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AUTHOR: Tibor Vais

CONTRACTOR: The President and Fellows of Harvard College

PRINCIPAL INVESTIGATOR: Abram Bergson

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Summary

Recent studies of the Soviet economy have shown that one of the main economic challenges facing the Soviet Union in the 1980s is a labor shortage. What has not been pointed out in these studies is that this is a common chronic problem of all Soviet-type economies. This study seeks to examine the reasons why labor shortage is a common problem for Eastern Europe and the USSR, and what options are open for Soviet and East European decision-makers to alleviate this problem.

The study finds that the major reason for labor-shortage problems in Soviet and East European economies is rooted in the nature of the centrally-planned, command economy. Though labor shortages are also exacerbated by demographic features, this study demonstrates that Soviet and East European countries have been effective in mobilizing labor resources for economic sectors of high priority. Thus it suggests that without serious economic reform in the long run manpower policies will largely be ineffective in alleviating system-wide effects of labor shortages. On the other hand, labor shortages will have less effect on the high priority defense-related sectors of these economies.

The labor market situation in any country is a result of past demographic changes and present economic and political goals and strategies. The East European CMEA countries throughout their postwar histories maintained the goal of maximum rates of economic development and the principle of full employment. Uneven industrialization, differing sectoral structures, and differences in the rates of economic development of the East European economies already created quite diverse labor market situation by the early 1950s.

The two most industrially advanced of these countries, namely the G.D.R. and Czechoslovakia, reached high rates of participation of their population and ensured full employment already by the early 1950s, and since then have been struggling with a labor shortage. Not even economic and
political disruptions could change the continuous excessive demand for labor.

On the other end of the scale there is a group of the less-industrialized East European countries, Bulgaria, Romania, and to a lesser degree Poland and Hungary, which had abundant labor resources both among the unemployed population in the cities, and in the overpopulated countryside. In Bulgaria, the process of industrialization was very slow until 1956, and employment in industry and construction hardly grew. Combined with a declining agricultural labor force, this resulted in a decrease in the size of the workforce up to the mid-1960s. Since then, however, the demand for labor in excess of its natural supply not only absorbed the labor market reserves, but also brought about spot labor shortages which are developing into a general economy-wide shortage of manpower.

Throughout the entire postwar period Romania and Poland had the largest increments to their working-age population among the East European countries. Therefore, both countries could rely on these additional manpower reserves for the development of non-agricultural sectors. Employment growth in Romania was steady but moderate, and since the mid-1970s it has been lower than the growth of the working-age population, with a resulting decline in the participation rates. Almost one third of the Romanian workforce is still employed in agriculture. This share is substantially higher than in any other East European country. These reserves are high enough to be able to satisfy the economy's demand for additional labor in the very near future, in spite of the appearance of local labor shortages in the industrially developed areas of the country.

Unlike Romania, in Poland rates of employment growth exceeded the growth of the working-age population since 1950, due mainly to increased female participation rates and lower rates of decline in agricultural employment.
Nevertheless, until the early 1970s the number of women seeking employment exceeded the number of vacancies, although industry suffered from a shortage of male labor resources. During the last decade the labor market situation in Poland has drastically changed twice. During the period 1971-75, Poland had the largest increase in its working-age population in its history. The new political leadership of E. Gierak, facing a threat of unemployment and severe economic problems, adopted a new economic strategy which was based on heavy investments in industry through foreign borrowing and high rates of growth of employment. By the mid-1970s, the labor market became tight, and labor shortages started to spread from the main industrial centers of the country to other areas. The collapse of the new developmental strategy of the Gierak administration led to an economic and political crisis in the late 1970s and early 1980s. The national plan for 1980 called for employment cuts in industry, construction, and trade. A virtual halt in production at many enterprises and further cuts in investments as a result of the economic crisis and of the burden of foreign indebtedness in 1980-81 has brought about a situation in which scores of thousands of formally-employed workers are idle. At present, the condition of the Polish economy and the political situation in the country are such that any serious assessment of the possible changes in the labor market, even in the nearest future, is impossible.

Hungary had "succeeded" in catching up with the labor shortages of her more industrialized neighbors, Czechoslovakia and the G.D.R., already by 1953, due to the forced industrialization policies of the Rakosi administration. Between 1954 and the early 1960s, the labor market became less tight, reflecting to a much greater degree changes in the size of the working-age
population, the disruption of the economy in 1956, and the massive collectivization of agriculture in the late 1950s and early 1960s. In some periods the supply of labor even exceeded demand.

Fearing that the New Economic Mechanism of 1968 could result in unemployment, Hungarian policy makers created a type of employment safety net which led to an unprecedented demand for additional labor. In a matter of a few years Hungary joined the G.D.R. and Czechoslovakia as a country with a general labor shortage. In the second half of the 1970s, the Hungarian labor market has acquired some new characteristics. Considerable slowdown in economic development decreased demand for additional labor. Combined with declining increments to the labor force, this resulted in an absolute decrease in the workforce during 1976-78. The government has started to remove some of the regulations that prevented enterprises from efficient utilization of their workforce. The right to a job was reinterpreted as the right to employment, but not to a specific job. The market-orientation of the economic reform was reinforced, and new measures were adopted with the aim of further increasing the autonomy of economic organizations. All these factors contributed to a slackened labor market by the early 1980s.

If Eastern Europe manages to overcome the economic crisis of the late seventies/early eighties within a short period of time, and should the demand for labor pick up again, it will have to rely only on the natural increments to the working-age population for meeting any additional demand for labor. However, this source will decline sharply, especially in the period 1981-85, in all countries but Romania. The size of the working-age population will decrease absolutely in the current five-year plan period in Bulgaria and Hungary, and from 1985 until the end of the century in the G.D.R. In Czechoslovakia,
the average annual rates of growth will be only one tenth of what they were in the previous five years. In Poland, there will be half as many new entrants into the job market as in the 1976-80 period. These projections, combined with the achieved levels of participation rates in individual countries, suggest a significant slowdown or even an absolute decline in the labor force in most East European countries. Since employment of foreign workers has almost no effect on the national labor market situation in the Soviet bloc countries due to its limited scope, and provided no significant improvements in labor productivity occur, it is reasonable to expect further slowdown in the rates of economic growth in most countries of the area. This assessment may be changed if East European policy makers turn away from rhetorical appeals to increase the effectiveness of production and from short-term quick-fixes and turn towards substantial changes in their economic systems (perhaps, along the route suggested by the latest economic reforms in Hungary). On the other hand, this option may not be available to them should the political crisis in Poland grow into an area-wide crisis.
Acknowledgments

During the writing of this report I had the honor of being associated with the Russian Research Center of Harvard University. It is impossible to express my gratitude to the Executive Committee of the Center, its former and current directors Professor Abram Bergson and Professor Adam Ulam for giving me this opportunity. I greatly benefitted from the formal seminars and informal discussions with my colleagues. I am especially indebted to Abram Bergson, Joseph Berliner, Padma Desai, Edward Hewett, and Barney Schwalberg for their helpful criticism. I wish also to thank the administrative and secretarial staff of the Center, particularly Ms. Mary Towle, Miss Rose di Benedetto, and Mrs. Mary Christopher for their typing and retyping of the report and for their editorial assistance.
Introduction

This study seeks to present a picture of labor markets and governmental responses to changes in the labor market situation in the six East European countries which are members of the Council for Mutual Economic Assistance (CMEA): Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and Romania.

The first goal of this paper is to describe the general features of labor markets in Eastern Europe during the postwar period. The labor resources of any country are determined primarily by demographic factors—i.e. by the size of the population and its sex and age characteristics. The labor market situation is a result of both demographic changes, which affect the supply of labor, and economic policies, which primarily determine the demand for labor. Changes in labor markets as a result of these two factors are discussed in the first part of this paper. Despite the existence of substantial differences in the relation between labor supply and demand among individual countries, the general tendency in most of them has been towards a demand for labor that exceeds the supply. The second section contains a discussion of some causes of this imbalance.

The second goal of this report is to describe East European manpower policies. One of the main goals of socialist economic policy is to provide employment for all those seeking it. At present, this task has been achieved in all the East European countries. Under the circumstances of growing labor shortages the main objective becomes the better use of the available labor force. This can be achieved in particular by means of manpower policy. Manpower policy must ensure that the proper types of labor power are available at the places and in the quantities that are needed to fulfill national economic plans. Among the manpower instruments that will be discussed in the
second part of this paper are labor planning, regulation of labor mobility, certain elements of wage policy, as well as measures aimed at increasing the current and future labor supply.

The third part of this study is devoted to an analysis of various aspects of socialist labor economics. One of the main manpower instruments used in practically all the East European countries has been the stimulation of employment of the retirement age population. This problem acquires particular importance with the aging of population that is taking place in the Soviet bloc countries. The USSR recently passed new legislation which is also intended to provide financial incentives for the elderly to continue in full-time employment. One of the essays in this part of the report is devoted to the study of the situation of the aged in Hungary, and to the Hungarian experience in trying to increase the participation of this part of the population in the work force. It should be mentioned that Hungary was among the first East European countries that actively used this instrument of manpower policy in order to influence labor supply.

The Soviet labor shortage in the 1980s has become a topic that attracted much attention both in the West, and in the Soviet Union. The slowdown in the growth of the working age population (and even an absolute decline in some parts of the country) poses a real challenge to Soviet planners. How serious is this challenge and what effect could it have on the Soviet economy? How could the Soviet authorities respond to the labor shortage problem and what out of the East European experience in this area is relevant for Soviet decision-makers? These questions are also discussed in the third part of this study.
The growing labor shortage in most East European countries and the simultaneous existence of differences in the labor market situation of individual countries raises the question of the possible utilization of foreign workers as an additional source of manpower. Limited movement of labor resources between the CMEA countries has existed since the early postwar years. What were the factors behind its development? What was the scope of labor migration between the socialist countries? How did it affect the labor market situation? These and related problems are addressed in a separate essay in the last section of Part III.

It should be noted that this study concentrates on the industrial labor market. There is no discussion of that facet of manpower policy which addresses the problems of supply and demand for workers of a given specialty; nor are the problems of regional labor markets in individual countries analyzed. The goal here is simply to provide the reader with a general understanding of the labor market situation and the general features of manpower policy in Eastern Europe.

I. The Labor Market

A. From reserves to shortages

The labor resources of any country are determined primarily by demographic factors, that is, by the size of the population and its age and sex composition. The six East European CMEA member countries had a population of 108 million in 1978, an increase of 5.3 million, or 5.1 percent, over 1970. During the entire post World War II period the population in all but one of these countries has been increasing. The only exception has been the G.D.R. where, because of the massive emigration before 1961, the adverse impact of the two world wars on the age of the population, and low birth rates,
the population and sex structure has been decreasing almost throughout the entire postwar period (see Table 1). At the same time, the general tendency in the majority of East European countries has been a decline in the average rates of population growth. This decline was especially large in the 1960s. In the 1970s, however, there was a slight increase in population growth in Czechoslovakia, Hungary, and Poland.

At least two periods in the dynamics of population can be distinguished in most East European countries. During the first period, which lasted approximately until the mid-1950s, birth rates were high and death rates were decreasing. While death rates decreased steadily until the end of the 1960s, birth rates reached their maximum level in most East European countries in the early 1950s. Thereafter they started to decline rapidly. Death rates were relatively stable in the 1970s, while birth rates have stabilized or even somewhat increased. The latter was due to the fact that the relatively large cohorts of population born after World War II were entering child bearing years during that period. Active pronatalist population policies adopted by most East European countries have also contributed to this increase in birth rates.

Changes in birth and death rates and increased life expectancy resulted in significant changes in the age structure of population. Their characteristic feature has been the aging of the population. At the same time, the youth (under 15) have decreased in number and proportion in the population in almost all the countries.

As all East European countries must rely primarily on domestic labor sources, the dynamics of the working age population is of paramount importance to the evaluation of labor supply (see Table 2). This Table is important for the following discussion on labor economics.
TABLE 1. AVERAGE ANNUAL PERCENTAGE CHANGE IN THE POPULATION

<table>
<thead>
<tr>
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<td>Bulgaria</td>
<td>0.65</td>
<td>0.95</td>
<td>0.85</td>
<td>0.70</td>
<td>0.55</td>
<td>0.35</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1.10</td>
<td>0.85</td>
<td>0.75</td>
<td>0.25</td>
<td>0.65</td>
<td>0.75</td>
</tr>
<tr>
<td>German Democratic Republic</td>
<td>-.50</td>
<td>-.80</td>
<td>-.25</td>
<td>.05</td>
<td>-.25</td>
<td>-.20</td>
</tr>
<tr>
<td>Hungary</td>
<td>1.00</td>
<td>.30</td>
<td>.35</td>
<td>.35</td>
<td>.40</td>
<td>.45</td>
</tr>
<tr>
<td>Poland</td>
<td>1.90</td>
<td>1.60</td>
<td>1.30</td>
<td>.65</td>
<td>.90</td>
<td>.95</td>
</tr>
<tr>
<td>Romania</td>
<td>1.20</td>
<td>1.20</td>
<td>.65</td>
<td>1.25</td>
<td>.95</td>
<td>.95</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>.80</td>
<td>.70</td>
<td>.60</td>
<td>.60</td>
<td>.60</td>
</tr>
</tbody>
</table>

Source: Statistical yearbooks of individual countries.
<table>
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<tr>
<td>Bulgaria</td>
<td>4,203</td>
<td>4,153</td>
<td>3,956</td>
<td>3,942</td>
<td>4,151</td>
<td>4,304</td>
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<td>Czechoslovakia</td>
<td>5,577</td>
<td>5,956</td>
<td>6,063</td>
<td>6,477</td>
<td>7,033</td>
<td>7,605</td>
</tr>
<tr>
<td>German Democratic</td>
<td>7,196</td>
<td>7,722</td>
<td>7,686</td>
<td>7,676</td>
<td>7,769</td>
<td>8,048</td>
</tr>
<tr>
<td>Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>4,107</td>
<td>4,470</td>
<td>4,735</td>
<td>4,649</td>
<td>4,980</td>
<td>5,069</td>
</tr>
<tr>
<td>Poland</td>
<td>10,186</td>
<td>11,467</td>
<td>12,401</td>
<td>13,521</td>
<td>15,175</td>
<td>17,410</td>
</tr>
<tr>
<td>Romania</td>
<td>8,377</td>
<td>9,363</td>
<td>9,538</td>
<td>9,684</td>
<td>9,875</td>
<td>10,290</td>
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</table>

TABLE 3. AVERAGE ANNUAL PERCENTAGE CHANGE IN WORKING-AGE POPULATION (P) AND EMPLOYED POPULATION (E)

<table>
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</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>0.75</td>
<td>-0.25</td>
<td>0.40</td>
<td>-0.95</td>
<td>0.75</td>
<td>-0.05</td>
<td>0.60</td>
<td>1.05</td>
<td>0.50</td>
<td>0.75</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1.15</td>
<td>1.35</td>
<td>0.40</td>
<td>0.35</td>
<td>0.85</td>
<td>1.35</td>
<td>0.50</td>
<td>1.65</td>
<td>0.70</td>
<td>1.00</td>
</tr>
<tr>
<td>German Democratic Republic</td>
<td>-0.65</td>
<td>1.40</td>
<td>-1.55</td>
<td>-1.10</td>
<td>-1.20</td>
<td>0.00</td>
<td>-0.05</td>
<td>0.25</td>
<td>0.65</td>
<td>0.55</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.50</td>
<td>1.70</td>
<td>-1.10</td>
<td>1.15</td>
<td>0.45</td>
<td>-0.35</td>
<td>0.65</td>
<td>1.40</td>
<td>0.35</td>
<td>0.25</td>
</tr>
<tr>
<td>Poland</td>
<td>1.45</td>
<td>2.40</td>
<td>0.85</td>
<td>1.60</td>
<td>1.00</td>
<td>1.75</td>
<td>1.40</td>
<td>2.35</td>
<td>1.70</td>
<td>1.75</td>
</tr>
<tr>
<td>Romania</td>
<td>...</td>
<td>2.25</td>
<td>0.65</td>
<td>0.35</td>
<td>0.50</td>
<td>0.30</td>
<td>1.05</td>
<td>0.40</td>
<td>1.35</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1. Population of individuals of working age is by official age limits set by individual countries, except for Romania (15 to 59 for men and 15 to 54 for women).

2. When discussing employment rates one should be aware of several caveats. The employment rate of the total population does not reflect the differences among individual countries in the age and sex structure of the population. Thus, a country where the labor force potential of the population (i.e., the share of the able-bodied population in the total population) is higher might have a higher employment rate though the age-specific participation rates might not necessarily be higher. The employment rates of the working-age population are distorted by the fact that the employed population consists not only of persons in working-age groups, but of those in pre and post-productive ages as well. It should be mentioned that employment of people of pre-productive ages is very limited in the socialist countries of Eastern Europe. For example, in Bulgaria there were only 10,000 persons of this age employed in the national economy in 1970. This constituted only 0.2 of overall employment. (2) In addition, the employment rate is affected by the branch structure of the economy. Countries with a high proportion of the workforce employed in agriculture (see table below) have, as a rule, higher employment rates. Possibilities of employment in agriculture in the East European countries for women, elderly persons, and less skilled labor are much greater than in other branches of the national economy. Therefore, ceteris paribus one can expect the employment rates to be higher in such countries with a large share of agricultural employment, as Romania, Poland and Bulgaria.

3. Sources: Same as for Table 2.
Table 3a

Percentage of overall workforce employed in agriculture and forestry

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>79.5</td>
<td>70.4</td>
<td>55.5</td>
<td>45.3</td>
<td>35.7</td>
<td>24.9</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>38.6</td>
<td>34.1</td>
<td>25.9</td>
<td>21.3</td>
<td>18.6</td>
<td>14.3</td>
</tr>
<tr>
<td>G.D.R.</td>
<td>27.3</td>
<td>20.7</td>
<td>17.2</td>
<td>15.2</td>
<td>13.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>50.6</td>
<td>43.4</td>
<td>38.9</td>
<td>29.7</td>
<td>26.4</td>
<td>21.8</td>
</tr>
<tr>
<td>Poland</td>
<td>54.0</td>
<td>...</td>
<td>44.1</td>
<td>39.4</td>
<td>34.6</td>
<td>26.9</td>
</tr>
<tr>
<td>Romania</td>
<td>74.3</td>
<td>69.7</td>
<td>65.6</td>
<td>56.7</td>
<td>49.3</td>
<td>31.1</td>
</tr>
</tbody>
</table>

During the entire postwar period Poland has had the largest growth in working-age population, and therefore, the ability to increase its labor force more rapidly than the rest of the East European countries. Romania and Bulgaria also experienced relatively high rates of growth in the working-age population in the 1950s. With the exception of the G.D.R., labor supply again increased in all the East European countries during the second half of the 1960s, due to high birth rates after the war and in the early 1950s. During the second half of the 1970s the average annual rates of growth of working-age population started to decline in most East European countries, reflecting the low birth rates in the 1960s. This trend will become particularly evident in the first years of the 1980s.

In addition to decreasing increments of young people to the labor force, the dynamics of the aging population withdrawing from the labor force upon reaching retirement age will also have an increasingly negative effect on the labor supply in most East European countries. For example, World War I affected Hungarian birth rates so that an average of only 131 thousand people a year were born during 1916-1918 compared to an average of 264 thousand during 1900-1914 and an average of 251,000 during 1920-1922). The pre- and post-war cohorts partially offset the lower increments to the working-age population generated during the war throughout the 1970s. But in 1980-1982 people born after World War I, the years of maximum birth rates in Hungarian history, will reach retirement age. At the same time people born in the mid-1960s, when the birth rates were extremely low, will reach working age. Thus, the size of the working-age population in Hungary will decrease. Similar demographic trends can be observed in most of the other countries of Eastern Europe as well.
Let us take a closer look at employment growth in individual countries and the factors which have affected this growth.

(i) 1951-55: Ample Labor Reserves

The immediate postwar period and the first years of the 1950s were the years of reconstruction of the East European economies with rapid industrial development which required a significant labor force. Meeting this labor demand was not a problem, since unemployment plagued urban areas and the countryside was overpopulated. The increase in employment was based primarily on elimination of unemployment. Due to this policy, the employment rate of the population rose significantly in most countries (see tables 4 and 5). For example, during 1951-1955 the employment rate of the population of able-bodied ages increased in Czechoslovakia from 75.1 to 79.6 percent, in the G.D.R. from 61.1 to 67.7 percent. The first labor shortages appeared in the G.D.R. and Czechoslovakia toward the end of this period. There were labor shortages in Hungary as well due to economic policies before 1953. The only exception has been Bulgaria where until 1956 the process of industrialization was very slow, and employment in industry and construction hardly grew. As a result, the size of the labor force has decreased. That, in turn, caused a decline in the level of economic activity.

