangelsk in 1913. Russian vessels were also a familiar sight in the ports in Northern Norway.

By the end of the 19th century, population on the peninsula had reached 9.000. At the outbreak of World War I, 13.218 persons were registered as inhabitants. In many ways, requirements of the war transformed life on the peninsula. In particular, the construction of the railway from central Russia up to the Kola Bay, providing an ice-free port the whole year, tore the Kola Peninsula out of its previous isolation. The railway, and the foundation of the trade port Romanovna-Murmane, later renamed Murmansk, on the Kola Bay in 1916, turned the northern shore into a strategic key role in Russia's policy towards the Atlantic, which it has kept to this day.

With the October Revolution in 1917, the region was thrown into a two year long civil war. This ended with the final victory of the Bolshevik forces, and establishment of Soviet power in March 1920, somewhat earlier than in the rest of the country.[2] Even though the war had taken its toll among the population, in 1920, the Murman region had 19.000 inhabitants according to the All-Russian census conduct-

2 According to the new (Julian) calendar. According to the old (Gregorian) calendar, still in use at that time, the date was February 21, 1920.

ed in that year. In the first years of Soviet power, priority was given to reconstruction of the railway and the port, both of which had been badly damaged during the war. In the 1920's, the first industries to be developed were sawmills and fish processing, and during the first Five-Year Plan (1928-1932) emphasis was given to further strengthening of the fisheries. The largest fish-processing factory in the world was built on the peninsula, employing some 3.000 people. In the same period, the first discoveries of ores were made in the Khibiny mountains. Exploitation of the deposits of apatite and nepheline were started in 1929, and already three years later, the population of the mining town Khibinogorsk (later Kirovsk) had grown to 30.000. The first hydropower station was built on the Niva river in the same period. The most important part of the second Five-Year Plan (1933-37) as regards the Kola Peninsula was the construction of the copper-nickel mine and smelter "Severonikel" in Monchegorsk, and further development of the energy supply. The Kola Peninsula was established as an individual administrative unit (*oblast*) of its own in 1938, when it was separated from Leningrad county.[3]

World War II came to the peninsula in June 1941. Most of the civilian population was evacuated, and every sixth inhabitant went to the front. Undernearly constant bombardement during three and a half years, the Kola population through an almost superhuman effort not only withstood the better equipped German attackers, but were also to a large extent able to keep the factories and fishing fleet running. Through the war years, Murmansk also acquired fame as the target port for allied convoys, bringing war material under the lend-and-lease agreement. By November 1944, Soviet forces had pushed the German attackers back, and North-Western Russia as well as Northern Norway were freed.

The post-war years were characterised by very high construction activity, of both industry, infrastructure and residential areas. An iron-ore enriching plant was constructed in Olenogorsk, and an aluminium smelter in the port town of Kandalaksha. Growing industrial development also demanded more energy, and in the late fifties and early sixties, eight new hydropower plants were built on the peninsula's rivers.

However, the forced tempo of development during several decades of extensive growth started to show strains on the economy of the region. The inherent inefficiencies and rigidities of the command

3 Throughout this report, the terms "Murmansk County" and "The Kola Peninsula" are treated as synonyms.

economy were increasingly being felt. As in other regions, the command economy was fairly efficient in promoting extensive growth of the kind hitherto experienced in the region, but was not geared to the requirements for intensive growth. Thus, the industrial fabric of the region remained rather inefficient, consuming large quantities of energy and manpower, with some exceptions producing largely low-quality output, and emitting enormous amounts of polluting substances to air and water.

Today, the population of the Kola Peninsula is left to cope with the after-effects of several years of artificially high extensive growth rates, and an overgrown, inefficient, obsolete and inflexible industrial structure. Simultaneously, the same thing happens over large parts of Russia, in the midst of political and economic upheaval.

Perestroika and reform in the USSR

By the middle of the 1980's the evident weakness of the command economy, and the rising demand for political reform in the population had reached critical levels in the USSR. In 1985, newly-elected General Secretary of the CPSU, Mikhail Gorbachev, launched two hitherto unknown political concepts. As a result, most of the population of the world today knows at least two words in Russian: *perestroika* and *glasnost*.

Gorbachev's perestroika initiative, revolutionary as it was in a Soviet context, was mainly aimed at increasing the efficiency of the planned economy, and posterity has by and large come to judge these reform efforts as "too little, too late". Once set in motion, the demand for real political liberties and real political changes, including introduction of market economy, became unstoppable. In the presidential elections of 1991, Boris Yeltsin was swept to power on a programme committed to introduction of market principles in the economy, large-scale privatisation of land and means of production, as well as further democratisation of the political sphere.

Since then, the reform efforts of President Yeltsin's government have struggled to overcome the institutional rigidities of the command-economy apparatus, as well as political opposition from adherents of the old order. Yeltsin also inherited an economy in full collapse, partly due to the breakup of the USSR into independent states. Manufacturing industries suddenly found themselves cut off from raw-material or component suppliers who now were located in another state. Yeltsin and his key advisors were more or less forced by

the circumstances to act boldly, and introduced an economic policy that came to be known as "shock therapy". The aim was to increase economic efficiency by letting prices balance off supply and demand. That included immediate elimination of most subsidies and price controls, except on a limited list of key priority products, like bread, milk and some energy products. International finance institutions have for many years promoted similar policies in other contexts, sometimes to good effect, but always with high political and social costs.

The so-called "Big Bang" of economic reform was launched on January 2nd, 1992, and in the subsequent months, most prices rose by a factor of ten. It was expected that price increases would curb demand, and – in time – stimulate production of consumer goods. With just a little over one year passed since the beginning of these reform initatives, their full effect has probably not yet ben seen. The number of private sector producers is still very low, and even if consumer goods have started to reappear on the shelves, most observers agree that there is a long way to go before the framework for a functioning market economy will be in place. Also, the economic institutions and rigidly monpolistic industrial structures inherited from the USSR continue to exist. Hence, price flexibility alone seems to have been insufficient in order to induce supply in the short term in this industrial context. To some extent, this was different from the experience made in other Central Eastern European countries, having a shorter history of their planned economies. Further, the considerable political clout wielded by the captains of industry and collectivised agriculture is mainly used in opposition to quick economic reform, and have successfully defended still monopolist positions. The traditional monopolies can maximise profits by withholding commodities, even as they begin to perish and rot. In Russia's still state-owned industries, wages continue to be paid irrespective of the quantity and quality of goods produced, and irrespective of these goods can be sold or not.

The emergence of small-scale business is also hampered by the widespread fear of the pervasive mafia. Organised crime has gradually become not only a threat to life and property of citizens, but has also developed into a considerable problem for economic policies at all levels. It should be added that in Russia, the word *mafiya* is used about at least three different groups: Firstly, it refers to the organised crime gangs proper, racketeers of various shades, running operations ranging from pirate taxis outside prestigious hotels, to extortion of private businesses and street robbery, to large-scale trade in drugs,

firearms and even nuclear materials. Secondly, parts of the – now defunct – Communist Party and administrative apparatus are sometimes also referred to as *mafiya*, with reference to bureaucrats in key positions, who remain in a position to grant or refuse the official permissions required by aspiring entrepreneurs. The combined effect of the presence of these two groups is in many cases that a virtual stranglehold is maintained on those who wish to establish any kind of small business. Thirdly, as most Russians today only have experience with private economic activity from the loathed speculators, many otherwise innocent traders are sometimes also named by this term.

The popular response to continuing supply deficits and rigidities has become the emergence of inpromptu bazaars on nearly every street in Russian towns and cities. The traders, as well as their merchandise, are a mixed bag. Some traders are professionals, purchasing consumer goods abroad for resale at home. For others, petty trade in hoarded goods, or even family heirlooms, have become a way of surviving as inflation makes regular incomes dwindle. Such petty trade has become a supplement to established state and private outlets in Russian daily life.

On the whole, it is – also after the spring referendum of 1993 – still too early to judge with any degree of confidence the long-term success and welfare effects of the reform programme initatied by the Yeltsin administration. However, to say that the period of transition is likely to be rather protracted does not seem to be a rash conclusion.

Chapter 2
Population, demography and migration

Population data

Obtaining reliable population figures for the Kola Peninsula is difficult. This is caused by the strong military presence in the region, and the practices related to the registration of military personnel. In census figures, the military is sometimes included, sometimes excluded, resulting in fairly large variations in population volume and composition. The background for such a practice is not only found in the traditional secrecy surrounding the military activities in the area; it also reflects the organisational division of the military and civilian sectors. By and large, the USSR military apparatus was organised almost entirely as a separate body, with limited interaction with civilian society, and thus rarely appearing in civilian records. However, with the end of the Cold War and the following reorganisation of Russian society, some of the secrecy is now gradually being lifted, and the organisational status of the military sector is changing.

Through comparison of different sources and population statistics the entire population of the Kola Peninsula, including permanently resident military officers, but excluding the temporarily resident rank-and-file conscripts, numbered approximately 1,160,000, as of 1991.

Interestingly enough, the Kola Peninsula is one of the most highly urbanised regions of the former USSR. Approximately 80 per cent of the population is reported to live in urban settlements (SCB 1992, p. 11). In the USSR as a whole, the urban population accounted for 66 per cent of the population in 1990, though with a rising tendency. (Goskomstat 1991, p. 64).

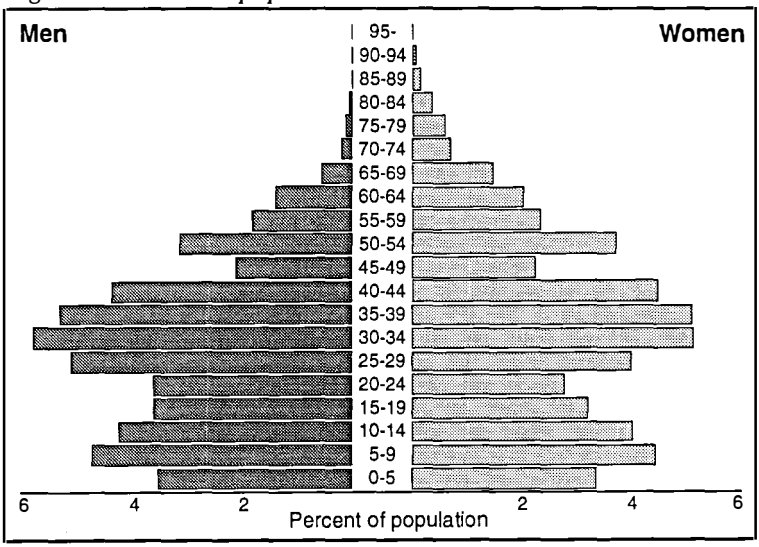
Age profile

On the whole, the population on the Kola Peninsula is relatively young. Consequently, a high share of the population is in working age (from 16 years to 54 years for women and 59 years for men). This age

group constituted 64 per cent in 1991, as against a national average of 57 per cent for Russia as a whole. The share of persons over normal retirement age constituted 9 per cent. However, due to the lower retirement age in the northern areas and the armed forces, the share of actual pensioners is somewhat higher; approximately 14 per cent. This is still lower than the national average for Russia, which is close to 20 per cent. Children under 16 years constitute 27 per cent of the population (Muroblstat 1992).

In the youngest age group, boys slightly outnumber girls, with 51 per cent of the total. In the adult population below retirement age, men are also in the majority, with 53 per cent. It should be recalled that retirement age is five years higher for men, accounting for this difference. Finally, in the age group having reached retirement age, women are in a solid majority, constituting 80 per cent of the group. This is for a large part caused by the considerably lower life expectancy for men, which among the urban population in Russia is 64.8 years, as opposed to 74.5 years for women (Goskomstat 1991, p. 61). This yields an overall gender balance of 49.5 per cent men, and 50.5 per cent women in the population as a whole. This is a more even balance than in the country as a whole, where women accounted for 53.3 per cent of the population in 1989 (ibid., p. 79).

Figure 2.1 The Kola population 1991.



Source: SCB 1992, p. 11.

Fertility and mortality

The low average age profile will tend to account for a number of related demographic features among the population. With lower average age, we would expect to find higher birth rates, lower mortality, and less diseases.

Official figures suggest, however, that fertility figures for the region have decreased faster than national averages. In 1980, the birth rate, i.e. the annual number of births per 1,000 inhabitants, on the peninsula was 16.1 (national average: 15.9), but in 1990, it had dropped to 11.5, as opposed to 13.5 for Russia as a whole, and appear to have a further decreasing tendency. Birth rates show little variation over the peninsula; from the lowest in Murmansk (10.5) to the highest in the sparsely populated Lovozero region in the central and eastern part (14.8) (all figures for 1990; Source: Muroblstat 1992).

As for mortality, the relatively low average age on the peninsula as expected account for correspondingly low mortality figures. Overall mortality was 6.0 per 1,000 in 1990, which is a slight increase from the previous year. This is considerably lower than the national average, which was 10.7 in 1989.

Natural population growth (i.e. the number of live births, minus the number of deaths) has fallen rapidly over the last five years. In 1987, natural population growth was 10.1 per 1,000, but had fallen to 5.5 in 1990. This is still higher than the national average, which was 3.9 in 1989. However, due to varying mortality, annual natural population growth vary considerably across the peninsula, from less than 1 to over 9 per 1,000. (Muroblstat 1992). This points to a somewhat uneven composition of the population, particularly with regard to the share of the population in older age groups.

Infant mortality rates on the Kola Peninsula, defined as infants dying within one year after birth, was 16.1 per 1,000 live births in 1990 (Castberg 1992, p. 11). This is approximately equal to infant mortality rates which prevailed in Norway in the early 1960's. In Russia as a whole, corresponding figures were 17.8 per 1,000 live births in 1989. (Goskomstat 1991, p. 53).

In addition to natural population growth, the demographic composition of the Kola Peninsula is influenced by migration, which is treated separately below.

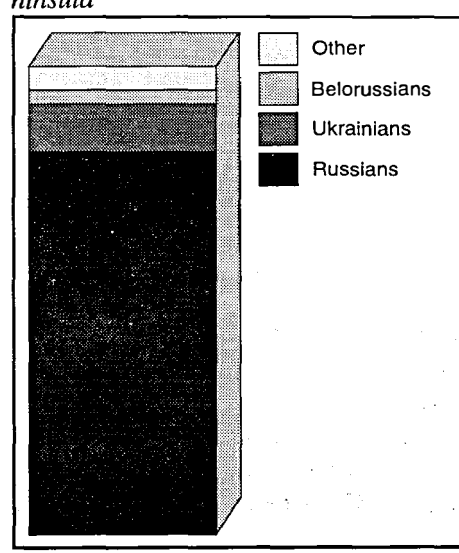
National composition

The Kola Peninsula has received migrants from many parts of the multi-ethnic USSR, and this has left a mark on the national composition of the region. According to the 1979 census, approximately 70 nationalities were represented in the population. In the sample, respondents were distributed among nationalities as shown in figure 2.2. Not unexpectedly, Russians constitute a clear majority, with 82 per cent of all respondents, which is approximately equal to the share of Russians in the country as a whole. The second largest group is constituted by Ukrainians, making up close to 10 per cent of the total. This national group is strongly represented in the mining industry all over the former USSR. Belarussians account for the third largest group, of approximately 3 per cent. Thus, the three main Slavic-speaking nationalities from the European part of the former USSR account for approximately 95 per cent of the total population. Other, minor nationalities are Tatars, with approximately 1 per cent, Jews with 0.5 per cent and the indigenous Saami, Komi and Nenets with less than 0.2 per cent combined. The indigenous population is mainly represented in the central and eastern parts of the peninsula, chiefly in the Lovozero region, outside the area covered by this survey. The indigenous Saami population has been very small throughout this century. In the census of 1937, a total of 1,828 individuals of this nationality were counted in Russia, and in the census of 1979, the total number of individuals of Saami nationality was reduced to 1,565 (Goskomstat 1991, p. 20; Murmanskoy oblasti 50 let, p. 44).

The potential for nationality-based conflicts in the area seems small, as no ethnic group apart from the Saami have any territorial base. Such conflicts, if they occur, are most likely to be related to ownership of, access to, and rights to exploitation of natural resources, or to environmental issues.

On the other hand, the future position of the considerable groups of Ukrainians and Belarussians remains unclear, as these will have to choose which citizenship they

Figure 2.2 Nationalities on the Kola Peninsula



Source: The Kola Peninsula Living Conditions Survey 1992

want to hold. Many of these have lived for up to 20 years in the region, and if these suddenly are to be counted as "foreigners" a new administrative situation will obviously emerge.

Migration

Mainly due to lack of adequate housing, labour mobility in the USSR was on the whole rather low. The northern regions were in fact the exception to this rule. The dominating pattern of labour migration was that people would go to the northern parts of European Russia or to Siberia, work there for a certain amount of time, and then return to the central or southern parts of the country. The permanent scarcity of labour in these regions, as well as the unfavourable climate, necessitated the use of special incentives in order to attract migrants. These incentives could include higher wages. The so-called "Arctic coefficient" made wages from 40 to 80 per cent higher than in the central parts of the USSR. Other benefits could e.g. include paid vacations in the South, longer holidays, and lower retirement age. Such incentives made the northern regions a favoured place to stay for some years, for those who wanted to make money to take home for purposes of investment in housing, etc. However, many migrants decided to stay also for longer periods, or even settle there for good.

The most characteristic feature of migration patterns on the Peninsula in the latest 3–5 years is a slowly increasing rate of out-migration, and decreasing numbers of in-migrants. Combined with sinking birth rates, this gave the Peninsula net negative population growth in 1991, for the first time since World War II. Official sources state that whereas in 1987, in-migration exceeded out-migration by 6,400, by 1991, the relationship had been reversed to a net out-migration surplus of 16,200 (SCB 1992, p. 11).

The pattern of the population of the Kola Peninsula with respect to their time of residence partly reflects this position of the region as a target for internal migration. In the survey, respondents were asked how long they had lived in the area. Answers were distributed as shown in figure 2.3.

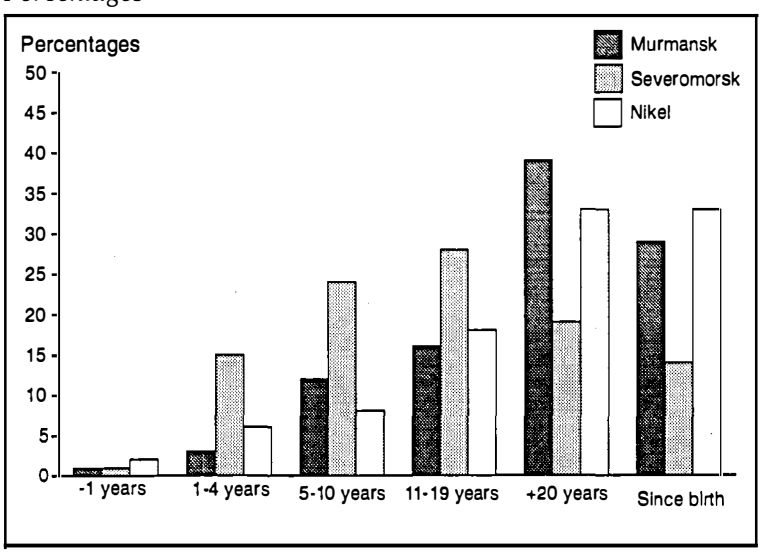
As shown by the figure, only every fourth inhabitant is actually born in the region. Migration to this region was related to the development of the locally predominant industry. In addition, the military presence was also determined by the position of the Northern Fleet as an instrument of deterrence in superpower politics. These two

migration determinants create two separate patterns of migration; one "industrial" and one "military".

According to official sources, approximately 5 per cent of the population are renewed due to migration annually (Castberg 1992, p. 10; SCB 1992, p. 11). The survey figures suggest a somewhat lower annual turnover within the studied region, though this is possibly explained by the fact that migrants are likely to be unevenly distributed over the whole peninsula. In addition, varying definitions of whom is to be counted as "real" migrants might have been used. The lower figures are also further indication of the lower rates of in-migration to the peninsula over the last years.

As for "military" migration, this seems to have remained high until 1991. It should be borne in mind that the USSR was formally disbanded in this year, with obvious effects for the USSR military apparatus. Also, many of those who arrived during the preceding five-year period are likely to be troops withdrawn from the former states of the Warzaw Pact. As the relocation of Soviet troops from the Baltic states and the other republics of the CIS continues, this is likely to have an effect on the military presence on the peninsula. In addition, being subject to a general command system, military personnel is on the whole more mobile than the industrial workforce in most societies.

Figure 2.3 Length of time of residence on the Kola Peninsula. Percentages



Source: The Kola Peninsula Living Conditions Survey 1992

Out-migration

In the survey, attempts were also made to identify further migration plans among the population. In particular, it would be interesting to see to what extent the population regards emigration to another country as an option, given the difficult position very many families in the region are in.

