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Unemployment, Labour Policies and Health in Transition: Evidence from Kazakhstan

Paolo Verme

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This study has been prepared within the UNU/WIDER Internship Programme and the research project on Economic Shocks, Social Stress and the Transition's Mortality Crisis, which is co-directed by Professor Giovanni Andrea Cornia and Dr. Renato Paniccià.

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FOREWORD

I am indeed pleased to introduce the reader to this working paper which is a worthy contribution to the efforts undertaken by WIDER on the analysis of labour markets and the health impact of transition to the market economy. WIDER recently carried out a wide and multi-layered two-year study addressing mortality and morbidity effects within transitional economies, and a volume will shortly be published containing the extensive findings of the research project.

After proffering a general discussion of labour market changes and policies, this study presents a wealth of data on unemployment, morbidity and mortality in Kazakhstan. The analysis makes use of a very detailed dataset prepared by the World Bank, obtained by the Living Standards Measurement Survey carried out in 1996, which includes valuable information on the health of labour markets, individual workers, and families. The study confirms that there is a close association between unemployment and health status—important information for those who are framing policies in this area.

I warmly praise Paolo Verme for the thorough and detailed research on this sadly neglected but vital area, and his fresh ideas and suggestions to the problems.

Giovanni Andrea Cornia Director, UNU/WIDER October 1998

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Paolo Verme Helsinki, October 1998

ABSTRACT

A sharp rise in unemployment and a sharp rise in mortality have been two recurrent aspects of the process of transition. In response to the unemployment challenge transitional economies have equipped themselves with labour market policies (LMPs) derived from market economies' experiences. This has been done in a rather homogenous fashion across the transitional spectrum irrespective of the profound existing differences Eastern European economies between Central and (CEEs) Commonwealth of Independent States (CISs) labour markets. This calls for a reconsideration of LMPs when labour market, macro and microeconomic conditions present substantial peculiarities. It is argued that, in economies particularly depressed where growth constraints lie in the disruption and disorganization of production, LMPs focused on the demand side rather than on the supply side of the labour market can be a better policy instrument by achieving multiple objectives at the same time. In the light of the current social and health outcome visible in Kazakhstan, there are strong arguments to support a diversification of both aims and beneficiaries of LMPs.

INTRODUCTION

Two striking features of the transitional story to date in most former socialist countries are the emergence and steep growth of unemployment and the worsening health status of the population including a severe increase in the mortality rate. Two social aspects which the socialist system aimed at and succeeded in ameliorating. And as they occurred in parallel with economic transitional reforms it seems obvious to blame partly these same reforms for the social outcome. Indeed, the output decline could not have possibly been so steep in such a short period of time had reforms and the break-up of Comecon and the Soviet Union not occurred, and the employment decline, which led to unemployment growth, could not have occurred if the output decline, privatization and enterprise restructuring had not occurred. The deterioration of the health status may be seen as a consequence of economic instability in so far as the rise of unemployment, the deterioration of public health provision, the increase in poverty, insecurity, and the consequent stress generated by these factors may be the cause of a surge in morbidity and mortality.

This study looks at the labour market, labour market policies (LMPs) and health status in transition. From the experience of countries which went through periods of high unemployment, we know that this measure is associated with a poor health status, poverty, destitution and crime. An unemployed is more likely to fall into these 'traps' than an employed person. The causality chain which links labour market policies with the health status of the population is long and the 'noise' present in each ring of the chain can render the search for this causality a lost cause from the start. In this study we will not attempt to estimate the elasticity of health variables vis-à-vis LMPs, but we will look at the connection between labour market policies and unemployment on the one side, and unemployment and health status on the other side.

Part I of this study overviews briefly the rise and nature of unemployment in transitional economies and the relative response generated in various countries in terms of LMPs. We argue that a certain discrepancy between the nature of unemployment during transition and the aim of LMPs exists and that

it is uncertain what LMPs can really do for unemployment at this particular stage, particularly in CIS economies. It is suggested that LMPs are indeed necessary but that they should be considered as a wider social policy tool not only targeted to the registered unemployed but also to a larger spectrum of people in need of a real job, wishing to work, and with capacities and abilities to work.

Part II applies this discussion to the case of Kazakhstan. The features and dynamics of employment and unemployment are sketched and the LMPs response to the labour market failure assessed. It is found that the registered unemployed as a group represents a small proportion of those in need of a real job. The latter include not only the non-registered unemployed but also some of the employed and the economically inactive. LMPs—comprehensive and diverse in their original aim—progressively concentrated over the years on the registered unemployed and on unemployment benefits, failing to provide even basic income maintenance. Thus, the opportunity for LMPs to cover those in need who do not register at the employment services declined.

Part III focuses on health in Kazakhstan and the connection with employment status. The population and mortality crises which hit the country in the past few years are explored, and a few hypotheses offered by the literature on the causes are discussed. One of these hypothesis suggests that labour market instability and unemployment are strictly related with a rise in stress, morbidity and mortality. The connection between labour and health variables is investigated further and it is found that, once stress-related health variables are isolated, morbidity is higher among the unemployed than the employed and generally higher for the labour force than for the economically non-active population aged 35–54. This is found using a living standards measurement survey (LSMS) carried out in 1996¹.

The study concludes by arguing that in the light of the current employment and health conditions of the population, LMPs should attempt to reach beyond the registered unemployed and beyond the difficult task of reducing unemployment by diversifying the clusters of beneficiaries and the overall aims. Both objectives may be achieved by shifting part of LMPs resources from the supply side to the demand side of the labour market.

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¹ The dataset was provided by the World Bank upon payment. Access to the data was authorised by the Committee for Statistical Analysis of the Republic of Kazakhstan (CSAK). I wish to thank Prof. Koulakeyev, head of the CSAK, for authorising the use of the data and for providing access to a large amount of additional statistical information used in part in this study.

I LABOUR AND LABOUR MARKET POLICIES IN TRANSITIONAL ECONOMIES

1.1 The emergence of unemployment

In the socialist system, work was both a duty and a right for the socialist citizen. The Soviet concept of *nezaniatye* (not employed) was used to define those who for some *justified* reason were not employed. In the Soviet Union and in CEE countries, the general understanding was that the economies faced labour shortages rather than excess of labour (Nuti, 1996). At the same time, labour within enterprises has often been described as somewhat unproductive and labour hoarding was a recurrent practice. Thus—as Kornai (1992) pointed out—labour shortages in the market and labour surpluses in enterprises coexisted in a socialist system. Labour was at times scarce, poorly allocated, or not very productive. This phenomenon was structural in that it was determined by the nature of the planned system. Production targets were set at the central level and fluctuations in these targets encouraged managers to hoard labour to be able to face sudden changes. Labour size also provided the status and prestige of the enterprise and managers competed for workers.

During the first phase of transition it was understood that the process of change would affect both employment and unemployment. Blanchard (1991) argued that the process of privatization was going to drive the reallocation of labour in a three-stage process. In the first phase, the state sector reduces employment with immediate increase in unemployment. This is followed by the growth of the private sector and absorption of workers from the unemployment pool. In the final stage, the growth of the private sector takes over state employees straight out of state employment. A similar model was proposed by Chada, Coricelli and Krajnyak (1993) who saw a two-stage process with an initial reallocation of resources from the state to the private sector accompanied by a sharp increase in unemployment. This should have been followed by a phase where the reached level of unemployment and human capital determined a reprisal of growth and a decline in unemployment.

Thus, during the processes of privatization and restructuring an important role had to be played by employment services and labour market policies. The reallocation of labour resources was going to create the need for new skills and retraining was deemed necessary. The expected growing number of unemployed had to be assisted during the period necessary for the private sector to grow and to re-absorb the unemployed into production.

TABLE 1.1 GDP DECLINE 1989-97

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997* |
|--------------|------|-------|-------|------|------|------|------|-------|-------|
| CEE, BS, CIS | 100 | 95.1 | 87.8 | 78.7 | 74.5 | 69.6 | 69.0 | 68.3 | 69.4 |
| CEE and BS | 100 | 93.2 | 83.3 | 79.8 | 80.1 | 83.1 | 87.5 | 91.1 | 93.9 |
| Albania | 100 | 90.0 | 65.1 | 60.4 | 66.2 | 72.4 | 78.8 | 85.3 | 72.5 |
| Bulgaria | 100 | 90.9 | 80.3 | 74.4 | 72.6 | 73.9 | 75.5 | 67.3 | 62.5 |
| Croatia | 100 | 93.1 | 74.7 | 66.4 | 65.8 | 66.2 | 67.3 | 70.1 | 73.6 |
| Czech Rep. | 100 | 98.8 | 87.4 | 84.6 | 85.1 | 87.4 | 92.5 | 96.3 | 97.3 |
| Estonia | 100 | 91.9 | 84.6 | 72.6 | 66.4 | 65.3 | 68.1 | 70.8 | 75.7 |
| Hungary | 100 | 96.5 | 85.0 | 82.4 | 81.9 | 84.3 | 85.5 | 86.4 | 89.0 |
| Latvia | 100 | 102.9 | 92.2 | 60.0 | 51.1 | 51.4 | 51.0 | 52.4 | 54.2 |
| Lithuania | 100 | 95.0 | 82.3 | 51.3 | 38.9 | 39.2 | 40.4 | 41.9 | 43.8 |
| Poland | 100 | 88.4 | 82.2 | 84.3 | 87.6 | 92.1 | 98.6 | 104.5 | 110.2 |
| Romania | 100 | 94.4 | 82.2 | 75.1 | 76.2 | 79.2 | 84.8 | 88.3 | 86.9 |
| Slovak Rep. | 100 | 97.5 | 83.3 | 77.9 | 75.0 | 78.6 | 84.0 | 89.8 | 93.8 |
| Slovenia | 100 | 95.3 | 86.8 | 82.0 | 84.3 | 88.8 | 92.5 | 95.3 | 99.1 |
| CIS | 100 | 96.3 | 90.7 | 77.7 | 70.5 | 61.0 | 58.0 | 55.3 | 55.8 |
| Armenia | 100 | 92.6 | 76.8 | 36.4 | 31.0 | 32.7 | 34.9 | 37.0 | 39.1 |
| Azerbaijan | 100 | 88.3 | 87.7 | 67.9 | 52.2 | 42.7 | 38.0 | 38.5 | 40.5 |
| Belarus | 100 | 97.0 | 95.8 | 86.6 | 80.1 | 70.0 | 62.7 | 64.3 | 66.2 |
| Georgia | 100 | 87.6 | 75.5 | 41.7 | 31.1 | 27.6 | 28.2 | 31.2 | 34.4 |
| Kazakhstan | 100 | 99.6 | 86.7 | 84.1 | 75.4 | 62.0 | 56.5 | 57.1 | 58.2 |
| Kyrgiz Rep. | 100 | 103.0 | 97.9 | 79.3 | 66.6 | 53.3 | 54.0 | 57.0 | 60.4 |
| Moldova | 100 | 97.6 | 80.5 | 57.2 | 56.6 | 38.9 | 37.8 | 34.7 | 34.1 |
| Russia | 100 | 96.0 | 91.2 | 78.0 | 71.2 | 62.2 | 59.7 | 56.7 | 57.3 |
| Tajikistan | 100 | 98.4 | 91.4 | 64.9 | 57.7 | 45.3 | 39.6 | 36.9 | 35.8 |
| Turkmenistan | 100 | 102.0 | 97.2 | 92.1 | 82.8 | 67.1 | 61.6 | 59.8 | 50.8 |
| Ukraine | 100 | 96.6 | 85.4 | 73.7 | 63.2 | 48.7 | 42.9 | 38.6 | 37.4 |
| Uzbekistan | 100 | 101.6 | 101.1 | 89.9 | 87.8 | 84.1 | 83.4 | 84.7 | 85.5 |

Source: EBRD (1997), World Bank (1997), IMF (1997), CIS-Stat (1998), calculated from GDP annual percentage changes. (*) 1997 data are still subject to revisions.

This basic mechanism described by early models did occur, but with many pitfalls of differing degrees in different places.

The output shock has been more severe than initially expected in all transitional economies and labour flows do not follow the expected path of state employment-unemployment-private employment. New hirings take place among the employed rather than the unemployed. Therefore, the inflow into the unemployment pool has been relatively small with an even smaller outflow rendering unemployment a growing phenomenon and a long-term condition. The number of 'exhaustees' (those who are no longer entitled to benefits) has been increasing in most countries and 'exit' from the labour force altogether has been a recurrent feature. Labour force participation rates (LFPRs) have been declining almost everywhere. This has been observed in

both CEE (Boeri, 1996) and CIS countries, such as Russia (Layard and Richter, 1995). The idea that unemployment *per se* can be instrumental in driving the reallocation of labour and facilitate the process of restructuring (Jackman and Pauna, 1997) has also been challenged.

TABLE 1.2 OUTPUT AND EMPLOYMENT DECLINE, CIS, CEE, BS

| | | | Output- | | | | Output- |
|--------------|---------------|---------|---------------|--------------|--------|---------|---------|
| | _ | | employ. | | _ | | employ. |
| 1991–6 | Output | Employ. | gap | 1989–95 | Output | Employ. | gap |
| CIS | -44.9 | -8.6 | -36.3 | CEE | -14.9 | -16.0 | 1.0 |
| Armenia | - 51.9 | -14.1 | -37.7 | Bulgaria | -24.5 | -30.4 | 5.9 |
| Azerbaijan | -56.1 | -5.0 | -51.1 | Croatia | -32.7 | -12.2 | -20.5 |
| Belarus | -32.9 | -13.1 | -19.8 | Czech Rep. | -7.5 | -9.4 | 1.9 |
| Georgia | -58.7 | -15.2 | -43.5 | Hungary | -14.5 | -27.3 | 12.8 |
| Kazakhstan | -34.1 | -15.5 | -18.6 | Poland | -1.4 | -14.4 | 13.0 |
| Kyrgiz Rep. | - 41.8 | -1.8 | -39.9 | Romania | -15.2 | 1.9 | -17.1 |
| Moldova | -56.8 | -19.8 | -37.0 | Slovak Rep. | -16.0 | -15 | -1.0 |
| Russia | -37.8 | -8.4 | -29.4 | Slovenia | -7.5 | -20.8 | 13.3 |
| Tajikistan | - 59.7 | -12.1 | - 47.5 | BS | -46.9 | -12.4 | -34.5 |
| Turkmenistan | -38.5 | 6.1 | -44.7 | Estonia | -31.9 | -11.1 | -20.8 |
| Ukraine | -54.8 | -7.1 | -47.7 | Latvia | -49.0 | -15.5 | -33.5 |
| Uzbekistan | -16.2 | 2.9 | -19.1 | Lithuania(*) | -59.6 | -10.6 | -49.0 |

Source: CIS-Stat (1998), EBRD (1997), Allison and Ringold (1996) (*)1992-6.

The process output-employment-unemployment took very different shapes depending whether we looked at CEE or CIS countries. The main features of this difference can be identified as follow:

- 1. CIS countries experienced a longer and deeper recession on average when compared to CEE neighbours as it is shown in Table 1.1. Among all the countries considered, only Poland regained its pre-transition level of output by 1997, while CEE countries on average were much closer to this target than CIS economies.
- 2. CIS countries experienced a 'gap' between the reduction in output and the reduction in employment which is not visible in CEE economies. Table 1.2. shows that this gap is, on average, more than -36 percentage points as opposed to an average for CEE countries which is slightly positive. The CIS trend can be explained in terms of labour hoarding and underemployment facilitated by soft-budget constraints, sharp reduction in real wages and the recurrence to measures such as unpaid leave, salaries paid in kind and wage arrears. The CEE countries which have performed betters—such as Poland, Slovenia, Hungary and the Czech Republic—

have shed labour at a rate superior to the output loss, thus maintaining or increasing output per worker.

TABLE 1.3 REGISTERED UNEMPLOYMENT (% OF THE LABOUR FORCE, END OF THE YEAR)

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-----------------|----------|------|------------|------|------|------|------|------|------|
| CEE and BS | 0.8 | 1.4 | 5.4 | 8.0 | 10.1 | 9.5 | 9.5 | 9.2 | |
| Bulgaria | | 1.5 | 6.7 | 13.9 | 16.7 | 12.4 | 11.1 | 12.5 | |
| Czech Rep. | | 0.8 | 4.1 | 2.6 | 3.5 | 3.2 | 2.9 | 3.5 | |
| Estonia | | | 0.1 | 1.7 | 5.0 | 2.2 | 5.0 | 5.2 | |
| Hungary | 0.5 | 1.0 | 4.1 | 10.7 | 12.9 | 10.4 | 10.4 | 10.5 | |
| Latvia | | | | 2.1 | 5.8 | 6.3 | 6.5 | 7.1 | 7.1 |
| Lithuania | | | 0.3 | | 3.4 | | | | |
| Poland | 0.3 | 3.4 | 8.7 | 12.7 | 14.8 | | | | |
| Romania | | | 3.0 | 8.4 | 10.2 | 11.0 | | | 6.8 |
| Slovak Republic | | 0.6 | 11.8 | | 14.4 | 14.6 | | 12.8 | |
| Slovenia | 3.2 | 5.3 | 9.5 | 13.8 | 14.4 | 14.5 | 14.5 | | |
| CIS | | | | 0.7 | 1.3 | | | | 3.2 |
| Armenia | | | | 3.4 | 6.2 | | | | |
| Azerbaijan | | | 0.1 | 0.2 | | | 1.0 | 1.1 | 1.3 |
| Belarus | | | | 0.5 | 1.4 | 2.1 | 2.9 | 4.0 | 3.1 |
| Georgia | | | | | | | | 1.4 | |
| Kazakhstan | | | | 0.4 | 0.6 | 1.1 | 2.1 | 4.2 | 3.9 |
| Kyrgiz Republic | | | | 0.1 | 0.2 | | | 4.5 | |
| Moldova | | | | 0.7 | 0.8 | | | 1.4 | 1.6 |
| Russia | | | 0.1 | 0.8 | 1.1 | 2.2 | 3.2 | | |
| Tajikistan | | | | 0.4 | | 1.7 | | | |
| Ukraine | | | | 0.3 | 0.3 | | | | |
| Uzbekistan | 1 (4005) | | \ <u> </u> | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 |

Sources: Porket, J (1995), ILO - Yearbook of Labour Statistics 1994; Jackman (1995) Nesporova (1998), Godfrey (1995), CIS-Stat (1998), Godfrey and Richards (1997).