(ii) 1956-60: Departure from the Labor Force

Large scale collectivization made the second half of the 1950s a time of rapid changes in agriculture in most East European countries. Large numbers

* Relatively lower employment rates of the population in the G.D.R. are explained primarily by the high average age of its population, limiting the size of working-age population. If we consider the participation rates of the population aged 15 to 59 then this indicator, for example, for 1970 would have been 83.5 percent rather than 78.6 percent for the legally determined population of working ages.
of previously underemployed agricultural workers and their families moved to urban areas. In some instances the non-agricultural sectors could not absorb both the total growth of the population of working ages and the influx of agricultural population. Limited employment prospects in non-agricultural sectors resulted in significant withdrawals from the labor force, a general decrease in employment, and in Bulgaria even open unemployment, especially among women. This process also resulted in a decline in the level of economic activity of the population in some countries (in Bulgaria the rate of employment of the population decreased from 58 percent in 1950 to 50.3 percent in 1960, in Romania from 54.1 in 1955 to 51.8 in 1960, and in Czechoslovakia from 45.5 to 44.4 during the same five year period). There was a decline in employment in Hungary as well. However, the main cause of this decline was the 1956 revolt, which disrupted regular economic activities. Approximately 180,000 people, a majority of them working age, left Hungary. The authorities subsequently introduced unemployment benefits. In general, during the second half of the 1950s the rates of growth of employment in all East European countries were lower than in the preceding five year period. At the same time in the majority of them these rates were higher than the rates of growth of the population of working ages. As mentioned, the main sources of additional labor for non-agricultural sectors were the formerly agricultural population and housewives in the cities. Some countries relied heavily on the latter source, including the G.D.R. where using this method the employment rate of the population of working ages was increased from 68 percent in 1955 to 73 in 1960.

(iii) 1961-65: Continuing Reliance on Agricultural Labor Force Departure

During the first years of the 1960s the process of collectivization in agriculture had continued in most countries with a resulting mass movement
Table 4. Employment rate of the population (percentage of employed population in total population)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>58.0</td>
<td>55.4</td>
<td>50.3</td>
<td>48.1</td>
<td>48.9</td>
<td>49.4*</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>45.0</td>
<td>45.5</td>
<td>44.4</td>
<td>45.7</td>
<td>49.1</td>
<td>50.1</td>
</tr>
<tr>
<td>G.D.R.</td>
<td>39.1</td>
<td>43.0</td>
<td>44.6</td>
<td>45.1</td>
<td>45.5</td>
<td>48.5</td>
</tr>
</tbody>
</table>
| Hungary     | 44.0 | 45.5 | 47.4 | 45.8 | 48.2 | 47.4 *
| Poland      | 41.0 | 42.0 | 42.0 | 42.9 | 46.6 | 49.7 |
| Romania     | 51.4 | 54.1 | 51.8 | 50.9 | 48.8 | 46.9 |

* 1975

Source: Same as for tables 1 and 2.

Table 5. Employment rate of the working-age population (percentage of employed population in the population of working age)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
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<td>96.7</td>
<td>92.0</td>
<td>85.8</td>
<td>82.3</td>
<td>84.1</td>
<td>85.1*</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>75.1</td>
<td>79.6</td>
<td>79.4</td>
<td>81.4</td>
<td>86.2</td>
<td>88.0</td>
</tr>
<tr>
<td>G.D.R.</td>
<td>61.1</td>
<td>67.7</td>
<td>72.9</td>
<td>77.4</td>
<td>78.6</td>
<td>77.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>71.8</td>
<td>73.5</td>
<td>80.3</td>
<td>77.1</td>
<td>80.0</td>
<td>79.6</td>
</tr>
<tr>
<td>Poland</td>
<td>70.2</td>
<td>73.5</td>
<td>76.2</td>
<td>79.1</td>
<td>82.8</td>
<td>83.6**</td>
</tr>
<tr>
<td>Romania</td>
<td>...</td>
<td>91.7</td>
<td>90.4</td>
<td>89.6</td>
<td>86.8</td>
<td>81.3</td>
</tr>
</tbody>
</table>

* 1975; ** 1977.

Source: Same as for table 2.
of population to urban areas. For example, from 1959 to 1962 the number of persons employed in Hungarian agriculture decreased by 442,500, while during the preceding and succeeding three year periods the decrease was only 14,000 and 151,400 persons respectively. At the same time, there was an increase in the rates of growth of the working-age population in all the East European countries, as youth born after the war began to enter the labor force. Notwithstanding the increased labor supply, however, the demand for labor exceeded supply in most countries.

It should be mentioned that the first half of the 1960s was a period of severe economic problems for many East European countries. Economic growth rates had declined significantly, reflecting, in particular, crises in agriculture after collectivization. In addition, the rates of growth of labor productivity had also begun to decline. Policy-makers sought to counteract these trends by expanding production through construction of new industrial capacity and an increase in the labor force. The main source of industrial employment in most countries continued to be the agricultural workforce. Employment in agriculture during these five years decreased in Hungary by one-fourth, and in the G.D.R., Czechoslovakia, and Romania by one-sixth. In addition, the age and sex composition of agricultural labor force deteriorated. In the early 1960s, 26 percent of the labor force in agriculture in Czechoslovakia was in post-productive age groups, in Hungary almost one-fifth. Simultaneously in such countries as the G.D.R. and Czechoslovakia the proportion of women in the labor force increased considerably. The rate of employment of women approached the maximum achievable. Illustrative of this process of massive tapping of female labor reserves in Eastern Europe during the postwar period is the fact that in Czechoslovakia during the period 1948-1977
total employment increased by 1,545,000 while the number of employed women increased by 1,111,000 (72 percent of the increase). Even more impressive are the data for Hungary where during the period 1949-1979 the increase in employment of women (1,083,000) was higher than the increase in overall employment (1,058,000).

The following factors have contributed to this significant increase in women's employment: (1) low wages for heads of households created a demand for a second income in the family in order to maintain the standard of living; (2) the increase in the minimum wage raised the opportunity cost of staying home for housewives; (3) creation of job opportunities in excess of available male labor reserves generated increased demand for female labor; (4) the introduction of new technology made many jobs suitable for employment of women; (5) the increase in educational level of women results in a desire to apply the acquired skills and to pursue a career; and (6) development of childcare facilities relieved women (to some degree) from the necessity to stay at home with their children.

(iv) 1966-70: Economic Reforms--Caution in Manpower Policy

Most East European countries undertook economic reforms in the second half of the 1960s. Some of them, for example Hungary and Bulgaria, were afraid that economic reforms combined with an increase in the working-age population could bring about the reappearance of unemployment. In order to avoid this danger, the Hungarian policymakers adopted several measures. Economic regulators, particularly the system of wage regulation, were constructed in such a way as to discourage enterprises from firing redundant workers. In addition, Hungary signed an agreement with the G.D.R., according to which 10,000 young Hungarians were to work in the G.D.R. for three years. However,
fears of unemployment were unfounded: demand for additional labor was extremely high. As a result, while annual rates of growth of the working-age population averaged 0.65 percent, employment increased at a rate of 1.4 percent per annum, and overall the employment rate of the population rose from 45.8 in 1965 to 48.2 percent in 1970, leading to a labor shortage. In the G.D.R., in spite of the continuing decrease of the size of the working-age group, the labor force continued to increase. This was made possible by the introduction of flexible forms of employment for marginal female labor reserves and by encouraging people who became eligible for old-age pensions to continue to work. In the mid-1960s 8 percent of the labor force in the G.D.R. consisted in post-productive ages. In Czechoslovakia the rates of growth of employment were also significantly higher than the rates of growth of working age population; the former has been increasing by 1.65 percent on average per year, the latter by 0.50 percent. Almost half of the country's population was employed. Eighty-five percent of the employment increase was derived from the natural increase of working age population.

Poland and Romania based their economic strategies on expanding production by bringing additional workers into non-agricultural sectors. In Poland during the period 1966-1970 more than three million people (as opposed to two million in the preceding five year period) reached working age. Thus, in order to secure employment for these increments to the labor force, 1.5 million new job opportunities had to be created. In fact, during this period labor force in Poland increased by more than that, and the first signs of local labor shortages appeared, especially in the industrially developed regions of the country and among men. At the same time, there were not enough job opportunities for women. In 1965, for every 10 women
registered as seeking employment there were only 2 openings and by 1970
only one. In Bulgaria, in contrast with the preceding 15 years of decreasing
labor force, employment showed a significant rise during the second half of
the 1960s. The employment rate increased primarily due to increased participa-
tion rates of the urban female population. As in Hungary and in Poland,
the first labor shortages appeared in Bulgaria during this period.


Thus, at the beginning of the 1970s, two countries--the G.D.R. and
Czechoslovakia--achieved high levels of participation of their population,
each practically exhausted labor reserves among non-working women of working
age, and could no longer rely on agriculture as a source of manpower for
other sectors of their economies. The labor market in Hungary had very similar
characteristics, though the labor shortage was not as acute, as in the two
above mentioned countries. In Poland, Romania, and to a lesser degree, in
Bulgaria there were still possibilities for increasing the levels of economic
activity of working-age women, and agriculture still was a reservoir of man-
power for non-agricultural sectors.

In general, in the 1970s, East European countries with tight labor
markets had to focus on increasing labor productivity, while Poland's and
Romania's economic policies were still based on the availability of labor
reserves. In Romania, due mainly to decreased agricultural employment, the
participation rates of the entire population and of the working age popula-
tion continued to decline. Nevertheless, 31.1 percent of the Romanian labor
force was still employed in agriculture in 1979. This share is substantially
higher than in any other East European country. The Romanian agricultural
labor reserves are theoretically high enough to be able to satisfy labor
demand in the non-agricultural sectors of the economy. Yet evidences of local labor shortages in industrially developed areas of the country have appeared, and the 1980 plan for employment in industry and construction was underfulfilled. At the meeting of the Central Committee of the Romanian Communist Party in 1980 President N. Ceausescu pointed out that "In all industrial sectors--investments, construction, agriculture--there is a shortage of manpower."7

In Bulgaria and Poland the labor shortage has worsened. Employment in the sphere of material production declined in Bulgaria in 1976 and 1977. At the beginning of 1978, the labor shortage was estimated to equal 27,000 persons. In Poland, the labor market situation has changed twice during the past decade. During the period 1971-1975 Poland had the largest increase in the population of working age in its history. At the same time, in 1970 there were 71,300 women seeking employment, but only 8,500 openings. According to one version of the five year plan, unemployment would reach 500,000 at the end of the plan period.8 To combat rising unemployment and other severe economic problems, the Polish Communist Party adopted a strategy based on heavy investments in industry through foreign borrowing and on high rates of growth of creating new "cheap" job opportunities for women was adopted, and the rates of growth of employment in "female" branches of the economy have risen sharply. For example, in 1971, the growth rate of employment in the clothing industry was 5.6 times the (percentage) growth rate of 1970; in the leather, fur and shoe industries 2.8 times greater; and in the food industry 16 times greater.9 As a result, for the first time, demand for female labor exceeded the supply in 1973.10 High rates of employment growth continued through most of the 1970s. Simultaneously, in the last years of the past
decade employment in agriculture has stabilized. Under conditions of very limited labor reallocation between agricultural and non-agricultural sectors and diminishing labor reserves among the female population in urban areas, the demand for labor in excess of natural growth of the working age population led to increased labor shortages.

By the late 1970s, however, the Gierek administration was faced with new economic crises. Sharp reductions in the volume of imported materials and intermediate goods and cuts in investment outlays adversely affected the labor market. The 1980 national plan called for great reductions in employment in the construction industry (93,000 jobs), industrial employment (11,000 jobs), and in employment in trade (6,000 jobs).\textsuperscript{11} Substantial decline in output, a virtual stoppage of production in many enterprises, and further cuts in investments as a result of the inability to import or obtain foreign credits contributed to substantial employment by 1980-81. Reports from Poland refer 10 to 20 percent of the workforce "who may simply find, any day now, that there is not enough work for them to do."\textsuperscript{12} Trybuna Ludu writes about the need to redeploy the jobless workers into agricultural and service sectors, or programs to encourage early retirement.\textsuperscript{13} Within the next three years between 1.0 and 1.2 million people in the various sectors of the national economy will have to find alternative employment,\textsuperscript{14} with the government admitting that many will be unable to find new jobs.\textsuperscript{15}

At the same time, a considerable slowdown in economic development in practically all the East European countries in the late 1970s and early 1980s has decreased demand for additional labor. Combined with declining increments to the labor force this resulted in slower rates of growth of employment,
and in Hungary even in an absolute decrease in the labor force during 1976-78. In fact, in Hungary employment in industry and construction has been declining throughout this period, while employment in agriculture has been on the increase. Most Hungarian experts agree that the labor market is becoming less tight, but that the labor shortage is confined to certain sectors and professions (there is a shortage of unskilled and a surplus of skilled workers in some professions). In the opinion of Hungarian planners there is no need to increase the participation rates of the population during the current FYP. According to the Ministry of Labor, participation rate of the working age population will remain unchanged between 1981 and 1985, while male participation rates will continue to decline (from 82.3 percent at the beginning of 1981 to 81 percent at the beginning of 1986), and female participation rate will increase from 70.5 to 72.5 percent. This envisages a 36,000 reduction in the total labor force.

Thus, at the beginning of the eighties a new picture of labor market situation in Eastern Europe has begun to emerge. The two chronically labor-short economies of the G.D.R. and Czechoslovakia continued to struggle with a general labor shortage. Hungary, which throughout the middle of the previous decade had a similarly tight labor market, now experiences local labor shortages, as do Bulgaria and Romania which are moving rapidly toward a general shortage of labor. At present the condition of Polish economy is in such disarray that any serious assessment of possible changes in the labor market is impossible. In any event, for awhile Poland will not be among the countries with a labor shortage.

If Eastern Europe manages to overcome the economic crisis of the present within a short period of time, and demand for labor increases again,
it will have to rely on the natural increment to the working age population. However, this source will decline sharply especially in the period 1981-1985, in all countries but Romania. The size of the working age population will decrease absolutely in the current five-year period in Bulgaria and Hungary, and from 1985 until the end of the century in the G.D.R. In Czechoslovakia, the average annual rates of growth will be one-tenth of a percent in contrast to the one percent of the second half of the 1970s. In Poland there will be half as many new entrants to the job market as in the preceding five years (see Table 6).

These projections, combined with levels of economic activity of the population in individual countries, suggest a significant slowdown or even absolute decline in the labor force in most East European countries. The labor market situation will depend primarily on changes in the demand for labor, and the ability of policy makers to meet demand by reallocating labor within individual industries rather than seeking to continue the traditional ways of mobilizing additional manpower reserves.

B. Causes of labor shortage

There are quite a few explanations for the existence of labor shortages in the East European countries. Generally speaking, labor shortages arise because of planning practices which create more job opportunities than available labor supply.

One of the main causes of the labor shortage is deficiencies in national planning. Labor planning in the socialist countries is based on a balance of labor resources. The supply side of the balance is determined primarily on the basis of demographic development and estimates of changes in the participation rates. One of the basic requirements for the national labor
Table 6
Average annual percentage change in the working-age population*
(projections)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>-0.1</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>0.1</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>G.D.R.</td>
<td>0.5</td>
<td>-0.1</td>
<td>-0.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>-0.2</td>
<td>0.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Poland</td>
<td>0.4</td>
<td>0.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Romania</td>
<td>0.9</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Population aged 15 to 59.

plans is **full employment**. Hence, the potential size of employment is given. Then the supply side of the balance of labor resources is compared with the economy's demand for labor. The latter is calculated on the basis of projected production and labor productivity growths. At this stage the supply and demand sides are balanced.

However, for a number of reasons enterprises submit plans to their respective ministries trying to prove that in order to fulfill their production plans they need more workers than the planned employment limits handed down to them. The same claim is made to the national planning committees by branch ministries. The national planning committees yield to these pressures for additional labor by expanding the supply side of the balance of labor resources on the often unrealistic assumptions that more people would be willing to undertake employment or fewer workers would be leaving the labor force. Therefore, labor supply figures become the desired number rather than the estimated. As a result of these assumptions, labor plans call for greater increase in employment than is possible.

A second source of labor shortage on the macroeconomic level is the planners' unfounded optimism with regard to the growth of labor productivity. If one compares the five year plans of East European countries during the postwar period, one notes that most of the planned targets for productivity growth were unfulfilled. Thus, if the level of labor productivity is lower than planned, an increase in the labor force to exceed plan levels is necessary in order to fulfill output targets, which are still the most important success criteria.

The third cause of labor shortage derives from the practice of investment planning. In this sphere the main goal of an enterprise is to have its investment plans approved by the central authorities. Approval is easier to
obtain if the project shows low requirements for labor (and money). Therefore, enterprises, as a rule, underestimate the actual labor demand connected with new investments. It is much easier to get additional funding to complete the construction when construction is started and millions of crowns, forints or levas have been spent, even if the final costs and labor requirements are much higher than those estimated and approved. 18

The excess supply of job opportunities has its historical roots in the postwar years. During that period of abundant and cheap labor, policy makers sought to create as many job opportunities as "accumulation funds" permitted. This often led to the creation of positions with a low technological level which resulted in turn in low labor productivity. After labor reserves had been exhausted this policy of extensive investments in new capacities rather than increased capital for labor substitution at the existing production units continued, and this compounded the labor shortage.

Labor shortages in the East European countries can also be discussed from the point of view that it seems to be a general law that firms in modern societies seek to expand. In addition to common reasons for a growth-orientation, socialist enterprises have their own specific motives for expansion. In a socialist economy, the activities of enterprises depend on central authorities or market regulators determined by these authorities. The larger the enterprise, the greater its significance, prestige and influence on authorities, and occasionally, its monopolistic or semi-monopolistic position. This holds true for economies with traditional types of economic planning as well as for economies which have introduced limited market regulations. With regard to the former, the larger the enterprise, the greater is its ability to influence the plan targets given to it by the
central authorities and the stronger is its bargaining position for "better" plan targets. With regard to the latter, a larger enterprise is likely to force the authorities to be more sensitive to the enterprise's interests when determining the market regulators.

This tendency toward growth results in a shortage of factors of production, especially of labor and capital. But while most capital is allocated by the center (the market for capital goods does not exist, or is very limited), there is a labor market through which, under the conditions of free movement of labor, some enterprises are able to get labor even if the total demand is greater than the supply. In a labor-short economy every enterprise has to compete for labor, or it will lose its own. This often pushes the enterprise to seek additional labor, even if it does not need it.\(^\text{19}\)

In addition, enterprises in the majority of the East European countries are not profit-maximizing. Their prime objectives are connected with the fulfillment of output targets, while profitability is subordinated to these goals. Therefore, allocation of resources is not primarily based on comparative costs of factors of production and their productivity, but rather on the easiest ways of increasing output. Since it is no easier to acquire additional labor rather than capital, enterprises often follow a labor intensive policy. This helps to explain why efforts of many East European countries to increase shadow wages for enterprises (which will be discussed later) have been fruitless.

In addition, the low level of mechanization of auxiliary processes such as material handling and storage contributes to labor shortages. Even in the G.D.R., where the level of mechanization is higher than in the rest of Eastern Europe, mechanization of auxiliary processes is 30% lower than
Lack of capital for labor substitution in this sphere is due to the fact that such labor-saving investments do not increase output.

Another explanation for labor shortages is connected with the ratchet principle of national planning and management which is also known as "planning from the achieved." Under this system managers hide labor and capital when targets are being established. This phenomenon leads to the creation of so-called "intra-mural" labor reserves at the enterprises. According to various estimates, the reserves constitute up to 20 percent of the industrial labor force and are even larger in the construction industry. In addition by increasing an enterprise's workforce the managers, whose salary under the existing system of remuneration is directly connected to the size of the enterprise, receives greater compensation.

Another explanation for the labor shortage is the low level of labor productivity in comparison with the achieved level of technology. Very often this results from the extremely limited material incentives for the workers to increase the intensity and productivity of their work. The main reason for this absence of stimuli, however, lies outside the sphere of economic policy. Material incentives can be productive only if they allow visible wage differentiation according to work performance. But this differentiation is very restricted due to political considerations, including the population's intolerance of significant wage and income differentials.

II. Manpower Policy

To achieve the goals of economic policy, authorities use different tools. One such tool is manpower policy. Although subordinate to economic policy, manpower policy has tasks of its own. It must ensure that the
necessary types of workers are available at the places and in quantities
where they are needed in order to fulfill national economic plans, which re-
reflect the goals of economic policy. The goals of manpower policy can
be achieved only in combination with other governmental policies, such as
investment, population, educational, housing and wage policies. Lack of
coordination among these policies results in disequilibria in the labor
market. One of the causes of this lack of coordination is the economic policy
of "unconditional" economic growth. Therefore, manpower policy cannot be
"blamed" for the principal labor market problems in the countries of Eastern
Europe.

A. Instruments of Manpower Policy

(i) Labor planning

In socialist countries the main tool of manpower policy at the national
level is labor planning based on a balance between the demand for labor and
the available labor supply. Two main types of balances may be distinguished,
actual and planned, which reflect the process of reproduction and utilization
of the labor resources at a specific point in or period of time in the past
(actual balances) or in the future (planned balances). An example of an
aggregate actual manpower balance for Hungary, is given below (Table 7).