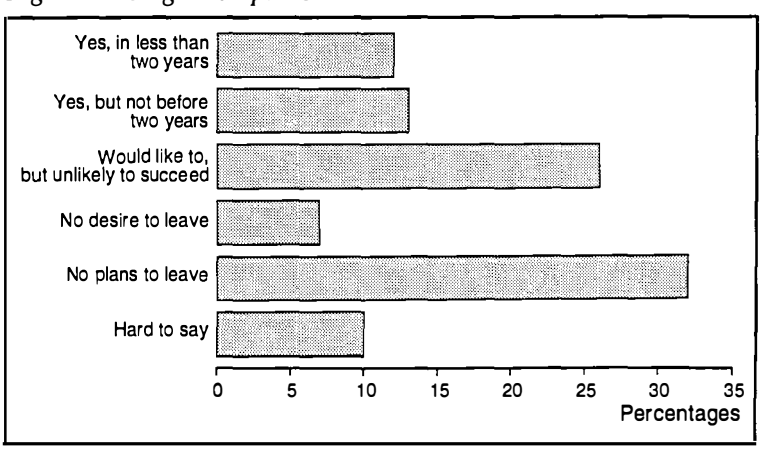
Firstly, it was important to establish the presence of migration plans among the respondents, and the planning horizon for any migration decisions. The following question was asked:

> "Are you planning to leave Murmansk (Severomorsk, Nikel) for another place of residence?"

Reported migration plans were distributed as shown in figure 2.4. It should be borne in mind that migration is driven both by "push"-factors in the current region of residence, as well as "pull"-factors from other regions offering better perspectives. Among the military, on the other hand, decisions to move to another region is only partially made by the individual. Other reasons to move to another area can be very varied. In the survey, an attempt to identify some reasons for moving was made. The distribution of reasons is illustrated in figure 2.5.

Some of these categories are overlapping, and the list is not in any way exhaustive. However, the distribution shows some interesting tendencies in the relative distribution of both "push"- and "pull"-factors. The number one reason for desire to migrate which was reported was the state of the environment on the peninsula. In several

Figure 2.4 Migration plans

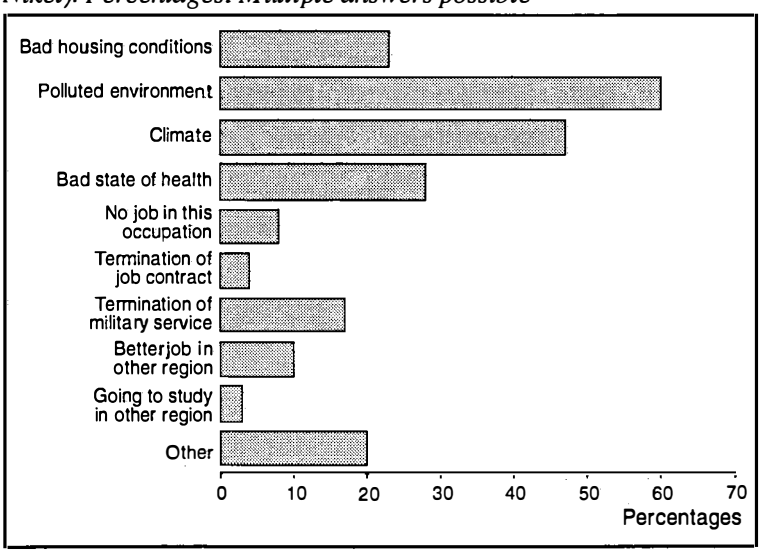


Source: The Kola Peninsula Living Conditions Survey 1992

parts of the region, pollution has reached levels obviously causing considerable discomfort, to an extent where people have started to worry about effects on their health, and particularly for the health of their children. Close to half also states the climate to be a significant "push"-factor. The influence of "pull"-factors seems to be relatively insignificant, as quite few reports to see any better job prospects in other regions, or conversely, suffer from lack of an appropriate job inside the region. The main reasons reported for desire to migrate are all non-economical, meaning that roughly speaking, people would think of leaving the area mainly as an escape from the dirt and the cold. This is likely to have an effect on long-term development prospects for the region, unless a major effort to improve air and water quality is undertaken.

As for emissions, very considerable amounts of pollutants are poured into the atmosphere on the peninsula every year. Of these emissions, a significant amount originates in the Pechenga region, in particular from the nickel-enriching plant in Nikel. This plant alone seems to account for more than one third of all emissions on the peninsula. Out of total emissions of 784.000 tonnes, of which close to 80 per cent consists of sulphur, 302.000 tonnes came from the smokestacks at the Pechenganikel plant (Castberg & Stokke 1992, p. 13 ff.). In the first half of 1991, average concentrations of sulphur

Figure 2.5 Reasons for desire to move from Murmansk (Severomorsk, Nikel). Percentages. Multiple answers possible



Source: The Kola Peninsula Living Conditions Survey 1992

dioxide in the air in the Pechenga region exceeded active norms by a factor of 1.7 (ibid., p. 26). The actual health risk posed by these emissions is a debated affair, but there can be no doubt that these emissions are strongly unpleasant to live with.

It can be seen from the figure that for the whole area, approximately 11 per cent plan to move from the peninsula within the next two years. Although all of these respondents are unlikely to go through with their plans, it could be seen as an indication that the pressure towards out-migration from the region is fairly constant. It will be recalled that normal migration movements comprise approximately 5 per cent of the population per year. Thus, in order to maintain the present population patterns, in-migration to the peninsula will have to be kept at present levels. As described in the introduction, the whole peninsula had a net out-migration surplus in 1991, for the first time since World War II. If this trend towards decreasing in-migration, combined with low birth rates, continues, the population of the peninsula is likely to gradually decrease.

The highest propensity to migrate is found in Severomorsk. Many of these respondents are military servicemen assigned for a specific period to the local forces, or approaching retirement (retirement age in the Soviet Army could be as low as 45 years), thus leaving the region for natural reasons. In Nikel, close to every sixth respondent answers that he or she holds plans to leave within the next year, and every third states to have definite plans to move out of the region within the foreseeable future. Migration propensity is lowest in Murmansk, providing as it does a wider selection of occupations, and the amenities of the bigger city. A high proportion of respondents states to have a desire to move out of the region, but that this is unlikely to succeed. One in four respondents gives this answer. This may have two different types of explanations: Firstly, for several generations, the working population of Russia has been subject to a considerable amount of coercion in the labour sphere, and freedom of choice of occupation and place of residence has been somewhat limited. This "defaitist" attitude can therefore be interpreted as a general lack of conviction in the abilities of the individual to improve his or her lot on an individual basis. It has been argued that the patrimonialism exerted by the Soviet state has created a kind of "learned helplessness" in its citizens, and lack of a self-help culture which is required when everybody is left to fend for him- or herself in a market economy. Secondly, the desire to migrate might be connected to the perceived access to a preferred migration target region. On this background,

respondents were also asked about preferred migration targets. The question was:

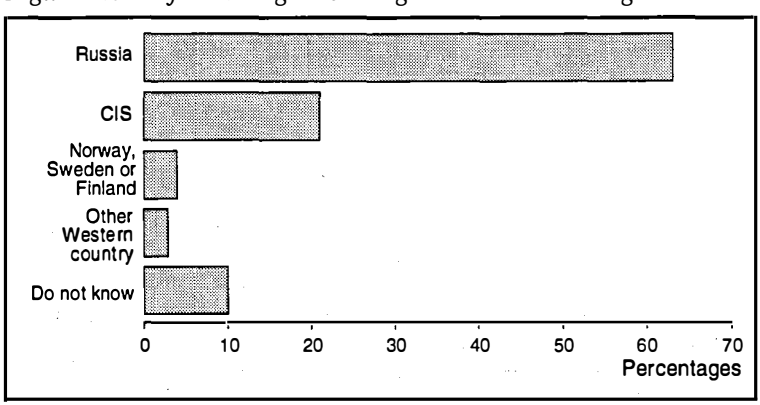
"If you plan to leave Murmansk (Severomorsk, Nikel), then to where?"

Russia dominate clearly as the preferred target area, followed by the other CIS countries. As described in the chapter on population, a considerable number of inhabitants are either Ukranians or Belarussians, for whom these countries are natural targets. Only a very limited number of respondents seem to view emigration to one of the neighbouring countries, or another Western country, as an option.

Further, a closer analysis of the connection between the desire to migrate and the choice of desired target area reveals another clear tendency. A majority of those who report to desire to emigrate to the neighbouring countries, or another Western country, also reports to see little prospects for success. Thus, this perception factor dampens the already very limited emigration "pull".

However, this seemingly constant pattern of migration-proneness should be viewed in conjunction with the general state of social and economic life on the peninsula and in Russia as a whole. It is not surprising to find a low rate of labour migration in an area with practically no registered unemployment and relatively favourable income structures. In the area as a whole, we find a high rate of employment, a relatively high rate of job and housing satisfaction, and an averagely high wage level. All these factors combined account for

Figure 2.6 Preferred migration target areas.[1] Percentages.



Source: The Kola Peninsula Living Conditons Survey 1992

1 Comprising only those who express plans/desire to move. N=937.

a relatively limited labour migration "push". Increasing unemployment, caused by industrial restructuring in the form of plant closures or larger-scale layoffs could possibly alter the mixture of "push"-factors to a very considerable extent.

A prediction of the direction of future migratory movements will depend on the type of economic scenario foreseen. It is unlikely that the reform goals pursued by the present Russian administration can be achieved without a period characterised by considerable unemployment. The timing hinges on political decisions, and is hence a somewhat unpredictable factor. Further, crucial factors are connected to the distribution of reform effects across industries and regions, possibly resulting in regionally differential rates of unemployment. Also, certain industries may still remain protected, whereas others could increasingly be exposed to both domestic and foreign competition. Perspectives for growth of employment in the private sector are also far from certain, even after the spring of 1993. However, it should be added that the invariably positive correlation found between rates of unemployment and rates of net out-migration is rarely due to high mobility on the part of the unemployed themselves; these are on the whole relatively immobile. Rather, it is a consequence of reduced employment prospects discouraging in-migration end encouraging the younger and better educated workforce to leave (cf. Jones 1990, p. 198).

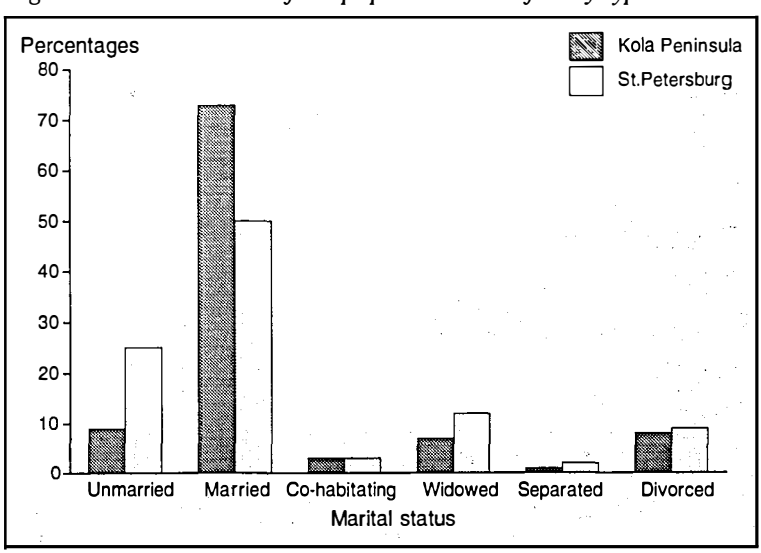
The combination of these factors may thus influence perceptions of available opportunities, and hence the propensity to regard migration or even emigration as real options. By way of conclusion, it is no foolhardy prediction to assert that for as long as present industrial and labour market policies prevail, migration pressure on the peninsula will remain low. However, introduction of more radical restructuring policies, including market-oriented, hard-budget constraints on state enterprises, or their outright privatisation, is liable to create a response in the labour market, in the form of rising unemployment. This could be expected to introduce an economic migration "push" in the region. However, migration is only one among several possible responses to unemployment. Also, the data indicate that the threshold to emigration is relatively high, and is likely to remain so, unless the situation becomes very desperate. Thus, emigration pressures on the borders of Scandinavia and Finland are likely to remain moderate, as long as unemployment remains low or moderate. Though, if the situation in the region deteriorates very rapidly, following changes may be sudden and unpredictable. It should be added that neither the authorities, nor

the population have any experience in handling unemployment, and thresholds to levels deemed as critical may be different from those which have become commonplace in Western countries. As a result, developments in the area should be monitored carefully, particularly with regard to official and popular responses to prevailing rates of unemployment.

Family and household composition

On the Kola Peninsula, as in Russia as a whole, families tend to be small. In the USSR, family policy encouraged couples to have many children. In comparison to Western countries, family allowances and maternity leave benefits were very generous. Still, due to cramped housing conditions and a general lack of facilities like day-care institutions, etc., birth rates in the European part of the USSR remained low. The obligatory nature of female labour participation also pushed down the propensity to have more than one child. Studies indicate that Russian women shoulder the main burden of household chores and care of children. Today, with general economic upheaval and with the future becoming increasingly unpredictable, it seems as if many couples choose to postpone parenthood even further.

Figure 2.7 Distribution of the population over family types



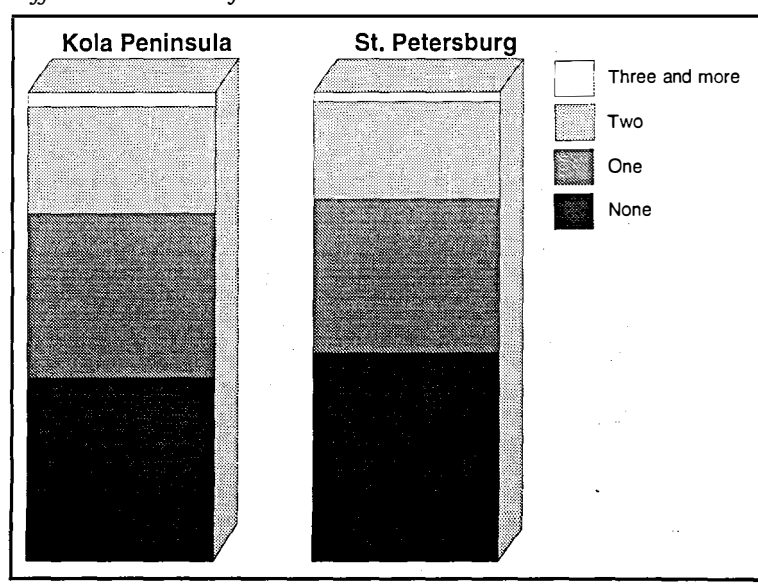
Source: Kola Peninsula Living Conditions Study 1992; St. Petersburg Living Conditions Study 1991

The distribution of the population over family types on the Kola Peninsula is somewhat different from other urban parts of Russia. The slightly lower average age of Kola inhabitants than the national average means that we find a higher share of the population in marriageable age, and hence a higher proportion in the group consisting of married couples. The result is a relatively low proportion of singles, of which there are considerably less than in the bigger city. Other groups are more or less equally distributed. However, the general tendency in Russia is to marry at a relatively young age, as this was earlier the only way of being put on the waiting list for a governmental flat. This fact, though combined with tradition, also explains the low number of co-habiting couples in both regions.

By and large, the Kola Peninsula conforms to the same patterns of family size as the rest of Russia, here exemplified by St. Petersburg. The one-child family is the dominant type, and families with three children and more are extremely rare.

Simultaneously, 14 per cent of the respondents report that the household comprises elderly family members. Also, as many as 27 per cent report that adult children (18 years and older) still live in the

Figure 2.8 Number of children (17 years or younger) per family, The Kola Peninsula and St Petersburg. Percentage of households having different numbers of children



Source: The Kola Peninsula Living Conditions Survey 1992; St. Petersburg Living Conditions Survey 1991

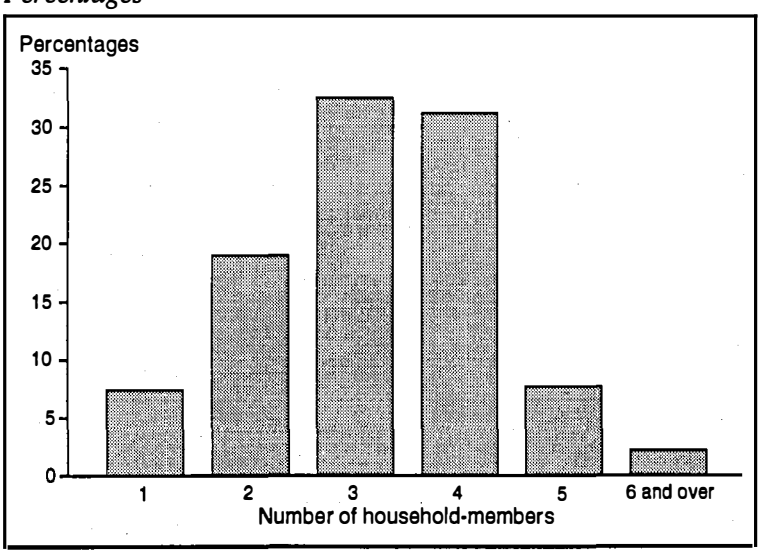
household. This is due to the regulated nature of distribution of (very scarce) housing space, forcing most adolescents to live at home with their parents until marriage, or even later. The general picture regarding household composition may therefore be somewhat different from the average in most Western countries. It would be expected to find fewer small children, more older children, as well as more elderly relatives in the houshold.

In figure 2.9, the distribution of family sizes on the Kola Peninsula is summarized.

Less than ten per cent of the population lives alone. As described above, the family structure on the Kola Peninsula is dominated by married couples, though having few children. The vast majority of the population live in small household units, with 90 per cent consisting of four people or less. This not surprising, given the small average size of housing units in the survey region (cf. chapter on housing).

It should be added that family and household are two different concepts. In principle, a household may consist of several families, or include persons unrelated to the others. Though, the small average size of housing units, and the small average houshold unit size gives ground to the conclusion that the Kola Peninsula is a region characterised by a pattern of small nuclear families.

Figure 2.9 Relative distribution of respondents by size of household. Percentages



Source: The Kola Peninsula Living Conditions Survey 1992

Chapter 3
Health

Good physical health constitute a key aspect of living conditions, and is considered a central level of living component. Simultaneously, it is not immediately as easy to define clearly what good health actually is. Definitions of health can vary, differing in the scope of factors included in the concept. An example of a broad approach is the definition used by the World Health Organisation (WHO), specifying that: "Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity". This definition entails a wide view of health, and includes a number of other aspects of a person's welfare. However, the less specific a definition is, the more difficult it is to measure the phenomenon with any degree of precision. A narrower definition may allow for a sharper focus.

For the purposes of a social measurement survey of this kind, a somewhat narrower definition of health has been chosen. Focus will be put on the *actual occurence of diseases and infirmities* among the Kola population. The background for this choice is that the general state of health, operationalised as the rate of occurence of disease in a population, can be regarded as a basic indicator of the level of development in that society. Changes in this indicator over time points to the direction in which general levels of welfare develop in the society in question.

Still, health is a complex phenomenon, which is amenable to study from several angles. In the given context, the type of data which can be obtained using the survey method of data collection is better suited to capture the prevalence of illnesses and afflictions, than to describe health or physical fitness of the population in a broader sense. However, this method also has its drawbacks. Some illnesses may be forgotten, particularly if they are less visible, less worrisome or occur only periodically to the respondent. Information on other diseases might be underreported, because people find it difficult to talk about them, especially to a stranger, as an interviewer in most cases will be. And, a familiar fact, some diseases may be imagined. Finally, and

possibly most importantly, it should be borne in mind that the *experience* of disease may be totally different from disease as this is diagnosed in any "objective", medically professional manner.

Despite these and similar shortcomings, however, surveys still are considered to be able to reveal relevant empirical evidence concerning the state of health in the population.

Analyses of this kind normally normally focus on diseases and afflictions of some duration. The underlying assumption is that these afflictions have a more profound impact on the welfare of the individual than other diseases of only short duration. In addition, this chapter also shortly reviews the consequences of such illness as exists, with respect to impairment of the ability of the individual to perform daily tasks at work and in the home.

Causes of death

However, before going into reported occurrence of diseases, it is revealing to make a short review of causes of death, as this gives valuable background information on the state of public health.

Overall mortality on the peninsula is low: only 6 per 1,000 inhabitants per year, compared to a national average for both Russia and Norway of approximately 11 per 1,000. The age structure of the Kola population obviously influences mortality patterns, as causes of death are strongly age-specific.

Table 3.1 Causes of death, the Kola Peninsula, 1990[1]

	Frequencies	Per 1,000 inhabitants
Total deaths	6900	6.0
Whereof		
Cardiovascular diseases	3606	3.11
Malignant neoplasms	1322	1.14
Accidents	1010	0.87
Whereof		
Road traffic	152	0.13
Suicides	235	0.20
Murders	83	0.07

Source: Official statistics (Muroblstat 1992)

1 Age and gender breakdown unavailable.

Due to the lack of detailed and reliable population data, as well as the use of other practices for grouping of diseases, referred to above, direct comparisons with other countries are difficult. The figures quoted above should therefore be treated with some caution.

