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#### ECONOMIC COMMITTEE

#### AND MANPOWER POLICIES AND TRENDS IN EASTERN EUROPE AND THE SOVIET UNION

#### Note by the Chairman

This document is the outcome of the reinforced meeting on population trends in the Soviet Union and Eastern Europe which the Economic Committee held on 13th and 14th May, 1976. It incorporates conclusions which emerged from the discussions and takes account of information sent in by several delegations for the meeting, as well as of comments made on the initial version of the report.

This is an information document; the data it contains can be used by the Committee for other studies.

(Signed) J. BILLY

NATO, 1110 Brussels.

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## DEMOGRAPHIC AND MANPOWER POLICIES AND TRENDS IN EASTERN EUROPE AND THE SOVIET UNION

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This study on population and manpower policies and trends deals first with the Soviet Union and then with the East European countries.

## I. SOVIET UNION

## A. <u>Demographic trends</u>

- 1. On 1st July, 1975 the population of the Soviet Union stood at 254,462,000 and it is expected to reach 312,215,000 in the year 2000(1). Between 1950 and 1975 the population rose by 74,387,000 inhabitants but the increase during the last quarter of the century is expected to be no more than 57.7 million. The population growth rate has been dropping steadily for many years now. Whereas between 1950 and 1960 the average yearly rate of growth was around 1.8%, it fell to 1% a year between 1965 and 1970 and to 0.9% between 1970 and 1975. During the 1975-1985 period, the growth rate should level off at around 1%, and then drop gradually to no more than 0.6% at the end of the century, that is to say, about a third of what it was in the 50s. This development is not peculiar to the Soviet Union, affecting as it does most European countries, East and West.
- 2. The slower growth rate results both from the reduction in the absolute number of births and from the drop in the fertility rates. Couples who do not wish to have children are making more use of contraceptive methods. Moreover, abortions, which were made legal again in 1955, are frequent (the rate of abortion is apparently higher than in Hungary or Japan).
- 3. The most visible consequences of this development are the drop in the proportion of under-16s in the total population, a big rise in the number of elderly people and the relative stagnation of the population of working age. Between 1970 and the year 2000 the distribution of the population by age groups should be as follows:

	1970	2000
0-15 years	30.7%	25.2%
16-59 years (men) 16-54 years (women)	54.2%	55 <b>.5</b> %
Over 60 (men) Over 55 (women)	15.1%	19.2%

These figures highlight the ageing of the Soviet population.

<sup>(1)</sup> United States Department of Commerce figures.

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- 4. Although demographers have been concerned by this trend for several years, only recently have the Soviet Authorities introduced pro-natalist measures, such as family allowances, one year's maternity leave on part pay for working mothers(1) and the creation of distinctions and medals for mothers of large families.
- However, in the Soviet Union such a policy comes up against economic and sociological difficulties. On the economic front, the State has to find the money for allowances for mothers of large families; the poor housing facilities operate against the founding and expansion of families; medical facilities(2) and creches for young children remain inadequate; increased maternity leave and leave for family reasons leads to a reduction in the number of women working and the same is true if mothers are encouraged to stay at home. If there were a drop in the number of women working as a result of family measures this would make the manpower shortage worse. The anti-natalist sociological factors are the desire of couples to improve their living standards, urbanization, industrialization and a tendency for women to extend their education and participate more fully in the political, cultural and economic life of the nation.
- 6. There has been a general decline in the birth rate but it has not affected all the Soviet Republics in the same way. In the Central Asian Republics, Transcaucasia and Kazakhstan, the rate of fertility remains high. As a reault, the natural growth rate of the population in these areas between 1970 and 2000 should be well above that of the other Republics and the average expected for the Soviet Union as a whole(3). One consequence of this is that after 1990 the Soviet population could be 53% non-Russian(4). This shift in the ethnic pattern in favour of the non-Russian and somewhat more backward sections of the population may in the long-term give rise to domestic, political and social problems. For example, the percentage of men from the southernmost strip of the Soviet Union or from non-Slav regions serving in the armed forces can be expected to rise and this could have some impact on the effectiveness and cohesion of these forces.
- 7. But this is only one of the consequences of the big differences existing between the birth rates of the nationalities which make up the Soviet population. During the

This proposal has not yet apparently become law.
 In this respect it should be noted that there was a large rise in the infant mortality rate from 22.9 per 1,000 in 1971 to 27.9 per 1,000 in 1974. Demographers are unable to explain this.

(3) In Kazakhstan and the Transcaucasian Republics the natural growth rate in the year 2000 could be 1.4% and in the Central Asian Republics 2.9%, that is to say, respectively 2½ and 5 times more than the average for the Soviet Union (0.6%).