In addition to manpower balances, East European planners usually
utilize employment balances. These balances show the number of employed people
at the beginning of the year, the increment to the working population during
the year (mainly from schools and training institutions), total withdrawals
from the workforce during the year, including natural losses, and finally,
the number employed at the end of the year. These data are broken down by sex.
### TABLE 7.—AGGREGATE MANPOWER BALANCE IN HUNGARY (BEGINNING OF THE YEAR)

<table>
<thead>
<tr>
<th></th>
<th>1971</th>
<th>1976</th>
<th>1979</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td></td>
</tr>
<tr>
<td>Of which</td>
<td>4,947.0</td>
<td>2,003.7</td>
<td>2,172.3</td>
</tr>
<tr>
<td></td>
<td>1,116.0</td>
<td>1,056.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>1,056.3</td>
</tr>
<tr>
<td>Males</td>
<td>6,275.4</td>
<td>6,370.0</td>
<td>6,363.8</td>
</tr>
<tr>
<td>Female</td>
<td>3,325.3</td>
<td>3,038.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,038.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>2,131.3</td>
<td>2,158.4</td>
<td>2,162.7</td>
</tr>
<tr>
<td>Female</td>
<td>1,506.0</td>
<td>1,412.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,412.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>10,353.7</td>
<td>10,572.1</td>
<td>10,698.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,191.3</td>
<td>5,507.5</td>
</tr>
<tr>
<td>Source of manpower</td>
<td>6,275.4</td>
<td>6,370.0</td>
<td>6,363.8</td>
</tr>
<tr>
<td>Males</td>
<td>3,325.3</td>
<td>3,038.5</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3,038.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>217.6</td>
<td>233.8</td>
<td>69.9</td>
</tr>
<tr>
<td></td>
<td>6,636.2</td>
<td>6,647.6</td>
<td>6,597.6</td>
</tr>
<tr>
<td>Source of manpower,</td>
<td></td>
<td></td>
<td>6,597.6</td>
</tr>
<tr>
<td>total</td>
<td>6,350.3</td>
<td>6,476.1</td>
<td>6,597.6</td>
</tr>
<tr>
<td>Use of manpower</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Active earners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>1,725.5</td>
<td>1,728.8</td>
<td>1,733.9</td>
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<tr>
<td>Construction</td>
<td>385.0</td>
<td>410.4</td>
<td>413.2</td>
</tr>
<tr>
<td>Transportation and</td>
<td>369.1</td>
<td>402.2</td>
<td>405.7</td>
</tr>
<tr>
<td>communication</td>
<td>419.9</td>
<td>438.0</td>
<td>485.1</td>
</tr>
<tr>
<td>Trade</td>
<td>62.3</td>
<td>70.5</td>
<td>75.2</td>
</tr>
<tr>
<td>Water economy</td>
<td>727.7</td>
<td>834.2</td>
<td>935.3</td>
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<td>4,034.1</td>
<td>4,651.5</td>
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<tr>
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<td>1,544.4</td>
<td>1,511.4</td>
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<tr>
<td>between 14-59 yrs,</td>
<td></td>
<td></td>
<td>571.3</td>
</tr>
<tr>
<td>females between</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-59 yrs</td>
<td></td>
<td></td>
<td>940.3</td>
</tr>
<tr>
<td>Students</td>
<td>300.9</td>
<td>517.0</td>
<td>597.6</td>
</tr>
<tr>
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<td>509.4</td>
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<td></td>
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<td>360.6</td>
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Preparation and analyses of manpower and employment balances form the basis for planning and the introduction of measures intended to facilitate the fulfillment of the plan. Generally, the national labor plan is designed to provide full employment, to provide labor for the economy, to facilitate better utilization of employed personnel, and to regulate labor mobility. The plan's implementation in a given country relies upon: 1) regulation of employment at the level of branch ministries, associations and enterprises; 2) plans for organized labor recruitment; 3) plans for professional training and allocation of skilled labor; and 4) territorial labor planning. In addition, some non-manpower policy measures are employed. Most of the labor planning instruments are similar in the East European countries, but methods of regulation of employment differ.

In the 1970s when economic reforms were undertaken in a number of East European countries the general tendency was to give firms more power in making decisions about allocation of factors of production, including labor. The number of planned targets was substantially reduced, and some countries abolished direct planning of employment altogether. Regulation of employment was achieved through planning of the wage fund, average wages and labor productivity. In the 1970s, however, the majority of the East European countries returned to direct planning of employment. The main reasons for this were the acceleration of the growth of employment, the decline in the growth rates of labor productivity, and the desire of the planners to have a stricter control over the money supply in the economy in order to keep the demand for consumer goods and services from producing inflationary pressures.
In Bulgaria, for example, since 1972 all ministries, associations and firms have received binding limits for employment, broken down by categories of blue and white collar workers. There are special economic sanctions for violation of these limits. The number of employed personnel is also a planned target in Czechoslovakia, the G.D.R. and Romania. In Poland there are branches of the economy where the growth of employment is a fixed plan indicator, while in other branches employment is regulated indirectly with the help of the wage fund. The latter system of employment regulation is used in the Hungarian economy as well.

In Czechoslovakia all the elements of labor planning are integrated into a Unified System of Employment Management and Labor Force Allocation. This system includes a labor plan which prescribes the following employment targets which are binding down to the level of production units: distribution of labor and job placement by local national committees on the basis of personnel limits established by the central authorities, and the actual manpower balances in the specific country; measures aimed at satisfying the labor demands of specific branches, firms or developmental projects, and at reducing labor turnover; job placement of 15-year old youths; and control over work discipline. To assist labor planning, a system of employment accounting was introduced in Czechoslovakia in 1973, which keeps fairly comprehensive records of employment data.

Plans for organized recruitment of manpower are directed to cover only a small fraction of the total labor force. The task of these plans is to transfer labor from labor surplus regions
of the country to areas which have special needs for additional labor, be it from a low population density (as in the case of Czechoslovakia and Poland, from western parts of which German populations were deported or fled after or in the last years of the war), or the result of specific production tasks. In the latter case, workers are offered a contract for a specific period of time, after which they can either remain in the new job or return to previous places of residence and employment. The contracts are accompanied by certain material incentives. For example, in Czechoslovakia organized manpower recruitment is based on a contract between the worker and the local national committee for a period not less than a year, and is accompanied by incentives for the worker to relocate such as: a lump sum bonus, half of which is paid at the beginning of the new job, the remainder after six months; reimbursement of travelling and moving expenses; per diem during the period of relocation; on the job training grants; and family allowances if dependents do not get housing from the firm. In cases of breach of the contract, the worker is obliged to pay back the amount of money received. This system encourages long-term contracts by increasing lump sum payments. It should be noted that professional training in practice means plans for distribution of youth entering the workforce among various forms of training and education, and job placement of the graduates.

During the last few years a greater emphasis has been placed on territorial planning. Local authorities, who are represented in individual countries by national committees or councils, supervise the fulfillment of enterprise employment plans. They have the right to limit or to impose a ban (as in the case of
Czechoslovakia) on any new construction of production capacity if there is insufficient labor in the locality to fill new job vacancies.

In Hungary, for example, local councils divide firms into groups—usually three—as follows. In the first group are those firms which may hire additional personnel. (Most other counties have imposed limits on such increases.) Second are enterprises which can compensate for their losses in employment, but cannot increase employment above the base level for that year. The third group consists of firms which may not compensate for labor losses, and have to operate with diminishing labor.

(ii) Labor Force Allocation and Regulation of Labor Mobility

Labor force allocation and regulation of labor mobility are another major part of manpower policy in East European countries. Allocation of labor between various branches and industries is based primarily on investment and training policies, while wage differentiation has played a subordinate role.

There are few restrictions on the free movement of labor in the labor market, so that people are relatively free to choose among various types of employment. At the same time, labor mobility in the East European countries is a problem that causes substantial concern to the planners. Some view it as being insufficient while others believe there is too much labor mobility.

Labor turnover, which is considered to be undesirable and socially harmful, is a significant problem, in Hungary, for example, in the 1970s, running at 20 percent of average yearly
However, the problem is not so much in the high rate of labor turnover, as its direction. Most of the turnover has a circular movement, that is, workers quit their jobs and are replaced by others who have quit their jobs who, in turn, are replaced by those from the first group. Thus, this labor turnover does not facilitate desirable changes in the structure of production.

In addition, labor turnover is an economic burden. First, when workers are between jobs production time is lost at up to three weeks per worker. Second, labor productivity falls during the period prior to termination of employment, and is lower at a new job during a training period. These losses are even higher if the workers has to acquire a new profession or skill. It is understandable in this light why the official attitude toward labor turnover has been negative, and why measures to limit these movements, such as administrative restrictions on job changes and material incentives to encourage employment stability, have been introduced.

In Bulgaria the range of administrative restrictions on labor mobility is widespread. Firms, for instance, may not hire workers already employed or who have been dismissed for disciplinary violations. Territorial labor mobility is restricted by a ban on hiring those who reside in another district or were employed in agriculture. In addition, skilled workers who left agricultural jobs after January 1, 1973, had to return to the agricultural sector. Further measures include allowing lower wages for those who change jobs without "valid" reasons, prohibiting wage increases for one year, and depriving the right to get bonuses for
two years. Managers who breach these regulations may be subject-
ed to disciplinary actions or penalties, such as deprivation on
bonuses and salary cuts up to 20 percent.\textsuperscript{27} As far as material
incentives are concerned, "long-service" increments to the wages
are used. These increments range from six percent after one
year of service to 36 percent after 15 years of service in jobs
regarded as difficult, and from three percent after five years
to 12 percent after 20 years in other jobs.\textsuperscript{28}

In Czechoslovakia administrative restrictions are
included in the Labor Code. With regard to on the job training,
a firm may sign a contract with a worker which obligates him
to spend a specified period of time with the firm after the
training period is over. If the worker quits the job earlier,
he must pay back the training expenses. A similar type of contract
may be signed with an apprentice. A worker is eligible for regu-
lar paid vacation only after he has been with the enterprise
for a certain length of time, usually 11 months. There are also
material stimuli to encourage longer tenure including: 1) allow-
ances for "loyalty" (a specific percentage of wage increase
in accordance with length of uninterrupted service at a given
firm, primarily in the mining industry); 2) remuneration on the
occasion of 25 years service, fiftieth birthday, or retirement,
provided that the recipient has been with the enterprise not
less than 5 years; and 3) year-end bonuses, wage increments,
sick benefits, and pensions, on the basis of length of un-
interrupted service.
Many firms in Czechoslovakia have organized special "fluctuation" committees, the purpose of which is to analyze the causes of labor turnover and to prevent turnover, primarily by skilled workers who are difficult to replace. Similar committees have also been organized in enterprises in the G.D.R. The committees give targets for labor turnover reduction. In addition, there are "loyalty" allowances and bonuses at the end of the year according to the length of service. For example, the loyalty allowances in the mining industry for those working underground amount to four to 16 percent of yearly wages.

Both Czechoslovakian and Hungarian workers who change jobs more than twice a year or leave jobs without advance notice may be placed in a new position only through the mediation of a local employment office. However, the efficiency of this "compulsory" job placement is very low, although in 1978 the number placed in Hungary was 75 percent higher than in 1976 before compulsory mediation was introduced. Although this restriction has succeeded in bringing about some reduction in labor turnover, it has not solved the major problem to which employment agencies were assigned, namely to redirect workers to priority firms. Because a worker is not obliged to take the job offered, less than a third of those who reported to the employment offices were given assignment to priority enterprises. The majority, 60 to 70 percent, came to the offices having not only a concrete idea of future employment, but very often a special petition from the future employer, and more often than not was assigned to the petitioning firm. The Hungarian
authorities decided to abolish this system of compulsory mediation in January 1981.\textsuperscript{33}

Measures aimed at restricting labor turnover are enforced, however, at the same time as turnover is encouraged when it facilitates reallocation from low- to high-priority industries, matching of the skills of the workers and the job to labor force requirements, and when it is motivated by personal circumstances.\textsuperscript{34}

Restructuring of production in industry is becoming one of the primary economic objectives of East European countries. Unfavorable changes in world markets in the 1970s, unsatisfactory productivity of labor, the growing labor shortage, and the anticipated sharp reduction in the increment to the working age population for 1981-85 have made it evident to planners that structural changes are needed to avoid major economic slowdowns. The policies have not been totally successful, despite their high priority for a number of years. In the past, programs for development of new industrial products could have been carried out, though not without difficulties, by adding new labor to man new facilities. The present situation requires the reduction of the labor force at existing production units. These reductions must be accompanied by increased productivity at the same time as enterprises solve the problem of intraenterprise reserves of labor to reduce the labor shortage, and manufacture goods competitive on world markets. According to one Czechoslovak source, in the long run approximately 20 percent of all the jobs in industry should be phased out. During the 1976-1980 plan period 32 thousand working places were
to be eliminated, but during the first two years of the plan period this target was underfulfilled by 40 percent. In order to accelerate the process of structural change, the government of Czechoslovakia issued a decree in 1978 promoting material security for workers affected by those changes, enacted by the Federal Ministry of Labor and Social Questions in 1979, whose main objective was to encourage desirable labor mobility by reducing its negative effects on workers.

Accordingly, a displaced worker may be dismissed only if he cannot be employed at his place of former employment, and if he refused to accept a new job or to undergo retraining. The former employer is required to assist the worker in finding new employment. This is done in cooperation with the local national committees. A worker who accepts a new job at a developmental project may receive compensation for the loss of his wages. During the first three to six months (in some instances up to 12 months) at the new job, even if the present wage is lower. Further, a worker is hired at a developmental project through organized recruitment is eligible for the benefits appropriate to that recruitment.

A worker for whom a new job cannot be found is eligible for a grant, which is in fact a form of unemployment benefits, that constitutes 60 percent of the previous average net wage not to exceed 1,800 crowns a month (70 percent of average wage rate in industry for 1979). The grant is paid for up to a 6-month period, although if the dismissed worker has not been offered any suitable job during this 6-month period, the grant is paid for another 6 months but at a reduced rate (30 percent of the net average wage and not more than 90 crowns). It remains to be seen whether these new measures will achieve the goals for which they were designed. A similar regulation was introduced in Bulgaria in 1967, but no evidence of any positive effect on labor reallocation has been reported. Other East European countries have not turned to comprehensive unemployment benefits to encourage greater labor mobility, but this does not mean that the problem of structural
changes is less important in these countries nor does it mean that the Czech program is entirely successful.

In all East European countries, preference is given to transfers of workers within an enterprise. Under Hungarian regulation, if a worker does not accept a new job within the enterprise, he is given a dismissal notice 15 days to 6 months prior to the dismissal itself. During this period the firm is obliged to give the worker leave with full pay for a period of 15 to 30 days to look for a position. Only in certain circumstances is a worker eligible for some form of assistance, i.e. when he has been fired and cannot find a job. 39 Normally when relatively large dismissals occur such as in April of 1979 when 249 employees were dismissed from a truck and machine factory in Gyor, dismissed workers are given new jobs by local employment agencies. 40 There is evidence of structural change resulting in unemployment in Hungary.

In the G.D.R., structural changes in employment are carried out primarily in two ways. The first is the redistribution of the labor force by categorizing enterprises or branches according to the planners' ideas of future growth. Certain enterprises are designed to lose manpower and are not permitted to hire any new employees. This brings about a reduction of employment in the given sector of the economy in the long run. Other enterprises and branches targeted as growth areas increase their work forces with new employees from college graduates and trade school. This method is used primarily in construction and service industries. The second method of structural change is the direct transfer of workers on the basis of "triangle agreements."
The parties to such agreements are the two enterprises involved and the workers themselves, but these agreements may be established solely on the basis of central or local plans and include compensation both to former employers and the transferred workers. 41

The authorities also apply measures aimed at regulating movement of specific groups of the labor force. For example, almost all the East European countries at different periods have introduced more or less severe restrictions on hiring administrative workers, or have ordered a reduction in their number. Bulgaria in 1976 decided to reduce the number of administrative workers by 30 to 40 percent and to redirect them to new jobs. 42 Hungary introduced a freeze on hiring new administrative workers in 1976, which was replaced on January 1, 1977 by a regulation allowing the hiring of administrative workers for those who left their jobs. 43 Czechoslovakia has also tried to limit the growth of administrative and managerial workers with freezes and reductions in 1970 and 1976. Beginning with 1977 each enterprise has received a binding target for its share of administrative workers among total personnel. In spite of these restrictions, however, 81% of the increment in industrial employment of 58,000 during 1976-78 was managerial and clerical personnel. 44

Another means of influencing the distribution of the labor force is through housing policy, and restrictions on residence in certain cities. In many instances a firm is permitted to hire new workers only if they reside in the same community as the firm. Enterprises which are planned for growth receive allowances to
provide new workers with lodging, dormitories or apartments, or an allocation of apartments being constructed by the municipalities. In some countries enterprises provide workers with low-interest loans for home construction.

(iii) Wage Policy

A potentially important instrument for achieving goals of manpower policy is wage policy. At the macroeconomic level, regulation of wages has two important functions. First, it must keep the employees' wage bill within the planned limits of population's purchasing power to ensure a balanced consumer market. Second, it must provide firms with incentives to increase efficiency, including better utilization of the labor force. In almost all the East European countries wage regulation has served only the first function. A mechanism of wage regulation which effectively combines both functions has not yet been found. In fact, wage regulations which have occasionally been adopted with the aim of minimizing labor inputs, were usually accompanied by measures restricting their effect. Other regulation has taken the form of connecting the wage bill to the results of enterprises' activities by making it dependent on one of the performance indicators. In the last years in most of the East European countries this indicator has been net production or value added. But even in those countries which have adopted this normative (ratio) method of wage regulation the growth of the wage bill or the average wage is limited either by absolute amounts of paid wages, or by progressive taxation of wage
increase.45

The Hungarian system of wage regulation is unique. Decisions about inputs, including labor are on a microeconomic level, and has seemingly greater potential for increasing labor utilization than in CMEA countries where employment itself is regulated. Since 1976 four main methods of wage regulation have been used in Hungary.46 Two of them, which are used in branches and enterprises which are either non-profit or in which the performance depends more on the economic environment than on their own activities, are direct wage regulations by the center. The second two methods of regulation depend on success indicators. One, regulation of the average wage, is used in branches in which employment increases are permitted. The other involves enterprises which, according to the planners projections, are to develop with a stable or even shrinking labor force and regulates the wage bill by linking it to the increase in value added over the previous year.

This latter system of wage regulation was designed primarily to improve labor utilization. In this system, the percentage increase or decrease of the value added entitles the firms to an increase or decrease in the wage bill of 0.2-0.3 percent. Any higher increase in the wage bill is taxed, and the tax has to be paid out of the profit-sharing fund. In addition, there are limitations on increases in the average wage which may be increased up to a certain level, and then is subject to tax. In any case, an increase in the average wage of 8 to 10
percent is subject to progressive taxation. Until 1980 the un-
taxable average wage increase was set at six percent. The scale
of taxation was 100 to 300 percent of the increase of the wage
bill until 1979 when it was reduced to 50 percent in case of
growth of the average wage by 6 to 7 percent and to 100% in case
of 7 to 8 percent growth, provided the amount of this increase
is available at the enterprise due to increase in the value add-
ed or reduction in personnel. If the latter condition is not
fulfilled, the firm has to pay an additional 100 to 200 percent
in taxes on any increase of the average wage above the six per-
cent limit.47

The above method of wage regulation has become dominant
in the Hungarian economy. The percentage of workers in the
socialist sector so regulated increased from 9 in 1971 to 55
in 1978.48 While this system is the only one which stimulates
enterprises to use less labor to achieve production targets, its
actual effect is minimized by a low 3 percent untaxable in-
crease in the average wage which discourages capital for labor
substitution. Thus, an enterprise which reduces its personnel
and thus achieved savings in the usable wage bill, is prevented
from using this saving for wage increases. The result often
is that enterprises first calculate the amount of the wage fund
they can use without being subject to the progressive tax and
take this sum as a starting point in planning all the rest of
their economic activity, including employment changes.49 Thus
the stimuli for efficient production, and labor utilization
especially, are substantially reduced. An active debate on
possible changes in the system of wage regulation in Hungary took place during 1978-79, with proposals ranging from suggestions to introduce centrally determined wage increases to appeals for further increases in the scope of wage bill regulation, with the latter point of view seeming to have the upper hand.50

Although the East European countries are trying to create incentives for better utilization of their resources through regulation of wages, even in Hungary, which has gone further in these efforts, the results have not been satisfactory. Some have tried mechanisms intended to increase labor costs of enterprises, that is raising the shadow wage, thereby encouraging enterprises to reduce labor inputs. In Poland, for example, some enterprises must pay a fixed tax for any additional workers they hire above a base level. A similar kind of taxation was used in some enterprises in Czechoslovakia from 1972 to 1975, and with some modifications, until 1977. In all the East European countries enterprises must make social security payments to the state and in some cases pay a tax on the wage bill. In some instances these payments were increased; but in general they did not have a positive effect on labor utilization.51

B. Other measures

The foregoing discussion has been limited to instruments of manpower policy in the East European socialist countries which seek to regulate the employment of those already employed. In addition, these countries have sought to apply measures to increase the supply of manpower over both the short- and long-run--
an approach which is gaining increasing importance with the decline
in rates of growth of manpower in most East European countries and in
the absolute numbers of the population of working age in some of them.
from the point of view of East European policy makers the most
disturbing fact has been the decline in population growth. Closely
related to it is the negative effect of low birth rates on the age struc-
ture of the population. As life expectancy lengthens and birth rates fall,
the percentage of elderly in the total population rises.** This means
a future slowdown in the growth of the labor force.