According to table 3.1, 86 per cent of all deaths on the Kola Peninsula are accounted for by three causes: cardiovascular diseases, malignant neoplasms and accidents. Slightly more than half of all deaths are caused by various cardiovascular diseases; myocardite, cardiosclerosis/ arteriosclerosis or cerebrovascular disorders (Muroblstat 1992). For comparison, this is only slightly higher than in Norway, where such causes account for somewhat less than half of all deaths (CBS 1989, p. 53).

Corresponding similarities are found in death rates caused by malignant neoplasms, which account for approximately 20 per cent of all deaths in both Norway and on the Kola Peninsula (Muroblstat 1992; CBS 1989, p. 55).

However, with respect to violent deaths, there are clear dissimilarities. On the Kola Peninsula, violent causes account for 15 per cent of all deaths. Somewhat less than half of these fall into the three categories road accidents (15 per cent of all violent deaths), suicides and murders. In Norway, in comparison, only 5 per cent of all deaths are violent, of which accidents in the home account for roughly 50 per cent, road accidents 20 per cent, and workplace accidents 7 per cent (CBS 1989, pp. 56-57).

Thus, the age structure on the Peninsula influence mortality patterns to a significant extent, and sets it apart from what is found e.g. in Norway in several respects. Firstly, overall mortality with respect to e.g. cardiovascular diseases and malignant neoplasms is fairly similar to Norway. In Norway, however, these causes of death are first and foremost connected to higher age groups. The data thereby suggests that these causes of death are more prevalent in younger age groups on the Kola Peninsula, contrary to what would be expected. Secondly, deaths from violent causes are to a higher extent associated with younger age groups. The lower average age thus accounts for at least part of this difference.

Prevalence of prolonged illness

The following question was asked:

> "Do you have any chronical diseases (lasting current diseases, or diseases which recur periodically, even if these recurrences are very rare)?

Of all respondents, a total of 46 per cent answered in the affirmative. Here, it is not immediately evident what a natural yardstick should be. The figure is very similar to corresponding figures for Norway, where around 51 per cent reported lasting illness, though with a slightly wider definition. (CBS 1992, pp. 118-119). Taking into account that the rate of chronical afflictions naturally rise with increasing age, and that the average age level on the peninsula is relatively low, the age-adjusted actual rate of affliction would be somewhat higher than in Norway. Official statistics on health seems to confirm that for most disease types (including acute states), there was no higher occurrence in the adult population of the most common disease types on the Kola Peninsula than in the rest of the USSR in 1988. (Goskomstat 1989, p. 38, p.48; Castberg & Stokke 1992 p. 29). However, health statistics from the USSR were known to be characterised by large error margins. On the one hand, this is due to varying methods for categorisation of diseases, for data collection and processing, etc., as referred to above. This makes the data incomparable and hard to relate to for foreign readers. On the other hand, there is a widespread suspicion both in Russia and abroad that USSR health statistics were manipulated in order to conceal embarrassing facts and to convey a more positive picture.

However, in the survey data, there are significant gender differences in the response pattern. Among males, an average of 35 per cent stated to have a chronical disease or affliction, whereas the rate among females was 55 per cent. For comparison, in Norway, the gender difference was a mere 7 per cent in 1991 (48 and 55 per cent for males and females respectively). The large gender difference in the Kola material may have different explanations. One is underreporting on the part of the male population, as some diseases may be embarrasing to talk about to a stranger, as noted in the introduction to this chapter. Another may be that an illness or infirmity may be considered unmanly or effeminate, and in conflict with traditional sex-role patterns prevailing in Russia. A third factor may be that an illness or infirmity is considered a private matter, and consequently nobody

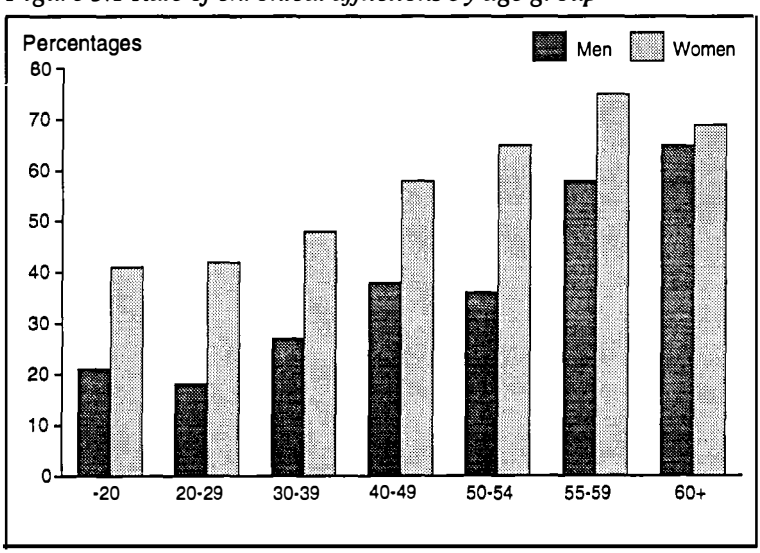
else's business. There is less reason to suspect underreporting on the side of the female population. One could even suspect the presence of some overreporting, the reasons for which will be described below.[2]

Further, there are very few men in the older age groups on the peninsula, due to their consistently higher mortality and lower life expectancy. A possible hypothesis is that as the rate of chronical affliction naturally rise with increasing age, the lower reported rate of illness among males possibly could be ascribed to this factor. However, as can be seen from figure 3.1. below, the reported rate of affliction is consistently higher among women in all age groups. Typically, the reported rate of such afflictions is from from 15 to 20 per cent higher for women in each age group.

In a survey carried out by FAFO in Lithuania in 1990, the rate of affirmative answers to a similar question about chronical diseases was around 30 per cent (Hernes & Knudsen 1991, p. 46)[3].

Even if we take the sources of error inherent in self-reporting, described above, into account, the figures seem to indicate that in

Figure 3.1 Rate of chronical afflictions by age group



Source: The Kola Peninsula Living Conditions Study 1992

2 Direct comparisons of survey data from Moscow and St. Petersburg are difficult, due to the use of another wording of the question in the questionnaire.

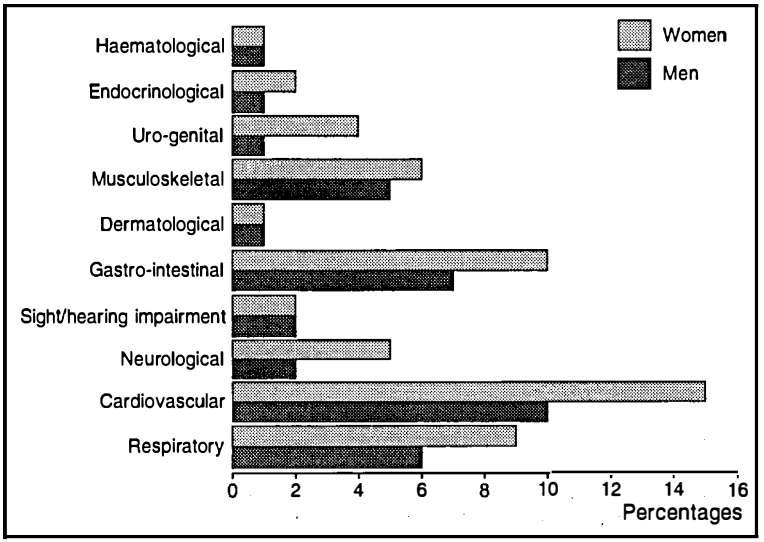
3 In the Lithuanian survey, the question had the following wording: "Are you chronically ill; do you suffer from a lasting disease, after-effects from accidents, or are you physically handicapped for any other reason? Please also include cases which occur only of minor importance to you".

general, it is reasonable to assume that the population on the Kola Peninsula is exposed to a heavier strain on their health than both the Lithuanians and the Norwegians. The difference to the Baltic state is further strenghtened when the lower average age of the Kola population is taken into account.

Another aspect is whether the timing of the different surveys has had an influence. The Lithuanian data were collected at a time characterised by near-normality, before the major transformations of Soviet society had gathered much speed. The Kola Peninsula data were collected in a period of transition and insecurity, high inflation and political turmoil. This could have influenced the data profile in two ways: Firstly, the psychological strains to which the population is exposed may have influenced response patterns related to physical health. In other words, some of the perception of stress is by respondents translated into a physical ailment. In general, though, stress produces actual illness only when several other factors are present. Still, this perception factor may have been the cause of some overreporting. Secondly, the adjustment process, forcing people to change behaviour, e.g. in restructuring their diet, often towards less nutritious food, may actually have caused the rate of afflictions to rise.

In figure 3.2 the rates of different types of diseases are depicted. As can be seen, four main disease types stand out as particularly

Figure 3.2 Chronical afflictions



Source: The Kola Peninsula Living Conditions Survey 1992

prevalent. There are different plausible interpretations of the pattem observed. However, some hypotheses may be suggested.

The most frequently reported type of permanent/lasting affliction is cardiovascular diseases. This is not surprising, as diseases of this type is an important cause of death in Russia as well as in most other countries. For all respondents, the reported rate of cardiovascular diseases was approximately 13 per cent, distributed with 10 per cent among men, and 15 per cent among women. These figures are almost identical with figures for Norway, where survey figures indicate a reported rate of such diseases of 12 per cent among the population of 16 years and older (CBS 1991, p. 117). However, it should be bome in mind that cardiovascular diseases are strongly age-related in Norway, and occur mainly in higher age groups. On the Kola Peninsula, with its lower average age profile, such diseases hence occur more frequently in lower age groups.

Moreover, the gender pattem of the Kola data are approximately equal to that of e.g. Norway, where reported rates of arteriosclerosis, hypertension, etc. is somewhat higher for women than for men, even if the actual death rates from these diseases are higher for men.

The second largest group of reported afflictions consists of diseases of the respiratory tract. A straightforward interpretation of this finding is not simple. Often, the high emissions of pollutants into the atmosphere from local industries are stated as a possible cause. However, the reported rate of such afflictions among the adult population is not significantly higher than in other parts of Russia. This is partly supported by official medical statistics (cf. Castberg & Stokke 1992, p. 26 ff.). However, among children, there seems to be a clearer pattern of environmentally-related afflictions, among them bronchial and pulmonary diseases (ibid.).

On the whole, the connection between environmental degradation and public health is by no means a simple one. Measurement of pollutants in air and water is a relatively simple task, but from this to establish a causal link to the health of the population at large is less straightforward. Moreover, disease is generally caused by a set of multiple factors, and to single out and identify the effect of a single factor or sub-set is extremely difficult.

Among the adult population, the pattem is sometimes ascribed to local smoking habits, as the former USSR was on second place in the world with respect to per capita consumption of tobacco (after the People's Republic of China).

In the CIS countries, diseases like tuberculosis, virtually extinct in most Western countries, still occur. According to official statistics, in the USSR as a whole, there were 114,500 new cases of tuberculosis discovered in 1989 (40 per 100,000), down from 133,100 (50 per 100,000) in 1980 (Goskomstat 1991, p. 108). Mortality from tuberculosis is stated to be 7.6 deaths per 100,000 inhabitants in the whole of the USSR in 1988 (ibid. p. 114). Assuming that the Kola Peninsula conforms to these national averages, the expected number of cases of tuberculosis on the peninsula would be around 400 per year, and approximately 8 deaths from this cause.

The third largest group of complaints reported was gastro-intestinal disorders, i.e. diseases of the digestive tract. This group of diseases comprise a very varied range of ailments and symptoms, like ulcers, gastritis, liver disorders, hernia, colitis, etc., and hence are difficult to relate to specific causes. However, some hypotheses may be suggested.

Firstly, one could point to the state of transport and storage facilities for foodstuffs, causing large amounts of food to perish. Not only are temperature and cleanliness requirements often overlooked, but also negligence and rough handling cause foodstuffs often to reach the consumer in poor quality. Secondly, an overlooked cause of gastric disorders is the use of pickling as a conservation method for vegetables. Pickled vegetables, mushrooms, etc. is a traditional Russian culinary favourite, and this method is often used because of lack of other methods for making vegetables last through winter. However, the pickling brine applied, containing vinegar and salt, is a known cause for gastric disorders, and even gastric cancer.[4] Thirdly, some gastric ailments, like e.g. ulcers, are generally related to stress, a factor which will be discussed below.

According to a popular myth, Russians are fond of their vodka, leading to the assertion that alcohol consumption could play a role in the overall condition of public health:

> "The preference of strong drinks, in large quantities, in combination with a universal tolerance for drunkenness, has for a long time been an accepted cultural characteristic of Russian drinking habits". (Partanen 1987, p. 204)[5]

4 I am indebted to Dr. Elisabet Helsing, The World Health Organisation, for making me aware of this point.

5 Translated from Swedish by FAFO.

Regrettably, there is little data available to support or weaken this hypothesis, as figures on consumption and production of alcohol have been consistently suppressed by USSR authorities. However, it can probably be regarded as a credible hypothesis that the reported rates of gastro-intestinal disorders, as well as the high rate of violent deaths (cf. above) are both in some way related to consumption of alcohol. Official USSR statistics reported that in the whole of the USSR, the number of persons being diagnosed as alcoholics in 1989 was 426,500 (148.9 per 100,000), down from 601,300 (216.9 per 100,000) in 1985 (Goskomstat 1991, p. 107). Various estimates of per capita alcohol consumption in the USSR have also been made. These estimates seem to be in agreement that consumption of alcohol in the USSR in the 1980's was approximately in the range 11 – 12 litres pure alcohol per capita per year.[6] (For comparison: France: 13.3 l/cap; Fed.Rep. Germany: 10.4 l/cap; United States: 7.5 l/cap; United Kingdom: 7.4 l/cap; Norway: 4.2 l/cap. Rusmidler i Norge 1991, p. 12) By the mid-1980's, the alcohol problem was considered to have become so grave in the USSR that an anti-alcohol campaign was launched, with a wide scope of drastic measures, by initiative of the newly-elected General Secretary Gorbachev.

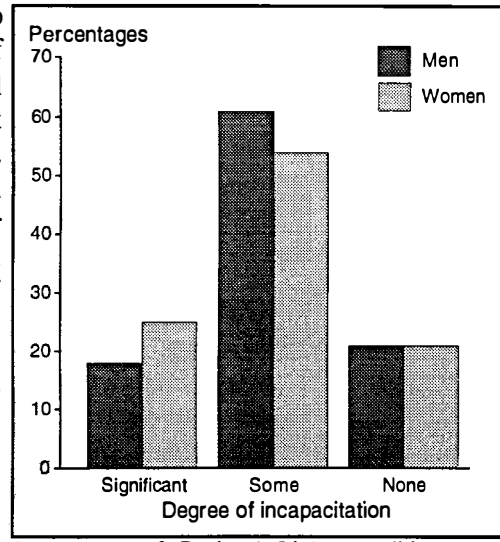
The fourth group of reported afflictions was musculoskeletal disorders. Diseases of this type, as arthritis and rheumatism, have varied causes. Though, in regions dominated by industries characterised by heavy manual labour, e.g. mining and fisheries, as the Kola Peninsula, one would expect the occurrence of work-related diseases of the musculo-skeletal system. However, only 6 per cent of the respondents report such afflictions, with women in a small majority. This is a striking contrast to e.g. Norway, where a total of 23 per cent reported to suffer from such diseases in 1991 (CBS 1992, p. 117). This could suggest these as a more "modern" type of afflictions, and therefore more often reported in Norway. A further comparison with Norwegian data yields some interesting patterns. In Norway, the most common physical disorders are musculoskeletal, cardiovascular, dermatological and respiratory ailments (CBS 1989, p. 53). Thus, in comparison with Norway, the patterns of reportings of disease types show both similarites and differences.

6 Sheregi, F.E.: "Prichiny i sotsialnye posledstvia pyanstva" in: *Sotsiologicheskie issledovania* 2: 1986 (144-152); Treml, V.G.: "Alcohol in the USSR: A Statistical Study", Duke Press Policy Studies, Durham, N.C. 1982. Both quoted in Partanen, op.cit.

Consequences of illness

The respondents were also asked to describe the gravity of the reported affliction, or more specifically, the degree to which the illness entailed a limitation of the ability to work and maintain social contacts. Among those who stated that they suffer from a permanent illness, 22 per cent reported to experience such limitations to a significant degree, 57 per cent to a certain degree, and 21 percent suffered no such effects. The rate of significant impairment of working capability was higher among women (24 per cent, as compared to 17 per cent for men), whereas a certain degree of impairment was felt by a majority of men (60 per cent as compared to 55 per cent for women). In the group suffering no such effects, the gender difference was negligible.

Figure 3.3 Incapacitation due to chronical ailment, by gender



Source: The Kola Peninsula Living Conditions Survey 1992

By and large, these figures are roughly similar to those found among the Norwegian population. In a living conditions survey carried out in 1991, a total of 21 per cent of Norwegian respondents reported suffering significant limitations in labour activity, etc., due to prolonged illness (CBS 1992, p. 117). However, one should bear in mind that on average, the Norwegian population is older. Hence, similar rates of impairment veils the fact that on the Kola Peninsula, such impairment occurs in younger age groups.

Another indicator of the state of public health is found in reported rates of use of health services. In the sample, 58 per cent of men, and 70 per cent of women reported to have enlisted the services of the primary health care apparatus (polyclinics) during the last year. Among male respondents, 26 per cent reported to have recceived treatment in a hospital, as compared to 32 per cent of women.

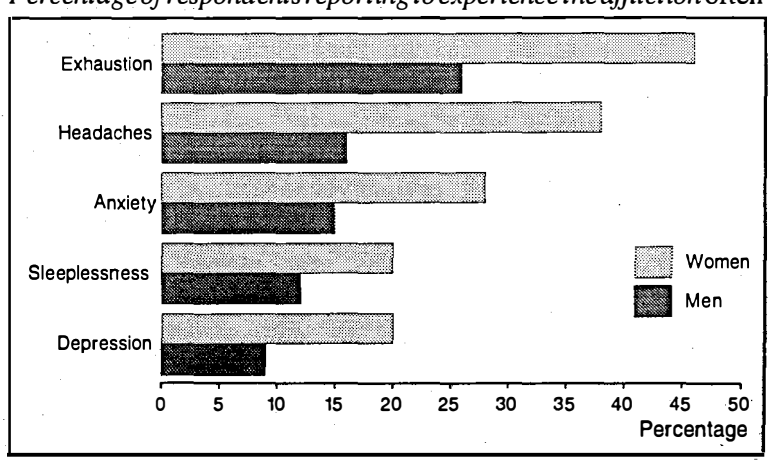
Mental health and well-being

Health and daily well-being is also influenced by the mental state a person is in. Daily problems, such as lack of amenities, standing in queues, crowded dwellings, worries about the future, etc. are all likely to influence the psychological profile of the population. In this survey, an attempt to chart such psychological factors was undertaken. It should be emphasised that mental and nervous disorders are indeed difficult to measure. In particular, it is close to impossible to draw a line between "normality" and a state deserving the characteristic "disease". Undoubtedly, there are considerable differences between individuals, as well as between cultures with respect to the classification of various psychological reactions.

Respondents were asked if they suffered from a series of different mentally-related symptoms: nervousness/anxiety, depressions, sleeplessness, headaches and exhaustion, as well as how often this occurs; often, sometimes or never.

From figure 3.4, it can be seen that whereas the population of the Kola Peninsula seems to be in physically relatively good shape, the reported frequencies of symptoms of nervous conditions are quite striking. A significant proportion of persons reports to suffer from frequent symptoms of nervous conditions. Moreover, women report such afflictions on the average close to twice as often as men. It can also be shown that reported symptoms increase with age.

Figure 3.4 Frequent symptoms of nervous conditions, by gender. Percentage of respondents reporting to experience the affliction often



Source: The Kola Peninsula Living Conditions Survey 1992

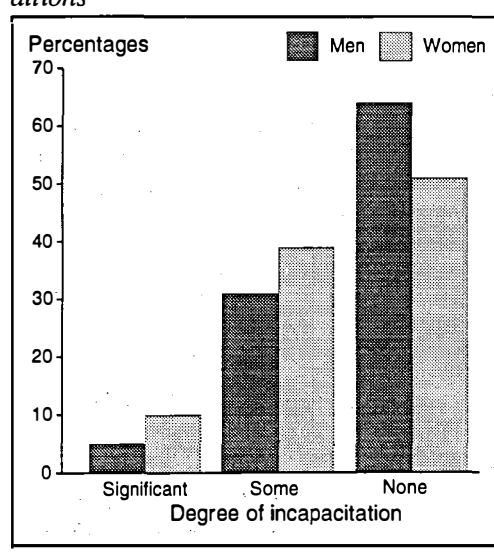
The observed gender pattern can be interpreted in different ways. Firstly, this can be linked to the different social roles traditionally assigned to women, and the circumstance that women are socialised to care more for others, and take a greater responsibility for how others are doing and feeling. Further, there may be differences in gender-role determined styles of expression and self-image, causing men more often to disguise and suppress such feelings, or not to express them openly. In general, this relation between male and female response patterns is by and large consistent with findings from living conditions surveys from e.g. the Scandinavian countries, where such afflictions occur much more rarely. In Norway, an average of 5 per cent of men and 9 per cent of women reported to have frequent symptoms of nervous conditions in 1991, and reported rates exceeded 10 per cent only among females in the oldest age groups (CBS 1992, pp. 44-45).