3. Registered unemployment rates are much lower in CIS than in CEE countries (Table 1.3). The difference can be explained as a combination of three factors. The first is what has been explained in point 2. CIS enterprises have tended to retain labour for the various reasons illustrated. The second is that a large portion of the unemployed simply do not register in CIS countries. Emerging survey data for the CIS show that real unemployment rates are two-to-four times registered figures.² Factors

² See for example Standing (1997) for Russia, The Ukrainian households surveys for 1995, 1996 and 1997 published by the Ukrainian Ministry of Labour and Social Relation, the 1996 World Bank Living Standards Measurement Survey (LSMS) for Kazakhstan and the 1994 and 1996 LSMS for Kyrgystan.

explaining this attitude include distance from employment services (ESs) and transport costs, disillusionment with ESs capacity to find work, poor ESs services and low level of unemployment benefits. The third factor is the large flow of workers out of employment and into economic inactivity. Early retirement, women becoming housewives, and the 'discouraged unemployed' effect, have been larger phenomena in CIS economies than in CEEs. Also, in some CIS countries, emigration has been an important exit channel.

In spite of the much lower registered unemployment rate, CIS economies reached already in 1994 an unemployed/vacancy (U/V) ratio comparable to the average CEE level (Table 1.4). Differences in this respect between countries are remarkable but it is evident that CIS economies have been 'catching up' fairly quickly with the CEEs. On average, U/V ratios in 1994 have been similar between the two groups of countries.

TABLE 1.4. UNEMPLOYED/VACANCY RATIOS

| | 1992 | 1993 | 1994 |
|-----------------|------|-------|-------|
| CEE | 34.6 | 41.9 | 35.0 |
| Bulgaria | 48.8 | 71.5 | 48.8 |
| Czech Republic | 2.1 | 2.3 | 2.3 |
| Hungary | 25.6 | 19.5 | 16.2 |
| Poland | 75.8 | 85.4 | 74.5 |
| Slovak Republic | 20.8 | 31.0 | 33.0 |
| CIS | 11.7 | 17.8 | 36.5 |
| Armenia | 3.0 | 4.4 | 8.4 |
| Azerbaijan | 41.4 | 113.1 | 223.7 |
| Belarus | 3.4 | 5.3 | 5.5 |
| Kyrgiz Republic | 1.6 | 2.5 | 14.4 |
| Moldova | 21.9 | 24.0 | 28.6 |
| Russia | 3.1 | 3.1 | 5.8 |
| Tajikistan | 38.7 | 5.7 | 40.5 |
| Ukraine | 1.1 | 0.9 | 0.8 |
| Uzbekistan | 1.0 | 1.0 | 0.8 |

Source: Boeri (1996), CIS-Stat (1998).

It also appears that CIS countries provide unemployment benefits to the same share of registered unemployed as the CEEs. This is shown in table 1.5. Approximately half of the registered unemployed in both groups of countries have been receiving unemployment benefits between 1992 and 1995.

Thus, output, employment and registered unemployment behaved substantially differently in CEE and CIS countries. However, real unemployment rates estimated from households surveys in CIS countries (where available) are often comparable to CEE figures. This suggests that ESs in the CIS have only a limited and probably biased view of the unemployed. Moreover, the small share of the unemployed who make it to the ESs receive similar support in terms of benefits of their counterparts in CEE countries with no better opportunities in terms of vacancies.

TABLE 1.5 SHARE OF REGISTERED UNEMPLOYED ON BENEFITS

| | 1992 | 1993 | 1994 | 1995 |
|-----------------|------|------|------|------|
| CEE | 50.5 | 43.7 | 36.5 | 51.1 |
| Croatia | 22.1 | 10.1 | 12.5 | n.a. |
| Czech Republic | 46.2 | 50.4 | 47.9 | 44.2 |
| Hungary | 80.2 | 62.6 | 40.4 | 73.5 |
| Poland | 52.3 | 48.3 | 50.1 | 58.9 |
| Romania | 69.5 | 52.4 | 44.9 | 77.5 |
| Slovak Republic | 33.6 | 33.4 | 22.9 | 21.9 |
| Slovenia | 49.5 | 48.5 | 36.7 | 30.3 |
| CIS | 69.6 | 42.7 | 44.3 | 48.9 |
| Armenia | 62.8 | 32.2 | 24.9 | 31.6 |
| Azerbaijan | 96.7 | 22.8 | 14.6 | 14.1 |
| Belarus | 82.7 | 52.0 | 51.6 | 52.4 |
| Kazakhstan | 53.9 | 38.1 | 47.4 | 52.7 |
| Kyrgiz Republic | 84.2 | 59.0 | 62.6 | 57.3 |
| Moldova | 26.9 | 28.8 | 30.7 | 32.5 |
| Russia | 64.3 | 65.9 | 85.2 | 87.1 |
| Tajikistan | 69.9 | 23.3 | 11.8 | 53.1 |
| Ukraine | 74.4 | 47.6 | 58.0 | 58.6 |
| Uzbekistan | 80.5 | 57.0 | 56.6 | 49.2 |

Source: CIS-Stat (1998), Allison and Ringold (1996), Nesporova (1998).

CIS labour markets are adjusting in a slow fashion, real restructuring is sluggish and the emergence of the new private sector still has to play the role which is helping some of the CEE economies out of the recession. The labour market difficulties observed in both groups of countries are exasperated in the CIS. Opportunities are scarce and people are more disillusioned with the situation. This is well reflected in opinion polls recurrently offered by the media and by the tendency in CIS countries to re-establish communist rulers. The question is whether under such different conditions the role of LMPs in the CIS should be the same as in CEE countries.

1.2 The nature of unemployment

The initial nature of unemployment in transitional economies may be labelled as 'Keynesian', meaning a fall in labour demand due to the post-Soviet disorganization of production, the fall in production, and the fall in aggregate demand accompanied by tight monetary policies. Later other factors

contributed to shape the unemployment phenomenon. Nuti (1996), for instance, sees all the four typical forms of unemployment (Keynesian, classical, neo-classical and structural) occurring during the different stages of transition. According to this author, after the initial Keynesian phase, unemployment became classical in that it was mainly determined by a lack of capital able to productively employ labour. Later, real wages revalued, in some cases to levels able to undermine the international competitiveness. This 'rigidity' can be interpreted as 'neo-classical' because a reduction in real wages would have allowed for an increase in employment. Structural unemployment may have been present throughout the transition. Mismatching between skills demanded and supplied is largely recognised as a constraining factor of the labour market. But also, regional imbalances in the distribution of labour and obstacles to efficient reallocation of capital across sectors and enterprises are existing structural rigidities partly responsible for unemployment.

Though the nature of unemployment in transitional economies is multifold, in those economies where steady output growth has not been restored and where the pre-transition level of production has not been reached, unemployment remains determined by a lack of aggregate demand and by the severe difficulties which enterprises have in restoring production. Scarcity of cash, difficult access to credits and large arrears towards workers, banks, the state and suppliers are now acknowledged as major constraints to further restructuring and to the reprisal of production. With such existing constraints, even where internal demand would be able to absorb local production, the latter is substituted by imports. This seems the case for most CIS economies, and perhaps some of the CEEs.

Where production constraints are so severe, LMPs alone have a limited power when it comes to unemployment reduction. Labour market policies solely targeted to the registered unemployed as a group, implicitly assume that unemployment is a phenomenon mainly determined by market rigidities such as regional and skills mismatches and labour mobility. If that is the case, the problem could be tackled from the labour supply side and ESs can play a very important role in this process. If, instead, it is on the demand side of the labour market where the difficulties lie, LMPs focusing on the supply side remain a poor instrument in the fight against unemployment.

1.3 LMPs in the CEE countries

Unemployment was a new condition in the early days of reforms and the obvious step was to look at how Western economies were dealing with the problem. As it was the case for macroeconomic policies, the OECD tendencies of the early nineties influenced strongly the qualitative advice

provided to transitional economies. Following the OECD model, transitional economies reformed the ESs systems and designed a wide range of LMPs.

1.3.1 The employment services

The most immediate response to the new emerging conditions in the labour market was the establishment of employment services throughout countries and regions and the supply of unemployment benefits to a selected group of the unemployed. Labour market institutions had to be established to count and monitor the unemployed, evaluate the nature of unemployment, and design and implement policies.

The resources necessary to finance the ESs and their activities have been secured through a form of taxation imposed on both workers and enterprises. A share of the workers' wage bill and a corresponding contribution from the enterprise are levied and put into a special fund (employment fund) which can be managed within the budget, though more often than not is extra-budgetary. The combined tax rate (workers + enterprise contribution) applied is variable, usually around 2–3 per cent of the wage bill, with a peak of 7 per cent in Bulgaria (Godfrey and Richards, 1997).

TABLE 1.6 EXPENDITURE ON LMPS (% OF GDP) AND SHARE OF PLMPS

| | 1992 | 1993 | 1994 |
|----------------|------|------|------|
| Bulgaria | 0.6 | 1.0 | 1.0 |
| (% PLMPs) | 83.0 | 82.6 | 80.0 |
| Czech Republic | 0.4 | 0.3 | 0.3 |
| (% PLMPs) | 45.3 | 65.4 | 72.0 |
| Hungary | 1.1 | 2.9 | 2.96 |
| (% PLMPs) | 79.0 | 77.4 | 71.3 |
| Poland | 1.8 | 1.9 | 2.1 |
| (% PLMPs) | 93.0 | 87.3 | 86.0 |

Source: Turunen (1997).

Generally speaking, the total level of expenditure on active and passive employment measures in CEE countries is similar to that of their neighbours in the West as well as the distribution of this expenditure among different labour market programmes (Rutkowski, M. 1996). Approximately, between 0.3 and 3 per cent of GDP is spent on such measures which is what OECD countries tend to devote to LMPs with comparable unemployment rates. The greatest share of LMPs expenditure still goes to passive measures (PLMPs), unemployment benefits above all (Table 1.6).

TABLE 1.7 RATIO OF REGISTERED UNEMPLOYED AND OF BENEFIT CLAIMANTS TO PUBLIC EMPLOYMENT SERVICE STAFF

| Country | Registered | Benefit |
|------------------------|------------|-----------|
| · | unemployed | claimants |
| OECD | 159 | 73 |
| Norway (90/91) | 65 | 41 |
| Spain (90/91) | 260 | 85 |
| UK (90/91) | 60 | 37 |
| Denmark (93/94) | 183 | 155 |
| Finland (93/94) | 247 | 159 |
| Italy (93/94) | 370 | 38 |
| Germany (94) | 41 | 32 |
| Sweden (94) | 42 | 38 |
| CEE | 265 | 166 |
| Bulgaria (93/94) | 271 | 98 |
| Czech Republic (93/94) | 37 | 17 |
| Hungary (93/94) | 160 | 70 |
| Poland (93/94) | 270 | 150 |
| Romania (93/94) | 600 | 550 |
| Slovenia (93/94) | 250 | 111 |

Source: Godfrey and Richards (1997), OECD and CEE average added.

Employment services are responsible for most LMPs. These policies are usually categorised as active or passive depending whether they actively contribute to put people back into work or not. In the following sections, we distinguish between labour supply policies, meaning LMPs which target specifically the registered unemployed as a group, and labour demand policies, meaning those measures aimed at encouraging employment retention and/or generation from the production side.

ESs seem to be understaffed as compared to their OECD counterparts. This is shown in Table 1.7. The ratios of registered unemployed or benefits claimants to employment services staff are higher than in Western Europe. Moreover, the number of registered unemployed does not reflect the workload of ESs. Candidates for unemployment status have to go through a selection mechanism before they are actually registered as unemployed and this selection consumes time and resources of ESs. Thus, the financial resources relative to the size of the economy are secured and they are not overutilized for administrative purposes. They are, however, insufficient and ESs remain understaffed.

1.3.2 Labour supply policies

The range of policies adopted is generally comparable to that in OECD countries. Other than the four main activities—job brokering, unemployment

compensation, retraining, public work—LMPs targeting registered unemployed include, business start-up schemes, self-employment schemes and activities addressed to groups affected by higher unemployment such as women, young people, and the disabled. The general consensus and lesson from OECD countries is that active policies should be preferred to passive. Public work or business start-up schemes should be preferred to unemployment benefits.

The job brokering function has become more difficult over the years. On the supply side of the market the increasing number of long-term unemployed and the prevalence of low-skilled workers meant that ESs found it increasingly difficult to match workers with vacancies. On the demand side, the process of privatization and the general large supply of labour allowed many enterprises to 'bypass' ESs. Workers are often found at the enterprise's gate rather than in ESs. Therefore, ESs have progressively lost their capacity to match demand and supply which converge under their domain.

Unemployment benefits absorb most of the resources dedicated to LMPs. That is because of the large number of unemployed rather than the cost per individual. In 1993 and 1994, the value of the average unemployment benefit in CEE countries was between 27–40 per cent of the average gross wage (Godfrey, 1996). Benefits should be a last resort measure with the capacity of supporting financially a person in real need. Therefore, the value of the benefits should be low enough to discourage rentseekers and high enough to guarantee subsistence. The search for this difficult balance is often cause for debate, but it is usually said that unemployment benefits are low by any standards in transitional economies with a few exceptions.

Training became a necessary measure undertaken by ESs. It is largely recognised that skill mismatches exist and that they are a product of the very nature of transition. Indeed, training has become popular and, together with public work, has been expanding in size over the years. However, it is costly, is only offered to a relatively small number of unemployed, and privileges those unemployed with higher skills—those who are less at risk of not finding employment in the current labour markets. Also training is often seen as an alternative to benefits but it is recognised (OECD, 1996) that this measure should be offered after a given period of full-time job searching. This allows for those who would find a job anyway to be matched and it would allow for more long-term unemployed to benefit. This is often not the case in CEE countries and training still tends to be seen as an alternative to unemployment benefits.

Public works are popular schemes and have been growing in importance in many countries. It is argued that these schemes pursue several objectives at the same time. They provide income maintenance and social inclusion, prevent loss of skills and motivation and contribute to socially purposeful projects. In the past, this measure has been a major policy tool of statist governments undergoing severe recessions. On the other hand, it is a difficult policy to sustain financially and in the long-run alternatives have to be found—also to avoid creating a dependency culture on this type of income source.

Start-up subsidies for intending entrepreneurs are in use in several CEE countries and incentives for small businesses are indeed recognised as necessary. However, they have lost ground over the years and they are often hampered by hostile macro and micro conditions. An International Finance Corporation survey (1997)³ on businesses constraints around the world found that, 'The highest obstacle according to businessmen in the Visegrad region is tax regulations and high taxes. This obstacle was considered as a very strong one by 76 per cent of the respondents, compared to 46 per cent for inflation, the obstacle ranked second. Corruption was ranked third followed by financing'. In Hungary, where start-up subsidy schemes have been adopted, a recent legislation raised the tax rate for the self-employed to 45 per cent of the monthly income thus undermining the possible gains of such schemes.⁴

Policies aimed at increasing mobility such as housing policies, reduction of registration requirements such as residency permits and mobility subsidies have also been in use in CEE economies, though they are not always classified as LMPs. Bulgaria, for instance, adopts a mobility support programme for the unemployed which covers travel and removal costs for the families of the unemployed (Bobeva, 1997). Labour mobility is indeed a serious constraint. Housing markets are still feeble particularly in the low rent sphere as most people live in their own properties. Transport costs are also on the increase and those workers who take up work opportunities in other regions or countries tend to move alone, leaving families behind.

Other schemes are in use such as early retirement and post-benefit assistance to the unemployed. The first scheme—as adopted by Hungary and Slovenia—foresees compensation for those firms putting workers on early retirement and provide for the early retirement pension The second scheme instead provides

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³ Internet source; ifc.org/depts/ops/econ/pubs/dp33/annex1.html.

⁴ Financial Times, 19 February 1997.

some form of income support to those long-term unemployed who are no longer entitled to registration.