These considerations have led the East European countries to adopt
pronatalist demographic policies. 53 Among the instruments of such poli-
cies are material incentives such as family allowances, paid maternity
leaves, loans to young married couples, childbirth grants, child sickness
benefits, and various non-monetary forms of aid to families with children.
Another instrument has been the reinstatement of strict laws regulating
abortion. Among the former, a measure which has a long-term effect is
a child care allowance system which has a direct impact on the current
and future situation in the labor market. Hungary introduced this system
on January 1, 1967. In 1962 Hungary's birth rate had dropped to 129
births per 10,000 of the population--one of the lowest in Europe. Had
the coefficient of population reproduction not been raised, there would
have been an absolute decline in the Hungarian population in the future.
At the same time due to the high participation rates of the female popula-
tion an ever increasing proportion of annual births occur among working

* In the mid-seventies the average life expectancy of population ranged
from 69.6 in Hungary to 71.9 in Poland. 52

** Between the early fifties and the late seventies the proportion of
population aged 60 and over increased in Czechoslovakia from 11.8 to 16.4,
in Hungary from 11.6 to 16.8, and in the G.D.R. from 13.3 to 18.4 percent.
women. In addition, since the mid-1960s fertility rates of working women have been higher than those for non-working women. Therefore, the introduction of the system of child care allowances was aimed primarily at increasing birth rates among working women.

Under this system, after the expiration of regular maternity leave, working mothers are eligible for child-care allowances up to the time when the child reaches three years of age. The monthly allowances at present are identical for urban and rural areas, but are differentiated according to the number of children in the family: 800 forints a month for the first child, 900 for the second, 1,000 forints for the third (for comparison, the average monthly wage in the Hungarian economy in 1979 equaled to 3,756 forints). During this time the woman is guaranteed re-employment at her previous job, if she so wishes. In addition, she receives any wage raises that have occurred during her maternity and child care leave. The program has been well received, and since 1967 more than one million women, or 8 out of 10 working mothers have taken advantage of it. The number of persons receiving child-care allowances has increased from 92,000 in December 1968 to 277,000 in December 1978.

The child care allowance system has both negative short-run and positive long-run effects. Combined with other pronatalist policies and due to an increase in the number of women of child-bearing age, live births per 10,000 of population in Hungary rose from a low level of 129 in 1962 to 184 in 1975. This increase in the number of births will result in a higher increment to the working age population in 15-18 years, thereby increasing the labor force in the long-run. (A slight decline in this index has been registered recently, due mainly to the change in the age composition of the population.) The policy has exerted, however, a
negative effect on short-term labor supply. The number of women on post-maternity leave represents approximately 5 percent of the total labor force and 11 to 12 percent of all employed women, or 250 to 300 thousand persons annually, has contributed to Hungary's labor shortage. This effect is especially acute in "female" industries, such as clothing, where 18.8 percent of all persons employed were receiving child-care allowances in December of 1978, textile, where 14.6 percent of all employees received the allowances, the leather, fur and shoe industries where the figure was 13.3 percent, and trade where the share of employees receiving allowances was 9.6 percent. The Hungarian child-care system was also adopted with some modifications in 1970 by Czechoslovakia, in 1973 by Bulgaria and in 1976 by the G.D.R.

East European planners are also seeking to increase the current labor supply. One of the traditional sources of additional labor in Eastern Europe has been actiization of unemployed female population. But due to increasing participation rates of women in the national economies this reservoir of labor has been almost totally exhausted in those countries where the labor shortage is especially acute. For example, according to the aggregate manpower balance of Hungary for 1979 (see Table 7), there were 3,038,500 women in the able-bodied ages (14-54 years). Out of this total, 2,261,100 were active earners (69 percent), 351,200 (11.6 percent) were pensioners, rentiers, mothers on child-care leave, 228,500 were students (7.5 percent), and 360,000 were dependents (11.9 percent). Among the dependents a large proportion have children, live in rural communities, or lack special skills so that their employment is either impossible or would require significant expenditures. Moreover, many work on household plots, the product of which is in strong demand. Therefore,
in the short-run their employment is unlikely. On the other hand, such countries as Romania and to a lesser degree Poland still have some labor reserves among women.

To increase the supply of labor some Hungarian specialists have suggested shortening child-care leave to increase participation rates among women. Some specialists argue that the child-care allowance should be such as to stimulate mothers to remain at home with their children during the first 12 to 18 months, while encouraging them to return to active employment afterwards. Since 60% currently take maternity leave of greater than 12 months, this could lead to a decrease in the number of women on post-maternity leave by 20 to 60 thousand.

In addition to seeking an increase in female employment, the East European countries try to make use of the growing population in post-productive ages. The period 1979-82 will see the retirement of large numbers of people born during the postwar birth rise of 1919 to 1922. This results in a large increase in the number of retirees and their proportion in the population, and creates a significant problem since the participation rate of this group has been declining in some countries. For example, in Hungary during the 12 year period 1966 to 1978 it decreased from 23.4 to 11.4 percent.

In the 1950s and even in the 1960s many aged people were forced to continue to work because they were not eligible for old-age retirement.

*It should be mentioned that retirement policies are used to regulate the labor market in the West too. For example, a system of pre-pensions was introduced in 1978 by Belgium in an effort to stimulate early retirement.
benefits. The pension scheme in the socialist countries provides full benefits to those who have reached a certain age and have been employed for a certain number of years (usually 25 years for men and 20 years for women), depending upon the country. Many would-be retirees are not eligible for full pensions because they have not fulfilled the second of these conditions. In addition, in many countries the pensions until recently did not cover the agricultural population. With the development of the more comprehensive pensions however the number of old-age pensioners has increased rapidly, reducing at the same time the number of employed elderly persons.

To increase labor participation rates of would be retirees new material incentives have been introduced to discourage retirement and lure pensioners back to work. This is important because the retirement age is low in most East European countries—usually 60 years of age for men and 55 for women—and the countries must make use of this labor reserve.

Two main types of work incentives can be distinguished in the East European countries. First, retirees may continue to work while having full or partial pension. In the G.D.R. the economic activity of persons older than working age is the highest among the East European countries, reaching 43 percent of this group of the population, while in Czechoslovakia, for example, it is only 22.7 percent of this group. One of the reasons for this success in the G.D.R. is that anyone who reaches retirement age not only receives a pension but may be employed full time as well. In other Comecon countries this possibility is restricted to a lesser or greater degree; the harshest restrictions are in Poland, the mildest in Hungary and Czechoslovakia, whose records have shown this incentive to be effective.
Second, some countries such as Bulgaria, Czechoslovakia and Hungary and to a very limited extent Romania, have introduced a system of pension-increments. Under this system, retirement and pension for eligible workers may be deferred, and each additional year spent on the job automatically increases the amount of the future pension by as much as eight percent. For example, the number of economically active persons above working age who were eligible for old-age pensions more than doubled in Czechoslovakia during 1966-77, and their share in the total labor force reached 9.2 percent. Out of a total of 651,000 employed persons of retirement age in Czechoslovakia in 1977, 585,000 or 90 percent, opted for one of the above incentives schemes, but only 35,000 or 5.4 percent choose postponed retirement and increased future pension. 60

In addition to material incentives, the East European manpower policies have also attempted to encourage the employment of the elderly by shortening the work day, introducing "flex-time," offering them less arduous jobs, and increasing the length of paid vacations. In Bulgaria and Poland, enterprises compile lists of jobs suitable for elderly people and provide them to the employment agencies. 61 Such policies have had some positive results. In Hungary, for example, 70 percent of total employment increases outside the service sector in 1978 resulted from increased employment of retirees. 62

Finally, it should be mentioned that manpower policy has also been directed toward the disabled and handicapped. During the past decade in some East European countries labor participation rates of males between the ages of 40 to 59 has declined due to an increase in the number receiving disability pensions. For example, in Hungary between 1976 through 1978, the rise in the number of disabled pensioners outstripped
the increase in the participation rate of females, despite the fact that the latter was larger than planned; this contributed to the overall decline in the size of employment.\textsuperscript{63} During 1972-1977 alone the number of disabled pensioners increased by 190,000.\textsuperscript{64} The increase, according to a Hungarian source, is explained by the increasing comprehensiveness of the social security system, as well as by abuses of this system.\textsuperscript{65} In addition, medical and vocational rehabilitation failed to keep pace with technological changes, although a special decree was adopted in 1974, which calls for special training and jobs for this group of the population.\textsuperscript{66}

Occasionally international labor migration has been mentioned as a means of influencing the labor market situation in the socialist countries. Although employment of foreign workers has a 36-year tradition, its scope is very limited and cannot be compared to the number of gastarbeiter employed in Western Europe. According to one estimate,\textsuperscript{67} the total number of foreign workers within all six East European countries plus the U.S.S.R. was approximately 150,000 during the mid-1970s. There is reason to believe that this number has since declined somewhat. Part III of this report contains a more detailed discussion of employment of foreign workers in the CMEA countries. Suffice it to say here, however, that the temporary transfer of personnel between socialist countries can only promote the solution of short-term or "target" projects.\textsuperscript{68}

All of the manpower instruments described above for better or worse fulfill the tasks for which they have been designed. However, they cannot eliminate the labor shortage in Eastern Europe.
This requires a change in economic policies, including more rational national planning, and a change in existing systems of management of the economies and in the behavior of enterprises in the labor market.

III. Essays in Labor Economics of CMEA Countries

A. Cooperation of the CMEA countries in the sphere of employment

Two major areas of cooperation of the CMEA countries in the sphere of employment can be distinguished. They are exchange of information and international labor migration.

1. Exchange of Information

Exchange of information includes cooperation in the field of labor planning, management, organization, social security, rationalization of labor utilization, etc. This cooperation dates back to the late 1940s and mainly to the early 1950s when the East European countries adopted Soviet methods of economic planning, including labor planning. In the second half of the 1950s the CMEA countries started to exchange information regularly on managing the economy and on practical matters concerning labor and social questions. At that time, this cooperation was based on a bilateral basis and was carried out primarily through consultations. These consultations were concentrated mainly on questions of wages and material incentives.

In September of 1968, the Executive Committee of the CMEA institutionalized a meeting of heads of state labor organizations of the member countries. Since 1969, there have been annual
sessions of the meeting which plan multinational cooperation of the CMEA countries in the spheres of labor organization and wages are discussed. In Budapest, in April 1969, the goals, procedures and forms of cooperation were established; in 1974, the Executive Committee of the CMEA approved the statute of the meeting, and in 1975, in Prague, its 1976-1980 program of activities was adopted. 70

In addition to these meetings, working groups have been created in such areas as labor economics, perfection of the wage and material incentive systems, social security, work conditions, and labor law. Working groups prepare joint studies involving the work of specialists from most CMEA countries. The results are presented at the Annual Meetings, with a recommendation for utilization in the member countries. These working groups are organized under the auspices of a state labor organization of one of the participating countries, and have become the prime movers of the annual meetings. 71 For example, the working group on rational utilization of manpower has studied such questions as different methods used in individual countries for distribution and redistribution of labor force, providing labor for priority branches, enterprises, and territories; ways and means of reducing labor turnover in industry; rational utilization of the working time, and the analysis of systems of manpower management, in particular to the functions of the central and local bodies responsible for managing labor mobility. There are plans to create a "labor
exchange," to improve systems to disseminate information on job vacancies, and to help regulate manpower mobility. This group has also looked at professional training and employment of younger workers.72

The exchange of information in the working groups has led directly to importation of new techniques of labor management from one CMEA country to another. The reorganization of Soviet Committee on Labor and Social Questions, whose Statute was based in part on the East European experience,73 is an example of this. The new Soviet decrees on providing incentives for persons of retirement age to continue to work contain measures first introduced in Czechoslovakia and Hungary. The same can be said about recent measures aimed at curtailing labor turnover. After the Bulgarians studied the experience of the USSR, Hungary, the GDR and Czechoslovakia while working on their new Unified Salary Scale Table, they introduced the same principle of minimal and maximal salaries. The Hungarians studied the Bulgarian regulation of wage levels before introducing it in a modified form in the New Economic Mechanism.74 Czechoslovakia, the GDR, and Bulgaria have introduced child-care systems following the Hungarian example. Last, as a more general example of intra CMEA information exchange is the proliferation of the usage of net production as an indicator for determining material remuneration.

Cooperation in information exchange extends from governmental ministries and committees, to research institutes, which organize joint studies, conferences and symposia, and hundreds
of enterprises which exchange delegations on different aspects of labor questions. This latter experience has become a common practice among CMEA countries.

Despite this seemingly vast area of shared information, it can still be said that cooperation in the sphere of employment has not gone much beyond the exchange of information. The evidence suggests that cooperation usually takes place in more "technical" areas, such as instrumentation, norms or methods used in labor, wage and social policies, while more general notions are diffused on higher political levels. This is because there must be a political decision made before a significant change can be introduced, for instance, into the Labor Code.

2. International Labor Migration

A second major area of cooperation of the CMEA member countries in the sphere of employment is international labor migration. This form of cooperation, as well as cooperation in the sphere of investments, stands out because there is no organizational body within the CMEA structure to coordinate it. Questions pertaining to labor migration or joint investments are, as a rule, secondary to the decisions on production cooperation. Therefore, strictly speaking, there are few instances of labor exchange between the CMEA countries which can be regarded as cooperation in the sphere of employment per se. However, international labor migration, being often a result of other forms of CMEA cooperation, involves cooperation in the sphere of employment. Therefore, we shall discuss all the known forms of such
migration.

Free movement of labor has never been officially endorsed by the CMEA, although its practice is now widespread. It is possible, however, that the adoption of the CMEA Program of Economic Integration (1971) provides the basis for the proliferation of agreements involving international labor migration when it alludes to the possibility of the "utilization of building-and-assembly organizations working under contract, and of the labor force and essential material resources of [fuel and power and material products] importing countries in building of projects for the manufacture (transport) of products of interest to the countries concerned."\(^7^{6}\)

International labor migration has a history which predates the adoption of the Program, but whose participation rates are low. An agreement on employment of Polish workers in the border areas of Czechoslovakia was signed in 1945. A year later the Czechoslovak authorities signed an agreement on labor cooperation with Bulgaria. Despite the proliferation of similar agreements, the scope of international socialist labor migration has always been limited. While foreign workers in the EEC countries constitute a significant proportion of the labor force adding up to several million persons, the maximum number of migrants in the CMEA (excluding Mongolia) has not reached 200,000. According to F. Levcik, by 1977 their number was around 150,000.\(^7^{7}\) I would estimate a current level of approximately 100,000 as realistic.
There are several reasons for the differences between these three figures. First of all, official data about employment of foreign workers in the CMEA countries are practically nonexistent, and one has to rely on rare articles in the daily press, journals, and magazines which contain some information. It is almost impossible to combine these figures in a coherent way because estimates vary significantly. Second, it seems that some of the figures which Professor Levcik used in his estimate were not actual but rather planned numbers. For example, some 25,000 to 30,000 foreign workers were to be employed in the USSR on the construction of the Soiuz natural gas pipeline. In fact, in 1978, less than one-half of the planned number was working on this project. This fact illustrates the results of impediments to intra-CMEA labor flows which will be discussed later. Third, by 1980 some of the major joint development projects in the USSR have been completed, in addition to which other agreements on temporary employment of workers abroad were close to expiration, and their scope has been diminishing for a number of years (i.e. the agreement between the G.D.R. and Hungary). And perhaps the major explanation lies in the growing industrial labor shortage in most CMEA countries. This is one of the reasons for the decrease in the number of foreign workers employed in Czechoslovakia—from 21,700 in 1974 to 11,200 in 1978.

3. Motivations of the Participating Countries

There are several reasons for CMEA countries to engage in international labor exchange. First, is the attempt to
balance supply and demand for labor on the national or regional level. With a trend towards labor shortages in most countries the role of this motivation has been diminishing. Another motivation behind international labor migration related to this is the need to improve the balance of payments through export of construction services. Another reason is the need to meet demand for fuel and raw materials which can be facilitated through participation in construction of production and transportation facilities in the exporting countries. The initiative in developing this kind of labor migration lies with the labor-recipient countries. This form of labor migration will probably be further developed. For example, a long-term program of cooperation between the USSR and Poland, signed in 1980, provides that Polish construction organizations will be contracted for projects in the USSR, including work at Soviet nuclear power stations, ore extracting enterprises, and pipelines.

Two final and related reasons are the attempt to improve the training and skills of young workers, and to continue cooperation in R & D institutes. While the latter has been successful and will probably continue, the former has not been as fruitful (based on an evaluation of one of the best known and publicized cooperation agreements of this kind between the GDR and Hungary). It is likely that in the future the CMEA countries will be more cautious in concluding agreements of this type. I will now discuss each of these reasons in greater detail.
(a) **Balancing Labor Supply and Demand**

There are three CMEA countries with severe labor shortages, Mongolia, the GDR, and Czechoslovakia. The conclusion of agreements between Czechoslovakia and Poland in 1945 and then Bulgaria in 1946 resulted from recognition of the labor shortage in Czechoslovakia and surplus labor in the two latter countries. Repatriation of persons of German origin from Czechoslovakia, especially from Western Bohemia in the immediate postwar period, contributed to an acute shortage of labor. Foreign labor, together with resettlement programs within the country helped to compensate for the shortage. Another example of labor migration with the aim of attaining equilibrium in the balance of labor force or lessening the labor shortage is the presence of thousands of Soviet workers in Mongolia, primarily in construction.83

The GDR also has a permanent labor shortage. It has been employing workers from other CMEA countries since at least the early 1960s. According to one source, in the second half of the 1970s an estimated 60,000 to 70,000 Poles, Hungarians, Bulgarians and Yugoslavs were employed in the GDR.84 In 1967, an agreement on manpower cooperation was signed between Hungary and the GDR. According to this agreement, some 10,000 young Hungarians were to work in the GDR for a period of two to three years with the purpose of acquiring professional skills. However, one of the main motivations behind this agreement was the
Hungarian fear of the appearance of unemployment after the introduction of the New Economic Mechanism in 1968. Further, postwar baby boom youths were beginning to enter the labor force in Hungary. For the GDR, on the other hand, this albeit marginal, but still additional source of labor helped to satisfy demand.

As can be judged by these and other examples, balancing labor supply in demand in individual countries was indeed the main motivation for developing international labor migration. However, its scope was never great enough to achieve equilibrium among the participating countries. Why weren't CMEA countries able to use international labor migration more widely and successfully for this purpose?

The reasons are as follows. During the first two decades after the war there was a significant difference between CMEA countries in the labor market situation. While the GDR, Czechoslovakia and Mongolia were almost continually suffering from labor shortages, Bulgaria, Poland, Romania and to a lesser extent Hungary had a surplus of labor, at least during some periods or in some regions. Under such conditions, one can imagine international labor exchange becoming an important avenue of such cooperation. However, principles guaranteeing the right to work and full employment, being the cornerstones of both economic planning and political propaganda in the socialist countries, prevented not only officials, but also scholars from even suggesting such a solution.

In addition, international labor migration has always been considered in the Soviet Union and the other socialist countries
a phenomenon of capitalism aimed at the exploitation of workers from less developed countries by the monopolies of the industrialized nations, and this is anathema to socialist thought. Thus, in spite of the fact that instances of labor migration between individual CMEA countries were becoming more numerous, it was not until the late 1960s that they were first mentioned in scholarly publications. However, international labor migration between the CMEA countries stills falls outside of the "notice" of CMEA organizations.

Meanwhile, the labor market situation in individual CMEA countries has been changing. Most of them were beginning to exhibit demand for labor in excess of supply. As was already mentioned, the GDR, Czechoslovakia and Mongolia have experienced labor shortages almost continually throughout the entire postwar period while Hungary was preoccupied with problems of creating enough job opportunities in the second half of the 1950s and to some extent at the end of the 1960s. By the second half of the 1970s Hungary was among the states with a tight balance of labor resources. In Bulgaria, employment had been decreasing until the mid-1960s, but since that time labor shortage has become the predominant feature of the labor market. The Soviet Union is entering a period of exacerbating labor shortages in most regions of the country. However, the most striking example of the abrupt changes in the labor market is Poland. Less than a decade ago there were reports of possible substantial unemployment. Since the late 1970s Poland has experienced labor shortages on top
of the current severe economic crisis. Even in Romania, which still has a substantial labor pool, especially in agriculture and among women, the labor market situation is bound to gain the same characteristics as in the rest of the CMEA countries if the present line of economic development continues. At the same time it should be noted that lower rates of growth planned for the current 5-year plan period (1981-85) in all the CMEA countries may decrease the demand for labor and result in a more balanced labor market. The latter has already occurred to some extent in Hungary in 1979 and 1980.