Further analysis (not reported here) show that the various symptoms of nervous conditions covary systematically among themselves. Thus, they can be seen as different indicators of one basic, unobserved dimension or factor. By so-called factor analysis, these indicators were combined into one common index for mental health. This index, furthermore, shows strong correlation with respondents' reported psychological health, on a separate question. Moreover, the index for mental health demonstrates significant correlation with reported chronical diseases. In this way, physical and psychological health to some degree go together.

However, mental types of afflictions seem on the average to be less consequential for those concerned. When asked whether such ailments entailed any limitations in the capacity to work or maintain social contacts, responses were distributed as shown in figure 3.5.

Only very few respondents gave affirmative answers, and a majority of both genders reported no such limitations. However, some gender differences are notable, as women more often than men report to experience incapacitations due to such afflictions.

Figure 3.5 Incapacitation from nervous conditions



Source: The Kola Peninsula Living Conditions Survey 1992

This is consistent with findings from similar surveys made in e.g. the Scandinavian countries.

It should be added that even if nervous symptoms occur much more often, the figures for *incapacitation* due to nervousness, etc. are more or less equal to figures for the same phenomenon reported during an equivalent survey carried out in Lithuania in 1990. As noted above, the Lithuanian study was carried out in a situation of near-normality, before the secession of Lithuania from the USSR.

Chapter 4
Education

In general, education systems fulfill many functions; to teach pupils various skills, from elementary to advanced, to evaluate and rank students according to achievement, and and to inculcate into students the basic social values of the society of which they are a part.

Further, whereas education *systems* are products of national requirements, development and traditions, etc., the educational *composition* of the population in a given region tends to be a reflection of its economic and industrial pattem. Also, the prevailing level of education and skills is an important factor with regard to economic potential for further industrial development. In particular, technological development has often spurred requirements to education even among blue-collar labour, as operation of modem industrial technology demands a generally higher level of skills than previous generations of industry. In this chapter, we will focus on the educational pattems among the population of the Kola Peninsula, in the light of the potential they provide for economic and industrial reform, modemisation and growth.

Moreover, education is generally regarded as a key determinant with respect to welfare. Higher levels of education are in most societies positively correlated to other welfare components, as income, housing, employment and health. In other words, education has a distributional effect on welfare. Partly, this is a consequence of the value put on different educational profiles in the labour market, partly is it an expression of the generally higher cognitive resources of the individual, developed through schooling and training. In command economies, the value assigned to each educational category, as indicated by reward systems, was oriented towards the assumed gain each group could bring the State, giving in many cases similar results as those of market economies.

Educational distribution

According to official Russian statistics, the main educational categories are grouped as follows:

* Primary (4 – 6 years of education)
* Incomplete secondary (7 – 9 years of education, polytechnic without secondary)
* Common secondary
* Specialised secondary/vocational
* Unfinished higher
* Higher

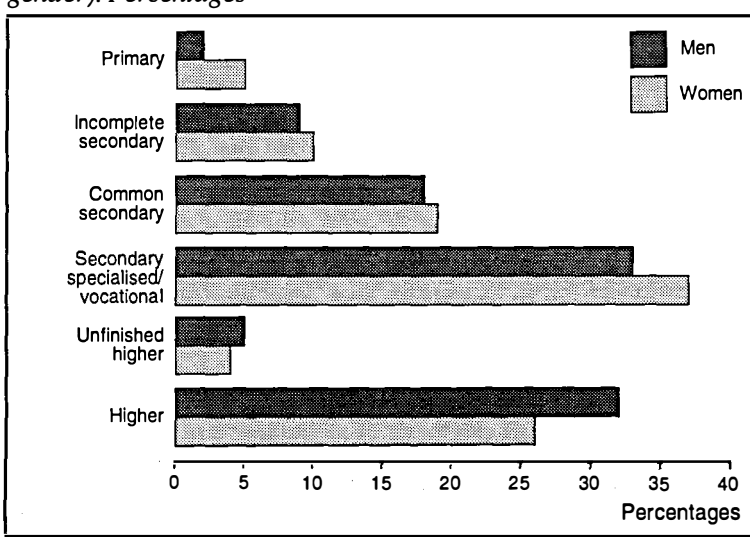
These categories are partly the result of historic developments of the Soviet educational system, which was characterised by the requirements of a highly industrialised command economy. In the period after the October Revolution, *primary* education was restricted to four years. Gradually, the duration of obligatory education was increased, and at the time of collapse of the Soviet Union, obligatory education was as high as eleven years for all. However, among the older age cohorts, some still only have four years of schooling. At the intermediate level, students are divided into groups having so-called common or incomplete secondary education. *Common secondary* level comprised the nine years of primary schooling, plus an additional two years. *Incomplete secondary* comprised the obligatory nine years, plus one year at a polytechnical or vocational training institution. Secondary education is obligatory for all. Further choices at this level could be the so-called *specialised secondary/vocational* education, consisting in two or more years at a specialised vocational training institution, after completion of the common intermediate level. *Higher* education does not necessarily mean the same as this concept does in most Western countries. Higher education in the USSR was a rather broad concept, comprising all forms of formal schooling beyond secondary or vocational training. Unlike systems in the West, university educations were not considered an elite qualification. Elite qualifications were mainly obtained from specialised, prestigious institutes in the large cities. Also, candidates from technical colleges, military officers' training facilities, etc., apart from universities and similar seats of learning, would also be considered to have higher education.

The vast distances of Russia, and the general low level of mobility also meant that a high number of students were engaged in long-distance education, while simultaneously being employed. In a con-

siderable number of cases, this educational process could be extended over a number of years, or in failure to formally qualify for a degree, even if most of the examina required were passed. Thus, a number of Russian mid-level management and scientific personnel have a so-called *unfinished higher* education. In many cases, these would be employed in a low- to middle-level managerial position, with further upward career moves being dependent on passage of the remaining examina.

It should be added that in the USSR, education was an irrevocable requirement for upward mobility, as each position in the command economy was defined in terms of a specific level of education. The command economy attached considerable weight and status to education, provided less opportunity for Western-style social climbing, and contained few, if any, "self-made" careers. Further, particularly higher Soviet educational institutions were sharply competitive, with sometimes excruciating entrance requirements to the most prestigious schools, and heavy-handed internal discipline. Flunking out was a constant threat. On the other hand, diligent students who received good grades were rewarded, and the best students could receive the so-called "Lenin stipend", of up to 180 rubles per month, corresponding to a managerial salary in the early 1980's.

Figure 4.1 Educational distribution on the Kola Peninsula (by gender). Percentages



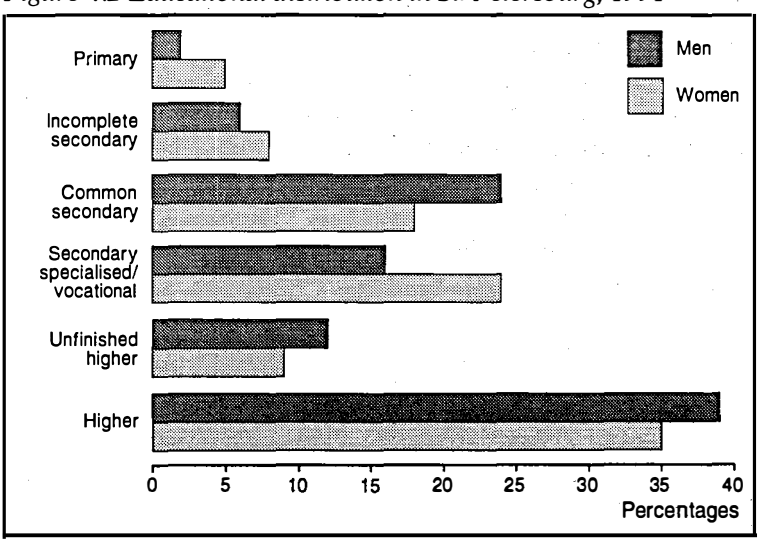
Source: The Kola Peninsula Living Conditions Survey 1992

As can be seen in figure 4.1, a fairly high number of respondents reported that they possess higher education. As described above, the broadness with which higher education is defined makes comparisons, particularly with Western countries, difficult.

In the sample, close to one third of all men and more than one fourth of all women respond that they have higher education. By comparison, in Norway, the share of persons having university education or equivalent was 13 per cent in 1985. In the same year, the share of Norwegians having any type of education beyond primary was 50 per cent. (SSB 1989, p. 73). On the Kola Peninsula, however, the share of persons with at least some education beyond primary level today is 86 per cent. This is obviously due to the obligatory nature of secondary education – at least one year after primary – as a national standard, accounting for most of this difference. Further, the lower average age on the Kola Peninsula would also account for a higher expected average education level. Differences in educational systems make direct comparisons difficult, and these distributional figures tell us little about the content of respective education patterns or real qualification levels. E.g. could a number of respondents with so-called higher education be low-rank military officers. These would not be considered as having higher education in most Western countries.

Compared to St. Petersburg, we see an interesting pattern, the peculiarities of the educational system taken into account. The

Figure 4.2 Educational distribution in St. Petersburg, 1991

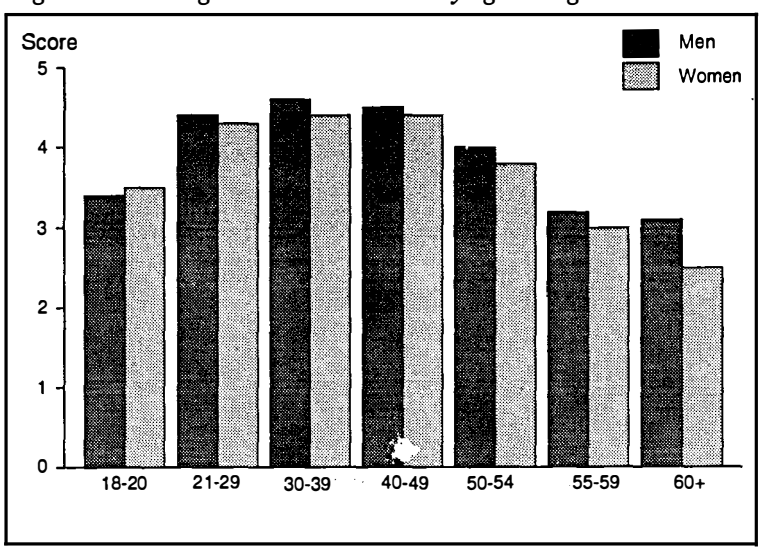


Source: The St. Petersburg Living Conditions Survey 1991

percentage of higher education-holders is higher in the bigger city, but the proportion of vocational training considerably lower. Other educational categories are approximately equally distributed in these two regions. These variations are obviously related to the structure of local industries. The bigger city has a higher share of manufacturing industries, administration and scientific activities, as opposed to the primarily raw-material producing Kola region. Still, in a Russian context, the educational level among the Kola population must be considered relatively high, and probably even compares not unfavourably to neighbouring regions in Finland, Sweden and Norway. The Kola Peninsula seems to some extent to have been able to attract both skilled labour and higher educated personnel, to a larger extent than e.g. the northern counties of Norway.

The age distribution of different educational categories follows a familiar pattern, with younger generations receiving progressively higher education levels than the preceding. This pattern can be witnessed in most industrialised countries. Thereby, corrected for age, the educational composition of the Kola population would in general be somewhat lower than in the larger city.

Figure 4.3 Average educational score by age and gender



Source: The Kola Peninsula Living Conditions Survey 1992
Educational scores have been computed as follows: Primary = 1, Incomplete secondary = 2, Common secondary = 3, Specialised secondary/vocational = 4, Unfinished higher = 5, Higher = 6.

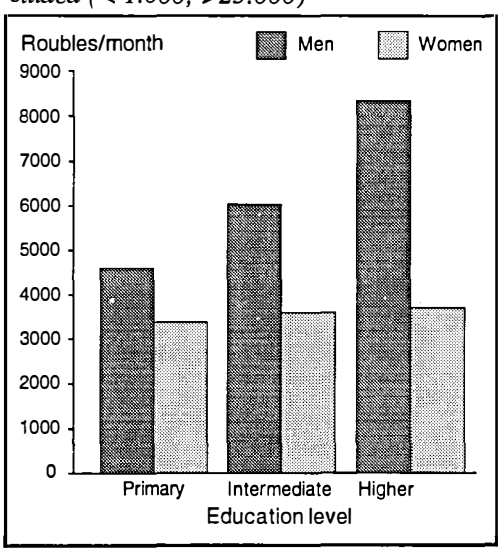
Consequences of education

An important question, also with respect to educational and industrial policy is the distributional consequences of educational differences. Put simply, which rewards does a given level of education bring to the individual? As described above, in the Soviet industrial structure, education was a key to career advancement. In addition, in order to achieve a higher managerial post, it was also an almost irrevocable requirement to possess membership in the Communist Party. People naturally related to this latter requirement in different ways. Some regarded it as a pure formality, whereas others were actually convinced of the correctness of the Party line. Some chose not to join, and remained confined to non-managerial or lower posts. Others actively used the Party apparatus as a career booster, and forwarded their career in this manner. In all cases, persons aspiring to higher posts within industry or administration had to relate to the leading role of the Communist Party as a fact of life. Thus, the rewards from education in terms of career advancement were likely to be somewhat tinted by this connection between advancement and Party membership.

As can be seen, education in general "pays off" in the form of higher wages. Simultaneously, and in addition to women receiving lower pay in general, this payoff is smaller for women than for men. As will be described in the chapter on incomes, this can be ascribed by the tendency to find women in low-paying sectors, as well as the lower upward mobility of women in the social hierarchy. In addition, the industrial structure on the Kola Peninsula can be expected to disfavour women. The main industries, as mining, fishery and the military, are traditionally male strongholds.

Consequently, very few women occupy managerial posts, even to a lesser extent than the share of well educated women would indicate. Another explanatory factor could be provided by the peculiarities of the Kola Peninsula as a temporary place of residence for

Figure 4.4 Wages by education and gender. Roubles per month, averages. Extremes excluded (< 1.000, >25.000)



Source: The Kola Peninsula Living Conditions Survey 1992

many couples. Whereas it has been relatively easy for men to find well-paying jobs in the Kola region, this seems to have been less easy for women, who have had less ability to, or sometimes less wish for, accumulating the required seniority in their respective positions in order to advance to a managerial position.

These findings are corroborated by official statistics, according to which women constituted 61 percent of the group having higher or specialised secondary/vocational education (cf. above) in the USSR in 1988. E.g. women accounted for 65 per cent of all medical doctors, which has been a typically female occupation throughout the post-war period (Goskomstat 1991, pp. 85-86). At the same time, women accounted for only 6 per cent of all top-level managers in the USSR in 1989 (ibid.). The Kola Peninsula seems to conform to this nation-wide pattern, as only 7 per cent of all high-level managers in the sample are women.

In general, women receive smaller rewards from given educational levels, in terms of higher wages and occupational positions, than men. This pattern is by no means unique for Russia, and can be found in most Western countries, the Scandinavian countries included.

Chapter 5
Housing conditions

As mentioned earlier in this report, the present settlement pattern on the Kola Peninsula is almost totally a product of the Soviet period of Russian history. This fact is also reflected in in the dwelling mass, which is almost entirely constructed according to nationwide Soviet standards. The region is characterised by the same pre-fabricated high-rise blocks which are found all over the territory of the former USSR. In addition, the severe Arctic climate in the region gnaws relentlessly on these houses, which in most cases originally were constructed for more moderate climates. Further, many years of lack of maintenance routines also have left their mark on much of the building mass.

Types of housing and dwelling units

The rapid industrialisation of the Kola Peninsula necessitated equally efficient construction of appropriate housing for the hundreds of thousands who moved into the region in the post-war years. In 1945, the whole peninsula had approximately 200.000 inhabitants. However, during the entire period after World War II, the population on the peninsula as a whole increased by approximately 100.000 – 150.000 persons every five years (Castberg 1992, p. 8). The answer to such a rapid growth became construction of a very dense dwelling mass, providing for the most basic housing demands.

In the survey, respondents were asked to identify the type of house in which they live. Results are illustrated in figure 5.1.

The majority of respondents abode in the ubiquitous high-rise blocks, followed by the group dwelling in houses of brick construction. Some of the houses in the latter group belong to the notorious "Khrushchev houses", built during the reign of the CPSU General Secretary of the same name. During the Khrushchev years, it was decided to make a national effort to solve the perpetual housing shortage in the USSR, and over a very short period, a high number of

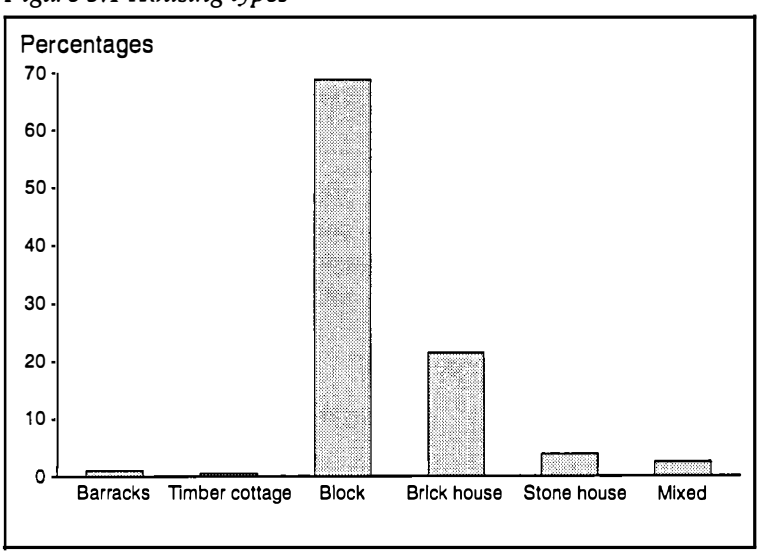
five-storey, brick-built housing blocks were constructed. These houses very soon acquired a bad reputation, and rightly so, for poor construction quality.

These two categories make up 90 per cent of the dwelling mass in the survey area. The rest is made up of barracks, which function as home to both military and civilians, stone-built houses, as found in central parts of Murmansk city, and even some timber cottages left from the early years of the century. Some of these are even found interspersed among the residential and commercial buildings in the centre of Murmansk.

Asked about the type of dwelling unit inhabited by the respondents, answers were distributed as shown by figure 5.2.

The overwhelming majority of housing units fall into the category of state-owned, separate, one-family flats. Here, as in most cities of the former USSR, we also find the so-called "communal" flats. This term covers a dwelling unit type in which several families have separate rooms, but share some amenities, as hall, kitchen or bathroom. This type of dwelling form was created as a response to the massive trek from the villages into the towns during Stalin's industrialisation drive. In response to the resulting housing shortage, the density of the existing housing mass had to be increased. The major cities of the USSR contained a fair amount of large flats, some pre-revolutionary,

Figure 5.1 Housing types



Source: The Kola Peninsula Living Conditions Survey 1992

Table 5.1 Average gross dwelling space (incl. kitchen, bathroom, hall, etc.) by region. Square meters

	Average	Standard deviation
Murmansk	47	38
Severomorsk	45	19
Nikel	46	21

Source The Kola Peninsula Living Conditions Survey 1992

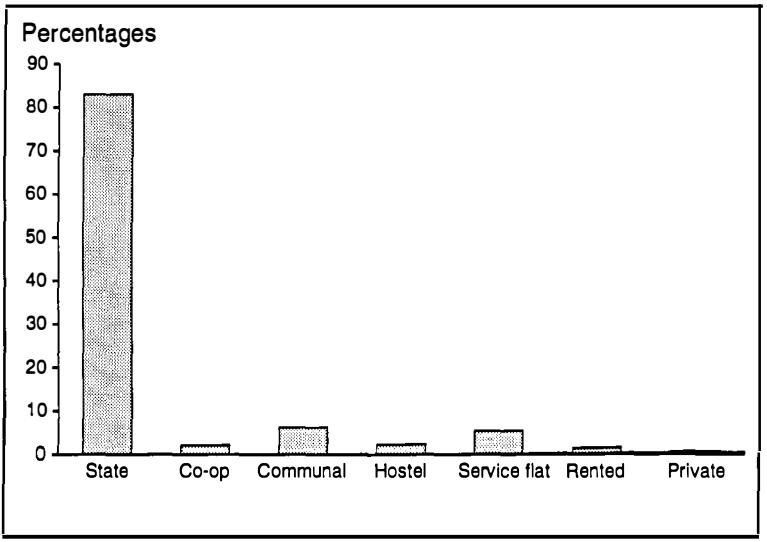
and some built during the early years of Stalinism. In order to accomodate the newcomers from the countryside, inhabitants had to move closer together, and where formerly one family lived, now four or five moved in. Born out of necessity, this form of dwelling was ideologically praised as a new and politically sound type, fostering a true collective spirit.