1.3.3 Labour demand policies

These measures focus on labour within enterprises and encourage enterprises and single entrepreneurs either to retain the existing labour or to create new jobs. The popularity of such measures has been in decline because of the negative stigma attached to subsidies and the fear of rendering enterprises once more dependent on the state. Thus, the range of these policies has been reduced to only a few measures.

Subsidies to enterprises willing to take on unemployed persons are adopted by several countries. Bulgaria subsidises employers who hire young professionals and skilled blue-collar workers—though with very scarce participation to the programme (Bobeva,1997). In Hungary employers who hire a long-term unemployed may receive a wage subsidy for up to one year. The scheme, not very popular in its early stage, covered 18 per cent of participants in active labour market programmes in its third year of existence (Frey, 1997). Poland also provides subsidies to employers who take on unemployed people selected from the employment offices under a scheme called 'intervention works'; long-term unemployed, school-leavers and women are usually the target of these schemes (Gora, 1997).

Jackman and Rutkowski (1994) have argued that subsidies to enterprises can be an effective measure to prevent short-run unemployment growth. They argue that such policies should be 'selective', i.e. targeted to enterprises with some economic potential and in cases where the cost of subsidies would be lower than the cost of supporting the unemployed. Moreover, the local authorities should be able to support this type of social service, and any enterprise difficulties should be recognised as transitory. Godfrey (1996) also supports this kind of intervention though critics tend to dismiss these policies as too 'soft', incentive distorting, and undermining the restructuring process.

Hungary has experimented with employment companies in areas particularly depressed and traditionally reliant on one major company. The scheme foresees the constitution of a new company for the absorption of laid-off workers. Though it has been limited to a few areas, the scheme has been judged positively (Frey, 1997). In CEE countries this is not a very popular measure but countries such as China have used it extensively—there public works sometimes are substituted by the creation of special enterprises which employ laid-off workers (Godfrey, 1995). The scheme is believed to be fairly successful although it is vulnerable to misuse by rentseekers and freeriding

entrepreneurs. Other experiments of this kind in Europe have been attempted in Germany with employment companies which '...act as service delivery agents for labour market programmes and offer temporary employment to laid-off workers and unemployed in depressed regions' (Godfrey and Richards, 1997).

Some countries, such as Bulgaria, have subsidised bank credits which are taken by enterprises for the purpose of job creation. These subsidies have been financed with the employment fund thus falling under LMPs but it is uncertain whether they really incite enterprises to hire new labour if this is not needed in the first place. More popular in most countries are small- and medium-sized enterprises (SMEs) promotion. These measures include the support of SMEs through business and legal advice, micro-credits and training. The schemes exist in all countries and are often supported by foreign donors such as USAID or European Union programmes. In these cases they can hardly be labelled as LMPs but in some countries, such as the Czech Republic, these measures were initially part of the active LMPs financed by the employment fund.

Perhaps the most important LMP in Poland has been apprenticeship programmes; enterprises are supported with small contributions for the employment of youth labour in need of experience. Where these activities are financed by employment funds they are considered active LMPs. The scheme is widely used in Western Europe and it is one of the major forms of youth employment schemes in countries such as Italy. Occasionally other forms of measures taken by enterprises in major difficulties—such as job sharing and reduced working hours—are supported and incited by employment services with some contributions, becoming in this way an additional form of LMPs.

Demand side LMPs lost ground vis-à-vis supply side policies. Overall, labour market policies in CEE countries maintained emphasis on the supply side and this seems in line with the prevalent view of scholars engaged on this front. The issue of policies for the demand side is usually left to macro and industrial policies. LMPs which envisage some form of subsidies to enterprises to encourage labour retention or absorption are looked at with suspicion and countries allowed for these measures to disappear gradually. Is this trend justified in a CEE context and should it be followed by CIS economies?

1.3.4 Are labour market policies effective?

The objectives of LMPs are multiple. Unemployment reduction, income maintenance, the reduction of market rigidities to improve labour matching

and reallocation and the prevention of long-term unemployment are some of the main objectives. Perhaps less explored are the effects of LMP on health, crime rates, and social inclusion. It may be that LMPs do not contribute substantially in reducing unemployment. But if they do contribute to providing social inclusion, therefore preventing the negative psychological and health consequences of unemployment and the related costs, then LMPs could be a substantial social policy instrument.

The evaluation of LMPs remains complex, time consuming and costly. These obstacles leave the question of whether these policies are effective with no obvious answer. Schwanse (1996: 17) commenting about LMPs outcomes in OECD countries remarks: '...unfortunately the answers provided are far from clear-cut: evaluation studies tend to vary in terms of rigour, coverage, time horizon, and evaluation results show that some programmes seem to work well for some groups but not for others'.

Evidence for CEE countries is also scattered and controversial. A few experiments have been carried out to test the effectiveness of LMPs. According to Rutkowski, M. (1996), in Hungary where these tests have been carried out for retraining and public sector employment there is scarce evidence that the schemes have been successful. In Poland, retraining was also not found effective in favouring the outflow from unemployment (Gora and Sztanderska 1994). Rutkowski, J (1998) evaluated LMPs in Poland and concluded that 'Although subsidised employment programs seem well targeted, they are not very effective in enhancing the chances of the unemployed to get regular jobs', and 'All in all, labour market policies that have been carried out in Poland have not significantly enhanced equality in access to jobs'.

Of a different opinion is Nesporova (1998) who argued that the Czech Republic and Poland are fairly successful in placing people in jobs after retraining, with placement rates which exceeded on average 70 per cent and 50 per cent (1995) respectively. A programme designed to capitalise unemployment benefits to start small businesses in Slovenia was also found fairly successful by the same author when evaluated using a control group over a period of three years.

The only country across transitional economies which has shown to be persistently successful in maintaining a low level of unemployment is the Czech Republic. Nesporova and Uldrichova (1997) attribute the low level of unemployment in this country to relatively low real wages, labour hoarding in large enterprises, the absorption capacity of the private sector, high flexibility

and mobility of the labour force and well designed employment policies. How much of the positive outcome is to be attributable to LMPs remains to be estimated. According to Boeri (1996) in countries which have been successful in stopping rising unemployment—such as Poland, Slovak Republic and Slovenia—the achievement is to be attributed to substantial growth rates.

The very nature of unemployment in transitional economies in general, and in the CIS countries in particular, seems to prevent LMPs from playing a substantial role on the unemployment reduction front. The fight against unemployment has still to rely on the reprisal of production and growth. Thus, one cannot blame ineffective LMPs for high unemployment rates and cannot rely on these measures to turn the labour market around.

Nonetheless, the scope for LMPs remains and can be justified on different grounds. Labour market rigidities do exist and have to be addressed. In this respect, LMPs such as training and mobility incentives should be supported. Also LMPs have implications well beyond the reduction of the unemployment rate. They can contribute to preventing the unemployed from becoming a total burden on society by falling into poverty, destitution, morbidity and crime. Thus, unemployment benefits, if well targeted and if the real value is maintained, should be encouraged. Public work and on-the-job training schemes can provide the necessary social inclusion for individuals to maintain self-esteem and motivation, even if they do not guarantee subsequent permanent jobs. When it comes to evaluation, it is also on social inclusion, income maintenance and health grounds that LMPs may be considered and evaluated at this stage of the transition. This is more true in CIS countries where all the negative aspects of the labour market described are exasperated.

While in the CEE countries LMPs reach all the unemployed because all those who qualify register at ESs (this is shown comparing registered figures with labour force survey figures), in the case of the CIS countries, most unemployed do not register. LMPs conducted by ESs do not reach most of the people in need. The obvious deduction is that it is largely insufficient to limit LMPs on the 'visible' supply side in CIS countries. To overcome this difficulty two options are open. One is to extend the reach of LMPs to the 'non-visible' supply beyond the registered unemployed. This can be done by encouraging ESs to move out of their premises and 'seek' the unemployed actively. However, this option remains realistically limited by the insufficient and declining resources currently available for ESs. The other option is to enhance LMPs which focus on the demand side of the labour market by providing enterprises with the right incentives to productively maintain existing labour and employ new workers. This can be done not only by

transferring part of LMPs resources into enterprises but also by linking ESs more closely to enterprises and to other local entities such as local administration and local tax authorities to create the conditions under which enterprises can operate in the same direction as ESs. This aspect of LMPs has been somehow neglected over the years.

In Part II of this work, we focus on Kazakhstan to take a closer look at labour market dynamics and assess the potential and possibilities offered by LMPs under a 'CIS type' scenario.

II LABOUR AND LABOUR MARKET POLICIES IN KAZAKHSTAN

Kazakhstan declared independence in December 1991 profiting from the political upheaval which affected the Soviet Union during the year. The newly established republic found itself with the immense task of building a state for the first time in its history. State institutions had to be built from the writing of a constitution to the establishment of a government, the reform of the public administration, the army, the judiciary system and the establishment of all other institutions typical of a modern state. This task was to be achieved in the course of transition from a planned to a market-based system. The heritage of the planned system was but a mere twig of a vast production system designed by Stalin as a cohesive mechanism of a large and diverse territory—the Soviet Union. What Kazakhstan inherited by establishing its borders was an unstructured, unconnected and disorganised conglomerate of enterprises. As was the case for other former Soviet republics, the system of production collapsed in the aftermath of independence.

Between 1990 and 1996 output declined by approximately 40 per cent. Employment declined by 13 per cent (CSAK, 1997) while unemployment from being non existent reached approximately 12 per cent of the labour force in 1996 (LSMS op. cit.).⁵ The population decreased, GDP per capita halved during the period and, in 1996, 34.6 per cent of the population lived below the poverty line. Income inequality as measured by the Gini coefficient increased from 0.29 estimated for the 1980s to 0.35 in 1996 (World Bank, 1998).

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⁵ The survey was carried out in July 1996 on a national sample of 7,223 individuals (1,996 households).

2.1 Employment and underemployment

According to government figures, employment declined by 13 per cent between 1990–6. This is a large decline in absolute terms (1 million workers) but small relative to the output decline. Substantial employment decline occurred only in 1993 and 1994 but employment in large and medium enterprises declined twice as much as total employment (2 million workers). The difference between the fall in employment in large and medium enterprises and the overall fall is explained by the growth of self-employment. This category includes individual workers and small businesses employing up to three people and it is the only category, together with private agriculture, which shows substantial growth during the period. Employment in large and medium enterprises declined in absolute terms in all economic sectors with the exceptions of general administration and credit and insurance which show some growth. Underemployment, calculated as the number of workers working for enterprises in serious difficulties, rises in both absolute terms and relative to employment in 1993, 1994 and 1995. It declines slightly in 1996 (Table 2.1 A, B, C).

The transition period brought about a number of employment trends that rendered employment quite precarious. For an estimated 1 million workers transition meant the abandoning of a formal and regular occupation and the entrance into the self-employment sector characterised by informal activities, low pay, occasional or irregular work and income. The new private sector (NPS) struggled to emerge and it did not manage to absorb substantial numbers of workers in any sector of the economy. The cross-sector reallocation of labour has been limited. Sector shares of employment changed because the recession hit certain sectors more than others while a visible substantial increase occurred only in 'general administration' (CSAK, 1997 and Table 2.2 B). For those who maintained a formal occupation, wages are often not paid or paid in kind. Unpaid leave is common practice for enterprises experiencing difficulties and working hours have been drastically reduced for many workers.

TABLE 2.1 EMPLOYMENT AND UNDEREMPLOYMENT 1990-6

The two fundamental elements which characterise employment—income and work—are not met for many of the persons formally employed. This is shown by the contingency Table 2.2 derived from the 1996 LSMS. The total number of people formally employed is put equal to 100. Two dimensions are identified corresponding to the actual time devolved to work during the 30 days previous to the interview and to the actual income received during the same period (including salary, bonuses, subsidies and allowances). Nine categories of workers emerge from the matrix. The largest category (22.9 per cent) is represented by people working full-time and not paid. This is followed by full-time workers with income paid partly (22 per cent) or in full (18.1 per cent). The category which comes next (10 per cent) is those who do not work at all and are not paid. These are people for which the two main criteria which define employment (income and work) do not apply. The matrix shows that 42.1 per cent of the employed had not been paid during the 30 days before the interview and that 15.5 per cent did not perform any activity. Thus, employment per se does not guarantee subsistence or an occupation.

TABLE 2.2 INCOME-WORK MATRIX: SHARE OF RESPONDENTS (%)

| | | | Work | | |
|-------|-------|------|------|------|-------|
| | | Full | Part | None | Total |
| me | Full | 18.1 | 5.8 | 2.8 | 26.7 |
| Incon | Part | 22.0 | 6.5 | 2.7 | 31.2 |
| | None | 22.9 | 9.2 | 10.0 | 42.1 |
| | Total | 63.0 | 21.5 | 15.5 | 100.0 |

Source: 1996 LSMS.

2.2 The unemployed

At independence, the employment law was already in force⁶ in Kazakhstan and labour exchange offices were being reformed and equipped to deal with the emerging labour market. In December 1991, 4,000 people (0.05 per cent of the labour force) were registered with the employment services throughout the country. Since then registered unemployment continued to increase reaching a peak of over 300,000 people in February 1997 (4.4 per cent of the labour force).

The characteristics of the registered unemployed are similar to those observed elsewhere in transitional economies (Table 2.3.). The registered unemployed tend to be women, young people and those with secondary education, though

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⁶ The law on employment was first introduced in July 1991.

the youth share is not particularly striking. The shares of women and youth decreased over the period while the share of secondary education graduates increased. These trends seem to have reverted in 1997.

TABLE 2.3 STRUCTURE OF REGISTERED UNEMPLOYMENT (%)

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | | | |
|----------------------|------|------|------|------|------|------|------|--|--|--|
| By gender | | | | | | | | | | |
| women | 75 | 70 | 65 | 59 | 56 | 59 | 64 | | | |
| men | 25 | 30 | 36 | 41 | 44 | 41 | 36 | | | |
| By age | | | | | | | | | | |
| 16-20 | | | | | | 14 | 10 | | | |
| 21-29 | | | | | | 30 | 28 | | | |
| 30-50 | | | | | | 55 | 61 | | | |
| pre-pensioners | | | | | | 1 | 1 | | | |
| By education | | | | | | | | | | |
| incomplete secondary | 8 | 7 | 9 | 9 | 9 | 9 | 8 | | | |
| secondary | 45 | 50 | 55 | 56 | 57 | 56 | 50 | | | |
| vocational | 30 | 31 | 27 | 28 | 27 | 28 | 32 | | | |
| higher | 17 | 12 | 9 | 8 | 7 | 7 | 11 | | | |
| | | | | | | | | | | |

Source: Isteleulova (1996), CSAK (various, a).

The registered unemployed are only a portion of those who apply to ESs (job seekers). This portion increased between 1991 and 1997 from 2.5 per cent to 71.7 per cent. Some applicants find occupation before being registered as unemployed but this 'exit' route declined substantially. Only 18.1 per cent of the applicants found a job in 1997 as opposed to 40.7 per cent in 1992. Others are not considered suitable for unemployment registration and exit the job seekers register altogether. Requirements for registration as unemployed are strict if compared with the ILO definition of unemployment.

TABLE 2.4 REGISTERED JOB SEEKERS AND THE UNEMPLOYED

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-----------------------------------|------|------|------|------|------|------|------|
| Flow data, January-December. | | | | | | | |
| Job seekers | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Placed into jobs | | 41 | 46 | 36 | 27 | 18 | 18 |
| Registered unemployed | 3 | 27 | 34 | 44 | 59 | 70 | 72 |
| On training and public work | | | | | | 9 | 7 |
| Stock data, end of period | | | | | | | |
| Registered unemployed | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Registered unemployed on benefits | 25 | 54 | 38 | 47 | 53 | 61 | 67 |
| Source: CSAK (various, a). | | | · | | | · | |

Furthermore, among those who are registered as unemployed not all are entitled to benefits. The unemployment benefits coverage ameliorated

substantially from 25.3 per cent in 1991 to 67.3 per cent in 1996. However, this witnesses a growth of the number of people who qualify for registration rather than a more permissive registration policy. All registered unemployed seem to receive some form of assistance—mainly with unemployment benefits, training and public work.

A better tool to estimate the *total number of unemployed* is a labour force survey. The LSMS contains a large section on labour and it shows that real unemployment is much higher than the registered figures. An unemployment rate of about 12 per cent can be estimated as opposed to a registered figure corresponding to the same period (July 1996) of 3.8 per cent. The reasons for not registering are mainly related with the belief that ESs cannot offer valuable help in job searching or income support, though other factors such as lack of information and the end of the entitlement period contribute in explaining the phenomenon (1996 LSMS).

TABLE 2.5 STRUCTURE OF REGISTERED AND TOTAL UNEMPLOYMENT (1996, %)

| | Registered | Total |
|----------------------|------------|------------|
| | unemployed | unemployed |
| By gender | | |
| Women | 59.4 | 47.9 |
| Men | 40.6 | 52.1 |
| By age | | |
| 16-29 | 36.7 | 47.6 |
| 30-50 | 58.6 | 42.6 |
| pre-pensioners | 4.7 | 9.8 |
| By education | | |
| Incomplete secondary | 24.2 | 27.4 |
| Secondary | 14.3 | 18.8 |
| Vocational | 50.5 | 36.8 |
| Higher | 11.0 | 17.0 |

Source: 1996 LSMS.