Thus, after World War II at first any substantial development of international socialist labor migration was ideologically unacceptable. Afterwards, a more pragmatic approach to economic problems on the part of political and economic leadership resulted in a compromise between ideological dogma and economic rationality, albeit short of officially promoting labor migration. At present the tendency toward labor shortages in all CMEA countries makes international labor migration between the CMEA countries less feasible. At the same time, this does not mean that the scope of migration will be substantially reduced. However, the main reasons for development of migration are increasingly connected with factors other than labor market equilibrium.

(b) Securing fuel and raw material imports

Another factor encouraging labor migration is the need of most of the CMEA countries to import fuels and raw materials, which they obtain from the principal supplier, the Soviet Union, through export of goods and services. Along these lines, there
are an increasing number of joint ventures, some of which provide for international transfer of manpower. In fact the Soviet Union has become a labor-importing country for the purpose of developing its fuel and raw material industry.

Some agreements take the form of a lease under which a portion of territory is leased out to another country in order to develop such production. For example, the USSR and Bulgaria signed an agreement according to which in the Komi ASSR four combined forestry operations are to be erected. The Soviet Union provides these organizations with woodlands, which have enough timber for procurement for approximately 50 years, project plans, building materials, equipment transport, while Bulgaria provides its labor force. In 1980, there were 13,000 Bulgarians working in Komi ASSR (short of the 15,000 to 20,000 reported to be reached by 1976). The timber cut by the Bulgarians is to be divided at the ratio of 1:1.33 between Bulgaria and the USSR. To date some 20 million cubic meters of timber has been cut of which Bulgaria has received almost 8 million. (This latest information suggests that the actual ratio of division of timber between Bulgaria and the USSR was around 1:1.5 rather than the envisaged 1:1.33, e.g. a shift in favor of the USSR.) Bulgarian workers have built three small towns in the region, and a fourth is under construction. A similar agreement exists between the Soviet Union and the Korean People's Democratic Republic, according to which Korean workers build timber plants in the Soviet Far East. Due to this form of labor migration, Bulgaria and Northern Korea are able to satisfy their needs in timber, while
Russia also gets timber, develops its remote areas, and increases exports.

Another form of cooperation within the CMEA in the field of fuel and raw materials which presupposes transfer of manpower between the involved countries is connected with construction, expansion or remodelling of production and transportation facilities for fuel and raw materials primarily from the USSR to Eastern Europe. The largest and the best known project is the natural gas pipeline Soiuz from Orenburg to the Western border of the Soviet Union. The pipeline, together with compressors, other equipment, and dormitories, has been built jointly by all the East European CMEA countries except Romania, and the USSR. In 1978, there were 13,000 foreign workers from Eastern Europe working on this project. The 2,750 kilometer pipeline will provide Eastern Europe with 15.5 billion cubic meters of natural gas a year. Other examples of East European labor in exchange for Soviet fuel and raw materials are the use of Polish workers in the building of a number of pipelines in the USSR; construction workers from Bulgaria and Hungary working on the site of the Ust-'Ilim cellulose combine near Lake Baikal, and thousands of Bulgarian construction workers taking part in construction, expansion, or remodelling enterprises which produce paper and cardboard, iron ore, steel, etc. in the Soviet Union. In addition the Soviet Union has built a natural gas pipeline which goes from Ostrogozhsk (near Voronezh) to the Soviet-Romanian border, and then further to Bulgaria. In return, Bulgaria has sent over
3,400 workers to work on various sites in the USSR, primarily, but not exclusively in the areas of natural gas extraction. A Bulgarian construction group has also been working for more than eight years now in the Uzbek Republic, in Central Asia. This latest form of cooperation, developed primarily between the USSR and Bulgaria, is probably due to the Bulgarian inability to increase sufficiently its exports to the USSR to pay the growing bill for imported fuel and raw materials.

(c) **Earning Currency**

Probably the most rapid development of international socialist labor migration is connected with exporting specialized construction services. This is a way of improving the balance of payment of the labor-exporting country and of making full use of available construction capacities, organizations, and labor. According to this form of cooperation, a construction organization of a socialist country contracts for a turn-key construction of a particular object on the territory of another country. The largest exporter of construction services in the CMEA is Poland. There are several Polish firms, such as Budimex, Energopol and others which specialize in construction of specific objects abroad. Among the CMEA countries importing these services are Czechoslovakia, the GDR, the USSR, and Hungary. Budimex is at present implementing 330 contracts in 17 countries, employing over 22,000 workers on foreign building sites. Nearly 100 construction sites in Czechoslovakia are under Budimex's authority, and constitute a significant contribution to the balance
of payment. The largest project carried out by another Polish organization, Energoexport, in the GDR, is construction of an industrial complex in Jaenschwalde, near Cottbus. The export value of construction carried out by Budimex in the GDR increased from $12,000,000 in 1968 to over $84,000,000 in 1976. Polish workers were also engaged in 1978 in 15 investment projects in Hungary. The value of Polish construction in Hungary by 1978 was estimated to be around 160,000,000 rubles. In the USSR, the Poles were participating in projects connected with the preparation for the 1980 Moscow Olympic Games. Export of these construction services, as mentioned above, not only improves Poland's balance of payments with these countries, but also makes it possible to utilize construction capacities fully that were created in Poland during its investment boom in the early and mid-1970s.

In addition to Polish export of construction services, cooperation involving labor migration also takes place between Bulgaria and the USSR, Hungary and Czechoslovakia, Hungary and the USSR. Import of foreign construction services has both positive and negative aspects for the recipient countries. Czechoslovakia, for example, started to import construction services in the late 1960s when it had an active trade balance with most CMEA countries. Such an import was considered to be a reasonable way to utilize this surplus in balance of trade. It also helped to overcome the imbalance between demand for investments in Czechoslovakia and lack of construction capacities in the country to meet this demand. Import of construction services had been increasing until 1975. In Bohemia alone, its value increased from 136
million crowns in 1967 to 2,954 millions in 1975, and its share in total construction rose from 0.4 in 1967 to 6.2% in 1975. These figures, although impressive by themselves, do not reflect fully the significance of such imports for the Czechoslovak economy. Among other benefits derived from this form of cooperation are a) immediate start-up of construction after signing of a contract; b) mobility of construction services and possibility to utilize them in any part of the country; c) a reduction of construction time by 30 to 50% as compared with home construction; d) higher quality of imported construction services and materials. In addition, these services can also be used in the mid-plan period when all the national construction capacities are fully employed. This last factor was the reason for importing 2.5 times more construction services by Czechoslovakia during 1971-75 than provided by the plan.

On the other hand, import of construction services proves to be rather expensive. On the average for 1971-75, construction carried out by foreign organizations in Czechoslovakia was by two-thirds more expensive than the projected cost of similar construction by native organizations. But if one takes into account the fact that projected and actual costs of construction differ significantly in all the socialist countries, then the difference between imported and local construction costs is only 10 to 20%. Nevertheless, due to deterioration of the Czechoslovak balance of trade, import of these services is becoming less attractive. It is projected that during the next 5 to 10 years its volume will not exceed the level reached in 1971-75,
therefore its share in total construction will decrease. 103

(d) Vocational Training

Another form of employment of foreign workers is aimed at providing them with an opportunity to acquire or perfect professional skills, and is at present in agreements between Hungary and the GDR (1967), and between Poland and the GDR, 1963). The latter was modified soon afterwards. 104

The Hungarian-GDR agreement is the best known. Some 40,000 young Hungarians have participated under it in the GDR. At present, the contracts run for three years. However, due to labor turnover, the average stay of a Hungarian worker in the GDR is two years. Only 50 to 60% of those leaving for the GDR stay there for the full three years. 105

At first when the agreement was signed on May 26, 1967, its purpose was defined as providing young Hungarians with the possibility of "acquiring professional skills." That meant that young Hungarians between the ages of 18 to 26 who had completed their military service (or had it postponed) would work in various enterprises in the GDR to acquire professional skills. It can be assumed that the Hungarian side was not quite satisfied with the way the Hungarians were employed in the GDR. They objected to their employment in agriculture, trade and catering services, as well as in construction industry which did not contribute to the acquisition of professional skills. Therefore, in 1973, after the agreement was renewed for the first time, employment in these branches was discontinued. Thereafter 80% of the
Hungarians were employed at enterprises in engineering and
electrotechnical, heavy and chemical industries. 106 Simultaneously,
the definition of the primary goals of this cooperation
was changed to "professional training and perfection of qualifi-
cations," meaning that the Hungarians would participate in
theoretical vocational training in addition to the on-the-job
training.

However, as one Hungarian source points out, these
expectations were never fully realized. First, the lack of
knowledge of the German language has been one of the strongest
barriers. Although before departure to the GDR young Hungarians
receive some preliminary instruction in German, and in the GDR
a 200 hour-long course in German (100 hours of which takes place
during the working hours with wages) is provided, the level of
knowledge of German is not high enough to allow the Hungarians
to understand lectures and read textbooks. Another major problem
is the lack of interest on the part of Hungarians participating
in these training programs. There are several reasons for this.
The most serious among them is the fact that even without the
training program they could earn as much with the program. 107
Besides, the work performed in the GDR often does not require
high qualifications. In addition, because of the differences
between the Hungarian and the East German training systems and
the different requirements put forward in the GDR and in Hungary
to a skilled worker, the worker acquires a certificate of qualifica-
tion in East Germany that is considered in Hungary to be only a
semiskilled worker with a resulting lower wage. Therefore, many
young Hungarians are not interested in making a serious effort
to studying the language and going through professional training at the expense of their leisure time. It is not known at the present time whether this agreement will be renewed after it expires in 1980. The number of Hungarians working in the GDR decreased continually in the second half of the 1970s, from 10,000 in 1976 to 5,000 in 1979.

A similar agreement was signed in 1978 by the governments of Cuba and Czechoslovakia. According to this agreement, Cuban workers, primarily unskilled, will work in textile factories in Czechoslovakia. They are getting on-the-job training in areas designated by the Cuban government in order to utilize the acquired skills of the workers upon their return to Cuba. The duration of the contract is four years. At present, 1,500 Cuban workers are employed in 35 textile factories in Czechoslovakia. The average monthly wage of the Cubans in 1979 was 1,558 crowns, while that of the native workers was 2,222 crowns. The difference is due to the lower qualification of the Cubans and the resulting lower fulfillment of work norms. It is not known whether there are some benefits and incentives for the Cubans to work in Czechoslovakia in addition to higher wages comparatively with wages in Cuba.

In addition to this form of manpower migration, the CMEA countries exchange students, provide vocational training for young people from abroad, etc. For example, there are 1,150 Polish students attending colleges and universities in the socialist countries. Annually 0.8-1.2 percent of Polish students admitted
Joint Soviet-Mongolian construction of a copper and molybdenum producing enterprise in Erdenet, Mongolia, has been accompanied by training of its future workers in the USSR. Since 1973, engineers who were to work at this enterprise have been sent to the Soviet Union to study at various technical schools. During 1975-78, 400 Mongolian workers attended one-year long programs organized by various Soviet enterprises.

Lastly, mention should be made of a form of international labor migration which is connected with joint research. Four international research institutes, established in the CMEA countries in which scientists and scholars from member nations participate, conduct joint research. The CMEA International Institute of Economic Problems of the World Socialist System in Moscow and the Institute for Atomic Physics in Dubna near Moscow illustrate this form of cooperation. More than 6,000 scientists from 10 socialist countries are working in the Institute in Dubna. Participating countries have obviously benefitted from some of the results of these joint ventures. For instance, a joint Soviet-Czechoslovak applied study resulted in the manufacture of a new type of textile machine with 2-2.5 times higher productivity.

(e) Personal motivations

Among personal motivations for working in another socialist country are the desire to improve one's standard of living through higher wages and other non-financial benefits, to
improve qualifications, and to travel abroad. In sum, international socialist labor migration is based on voluntary acceptance of a temporary job abroad. One of the main motivations for such a decision is financial. Working in a foreign country means higher earnings and other material benefits for the migrant worker.

There are two major organizational forms of labor migration between the socialist countries depending upon which the systems of remuneration also differ. In one, workers are sent abroad within larger crews usually to carry out specific tasks. The workers are under a contract with an organization of their native country, and are paid by their own country. As a rule, they receive wages that are not only higher than in their native countries, but even higher than in the host country. For example, wages paid to Bulgarian timber workers in the Soviet Union are much higher than the wages of their Soviet counterparts. In addition, they receive allowances, which are paid in Bulgaria. The Poles who worked on the Soluz pipeline construction in the USSR, received basic wages of between 600 to 800 rubles, which are at least two times higher than wages paid in the USSR for similar work. This is done because the wages in the host countries do not provide enough stimuli for the workers to work abroad. Then again, in some cases these wages are lower than in a migrant's native country.

In the second form of labor migration, there is a direct contract between an enterprise and a foreign worker. This is the case in border migration agreements between Czechoslovakia and Hungary, Poland and Czechoslovakia, and Poland and the GDR,
as well as under agreements on employment of Hungarians and Poles in the GDR, and Poles and Bulgarians in Czechoslovakia. In these cases higher wages in the host countries combined with some other benefits provide enough incentives to work abroad. For example, the income of young Hungarians working in the GDR is at least 30 to 40 percent higher than in Hungary.\textsuperscript{116}

Foreign workers are usually provided with free or nominal-rent lodging, cheap food, free medical care. They can transfer most of their savings home at a preferential exchange rate, and send consumer durables to native countries duty-free. Some countries provide additional incentives. For example, Bulgarian construction workers in the USSR upon their return to Bulgaria have priority in buying a car or building a family house.

Another personal motivation, less important in most cases than the financial one, is the desire on the part of especially young workers to acquire professional skills or to advance their professional knowledge. This is particularly the case with Hungarian workers in the GDR, who despite all the described problems and lack of incentives to participate in formal training still have a good chance to expose themselves to a higher level of technology in general in the host country. Limited opportunities to travel abroad makes the possibility to work for several years in a foreign country a very tempting chance, especially for youth without families of their own. This stay abroad helps them to travel in the host country, to learn a foreign language, to save some money in order to establish a financial basis for
their future families, etc.

4. Organization of migration

The high level of organization of manpower exchange between the socialist countries is one of the main differences between labor migration in the West and the CMEA. While in the West, the decision to take a job abroad is to a certain degree a personal matter, in the socialist countries such a decision cannot be made before the authorities of two or more interested countries have signed an agreement specifying in detail goals, duration, and conditions of temporary employment abroad. Any international movement of labor between the CMEA countries exists only within the frameworks of specific international agreement. These agreements are, as a rule, bilateral. Even if migration is called for by a multinational joint venture (e.g. the Soiuz pipeline), conditions of its fulfillment are specified in a series of bilateral agreements between the interested parties.

Many of the foreign workers in the CMEA do not establish any direct labor relations (contacts) with the host country, or only limited ones. This is especially true when foreign workers perform their duties within their national teams, being relatively isolated from their local counterparts, and the labor code of the native country, the length of a working day, labor norms, labor protection and organization is in effect. This means that the organizations of these countries pay wages, while all questions of compensation between involved countries are transacted on an international level. In case foreign workers
work along with workers from the host country, elements of labor codes of both countries could be applied. For example, during the construction of the Soiuz pipeline, questions of hiring, dismissal, remuneration, social security, and trade union rights were dealt with by the authorities of the labor-exporting countries, and were regulated by the laws and regulations valid in those countries. Simultaneously, regulation of length of working time, holidays, vacations, labor protection was carried out in accordance with the Soviet norms. The available experience suggests that the Soviet Union prefers not to have any business with foreign workers themselves, but rather with their governments. The reason for this may be the desire to avoid possible conflicts and the confidence that it is easier and less troublesome to deal with the fraternal governments than individual people. Of course, when a foreign worker signs a contract with an enterprise in a labor-recipient country laws and regulations of the host country apply to him as well.

5. Some problems of international socialist labor migration

Labor migration in the socialist world is not free of problems. A decision to accept a job in a foreign country is not an easy one, despite the financial benefits. The majority of migrant workers have to leave their families behind. According to the Soviet-Bulgarian cooperation agreement, only 15 percent of the Bulgarian workers are allowed to bring their families along to the USSR. In many instances they have to quit their
previously held jobs. When languages of the two participating countries are very different, they have to overcome the linguistic barrier. They sometimes have to adjust to a very different cultural environment. Occasionally, frictions between the native and the guest workers develop. Often native workers are not interested in making friends with the migrants so that their personal contacts are limited. These problems arise differently under different organizational arrangements. For those workers who commute to work across the border in many instances such problems as the language barrier, lack of family and necessity to adjust to a new way of life are limited. The third group of workers, engaged in specific projects abroad within their native organizations and crews, are provided with various social and cultural facilities to assist them in their adjustment. Sometimes, the assistance is such that adjustment is relatively smooth. This is illustrated by the fact that more than 50% of Bulgarians working in the USSR signed on for a second period of two years and 1,500 for a third. 117 The crews bring supporting staff (cooks, social workers, librarians), and organize their own clubs. Even food is sometimes supplied from native countries. This is the case of Bulgarians working in the Komi ASSR.

Due to the fact that most workers are bachelors or men whose families stay home, occasionally personal problems arise which stem from romantic involvement with local women. Sometimes these problems are resolved at mutual satisfaction, resulting in international marriages. For example, 50 percent of Bulgarians
working in Czechoslovakia have married local girls and have "stabilized" themselves in the new surrounding.\textsuperscript{118}

Another set of problems stems from shortages of consumer goods in the socialist countries. Work abroad and opportunity to send home parcels and consumer goods duty-free results in introducing an additional source of supply into the black market. On the other hand, if workers are concentrated in a relatively small town, they can empty store shelves buying up goods that are in short supply or are more expensive in their native countries, and thereby cause problems for the local population.

There are also some other problems that are unknown in the West. One of them is that of surplus product which is created by foreign workers. According to Marxist theory of labor value, the only source of value is work itself. The worker receives only part, not all of the value he creates, in the form of wages and bonuses. The remainder, which consists primarily of the surplus production, becomes the property of the whole society and is used for new investments and for public consumption. Because foreign workers take part in the creation of this surplus product and do not directly benefit from its utilization, the problem of division of this surplus product between the countries involved arises. This problem is rather complicated. It includes the question of measurement and division of the surplus product (which I discuss at some length in my earlier work).\textsuperscript{119}

That this is not just a theoretical question is suggested by the fact that in the practice of employment of Bulgarian workers in the USSR, the Soviet Union transfers to Bulgaria the surplus
product created by the Bulgarians in the USSR in the amount equivalent to 120 percent of the earnings of Bulgarian workers in the Soviet Union. 120

There is also a problem of convertability of earnings into national currency of the labor-exporting country. The unrealistic official exchange rates make it impossible to use them for this purpose. Therefore, in almost every case special regulations must be set up.121 One of the possible ways of handling this problem is to use the noncommercial exchange rates.

Another problem arises when labor migration is a part of a more general agreement, e.g. when foreign labor is combined with capital of the labor-recipient country, as is the case of Bulgarian workers felling timber in the USSR. This author was told by Soviet officials while studying this form of migration in the Komi ASSR that because the equipment was free to the Bulgarians, the latter did not care about its maintenance; the tractors were often left in the swamps, and the tools were lost or damaged.

In sum, there are substantial differences between labor migration in the East and in the West. While in the West the prime personal motivation to work abroad stems from existing unemployment or the inability to find a suitable job at home, in the East job security at present is assured. At the same time, one of the most important motivations, i.e. material, is the same in the East and in the West. Next, in the CMEA there is no material discrimination against foreign workers who are usually better paid than workers of the host country. As a
rule, they are also provided with cheap or free housing, food, and medical services.

Labor migration in the CMEA region provides some opportunities for perfection of qualification of foreign workers, and assists in securing imports of fuel and raw materials. It increasingly becomes a way of improving trade balance. The scope of employment of foreign workers in the West is 40 to 50 times higher than in the East. If we take the most optimistic estimates of the number of foreign workers in the Soviet Union and the East European CMEA countries, then foreign workers would constitute only about one-tenth of a percent of total employment. It can be said that labor migration between the CMEA member countries has only a marginal effect on attaining labor market equilibrium in all of them, except, perhaps, for Mongolia. Its limited scale in all probability will not change significantly in the foreseeable future.

B. The Soviet Labor Shortage in the 1980s*

The Soviet Union is entering a period of substantially smaller increments to the labor force. While during the last Five Year Plan the increment to manpower resources was 11.2 million, during 1981-85 it will drop to 3.3 million people, and it will be only 3.2 million during 1986-90. This sharp reduction is due to several factors.