(4) In 1970, non-Russians accounted for 47% of the Soviet population. (Source: Joint Economic Committee, Congress

of the United States, 1973)

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last quarter of the century, Central Asia, Kazakhstan and Transcaucasia will be the main manpower sources. Between 1976 and 1980, these three regions should provide 44.6% of the population of working age, which is expected to increase by 10,408,000 persons during this period. Between 1981 and 2000, the trend should become more pronounced; the population of working age in these southern Republics is expected to rise by 17,267,000 and 18,549,000 for the country as a whole. This would seem to indicate that the population of working age will hardly rise at all in those parts of the country where most of the plant and resources are to be found. This means that larger numbers of persons will have to come in from the underdeveloped areas where the population is less capable of adapting rapidly to the conditions of an industrial society.

- 8. The big population growth in the regions referred to in paragraphs 6 and 7 will necessitate increased efforts to promote their economic development (industrialization, urbanization, public works) and greater integration of the local populations, of whom 20% to 24% have varying degrees of competence in the Russian language.
- 9. Furthermore, 73% of the population of the Central Asian region are country dwellers who do not like changing their way of life so transfers of labour to the industrial areas or other areas are slow.
- 10. With regard to migratory movements within the Soviet Union, the authorities have always encouraged the settlement of certain areas and, under a decree of May 1973, benefits in kind and monetary compensation are available to those willing to settle along the Chinese frontiers. In some cases the authorities do not hesitate to transfer populations systematically; part of the population of the Baltic States has been uprooted and replaced by Slavs, a policy of Russianization which is encountering strong resistance from the Balts. As the Central Asian peoples are little inclined to move, the authorities may well, during the next two decades, introduce legislative and administrative measures in order to transfer manpower to areas where it is lacking.

## B. Manpower

- 11. The labour shortage which Russia has experienced for some years past is likely to get worse because of the big shrinkage in the growth rate of the population of working age. For the period 1959-1965 the rate was 0.5% and it rose to 1.8% for the period 1971-1975. After 1976 the trend will be downwards: 1.5% for the period 1976-1980, 0.4% for 1981-1985 and 0.3% for 1986-1990(1). Generally speaking, the Soviet Union
- (1) Between 1959 and 1965 and 1971 and 1975 the annual yearly intake rose from 739,000 to 2,545,000. The figure falls to 2,082,000 for the period 1976-1980 and to only 552,000 for the period 1981 to 1990.

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will henceforth have to rely entirely on the increase in its population of working age to meet its manpower requirements. Other sources of manpower such as an increase in the number of working women, transfers from the agricultural sector to industry and recycling of retired workers are beginning to dry up. Furthermore, the activity rate in the 16/19 age group which has been going down sharply for several years will continue to fall (men 69.4% in 1959, 53.3% in 1970, 48.4% in 1980 and 43.9% in 1990; women, for the same years, 71% 47.8%, 40.8% and 35% respectively). This is explained not only by the extension of secondary, technical and higher education, but also by the drop in the natural growth rate and the ageing of the population.

12. According to the information supplied by the United States Authorities(1), the manpower situation should be as follows in the Soviet Union between 1970 and 1990:

(in thousands	)
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	Total	Men	Women	Mean annual rate of increase in absolute figures at the end of each five-year period
1970	125,599	61,276	64,323	-
1975	135,599	67,264	68,335	2,000
1980	145,746	73,514	72,232	2,029
1985	152,168	77,775	74,393	1,284
1990	155,972	80,305	75,667	761

A big drop is expected in the number of new recruits to the labour force after 1980; a comparison between the mean annual rates for the five-year period ending 1980 and the following two five-year periods shows a decrease of 36% in 1980 and 63% in 1990. It will be seen, however, that in 1980 and 1990 fewer women will be working than men. This reversal of a situation which has existed for many years and which reflects the population trend since the war is expected to come about in 1978. The percentage of women in the labour force should drop from 51.2% in 1970 to 48.5% in 1990.

<sup>(1)</sup> Soviet population and manpower trends - Murray Feshbach and Stephen Rapawy

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- 13. In 1975, some 35 million persons were working in the agricultural sector, i.e. about one quarter of the civilian labour force. During the next 15 years, the number of people employed in agriculture should go down steadily by an average of 1.7% a year to no more than 27 million in 1990 (18% of the total civilian labour force). However, the difficulties encountered by Soviet agriculture could lead the authorities to slow down the exodus from rural areas and above all encourage young technicians and skilled workers, who are already in short supply, not to leave agriculture for industry. However, by interfering with these inter-sectoral labour movements there is a risk of complicating the difficulties of industry (particularly, construction, transport, light industry and the food industry) and the services sector where the labour shortage is likely to get worse over the next few years.
- 14. That the authorities are seriously concerned over the existing shortage is borne out by the emphasis given in the 10th Five-Year Plan to improving labour productivity, which is seen as the main factor of economic growth in the coming years. It will be noted, however, that the 1976-1980 Plan targets for labour productivity in the four main economic branches (industry, construction, rail transport and agriculture) are lower than most of the results achieved in the preceding five-year period.