Once we take into account the total number of unemployed, the structure by gender, age and education changes significantly. In total unemployment, the majority of the unemployed is not represented by women but by men and the share of youth unemployment is much higher than what registered figures show. Also total unemployment shows a higher proportion of people with higher education degrees and a significantly lower share of vocational schools graduates. Pre-pensioners are also more present in total unemployment figures. Therefore we should deduct that men, young people and pre-

pensioners are those who tend not to register and that registered unemployment is not even a representative sample of the total unemployed.

There is also a number of people who are formally categorised as economically inactive but who, under normal circumstances, would be looking for work. Even if we take into consideration all the unemployed according to an ILO definition and as emerging from household surveys, we still omit the discouraged unemployed—those who do not register anymore nor seek work, being convinced of the impossibility of finding a job. During deep and protracted recessions the number of these people is likely to be high, as chances of employment are realistically very scarce. There is also a class of people who may wish to work and have the potential to do so but who are incapacitated because of social duties emerged during the recession. Many women who were formally employed had to give up their jobs to look after the children or the elderly in the household because the free of charge kindergartens, schools and hospices closed down for lack of resources during transition⁷. Indeed, if we count those who are not employed and who declare to wish to work from the 1996 LSMS we find an unemployment rate of 24 per cent.

Two important considerations should be made in relation to the factual evidence presented on labour so far. The first is that the categories employed, unemployed, and economically inactive—as usually understood in a ILO framework—lose their significance and boundaries in the context of Kazakhstan. The condition of employment does not guarantee an income or an occupation. Registered unemployment captures only a small share of the total unemployed, which is also not very representative of total unemployment. Even total unemployment measured with household surveys still fails to include some of those in need of a job. It does not capture all those individuals who wish to work and would indeed be looking for work if only the market conditions and social duties which emerged during the transition period would allow them to do so.

The second consideration is about labour market policies. Policies implemented by the ESs such as unemployment benefits, retraining and public work reach only the registered unemployed. They do not reach those people formally employed but with no or little income and work. Moreover, they reach only a small proportion of the total unemployed and do not reach the economically inactive in need of a job. They are also likely to favour the

⁷ A ADB/UNESCO report (1996) argued that more than half of the kindergartens closed down between 1990 and 1995.

most proactive among the unemployed—those who are persistent enough to go through the whole selection process and recognise the importance of measures such as retraining for their employability. Those who, because of their positive attitudes, may be able to find work anyway. With these considerations in mind we should look at labour market policies in Kazakhstan.

2.3 Labour market policies

The government of Kazakhstan has been fairly active in regard to labour market policies. The new ESs system established in 1991 reformed the earlier system of placement offices. By mid 1993, the ESs had already 2,500 staff distributed in 300 regional and local offices, then giving a ratio of 15 registered unemployed per ES official, which was very low as compared to Italy (397 in 1993), Norway (26 in 1994) or Poland (270 in 1993–4). However, the initial positive start deteriorated quickly and financial resources devoted to LMPs have been scarce as compared to other transitional economies. Employment fund contributions between 1992–6 represented no more than 0.2 per cent of GDP (Table 2.6) which is less than what has been devoted to sickness or maternity benefits alone (World Bank, 1998).

In spite of the scarce resources, Kazakhstan adopted a wide range of LMPs including subsidies to enterprises, job creation schemes and housing programmes meant to facilitate labour mobility. In the early stages, policies focused on retraining schemes within enterprises to facilitate upgrading of existing labour to meet new needs. Also job creation schemes—addressed particularly to areas at risk such as small towns, rural areas and ecological disaster zones—were introduced.

Table 2.6 reports the range of LMPs adopted by Kazakhstan and the share of expenditures on different policies. The share of expenditure on unemployment benefits increased from 5.5 per cent to 56 per cent of the total budget compressing other forms of policies. That is due to the growth of the registered unemployed and it is comparable to what has been observed in CEE countries as reported in Boeri (1996). Employment services administrative costs are the second largest item of expenditure. These declined as a share of the total from 35.6 per cent in 1992 to 15.7 per cent in 1996. Job creation and job security measures and enterprise subsidies introduced in the early years virtually disappeared from the spectrum later on (job creation schemes and subsidies to converted defence companies as early as 1994). Housing programmes absorbed a substantial share of total expenditure, particularly the housing programme for Kazakhs returning from abroad in 1993 (43.5 per cent). This was obviously a political move but

housing programmes were still a significant share of expenditures in 1996. Expenditure on training increased from 1 per cent to 14.8 per cent during the period and public work from 0.6 per cent to 1.1 per cent. These last two are the only 'active' measures which increased between 1992 and 1996.

TABLE 2.6 EXPENDITURE OF THE EMPLOYMENT FUND

| | 1992 | 1993 | 1994 | 1995 | 1996 |
|-------------------------------------------------------|------|------|------|------|------|
| Expenditure as % of GDP | | 0.1 | 0.1 | 0.2 | 0.2 |
| Structure of expenditure | 100 | 100 | 100 | 100 | 100 |
| Unemployment benefits | 5.5 | 5.5 | 10.2 | 22.8 | 56.5 |
| Training and retraining | 11 | 11 | 15.4 | 12.5 | 14.8 |
| Public work | 0.6 | 0.5 | 0.9 | 0.7 | 1.1 |
| Subsidies to enterprises for disabled labour | 0 | 0 | 0 | 0.1 | 0.2 |
| Subsidies to converted defence companies for training | 11.4 | 1.6 | 0 | 2 | 0 |
| Job creation | 20.2 | 2.3 | 0 | 0.3 | 0 |
| Job security/layoffs prevention | 5.2 | 1.4 | 1.5 | 7.7 | 0.1 |
| Employment service | 35.6 | 28.2 | 35.1 | 19.5 | 15.7 |
| Information services for enterprises and individuals | 1.2 | 0.7 | 0.6 | 0.7 | 8.0 |
| Retraining centre in Turgen | 0 | 0 | 30.8 | 16.3 | 2.2 |
| Housing for Kazakhs returning from abroad | 0 | 43.5 | 5.3 | 6.1 | 3 |
| Other housing programmes | 0 | 0 | 0 | 10.5 | 4.1 |
| Interest on EBRD loans | 0 | 0 | 0 | 0 | 0.1 |
| Other expenditure | 9.2 | 5.3 | 0.3 | 8.0 | 1.5 |

Source: EU-KET (1997), World Bank (1998).

Did LMPs have a relevant impact on the labour market in Kazakhstan? Evaluating LMPs has been shown to be arduous in CEE economies. Information is even more scarce for CIS economies such as Kazakhstan. Nonetheless, we attempt to address the question piecing together the available information.

We reported that all registered unemployed are assisted, mainly with benefits, training or public work. This means that in 1996, and according to the LSMS, 15 per cent of those not employed who wished to work were assisted with LMPs. That is 27.5 per cent of those who actually took steps to find a job (total unemployment, ILO definition). The share of job seekers who found work declined throughout the period 1992–6. Considering that the number of registered unemployed actually started to decline from 1996 and that employment remained stagnant during the year, we should conclude that some unemployed lost hope of finding a job through ESs and abandoned this job search mechanism. Therefore, less than one third of the ILO defined unemployed are assisted with LMPs, and this share is decreasing.

Concerning unemployment benefits, we saw that the share of the unemployed on benefits increased. However, it would be hard to argue that unemployment benefits represented in 1996 a 'rigidity' in the labour market. Among the 1,981 respondents declaring not to be employed in the 1996 LSMS survey, 825 declared a wish to work and 464 actually applied for a job during the 30 days before the interview took place—of these, only 266 applied to ESs. One hundred and twenty-eight persons in total registered as unemployed at the time of the interview (62 were registered during the 30 days before the interview) and only 46 were actually receiving unemployment benefits—of these, 56 per cent received less than 1,000 tenge and 93 per cent less than 2,000 tenge at a time when the average salary was just below 7,000 tenge (about US\$100) and the estimated minimum consumption basket (MCB) procapita was calculated at 2,750 tenge. Thus the 1996 LSMS shows that the number of those who actually receive unemployment benefits is less than what is claimed by ESs statistics and that the amount actually received is insufficient for basic subsistence needs. Unemployment benefits do not perform the income maintenance function they are designed for.

ESs data system provides information on the people on retraining and public work schemes which allow for a crude evaluation. Data are presented in Table 2.7 by region for 1996 and 1997 while tables 2.8 and 2.9 highlight some important aspects.

Public work: in 1996, 24,446 people benefited from public work opportunities, equal to 4.4 per cent of the job seekers; 85 per cent of the beneficiaries were registered unemployed while public work was also offered to students and other groups of job seekers in need. In 1997, the share of public work beneficiaries increased slightly to 4.6 per cent of the job seekers and within the beneficiaries the share of the unemployed increased to 89 per cent. The share of long-term unemployed also increased between 1996 and 1997 from 25.3 per cent to 34.4 per cent of the total beneficiaries while the number of students and young people decreased (Table 2.8). Most striking, however, are the differences across regions of any indicator. For instance the share of women beneficiaries varies from 26.9 per cent in Kzil-Orda to 75 per cent in Mangistau (Table 2.7). People with dependants are given priority over other groups and former prisoners and refugees are also included in the schemes.

TABLE 2.7 PUBLIC WORK AND TRAINING BY OBLAST 1996, 1997

TABLE 2.7 second page

TABLE 2.8 PUBLIC WORK

| | 1996 | 1997 |
|--------------------------|------|------|
| Total | 100 | 100 |
| Unemployed | 85.3 | 89.1 |
| Younger than 20 | 25.5 | 18.8 |
| Women | 45.4 | 48.1 |
| Close to pension age | 1.0 | 1.1 |
| Invalids | 0.1 | 0.3 |
| People with dependants | 31.8 | 32.7 |
| Long-term unemployed | 25.3 | 34.4 |
| Former prisoners | 0.4 | 0.3 |
| Refugees | 0.8 | 0.4 |
| Students on vacation | 3.4 | 0.6 |
| Source: CSAK (verious b) | | |

Source: CSAK (various, b).

Training: the number of people on training schemes dropped from 4.4 per cent of the job seekers in 1996 to 2.5 per cent in 1997 (Table 2.9). This implied a higher selectivity which resulted in a much better placement ratio of the trainees into jobs from 58.4 per cent to 81.9 per cent. A much smaller proportion of trainees created their own business (2.2 per cent in 1996) and this proportion somehow declined between 1996 and 1997. About threefourths of the beneficiaries are young people below the age of 29 which is a definite bias in their favour while there does not appear to be a significant gender bias. Among the young beneficiaries only one-third have secondary education or more. Again the regional diversity is striking. There are regions which manage to place virtually all the trainees into jobs and others which place less than one-third of them (Table 2.8). This supports the general finding for CEE and CIS countries that regional markets within countries are very much diverse. This is the more so in CIS economies where labour mobility is lower than in CEE economies and constrained by a poor housing market and longer distances between regions.

The coverage of public work and training is small. Table 2.4. showed that only around 8.8 per cent of ESs job seekers benefited by training or public work in 1996 and that this proportion declined to 7.1 per cent in 1997. On the other hand, the placement ratio of training programmes is fairly good given the harsh market conditions, and the targeting of both public work and training seems appropriate. A preference for young people, long-term unemployed and people with dependants exists reflecting the structural composition of the unemployed and a focus on the most in need, while small categories at risk such as former prisoners, refugees and invalids are not forgotten. There is a small gender imbalance considering that women are still

the majority of the registered unemployed and there is a strong bias in favour of young people. Nonetheless, on the whole, it could be said that these policies are exploited to their best given the limited and declining resources available to ESs.

TABLE 2.9. TRAINING

| | 1996 | 1997 |
|--------------------------------------|------|------|
| Total | 100 | 100 |
| Now employed | 58 | 82 |
| Now with private business | 2 | 2 |
| Currently on training | 20 | 34 |
| From rural areas | 36 | 30 |
| Women | 55 | 55 |
| Invalids | 0 | 0 |
| Former prisoners | 0 | 0 |
| Young 16-29 | 79 | 73 |
| Young 16-29 from rural areas | 31 | 24 |
| Young 16-29 with secondary education | 26 | 17 |
| Young 16-29 with higher education | 3 | 3 |
| Course: CCAK (verious b) | | _ |

Source: CSAK (various, b).

Evaluating special subsidies to enterprises and their impact on the labour market is not a simple matter anywhere, and it is often left to speculation. Besides these measures almost disappeared from the agenda and cannot have possibly had any significant impact on the labour market in Kazakhstan in recent years. Moreover, subsidies when in existence were targeted to disabled labour and converted defence companies covering a very small share of the labour force. Again, it would be difficult to sustain the existence of any relevant positive or negative impact of these measures on the labour market as a whole and we do not dispose of firm-specific data to discuss local implications of these measures.

Job creation and job security measures also disappeared in recent periods. The disappearance coincided with the massive layoffs of the post-1993 period—up until that time Kazakhstan had not experienced a decline in employment. However, whether and how job creation and job security measures contributed to employment retention and creation cannot be estimated with the data available.

Housing benefits and programmes have been popular in Kazakhstan. Partly this was due to the national policy of encouraging Kazakhs living abroad to return and settle in the country. In 1993, 43.5 per cent of all employment fund resources went for this purpose alone. This effort declined over the years but

in 1996 still 3 per cent of resources were allocated for this purpose with an additional 4.1 per cent used for other housing programmes. Given the diversity of local market conditions and given the existing poor housing market, labour mobility can benefit a great deal from housing programmes. However, these programmes too are losing ground vis-à-vis passive policies.

In conclusion, LMPs in Kazakhstan show similar features to what we observed for CEE economies. The range of LMPs initially adopted was broad but unemployment benefits have squeezed out other policies over the years. The only active LMPs which maintained and increased somewhat their share on total expenditure are training and public work, the effectiveness of which remain an area of study. Perhaps Kazakhstan has been more active than CEE countries on the housing policy front though discriminating against the Russian population. On the other hand, employment fund resources are limited and the provision of unemployment benefits seems poorer than in CEE countries.

If we put LMPs in relation to the different market conditions which Kazakhstan faces vis-à-vis CEE countries, doubts emerge on the relevance of the current LMPs structure. The purpose of LMPs is to reduce unemployment and protect from poverty and destitution those who have been adversely affected by labour market conditions. Currently LMPs in Kazakhstan seem to fail on the front of unemployment reduction and income maintenance for different reasons. Unemployment reduction is arduous if macroeconomic conditions do not improve while income maintenance is caught in between the growth of unemployment and the reduction of enterprises contributions to the employment fund. LMPs perform better with training and public work though the number of beneficiaries is very small.

This raises the question of whether Kazakhstan made the right choice by abandoning demand side LMPs such as subsidies to enterprises for specific purposes, job creation and job losses prevention measures. For some of the CEE countries—where macro and microeconomic conditions allowed for enterprise restructuring and the growth of a new private sector—the management of the unemployed may be better achieved outside enterprises in order to facilitate restructuring and labour reallocation as early transition models foresaw. But in a CIS environment, where financial resources have been depleted by long lasting hyperinflation, where the disruption and disorganization of production have been larger and the recession deeper and where the social cost has been higher, LMPs focused on the supply side may not be the best tactic. A proper evaluation of any LMPs is not possible with available data but a few considerations seem appropriate.

Maintaining a worker within the enterprise rather than redundancy can satisfy different objectives. Even if only paid occasionally, the worker could benefit from some services still provided by enterprises. Taking these into account, income can hardly be below the current level of unemployment benefits. The training provided to the unemployed can simply be provided on the job, increasing the chances of matching the worker with enterprise needs and giving to the same enterprise the necessary confidence in the worker's abilities. Also public work funds, if shifted to the enterprise, could better serve the community by focusing on supporting units of production rather than the general public. At the same time, social inclusion is guaranteed giving that all workers would face the same destiny and that the social fabric would be maintained. Moreover, discrimination would not occur between those who are currently formally employed but with no income or work and the registered unemployed while the number of non-registered unemployed would be reduced.

Would this policy prevent reallocation of labour resources? Conditions in enterprises are bad enough to spur those workers with better opportunities to leave. Quit ratios are very high in Kazakhstan and those who can manage in the informal sector or in other private businesses have incentive to leave the formal occupation. According to the 1996 LSMS, double employment is not common as it is usually believed. Only 1.6 per cent of employed respondents said to have a second occupation. Thus, it would be difficult to argue that such policy would prevent an efficient reallocation of labour resources. Training or public work implemented within enterprises are not substitutes for a real job.

Would such a policy prevent restructuring? I would rather argue the opposite. Restructuring needs (other than investment) a change in skills which training would provide and a general reorganization of the layout of production in smaller units to which public work can contribute. It also needs motivated people with the belief of working for their own good and making sacrifices for their own benefits.

Would this policy be more expensive? The employment fund is financed by enterprises. Every worker laid-off may be a short-term relief for an enterprise but eventually employment fund contributions will have to be increased. Moreover, there is a transaction cost in transferring funds from enterprises to the state and from the state back to enterprises. This could be avoided by inducing enterprises to use part of employment fund contributions for training and various works within the enterprise.