*The regional dimension of the problem is beyond the scope of this essay. It merits a special study.
First, the reduction is caused by a general decline in birth rates. The number of births per 10,000 of the population has dropped from 387 in 1937, to 249 in 1960, 184 in 1965, and to 174 in 1970. Combined with a slightly increasing trend in mortality since the early 1960s, this led to a decrease in the natural population growth from 198 per 10,000 of population in 1937, to 178 in 1960, 111 in 1965, 92 in 1970, and 82 in 1979; and persons born in the 1960s will be entering the labor force during the 1980s.

Second, reserves of manpower among the female population are almost exhausted. According to the census of 1979, the participation rate of the able-bodied population reached a high of 94%, while in 1959 it was 82%, and in 1970 92%. As a result, increments to the labor force from among those not working in the organized sector of the economy, i.e. mainly women, have also substantially decreased. During the period of the 7th Five Year Plan (FYP) in 1961-65, these reserves enable the planners to increase the labor force by more than 10 million people, but in the 8th FYP (1966-70) by only 3 million. In the 1970s, these reserves for all practical purposes were depleted.

Third, the rates or rural-urban migration, reallocation of labor between agriculture and non-agricultural branches of the economy have also slowed. Between 1970 and 1975, the rural population of the Soviet Union decreased by 4.7 million, while during 1975-79 only by 2.2 million. In the first half of the 1960s 3.1 million people moved to the cities, while in the second half of the 1970s only 0.8 million. In addition, due
to unsatisfactory growth of labor productivity—in spite of massive investment programs—the flow of labor from rural to urban areas cannot be increased.

Fourth, the 1980s will witness a sharp increase in the share of the population reaching pensionable age. These are the cohorts born in the 1920s and early 1930s which were the years of the highest birth rates in Soviet history. There will be 40% more persons of pensionable age in the 1980s than there were in the 1970s.125

As a result of these demographic factors the increase in the size of the able-bodied group of the population during the 1980s will be 3.8% as compared to 18% in the seventies. This development will create problems for the Soviet economic situation in general, and the labor market, in particular. The question is the extent of the problems. Is the affect of the demographic situation going to be as drastic as some experts predict? What are the countervailing forces, if any? What can the Soviet planners do to alleviate the situation? What has been the East European experience in dealing with the problem of labor shortage, and are there some lessons for the USSR to learn from that experience?

1. The labor shortage

It is interesting to note that according to Soviet publications, the labor shortage was exacerbated at a time when manpower resources were growing at a substantial rate; in the first half of the 1970s the average annual increase of the
population in able-bodied ages was 2.44 million, while in the
1960s in spite of significantly smaller increases (only 1 mil-
lion on average per year), the labor market was not as tight as
in the 1970s. Therefore, the causes of labor shortage should
be sought not so much in the demographic changes, as in the
general functioning of the economy.

What is, however, "labor shortage" in the Soviet economy?
There are many answers to this question. Most often, the quanti-
tative difference between the sum of enterprises' plans
as regarding employment and the actual percentage of popula-
tion employed is considreed to be the measure of labor short-
age. Labor shortage, according to this interpretation,
manifests itself in the existence of vacancies. In the early
1970s, the labor shortage amounted to 1.5-2% of the labor
force. What are the causes of such a number of vacancies
and how did they arise? The answers to these questions should
help us to understand the nature of labor shortage not only
in the Soviet Union, but also in many East European countries.

It seems that there are two major factors which contri-
bute to the existing situation. Since the very beginning of
the establishment of Soviet Russia, one of its main political
and economic goals has been the achievement of as high rates
of economic growth as possible. Being poor in capital and
rich in labor, it was only natural that the country embarked
on a course of labor-intensive development. Massive creation
of new job opportunities at a very low technological level
coupled with exploitation of reserves of cheap labor resulted
in unprecedented rates of industrial development in the pre-
World War II years. By 1930, according to official Soviet
sources, the state had eliminated unemployment. The need
to rebuild rapidly the economy after World War II did not
stimulate economical use of labor. Economically, such a course
of development was possible because there were substantial re-
serves of manpower, among the unemployed, in agriculture and
among those working in households. Also, exploitation of the
farming population and general neglect of agriculture, in addi-
tion to keeping the standard of living of the entire popula-
tion low, provided capital resources for such actions. Politic-
ally, it was first made possible by the postrevolutionary enthu-
siasm which made some portions of the population ready for
sacrifices. Afterwards, especially after the years of forced
collectivization of agriculture and consolidation of Stalin's
power and terror, forced labor and fear because, to a great
degree, the forces which caused the population to accept the
situation as it was and the regime to utilize it. A final
political factor is patriotism. Throughout the Soviet period,
the regime has appealed to the patriotic feelings to encourage
sacrifice to help the motherland withstand "hostile encircle-
ment" of capitalist countries, resist Nazi aggression, rebuild
the economy, or be ready for a Western or Chinese invasion.
Although this propaganda is not directly linked to economic
performance, it creates a political atmosphere in which any
sign of dissatisfaction with any facet of economic policy is
regarded as antipatriotic or even betrayal of the motherland.
The urge toward growth has gradually created a pattern of development supported by the entire system of planning and management of the economy. Investment projects have been geared toward achievement of additional output based to a great degree on abundant manpower resources which facilitated such a policy. However, of late the inertia of this pattern of development is leading to a shortage of all the factors of production, especially labor and capital. When the labor factor had been exhausted, this policy of extensive investments in new capacity rather than increased capital for labor substitution at the existing production units was not reversed. Impressive rates of economic growth of the earlier periods no longer could be maintained as lower rates of productivity increases could not compensate for lower rates of growth of labor inputs into the economy or for a substantial slowdown in the restructuring of the economy (such as massive movement of labor from sectors with low levels of labor productivity, i.e. agriculture, to more productive sectors, mainly industry). Thus, productivity has become the decisive factor determining the growth potential of the Soviet economy.

The second major factor which in my opinion has contributed to the current macroeconomic labor shortage is the principle of full employment maintained by both the policy-makers and the planners throughout most of Soviet history. Full employment, and especially its interpretation as the right not only to a job but to a particular job, has had a profound effect on both the directors of the economy, and on the population of the Soviet Union as a whole. Granted, workers assert their right
to a particular job in most societies, but in the USSR the problem was exacerbated by keeping the demand for labor at a level providing job opportunities for everyone willing to join the labor force while ignoring labor productivity until recently. Such a policy objective thus simultaneously became a constraint to increases in the efficiency of production. It can be argued that it was a conscientious decision of the leadership to make a trade-off between the possible growth of labor productivity and maintenance of full employment. The price of this trade-off was not high while the government could achieve its objectives through high rates of increase of employment. However, as labor is becoming scarce, the price of the trade-off is increasing. The job guarantee has become one of the "social constraints" to increase labor productivity. The labor force has accepted the "social contract" offered by the government; the workers do not work very hard, the government does not pay very much, but everybody is assured that he will be able to maintain and even to improve his standard of living, and that he will keep his current job. "They pretend to pay us and we pretend to work," goes the saying quoted by Hedrick Smith in *The Russians*.

The idea of full employment has become the foundation on which all the rest of economic and social thinking is based. Not only the laws, decrees, and norms regulating the economy, but also the public consensus rejects dismissal as a way of rationalizing the economy. Until now, it was almost impossible for managers to dismiss surplus workers. If they were to do so, it would be their obligation to find a suitable position for the dismissed worker. Granted real power to dismiss workers, managers would prefer to avoid possible consequences of such a move, for the price to pay for keeping unnecessary labor is considerably less (if any) than the price
to pay for dismissing a worker. In some circumstances, even a manager's party membership and position could be jeopardized. Finally, every worker knows that whatever his performance is he cannot find himself without a job. If he has to quit a job he is certain to be able to find another one easily at the same pay. Absence of other stimuli to utilize his capacities and abilities fully leads to a situation where workers are in a strong position vis-a-vis the management.

These two major factors of labor shortage in the Soviet Union, as well as in most East European countries, underlie the specific mechanisms through which the shortage is realized. One of the direct causes of the labor shortage which stems from the urge toward growth is deeply rooted in the system of economic management. Central planners who seek to achieve maximum growth of output base their calculations of achievable and therefore planned rates of growth of labor productivity on ideal conditions. However, real life, being far from an ideal situation, proves that planned growth of labor productivity is unachievable. If one compares FYPs with their fulfillment during most of the postwar period, one can see underfulfillment of the planned targets for productivity growth. Thus, in order to fulfill (or to not fall far behind of) the planned output targets, which are considered among the most important planned indicators (even after the 1965 reform), an increase in the labor force which is above the planned (or estimated by Gosplan) is required to compensate for a lower than planned level of labor productivity. According to plans of enterprises, organizations and institutions, the number of workers and employees was to be 94.1 million in 1971 and 104.1 million in 1975. At the same time, according to Gosplan's estimates, it was to be only 92.7 and 101.6 million, that is the sum of plans of employment in the state.
sector of the economy was 1.4 million higher in 1971, and 2.5 million higher in 1975 than the calculations of the Gosplan. The same picture was characteristic of the 10th FYP (1976-1980); in 1977 and 1978 this difference was more than 2 million. 128

Unfounded optimism of the planners with regard to growth of productivity is just but one of the many reasons for labor shortage. Another one is linked to enterprises' urge towards having more manpower based on the firm's tendency to attempt to expand. (In addition to common reasons for a growth-orientation, socialist enterprises have their own specific motives for expansion, covered briefly on pp. 22-24 of this Report.) Suffice it to say here, in addition, that the desire to overstate demand for labor on the part of enterprises is influenced by the fact that many other planned indicators directly linked to the income and fringe benefits of the enterprises' personnel are based on the size of its work force. For instance, the wage fund, the fund for material incentives (the bonus fund), the funds for housing construction and social and cultural activities, the size of bonus fund for new technology, bonuses for socialist competition all have been made dependent on the size of the labor force. Moreover, the managers' salaries in some branches of industry are based on the category of the enterprise; the category itself is in part dependent on the size of the enterprise as measured by employment. Therefore, it should not come as a surprise that employment plans drawn up by enterprises envisage a greater size of the labor force than that included into the national plan.

In addition to the material interest of managers to have more rather then fewer workers on the payroll, there are many additional reasons for such behavior. The most important of these is the ratchet
principle of national planning, also known as planning from the achieved, which forces managers not to disclose all their reserves. This ratchet principle is applied to both enterprises and individual workers. A manager knows that any overfulfillment of the planned output or productivity targets, any saving in the payroll bill, any increase in efficiency of production that was achieved in the current year will become his plan for the next year. Therefore, he will always try to leave some untapped reserves to meet next year's targets as well. The same applied to an even greater extent to an individual worker, especially on piece-rate. He knows that overfulfillment of time-norms per unit of output is punished by reduction of these time-norms without increase in the piece-rate. Thus, his desire to produce only as much as is necessary not to jeopardize his standard of living is only natural.

The two fundamental reasons for the labor shortage in the Soviet economy discussed earlier--maximization of growth and job security--have been, perhaps, best expressed in the investment policies. Both demand a high rate of investment growth. Indeed, investment outlays in the USSR were growing at a very respectable rate. Since at least 1975, the volume of investment in the USSR has been higher than in the United States, while the USSR's GNP is only 60% of the USA's. This information is summarized in Charts 8 and 9. These substantial rates of growth of capital expenditures, although declining, have also been intended to maximize output growth at low cost. This argument is supported by evidence according to which capital investment is used mainly to increase production capacity and to a significantly lesser extent to improve the existing capacity. Real capital investment is highest in branches that have high rates of growth and low levels of labor productivity. It is precisely this desire to expand
### Chart 8 129

Average annual rates of growth of GNP and Fixed Investment (factor cost)

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<td>6.9</td>
<td>6.3</td>
<td>5.5</td>
<td>5.8</td>
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### Chart 9 130

Percentage of new fixed investment in GNP, USSR and USA (based on dollar value)

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<tbody>
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<td>USSR</td>
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capacities, to create new job opportunities rather than to substitute capital for labor than has been the most characteristic feature of investment activity in the Soviet economy. (This aspect of economic planning is discussed at length by Boris Rumer in a recent Final Report to the National Council, "The Dynamic of the Capital Coefficient in Industrial Investment in the USSR." ) Such a policy has been possible and, perhaps, economically rational when labor was abundant and capital scarce. It would be oversimplification to say that the planners were not concerned with the growth of labor productivity, but this pure increase in labor inputs and productivity gains from structural changes in the economy enabled them to maintain a stable, although decreasing, growth of physical output. It also has made it possible to have replacement investment be less than half the share of total investment compared with the economy of the United States, to have the ratio of basic to auxiliary workers in industry 1 to 1, compared with 2 to 1 in other industrial countries, because of low level of mechanization of auxiliary operations. This was not only possible, but also necessary in order to provide full employment. On the other hand, the stress on investment in new productive facilities increases the share of plant compared to equipment in the technical structure of the capital stock with a negative effect on infusion of advanced technology and a corresponding effect on increases in factor productivity.

To summarize, pursuing the dual goal of maximizing growth and maintaining full employment, the Soviet planners have created a mode of operation of the economy which is capable of absorbing without serious problems the growth in the able-bodied population willing to work. This was achieved mainly through a trade-off between higher productivity
and job security. However, this policy has led to demand for labor in excess of its supply in many areas of the country, on the one hand, and to a substantial pool of underemployed on the other.

2. What Can Be Expected?

The reader will undoubtedly notice that this discussion of the major factors of labor shortage in the Soviet economy in the 1970s is not very different from descriptions of the Soviet economic situation of several decades earlier. Then, as now, managers tried to create a safety net for themselves first by not disclosing their reserves, and second, trying to get lower plan targets and more resources to meet these targets. In 1940, Soviet authors were complaining about the low level of mechanization of auxiliary operations, as they do now.\textsuperscript{133} Forty years ago they accused managers who "instead of correctly utilizing labor, create 'reserves' for every occasion,"\textsuperscript{134} as they do now. Analysis of the Soviet economy and managerial behavior by Professor Berliner almost 30 years ago based mostly on Soviet prewar experience is still valid in its main conclusions. Does this then mean that those experts who predict an economic crisis in the USSR in the 1980s due to a sharp decrease in the growth of the labor force are correct? If what they mean is a collapse of the Soviet economic system then they are probably overstating the case. If, however, they mean a slowdown in the economy, more difficult times for the directors of the system to satisfy consumer and military demands then undoubtedly they are correct. But even here, it seems, the main constraint on economic development does not stem from lack of labor. Overall success in the face of labor shortages at least since the 1930s has demonstrated that although demographic fluctuations influence the economy, they are not the main determinant of the labor
situation. Therefore, we should address the question of the options Soviet planners have to effect both the supply of and the demand for labor.

Perhaps, the most general answer should be that these options are relatively limited. The fact that the factors, which gave rise to the tendency of excessive demand for any kind of resources, have been so persistent for many decades in spite of reforms and reformed reforms cannot make one an optimist. One cannot expect that the current Soviet leadership will totally abandon the goals of achieving maximal rates of growth (which today would be minimal rates) or the principle of full employment. Nor are plans to introduce a system of management which will do away with disequalibria between the available resources of labor and capital and demand for them in the working. Nevertheless, even with these limitations there are some factors counterbalancing the negative demographic developments and their influence on the economy.

As was pointed out earlier, the Soviet economy has proved to be almost inexhaustible labor absorbction. This statement does not mean that during certain periods, such as the early 1960s, or in certain areas, there have been no difficulties in providing enough job opportunities. These difficulties were caused by several factors. One of them was a significant increase in the number of young people entering into the labor force for the first time. The increase in minimum wage has also made the opportunity cost for housewives to stay home much higher. In addition, limitation on development of private agriculture imposed in the late 1950s has also led to an increased supply of labor to the non-agricultural labor markets. Nevertheless, due to various economic and social interventions, the economy went through this period of high rates of increase
in the able-bodied population without major problems. In addition to such direct measures as the decrease in the work week, lengthening of the schooling period, and increased investments in the small and medium-sized cities, the dynamics of employment in several sectors of the economy helped to absorb the additional increments to the labor force, or reduced the labor being reallocated from them. The same effect of labor-absorbing behavior of various branches of the economy can be observed in the 1970s when the increase in the able-bodied population was even greater.

Responses of various sectors of the economy to labor supply show regional differences. Thus, during 1971-75, characterized by the significant increase in the able-bodied population, the decline in the agricultural labor force has slowed down in the labor-short regions of the country (from -1.6% per annum during 1966-70 to -1.0 during 1971-75). In the second half of the seventies, when a decline in the growth of the labor force occurred, the decrease in agricultural employment has accelerated in this area (to -1.3% per annum during 1976-78). During the same period of time, in labor-surplus regions (Central Asia, the Transcaucases, and the Kazakh and Moldavian republics) employment in agriculture has been increasing. Within industry the role of compensatory branches, i.e. branches absorbing excessive supply of manpower resources in "good" years and reducing their demands for labor during "bad" years, has been played by construction, light, food and wood-working industries. As Soviet economists have noted, "Under the conditions of labor shortage, changes in employment in these branches entirely compensate for the fluctuations in the dynamics of national size of employment and provide independence of employment change in other branches of industry,
except for production of electrical energy."\textsuperscript{136} What these and similar findings\textsuperscript{137} suggest is that, on one hand, these sectors of the economy in the 1980s will "behave" according to the conditions of the labor market. The reserves of labor they have accumulated during the "good" years of the seventies would not only be sufficient to meet their demand for labor, but to a certain degree could make it available for other branches of the economy. On the other hand, the most important strategic branches of the economy, e.g. the fuel, machine-building, chemical, and construction materials industries demonstrate considerable independence in the dynamics of employment from the labor market situation. This means that during periods of a slack labor market situation, the most labor-absorptive is the first strategic group of industries, although the latter also shares in possibilities of increased employment; while in periods of a tight labor market the other industries is less likely to be affected by a labor shortage. In other words, the most important sectors of the Soviet industry will not feel the labor crunch of the 1980s to the extent suggested by the labor market situation. The size of employment in the so-called compensatory branches, which is equal to employment in the largest machine-building industry and is more than one-third of the total employment in industry, will be able to provide a cushion for the strategically important sectors.

Another factor which somewhat limits the impact of the slowdown in the growth of the labor force in the 1980s on the economy is the existence of significant so-called intra-mural reserves of labor within enterprises. Estimates of these reserves vary from 5 to 20 percent of industrial employment and up to 35 percent of the labor force in the construction. If the estimates about the scope of industrial labor shortage of 1.5 - 2 percent are correct, then even a comparatively small utilization of these reserves may be adequate to meet the additional labor demand in the 1980s. The
question is, what is to be done to utilize these reserves?

One of the first necessary steps is to prevent these reserves from increasing. According to the recommendations of the 1978 all-union conference on utilization of manpower resources, starting in 1980 enterprises will once again be assigned absolute ceilings on employment. This means restoration of the pre-1965 situation. It was argued at the conference the causes of labor shortage are not limited to the tight labor market in eastern parts of the USSR and in large industrial centers.

Much more important is the fact that organizations very often do not fulfill their targets on labor productivity growth. Therefore, taking advantage of some freedom of decision given to them regarding the size of their work force, they plan to increase the number of workers above the levels estimated in the national plan. In addition, many of the so-called non-productive branches of the economy which are not assigned targets on productivity growth also increase demand for labor over and above the national plan estimates. According to the Central Statistical Administration, during the 9th FYP this margin was equal to 1.6-2 million persons. This practice, according to Soviet sources, led to the creation of artificially high demand for labor and consequently to an artificial labor shortage, causing irrational utilization of the labor force. The new rules stipulate sanctions against violators of the ceilings on employment. Managers who violate these ceilings will be deprived of up to 50% of their year-end bonuses.

Direct planning of employment is a practice used also in Bulgaria, Czechoslovakia, the G.D.R., Romania, and in a less direct way also in Poland. The experience of two of these countries which have been plagued with a tight labor market for a long period of time, namely Czechoslovakia and the G.D.R., shows that this measure alone cannot eliminate the labor shortage. Still,
it may be somewhat more difficult for managers to hire more workers than they really need, and what the targets call for. It should not be expected that ceilings on employment would lead to a release of the reserves of labor. However, the fact that actual employment figures in the past were much closer to the estimates of the national plan than to the plans of enterprises suggests that direct planning of employment from above could bring about at least some easing of labor-shortage-psychosis and reduce the incidence of enticement of workers from one enterprise to another, or of offering a job to people in the waiting rooms of the labor-exchange offices.  