The third significant type of dwelling unit represented in the sample consists of service flats, most of which are inhabited by military personnel. Further, the housing co-operatives are less numerous in the survey area than in the major Russian cities, and make up less than two per cent. The remaining types of flats are close to negligible, making up less than three per cent combined.

In average, housing units are small. Average size of a flat in the whole survey area is close to 47 sq.m., with the main types of housing units fairly close to the average figure.

Average housing size does not seem to vary much across the survey area. Average figure for gross dwelling space inhabited were distributed as shown in table 5.1

Figure 5.2 Types of dwelling units. Percentages



Source: The Kola Peninsula Living Conditions Survey 1992

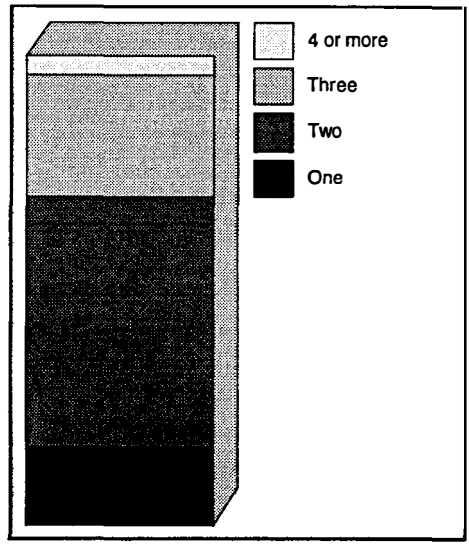
However, standard deviations for these averages suggest that the variations are wider in Murmansk, meaning that the dwelling mass in the city more often consists of very small, as well as very large flats.

As for the number of dwelling rooms (exclusive of kitchen, bathroom, hall, etc.) the distribution resulted as shown in figure 5.3.

As can be seen, the absolutely dominating type is two-room flats. This is not surprising, taken into account that the residential housing mass to a very large extent is built according to nationwide USSR standards, favouring this size.

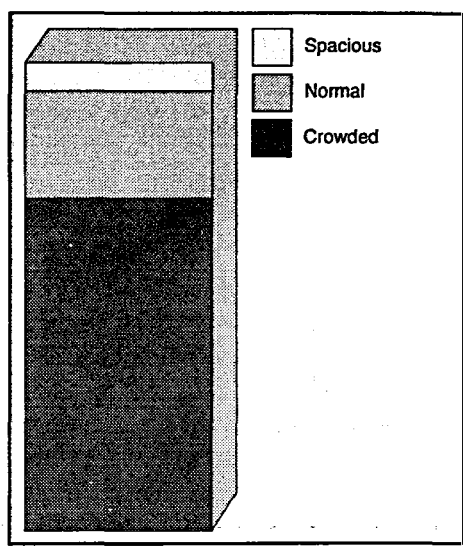
However, as described in the chapter on families and household composition, households tend to be small. For living conditions, the number of household members occupying a given flat is in general more important than absolute size. A small flat can be spacious and a large flat may be small, depending on the number of inhabitants. As a

Figure 5.3 Distribution of the housing mass by number of rooms. Percentages



Source: The Kola Peninsula Living Conditions Survey 1992

Figure 5.4 Degree of residential crowdedness. Percentages



Source: The Kola Peninsula Living Conditions Survey 1992

The following definition of crowdedness has been used:
Crowded flats = Flats where the number of inhabitants is greater than the number of occupied rooms. Normally spacious flats = The number of inhabitants is equal to the number of occupied rooms. Spacious flats = The number of inhabitants is smaller than the number of rooms
There are no universally accepted norms of what should be counted as crowdedness. The definition of crowdedness used here is not entirely similar to the one used in Norway. According to the Central Bureau of Statistics, one-person households are defined as crowded if they have only one room. Further, flats are defined as "very spacious" if they have two rooms or more per inhabitant. In Russia, however, anybody who has one room to himself counts himself as lucky, and very spacious flats according to the Norwegian definition are virtually non-existent.

summary measure of crowdedness, the relation between number of dwelling rooms and number of household members can be used. Here, a flat will be defined as crowded if the total number of permanent inhabitants is higher than the number of available rooms (excluding kitchen,etc.). Computing these figures, we can get an impression of prevailing levels of crowdedness in the dwelling mass.

This general crowdedness is reflected in average figures for dwelling space per capita. Over the whole survey area, and counting gross dwelling space (i.e. including kitchen, bathroom, hall, etc.), for every inhabitant there is 16.5 sq.m. of dwelling space. Variations across the region were: Murmansk 16.4 sq.m., Severomorsk 16.1 sq.m., Nikel 17.5 sq.m. According to official statistics, this is in fact slightly higher than the national average for the whole former USSR. In 1990, for each inhabitant of the USSR, there was 15.8 sq.m. of dwelling space. It should be added that both survey figures and official statistics contain certain margins of error. In the survey, respondents might not know the exact number of square meters, or might not recall the figure exactly. Official statistics contain data on registered dwelling space, which either might have been overreported by local authorities as an attempt to give the impression of fulfillment of their plan quota, or might not in fact be inhabitable. Still, there is reason to believe that in general, housing standards on the peninsula are slightly above former-USSR averages. This is mainly due to the fact that the nationwide norms for dwelling sizes gradually increased with each Five-Year Plan, and the bulk of the dwelling mass was built in later years.

Amenities

Respondents were also asked which amenities they had in their flat. Answers were distributed as shown in figure 5.5.

On the whole, flats on the Kola Peninsula seem to be relatively well equipped with amenities. Nearly everybody has indoor toilets, bathrooms, central heating and running hot water. This is probably explained by the fact that the bulk of the dwelling mass is fairly new. It should be added that central heating systems in the USSR most often run on heat supplied by a central boiler-house, supplying whole residential areas with heating and hot water. This can be a mixed blessing, as these systems are vulnerable to disruption, and tend to break down from time to time. Also, they are regularly switched off

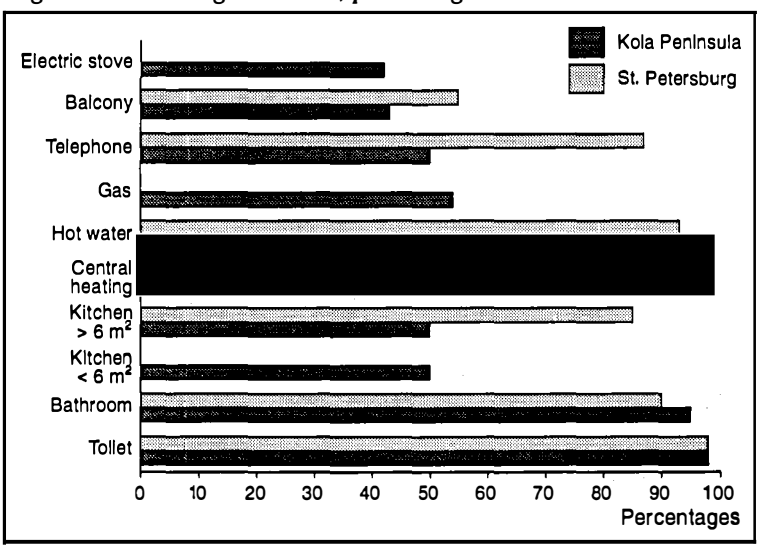
for maintenance for up to two months during summer, leaving households without hot water. The main problem in the residential sector is therefore connected more to the density and crampedness in flats, rather than the absence of amenities.

Dwelling environment

The quality of residential environments may also vary. Respondents were asked whether they were exposed to environmental nuisances in their flats. Responses are reported in figure 5.6.

A high number of households seem to suffer some negative effects from road traffic, either in the form of noise, or in the form of car exhaust. This is the most common complaint with respect to residential environment. As described in the chapter on incomes, car density in the survey area is relatively high, nearly equal to that of Moscow, even if it is considerably lower than in most Western countries. It should be remembered that Soviet-made cars are considerably more smelly and noisy than Western-made, both due their construction, as well as to the often low quality of fuels.

Figure 5.5 Housing amenities, percentages[1]



Source: The Kola Peninsula Living Conditions Survey 1992; The St. Petersburg Living Conditions Survey 1991

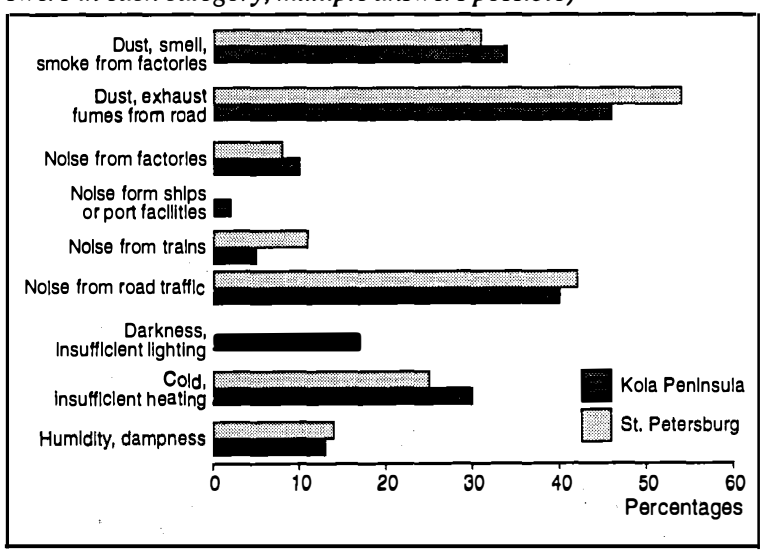
1 St. Petersburg data on kitchens, household gas and electric stoves unavailable.

Another major residential problem seems to be that flats often seem to be difficult to keep warm, and insufficient heating is cited by nearly one third. One should keep in mind that the data presented were collected in summer, and figures might have been different and higher if interviews had been made during another season. Construction materials and processes used in buildings in the area seem to be the same as those in central parts of Russia, though some concern seems to have been given to adaption to the local climate. The same factor also tend to make housing units relatively energy-inefficient. As long as households actually paid little or nothing for heating, there was no incentive for energy-saving measures. With liberalisation of energy prices, however, this is likely to change. Improved windows and insulation in residential houses could evidently bring about a considerable improvement in dwelling standards.

Approximately one third also reports to be exposed to dust, smell or smoke from factories. Town planners in the USSR deliberately mixed manufacturing and residential regions, for ideological reasons, as well as due to expediency.

For comparison, it can be shown that equivalent level of living surveys carried out nationwide in Norway state that in 1987, among households in the major cities, 39 per cent reported to be exposed to

Figure 5.6 Residential conditions. (Percentages of affirmative answers in each category, multiple answers possible)



Source: The Kola Peninsula Living Conditions Survey 1992; The St. Petersburg Living Conditions Survey 1991

noise and/or pollution in their dwellings. Another 11 percent reported to live in "unmodern" dwellings, i.e. without toilet/bathroom, or in cold or humid conditions. No further back than in 1980, the share of sub-standard dwellings according to this definition constituted 19 per cent in Norway (SSB 1989, pp. 136-139).

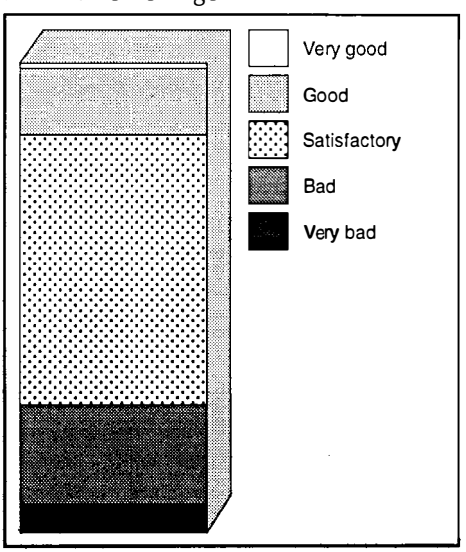
However, it should be bome in mind that these figures represent *subjective experience* of environmental nuisances, and not necessarily noise or pollution levels as they can be measured with some objective measuring instrument. Individuals clearly have very differing thresholds e.g. with respect to what is described as noise. This makes direct comparisons between regions somewhat difficult.

All these factors taken into account, how satisfied are people actually with regard to their dwelling conditions? The following question was put to the respondents:

> "On the whole, how do you evaluate your dwelling conditions?"

Responses were distributed as shown by figure 5.7. A surprisingly high share of the respondents actually express at least some degree of satisfaction. The share of respondents who evaluate their dwelling conditions as "satisfactory" or better actually constitute 72 per cent, even if there are very few who express full satisfaction – approximately one out of six. Somewhat more than one in four reports to have bad, or even very bad, dwelling conditions.

Figure 5.7 Satisfaction with housing conditions. Percentages



Source: The Kola Peninsula Living Conditions Survey 1992

A comparison with response patterns from St. Petersburg reveals some interesting findings with respect to satisfaction with housing standards. The share of those who reported at least some degree of satisfaction was fairly equal to the one found on the Kola Peninsula, approximating 70 per cent in both cases. On the whole, dwelling conditions seem to be fairly similar along the indicators described above, even if the dwelling mass on the Peninsula on the average is younger than in the historic city on the Neva. A notable difference is that the answer categories were more evenly distributed in the bigger city, reflecting in all likelihood the wider spread of the building mass over construction periods.

Chapter 6

Employment and labour conditions

In the command economy of the USSR, labour activity was not only a source of income for the citizens. To work according to one's abilities and "build communism" was also defined as the duty of all citizens towards the State. The State, on the other hand, as the only institution which could own means of production, was obliged to provide every individual with a job. Thus, to have a job was both a right and a duty. It was a punishable offence for any able-bodied adult not to hold employment over a period of more than four months during any twelve-month period, and failure to do so would result in criminal prosecution. In the penal code of the USSR, this was termed "deviant and anti-social behaviour" or "parasitic life-styles". In most cases these clauses were used against marginalised individuals, alcoholics, prostitutes, vagrants and similar. In other words, to be unemployed was against the law. The labour activity of each citizen was monitored through the "labour book" (*trudovaya knizhka*), that everybody was obliged to have, and in which all employment was recorded.

The ideological basis of this somewhat coercive practice were taken from Lenin's works on the dictatorship of the proletariat, and the official ideal was found in the "proletarian" lifestyle. Thus, in official propaganda the political and collective aspects of labour were thereby more featured than the individual. In Western countries, labour as an activity is often regarded in two perspectives: An economic perspective, focusing on labour productivity and remuneration systems, and a social view, emphasizing aspects of labour in its social context. In general, this latter view regards the workplace as an arena for self-realization, learning, creative thinking and social contacts. The Soviet view on the other hand, praised labour as a collective effort towards a historic goal – communism – in sometimes close to epic formulations.

Given this historic legacy, it is not surprising that even today, unemployment is virtually non-existent. As will be closer described

below, the massive bulk of industrial and service employment in Russia is still (as of spring 1993) found within the state sector, and so far, the legislature has only recently passed laws opening for bankruptcies of state-owned enterprises, meaning that larger-scale lay-offs have been postponed. Also, in the light of a historic tradition where the State had the responsibility to provide everybody with a job, mass redundancies are strongly unacceptable to public opinion.

Unemployment and participation in labour activity

In the sample, comprising respondents aged 18 years and older, a total of 80 per cent of respondents report to have a paid job. Another 14 per cent are pensioners without any employment, and 2 per cent are students. Those who fall into neither of these categories, and hence can be regarded as unemployed in the proper sense, make up a mere 4 per cent. Further, approximately one third of this formally unemployed group reports to have some kind of income of varying volume. In this residual group, without formal employment and without any reported income, we probably find a number of persons who has left the labour market voluntarily, and are not job-seekers. Further, there is fairly ample reason to believe that some in this group have unreported incomes from informal economic activity. Hence, de facto unemployed persons, without any source of income, were virtually nonexistent on the Kola Peninsula, as of the fall of 1992. On the contrary, a Western country with a similar unemployment figure would in all likelihood describe the situation as labour shortage.

On the other hand, it seems fairly obvious that the figures on formal job-holders cover a substantial amount of underemployment, or hidden unemployment. As described in the chapter on wages, the low-wage policy made enterprises undervalue labour, with overstaffing as a result. Also, due to the "soft budget constraint", causing enterprises presently to receive subsidies from the State according to the number of persons on the payroll, it is in fact profitable not to get rid of surplus manpower, but rather to hoard it.

In the USSR, labour hoarding by enterprises was widespread. Not only was this profitable to enterprises, but also in line with Marxist theory. According to such theories, surplus value is only created by labour. Hence, the more labour used, the more value is created. This was reflected in the accounting system, and actually rewarded enter-

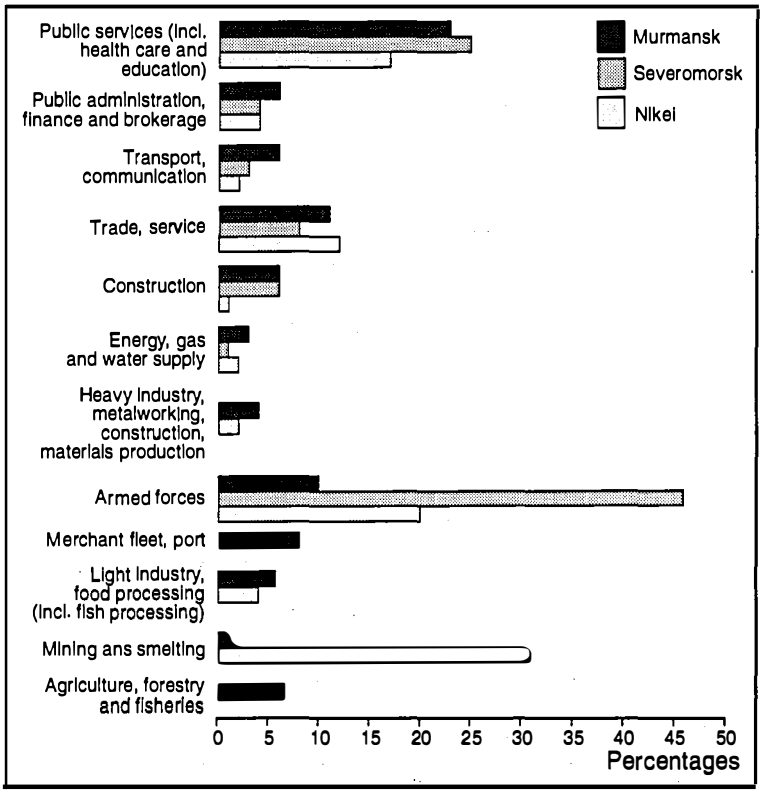
prises for overuse of labour. This factor thereby contributed to the permanent labour shortage.

Industrial employment

In the sample, relative distribution of employment among sectors was as shown by figure 6.1.

It emerges that the single largest sector in the survey area was the armed forces, accounting for *approximately 20 per cent* of the population as a whole, with considerable regional variations. The armed forces employ not only men, but also a considerable number of women, who work both in military positions, as well as in civilian-type support occupations. However, there are considerable margins of error related to this figure. Another feature of the employment distribution is the uneven spread of sectors across the survey area. The

Figure 6.1 Employed persons by industry and region. Percentages

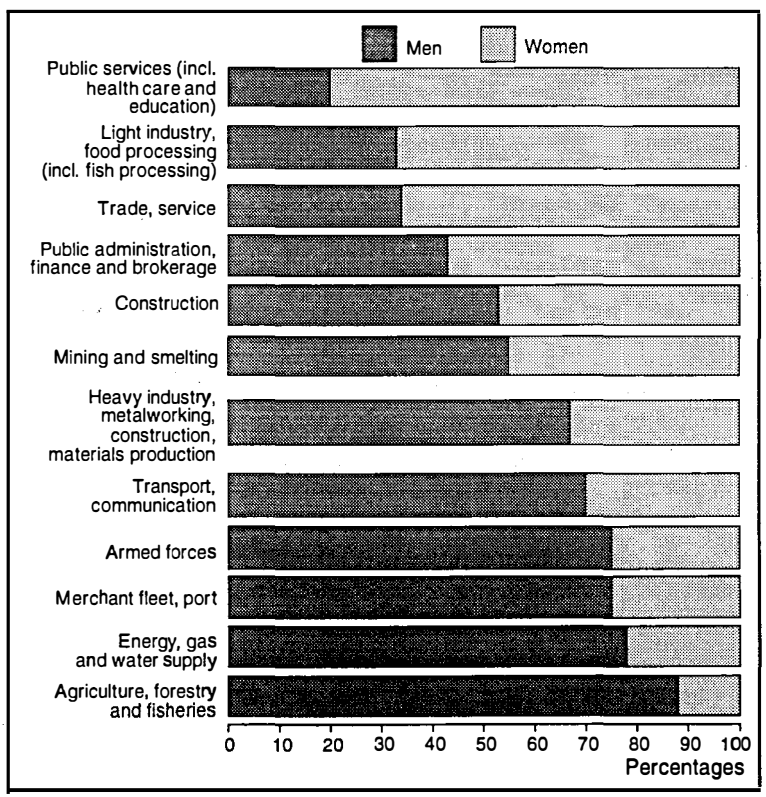


Source: The Kola Peninsula Living Conditions Survey 1992

armed forces have a strong concentration in Severomorsk. Here, 72 per cent of all gainfully employed males in the sample report to be in the armed forces. However, the military community figures strongly also in the two other localities surveyed, e.g. in Nikel, where they account for close to one third of male employment. In Nikel, the mining and smelter sector dominates, as the nickel enriching plant provides employment to close to half of all gainfully employed male adults. Female employment is concentrated in the service sectors, as trade, cleaning, maintenance, etc., as well as in the public services sector, within the personal care occupations, as health care and education. In Severomorsk, more than half of all employed women are found within these two sectors, and in Murmansk and Nikel close to one third.