## Percentage annual growth in productivity

	Industry	Construction	Rail Transport	Agriculture
1971 1972	6.3 5.2	5.0 5.4	4.5 3.8	3.6 -4.2
1973 1974	5.1 6.3	4.4 5.5	6.1 4.0	17.6 -1.9
1975	<b>5.</b> 9	5.5	3.6	not available
1976 1980 Plan	5•7	5•5	<b>3.</b> 5	5.1(1)

(1) Productivity of State and collective farms only.

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- 15. One explanation of this paradox may be that the authorities (i) expect that the growth of the labour force in certain economic sectors will be insufficient to meet requirements over the next few years; (ii) are not very optimistic over industry's ability to provide the equipment to improve the mechanization of industry and agriculture and (iii) have perhaps little confidence in the success of the measures taken to improve working methods. In this connection, it will be recalled that past efforts to mechanize manual labour, reduce the number of manipulations and improve standards proved less successful than had been hoped.
- 16. The authorities are considering a whole series of methods designed to improve productivity such as reducing the proportion of manual workers in the industrial labour force, using labour more rationally, closer supervision of recruitment by enterprises, freezing of recruitment to administrative and non-productive sectors of the economy, reducing the turnover of personnel (some 20% of industrial workers change their jobs every year), better management training, improvement of living and working conditions in Siberia and the Far Eastern areas, stricter discipline at the place of work, greater specialization by enterprises in the different industrial branches, making better use of manpower and supervisory staff by having them do the work for which they were trained.
- 17. In addition to the efforts to improve labour productivity, there are certain measures which should go some way to remedying the labour shortage, such as the use of foreign labour, a decrease in the number of men in the armed forces, the encouragement of voluntary unpaid work, the offer of full-time or part-time work for pensioners(1) and permission for workers to have more than one job. In this respect, during the 60s, the authorities allowed persons working in medicine or education to have a second job. In any event, having a second job seems fairly widespread in the Soviet Union even if, in some cases, it amounts to moonlighting.
- 18. The Soviet Union makes very limited use of foreign manpower, mainly skilled workers. However, 1973 saw the first signs of a policy for employing immigrants in sectors or regions where labour is lacking. Over the last few years this trend has become more pronounced although it remains slight. The Orenburg gas pipeline is being built with the help of workers from Eastern Europe who are expected to reach 20,000 when the work is in full swing. Some 2,000 foreign workers are employed on the construction of the Ust'-Ilimsk complex which is to
- (1) At 1st January, 1974, 4 million pensioners were working, and only 12,500 of them part-time; a large number of pensioners who have no jobs seem to prefer part-time work

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produce pulp and paper and roughly 30,000 Bulgarians, 7,000 North Koreans and 3,000 Finns are working on various projects. Lastly, a small number of foreign workers are employed under contracts between Western firms and the Russians; they are mainly skilled workers, technicians and engineers responsible for helping in the fitting out of plant and new capital equipment purchased by the Soviet Union or for training management and workers on the spot.

It seems likely that the use of immigrant labour will For political and ideological reasons, the remain marginal. Soviet Union prefers to turn to its COMECON partners although they too have manpower problems themselves and cannot supply large numbers of workers. Yugoslavia could provide workers but they prefer to go West and the Soviet Union would only be a second best for them at a time when emigration to Western Europe has greatly fallen off. There remains the possibility of using labour from the Asian Communist countries, the Third World and the West. In the first two cases the workers are likely to be unskilled and backward and therefore difficult to integrate in the industrial sectors which most need them. In the third case, it is highly unlikely that any large number of Western workers would want to go to the Soviet Union unless they were promised the same standard of living and purchasing power; for its part, the Soviet Union would probably be reluctant to play host for any length of time to people who would be in continuous contact with Soviet workers and whose presence would highlight the differences between the training and the style and standard of living of Soviet and Western citizens.

## C. Armed Forces and manpower

- 20. A reduction in the armed forces or in the period of military service is one of the measures referred to in paragraph 17 as being capable of bringing about a rapid increase in available manpower. Quite apart from such a possibility, the question arises whether, all other things being equal, the Soviet Union will be able to maintain its armed forces at the present level much longer bearing in mind that the number of 18 year old men will drop sharply after 1978. If the Soviets were to conscript all these young men, it would certainly create bottlenecks and affect economic performance.
- 21. Soviet armed forces personnel strength is currently estimated at 4.8 million men. This figure includes all military personnel in the Ministry of Defence and in the NVD and KGB security forces. On the basis of the projected

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decrease in the size of the 18 year old male population between 1975 and 1990, United States experts have concluded that the Russians will have to choose one, or a combination, of the following options:

- (i) a tightening of standards for call-up deferments and exemptions;
- (ii) an increase in the size of the career force through improved recruitment procedures and incentives for retention of career personnel:
- (iii) an extension of the terms of service:
- (iv) a decrease in the size of the armed forces.
- 22. A further difficulty which is already making itself felt but which will become much more pronounced during the next two decades is the far higher potential proportion of conscripts from Kazakhstan, the Central Asian Republics and Transcaucasia (some 22.9% in 1975 and in all likelihood 34.6% at the end of the century). This big influx of recruits who generally could be expected to have a poor knowledge of the Russian language and inferior technical qualifications could affect the efficiency of the armed forces which are using increasingly advanced weapons.