A real step towards utilization of labor resources is connected with factors relating to investment, although at present redirection of investment is not helping. For a long time investments were geared to the creation of new capacity. In the 1970s, the Soviet leadership started to stress the need to direct more investment into reconstruction and retooling of existing enterprises. This share indeed has increased. However, even in 1979, according to the national plan, the share of modernization was less than one-fifth of the volume of productive investments. As a result of such investment policy, many jobs are carried out manually, resulting in low labor productivity. According to data for 1975, more than one-half of the industrial workers had manual jobs (i.e. jobs that were not mechanized), including more than one-third who fulfilled hard manual labor. The number of such jobs is especially higher in machine-building, light, food, coal-mining, wood-working, and construction materials industries, i.e. the branches that employ the bulk of industrial labor. In turn, the level of mechanization of auxiliary processes (loading, assembling, material handling, sorting, and packing) is inadequate. While the share of mechanized jobs in the main processes of industry in 1975 was 62.4%, in auxiliary processes it was only 27.6%. The
number of people employed in these jobs in the state sector in 1979 was equal to 13.6 million. Although their share in total employment has been decreasing (0.9 percentage point per annum during 1959-1975), their absolute number increased by 2.1 percent.\textsuperscript{145} This happens in spite of the fact the efficiency of mechanization of labor in auxiliary operations is 2.8 to 3.5 times higher than in main processes. According to Soviet estimates, one million rubles invested in introduction of new technology in machining saves the work of 137 workers, in founding the savings is 170 workers, while the same capital investments in mechanization of internal transportation and loading results in the savings of 475 workers.\textsuperscript{146}

Although the need to mechanize labor-intensive processes, especially auxiliary operations, was recognized a long time ago, not much has been done. Several decrees, in 1973, 1979, and 1980, to mention the most recent, were devoted to this issue. Evidently, failure to solve the problem of so-called small mechanization lies in the fact that both the production of this equipment and its introduction do not have a priority over "productive" investments which directly result in increased volume of output. Production of this equipment is still scattered among hundreds of enterprises under 40 ministries, is high-cost and poor quality. While during 1976-80 the volume of production of the machine-building industry was increasing seven percent per annum, the average annual increase in production of machinery for loading and storing was only about two percent.\textsuperscript{147} If production of this equipment is not given the needed priority, with allocation of financial and material resources, and maybe creation of a special agency responsible for this area of production, it is hard to foresee real progress in the solution of this important problem.

It should also be noted that the effective methodology for computing efficiency of mechanization of manual labor is such that it does not
motivate such investment either; capital is expensive, and the labor it is replacing is cheap. In addition, it is much more difficult to set norms for these kinds of manual jobs which means that it is precisely here where managers can hold labor in reserve for emergencies, for periods of storming, or to meet demands of various organizations to send workers to help farms with the harvest, vegetable warehouses with loading and storage, or construction organizations with completing a project. As long as reasons for holding labor in reserve are compelling, managers will do everything possible to maintain them; and if it is easier to do so among manual workers (whose job-accounting is harder to control), then they will do so in this area. This is not to suggest that nothing can be done to reduce the number of people employed in these jobs. According to estimates of the USSR State Committee on Science and Technology, the number of manual workers can be reduced by one-third, provided the necessary technology is available. 148

A Decree of July 1979 instructed Gosplan and the relevant ministries to draw up a program for mechanization of labor throughout the economy. This will be one of 15 priority programs incorporated into the XIth FYP. 149 In addition, starting with the XIth FYP, industrial ministries and enterprises will receive binding plan targets on reduction of manual labor. It is reasonable to argue that while not being able to mechanize most of the manual jobs in the near future, the Soviets probably can arrest the trend towards absolute increase in the number of workers employed in them, and also to transfer some of them into main operations. These tasks become even more urgent if one considers the age structure of the labor force. Detailed data from the latest population census of 1979 are not yet available. However, according to the previous census of 1970, there were 31.3 million people in the age group of 40-49 years (ninety percent of who were in the labor force). About
14 million, or practically one-half had four or less years of elementary school. This means that during 1975-1989, due to retirement of this generation, approximately one million jobs, mainly non-attractive, manual jobs, will become vacant each year. Simultaneously, the increment to the labor force will consist practically only of young people, mainly with secondary education who are not willing to take up these jobs. This could force the management to pay more attention to the need to substitute capital for labor in this sphere.

Some labor-saving effect, although perhaps only marginal, can be expected from further reform of the system of management in accordance with the July 1979 Decree. One of the major changes is the introduction of normative rather than absolute plan targets. In the area of labor utilization, the following targets are assigned to industrial firms: growth of labor productivity measures on the basis of normative net output; wage funds based on normative wage rates per ruble of output (net or gross); employment limits; manual labor reduction targets; normatives for creation of incentive funds. The most publicized innovation is the introduction of normative net output which is calculated on the basis of normative net prices. The latter are being introduced together with the new wholesale prices and will be used for planning and accounting of labor productivity growth. By the end of 1982, all processing industries will be assigned targets based on these normative targets. The normatives are supposed to be branch-standard in order to reflect differences in performance of individual enterprises within a branch. However, as a Labor Research Institute study conducted in 1980 indicates, there are strong forces working against introduction of this normative. One-third of the questioned enterprise managers did not know when they would be able to transfer to the new planning system. The reasons, as they see them, are absence
of methodological recommendations on the adjustment of the 1979 Decree to
the peculiarities of individual branches, absence of any relationship between
the level of targets approved by industrial ministries, on one hand, and the
possibilities of enterprises to meet them, on the other.

Another major problem is that every enterprise arguing its special
situation is demanding adjustment of these standard branch normatives to its
conditions. Therefore, the whole exercise may be fruitless. A similar situa-
tion occurred in Hungary when almost every enterprise was treated individually
although norms were supposed to be universal. This resulted in a universal
system of exceptions from what was intended to be a universal system of norms.
In addition, as Soviet sources suggest, the determination of these normatives
is subject to manipulations and unaffected by changing technological conditions.
Another change in labor planning is the introduction of normative planning of
the wage fund. Until now the wage fund was assigned to ministries, associates
and enterprises as an absolute sum which did not depend directly on results of
the enterprise's work. These normative wage rates per ruble of output are
supposed to be long-term and specified for individual years.

In sum, there are several problems with the normative method that are
already becoming evident. First, discussions are still going on about specific
methods of determining these norms.152 Second, the argument of specific condi-
tions of every organization that undoubtedly will be raised could destroy
the entire system. Finally, there is every reason to believe that these norms,
based on past experience, will be neither long-term, nor stable. That means
that they will once again be ratchet-based, adjusted to current situations
and thereby will not generate any substantial labor savings. What they probably
will achieve is to bring closer the growth of labor productivity and the growth
of the wage fund, putting a stronger control on wage expenditures and thus
reducing the growth of unsatisfied consumer demand. The latter, by the way,
is also one of the concerns for Soviet planners who justifiably consider this demand as a factor in reducing the material interest of workers in the result of their work and decreasing the incentive role of wages in productivity growth.

As it was mentioned earlier, the determination of incentive funds has also been changed. Beginning in 1981, these funds have become practically independent of the size of enterprise workforce. For example, the size of the bonus fund is supposed to be determined in accordance with long-term norms set for every enterprise on the basis of growth of labor productivity and high-quality output. The fund is fed from profits. The incentive funds that were not used in the current year are to be left with the enterprise for the next year rather than to be confiscated as was the earlier practice. 153

In addition, the principles of the Shchekino experiment have been incorporated into the general incentive systems. Despite the fact that planners have urged introduction of Shchekino-type principles, by 1978 only 1,200 enterprises have adopted this method. The main reason for this situation is the contradiction between the principles of the experiment and the traditional branch planning system based on planning from the achieved level. In addition, instructions on introduction of the Shchekino method has been changed eight times during ten years of the duration of the experiment, and main principles of the experiment have been violated. For instance, stability of output plans and of wage funds was not secured. The right to provide additional payments from wage fund savings was not carried through. Under the cover of clarification of planned targets, the enterprises were often deprived of all the wage fund savings. 154 The latest instruction on introduction of

of the Shchekino scheme, approved in April 1978, is intended to eliminate some of these shortcomings. According to it, 100 percent, rather than the earlier 50 percent of wage fund savings that were unspent in the current year, can be transferred to the bonus fund. Bonuses for high-productivity work can reach up to 60 percent of wages; supplementary payments are allowed for repairmen. Motivation to reduce the workforce has also been strengthened.\textsuperscript{155}

However, the freedom of actions of enterprises regarding management of the wage fund and staff structure, and dismissal of superfluous labor is still rather limited.\textsuperscript{156} The obligation of managers to find employment for workers who become redundant is still one of the major barriers to adoption of this method. Soviet authors call for legislation which would provide retraining and reallocation for released workers, would increase the severance pay, would permit the worker to keep his \textit{propiska} (the residence right) in case he moves to another location.\textsuperscript{157}

Again, as with other measures designed to save labor, it is difficult to quantify the possible effect from integration of the Shchekino method into the general incentive system. There is no doubt that some intramural labor reserves will be utilized due to this measure. According to a survey conducted by a research branch of the RSFSR State Committee on Labor, by 1976 enterprises participating in the experiment have freed more than six percent of their workforce. Seventy percent of them were reallocated to other workplaces within the enterprise.\textsuperscript{158} These data suggest that if the efficiency of the method is not increased, then its role in changing the labor market situation will be negligible. The maintenance of the ratchet principle, now in planning of the norms, will lead the managers of even those enterprises which adopted the Shchekino scheme to maintain labor reserves. On the other hand, the 1979 Decree stipulates disciplinary and financial penalties for managers and branch directors for changes in the set norms which could promote better utilization
of the workforce.

One can list other measures such as tightening labor discipline, tying various kinds of benefits to length of service, increasing the role of the State Committee on Labor and Social Problems in control of employment and labor force utilization, attaching a binding planned target character to the balance of labor resources, and providing incentives to persons of pensionable age to continue to work, intended to deal with the changes in the labor market. ¹⁵⁹ All in all, these measures do not amount to any substantial reform in the existing system of planning and management of the economy. Nevertheless, their cumulative effect would be a somewhat less severe shortage of labor than without them.¹⁶⁰ Also, the spectrum of the measures and their main directions suggest the availability of disguised reserves of labor within enterprises, which are enough to enable the economy to muddle through the eighties without a major crisis.

The entire discussion in this sector has been devoted to the inter-relation of the labor market situation and possibilities to satisfy labor demand of the economy. If the rates of economic growth in the current decade remain as low as they have been during the past few years, then the labor market situation could become quite different from the one we have been looking at. Slower or zero growth or even absolute decline in the GNP will entail slower, or zero growth in demand for labor that could lead in the years to come to abandoning of all the incentives to increase the participation rates of the population, and to a more slack labor market.

C. Situation of Elderly in Hungary With Special Regard to Their Employment

A Case Study

The population of Hungary is aging (see Fig.10). The number of people of pensionable age (60 years and older for men and 55 years and older for
Age and Sex Composition of the Hungarian population, I.I.1980

Table (Figure) 10.

Preliminary results of the I.I.1980 population census.

90 years and older

in 1000's

men

in 1000's

women

age group

1949

1960

1980

* Preliminary results of the I.I.1980 population census.
women) increased during 1950-1980 by 66% while the total population increased by only 16%. The proportion of the elderly in the total population reached 20.3% in 1980, climbing from a low of 14.2% in 1949.\textsuperscript{161} During the same period of time, the share of those aged 0-14 declined from 24.9 percent to 20.5%.\textsuperscript{162}

The burden on society to support these increasing numbers of elderly has not surprisingly also grown. The number of pensioners during 1950-1980 has more than tripled, going from 596,000 in 1950 to over two million in 1980, and their share of the entire population rose from 6.4 percent to 18.8 percent. In addition, average pensions have also substantially increased, from 207 forints a month in 1952 to 2,270 forints in 1980 which lead to an increase in the annual pension bill from 1.4 billion to 56 billion forints. By 1980 roughly 10 percent of the national income was used for pension payments (see Fig. 11).\textsuperscript{163}

What has been the attitude of policy-makers to these changes? What was the evolution of laws governing retirement and employment of the aged? What is the current financial and employment situation of the elderly? In other words, what are the dynamics of employment of the elderly in Hungary.

1. Pension Law

Until 1975, when a law on social security was adopted, there were several pension laws governing retirement of the elderly. Before World War II old-age insurance covered only a small part of the population. In 1929, old-age pensions were introduced for industrial wage-earners, in 1939 for agricultural workers (only men). These pensions were set at a very low level. In 1938, only 31% of the population was covered by social security benefits (in 1973 this share was already 99%).\textsuperscript{164} The minimal length of service required for old-age pension eligibility was 8 years for blue-collar workers.
(BCW) and 9.5 years for white-collar workers (WCW). Prewar regulations were in effect with some modifications until the first postwar pension law was passed in 1951. Its main purpose was to broaden the coverage of old-age insurance, to raise the level of pensions, and to eliminate the eligibility differences between BCW and WCW. Simultaneously, the minimal length of service was increased to ten years, and the retirement age, as mentioned above, was set at 60 years for men and 55 years for women. However, the basic pension was calculated at only 15% of the wage level, and supplementary pension was figured at 2 percent of the basic pension for every year in employment since 1945. In addition, those who were eligible for retirement but postponed drawing their pensions for 5 years, received basic pension at 30% of their wages. Those who had been put on the retired list, but were still employed received only the basic pension.

The second pension law of October 1, 1954, raised the level of pensions, at the same time reducing the correlation between pension and earning prior to retirement. The basic pension was fixed at 50 percent of the average wages, instead of the 15 percent according to the 1951 law. The annual 2 percent supplementary was reduced to one percent. Limitations were introduced on employment of the pensioners. The pension could be determined and paid only if employment ceased or employment were less than one week in a month.

The third law, which was in effect until 1975, was enacted in January of 1959. Beginning in 1958, mandatory old-age insurance was introduced for members of agricultural cooperatives. Their retirement age was set at 65 years for men and 60 years for women (five years more than that for wage and salary earners), and the duration of membership at 20 years. Those, however, who had joined the agricultural cooperatives by the end of 1961 needed only 10 years to become entitled to an old-age pension. The third pension
law has also introduced a gradual increase in the minimum length of service needed for full pension. While in 1958 it was still 10 years, in 1959 it became 14 years, increasing annually by one year until it reached 25 years in 1970. Persons reaching retirement age with 10 years of service but less than 25 could claim a partial pension. The law was quite strict for those who were out of the labor force for more than five years, lost their accumulated seniority. Of course, higher pensions went to retirees with the most seniority, and the level of supplementary pensions was also raised by one percent, for each year of insured employment since 1929 rather than 1945. Partial pensions were calculated at the rate of the basic pension, less two percent for each year of the period insufficient to claim a full pension.

In addition, a minimum pension was set at 500 forints. Finally, in 1967, a pension scale was introduced for retirees of agricultural cooperatives, and in 1975, a unified pension scale was introduced for all employed in the state and cooperative sectors of the economy (see Table 13).

Before 1975, the pension scale of members of agricultural cooperatives was slightly more advantageous than that of workers and employees. Of course the level of earnings in the cooperatives was lower than in the state sector of the economy. According to the new pension scale, introduced in July 1975, after a minimum of ten years service, pensioners were receiving 33 percent of their average earnings, and the value of the pension increased by two percent each year to a maximum of 25 years of service. Between 26 to 32 years of service the increase was one percent per annum, and with 33 to 42 years the step was one half of a percent; the pension reached 75%, with 42 years seniority, and further service was not reckonable. Calculations of pensions is based on average monthly earnings during the last four calendar years prior to retirement. The best three years of the last five years of
Table 12  Pension scale  pre-and post 1975.

<table>
<thead>
<tr>
<th>Years</th>
<th>Time of Service Workers and Employees</th>
<th>Time of Service before 1975</th>
<th>Members of agricultural coops</th>
<th>Unified Scale after 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>22%</td>
<td>33%</td>
<td></td>
<td>33%</td>
</tr>
<tr>
<td>15</td>
<td>34.5</td>
<td>43</td>
<td></td>
<td>43</td>
</tr>
<tr>
<td>20</td>
<td>48</td>
<td>53</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>25</td>
<td>62.5</td>
<td>63</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td>30</td>
<td>65</td>
<td>68</td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>35</td>
<td>67.5</td>
<td>70</td>
<td></td>
<td>71.5</td>
</tr>
<tr>
<td>40</td>
<td>70</td>
<td>70</td>
<td></td>
<td>74</td>
</tr>
<tr>
<td>42</td>
<td>...</td>
<td>...</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td>45</td>
<td>72.5</td>
<td>70</td>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>
employment must be taken as the basis for computation if this is more advantageous for the retiree.

The new social security law of 1975 also introduced a gradual reduction in retirement age for members of agricultural cooperatives so that by 1980, their retirement age was the same as for workers and employees. The new law also liberalized the calculation of the length of service by including those years after 1929 when a person was employed but was not covered by old-age insurance.\textsuperscript{173}

In January 1981, some modifications were introduced into the pension law. The minimum length of service qualifying a worker for an old-age pension was raised from 10 to 20 years. This seniority requirement is to become general in 1990. Those who reach retirement age before 1991 will be eligible for old-age pensions if they have accumulated at least 10 years of service.\textsuperscript{174} The official explanation for this move is that most retirees at present have twenty years' service or more. Among those retired in 1979, there were two thousand men (7\% of male retirees) and 21 thousand women (46\% of female retirees) whose length of service was less than 20 years.\textsuperscript{175} Among those whose seniority is less than twenty years older workers and women born in the 1930s who joined the labor force only at the beginning of the 1970s take precedence. In addition, members of agricultural cooperatives started to accumulate seniority only in the early 1960s, artisans since 1961, and private retailers since 1970.

As has already been pointed out, the level of pensions in the 1950s was very low, and even in 1961, the minimal pension was set at only 500 forints a month, or less than one third of the average wages in the economy.\textsuperscript{176} Before 1971, lower pensions were raised at random intervals. Since January 1,
1971, however, all pensions are raised two percent annually. In addition, to offset price hikes, pensions are increased simultaneously with price increases. By 1973, minimal pensions for workers and employees were 697 forints, and for retirees of agricultural cooperatives 538 forints. In 1975 a governmental decree raised the minimal pensions for workers and employees from 807 to 910 forints, for members of agricultural cooperatives from 648 to 810, and for artisans and private traders from 754 to 860 forints a month. In 1981, the minimum pension for workers and employees was 1200 forints. However, the introduction of these minimal pension levels has not been retroactive, with the result that in many instances the average pension is lower than the current minimum pension (see Table 14).

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Average pensions increases</td>
<td>486</td>
<td>571</td>
<td>765</td>
<td>1272</td>
<td>2270</td>
</tr>
<tr>
<td>Percentage of average wages</td>
<td>31</td>
<td>32.1</td>
<td>33.4</td>
<td>40.8</td>
<td>51.2</td>
</tr>
</tbody>
</table>

At the same time pensions established in later years were substantially higher (see Table 3).

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Average new pensions (forints)</td>
<td>898</td>
<td>922</td>
<td>1136</td>
<td>1966</td>
<td>3100</td>
</tr>
<tr>
<td>Percentage of average pensions</td>
<td>184.8</td>
<td>161.5</td>
<td>148.5</td>
<td>154.6</td>
<td>137.0</td>
</tr>
<tr>
<td>Percentage of average earnings</td>
<td>57.2</td>
<td>51.8</td>
<td>49.6</td>
<td>63.1</td>
<td>70.4</td>
</tr>
</tbody>
</table>

Table 13
Average pensions in Hungary in 1960-1980

Table 14
Average monthly pensions of workers and employees set in corresponding years.
For comparison, pensions established in 1979 for workers and employees came to 2,835 forints and 1,900 forints for members of agricultural cooperatives (67% of the former). These data demonstrate a trend towards a decreasing gap between the new pensions and earnings as a result of both the development of the social security system, and the increase in the share of retirees with greater seniority. However, the average pension is still only roughly one half of the average wage. In 1980, 60% of all pensioners received pensions that were lower than the average. In 1977, while the poverty level was estimated at 1600 forints of per capita income, the average pension was only 1,590 forints, even though the average size of pensions settled in that year was 2,399 forints a month, while the average pension had reached 2,270, and new pensions averaged 3,100 forints. These data show that a significant proportion of the elderly—forty-two percent—live with pensions below the poverty level. Can these people supplement their pensions with additional earnings? What is the situation with the employment of elderly in Hungary?