Would this policy make ESs redundant? Activities within enterprises have to be monitored. A number of registered unemployed will have to be assisted outside firms and ESs still have to play the function of redistributing resources. Employment fund resources should flow from the less to the more depressed areas while labour resources should flow in the opposite direction. Also the ESs burden would be reduced leaving a hard core of people in real need. Perhaps these are the areas where ESs can be more successful if energies are focused.

The demand-supply vision of LMPs is an aspect which did not attract much attention in transitional economies. However, a CIS-type scenario suggests that this is a useful framework to look at LMPs. The questions raised above are far from being exhausted and deserve more attention and certainly more data to be satisfactorily addressed, but they do show that there may be a justification for shifting resources from the supply to the demand side of the labour market. An additional justification may come from a closer look at one aspect of the social outcome in Kazakhstan. In Part III of this study the relation between labour market status and health status is observed making use of the 1996 LSMS.

III HEALTH AND LABOUR IN KAZAKHSTAN

3.1 A population, morbidity and mortality crisis

The social counterface of the economic crisis in Kazakhstan was the emergence of population, morbidity and mortality crises. Between 1989 and 1995, the birth rate declined from 23/1,000 to 16,6/1,000 and the death rate increased from 7.6/1,000 to 10.1/1,000. The combined effect produced a reduction in the natural growth of the population from 15.4/1,000 to 6.5/1,000 (UNDP, 1996). Life expectancy at birth declined in the post-1989 period for both men and women (Table 3.1). Between 1989 and 1996 a net out migration of 1.5 million people occurred which alone put paid to any effects of natural growth in the population. This meant that the population in 1996 was roughly the same as at the time of the last census in 1989. The population crisis consisted also of a significant change in the marriage and divorce rates (Table 3.2)

TABLE 3.1. LIFE EXPECTANCY AT BIRTH (LEB) AND STANDARDISED DEATH RATES (SDR/000.000) 1985–96

| 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|------|--------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 67,5 | 68,9 | 68,8 | 68,5 | 68,7 | 68,8 | 68,3 | 68,1 | 66,3 | 65,8 | 64,9 |
| 62,5 | 64,2 | 64,2 | 63,9 | 63,9 | 63,9 | 63,3 | 63,3 | 61,2 | 60,8 | |
| 72,1 | 73,1 | 72,9 | 72,7 | 73,2 | 73,4 | 73 | 72,8 | 71,5 | 71 | |
| 1224 | 1139 | 1154 | 1188 | 1171 | 1166 | 1198 | 1215 | 1344 | 1446 | 1506 |
| 1675 | 1550 | 1565 | 1600 | 1609 | 1606 | 1652 | 1674 | 1857 | 2017 | 2103 |
| 942 | 888 | 903 | 932 | 899 | 888 | 910 | 923 | 1006 | 1087 | 1107 |
| | 67,5 62,5 72,1 1224 1675 | 67,5 68,9 62,5 64,2 72,1 73,1 1224 1139 1675 1550 | 67,5 68,9 68,8 62,5 64,2 64,2 72,1 73,1 72,9 1224 1139 1154 1675 1550 1565 | 67,5 68,9 68,8 68,5 62,5 64,2 64,2 63,9 72,1 73,1 72,9 72,7 1224 1139 1154 1188 1675 1550 1565 1600 | 67,5 68,9 68,8 68,5 68,7 62,5 64,2 64,2 63,9 63,9 72,1 73,1 72,9 72,7 73,2 1224 1139 1154 1188 1171 1675 1550 1565 1600 1609 | 67,5 68,9 68,8 68,5 68,7 68,8 62,5 64,2 64,2 63,9 63,9 63,9 72,1 73,1 72,9 72,7 73,2 73,4 1224 1139 1154 1188 1171 1166 1675 1550 1565 1600 1609 1606 | 67,5 68,9 68,8 68,5 68,7 68,8 68,3 62,5 64,2 64,2 63,9 63,9 63,9 63,3 72,1 73,1 72,9 72,7 73,2 73,4 73 1224 1139 1154 1188 1171 1166 1198 1675 1550 1565 1600 1609 1606 1652 | 67,5 68,9 68,8 68,5 68,7 68,8 68,3 68,1 62,5 64,2 64,2 63,9 63,9 63,9 63,3 63,3 72,1 73,1 72,9 72,7 73,2 73,4 73 72,8 1224 1139 1154 1188 1171 1166 1198 1215 1675 1550 1565 1600 1609 1606 1652 1674 | 67,5 68,9 68,8 68,5 68,7 68,8 68,3 68,1 66,3 62,5 64,2 64,2 63,9 63,9 63,9 63,3 63,3 61,2 72,1 73,1 72,9 72,7 73,2 73,4 73 72,8 71,5 1224 1139 1154 1188 1171 1166 1198 1215 1344 1675 1550 1565 1600 1609 1606 1652 1674 1857 | 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 67,5 68,9 68,8 68,5 68,7 68,8 68,3 68,1 66,3 65,8 62,5 64,2 64,2 63,9 63,9 63,3 63,3 61,2 60,8 72,1 73,1 72,9 72,7 73,2 73,4 73 72,8 71,5 71 1224 1139 1154 1188 1171 1166 1198 1215 1344 1446 1675 1550 1565 1600 1609 1606 1652 1674 1857 2017 942 888 903 932 899 888 910 923 1006 1087 |

Source: Klugman and Schieber (1996), UNDP (1997), WHO—Health for All database.

TABLE 3.2 MARRIAGE AND DIVORCE RATES

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---------------|------|------|------|------|------|------|
| Marriage rate | 9.8 | 8.7 | 8.6 | 7.6 | 7 | 6.2 |
| Divorce rate | 2.9 | 3 | 2.7 | 2.5 | 2.3 | 2.4 |

Source: UNDP (1997: 88).

In Table 3.3 we look more closely at mortality data. Standardised death rates (SDRs) are available only by gender and for the period 1981-94 while crude death rates (CDR) data are also available by age. We selected three years, 1981, 1987 and 1994 (latest available) and calculated changes between the two periods 1981–7 and 1987–94. The SDR decreased by 5 per cent between 1981 and 1987 while increased by 25 per cent between 1987 and 1994. This trend is evident for both men and women but much more pronounced for men. The sharp increase in mortality for the period 1987–94 is evident for all mortality causes with the sole exception of malignant neoplasm (cancer). The four main causes of death are circulatory system diseases, of which ischaemic heart diseases and cerebrovascular diseases are the main components, malignant neoplasm and external causes which include accidents, suicides and homicides. This order of causality has been maintained throughout the period considered, but circulatory system diseases and external causes experienced the most acute shocks. The rise in mortality due to homicides, mental disorders and suicides has been particularly sharp, especially for men.

Table 3.4. reports CDRs for the working age population (15–64). CDR data are less accurate because are affected by age cohorts. Nevertheless, by dividing the data into age ranges useful information can be gathered. In Part A of the table it is shown that the main mortality cause for the working age population is circulatory system diseases. This is followed by malignant neoplasm and external causes which combines accidents, suicides and homicides. The order of these three causes does not change between 1981 and 1994, but malignant neoplasm incidences decrease between 1987 and 1994 as

opposed to the other two causes which increase significantly. This is what we observed for the SDRs and for the whole population.

TABLE 3.3 STANDARDISED DEATH RATES 1981, 1987, 1994 (/100,000)

| | | | | | ` | | , |
|--------------------------------------|------|-------|------|--------|-------|------|--------|
| | | Total | Male | Female | Total | Male | Female |
| All causes | 1981 | 1213 | 1694 | 910 | % | chan | ges |
| | 1987 | 1154 | 1565 | 903 | -5 | -8 | -1 |
| | 1994 | 1446 | 2017 | 1087 | 25 | 29 | 20 |
| Infectious and parasitic | 1981 | 39 | 60 | 25 | | | _ |
| · | 1987 | 29 | 41 | 20 | -26 | -32 | -20 |
| | 1994 | 33 | 53 | 17 | 14 | 29 | -15 |
| Respiratory system | 1981 | 147 | 218 | 108 | | | |
| | 1987 | 114 | 174 | 83 | -22 | -20 | -23 |
| | 1994 | 124 | 208 | 79 | 9 | 20 | -5 |
| Malignant neoplasm | 1981 | 202 | 300 | 148 | | | |
| | 1987 | 210 | 307 | 153 | 4 | 2 | 3 |
| | 1994 | 205 | 306 | 145 | -2 | 0 | -5 |
| Circulatory system | 1981 | 574 | 737 | 479 | | | |
| • • | 1987 | 597 | 749 | 511 | 4 | 2 | 7 |
| | 1994 | 788 | 1028 | 653 | 32 | 37 | 28 |
| Ischaemic heart diseases | 1981 | 306 | 411 | 244 | | | |
| | 1987 | 308 | 415 | 246 | 1 | 1 | 1 |
| | 1994 | 416 | 582 | 323 | 35 | 40 | 31 |
| Cerebrovascular | 1981 | 180 | 215 | 161 | | | |
| | 1987 | 195 | 220 | 181 | 8 | 2 | 12 |
| | 1994 | 243 | 284 | 221 | 25 | 29 | 22 |
| Mental Disorders | 1981 | 11 | 14 | 9 | | | |
| | 1987 | 9 | 12 | 8 | -18 | -14 | -11 |
| | 1994 | 14 | 18 | 11 | 56 | 50 | 38 |
| Motor vehicle traffic accidents | 1981 | 16 | 27 | 7 | | | |
| | 1987 | 13 | 21 | 6 | -19 | -22 | -14 |
| | 1994 | 14 | 23 | 6 | 8 | 10 | 0 |
| Suicides and self-inflicted injuries | 1981 | 28 | 48 | 12 | | | |
| , , | 1987 | 20 | 33 | 10 | -29 | -31 | -17 |
| | 1994 | 28 | 50 | 10 | 40 | 52 | 0 |
| Homicides and other injuries | 1981 | 11 | 18 | 6 | | | |
| purposely inflicted by other | 1987 | 7 | 11 | 4 | -36 | -39 | -33 |
| persons | 1994 | 19 | 32 | 8 | 171 | 191 | 100 |
| <u> </u> | 4000 | | | | | | |

Source: WHO—Health for All Database 1996; author's calculations.

The gender gap is more pronounced for the working age population than what was observed for SDRs and the whole population—female mortality being less than 40 per cent of male in 1994. Also mortality causes change significantly across age classes as one would expect. For instance, the main cause of mortality in age 15–24 is suicide followed by homicides and motor vehicle accidents. External causes are still an important factor for persons

aged 25–34, while for older age groups circulatory system diseases prevail. Again, these factors are more important for men than for women. The gender gap is particularly evident for external causes.

In Part B of the table we can observe changes occurred between the two periods 1981–7 and 1987–94 for the working age population. Overall, mortality rates decreased by 19 per cent and 12 per cent for men and women respectively in the first period and increased by 34 per cent for men and 19 per cent for women in the second period. The sharpest male mortality increases occurred for homicides, mental disorders, tuberculosis and infectious and parasitic diseases. For females mental disorders come first followed by homicides, circulatory system diseases and cerebrovascular diseases. The sharpest increases in mortality for all causes in the period 1987–94 occurred among the age range 15–44 and reaches its peak in the age range 25–34 for both males and females. This is particularly true for infectious and parasitic diseases and tuberculosis while for mental disorders and homicides the peak is more centred around 35–54 years of age.

The overall increase in mortality has been driven by a sharp rise in mortality of the adult population. According to UNDP (1996), infant mortality increased only slightly between 1990 and 1994 from 26.4 to 26.8 per thousand newborns. As noted elsewhere for other transitional economies (Cornia, 1996), it is striking that the most vulnerable groups—such as children, the elderly and women—have not been protagonist of the mortality crisis among civilians as is usually the case during major human catastrophes. Mortality increased most among relatively young men of working age despite the total absence of internal or external conflicts.

One could divide mortality causes depending on whether they are more likely to be related to poor health care, stress or other causes. In the first category we could put infectious and parasitic diseases, pneumonia and tuberculosis. Many hospitals such as those with patients affected by TB, closed down for lack of funds, cuts in energy or other supplies and patients were forced to stay home contributing to the spread of the diseases. In the second category (stress-related diseases). circulatory system diseases. infarction. cerebrovascular diseases, mental disorders, accidents, suicides and homicides could be put, while to the third category belong malignant neoplasm. If this categorization is acceptable, then it is obvious that stress-related factors played a major role in the mortality rise in Kazakhstan followed by health care and other factors.

TABLE 3.4. CRUDE DEATH RATES BY AGE AND GENDER 1981, 1987, 1994 (/100,000)

| | | | | ` | | | | | | | |
|--------------------|------|-----|-----|-------|------|------|-------|-----|--------|-------|-------|
| Α | | | | Male | | | | | Female | | |
| | | | | 35-44 | | | 15-24 | | | 45-54 | 55-64 |
| All causes | 1981 | 212 | 422 | 800 | 1493 | 2870 | 79 | 137 | 284 | 624 | 1222 |
| | 1987 | 160 | 275 | 488 | 1179 | 2571 | 70 | 102 | 201 | 484 | 1218 |
| | 1994 | 229 | 449 | 757 | 1599 | 3217 | 97 | 146 | 259 | 607 | 1369 |
| Infectious and | 1981 | 6 | 21 | 52 | 76 | 115 | 6 | 13 | 13 | 20 | 23 |
| parasitic | 1987 | 5 | 15 | 29 | 48 | 70 | 7 | 8 | 11 | 12 | 19 |
| | 1994 | 14 | 40 | 55 | 83 | 87 | 7 | 12 | 10 | 12 | 17 |
| Pneumonia | 1981 | 3 | 7 | 16 | 32 | 61 | 5 | 3 | 4 | 11 | 16 |
| | 1987 | 3 | 4 | 7 | 15 | 35 | 2 | 2 | 2 | 5 | 12 |
| | 1994 | 6 | 7 | 17 | 30 | 38 | 4 | 4 | 4 | 6 | 9 |
| Tuberculosis of | 1981 | 3 | 17 | 40 | 64 | 99 | 3 | 8 | 9 | 14 | 17 |
| resp. system | 1987 | 2 | 12 | 25 | 43 | 58 | 3 | 5 | 6 | 8 | 14 |
| | 1994 | 10 | 35 | 49 | 77 | 77 | 5 | 9 | 7 | 8 | 11 |
| Malignant | 1981 | 9 | 17 | 92 | 333 | 772 | 7 | 19 | 66 | 186 | 367 |
| neoplasm | 1987 | 9 | 14 | 62 | 311 | 834 | 7 | 18 | 61 | 161 | 369 |
| | 1994 | 10 | 18 | 62 | 276 | 791 | 9 | 19 | 60 | 154 | 328 |
| Circulatory | 1981 | 10 | 49 | 199 | 476 | 1119 | 8 | 23 | 73 | 203 | 522 |
| system | 1987 | 8 | 32 | 134 | 415 | 1035 | 5 | 16 | 45 | 167 | 544 |
| | 1994 | 15 | 56 | 198 | 606 | 1445 | 9 | 22 | 69 | 239 | 685 |
| Infarction | 1981 | 0 | 7 | 42 | 95 | 176 | 1 | 3 | 7 | 18 | 48 |
| | 1987 | 1 | 7 | 35 | 104 | 205 | 0 | 1 | 4 | 15 | 57 |
| | 1994 | 1 | 9 | 41 | 127 | 248 | 1 | 1 | 7 | 24 | 61 |
| Cerebro- | 1981 | 1 | 9 | 39 | 119 | 327 | 1 | 5 | 21 | 79 | 202 |
| vascular | 1987 | 2 | 6 | 21 | 90 | 298 | 2 | 4 | 14 | 66 | 209 |
| | 1994 | 4 | 10 | 32 | 138 | 395 | 3 | 6 | 20 | 94 | 255 |
| Ulcer of | 1981 | 1 | 3 | 6 | 14 | 22 | | 0 | 1 | 3 | 3 |
| stomach and | 1987 | 1 | 2 | 3 | 11 | 18 | | 0 | 1 | 2 | |
| duodenum | 1994 | 1 | 2 | 5 | 12 | 19 | 0 | 0 | 1 | 2 | 4 |
| Mental | 1981 | 2 | 3 | 7 | 8 | 6 | 2 | 1 | 2 | 3 | 3 |
| disorders | 1987 | 1 | 2 | 2 | 4 | 5 | 1 | 1 | 1 | 1 | 3 |
| | 1994 | 4 | 4 | 7 | 13 | 10 | 2 | 2 | 3 | 6 | 4 |
| Motor vehicle | 1981 | 29 | 37 | 33 | 32 | 28 | | 6 | 6 | 8 | 9 |
| traffic accidents | 1987 | 23 | 32 | 27 | 24 | 20 | | 4 | 6 | 7 | 7 |
| | 1994 | 20 | 35 | 33 | 30 | 23 | | 6 | 8 | 7 | 8 |
| Suicides and | 1981 | 26 | 59 | 75 | 80 | 62 | | 10 | 15 | 17 | 22 |
| self-inflicted | 1987 | 21 | 35 | 39 | 52 | 48 | | 7 | 8 | 13 | 17 |
| injuries | 1994 | 36 | 55 | 62 | 77 | 70 | | 10 | 9 | 13 | |
| Homicides and | 1981 | 18 | 30 | 24 | 22 | 27 | 3 | 7 | 10 | 10 | 8 |
| injuries inflicted | 1987 | 12 | 19 | 17 | 13 | 12 | | 4 | 4 | 6 | 6 |
| by others | 1994 | 26 | 51 | 50 | 49 | 39 | 6 | 10 | 11 | 10 | 11 |

table continues...