## Conclusion

- 23. From the beginning of the next decade, the manpower gap will accentuate military and civilian competition for the new generations joining the population of working age and the work force. Clearly, in this situation political choices will have to be made.
- 24. The fact that during the last quarter of this century a large number of young people will join the population of working age in Central Asia and Transcaucasia means that these areas will become a potential reservoir of manpower for the civilian sector and for the armed forces. This new development will oblige the Soviet Authorities to take urgent legislative and administrative measures to meet the changes to which this trend will give rise in such fields as employment, occupational training, education (increasing the ability of people in these areas to communicate in Russian), investments, regional policies, population mobility and the armed forces.

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The Soviet Union is practically at the crossroads. The population trend and the country's economic performance mean that the authorities will be increasingly obliged to make difficult choices between economic possibilities, civilian requirements and the demands of the military. In the short and medium run they will have to rely on improved productivity to offset the insufficient increase in the labour force. In this connection, imports of Western technology should bring about an improvement in industrial and agricultural returns but the serious shortage of hard currency, the size of Russia's debt burden and its limited capacity to absorb new techniques may hamper such transactions. If, during the next few years, the Soviet Union does not succeed in improving labour productivity, if it fails to speed up the transition of its economy from the extensive production, labour-consuming, stage to the intensive quality production stage it may be obliged to sacrifice the consumer and further reduce the plan targets. The alternative would be to reduce the armed forces so as to release the manpower needed by the economy.

## II. EASTERN EUROPE

#### Introduction

- 26. Demographic trends in Eastern Europe are comparable to those in European Russia. The fall-off in the fertility rate which is no less pronounced than in most of the West European countries is illustrated by the slackening in the growth and ageing of the population.
- 27. Of the factors influencing population trends in Eastern Europe one of the most important is the urbanization stemming from gradual industrialization and the drift from the land. In addition, the use of contraception is accelerating the downward trend in the birth rate, which several of these countries are trying to check mainly by reducing the number of abortions, which were a common form of birth control. Positive family policy measures have been taken recently.
- 28. Some of the People's Democracies are already experiencing a chronic shortage of manpower and present population trends should add to these difficulties. Attempts are being made to remedy them by limited recourse to foreign labour, the re-employment of pensioners, increasing number of women working and above all by concerted official efforts to bring about the necessary improvement in productivity. However, the outlook for growth is rather overshadowed by the predictable scarcity of manpower.

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## A. BULGARIA

- 29. At end-1975, the Bulgarian population was 8.7 million. It has increased by 1.5 million since 1950, i.e. 0.7% a year, but the birth and fertility rates are going down and the total population is expected to be no more than 9.9 million in the year 2000, which is an increase of only 1.2 million in 25 years or 0.5% a year(1). This slackening of demographic expansion can be attributed to industrialization and urbanization and to the very bad housing conditions. To curb this trend towards population decline, the authorities have resorted to a whole series of measures including maternity grants, family allowances and tax concessions. In 1967 and again in 1973 they also tightened the rules governing abortions. All this led to an improvement in the birth rate but it appears to have been only temporary.
- 30. Bulgaria contains a large Turkish minority of some 800,000 or 10% of the population. At present there is a relative rise in the proportion of the population they represent, firstly because their fertility rate is higher than the Bulgarian average and secondly because the two governments concerned are discouraging emigration. Between 1949 and 1951, some 155,000 Turks were allowed to leave Bulgaria; since the 1968 agreement some 30,000 have left.
- 31. 77% of the population of working age is gainfully employed; this rate is slightly lower than in the GDR and Poland because a large number of women give up working when still quite young. In view of the raising of the school-leaving age and the effect this has on the labour market it is hardly likely to improve. Accordingly, the working population cannot be expected to increase by more than about 280,000 during the next ten years.
- 32. The movement away from employment in agriculture is very noticeable; this sector accounted for 55% of the labour force in 1960 and 36% in 1970. If, as expected, the proportion has dropped to 18% by 1985, the reduction will have been around 1% a year.
- 33. Population trends in Bulgaria, although not particularly alarming from the manpower point of view, make it doubtful whether the economic growth rate of the last few years can be maintained. Whatever pro-natalist and occupational training policies are implemented, a slackening of the economic growth rate seems inevitable.
- (1) Except where otherwise stated, the East European population projections used in this report are mid-year estimates based on a medium growth assumption and are taken from "International Population Reports", US Department of Commerce, July 1976"