A more detailed illustration of the gender segregation in the labour market is given in figure 6.2. As can be seen, there are typically male,

Figure 6.2 Proportion of men and women in various industries



Source: The Kola Peninsula Living Conditions Survey 1992

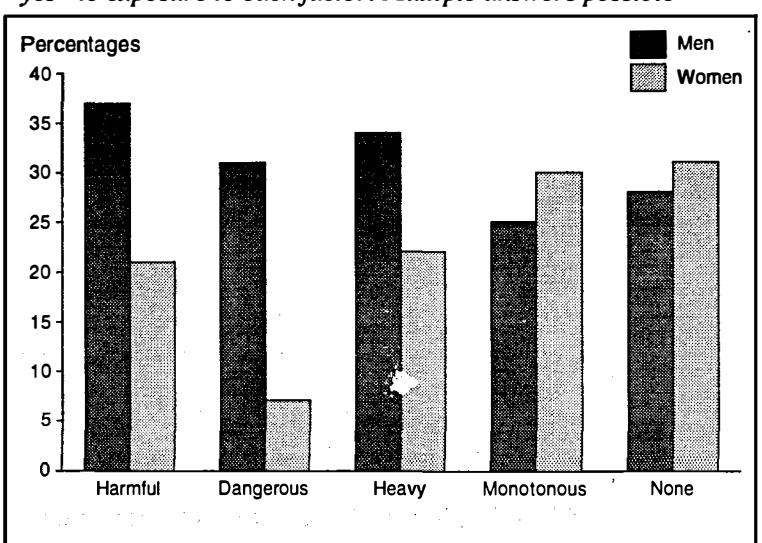
as well as typically female sectors. Very few sectors actually appear as balanced with regard to gender distribution.

Labour conditions and work environment

Most of the present industrial structure on the Kola Peninsula was developed and built in the in forced tempo in the post-war period, and a lot of the production facilities are obsolete and polluting by Western standards. As a work environment, they are often harmful or dangerous. In the survey, respondents were asked whether they were exposed to harmful production processes (smoke/fumes, dust, vibrations, high temperatures, etc.), dangerous production processes (high above ground, at open sea, in contact with explosives/corrosives, etc.), heavy physical loads, or monotonous/repetitive tasks. The answers were distributed as follows:

In general, approximately one third of all surveyed men reported to be exposed to each of the type of conditions listed in the questionnaire, whereas the frequencies for women were somewhat lower. Some of these conditions are obviously interrelated (as supported by

Figure 6.3 Exposure to workplace hazards. Percentages who answer "yes" to exposure to each factor. Multiple answers possible



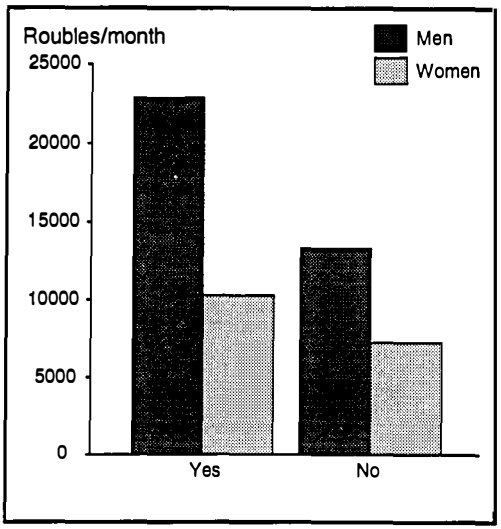
Source: The Kola Peninsula Living Conditions Survey 1992

factor analysis, not reported here), some labour tasks can e.g. be both monotonous and harmful at the same time.

Only slightly less than one third of the respondents stated that they were exposed to no negative workplace conditions. In this group, women were in a majority. As can be seen, the reported answers testify to a work environment in general characterised by a considerable level of workplace hazards.

Traditionally, exposure to harmful and unhealthy labour tasks have been compensated by wages. In figure 6.5. average monthly wages within the mining and smelter sector are summarised, for respondents giving different answers to the question on exposure to workplace hazards, and for men and women respectively.

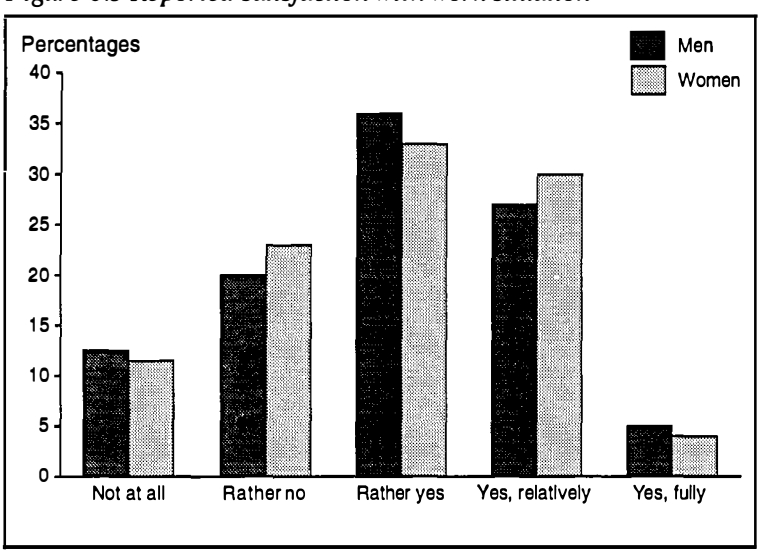
Figure 6.4 Average monthly wages by gender and exposure to workplace hazard, mining/ smelter industries



Source: The Kola Peninsula Living Conditions Survey 1992

Evidently, acceptance of harmful labour tasks in particular pays off, in the form of higher wages. This incentive system seems

Figure 6.5 Reported satisfaction with work situation



Source: The Kola Peninsula Living Conditions Survey 1992

originally to have become necessary due to the tight labour supply, in order to induce people to accept the most unpleasant labour. On the other hand, the effect of this incentive system means that there later on is little internal pressure in enterprises, from trade unions or others, towards improvement of the work environment.

As already noted, the distribution of harmful or dangerous labour tasks are also unevenly distributed among the genders. With the exception of monotonous and repetitive work, men seem to be more exposed to workplace hazards than women, thus offering a supplementary explanation for the differences between the genders in wage earnings.

In the survey, respondents were also asked to indicate their degree of satisfaction with labour conditions. Answers were distributed as shown by figure 6.5.

Obviously, very few people are totally happy with their workplace conditions, including the wage level, but the proportion stating at least some degree of satisfaction (the sum of response categories 3, 4 and 5) constitute two thirds of both genders. The differences between the genders are not marked. Together with results from the previous chapter on housing, these findings suggest an interesting pattern: Despite rather tough living conditions in objective terms, people seem to have adapted, and perceive their situation as fairly satisfactory.

Chapter 7
Income distribution

The collapse of economic structures in Russia has also affected established wage formation mechanisms. As a consequence, there is at present no unified, or universally accepted system of wage determination. Incomes are therefore distributed less systematically than earlier. Some groups have been able to increase their wages to keep up with, and even surpass inflation, thus gaining in real purchasing power. Others have seen the real value of their incomes drop sharply, to fall even below the poverty line. In spite of the present surge in private enterprise, wages remain the main source of livelihood for the vast majority of the population.

Income profiles can be studied from several angles. One approach is to examine the supply side, i.e. the structural features of the economic and industrial composition of the given region. One example of such features is the traditionally higher wage level the northern regions of the USSR. As described in the chapter on migration, wages were calculated at the basis of the so-called "Arctic coefficient", making wages from 40 to 80 per cent higher than in the southern part of the country. This advantage was in fact the main reason for many families to move to Murmansk or other northern regions. Other such structural determinants can be found in the wage-paying capabilities of the industry in question. This capability may vary, depending on whether the enterprise is state-owned or private, manufacturing or service-producing, export-oriented or producing for the home or local market.

On the other hand, incomes can also be studied from the demand side, according to features of the wage-earners. The actual pay an employee can take home, as compared to his fellow workers, is dependent on individual characteristics, or features of a socially defined group to which he or she belongs. Typical examples of such basic individual or social characteristics are gender, age and education. These define the individual into various social and economic roles, which are differentially rewarded.

As described earlier, the regulated nature of the command economy, elements of which still are in effect, necessitates a more structuralist approach than might have been chosen in another, market-economy context. Though, a focus on welfare, particularly in the present situation of economic transformation and upheaval in Russia, also requires a focus on the opportunities for adaption, as well as on how different groups in general are exposed to the effects of the ongoing changes.

It is interesting to note that a considerable number of survey respondents (approximately 20 per cent of the net sample) did not want to answer the questions on income. This could have several reasons. One is that some incomes may have originated in the "shadow economy", in illegal or semi-legal manners. Other people may make a livelihood in legal ways, but in manners which are officially frowned upon, like begging or prostitution. Further, some employees may have private wage agreements they do not wish to disclose. Moreover, in the face of rising crime rates, some may not wish to disclose their wealth to a stranger. Finally, some might think that their income is a private matter and nobody else's concern. This latter attitude can also be interpreted as an expression of distrust of public authorities, which is not surprising, given the coercion and intimidation which characterised the labour sphere in the USSR.

The level of non-response may indicate that real average income levels could be somewhat different from those presented below. Income figures presented here should therefore be interpreted with caution. However, the response rate is regarded as sufficient to demonstrate the general patterns; non-responses can probably be assumed to represent the exceptions. Survey material seems to be representative of the norm, showing actual distributions within the legal, "non-shadow" economy. The "shadow", "grey" or even "black" economy can be assumed to hide somewhere in the total rate of non-response.

Further, prevailing inflation levels will tend to make analyses of *nominal* income levels obsolete within a very short time. However, it seems reasonable to expect a certain stability of the *relative* levels, which change at a lower pace.

Wages and welfare

In Western market economies, wages and monetary incomes are usually seen as the main determinants of living standard, and a central level of living component. The amount available for daily spending, as well as accumulated savings, determines the degree to which an individual or a family is able to satisfy everyday needs for food and clothing, as well as the level of long-term investments in durable consumer commodities. Monetary incomes are commonly regarded as influencing welfare directly, through the volume of commodities and services available through market channels, and indirectly, through the possibility of realising a desired lifestyle and personal preferences.

At present, there are indications that Russia is slowly developing a proper money economy, that eventually will do away with with the non-market features of the former command economy, also on household level. Consequently, the importance of monetary incomes is likely to increase, as compared to welfare factors previously related to access to consumer commodities through non-market channels. The present structure of distribution, still exerting some effects on consumption patterns, is described in the next chapter. In this chapter, the main focus will be put on a description on the distribution of monetary incomes and wages.

Wage formation systems in the USSR

There are at least two basic approaches to the study of income and income differentials. One approach emphasises income as a token of welfare, and puts the focus on *purchasing power*, i.e. how much a wage earner can buy for his money. Another approach focuses on income as a reward for productive services, based on the value (in market terms, or by some other mechanism of evaluation) of the services rendered. Incidentally, Lenin's dictum about the connection between labour effort and remuneration under socialism, stating the principle to be "from everybody according to his abilities, to everybody according to his needs" could be seen as an expression of the former approach. After the revolution, this principle was revised into "... to everybody according to his work", which is in accordance with the latter approach. This revision opened the way for substantial wage inequalities in Soviet society. Wages were only one among several differentiating mechanism, and its welfare effect was probably less significant than the system of privileges. Thus, Soviet citizens were

not unfamiliar with wage inequalities, representing a differentiating factor in a purportedly classless society.

The roots of the wage formation system can be found in the early years of Soviet power. In 1921, an economic system with several market features was introduced, including market-oriented wage formation systems, under the NEP (New Economic Policy) scheme. Wage levels and changes were largely determined by supply and demand in the labour market, though subject to approval by the State. To a certain extent, wages could be settled by collective bargaining. However, in the period 1927-29, wage scales and wage policy came under strict government control, and the role of collective bargaining was reduced to a formality. The single wage scale was replaced by an intricate system of centrally determined wage scales for white- and blue-collar labour, varying over industries. (Shcherbakov 1991, p. 227).

For decades, the USSR pursued a low-wage policy, under the ideological rationale of "decommoditisation" of labour, entailing a shift away from the sale-and-purchase relation between the workers and the enterprises with regard to labour. Instead, it was envisaged that an increasing share of social and cultural needs should be catered for by non-wage benefits and allowances, the so-called "social consumption fund". This policy, however, meant that enterprises had little incentive to economise on labour, to introduce labour-saving machinery, or even to raise skill levels. The low-wage policy has been regarded as a major cause for low work motivation and productivity in Soviet industry. (Standing 1991, p. 240).

Generally, surveys indicate that Soviet workers ranked wages low in the factors that determined their choice of a job. Factors like skills improvement, job content, social usefulness and similar were most often ranked before wages as a job incentive. (ibid.) Such data might be misleading, though. Aspects influencing these response patterns may be prevailing ideology, or even the fact that wages were so low everywhere that they played a limited role in influencing individual choice. Another indication of the weakness of the argument that wages were unimportant is the evident success with which material incentives have been used to attract migrants to the Kola Peninsula. Still another, as likely, but somewhat disputed argument is the assertion that jobs entailing access to scarce consumer goods, in other words to pilfer from the enterprise, were the most popular ones. In an economy of persistent scarcity, gains from pilfering would far exceed any advantages from increased wages, within the narrow limits set by the

centrally determined wage scale. There is an anecdote that by order from Joseph Stalin, wages for shop clerks were set extremely low, as these would only steal the shop's goods anyway! Thus, shop clerks were actually expected to pilfer, and were in fact left with no other alternative.

In the post-war period, the wage formation system changed in some important respects: Mainly due to the (largely artificial) manpower shortage in the Soviet economy, it became difficult to keep minimum wages down, particularly for unskilled, but unattractive and arduous labour tasks. Even if this was ideologically anathema, it was an expression of the influence of supply and demand in the labour market. The labour market was also pressed from the other direction, as the rapid expansion of the educational system produced a high number of skilled persons for a limited number of job opportunities. The wage formation system gradually yielded to this pressure, causing wage differentials slowly to decrease. The ratio of the top to the bottom deciles of the wage distribution fell from 7.2 in 1946, to 3.2 in 1966, and to 3.0 in 1990. This process slowly eroded the role of wages as an incentive in the Soviet economy (Shcherbakov 1991, pp. 228-229).

At present, also due to the very high level of inflation, wage controls from above have become difficult, even if attempts of control are made by means of the the taxation system, forming the key instrument of governmental incomes policy.

Perks and privileges

The full extent of the privileges awarded to the *nomenklatura* (top party leadership) will probably never be known. The practice of granting such privileges turned the model country of social classlessness into a highly differentiated society. It should be noted, however, that the various benefits granted to Communist Party officials very rarely had the character of property. Chauffeured cars, country estates, large flats, etc. were only given for the use of the recipient as long as he or she remained in position. Thus, such privileges were not given as a reward "according to work", but rather according to loyalty to the Party. Even prior to the abolishment of this system of privileges, the identity and number of beneficiaries of such privileges were always a secret. As for "shadow" incomes, a measurement design of the type used in this study is not likely to register fully neither the extent of the system of privileges, nor the effect of the same on present levels of

welfare. Consequently, the figures presented below should be regarded as relevant mostly for the traditionally unprivileged part of the population.

Wage formation today

As of today, there seems to be two major mechanisms for determination of wage levels, as central wage controls have all but collapsed in the face of inflation and general economic disorder. Firstly, there is the method of *local negotiation*, known from Western countries, in which local trade unions on a quarterly basis negotiate with plant managements for pay raises, set mainly in accordance with the wage-paying capabilities of the enterprise. This method is applied both within large state-owned, as well as in small private or co-operative enterprises. Secondly, in other parts of the state enterprise system, like schools, hospitals, administration, scientific institutes, or other institutions which do not themselves accumulate any profits, a different practice is applied. In such organisations, which are directly dependent on state subsidies, the battle for inflation-beating pay raises takes the form of a struggle for distribution of the increasingly scarce funds available. This phenomenon has become so commonplace that a separate term has been coined for it; it is commonly referred to as "pulling the budget blanket over to your side". Simultaneously, wage raises are normally calculated as a coefficient, based on position in the wage hierarchy, as set by previous wage scales. This tends to preserve wage differentials to some extent.

Finally, there are several ways of analysing the wage structure of the Kola population. As indicated above, life and welfare among the population on the peninsula is heavily influenced by the nature and success of local industries, some of which may have higher wage-paying capabilities than others. Also, wage-paying practices may vary considerably between the state and the emerging private sector. Thus, it is the combined effect of different wage systems that yields an overall welfare distribution effect on the population.

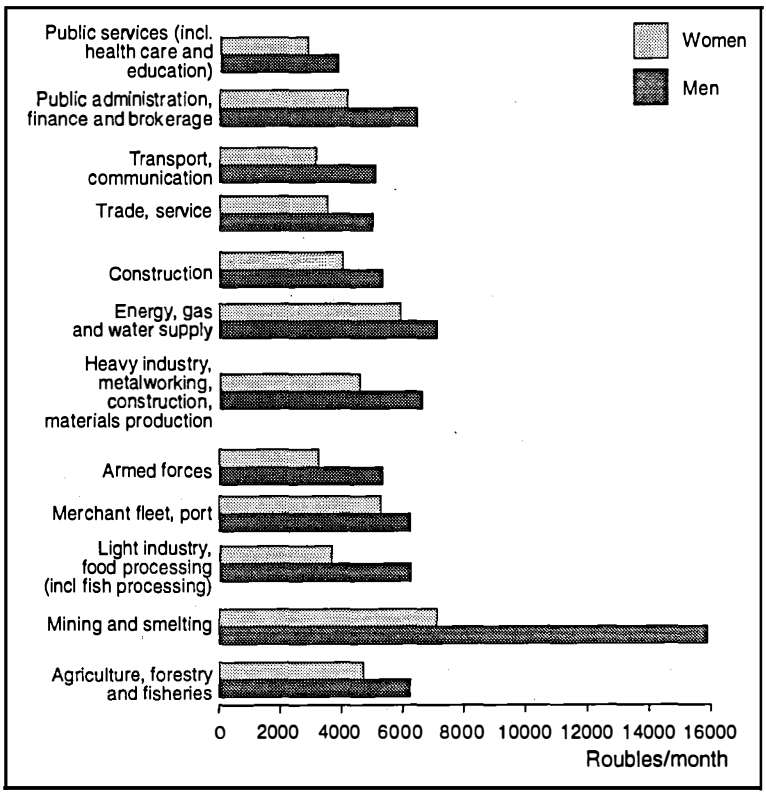
Wage distribution by industry

The state-owned industries dominate strongly in the industrial life of the Kola Peninsula. As described in the previous chapter, close to 80 per cent of the survey respondents stated that they were employed in

the state sector. The remaining 20 per cent were distributed among various types of private or co-operative enterprises, or were self-employed. The figure 7.1 below gives an indication of average wage level by industry sector, as of May-July 1992.

As can be seen from the figure, the absolute wage leaders are found in the mining and smelter industries. As indicated above, this can be seen as an effect of the wage-paying capabilities of these industries. They are export-oriented, and currently also free to charge the prices they see fit, according to the price liberalisation policies of the current government. Another aspect of this seemingly high-wage policy is found in the propensity to pay – in Russian terms – extremely high wages to workers who are willing to accept labour tasks which are dangerous or harmful. Most mines and smelter plants are poorly equipped with security equipment, furnaces are old and polluting, and

Figure 7.1 Wage level by industry sector, averages (Extreme values excluded; income from full time employment only)



Source: The Kola Peninsula Living Conditions Survey 1992

present in a majority of cases a harmful or hazardous work environment. These high wages are by workers and management alike regarded as compensation for health hazard. This practice is not a new phenomenon, but has been a part of Soviet labour life for many decades, as described in the previous chapter.

Another striking aspect of the wage distribution profile reported in figure 7.1 is the marked difference in earnings between men and women. Typically, women earn from 10 to 50 per cent less than men within the same industries. Simultaneously, the labour market is also gender segregated, demonstrating typically male and female sectors. Whereas mining and smelters are typically male domains, there is a clear majority of women in sectors like health care and education. These represent the bottom of the wage distribution, a pattern not unfamiliar from Western countries. Equal pay for equal work has been a principle in Soviet labour legislation since the consolidation of Communist power. However, such laws seem to have had only limited influence. The systematically lower wage level among women is associated with several factors. One is a general lower upward mobility for women in the administrative and industrial hierarchy, and consequently lower probability of finding women in higher positions. Another is various forms of gender discrimination, that in all likelihood exist in Russia as in other countries.