(% CHANGES)

| В | | | | Ма | le | | | | | Fem | ale | | |
|---------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 15- | 25- | 35- | 45- | 55- | 15- | 15- | 25- | 35- | 45- | 55- | 15- |
| | | 24 | 34 | 44 | 54 | 64 | 64 | 24 | 34 | 44 | 54 | 64 | 64 |
| All causes | 81-87 | -24 | -35 | -39 | -21 | -10 | -19 | -12 | -25 | -29 | -22 | 0 | -12 |
| | 87-94 | 43 | 63 | 55 | 36 | 25 | 34 | 39 | 42 | 29 | 25 | 12 | 19 |
| Infectious | 81-87 | -8 | -27 | -44 | -36 | -39 | -37 | 20 | -37 | -16 | -40 | -20 | -25 |
| and parasitic | 87-94 | 150 | 164 | 88 | 72 | 24 | 66 | 8 | 44 | -6 | -3 | -12 | 1 |
| Pneumonia | 81-87 | -3 | -51 | -56 | -52 | -43 | -46 | -65 | -36 | -43 | -54 | -25 | -41 |
| | 87-94 | 78 | 100 | 139 | 97 | 9 | 53 | 119 | 71 | 70 | 23 | -23 | 15 |
| Tuberculosis | 81-87 | -34 | -28 | -38 | -33 | -41 | -37 | -7 | -41 | -39 | -43 | -17 | -31 |
| of resp. | 87-94 | 357 | 197 | 96 | 79 | 31 | 76 | 85 | 85 | 21 | 0 | -21 | 13 |
| system | | | | | | | | | | | | | |
| Malignant | 81-87 | -2 | -13 | -33 | -7 | 8 | 1 | -5 | -6 | -8 | -13 | 1 | -5 |
| neoplasm | 87-94 | 10 | 26 | 0 | -11 | -5 | -6 | 23 | 6 | -1 | -4 | -11 | -7 |
| Circulatory | 81-87 | -21 | -34 | -33 | -13 | -7 | -12 | -31 | -32 | -38 | -18 | 4 | -6 |
| system | | | | | | | | | | | | | |
| | 87-94 | 94 | 73 | 47 | 46 | 40 | 43 | 66 | 40 | 52 | 43 | 26 | 32 |
| Infarction | 81-87 | 100 | -5 | -17 | 10 | 17 | 10 | -40 | -68 | -41 | -17 | 18 | 1 |
| | 87-94 | 50 | 23 | 17 | 22 | 21 | 21 | 67 | 75 | 50 | 63 | 7 | 21 |
| Cerebro- | 81-87 | 67 | -34 | -47 | -24 | -9 | -16 | 14 | -27 | -30 | -17 | 3 | -4 |
| vascular | 87-94 | 120 | 61 | 56 | 54 | 32 | 39 | 81 | 66 | 41 | 44 | 22 | 28 |
| Ulcer of | 81-87 | 20 | -40 | -46 | -24 | -18 | -25 | | 200 | -25 | -48 | 17 | -13 |
| stomach + | 87-94 | 0 | 60 | 50 | 9 | 8 | 14 | | 0 | 50 | 27 | 18 | 1 |
| duodenum | | | | | | | | | | | | | |
| Mental | 81-87 | -26 | -27 | -66 | -50 | -23 | -43 | -65 | -57 | -39 | -44 | -10 | -39 |
| disorders | 87-94 | 157 | 116 | 227 | 215 | 108 | 162 | 150 | 300 | 164 | 343 | 69 | 176 |
| Motor | 81-87 | -20 | -13 | -17 | -26 | -27 | -20 | 23 | -25 | -7 | -11 | -22 | -11 |
| vehicle | 87-94 | -11 | 8 | 24 | 25 | 13 | 12 | 4 | 49 | 40 | 4 | 9 | 19 |
| traffic | | | | | | | | | | | | | |
| accidents | | | | | | | | | | | | | |
| Suicides | 81-87 | -17 | -40 | -48 | -35 | -23 | -35 | 0 | -30 | -50 | -25 | -22 | -27 |
| and self- | 87-94 | 69 | 57 | 58 | 47 | 47 | 53 | 47 | 41 | 14 | -3 | -9 | 11 |
| inflected | | | | | | | | | | | | | |
| injuries | | | | | | | | | | | | | |
| Homicides + | - | -34 | -37 | -29 | -44 | -54 | -40 | -3 | -38 | -55 | -37 | -19 | -35 |
| injuries | 87-94 | 126 | 176 | 195 | 292 | 222 | 200 | 100 | 121 | 160 | 67 | 82 | 102 |
| inflicted by | | | | | | | | | | | | | |
| others | (4000) | | | | | | | | | | | | |

Source: WHO (1996).

Thus, if the rise in mortality affected mainly the working age population and if this rise is explained mainly by stress-related causes, it is natural to ask what changes occurred in the labour market which contributed in determining a general increase in stress.

3.2 Health and labour

The literature on mortality offers a wide variety of approaches aimed at explaining the causes of changes in mortality trends in the long and short period. Mortality increases particularly during periods of war, famines or acute recessions when populations are subject to severe physical, mental and societal shocks. In the case of transitional economies, the deep recession has been accompanied by a sharp increase in mortality and where the recession has been deeper the mortality crisis has usually been sharper. As most transitional economies did not experience war or famine, the rise in mortality has to be associated with the economic recession.

Causes of the mortality crisis in transitional economies have been investigated at length in the literature and different hypotheses have been put forward. Some argue that it is rather a statistical artefact due to data manipulation in Soviet times (Eberstadt, 1994), others point at adverse long-term environmental degradation and changes in health behaviour (Feshback and Friendly, 1992). More recently, emphasis has been put on the psychological and social impact of socioeconomic changes (Cornia, 1996; Cornia and Paniccià, 1996). This literature builds on previous research which looked at the impact of large unemployment and institutional changes on the health status and supports the hypothesis that the mortality crisis is to be mainly explained in terms of stress induced by changes in socioeconomic conditions. Two groups of models are explored further by this literature. The unemployment stigma models which emphasise the effects of the loss of utility and social role derived from work on health status, and the psychosocial stress models which emphasises the effect of stress on health due to the increasing incapacity to cope with adverse and unexpected situations.

The case of Kazakhstan features many of the aspects emphasised by this latter literature. The deep institutional changes occurred with independence, the population crisis, the steep rise in unemployment, the deteriorated conditions of employment, and the mortality crisis—these are all elements that this country shares with other transitional economies, perhaps in an extreme fashion. Is the Kazakh labour force increasingly stressed due to the worsening conditions of the labour market? And does the increasing stress and labour insecurity increase morbidity and mortality?

⁸ See Cornia (1998) for a summary and discussion of mortality models.

The study of the relation between mortality and labour present some major difficulties. One problem is that death certificates do not carry information about the employment status. We don't know, for instance, if mortality is higher among the employed or the unemployed. One possibility to move around this obstacle is to study the relation between mortality and labour variables over a certain period of time regressing a number of explanatory variables such as unemployment rate, labour market status or employment rates against mortality rates over a certain period of time. However, the emergence of unemployment and unemployment data are recent and time series are short. Leaving labour variables aside and studying the long- and short-term effects of changes in cardiovascular disease mortality, Paniccià (1997) finds important correlations between cardiovascular diseases, health assets and psychosocial factors.

A second possibility is to take two points in time, say 1989 and 1996, and compare changes which occurred cross-country or cross-region. Following this approach Cornia (1996) and Cornia and Paniccià (1996) find that a significant correlation between SDRs, labour turnover, unemployment rates and a constructed stress variable exists for 47 Russian oblasts (1989–94). In a cross-country study the same authors find significant correlations between labour variables and life expectancy at birth. Riphahn and Zimmermann (1997) looking at the mortality crisis in East Germany also find support for the psychosocial stress hypothesis using a micro-panel as well as cross-regional data.

For the rest of the study we take a different approach. We look at the relation between health status and labour status for a population sample surveyed in a particular point in time (the LSMS carried out in July 1996 used in other sections of the study). We first establish the characteristics of the health status of the population surveyed and find whether morbidity causes present some common patterns with the mortality causes observed in Tables 3.3 and 3.4. We then select a few health variables and construct a mortality stress proxy based on morbidity data. These variables are run against labour variables in different stages controlling for different forms of employment, unemployment, economic inactivity, income and working hours, underage and gender dimensions.

3.2.1 Health status

We took the whole sample of respondents in working age and divided it by gender and age groups as for the mortality rates presented in Tables 3.3 and

- 3.4. The following health questions were selected to determine the health status:
- 1. Did you have health problems during the last 30 days?
- 2. What kind of health problems?
- 3. Do you suffer from chronic diseases?
- 4. What kind of chronic diseases?
- 5. Were you hospitalized during the last 30 days?
- 6. Do you smoke?
- 7. How many cigarettes per day?
- 8. Do you drink alcohol?
- 9. How often did you drink alcohol during the last 30 days?

Table 3.5 presents the incidence of morbidity by gender and age groups determined from the questions listed above. This can be summarised as follows: 15 per cent of men and 23 per cent of women declared to have suffered from health problems during the 30 days before the interview (recent morbidity). Recent morbidity increases through age as one would expect. Cardiovascular diseases are the main morbidity cause for both men and women. This cause is followed in importance by colds, intestinal diseases and lingering diseases in acute stage (cancer, diabetics, rheumatism, etc.). The peak share of cardiovascular diseases among all causes is in the age range 45–54 for both men and women, rather than in age 55–64 as one would expect. Generally, women declare to suffer more than men but the weight of intestinal diseases, injuries and lingering diseases in acute stage is larger for men than women. Chronic diseases affect 24 per cent of men and 36 per cent of women in the sample. In this case intestinal diseases are the most relevant problem for men followed by cardiovascular diseases, while vice versa for women.

Hospitalization is higher for men than for women and it peaks at the youngest age group considered (15–24). Smoking is by far a male habit. More than half of the men interviewed smoke as opposed to less than 4 per cent of the women. Smoking, and particularly heavy smoking, peaks around age 35–54 for men. The gender gap is much less pronounced for alcohol consumption with 52 per cent of men and 33 per cent of women interviewed. Drinking is the most diffuse among the age range 35–44 for both men and women, while men drink more often than women on average.

TABLE 3.5 MORBIDITY RATES 1996 (% OF RESPONDENTS WHO ANSWERED THE QUESTIONS POSITIVELY)

TABLE 3.5 CONTINUED

Morbidity can hardly be taken as a proxy of mortality. For instance, mortality is much higher among men of working age but morbidity is much higher among women. However, we can construct a variable based on stress-related morbidity data and see if it behaves in terms of gender and age as mortality does. We include in this variable the following morbidity causes: cardiovascular diseases (recent and chronic), injuries, intestinal diseases (recent and chronic), lingering diseases in acute stage (the morbidity variable the closest to death status), the number of those who were hospitalized during the last 30 days and the number of heavy smokers (21 or more cigarettes per day) and heavy drinkers (daily or 4–6 times a week). The variable simply counts all respondents who declared to have at least one of the conditions listed—we call this variable mortality stress proxy (MSP).9

The MSP is tested to see if it represents the mortality pattern better than other general health variables; we show this in Table 3.7. Here we compared the MSP with the variables health problems during the last 30 days and chronic diseases for the working age population (15–64). MSP vis-à-vis the other two variables has a higher incidence for men and for working age groups 35–44 and 45–54. Thus, when stress-related factors are isolated, morbidity becomes closer to the mortality pattern.

TABLE 3.6 MSP, RECENT AND CHRONIC HEALTH PROBLEMS (AGE AND GENDER WEIGHTS)

| Total = 100 | | | l | male | | | female |
|------------------------------|-----|-----|------|------|-----|-------|-----------------------------|
| | 15- | 25- | 35- | 45- | 55- | Total | 15- 25- 35- 45- 55- Total |
| | 24 | 34 | 44 | 54 | 64 | | 24 34 44 54 64 |
| Mortality stress proxy | 5.7 | 5.6 | 13.0 | 11.0 | 7.6 | 42.9 | 6.0 6.9 17.8 12.9 13.4 57.1 |
| Recent health problems | 5.7 | 5.5 | 9.9 | 8.3 | 7.4 | 36.7 | 8.2 9.2 20.2 13.1 12.7 63.3 |
| Chronic problems | 6.4 | | 10.1 | 8.6 | 7.6 | 37.7 | 7.7 8.9 19.3 13.8 12.6 62.3 |

Source: 1996 LSMS.

3.2.2 Health and labour

The next step was to look at whether any relation between labour market variables and health variables is visible. From the LSMS database three

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⁹ Note that persons with more than one of the morbidity aspects described are counted only once.

indicators for employment and ten for unemployment were first constructed. This was possible thanks to the wide range of questions through which the employed and the unemployed could be counted. For employment, three measures which could approximate the ILO definition were used and for unemployment measures from the largest possible (U1=people not employed, wishing to work) to the smallest (U10=registered unemployed on benefits)¹⁰ were taken. The incidence of morbidity was calculated for the 13 variables (Table 3.7).

TABLE 3.7 MORBIDITY INCIDENCE (%) AND THE LABOUR FORCE

| | Recent morbidity | Chronic morbidity | MSP |
|-------|------------------|-------------------|-----|
| E1 | 19 | 31 | 22 |
| E2 | 19 | 31 | 23 |
| E3 | 20 | 33 | 23 |
| E Av. | 19 | 32 | 23 |
| U1 | 20 | 29 | 19 |
| U2 | 16 | 23 | 17 |
| U3 | 15 | 22 | 17 |
| U4 | 14 | 22 | 15 |
| U5 | 21 | 28 | 19 |
| U6 | 13 | 19 | 14 |
| U7 | 24 | 29 | 21 |
| U8 | 23 | 34 | 24 |
| U9 | 16 | 28 | 23 |
| U10 | 28 | 35 | 26 |
| U Av. | 18 | 26 | 19 |
| Stdev | 6 | 8 | 6 |

Source: 1996 LSMS.

Legenda: E1 = Employed and self-employed; E2 = Employed; E3: Employment (ILO) U1 = Not employed, wish to work; U2 = Job seeker in the past 7 days + waiting for response from employer + found a job, waiting for instructions + waiting for beginning of seasonal work + 'no good job for me' + registered unemployed + 'no jobs at all'; U3 = U2 - job seeker in the past 7 days; U4 = job seeker past 30 days (status) U5 = job applicant past 30 days; U6 = not working because 'dismissed', 'staff reduction', 'restructuring', 'change of work', 'no work after military, imprisonment or education'; U7 = job applicant to ES; U8 = Registered unemployed; U9 = job seeker in the past 7 days; U10 = Registered unemployed on benefits.

Taken as a whole, the employed seem to be in worse health than the unemployed. Within the employed, family members working for free show the highest incidence of poor health (not in table). There are significant differences according to what group of unemployed we are considering as it is shown by the standard deviation. For instance, morbidity is lower for those

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¹⁰ Note that the largest variables also contain the smallest variables. To give an idea of the spectrum of variables, U10 is only 5.6% of U1.

who declared to be looking for jobs but did not necessarily take any step in that direction (U4) and for those who are changing job, have left their previous occupation or did not manage to enter employment (U6). It is instead significantly higher among those who applied to ESs or are actually registered at ESs and on benefits.

This may simply mean that selection criteria for LMPs beneficiaries tend to favour those with particular difficult situations who are more likely to be affected by health problems. Indeed labour legislation favours vulnerable groups such as the disabled or mothers with four or more children. However, it could also be argued that the higher morbidity incidence found among the registered unemployed is the effect of self-selection if applying to ESs is seen as a last resort survival means. Also noticeable is the fact that MSP does not seem to show a substantially different behaviour from the other two health variables. Here too morbidity is higher for the employed than for the unemployed.

However, Table 3.7 suffers from serious shortcomings. One is that gender and age aspects are not explored which is an important constraint when looking at health variables. The second is that employment variables do not take into consideration income and working hours factors which we saw being discriminatory factors within employment and which may be related to health conditions. And the third is that unemployment variables contain each other thus partially affecting each other. To overcome these difficulties, morbidity odds ratios were calculated dividing the working age population by gender and age groups, dividing the employed in working hours and income classes and dividing the unemployed in registered and non-registered. The categories used are the closest to ILO criteria.¹¹

When general morbidity is taken into account (Table 3.8, A), the odds of being sick are significantly higher for the employed in age 15–34, and for the unemployed in age 35–54. Once stress-related morbidity is isolated (part B), several aspects change significantly. Firstly, the gender gap is reduced; this is what we expected given that some of the health conditions included in MSP are predominantly male. Secondly, the age groups 15–34 reverse their

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¹¹ For employment, E2 in Table 3.8 is used. Unemployment includes the job seekers in the past 7 days, the registered unemployed not included into the job seekers, people waiting for response from employers, people waiting to start their new job and people waiting for seasonal work. This is in compliance with the October 1982 ILO 'Resolution concerning economically active population, employment and underemployment' and the January 1993 ILO 'Resolution concerning the international classification of status in employment' adopted by the 15th international conference of labour statisticians.

behaviour. For these groups too the odds of being sick from MSP morbidity are higher for the unemployed than the employed. Thirdly, the employment/unemployment gap is increased. The odds ratios for the unemployed increase relatively to those for the employed. For instance, the employed/unemployed gap for females in age 35–54 increases from 23.4 per cent for general morbidity to 36.9 per cent for MSP morbidity. And fourthly, the largest employment/unemployment gap is found for males in age 35–54 where the odds of suffering from MSP related morbidity are 38.6 per cent higher for the unemployed than for the employed. Generally speaking, economic inactivity shows lower values than both employment and unemployment despite the fact that this category includes people not able to work due to health conditions.