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#### B. CZECHOSLOVAKIA

- 34. The population of Czechoslovakia which at end-1975 was 14.8 million, has risen by 2.4 million in 25 years; this represents a mean annual growth rate of about 0.7%. The development during the last quarter of this century should be very similar with the population increasing annually by an average of 0.6% to reach a total of 17.2 million inhabitants in the year 2000. This forecast presupposes the maintenance of a reasonably favourable fertility rate and an increase in the life span. Since 1970 the authorities have been seeking to improve the birth rate by providing more creches, schools and day nurseries. On the other hand, the housing situation does not seem to be improving and is one of the main obstacles to a higher birth rate.
- 35. There are differences between the Czech and Slovak populations, with a much higher natural growth rate in Slovakia. However, migration between the two Republics tends to redress the balance in favour of the Czech areas which are more industrialized and offer more chances of employment.
- 36. During the period 1971-1975, the working population increased by 416,000 i.e. from 7.03 million in 1971 to 7.45 million at the end of the period. The Czechoslovak Authorities are apparently prepared, should the present manpower shortage get worse, to accept immigrant workers. There are in fact signs that this has already been done on a limited scale with workers from Yugoslavia, Vietnam, North Korea, Algeria and Cyprus in particular.

#### C. HUNGARY

- 37. The 1975 census gave the population of Hungary as 10.5 million. This means that between 1950 and 1975, demographic growth was slow (0.5% per annum) and it seems likely that the present trend will continue up to the year 2000 when the population is expected to total 11.5 million, making an average yearly growth rate of 0.4% in relation to 1975. The fertility rate has remained steady but has been relatively low except for a peak in 1974 which was apparently triggered off by the measures taken to help families. The granting of new family allowances seems to have sparked off another increase in the birth rate.
- 38. Although it is an industrially-advanced country, 50% of Hungary's population still lives in rural areas; the attraction of the towns seems to have had less effect than in other countries and the agricultural population has benefited from the new economic mechanism as much and perhaps more than industry.

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In spite of efforts to enable more women to take up gainful employment, Hungary has a growing labour shortage. During the period of the current Five-Year Plan the total labour force is expected to increase by no more than 60,000 or 1.2%. Moreover, between 120,000 and 130,000 persons will be leaving agriculture for other sectors. To remedy the shortfall, the government intends to improve labour productivity to an extent equal to an increase in the working population of 500,000 (according to the study by G. Sovari in the 8th January, 1975 issue of Figuelo). There is, moreover, blatant underemployment in certain sectors and the recycling of manpower throughout the economy could be one way of easing current difficulties. In this connection the recruitment of administrative staff to the Civil Service and enterprises has been suspended on the strength of a 1975 decision

#### D. RUMANIA

## The general picture

- 40. The population of Rumania rose from 15.8 million inhabitants in 1948 to 21 million in 1974. This is a big rise (33% in 26 years or about 1.2% a year). Since 1966, a sharp rise in the birth rate has put Rumania ahead of the other countries of Eastern Europe. This development would seem to be partly the result of the pro-natalist policy which, for instance, under a 1966 decree, provides for 112 days' maternity leave and a maternity benefit payable as from the third child. At the same time, it has become more difficult to obtain an abortion.
- 41. By the year 2000, the population of Rumania should be 25.6 million inhabitants; this means that demographic growth during the next 25 years will be no more than 0.8% a year, which denotes a slow but steady ageing of the population. The population of working age (15 to 64) is expected to rise from 13.8 million in 1975 to 16.4 million in the year 2000.
- 42. Rumania is not ethnically homogeneous but the Hungarian and German minorities (8.5% and 2% respectively) are declining because of the greater fertility of the Rumanians and the right of families in the minority groups to emigrate.
- 43. The increase in the urban population which rose from 21.4% of the total in 1930 to 23.4% in 1948 and to almost twice that figure (42.7%) in 1974, has greatly altered the breakdown between the town and country: Bucharest has been less affected by this movement than the medium-sized towns, however.

#### Working Population

44. The extension of schooling and the drop in the number of persons working in the upper age groups (a result of the relative decline of agriculture) between the 1956 and 1966

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censuses have led to a drop in the general activity rate from 59 to 54% and the virtual levelling off of the working population. The decline would have been even more noticeable if the number of women working had not greatly increased. In all likelihood, the trend observed between 1956 and 1966 has continued.