Hence, the public services sector (health care, education, culture, etc.) represent the bottom of the wage scale. Though, as can be seen from the figure, the mining and smelter sector stands out. All other industries have wage levels clustering more or less around the regional average. In the survey region, the mining and smelter industries are somewhat underrepresented in relation to the whole of the Kola Peninsula. It can therefore be assumed that for the peninsula as a whole, average wages will be correspondingly higher.

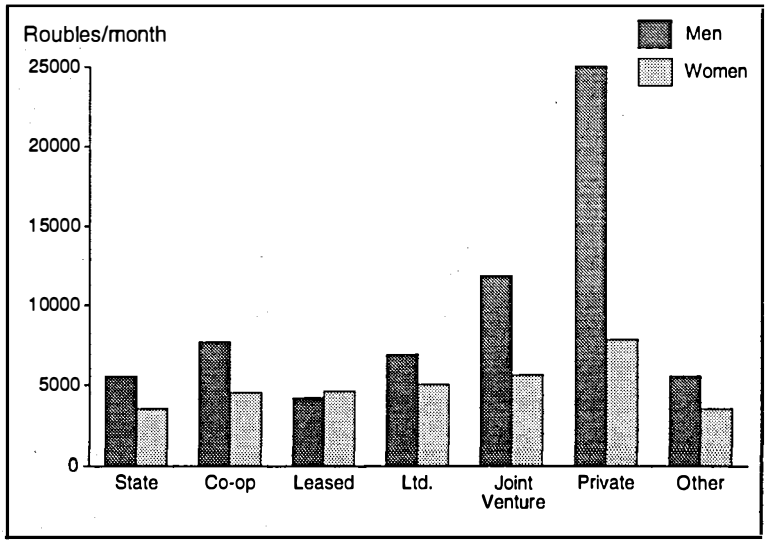
In Russia's transitional economy, other types of differentiating mechanisms can be found between the employees in the state enterprises on the one hand, and those in the emerging private sector on the other. It should be emphasized that the private sector still is very small, and only account for some 6 per cent of the total respondents in the present sample. These respondents are found in different types of enterprises, with a varying degree of private ownership. The first category of private business to be introduced in the USSR was the cooperatives, mainly concentrated in the service sector. Later forms to be introduced included the so-called "leased" companies. In these, the employees rent an existing facility from the state for a fixed sum, and

are then free to run it at profit. Other types introduced are shareholding companies and private enterprises in the proper sense. Joint ventures, involving a mix of Soviet – later Russian – and foreign interests were also introduced at an early stage. Figure 7.2 Wage distribution by company type

A general tendency in figure 7.2 is that the higher the degree of private ownership, the higher the wages of the employees. At the top of the list, we find the private businesses proper, followed by joint ventures and shareholding companies at a distant second and close third. Gender differences in wage level are just as marked in the private sector as in the state counterpart, reflecting that the majority of leading positions also in this sector is occupied by men. At the bottom, the leased companies are found. This company type have not been widespread, and did never achieve any significant popularity. The low wage level in these companies may be a reflection of the fact that the state-owned enterprises often lease out their less profitable parts. However, it should be noted that the number of observations of employees from various types of private companies is limited, and one should therefore be careful not to draw any final conclusions.

Another differentiating factor with respect to wages is *education level.* In the USSR, higher education was an absolute requirement for

Figure 7.2 Wage level by company type



Source: The Kola Peninsula Living Conditions Survey 1992

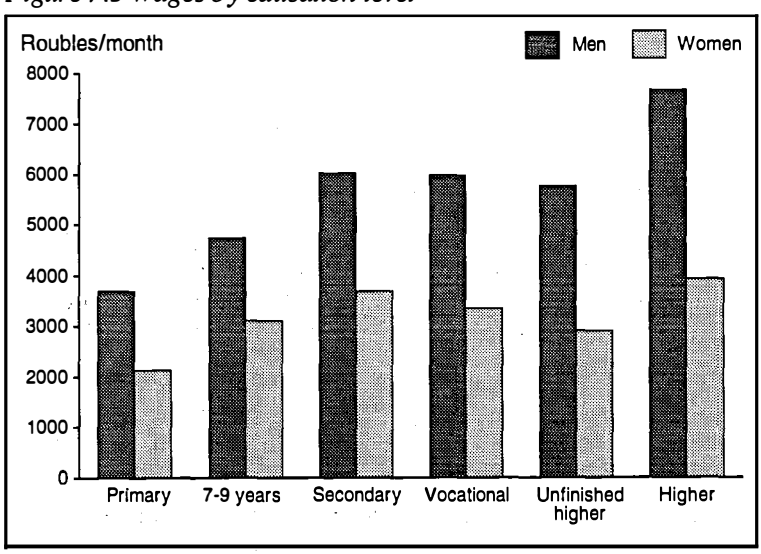
candidates to higher positions in industry. In all cases, wage standards were set by a centrally determined regulative, giving detailed amounts for each job category.

As can be seen from figure 7.3, the effect of education on wage level differs according to gender. For men, education has an effect on wage levels, as higher educated men earn systematically higher wages than those with less education. This is not very surprising, as this pattern can be expected to be found in most countries.

For women, on the other hand, education seems to have little effect on wage level, as the differences in wage incomes between educational groups are nearly negligible over all categories. In other words, women receive very little, and even less than men, in money terms in reward for having higher levels of education. Thus, women seem to lose in both ends of the education scale: unskilled female labour is also low-pay, as the high-pay section of the unskilled labour market is dominated by typically male sectors, like mining, etc. Unskilled or low-skilled female labour dominate in sectors like trade and services (low-pay), semi-skilled and skilled female labour are prevalent in low-paying sectors like food-processing industries, health care and education.

Moreover, this pattern of gender segregation in sectors with systematically varying wages can be further illustrated by including

Figure 7.3 Wages by education level



Source: The Kola Peninsula Living Conditions Survey 1992

the regional dimension in the analysis. This connection between gender, education and income varies over the survey area. The effect of education on income (i.e. higher educational categories being associated with higher income) is strongest in Murmansk. In Nikel, the effect of education on income is negligible, whereas the gender difference is systematic. This is evidence to the concentration of skill-intensive industries in Murmansk, as opposed to the dominance of the high-pay, but predominantly low-skill mining and smelter sector in Nikel.

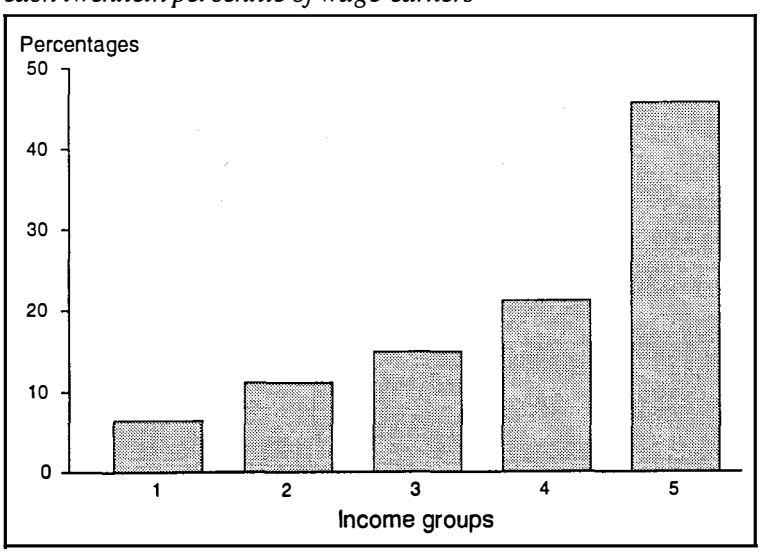
Wage distribution profile

The combined effect of all the wage determinants described above yields a wage profile for the Kola population. A standard manner of regarding wage distribution is to examine distribution skewness, i.e. the equality of distribution of wage earnings among the population. Figure 7.4 describes the wage level for each twentieth percentile of the population, meaning that the population is divided into five groups of equal size, ranked from the lowest-earning to highest. The outer left column describes the percentage of total wage payments received by the lowest paid 20 per cent of the population, followed by the percentage for the next 20 per cent, etc. In a totally uniform distribution, i.e. if everybody received the same wages, we would expect the columns to be of equal size, with each 20 per cent of the population receiving 20 per cent of the total wages. As can be seen, this is far from the case. On the contrary, the figure suggests a rather uneven distribution of wage incomes, and the lowest paid fifth of the population receives only about 7 percent of the total payment stream. At the other extreme, the highest paid fifth receive just over 45 per cent of total payments, with the three intermediate groups ranging from 11 to 23, i.e. clustered somewhat below the expected mean. In other words, the best paid fifth receive nearly six times as high wages as the lowest fifth. This seems like a very substantial difference, but is probably not very much higher than in most Western countries, even if wage differences in Western countries are rarely as dependent on industry sector, and more correlated to education and type of profession. In Russia, wage differentials between men and women are most marked in typically male domains, whereas in typically female domains, gender differences tend to be less pronounced, and wages generally low.

As can be seen, wages are to some extent (for men) correlated with education, but even more to industry sector, type of company and gender. The high incomes are, as we have seen, found in the mining and smelter sector, in private businesses and primarily among men. The influence of industry sector on earnings is further demonstrated by the fact that women employed in the mining/smelter sector earn more on average than men in all other sectors.

As mentioned above, a deciding characteristic of wage earning profile is assumed to depend on the nature of the local industries. Therefore, earnings may vary considerably according to region. As this survey encompasses three separate regions, each with their specific characteristics, it is interesting to investigate the distribution of wage earnings across the different regions. In figure 7.5 below, we have summarised average earnings according to these regions. Murmansk city is a fairly well developed industrial centre, with a varied industrial life, demonstrating a broad spectrum of manufacturing a service industries. Severomorsk on the other hand, is almost exclusively a military settlement, with a minor civilian population, chiefly in the service industries. Finally, Nikel is totally dominated by the nickel smelter plant, providing employment to nearly the whole population.

Figure 7.4 Wage distribution; per cent of total payment stream by each twentieth percentile of wage-earners

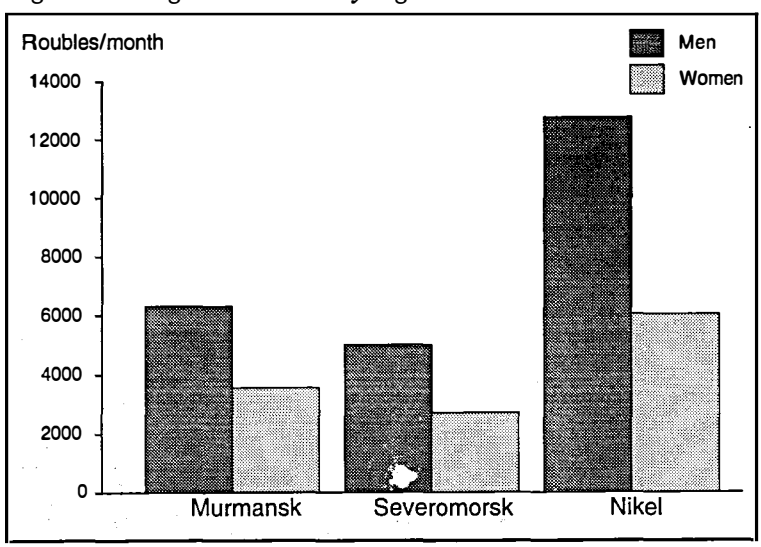


Source: The Kola Peninsula Living Conditions Study 1992

Not unexpectedly, wage earnings are highest in Nikel, providing further evidence to the predominance of the metallurgical industry. In this region, more than 25 per cent of the respondents stated wage incomes of 10.000 rubles per month (i.e. approximately twice the average) and over. At the bottom, we find Severomorsk, quite well below the average for the population as a whole. Here, only 1 per cent of respondents indicated wage earnings of more than 10.000 rubles per month.[1] Murmansk, with its diversified economy, is close to the average. It should be added that the average figures tend to veil the obviously large variations in income observed over the Kola population. Typically, Nikel has not only the highest average wage level, but also the largest variations.

Finally, it is often revealing to investigate the age-earnings profile of the population. This is an expression of the wages earned by each age group within the working population. There are three basic approaches to the study of wage differentials between age groups. Firstly, the observed pattern can be interpreted as an expression of the incomes earned by an employee over his or her lifetime (the "life-cycle effect"). Secondly, differentials can be interpreted in a generational

Figure 7.5 Wage distribution by region



Source: The Kola Peninsula Living Conditions Survey 1992

1 It should be added that wages for military personnel were raised considerably after this survey was carried out, bringing incomes of military officers close to the industrial average.

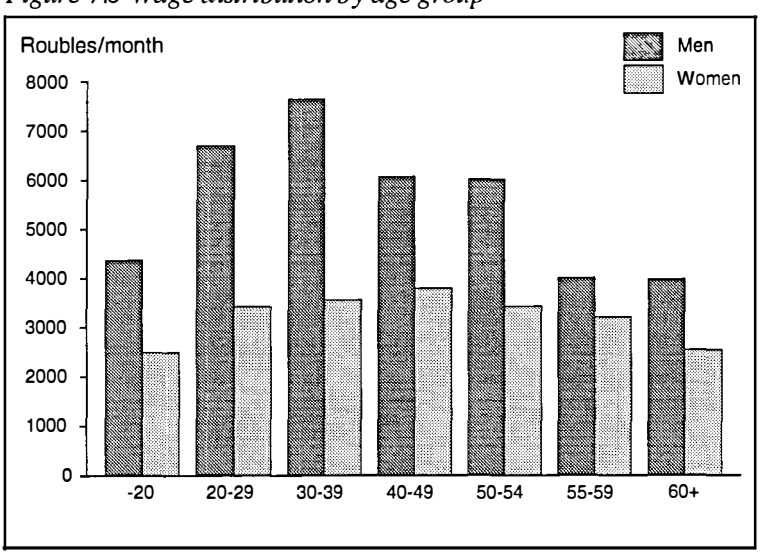
perspective, as each new generation faces opportunities and obstacles not encountered by their parents (the "generation effect"). Thirdly, differentials can be expressions of short-term variations in economic opportunities, unequally affecting different age groups (the "period effect").

In figure 7.6, average monthly earnings among full-time employees, excluding the most extreme income variations, are computed.

The pattern appears roughly as expected, though with some modifications. Men in the age groups 20 to 40 years are the absolute leaders in terms of income. Variations within this group are considerable, as the bulk of the relatively low-paid military officers is found here, as are a significant part of the high-paid miners. In the following age groups, incomes remain stable at a lower level until the pre-retirement age group, where it drops to the same level as for the very youngest group.

Women, on the other hand, have a considerably flatter age-earnings curve. This is probably due to the coincidence of the first stages in labour life with childbearing and -rearing. In this period, women lose a formative career period, which is never regained fully later. Though significantly lower than for men, the wage level for women also remains stable over the middle age groups until retirement (at 55 years). As can be seen, however, many women continue in the

Figure 7.6 Wage distribution by age group



Source: The Kola Peninsula Living Conditions Survey 1992

labour force even after retirement age, though at a lower labour intensity.

In addition, these gender differences in age earnings can probably be partly explained by the combined influence of several of the effects described above. Firstly, the predominance of male labour in high-paying sectors also unequally affects different age groups. Secondly, younger employees tend to be more mobile than the older, and hence more able to shift into higher-paying jobs, e.g. in the private sector, which is dominated by the younger generation. Thirdly, as seen above, men are more able than women to capitalise on their education.

Hard-currency wages

It is sometimes reported that the real upper class in Russia today are persons who receive all or part of their wages in hard, convertible currency. For an individual, to hold foreign cash provides many obvious benefits. Firstly, it is an inflation-resistant medium of value storage. Secondly, the value of the rouble in relation to most convertible currencies has over the last year deteriorated faster than inflation, actually making the currency increase in value with respect to the rouble. Thirdly, foreign cash gives entry to the currency shops, providing a stable, permanent and mostly queue-free supply of consumer goods of high status value. Fourthly, some services, like e.g. foreign travel, are in most cases only available through full or partial payment in convertible currency.

On the other hand, the practice of paying wages or benefits in foreign currency has until today taken place in a legal vacuum. It is not specifically illegal, according to present legislation, but neither is it specifically stated to be legal. Consequently, this practice is often unregulated. Further, present taxation rules stipulate a punitive tax on wage increases beyond a narrow limit set by the authorities. The constant increases in the value of a currency wage packet in rouble terms would consequently be subject to a heavy tax, and therefore, most of these payments take place in cash, and probably remain unregistered.

Among survey respondents, approximately 2,5 per cent of those permanently employed stated to receive some kind of wage payment in currency, which is roughly equal to estimates from other major cities. The amounts reported varied strongly, from around USD 20 to several thousand. It should be borne in mind that at the rate of exchange

prevailing in the first months of 1993, an average wage packet of 5.000 roubles was worth approximately USD 10.

The majority of the currency-eamers are found in the fisheries, the merchant fleet and the mining sector, but even some civil servants and army personnel stated to receive considerable currency wage incomes. This practice seems to be rather unsystematic. However, it is likely to have a major effect on overall welfare levels for those concemed. Still, survey figures suggest only a very small minority as beneficiaries of this practice.

Chapter 8
Consumption patterns

The price reforms of 1992 did to some extent bring goods back onto the shelves of Russian shops. However, the situation on the consumer goods market in Russia is still characterised by scarcity.

During the Soviet years, visitors to Russia often struggled to understand an obviously bewildering paradox: When shops were totally empty, from where did people acquire their necessary groceries and durables? A cursory look into a Soviet grocery store might convey the impression that the country suffered from widespread starvation. Looking at people in the street, this seemed not to be the case.

In Russia today, the paradox looks somewhat differently: When soaring inflation and economic disorder have left many people's incomes close to valueless, how are they able to buy their daily necessities?

In order to get an understanding of both these phenomena, one needs to delve somewhat deeper into the non-market characteristics of former Soviet, as well as present Russian, distribution systems.

In Soviet times, shops were never market institutions, but served simply as points of distribution. Prices were set centrally, and their purpose was to meet planned financial balances and to transfer income. Usually they did not reflect any resource scarcity. In practical terms, this meant that concepts like supply and demand, or even cost of production, were largely irrelevant to planning. Combined with a steadily increasing purchasing power in the population (the so-called "rouble overhang"), this resulted in the notorious queues, as prices to a large extent became irrelevant for the consumers, too. Availability, and willingness to wait in hour-long queues, more than prices regulated demand. In other words, because of persistent scarcities, consumer goods had a value over and beyond the governmentally regulated price.

Additionally, it should be borne in mind that shops were only one of several channels of distribution. In response to the shortages created by deficient production, insufficient transport systems, and inefficient

distribution at the outlets, alternative systems for allocation of consumer goods to customers were introduced. These systems were partly defined by workplace attachment, and partly based on criteria like professional, wartime and political merit, or the social position of families.

In the Soviet period, a three-tiered system for distribution of consumer goods was established, parts of which are still in function.

The first tier still exists, and consists of the ordinary retail outlets; both state-owned and private. The retail system is presently in the process of privatisation. At the time of the survey, though, the state-owned shops were still dominating, accounting for an estinmated 85 per cent of retail turnover, for all types of commodities. In these outlets, prices were at the time of the survey still regulated to a certain extent, as price increases were subject to state approval. Private trade, on the other hand, is concentrated in two market segments. Firstly, foodstuffs from private plots of land, sold on the kerbside from trucks or on the organised markets. In Soviet times, these plots of land accounted for some 3 per cent of the total cultivated land, but represented approximately 30 per cent of the total agricultural output (Goldman 1991, p. 77). This was due to higher yields, as well as to less wastage in transport. Also, low air fares on internal flights in the USSR made it profitable for traders from the southern republics to travel to cities like Moscow or even to distant Murmansk with bags of locally grown fruit and vegetables, and still earn a nice profit. Today, private agriculture is increaseing, although at a slow rate. Secondly, private trade is evident within some other commodity groups which traditionally presented bottlenecks in the Soviet distribution system, in particular clothing, footwear and luxury items. The latter group comprises e.g. consumer electronics, wines and spirits, tobacco, perfumes/toiletries and other high-value added items. In addition, price differentials between the state and private sectors gives rise to a significant amount of unproductive rent-seeking.

In private outlets, price levels tend to be higher than in the state sector, as the former are more responsive to demand. Also, because many traded goods are imported, prices are sensitive to exchange-rate fluctuations between the rouble and other currencies. Consequently, the average citizen tends to avoid the private retail sector if possible. Instead, he or she covers basic demands from the state-owned shops, and use the private sector for complementation only.

The second tier, also still in existence, consists of non-market distribution channels, based on workplace attachment. Many large

companies practice so-called "foodstuffs orders" (*"prodovolstvennye zakazy"*), meaning that employees can place orders for foodstuffs or other goods with the company, which acquires commodities at option exchanges. Employees subsequently receive these at favourable conditions, instead of partial wages, or in addition to wages. This system, inherited from the USSR, is still in existence, and quite widespread. It seems, however, as if these channels are slowly moving towards market conditions, gradually equalising price levels with those in the state shops. In the survey, an attempt was made to assess how widespread this system is, and also to judge its welfare effects.