TABLE 3.8 MORBIDITY (ODDS RATIOS)

| | Ma | le | Fer | nale |
|----------------------------------|-------|-------|-------|-------|
| | 15-34 | 35-54 | 15-34 | 35-54 |
| (A) Recent and Chronic Morbidity | | | | |
| employment | 0.30 | 0.53 | 0.49 | 0.98 |
| unemployment | 0.19 | 0.74 | 0.25 | 1.28 |
| economically non-active | 0.20 | 0.51 | 0.34 | 1.07 |
| (B) MSP Morbidity | | | | |
| employment | 0.16 | 0.35 | 0.15 | 0.41 |
| unemployment | 0.16 | 0.57 | 0.22 | 0.65 |
| economically non-active | 0.08 | 0.34 | 0.11 | 0.42 |

Source: 1996 LSMS.

Focusing on employment, Table 3.9 reports the odds ratios for MSP in different working hours and income classes. Two income and two working hours classes are used using as cut-off values average nominal monthly income as reported in official publications (7,500 tenge/month) and an average full-time working month (160 hrs./month). As shown by the odds ratios, both working hours and income do not seem to make a substantial difference except for female income. Older females with income below average show significantly higher odds of suffering from MSP morbidity. In effect, both excessive or insufficient work can be the cause of stress and poor health and below average working hours may be cause or effect of poor health. Income may also be scarcely correlated with health, given the importance of non-cash benefits in the economy and given the difficulty in gathering proper income data in household sample surveys. 12

TABLE 3.9 MSP MORBIDITY IN EMPLOYMENT (ODDS RATIOS)

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¹² See Deaton (1997).

| | N | 1ale | Female | | |
|---------------------|-------|-------|--------|-------|--|
| MSP | 15-34 | 35-54 | 15-34 | 35-54 | |
| Work-time 0-160 hrs | 0.15 | 0.38 | 0.14 | 0.44 | |
| Work-time > 160hrs | 0.14 | 0.31 | 0.19 | 0.38 | |
| Income < 7500 tenge | 0.12 | 0.37 | 0.14 | 0.43 | |
| Income > 7500 tenge | 0.16 | 0.36 | 0.19 | 0.32 | |

Source: 1996 LSMS.

The final step was to look at whether there is any difference in the odds of suffering from MSP morbidity between those who register at ESs and those who do not (Table 3.10). In Table 3.7 we saw that, overall, the registered unemployed showed a higher morbidity incidence than the non-registered. However, once we divide the sample in gender and age classes some important caveats emerge. The odds of suffering from MSP morbidity are higher for the registered unemployed only in age 15–34. The opposite is true for the age range 35–54. Given that, in principle, the ESs legislation favours vulnerable groups in all ages, this phenomenon may better be explained in terms of self-selection. Older unemployed who suffer from MSP morbidity tend to register less at ESs. This is true for both males and females and it is a particularly worrying factor because it indicates the existence of an underclass of older people of working age who combine unemployment with poor health and are not targeted by LMPs.

TABLE 3. 10 MSP MORBIDITY IN UNEMPLOYMENT (ODDS RATIO)

| | Male | Female |
|----------------|-------------|-------------|
| | 15-34 35-54 | 15-34 35-54 |
| Registered | 0.25 0.50 | 0.40 0.54 |
| Non-registered | 0.13 0.60 | 0.16 0.86 |

Source: 1996 LSMS.

What can be argued from these findings is that the health condition of the working age population of Kazakhstan not only varies with gender and age, but also according to what labour category we consider. Labour categories do seem to matter when it comes to health status. This initial research was not aimed at establishing a correlation between health and labour market variables, nor the direction of such correlation; instead we have been concerned with the behaviour of morbidity, particularly the stress-related morbidity, in specific groups of people in working age. It is found that being unemployed aged 35–54 carries a significantly higher risk of suffering from stress-related morbidity particularly for males. Non-registered unemployed in the same age group are also more at risk than the registered unemployed. This aspect of the social outcome of transition in Kazakhstan should not be underestimated and it should be taken into account in the formulation of

social policies, labour market policies included. In the context of Part II of this work, this is an additional indication that the condition of unemployment can be a precarious one particularly for some of those outside the reach of ESs and LMPs.

IV CONCLUSIONS

We tried to show what is the relation between the labour market and labour market policies in transitional economies confronting the experiences of CEE and CIS countries. We argued that labour market policies cover a small number of those in need in CIS countries. It is also uncertain whether LMPs have any significant effect in relation to unemployment reduction in CEE countries. This suggests that there is space for expanding the coverage and aim of LMPs in CIS economies as the case of Kazakhstan would support.

Expanding the coverage means targeting the non-registered unemployed as well as some of the formally employed and economically non-active. The reasons for not registering are not linked to the fact that people have in fact a real occupation but to facts related to difficult access to ESs and the poor quality of services provided. One possibility for adjusting the target of LMPs and preventing a substantial rise in costs at the same time is to shift resources from the supply side of the labour market to the demand side—from ESs to enterprises. Activities such as training and public work in many cases could be done within enterprises, servicing specific purposes rather than general needs.

Expanding the aim means emphasising the role for LMPs in providing social inclusion, income maintenance and, by reflection, better health conditions. A justification for expanding the aim of LMPs comes from the outlook provided for the social and health status of the population in Kazakhstan. A certain relation between unemployment status and stress-related morbidity was found. Being unemployed carries a higher probability of suffering from stress-related conditions particularly for males and non-registered unemployed in age 35–54—it should not be forgotten that males in this age range are the single group with the highest mortality rate in Kazakhstan. Expanding the aim can also be done maintaining workers in jobs through incentives to enterprises. Some income and social provisions are assured in this way and the social fabric which was traditionally built around the enterprise would not be disrupted. It is, of course, an interim and anti-crisis

measure until the private sector has reached sufficient critical mass to pull workers out of the state sector.

Perhaps, LMPs should be seen in the wider spectrum of social policies in a transitional context, and LMPs effectiveness should be judged in relation to the wider impact that these policies may have on the well-being of individuals rather than narrowly considering the ability to reduce unemployment. In heavily depressed transitional economies, such as Kazakhstan, unemployment remains a demand deficit inducted phenomenon to be solved through industrial policies and the reprisal of growth.

The simple categories employed, unemployed and economically inactive hide a deep degree of diversity. This is the case not only in relation to income and working hours but also in relation to the health status of the different groups. This is one more reason to better target social policies such as labour market policies to groups with similar needs. And in order to do that a more complex framework of analysis than the one currently offered by standard ILO categories should be used. Above all, the non-registered unemployed and the employed with little occupation or income have little hopes of being assisted in any way unless the policymaker is prepared to recognise and accept the complex diversity of the labour market in Kazakhstan. This line of argument may find support from evidence emerging in other CIS economies and opens a research agenda which has attracted only sporadic attention to date.

REFERENCES

ADB and UNESCO. 1996. Review of Labour and Employment. *Technical Assistance for the Education and Training Sector Study, Annex 4*. Ministry of Education: Almaty, Kazakhstan.

Allison, C. and D. Ringold. 1996. Labor Markets in Transition in Central and Eastern Europe 1989-1995. *World Bank Technical Paper*, No. 352. World Bank: Washington, DC.

Barr, N. 1994. Labour Markets and Social Policy in Central and Eastern Europe: The Transition and Beyond. Oxford University Press: Oxford.

Blanchard, O. 1991. Clarendon Lecture Series on Transition Economies, Clarendon Press: Oxford.

Bobeva, D. 1997. Employment Policies and Programmes in Bulgaria. In Godfrey and Richards, 1997.

Boeri, T. 1996. Unemployment Outflows and the Scope of Labour Market Policies in Central and Eastern Europe. In OECD, 1996.

Chadha, B., F. Coricelli, and K. Krajnyak. 1993. Economic Restructuring, Unemployment, and Growth in a Transition Economy. *IMF Working Paper*, No. 93/16. IMF: Washington, DC.

CIS-Stat (Interstate Statistical Committee of the Commonwealth of Independent States). 1998. *Labour Markets in the CIS countries*. Moscow.

Cornia, G. A. 1996. Labour Market Shocks, Psychosocial Stress and the Transition's Mortality Crisis. *WIDER Research in Progress*, No.4. UNU/WIDER: Helsinki.

Cornia, G.A. 1998. Models of Mortality Crisis. Mimeo. UNU/WIDER: Helsinki.

Cornia, G.A. and R. Paniccià. 1996. The Transition's Population Crisis: An Econometric Investigation of Nuptiality, Fertility and Mortality in Severely Distressed Economies. *MOCT-MOST*, No.6, 1996. Kluwer: Dordrecht, Netherlands.

CSAK (Committee for Statistical Analysis of the Republic of Kazakhstan). Various years, a. About the Labour Market and the Social Support for the Unemployed in the Republic of Kazakhstan. *CSAK Internal Working Document*, (annually prepared; unpublished; in Russian), Almaty.

| Various | years, b. | The Bala | ance of Lab | our Resour | ces. CSAK | Internal |
|--------------|-----------|------------|-------------|---------------|--------------|----------|
| Working Docu | ment (ann | ually prep | ared; unpub | olished; in R | ussian). Alr | naty. |

_____. 1997. *Statistical Bulletin*, No.1, 1997, Almaty.

Deaton, A. 1997. *The Analysis of Household Surveys: A Microeconomic Approach to Development Policy*. World Bank, The John Hopkins University Press: Baltimore.

Ebersdat, N. 1994. Demographic Shocks After Communism: Eastern Germany, 1989–1993. *Population and Development Review*, No.20 (1).

EBRD. 1997. *Transition Report 1997: Enterprise Performance and Growth*. European Bank for Reconstruction and Development: London.

EU-KET (European Union-Kazakhstan Economic Trends). 1997. *TACIS*. Third Quarter. DIW, German Institute for Economic Research: Berlin.

Feshback, M. and A. Friendly Jr. 1992. *Ecocide in the USSR*. Basic Books: New York.

Frey, M. 1997. Employment Policies and Programmes in Hungary. In Godfrey, M. and P. Richards, 1997.

Godfrey, M. 1995. The Struggle Against Unemployment: Medium-Term Policy Options for Transitional Economies. *International Labour Review*, Vol.134, No.1.

_____. 1996. Pain in the Labour Market: Is there an alternative Strategy for a Transitional Economy? Mimeo.

Godfrey, M., and P. Richards. 1997. *Employment Policies and Programmes in Central and Eastern Europe*. ILO: Geneva.

_____. 1997. The Struggle Against Unemployment: Medium-Term Policy Options for Transition Economies. In Godfrey and Richards, 1997.

_____. 1997. Statistical Handbook 1997. States of the Former Soviet Union. *Studies of Economies in Transformation*.

Gora, M. 1997. Employment Policies and Programmes in Poland. In Godfrey, M. and P. Richards.

Gora, M. and Sztanderski. 1994. Evaluation of Labour Market Policies. Supplementary Labour Force Survey Questionnaire. In Lehmann H. and J. Wadsworth, J. (eds.) 1994.

ILO. 1994. Year Book of Statistics. ILO: Geneva.

IMF. 1997. World Economic Outlook. IMF: Washington, DC.

Isteleulova, E. 1996. Unemployment and the Social Security System in Kazakhstan. *Kazakhstan Economic Trends*, 4th Quarter.

Jackman, R. 1995. Economic Policies, Employment and Labour Markets in Transition in Central and Eastern Europe. *LSE Centre for Economic Performance Working Paper*, No.265. London School of Economics: London.

_____. 1995. What can Active Labour Market Policy Do? *LSE Centre for Economic Performance Working Paper*, No.266. London School of Economics: London.

Jackman, R. and C. Pauna. 1997. Labour Market Policy and the Reallocation of Labour Across Sectors. In Zecchini, 1997.

Jackman, R. and M. Rutkowski. 1994. Labor Markets: Wages and Employment. In Barr, 1994.

Klugman, J and G. Schieber. 1996. A Survey of Health Reforms in Central Asia. *World Bank Technical Paper*, No.344. World Bank: Washington, DC.

Kornai, J. 1992. The Socialist System: The Political Economy of Communism. Princeton University Press: Princeton, New Jersey.

Koulekeyev, J. and A. Katarvaeva. 1997. Labour Resources in the Republic of Kazakstan. *Business Weekly*, 12 September (in Russia). Almaty.

Layard, R. and A. Richter. 1995. How Much Unemployment is Needed for Restructuring?: The Russian Experience. *LSE Centre for Economic Performance D.P,* No.238, May.

Lehmann H. and J. Wadsworth (eds.) 1994. *Labour Force Survey Design: Analysis and Evaluation of Labour Market Policies*. Institute for Economic Research: Munich.

Nesporova, A. 1998. Fighting Unemployment and Strees: Labour Market Policies in Central and Eastern Europe. In, *The Transition's Mortality Crisis*, (forthcoming) edited by G. A. Cornia and R. Paniccià.

Nesporova, A. and V. Uldrichova. 1997. Employment Policies and Programmes in the Czech Republic. In Godfrey and Richards, 1997.

Nuti, D.M. 1996. Fighting Unemployment in Transitional Economies. *MOCT-MOST*, No.6, 1996. Kluwer: Dordrecht, Netherlands.

OECD. 1996. Lessons from Labour Market Policies in the Transition Countries. *OECD Proceedings, Centre for the Co-operation with the Economies in Transition*.

O'Leary, C. 1995. Performance Indicators: A Management Tool for Active Labour Programmes in Hungary and Poland. *International Labour Review*, Vol.134, No.6.

Paniccià, R. 1997. Economic Shocks, Impoverishment and Poverty-Related Mortality During the Eastern European Transition. *WIDER Working Paper*, No.126. UNU/WIDER: Helsinki.

Porket, J.L. .1995. Unemployment in Capitalists, Communists and Post-Communists Economies. St. Martin Press.

Riphahn, R. T. and K. F. Zimmermann. 1997. The Transition's Mortality Crisis in East Germany. *WIDER Research for Action*, No.42. UNU/WIDER: Helsinki.

Rutkowski, J. 1998. Labor Markets, Welfare and Social Policy During Economic Transition in Poland. *World Bank Social Challenges of Transition Series* (mimeo). World Bank: Washington, DC.

Rustowski, M. 1996. Labour Market Policies in Transition Economies. *MOCT-MOST*, No.6, 1996. Kluwer: Dordrecht, Netherlands.

Schwanse, P. 1996. The Effectiveness of Active Labour Market Policies: Some Lessons from the Experience of OECD Countries. In OECD, 1996.

Standing, G. 1997. Russian Unemployment and Enterprise Restructuring: Reviving Dead Souls. Macmillan: London.

Turunen, J. 1997. Unemployment and Labour Market policies in Transition: Active or Passive?' *Kiel Institute of World Economics Working Paper*, No.314.

UNDP. 1996. Kazakhstan: Human Development Report. UNDP: Almaty.

____. 1997. Kazakhstan: Human Development Report. UNDP: Almaty.

WHO. 1996. World Health Statistics Annual. WHO: Geneva.

World Bank. 1996. Statistical Handbook 1996: States of the Former Soviet Union: Studies of Economies in Transformation. World Bank: Washington, DC.
_____. 1997. Statistical Handbook 1997: States of the Former Soviet Union: Studies of Economies in Transformation. World Bank: Washington, DC.
_____. 1998. Kazakhstan: Living Standards During the Transition. IBRD Report, No.17520-KZ. World Bank: Washington, DC.

Zecchini, S. 1997. Lessons from the Economic Transition: Central and Eastern Europe in the 1990s. Kluwer: Dordrecht, Netherlands.