- 45. Movements from rural to urban areas(1) greatly altered the classification of manpower by branch of activity between 1950 and 1974. The number of persons employed in agriculture fell from 74% of the labour force in 1950 to 40% in 1974. A contrary trend is recorded in industry where, in 24 years, the percentage went from 12% to almost 30%, construction (from 2 to 8%) and the transport sector (from 2 to 4%). All the service industries have also made relative progress in the percentage of the labour force they employ, except the administrative sector, where it has fallen from 1.7 to 0.7%.
- 46. Education has made great strides, with the emphasis being placed on primary and general education during the 1956-1960 five-year period. During the following ten years most headway was made firstly in occupational training and secondary education and then in higher education. Rumania has a high proportion of workers who have completed eight years of study or been awarded a certificate (85% of the total labour force).
- 47. The trends referred to above expansion of agriculture, earlier retirement for the older members of the rural population and an increase in the number of women working can be expected to continue until 1990. In view of the number of persons at present employed in agriculture (4 million) it should be possible to meet the forecast manpower requirements in the industrial and service sectors without too much difficulty over the next few years. It is however, highly unlikely that the ambitious plans for economic expansion can be implemented without a very real improvement in productivity.

#### E. GERMAN DEMOCRATIC REPUBLIC

#### General picture

- 48. In spite of the large loss of human life in the Second World War, the GDR in 1946 had a population of 18.1 million as against 16.7 million in 1939 within the present frontiers. The all-time high of 19.1 million reached two years later reflected the arrival of about 3½ million refugees
- (1) According to the projections formulated for 1980 and 1985 the rural population will become stabilized at 41.45% of the total. This slowing down of migration to the towns may indicate the desire of the government to modify the industrial development model for the 80s.

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from the former German territories in the East. Subsequently, emigration had a significant effect, with 2.7 million refugees officially reaching the Federal Republic of Germany between 1949 and the construction of the Berlin Wall in 1961. To this should be added at least 0.6 million who, having fled the old Soviet zone of occupation before 1949, have not been included in the censuses. After the introduction of the restrictive measures migration was a less important factor although up to 1975 another 360,000 persons from the GDR escaped to the Federal Republic.

- 49. Thus on 30th June, 1976 the population of the GDR was 16.8 million, practically the same as before the war.
- 50. The very irregular age distribution testifies to the losses of the two World Wars, the decline in births observed at the time of the 1932 recession and the large-scale exodus between 1949 and 1961 which mainly affected young men. Furthermore, especially since 1965, the GDR has experienced a drop in the birth rate which is attributable both to a decrease in the number of women of child-bearing age and the decline in the fertility rate. The latter, which was fifty-two per thousand in 1974, is the lowest of all the East European countries; it is also lower than the immediate post-war rate.
- 51. Two distortions of the population pyramid are worth mentioning: the number of persons born in 1904 and still living in 1974 was higher than the number of births in 1974. Furthermore, there were 70 economically-inactive persons (children and above all pensioners) for 100 persons of working age.
- 52. In addition to the distortions in the age groups in reproductive period, the lower birth rate can also be traced to a preference for smaller families. This development, which was also observed between the two World Wars and is the result of industrialization and urbanization, has become more pronounced with the popularization of contraception and, since 1972, the introduction of legalized abortion. Other reasons given for reduced fertility are the better living and educational standards, the increase in the number of women working, the housing shortage and the lack of amenities for working mothers (crèches and the like).
- 53. Recent pro-natalist measures to check this trend have had to take account of some of these factors. In addition to the granting of allowances and bonuses, a housing programme designed to provide 3 million homes between now and 1990 has been finalized. A host of regulations which will make life easier for working mothers have been introduced but they have not yet begun to be effective.

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54. The demographic outlook is none too bright; between now and 1990, the total population will have hardly changed in comparison with the present figure. The ratio of men to women will be redressed (100 to 109 in 1990 as against 100 to 116 at present). A reduction in the number of young people and pensioners (about 700,000 in each case) can be expected whereas the population of working age should increase by about 1 million (from 59 to 66.3% of the total) and then decline after 1990 when the lower birth rate age groups reach working age(1).

## Working population

- 55. In spite of the drop in the population of working age from 11.8 to 9.9 million between 1959 and 1974 (a decline from 64.1 to 59% of the total population) the gainfully employed in the civilian sector went up slightly (by 200,000) to reach 8.4 million at end-1974. This increase is due entirely to the rise in the number of economically-active women; the number of male workers went down by 400,000. Because of the severe manpower shortage the authorities have persuaded more and more women to take up jobs. Since 1950 the number of working women has risen by 700,000 and today they represent almost half the total civilian labour force(2). Consequently, the utilization factor of the population of working age (79.2%) is probably the highest in the world.
- 56. This situation has encouraged the GDR to concentrate its development efforts on the high added-value industrial sectors and this has made it one of the world's foremost industrial powers. The classification of the labour force by economic sectors reveals the leading position of industry, which employs 42% of the workers against 21% in services and 11% in agriculture.
- 57. Mechanization and more rational production methods have made it possible to halve the agricultural labour force in the space of 25 years. On the other hand, the expanding service industries, where there is limited scope for improving productivity, have increased their labour force (index 171 as against 100 in 1952). During the same period, the number of persons employed in industry has increased by about 10%.
- 58. This changing pattern reflects the normal trends of an expanding industrial society. It has gone hand-in-hand with a vigorous training programme, particularly for the younger

Source: AC/127-WP/458, dated llth May, 1976.
 It should be pointed out, however, that about 1 million women do only part-time work.