2. Employment of the Elderly

As already indicated, the proportion of the population in post-productive ages has increased substantially since World War II. At the same time, the proportion of the employed population in these age groups has decreased (see Table 16). As a result, the labor force participation rate of the population of pensionable age has decreased from 30% to 10% during the last two decades (see figure 17). Since 1945, depending on the labor market situation and status of government programs providing social security, the authorities have changed regulations concerning employment of the elderly a number of times. Between 1945 and 1954, there were no restrictions on
Table 15

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (thous.)</td>
<td>10,007</td>
<td>10,166</td>
<td>10,354</td>
<td>10,572</td>
<td>10,710</td>
</tr>
<tr>
<td>Population in post-productive ages (thous)</td>
<td>1,717.9</td>
<td>1,940.7</td>
<td>2,132.5</td>
<td>2,165.4</td>
<td>2,189.0</td>
</tr>
<tr>
<td>Percentage of population</td>
<td>17.2</td>
<td>19.1</td>
<td>20.6</td>
<td>20.5</td>
<td>20.5</td>
</tr>
<tr>
<td>Employed elderly</td>
<td>500.6</td>
<td>453.6</td>
<td>360.8</td>
<td>277.6</td>
<td>220.0</td>
</tr>
<tr>
<td>Participation rate</td>
<td>29.1</td>
<td>23.4</td>
<td>16.9</td>
<td>12.8</td>
<td>10.1</td>
</tr>
</tbody>
</table>
Table (Figure) 16

their employment, and a five-year postponement in drawing pensions resulted in a bigger pension in the future. The pension law of 1954 limited the employment of pensioners to 12 weeks per year. The only exceptions were physicians working in civil service, or workers employed in underground jobs, or in jobs harmful to health. Between 1969 and 1972 pensioners had the right to collect pensions and work, provided their earnings were not more than 6,000 forints a year. In 1972 the regulations were changed again, permitting no more than 840 hours of work per year (4 months) in some occupations. Since 1975, there have been no restrictions on employment for pensioners whose pensions did not exceed 910 forints a month (the minimum for workers and employees). This was raised to 1,160 forints a month in 1977, and 1,400 forints in 1978. Since 1979, this is increasing by two percent annually. 188

An incentive system to encourage prolonged employment was also introduced in 1972. The future pension of workers who do not draw their pensions while they continue to work increases by 7% for each additional year worked for BCW and by 3% for WCW. Until 1978, the total pension, including these supplements could not be more than 95% or 90% of the earnings on which the pension was based. Since January 1, 1978, however, the pension can be equal to average earnings. In addition, for each year worked, paid vacation is increased by three days up to a total of 12 days. 189

In spite of these stimuli, the number of working people in post-productive ages, as has already been shown, is decreasing. In 1969 the Hungarian Main Statistical Office conducted a representative survey of the population of pensionable age, the results of which were published in 1972. 190 Although the data are thirteen years old, they still could be useful for
our purposes. The sample consisted of 1,829 persons, 682 men aged 60 and older, and 1,147 women aged 55 and over. It should be noted that at the time of the survey the pensionable age for members of agricultural cooperatives was still five years higher than that of workers and employees.

The study focused on the gainfully employed. This category includes those of pensionable age who hold regular jobs and whose employment was not restricted. The proportion of this group in the sample was 14 percent, of whom 42% were women and 58% were men. 44% were employed in the cooperative sector of the economy; 37% were workers and employees, 16% were self-employed, and 3% were assisting family members. Among men the share of self-employed (21%) was substantially higher than among women.

70% of those employed in agricultural cooperatives were 60-64 year old men and 55-59 year old women, i.e. persons who had not yet reached their effective pensionable age. Therefore, their employment was clearly economically motivated. This motivation also played a major role in the employment of other groups of the older population. Among BCW, 49% did not yet have even ten years of seniority that would have qualified them for any pension, another 34% were qualified only for a partial pension. Only 10% of BCW had full pension eligibility, but 92% of the intelligentsia had full eligibility, and 54% of the WCW. Even worse was the situation of the self-employed, 58% of whom were not covered by any old-age insurance. Thus, the vast majority of the gainfully employed population of post-productive ages were compelled to continue to work either because they were not eligible for pensions, or because the amount of pension would have been significantly lower than their earnings. This also suggests that high participation rates of the older population do not mean that they consider the effective pensionable age to be too low. Quite to the contrary, many of them thought that it was too high. Almost one half of them shared this view, and only 8 percent considered
the pensionable age-limit to be too low. At the same time, this latter view was supported by 46% of the intelligentsia, which is a substantial divergence from the general pattern. 193

Many of the elderly employed in agricultural cooperatives who were questioned planned to retire as soon as they reached the pensionable age (53% of the working men and 38% of women). 40% of workers and employees planned to retire during the first five years after reaching the age-eligibility limit, 1/3 in the second quinquennium, and one-fifth in the third. 194

In order to determine the motives behind continued employment, the respondents were asked what they would miss most if they retired. 66% of the gainfully employed chose earnings as their first answer; another 11% ranked earnings on the second place. These responses were predominant among members of agricultural cooperatives (78%), while among intelligentsia only 30% ranked earnings as the thing which they would miss most in case of their retirement. The WCW, and especially intelligentsia ranked work itself much higher than did all the other groups (38% for intelligentsia and 17% for other WCW). 195

All in all, the study clearly shows that, perhaps with the exception of intelligentsia, economic need and legal coercion are the major reasons for continued employment by the elderly. Since this survey was conducted, the pension laws have been changed. The retirement age of members of agricultural cooperatives now equals to that of workers and employees. A new system of calculation of pensions was introduced that abolished the so-called full and partial pensions. In addition, the number of people with low length of service decreases every year. But all of these changes have led to withdrawal of the elderly from the labor force. Not even the introduction in 1972
of the above-mentioned incentive schemes have halted this trend. In 1972, the number of persons in postproductive age who chose this option was 12,000 (23% of retirees), in the later years this number reached 18,000, but in 1978-79 it was back to 12,000-13,000. Another problem, recognized by the Hungarian government is that BCW respond very differently to incentives than WCW, the former requiring a higher annual pension supplement (7%) than the latter (3%). The proportion of BCW to WCW who chose this option is 60:40, while the same relation in the total labor force is 75:25. The problem arises because there is a much stronger demand on the part of the economy for BCW’s work. In addition, most Hungarian studies show that pensioners prefer not to work full time, and this is a prerequisite for participation in the incentive 3-7% scheme. More frequently the second incentive is used whereby people retire but continue working in a part-time job as pensioners. In spite of the fact that pensioners prefer part-time employment and that they are best fitted for this kind of flexible work organization, firms still try to avoid the problems that arise from creation of part-time jobs, such as the paperwork needed simply to hire. Simultaneously, many of the existing part-time jobs are jobs behind the establishment of which are social, rather than economic considerations. This problem exists throughout almost all of Eastern Europe.

3. Conclusions

The thrust of Hungarian retirement policy after World War II was the universalization of pension coverage and income adequacy. Today 93% of the Hungarian population of postproductive ages receives some kind of pension. The number of pensioners has increased from 596,000 in 1950 to more than two million in 1980 (see Table 18).
Table 17

Number of Pensioners in Hungary (thousands)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Number of Pensioners</td>
<td>596</td>
<td>562</td>
<td>636</td>
<td>1,101</td>
<td>1,380</td>
<td>1,748</td>
<td>2,018</td>
</tr>
<tr>
<td>Percentage of Population</td>
<td>6.4</td>
<td>5.8</td>
<td>6.4</td>
<td>10.9</td>
<td>13.4</td>
<td>16.6</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Growth was especially rapid in the first half of the 1960s during extensive collectivization of agriculture. As in other East European countries, this socio-economic transformation of agriculture led to a massive reduction in the agricultural labor force. Elderly people working on small family plots were much less fit to participate in large-scale farming. Still, even today, the share of the elderly employed in agriculture and forestry is more than twice (47.6%) the share of the total labor force (20%).

During the 1970s, the rate of retirement slowed down, yet took place when the absolute number of elderly remained virtually constant and their share in the total population even somewhat declined. This was due to the fact that small cohorts of population born during World War I were reaching retirement age. Such a development constituted a temporary and unique phenomenon in the general process of aging of the population. The increase in the number of retirees in the 1970s was due to the decrease in retirement age for members of agricultural cooperatives, and a substantial increase in the number of disability pensioners.

The financial situation of the elderly has improved. The average pension as a percentage of the average wage has increased from 31% in 1960 to 51.2% in 1980 and is planned to reach 60% by 1985. This figure would be much higher if not for the still substantial number of retirees of earlier years with pensions frozen at much lower rates. At present, the difference
between the highest and the lowest pensions is tenfold. At the same
time this increase in average pensions is due also to gradual decrease in
the number of people who retired early in the postwar period which explains
the average 2-4% annual increase in pensions.

These data also mean that fewer elderly are forced to continue to
work for economic or legal reasons. The 1969 survey, discussed earlier,
and most of later Hungarian studies seem to support the idea that so-called
negative inducements to continue to work beyond the retirement age are much
stronger than the positive ones. The majority of the population retires upon
reaching the pensionable age. Those who continue to work beyond the pension-
able age do so for only 3.5 years on average. As a result, while in 1960,
13.3% of the labor force consisted of elderly, in 1980 their share declined
to only 3.3%. Another factor contributing to the decreasing participation
rates of the elderly was the development of the second economy. Forty per-
cent of the pensioners are involved in some aspect of the second economy.
Most of them belong to the group of so-called "young" old, i.e. people in
the first postproductive age groups, while the older retirees whose pensions
are, as a rule, lower, have also fewer chances to supplement their pensions
with income from both the first, and the second economy.

The official policy towards employment of the elderly has been geared
to the changes in the labor market situation. As J. Timar has noted, "It is
a characteristic example that in 1957, because of the temporary setback caused
by the counterrevolution, it became necessary to hasten—even at the expense
of temporarily reducing the retirement age—the retirement of older people
from the labor force, partly enable young people to take jobs and partly to
prevent workers tin the productive ages from being dismissed." Later,
in the early 1970s, as the labor shortage in the economy became very acute the government introduced the 3-7% incentive scheme to induce the elderly to continue to work. By the late 1970s and early 1980s the situation in the labor market has changed again. Demand for additional labor has substantially subsided, and because some difficulties in job placement of school graduates can be expected, the 3-7% incentive scheme is being changed.

In general, these governmental measures have been successful only when they are of an administrative nature (for example, compulsory retirement). As discussed the government has little leverage in regulating the employment of the elderly via financial incentives. In addition, enterprises even during labor shortages, do not demonstrate particular willingness to adjust their requirements for additional labor to the specific needs (working conditions, flexible working hours) of the elderly; the elderly are only seen as a source of unskilled cheap labor. As time goes on, new additions to pensioners will be more skilled labor less inclined to take these jobs. This is especially true if they can sell their services much more expensively in the second economy. Therefore, even after the current period of a sluggish economy is over, there will not be much room to increase labor participation rates of the older generation. Another solution, i.e. to increase the retirement age, is highly unlikely because of political considerations.

2 Radulov, Atanasov, L., V'zproizvodstvo na trudovi resuri v razvitoto socialistichesko obschestvo (ikonomicheski problemi). (Reproduction of Labor Resources in a Developed Socialist Society: Economic Problems), (Varna: 1977), as reported in Referativnyi Sbornik Ekonomika Promishlennosti, Moscow, 1979, No. 2m, pp. 21-22.


4 Rabotnichesko Delo, 14 November 1962, as reported in Mikulskyi, K.I. Trudovye resursy evropeiskikh stran sotsializma. (Labor Resources of the European Socialist Countries), (Moscow: 1969), p. 86.


6 Kabaj, M., "Pelne zatrudnienie (Full Employment)," Ekonomika i organizacija pracy, 1979, Nos. 7-8, p. 12.

7 Scintelia, 1 June 1980.


14 Trybuna Ludu, 17 April 1981.


16 Figyelo", No. 51, p. 5.


18 Ibid., p. 3.

19 Gabor, R.I., "Munkaerőhiány a mai szocialista gazdaságban (Labor Shortage in the Contemporary Socialist Economy)," Közpazdasagi Szemle, 1979, No. 2, pp. 171-87.

20 Mikulskyi, K.I., ed., Effektivnost' socialisticheskogo proizvodstva i khozyaistvennyi mekanizm (Efficiency of Socialist Production and the Economic Mechanism), (Moscow: 1979), p. 44.


23  Stetka, K., "Informacni system o pracovnych silach (Manpower Information System)," Hospodarske Noviny, 1978, No. 19, p. 4.


29  Savranskaya (1979), pp. 120-1.

Vertes, Cs., "Kotelezo munkaerö-kozvetites (Compulsory Manpower Mediation)," Figyelo," 1979, No. 33, p. 5.

Ibid., p. 6.


Susta, V., "Hmotne zabezpeceni pracovniku pri strukturálnich zmenach a jiných racionalisacních a organizacních opatreních. I. cast (Material Security of Workers Who Have Been Affected by Structural Changes and by Other Rationalization Measures, Part I)," Hospodarske Noviny, 1979, No. 4, p. 3.

Ibid., pp. 3-4.

Ibid., p. 8.

Rabotnichesko Delo, 28 January 1967.

Dr. M.T., "A munkaerö szervezett atcsoportositása nak a dolgozok munkaviszonyat erintő jogszabalyi kerdesei (Legal Problems of Workers' Employment Under Organized Manpower Re-allocation)," Munkaügyi Szemle, 1979, No. 5, p. 37.

RFE Situation Report 14, 18 July 1979, p. 5.


Papp J., "Plnenie hospodarskeho a socialniho programu XV, zjazdu KSC (Fulfillment of the Economic and Social Program of the XVth Congress of the Czechoslovak Communist Party)," Hospodarske Noviny, Priloha, 1979, No. 3.

For more on wage regulation in some East European countries, see Adam, J., Wage Control and Inflation in the Soviet Bloc Countries, (London: 1979).

For more on the system of wage regulation in Hungary in 1980 see Penzügyi Közlony, 1979, No. 14.


Szilard, Cs., "Munkaerö-tartalekaink nyomaban (Tracing Our Labor Reserves)," Figyelo, 1979, No. 11, p. 3.


For more on these aspects of manpower policy, see Mikulskyi, (1979), pp. 146-58.
Statisticheskyi ezhegodnik, 1978, p. 11.


For more on assistance to mothers in Eastern Europe, see Valevskaya, V.I., "Pomosh obschestva zhenschinam-matyam (Society's Help to Women-Mothers)," Ekonomika i organizaciya promishlennogo proizvodstva, 1978, No. 3, pp. 106-114.


Timar, ibid., p. 43.

Pulay, Gy. "Nyugdias koru tartaleksereg (Reserves Among Population of Retirement Age)," Figyelo, 1979, No. 18, p. 6.


Seidl, V., "Ekonomicka aktivita osob v popruduktivnim veku (Economic Activity of Persons in Postproduction Ages)," Planovane Hospodarstvi, 1979, No. 8, pp. 12-15. Only those working pensioners who voluntarily choose to work after achieving retirement eligibility are discussed.

Lacso, J., "Munakugyi Helyzetkep (Situation in the Area of Labor and Wages)," Figyelo, 1979, p. 1.


Pongracz, L., "A munkaero-gazdalkodas idoszeru kerdesei (Urgent Problems of Lab or Force Utilization)," Munkaugyi Szemle, (II. supplementary), 1977, p. 16.


For more on employment of foreign workers in Eastern Europe, see Vais, T.A., Problemy sotrudnichestva stran SEV v ispolzovanii trudovych resursoy (Problems of Cooperation of the CMEA Countries in Manpower Utilization), (Moscow: 1976).


For instance, in 1969 working groups in the following areas were organized: elaboration of systems of mutual information (sponsor--the GDR State Secretariat on Labor and Wages); assessment of experience in material stimulation (sponsor--the Soviet State Committee on Questions of Labor and Wages); on scientific organization of labor (the Bulgarian Ministry of Labor and Social Security); raising the qualification level of managers (the Romanian Ministry of Labor); and rational manpower utilization (the Czechoslovak Ministry of Labor and Social Affairs). Some of these groups have already finished their work, and others have been established.

L. Kostin, "Sotrudnichestvo stran-chlenov SEV v oblasti truda i sotsial'nykh voprosov (Cooperation of the CMEA Member Countries in the Area of Labor and Social Questions)," Ekonomicheskoe Sotrudnichestvo Stran-chlenov SEV, 1978, No. 1, p. 51.


L. Kostin, "Osushchestvlenie programy razvitiya SSSR i sotrudnichestvo so stranami SEV (Realization of the Program of the USSR Social Development, and USSR's Cooperation with the CMEA Countries)," Ekonomicheskoe Sotrudnichestvo Stran-Chlenov SEV, 1980, No. 2, p. 65.
Co-operation and Development of Socialist Economic Integration by the CMEA Member-Countries (Moscow: 1971), p. 64.


78 Ibid., p. 464.


81 V. Karavaev, Integratsiia i investitsii: problemy sotrudnichestva stran SEV, (Moscow: 1979), p. 79.

82 V. Sorokin, Ekonomicheskaia Gazeta, May 1980, No. 22, p. 20.


87  

88  

89  

90  
Rude Pravo, 9 June 1980.

91  
Polish Economic Survey, No. 4 (385), 16-28 February 1978, p. 5;  
Contemporary Poland, No. 14, July 1979, p. 15.

92  

93  
V. Mladenov, Integratsiya i sblizhavane ikonomikata na NRB i SSR,  
(Sofia: 1973), p. 127; and A. Annin, Ekonomicheskaya Gazeta, No. 9, February  

94  
Mladenov, p. 83.

95  
V. Dilkov, Ekonomicheskaya Gazeta, No. 34, August 1979, p. 20.

96  
A. Zubkov, ed., Toplivno-syr'evaia problema v usloviakh sotsialisticheskoi  

97  
Soviet construction in Mongolia is excluded. Several Soviet construc-
tion organizations with their own capital and staff have operated for many  
years in Mongolia.

98  
Polish Economic Survey, No. 3 (432), 1-15 February 1980, p. 7; No. 24  
(405), 16-31 December 1978.

99  
p. 5.

Ibid.


A. Zeman, Planovane Hospodarstvi, No. 6, 1976, pp. 55-63.

M. Kmet'kova, Ekonomicky Casopis, No. 1, 1979, p. 77.


Nepszabadsag, 28 October 1973, melleklet.


Radnai, ibid.


Sotsialisticheskaia Ekonomicheskia Integratsiia, (Moscow: 1978), pp. 142-143.


115 Dziennik Polski, 15-16 February 1975, as reported in RFER, RAD BR/169 (Eastern Europe), 4 December 1975, p. 6.


117 Rabotnichesko Delo, 7 December 1974, as reported in RFER, RAD BR/169 (Eastern Europe), 4 December 1975, p. 7.

118 M. Kmet'kova, p. 77.

119 See, in particular, T. Vais, Problemy sotrudnichestva, pp. 76-79.


124 Kostin (1979), p. 11.

125 Ibid., p. 12.

126 See, for instance, Sotsialisticheskii trud, No. 4, 1980, p. 97.


Planovoe Khoziastvo, No. 9, ,940, p. 24, as quoted in Joseph S. Berliner, ibidem, p. 179.


Ibid., p. 62.

See also Izvestia Akademii Nauk SSSR. Seriia Ekonomicheskaia, No. 4, 1975, pp. 53-64.


Koston (1979), p. 266.


142  

143  

144  

145  
*Sotsialisticheskii trud*, No. 12, 1980, p. 74.

146  

147  
*Pravda*, April 20, 1981.

148  

149  

150  

151  

152  
Ibid., p. 136.

153  

154  
Ibid., p. 58.

155  

156  

157  
See *Voprosy Ekonomiki*, No. 5, 1980; No. 6, 1965; No. 10, 1969.

158  
*Sotsialisticheskii trud*, No. 4, 1980, p. 97.
For more on these measures see Kostin (1979) Ibidem; Ekonomicheskaia Gazeta, No. 4, 1979, p. 22; No. 41, 1979, p. 3; No. 15, 1980, p. 15; No. 8, 1980, p. 5; and No. 16, 1980, p. 6; and Trud, June 4, 1980, p. 4.

After this paper was finished, the Soviet authorities announced a gradual introduction of a child-care system, starting in 1981, according to which young mothers will be eligible for a 35 or 50 ruble a month allowance (depending on the region of the country) after expiration of their regular maternity leave until the child is one year old. The East European experience with similar pronatalist measures demonstrates that these policies decrease female employment especially among those with lower wages and among the less skilled. Therefore, the introduction of this system at a time of sharp reduction in the growth of the labor force in the USSR can only exacerbate the labor shortage.


Figyelo, 1981, No. 17, p. 5.


169
Munkaúgyi Szemle, 1975, No. 3, p. 4.

170
RFER, 7 December 1973, p. 23.

171

172
Munkaúgyi Szemle, 1975, No. 5, p. 3.

173
Ibid., p. 4.

174

175

176

177

178
Munkaúgyi Szemle, 1975, No. 5, p. 5.

179
Irodalmi Ujsag, March-April, p. 4.

180

181
Ibid., p. 109.

182

183
Irodalmi Ujság, p. 4, and SIK A Lakosság jövedelme, p. 16.

Irodalmi Ujság, p. 4.

Ibid., p. 4.

SIK Eletszínvonal, p. 22.


Ibid., p. 102.

Ibid., p. 21.


Ibid., p. 27.


Munkaügyi Szemle, 1979, No. 18, pp. 20 and 22.

Munkaügyi Szemle, 1979, No. 18, p. 20.

Figyelo, 1979, No. 18, p. 6.

Figyelo, 1981, No. 10, p. 16.
201  

202  
Figyelo, 1981, No. 17, p. 5. The number of pensioners in able-bodied ages rose from 54,000 in 1961 to 133,000 in 1971 and to 338,000 in 1980. See SIK: Eletszinonal, p. 22.

203  
Figyelo, 1981, No. 10, p. 16.

204  

205  
Ibid., p. 826.

206  

207  

208  
Irodalmi Ujsag, p. 4.

209  