Access to this system is obviously dependent on having an attachment to a workplace. In other words, the non-working population, mostly pensioners and invalids, is excluded from it. These, on the other hand, have often access to the so-called "orders` department" (*stol zakazov*), catering for selected groups, like war veterans, the handicapped, and child-rich families. Such departments are often located in a corner of big state-owned department stores, and distribute goods not on display, and not available to the general public. This practice is traditionally part of the general social welfare benefits system. Prices in these transactions are not market oriented, but take place at the governmentally regulated level, though with no discounts. This system is thereby of some importance in situations of scarcity, as it frees pensioners and invalids from the ordeal of queueing for hours.

The third tier previously consisted in the peculiarities of Russian shopping behaviour, and in the family- and network-based features of welfare distribution. Under the command economy order, availability, more than price, was decisive for a purchase decision, and shoppers tended to buy a lot more than they themselves or their families actually needed at the moment. The maximum limit to purchase was often determined by the physical load the shopper was capable of carrying home. The obtained goods could then either be exchanged with complementary products among relatives, neighbours or colleagues, traded for services, or hoarded/stockpiled. Also, other scarce goods, like books, theatre tickets, clothing, household appliances, etc. were normally widely exchanged in the family or workplace network, to compensate for rigidities in the official system. This tier was consequently not only non-market, but in most cases also non-monetary. As Russia at present is in the process of developing a proper money economy, and price levels increasingly do reflect resource scarcity, this tier seems to be rapidly vanishing. Excess purchasing is becoming an impossibility for the majority of the

population, who is left to struggle in order to make ends meet at current incomes. On the contrary, on the streets of Russian cities, pensioners and housewives selling household items, previously hoarded goods and sometimes even family heirlooms in an attempt to reconvert these into desperately needed cash, have become a familiar sight.

To complement these established patterns, some other innovations have become commonplace, sometimes aimed at finding ways round the recently introduced income taxes. In principle, the tax system, being the key element in governmental incomes policy, is simple. Any wage increases beyond a governmentally stipulated level is subject to a punitive tax, of up to 60 per cent, perceived as necessary in order to prevent hyperinflation. However, all benefits of a social welfare character are exempt from taxation. Many companies therefore choose to give their employees wage raises in the form of vouchers or coupons, and term them "subsidy for food" or similar. As described above, paying wages in benefits, rather than in money, has been an established practice for many decades. In currency-earning companies, these vouchers are sometimes issued in currency equivalents, and are more or less grudgingly accepted by currency shops. Export revenues are divided equally between the exporting company and the county authorities, under the condition that the companies spend the currency within "the social sphere". Employees often have a certain influence on spending decisions, partly through the Council of Employees (Castberg 1992, p. 78). Imports of both foodstuffs and consumer durables to the region have apparently increased over the later years, as the county administration itself, as well as individual companies have received the right to dispose over currency revenues generated locally. Imports made directly by the companies themselves have been distributed to employees, on occasions decided by drawing of lots. (Castberg 1992, p. 80). Imports of foodstuffs is not a new phenomenon on the Kola Peninsula; the first commodities to cross the Norwegian-Soviet border in 1983 was a batch of Norwegian salami sausage. (ibid., p. 77).

Other factors also contribute to this shift to benefits as a substitute for wages. One is inflation, the level of which over the last year has been around 100 per cent per month, reducing the real value of incomes by half each month. Further, because scarcities of consumer goods persist, increasing salaries in rouble terms alone provides little material incentive for workers to keep deadlines and quality requirements, both crucial for exporting companies. This type of payment in

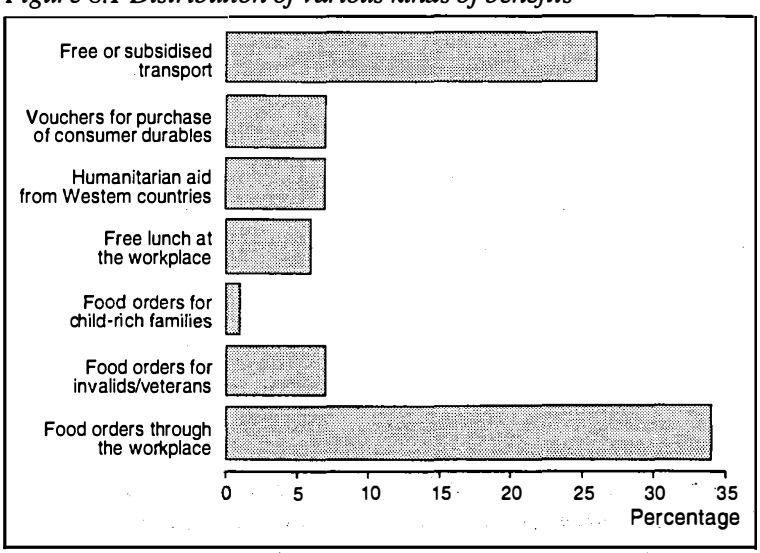
kind, comprising coveted imported goods, is therefore seen as a more efficient incentive for productivity.

On the other hand, it has been argued that the replacement of wages by benefits is likely to damage productivity growth in the long run, as wages have proved more efficient as a general productivity stimulant in both Western and other Central Eastern European countries. Estimates indicate that in Russia in the early 1980's, material benefits accounted for approximately 25 per cent of wages by value, which is more or less equal to average Western levels. This percentage seems to have increased in the subsequent years, particularly in the large enterprises, even if variations between enterprises are substantial. (Standing 1991, pp. 251-252).

This unevenly distributed capability among enterprises to provide non-wage and material benefits creates variations in the consumption pattern over the survey region. It appears that Nikel (together with the mining towns Monchegorsk and Olenogorsk, both utside the survey region) has an overall better supply situation than the other two sub-regions covered by this survey, due to the currency-earning capabilities of the local enterprise.

Figure 8.1 shows the frequencies of various fringe benefits and other sources for consumer goods through the workplace or public facilities

Figure 8.1 Distribution of various kinds of benefits



Source: The Kola Peninsula Living Conditions Survey 1992

As can be seen, the distribution of foodstuffs through the workplace is the most common form of fringe benefit, enjoyed by around 30 per cent of the population. In terms of welfare effect, however, this opportunity is unevenly distributed. In the lowest income group (the lowest paid fifth of the wage-earners) only 16 per cent reported to use this distribution channel. Among the top wage earners (the highest paid fifth), on the other hand, 46 percent of the respondents reported to have access to this channel. This uneven distribution is explained by the fact that the most profitable enterprises also possess resources to engage in this type of benefits distribution. In other words, those who receive the highest pay, also receive a higher proportion of the benefits, adding to the already strongly skewed income distribution. However, closer investigation shows that there are regional variations in this pattern. The overall distribution of this benefit is dominated by Murmansk, where a majority of recipients is found in the high-income groups. In Nikel, the pattern is reversed, and a majority of those reporting to benefit from food orders are found in the low-income groups. This is in all likelihood a result of policies pursued by the dominating enterprise, paying higher wages instead of material benefits.

The second group, food orders for invalids or veterans (both war veterans and work veterans) is enjoyed by a relatively small group, as this group probably not is very numerous. The same is the case for child-rich families, of which there in fact are only few in the region. Free lunches at the workplace is received by only 6 percent, including the military. Further investigation shows, however, that this figure is higher (11 per cent) for those employed in the armed forces, but still lower than what would have been expected.

Humanitarian aid from Western countries has reached around 6 per cent of the respondents. Vouchers for purchase of consumer durables, also distributed by the companies, have been received by around 9 per cent. In the survey, the question was related specifically to vouchers, which are normally valid for purchases in local shops. There have been instances where companies have distributed consumer durables directly, or through the drawing of lots, as mentioned above. However, this practice was not – at the time – considered sufficiently widespread to justify inclusion in the questionnaire, and has probably only a minor influence on overall welfare levels. Finally, as many as 23 per cent of the respondents stated that they receive free or subsidised transport. In general, public transportation has so far been very cheap in the USSR/Russia, and the cost of providing

transport subsidies have probably been small for the companies. On the Kola Peninsula, the transport infrastructure is yet little developed, and the transport referred to by respondents are probably in most cases company buses, ferrying workers to and from work. It can be assumed that employees who live far from their place of work otherwise would experience some problems in getting to work in the morning, and back home in the evening.

Stockpiles and hoarding

Due to the erratic pattern of availability of commodities in Soviet shops, purchases for stockpiling and hoarding for later use have always been prevalent. Hoarding behaviour was particularly evident in the last months of 1991, immediately before the announced price liberalisation on January 1st 1992. Though, at the time of the survey (summer 1992), a significant number of households stated that they possessed stockpiles of some volume, and of some kind. Table 8.1 shows the percentage of respondents who answered that they had some kind of stockpiles of the given items.

Typically, approximately two thirds of the population are in possession of stockpiles of some kind of commodity, even if there might have been varying interpretations of what is to be counted as stockpiles. Also, one third of the respondents states that they do not have any goods hoarded for later use, meaning that they have to live only on current incomes. The existence of stockpiles is in itself a mechanism of adaption, as it "softens the blow" of sudden price increases, and provides some temporary relief until the household can adapt and adjust. It should be noted, however, that a majority of respondents stated that their stockpiles had been drawn consistently

Table 8.1 Possession of stockpiles of food, etc. Percentages

Item	Yes	No	Hard to say
Foodstuffs	68	30	2
Medicines	60	36	4
Clothing	63	33	4
Footwear	61	35	4
Consumer durables	56	36	8

Source: The Kola Peninsula Living Conditions Survey 1992

down over the last six months. The adjustment effect of these stockpiles is therefore expected sooner or later to be exhausted. Price increases had evidently made hoarding less possible over the months preceding the survey. On the other hand, perceived availability of commodities have obviously increased. Table 8.2 shows how the shortages within various commodity groups are perceived to have changed over the six months preceding the survey, i.e. since January/ February until June/July 1992.

It should be emphasised that this table reflects the *perceived* development of shortages, and not necessarily real development. Perception of a shortage will be dependent on many factors, such as wage level, opportunity or willingness to stand in queues, consumption preferences, etc. The quoted figures still give an impression of how people in general perceive the situation on the market for consumer goods. Hence, it is to a certain extent an indicator of the degree of material satisfaction. Though, even if shortages have decreased, i.e. availability has improved, this does not necessarily mean that consumption of a given item has increased, as price levels at present regulate consumption more than availability alone. This change to price as a regulating mechanism has resulted in Russians being forced to learn new patterns of consumption behaviour, as prices previously were largely irrelevant for a purchase decision. Needless to say, the price increases have – not unexpectedly – been received with a fair amount of bitterness and resentment among the population.

Table 8.2 Perceived development of shortages

	Shortages have			
	Decreased	Increased	Remained unchanged	Hard to say
Meat	52	26	16	4
Milk	50	23	21	4
Vegetables	24	50	22	5
Bread	29	25	40	4
Tobacco	26	48	11	12
Wines/spirits	33	41	13	11
Clothing	32	41	16	9

Source: The Kola Peninsula Living Conditions Survey 1992

Availability of services

The personal service industries were never well developed in the USSR. Often, services had to be bought through bribes or "gifts", or through the network of personal contacts. As regards social services, as schooling, health and holiday facilities, the fact that these most often were organised through the enterprises implied that these and other services remained tied to the minimal levels required for industrialisation, and thereby less responsive to the needs of wider social development. Further, continuing low wages have discouraged investment in those sectors. (Standing 1991, p. 247). As demonstrated in the chapter on incomes, the service sectors, as trade, health and education, are close to the bottom of the wage distribution, and this has also served to restrain skill development.

The general state of the service sector is further illustrated by survey responses to a question concerning the perceived availability of personal services at the time of interviewing compared to six months ago. Answers were distributed as shown in table 8.3.

As one can see, there are large variations in the manner in which people perceive the availability of personal services. The main determinant for such perception is obviously whether the respondent has actually wanted the service in question over the last six months, and whether the services mentioned in the questionnaire apply to the respondent; e.g. in general, only car owners will actually search for car repair services. Previous patterns of low consumption of services also obviously influence the propensity to demand services, as the service sector always was a weak part of the Soviet economy. As in the case of consumer commodities, the lack of an open market mechanism also results in the population having very fragmented actual knowledge of

Table 8.3 Perceived availability of personal services

	Easier, but costlier	Just as hard, and costlier	Hard to say
Car repair	10	23	64
House repair	20	47	33
Furniture repair	15	36	49
Tailoring	42	37	20
Dry-cleaning/washing	40	25	35

Source: The Kola Peninsula Living Conditions Survey 1992

definitive price levels. This is reflected in the high percentage of "hard to say" answers.

Generally, though, it seems as if current reforms have had more success in the consumer goods and commodities market, than in the market for consumer services. Another factor in this connection is the structure of household expenditures, where foodstuffs occupy a very major position, thus leaving very little room for services, clothing and durables. We will examine this composition of expenditures below.

Household expenditure patterns

Given the present state of the Russian economy, an assessment of a reasonably accurate poverty line, stated in terms of income, is difficult indeed. This is firstly due to present levels of inflation, of up to 100 per cent per month. Secondly, the influence of non-market features of both wages, benefits and distribution will tend to distort estimates based solely on family income.

One might, however, receive a rough estimate of family welfare by looking at the share of family incomes which is spent on purchase of foodstuffs. In figure 8.2, an attempt has been made to assess the average percentage of household incomes which is spent on purchase of foodstuffs, as well as the variations of this percentage among income groups. The figure shows the average figure in each group.

The question was worded in the following manner:

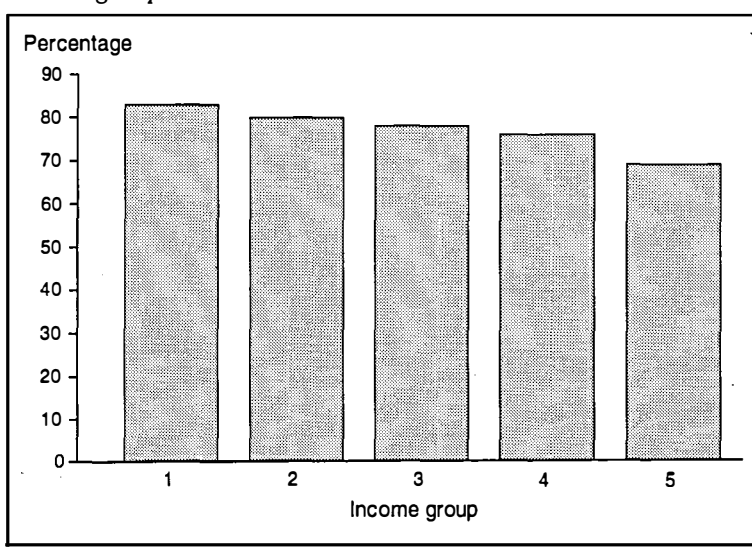
> "Approximately what percentage of your household budget is spent on foodstuffs?"

Thus, we see that foodstuffs occupy a dominating position on household budgets. On average their share amounts to around 75 per cent of household incomes. However, there are particularly large margins of insecurity attached to this figure, and it should be regarded as a rough estimate. Part of this expenditure may be due to hoarding. Some statements may be more or less correct, incomes may have changed over the period asked for, stockpiles may have been drawn on, or there may have been seasonal variations in the supply situation. Still, the data presented are in general fairly consistent with data from the earlier Moscow and St. Petersburg surveys, and by and large seem to reflect reality. Further multivariate analysis shows that although income level is the strongest predictor of answers to this question, age as well as region have a significant impact. Older people report to spend a higher proportion than young, while people in Nikel, where

incomes are higher, quite expectedly report to spend a smaller share than those in Murmansk and Severomorsk. One possible interpretation of this finding could be that young people and those in more affluent environments are less inclined to hoard, maybe reflecting a more optimistic attitude on their part.

One might add that in Russia, housing normally is still close to free of charge, just as are items like local telephone calls, heating, gas and electricity. These items are therefore so far no big load on household budgets, even if they are likely to become so in the not-so-distant future. Expenditure for food therefore occupies a similar, though somewhat higher place on household budgets than housing generally do in the Western countries, where it often consumes from half to three fourths of household incomes. This is not to say that living standards on the Kola Peninsula are comparable with these of Western neighbouring countries. The point is that the share of expenditures for food is the one factor which determines poverty levels, much in the same way as increasing housing costs have created a class of "new poor" and "debt victims" in several Western countries.

Figure 8.2 Percentage of household budgets spent on foodstuffs, by income group



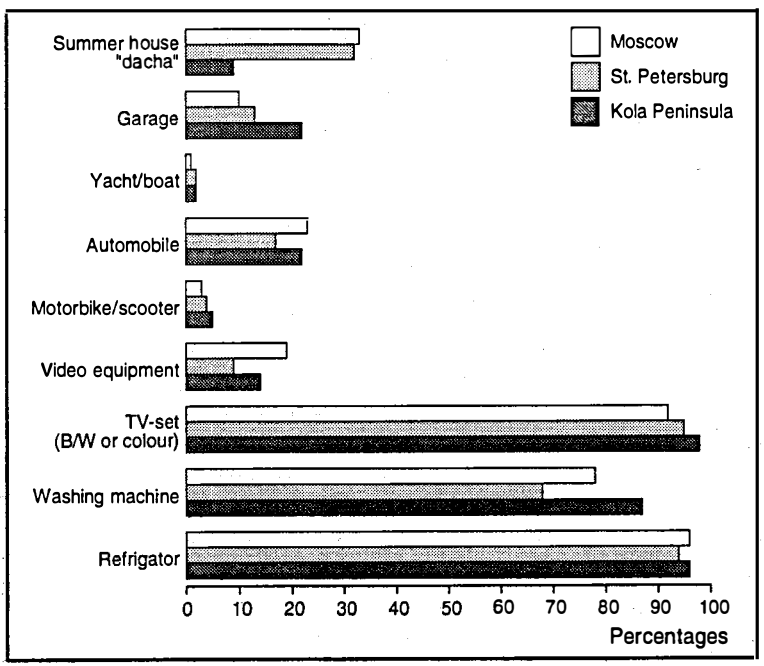
Source: The Kola Peninsula Living Conditions Survey 1992

Durable consumer commodities

In Western countries, presence in the household of capital goods, like cars, yachts, VCRs, etc. are normally taken as an indication of wealth. It is assumed that in order to amass the capital required for purchase of investment items or expensive appliances, a family must have had a stable, orderly economy, providing for a spending surplus. In the USSR/Russia, however, this is mostly, but not always, the case. Goods were never distributed according to market principles, but to a significant extent by central regulation and privilege. Secondly, the presence in a household of previously amassed wealth is not necessarily indicative of present welfare levels, as households are unequally affected by inflation and general economic disorder. This taken into account, the distribution of ownership of selected types of capital goods in the sample turned out as described in figure 8.3, where data from St. Petersburg and Moscow are included for comparison.

Generally speaking, the Kola Peninsula compares favourably with the two major cities in Russia with respect to ownership of capital

Figure 8.3 Ownership of durable consumer commodities



Sources: The Kola Peninsula Living Conditions Survey 1992, The Moscow Living Conditions Survey 1991, The St. Petersburg Living Conditions Survey 1991

household goods. Car density is nearly equal to that of the capital city. For most household appliances, the Kola Peninsula is on equal level with or above the central Russian cities. One exception is summer houses, though the low rate of ownership of country cottages is easily explained by the short summer season, and the propensity of inhabitants to spend their vacations in the south of the country, rather than in the Kola tundras.

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LIVING CONDITIONS ON THE KOLA PENINSULA

This report summarises the results from the Kola Peninsula Living Conditions Survey, which was carried out in the summer and autumn of 1992. This was the first time that a living conditions survey based on Scandinavian methodology was carried out on the Kola Peninsula, a fact which would have been unthinkable only very few years back. This is in itself evidence to the changing climate of cooperation in the European North, where the social challenge has replaced former Cold War lines of division.

This report presents a snapshot of life on the Kola Peninsula in the midst of economic and political reform. Based on a representative sample of the adult population from 1992, it is a baseline study that captures the conditions and variations in social and economic life along dimensions as population, health, education, housing, employment, consumption and income and economic resources. The report describes both the historic background and the roots of the present welfare distribution, as well as the economic structures and practices which have emerged after the demise of the Soviet Union and the command economy order.

The survey was carried out in cooperation between FAFO and the Moscow-based Russian-Norwegian Social Technologies Company (SOTECO). The following persons have participated in the survey: Erik Hansen, Project Director, Researcher and report author, FAFO; Professor Knud Knudsen, Special Advisor and Associate Researcher, FAFO; Steinar Tamsfoss, Advisor, FAFO; Vyatcheslav V. Soptsov, Advisor, SOTECO; Vera G. Kopnina, Advisor, SOTECO; Mikhail M. Lokshin, Computer Operator, SOTECO; Norair T. Pakhchanyan, Computer Operator, SOTECO; Marina V. Panfilova, Assistant, SOTECO.

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