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generation, and measures to improve adults' qualifications; in 1971, two-thirds of the working population underwent professional training (80% of the 25-30 age group and 45% of the 55-60 age group). The differences are even more marked for women; compared with 1960, the number of graduates and those awarded technical diplomas has increased three-fold.

- 59. To combat the manpower shortage, the GDR has started to import foreign labour, mainly Polish and Hungarian, although on a fairly limited scale. According to recent information, the authorities intend to recruit workers from certain Mediterranean countries, principally Algeria.
- The forecasts for the development of the labour force are reasonably favourable for the next ten years since there will be an increase of some 900,000 persons of working age, but are much less promising after 1985. The percentage of persons of working age in the total population will increase to 66.3% in 1990; at the same time, the proportion of pensioners will drop from 19.8% to 16.2% and the same trend will affect the younger generations which have not yet reached working age (21.2% in 1974 compared with 17.6% in 1990). During the next 15 years the GDR can therefore expect the problems arising from its manpower shortage and the funding of its social services, education and pensions to become less acute. However, when the low birth rate age groups come on to the employment market in the 1990s, East Germany will face serious difficulties stemming from its inadequate labour force and the economic burden of the social services.
- 61. The overall economic growth rate forecast in the Plan (a mean annual rise of between 4.9 and 5.4% up to 1980) appears feasible, bearing in mind the expansion of the working population and the expected improvements in labour productivity (from 4.2 to 4.7%).

#### F. POLAND

#### The general picture

62. The most heavily populated of the East European countries, Poland had a population of just over 34.2 million at 31st December, 1975, which was almost 10 million or 37% more than in 1950 and represented a rise of 1.2% a year. This growth rate is higher than in the Soviet Union or any of the East European countries except Albania.

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- 63. Immediate post-war migratory movements (departure of Jews and Germans and repatriation of Poles from Russia) are now demographically insignificant. But the recent Polish/German agreements will give a temporary boost to emigration (repatriation of some 120,000 Germans).
- 64. Present demographic trends are the result of natural and complex factors; the high birth rate 1950 to 1960 age groups are entering the reproductive period, the fertility rate now seems to be stabilized after falling sharply between 1960 and 1970 because of the rapid urbanization and, lastly, the infant mortality rate dropped from 37.5 per thousand in 1960 to 14.6 per thousand in 1974.
- and was made even easier after 1960. The drive to promote a higher birth rate, which started in 1971, has at the most checked the decline in the fertility rate but it seems unlikely that the authorities will embark on a strong pro-natalist course in the near future. In the long run this would greatly increase the strain on the social services and no allowance has been made for this in the 1976-1980 Five-Year Plan. No change in emphasis seems likely before the start of the next decade. Western demographers forecast that the Polish population will go from 34 million in 1975 to 41.8 million in the year 2000, i.e. an average yearly increase of 0.8%.

#### Manpower

- 66. Because of the rapid growth during the past few years, Poland is a young country where almost one-third of the population is under twenty and about 43% come within the 20 to 50 age group. The proportion of persons of working age will remain high during the next ten years (60% of the total population) although it will not increase as it has done during the last few years.
- 67. The occupational classification in the main economic sectors reveals that agriculture still plays a big rôle with 36% (as against 50% in 1960). Most of the 36% are small private farmers (only 15% of agricultural workers are employed in the public sector although this is twice as many as in 1960). In the other economic branches industry, construction and services the public sector accounts for more than 90%.
- 68. The number of Poles over fifteen years of age who do not go on to other educational establishments after they leave school is decreasing but remains high at 68%. The Polish economy still suffers from a lack of skilled manpower but the situation is improving as a result of the recent expansion of occupational training.

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#### G. ALBANIA

- 69. Albania, with a population in 1975 of 2.4 million and a yearly growth rate of 2.8% has doubled its population in the space of 25 years. The birth rate is especially high (3.04% in 1973) and improved hygiene has greatly brought down the death rate. Before the war, life expectancy was an extremely low 38 years but it is now 68 years and compares with the most developed European countries.
- 70. All this means that the population is very young, with 60% of the inhabitants under 30. Urbanization is not very advanced, only 34% of the people live in towns. More than half the population is therefore still engaged in agriculture; industry accounts for only 36%.
- 71. Official propaganda advocates rapid population growth; everything is done to discourage abortion and even contraception, the aim being to have 5 million Albanians as soon as possible. A more realistic forecast sets the population at 4.2 million in the year 2000. However, by attempting to run before they can walk, the Albanian Authorities may find themselves confronted with intractable economic and financial difficulties.

## III. INTRA-COMECON MANPOWER MOVEMENTS

- 72. The drying up of manpower reserves in the GDR, Czechoslovakia, Hungary and the Soviet Union and the increasing unemployment in Yugoslavia(1) have encouraged the Communist countries to consider transfers of workers among themselves with an eye to making optimum use of the human resources available.
- 73. Such movements have so far been extremely limited (0.4% in the GDR, 0.11% in Czechoslovakia and 0.06% in Russia) but they may rise slightly over the next few years.
- 74. The agreements governing economic co-operation between the Communist countries make no provision for labour migration but it may well develop empirically in the following three ways:
  - (a) transfers of workers in exchange for occupational training; although its employment situation is fairly tight Hungary has agreed to send young workers for occupational training in the GDR; East Germany apparently already employs 12,000 Hungarian workers and similar movement in the other direction is under consideration;
  - (1) Yugoslavia has observer status within COMECON.

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- (b) the implementation of joint projects under the COMECON Comprehensive Programme and particularly the participation of the Soviet Union's partners in the development of its natural resources; the Orenburg site employs 20,000 and Bulgaria has sent 30,000 workers to the Soviet Union;
- (c) under an arrangement evolved by Yugoslavia and Czechoslovakia in 1975, 4,000 Yugoslav workers are to be employed in Czechoslovak enterprizes after 1976; the immigrants will be allowed to remit funds to Yugoslavia which thus removes the financial obstacle to manpower transfers.
- 75. Eastern Europe's manpower reservoir is Yugoslavia, where the unemployed exceeded 500,000 in 1975. In the present state of affairs, the Yugoslavs will probably agree to go to the Communist countries. But as soon as Western Europe where 800,000 of them are already working is ready to take immigrants again, that is where they will prefer to go.
- 76. Be this as it may, there are a number of problems connected with social legislation or arising from historical or political differences which hamper labour migration, particularly to the Soviet Union. In the latter case, the difficulties reflect the gap between the level of development in Russia and in some of the People's Democracies. Compared with requirements, especially Siberia's requirements, transfers of labour to the Soviet Union will most probably remain insignificant. Even if the barriers to immigration are removed, the potential resources of the rest of COMECON are insufficient to guarantee a big movement of workers.

#### IV. GENERAL CONCLUSIONS

- 77. At a time when the world population is going by well nigh 2% a year and will have nearly doubled by the year 2010 from 3.9 to 7.7 milliard, Eastern Europe is experiencing a period of demographic slack. In the fairly near future, conjugal behaviour must lead to a visible fall in demographic growth and even to a stabilization of the population in most European countries.
- 78. In several East European countries (Hungary, Bulgaria and Rumania) the governments have managed to check the downward birth rate by curbing abortion, which was a common method of birth control. Positive family measures have also been taken. In Western Europe, the authorities have not generally sought the check the drop in fertility which began in 1964 and has gained momentum during the last three years.

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79. This slackening of the birth rate, together with a stabilization of the death rate at a very low level, leads to a slow ageing of the population.

#### The outlook

- 80. United Nations forecasts for ten European members of the Alliance postulate a population increase between 1970 and the year 2000 of 11.5% from 270 to 301 million. At the same time, it is estimated that the total population of the Allied countries will rise from 532 million to 660 million, i.e. an increase of 24%.
- 81. The population of the European Communist countries is expected to reach 435 million in the year 2000, as against 346 million in 1970, which represents a rise of 26%. The population of the Soviet Union will rise from 243 to 312 million (29%), which will be well above the figure for the People's Democracies taken as a whole (+19%) and, consequently the relative Soviet share in the total population of the European Communist countries will go up slightly from the 1970 figure of 70% to 72% in the year 2000(1).
- 82. In absolute terms, these forecasts show that between now and the end of the century, the member countries of the Alliance will retain an appreciable numerical superiority over the Warsaw Pact countries. But in relative terms demographic trends will be to the advantage of the latter, since their populations can be expected to grow slightly faster than in the Allied countries.
- 83. However, with regard to the number of persons mobilisable in the event of hostilities, the ageing of the population in the Communist countries, which seems to be more rapid than in the countries of the Alliance, should give the latter an advantage. The projections for 1990 reveal that the number of persons who could be called up(2) in the NATO countries
  - (1) Sources: Soviet Union: Mr. Feshback and S. Rapawy, "Population and Manpower Trends", May 1976, Eastern Europe: "International Population Reports", July 1976.

(2) On the basis of the available statistics, the mobilisable strength has been taken as the male population of between 15 and 44.

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will go from 113 million men in 1970 to 141 million (+25%), whereas the corresponding figures for the Warsaw Pact countries are from 77 million to 90 million, which is an increase of only 17%(1).

(1) Sources: Eastern Europe: International Population Reports, July 1976
Soviet Union, NATO Europe countries except Turkey,
Iceland and Luxembourg: "Post-War Demographic Trends in Europe and the Outlook until the Year 2000", published by the UN.

USA: Statistical Abstract, 1975
Canada, Turkey, Iceland and Luxembourg: estimates
Given the varied nature of these sources, the projections should be regarded as an approximate indication of probable trends.