TABLE 2.1 EMPLOYMENT AND UNDEREMPLOYMENT 1990-6

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1990 | 1991 | 1992 | 1993 (%) | 1994 | 1995 | 1996 |
|-------------------------------------------|------|------|------|------|------|------|------|--------|------|------|-------------|------|------|------|
| (A) Employment by ownership | 7565 | 7494 | 7572 | 6926 | 6581 | 6551 | 6519 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Public, social, collective organisations | 6617 | 6534 | 6754 | 6188 | 5604 | 5039 | 4402 | 87 | 87 | 89 | 89 | 85 | 77 | 68 |
| Private agriculture | 1 | 5 | 39 | 49 | 69 | 102 | 209 | 0 | 0 | 1 | 1 | 1 | 2 | 3 |
| Small businesses(1) | 501 | 443 | 366 | 290 | 344 | 159 | 148 | 7 | 6 | 5 | 4 | 5 | 2 | 2 |
| Joint-ventures | 1 | 7 | 7 | 13 | 23 | 25 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Self-employed(2) | 445 | 505 | 406 | 386 | 541 | 1226 | 1728 | 6 | 7 | 5 | 6 | 8 | 19 | 27 |
| (B) Employment by sector of activity | 6476 | 6485 | 6305 | 5631 | 5415 | 4994 | 4432 | 100 | 100 | 100 | 100 | 100 | 100 | 99 |
| Industry | 1360 | 1385 | 1351 | 1195 | 1149 | 1050 | 958 | 21 | 21 | 21 | 21 | 21 | 21 | 22 |
| Construction | 745 | 674 | 650 | 492 | 391 | 325 | 264 | 12 | 10 | 10 | 9 | 7 | 7 | 6 |
| Agriculture | 1202 | 1194 | 1158 | 1108 | 1196 | 1062 | 1017 | 19 | 18 | 18 | 20 | 22 | 21 | 23 |
| Forestry | 13 | 14 | 13 | 13 | 11 | 10 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport | 610 | 604 | 566 | 497 | 464 | 418 | 367 | 9 | 9 | 9 | 9 | 9 | 8 | 8 |
| Communications | 89 | 89 | 82 | 79 | 82 | 80 | 78 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| Trade and catering | 431 | 424 | 409 | 294 | 264 | 225 | 162 | 7 | 7 | 6 | 5 | 5 | 5 | 4 |
| Supply, marketing and purchases | 99 | 98 | 99 | 98 | 84 | 72 | 5 | 2 | 2 | 2 | 2 | 2 | 1 | 0 |
| Information, computer services | 21 | 19 | 14 | 10 | 8 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Housing and public utilities | 258 | 260 | 263 | 252 | 242 | 249 | 178 | 4 | 4 | 4 | 4 | 4 | 5 | 4 |
| Education | 737 | 766 | 755 | 732 | 697 | 685 | 618 | 11 | 12 | 12 | 13 | 13 | 14 | 14 |
| Culture and art | 116 | 114 | 98 | 93 | 82 | 81 | 57 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| Science and scientific services | 109 | 104 | 88 | 77 | 38 | 37 | 31 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| Health, Physical culture and social ins. | 438 | 448 | 467 | 425 | 425 | 412 | 380 | 7 | 7 | 7 | 8 | 8 | 8 | 9 |
| Credit and insurance | 39 | 42 | 46 | 52 | 49 | 47 | 43 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| General administration | 102 | 114 | 126 | 132 | 145 | 146 | 143 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
| Others | 107 | 136 | 120 | 82 | 88 | 89 | 58 | 2 | 2 | 2 | 1 | 2 | 2 | 1 |
| (C) Underemployment | | | | 386 | 596 | 633 | 546 | | | | 100 | 100 | 100 | 100 |
| of which : on forced leave | | | | 82 | 160 | 210 | 188 | | | | 21 | 27 | 33 | 34 |
| stopped production completely | | | | 16 | 51 | 82 | 62 | | | | 4 | 9 | 13 | 11 |
| partially suspended production | | | | 257 | 373 | 368 | 304 | | | | 67 | 62 | 58 | 56 |
| totally shifted to part-time regime | | | | 73 | 100 | 89 | 89 | | | | 19 | 17 | 14 | 16 |
| partially shifted to part-time regime (3) | | | | 39 | 73 | 95 | 91 | (4000) | | | 10 | 12 | 15 | 17 |

Source: (A) ADB/UNESCO (1996); Koulekeyev and Katarvaeva (1997), World Bank (1996); data are period end. (B) CSAK (1997); excludes joint ventures, small businesses, self-employed; data are annual averages. (C) CSAK (various, b); ADB/UNESCO (1996); data are period end. (1) Includes collective farms + co-operative workers; (2) Includes private subs. farmers (3) Value estimated for 1995.

TABLE 2.7 PUBLIC WORK AND TRAINING BY OBLAST 1996, 1997

| Public Work | Kazakhstan | Akmola | Aktyub. | Almaty | Atyrau | East.Kaz | Jambul | West Kaz. | Karaganda | Kzil-orda | Kustanay | Mangistau | Pavlodar | North Kaz. | South Kaz. | Almaty city |
|----------------------|------------|--------|---------|--------|--------|----------|--------|-----------|-----------|-----------|----------|-----------|----------|------------|------------|-------------|
| Total 1996 | 24446 | 754 | 431 | 749 | 926 | 1472 | 128 | 1543 | 387 | 623 | 2182 | 429 | 1787 | 164 | 1639 | 745 |
| Shares | | | | | | | | | | | | | | | | |
| unemployed | 85.3 | 65.3 | 100.0 | 97.2 | 100.0 | 96.0 | 39.1 | 79.2 | | 100.0 | 100.0 | 94.2 | 42.2 | 86.6 | 97.3 | |
| younger than 20 | 25.5 | 15.3 | 26.9 | 19.5 | 25.6 | 27.4 | 10.2 | 37.5 | 19.9 | 20.5 | 21.8 | 21.4 | 69.6 | 45.1 | 18.1 | 11.3 |
| women | 45.4 | 41.6 | 41.8 | 61.7 | 67.0 | 49.8 | 35.2 | 45.8 | 68.7 | 37.4 | 26.9 | 47.6 | 55.8 | 75.0 | 45.1 | 40.7 |
| close to pension age | 1.0 | 0.5 | 0.5 | 0.0 | 1.1 | 0.7 | 0.0 | 0.9 | 0.0 | 3.7 | 0.0 | 2.6 | 0.5 | 1.2 | 1.9 | 0.8 |
| invalids | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.7 | 0.8 |
| people with | 31.8 | 42.8 | 35.7 | 47.1 | 27.4 | 27.6 | 45.3 | 32.4 | 41.1 | 29.9 | 37.6 | 35.2 | 14.5 | 12.8 | 37.8 | 47.9 |
| dependants | | | | | | | | | | | | | | | | |
| long-term unemployed | 25.3 | 26.8 | 16.2 | 25.6 | 28.2 | 7.7 | 18.8 | 18.8 | 39.0 | 24.7 | 30.5 | 30.5 | 13.1 | 23.2 | 26.4 | 18.8 |
| ex-prisoners | 0.4 | 0.0 | 0.5 | 0.3 | 0.2 | 2.9 | 0.0 | 0.6 | 0.0 | 0.6 | 0.1 | 0.0 | 0.3 | 0.0 | 0.5 | 1.1 |
| refugees | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 10.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 0.0 | 0.0 |
| students on vacation | 3.4 | 39.4 | 2.6 | 0.0 | 2.9 | 2.2 | 0.0 | 3.1 | 3.9 | 0.0 | 1.1 | 0.0 | 0.0 | 31.1 | 0.0 | 32.1 |
| Total 1997 Shares | 24379 | 812 | 1225 | 2868 | 1295 | 2264 | 63 | 532 | 2287 | 2386 | 1703 | 386 | 1664 | 1969 | 3055 | 1870 |
| unemployed | 89.1 | 96.8 | 94.7 | 93.4 | 100.0 | 96.9 | 100.0 | 100.0 | 61.2 | 92.8 | 99.4 | 95.6 | 98.9 | 96.0 | 63.6 | 98.7 |
| younger than 20 | 18.8 | 10.7 | 14.3 | 16.2 | 27.3 | 26.2 | 15.9 | 10.9 | 17.9 | 30.8 | 18.3 | 25.4 | 12.3 | 7.6 | 27.9 | 3.6 |
| women | 48.1 | 49.4 | 29.0 | 64.6 | 67.5 | 47.4 | 58.7 | 46.4 | 48.7 | 31.2 | 53.1 | 72.8 | 42.1 | 56.3 | 31.4 | 57.4 |
| close to pension age | 1.1 | 0.6 | 0.2 | 0.6 | 0.3 | 4.3 | 7.9 | 0.8 | 0.5 | 0.0 | 1.5 | 0.3 | 1.5 | 0.6 | 0.6 | 2.4 |
| invalids | 0.3 | 0.4 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 2.1 | 0.2 | 0.1 | 0.7 | 0.0 | 0.7 | 0.1 | 0.1 | 0.5 |
| with dependants | 32.7 | 39.8 | 35.0 | 36.1 | 20.0 | 35.6 | 23.8 | 33.6 | 37.4 | 24.1 | 24.1 | 13.5 | 47.0 | 22.5 | 34.5 | 39.7 |
| long-term unemployed | 34.4 | 20.0 | 34.0 | 43.7 | 32.3 | 39.6 | 19.0 | 39.8 | 28.4 | 32.3 | 35.1 | 14.2 | 30.5 | 29.2 | 37.9 | 37.8 |
| ex-prisoners | 0.3 | 0.4 | 0.4 | 0.1 | 0.0 | 1.5 | 0.0 | 0.0 | 0.7 | 0.0 | 0.3 | 0.0 | 0.3 | 0.2 | 0.1 | 0.1 |
| refugees | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 3.6 | 0.1 | 0.0 | 0.0 | 0.0 |
| students on vacation | 0.6 | 8.9 | 8.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

table continues...

| Training | Kazakhstan | Akmola | Aktyub. | Almaty | Atyrau | East.Kaz | Jambul | West Kaz. | Karaganda | Kzil-orda | Kustanay | Mangistau | Pavlodar | North Kaz. | South Kaz. | Almaty city |
|------------------------|------------|--------|---------|--------|--------|----------|--------|-----------|-----------|-----------|----------|-----------|----------|------------|------------|-------------|
| Total 1996 | 24739 | 1026 | 1234 | 1788 | 930 | 1901 | 523 | 1100 | 1350 | 1676 | 1164 | 640 | 956 | 572 | 1843 | 520 |
| Shares | | | | | | | | | | | | | | | | |
| now employed | 58.4 | 90.7 | 48.9 | 50.4 | 39.1 | 70.0 | 98.9 | 67.6 | 44.7 | 77.8 | 77.3 | 80.8 | 74.0 | 71.2 | 53.7 | 52.1 |
| now with priv.business | | 8.0 | 2.3 | 4.9 | 0.0 | 1.4 | 0.6 | 0.2 | 0.4 | 0.0 | 0.3 | 0.3 | 5.9 | 0.0 | 4.4 | 0.4 |
| currently on training | 20.1 | 8.0 | 3.5 | 30.5 | 7.1 | 11.0 | 16.6 | 5.6 | 35.3 | 41.3 | 5.8 | 0.5 | 8.4 | 50.2 | 19.3 | 41.0 |
| from rural areas | 36.0 | 18.5 | 33.5 | 64.5 | 32.0 | 19.9 | 52.0 | 15.6 | 62.8 | 15.9 | 30.3 | 48.3 | 41.4 | 11.2 | 46.8 | 34.4 |
| women | 50.6 | 36.5 | 61.1 | 60.7 | 40.4 | 48.0 | 61.0 | 36.1 | 47.0 | 40.9 | 41.2 | 35.6 | 57.0 | 43.2 | 43.8 | 48.7 |
| invalids | 0.3 | 8.0 | 1.0 | 0.0 | 0.4 | 0.3 | 0.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.5 | 1.3 | 0.3 | 0.4 | 1.2 |
| ex-prisoners | 0.3 | 0.4 | 0.2 | 0.2 | 1.0 | 0.3 | 0.0 | 0.4 | 0.1 | 0.5 | 0.0 | 0.5 | 0.1 | 0.3 | 0.3 | 0.0 |
| aged 16-29 | 78.7 | 83.1 | 83.8 | 69.2 | 77.5 | 81.9 | 80.7 | 80.7 | 85.8 | 81.7 | 77.3 | 80.5 | 76.4 | 80.9 | 79.2 | 72.9 |
| aged 16-29, rural | 31.0 | 17.3 | 30.8 | 45.5 | 25.1 | 18.8 | 47.0 | 11.6 | 55.6 | 14.3 | 23.2 | 47.7 | 37.2 | 11.0 | 37.7 | 31.7 |
| aged 16-29, sec. ed. | 25.9 | 23.8 | 1.7 | 17.2 | 45.1 | 10.1 | 67.3 | 34.3 | 43.6 | 22.9 | 51.1 | 1.6 | 35.6 | 2.6 | 1.7 | 52.5 |
| aged 16-29, high. ed. | 2.6 | 3.4 | 0.0 | 3.8 | 4.3 | 0.4 | 13.4 | 1.3 | 3.3 | 2.4 | 1.8 | 0.3 | 2.9 | 0.0 | 0.6 | 14.8 |
| Total 1997 Shares | 13345 | 642 | 647 | 2721 | 610 | 583 | 248 | 971 | 2011 | 490 | 429 | 419 | 890 | 447 | 341 | 1896 |
| now employed | 81.9 | 86.8 | 56.4 | 74.2 | 56.7 | 88.7 | 97.2 | 97.8 | 89.7 | 79.2 | 85.5 | 96.9 | 55.5 | 99.6 | 94.7 | 89.9 |
| now with priv.business | 1.9 | 0.2 | 0.3 | 5.0 | 0.2 | 0.2 | 0.0 | 0.5 | 3.9 | 0.2 | 3.3 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 |
| currently on training | 33.6 | 38.9 | 5.6 | 38.4 | 31.6 | 43.1 | 100.4 | 54.8 | 35.7 | 14.1 | 15.9 | 33.4 | 10.6 | 45.4 | 34.3 | 27.7 |
| from rural areas | 29.8 | 21.7 | 21.0 | 49.3 | 20.3 | 35.0 | 44.4 | 53.8 | 16.3 | 47.8 | 43.1 | 21.5 | 41.3 | 13.6 | 39.9 | 0.0 |
| women | 54.9 | 46.3 | 74.7 | 63.0 | 57.5 | 43.1 | 67.3 | 53.7 | 40.3 | 44.5 | 62.5 | 47.5 | 34.9 | 52.1 | 38.4 | 72.7 |
| invalids | 0.3 | 0.3 | 0.5 | 0.2 | 0.2 | 0.3 | 0.0 | 0.2 | 0.5 | 0.0 | 1.2 | 0.0 | 0.9 | 0.2 | 0.0 | 0.3 |
| ex-prisoners | 0.3 | 0.6 | 0.2 | 0.1 | 0.5 | 0.3 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 1.9 | 0.9 | 0.0 | 0.2 |
| aged 16-29 | 73.0 | 74.5 | 81.5 | 74.6 | 87.5 | 78.9 | 77.8 | 85.6 | 80.1 | 63.5 | 74.4 | 85.4 | 79.0 | 68.0 | 83.6 | 41.8 |
| aged 16-29, rural | 24.2 | 17.4 | 19.5 | 35.0 | 19.3 | 28.0 | 38.7 | 49.9 | 14.2 | 34.3 | 34.7 | 21.5 | 34.7 | 13.2 | 36.1 | 0.0 |
| aged 16-29, sec. ed. | 16.6 | 7.9 | 2.0 | 21.7 | 5.6 | 4.8 | 57.3 | 33.2 | 8.0 | 55.5 | 11.4 | 0.0 | 7.9 | 49.2 | 76.2 | 0.1 |
| aged 16-29, high. ed. | 2.9 | 7.9 | 0.0 | 2.8 | 2.3 | 0.7 | 20.6 | 5.7 | 0.3 | 2.7 | 4.9 | 0.0 | 0.3 | 14.8 | 7.0 | 0.0 |

Source: CSAK (various, b).

TABLE 3.5 MORBIDITY RATES 1996 (% OF RESPONDENTS WHO ANSWERED THE QUESTIONS POSITIVELY)

| - | | | Male | <u> </u> | | Female | | | | | | | |
|--------------------------------------|-------|-------|-------|----------|-------|--------|-------|-------|-------|-------|-------|-------|--|
| | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | Total | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | Total | |
| Health probs. during last 30 days? | 7.8 | 11.2 | 15.4 | 22.1 | 28.9 | 14.7 | 11.3 | 16.2 | 26.5 | 33.2 | 39.5 | 22.8 | |
| caught cold | 21.6 | 20.4 | 20.5 | 9.5 | 16.7 | 17.4 | 21.9 | 22.0 | 16.7 | 15.4 | 9.7 | 16.5 | |
| otolaryng. | 5.9 | 2.0 | 3.4 | 2.7 | 4.5 | 3.7 | 5.5 | 11.0 | 2.2 | 3.4 | 1.8 | 4.1 | |
| intestin | 17.6 | 18.4 | 21.6 | 17.6 | 13.6 | 18.0 | 9.6 | 11.0 | 11.1 | 6.8 | 10.6 | 9.9 | |
| cardiol. | 7.8 | 12.2 | 14.8 | 27.0 | 24.2 | 18.0 | 2.7 | 13.4 | 25.6 | 35.9 | 34.5 | 24.8 | |
| gyn. | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.7 | 19.5 | 12.2 | 5.1 | 0.0 | 9.6 | |
| injuries | 7.8 | 6.1 | 8.0 | 5.4 | 3.0 | 6.1 | 1.4 | 2.4 | 0.6 | 1.7 | 0.9 | 1.2 | |
| skin | 9.8 | 10.2 | 1.1 | 1.4 | 1.5 | 4.0 | 9.6 | 3.7 | 0.6 | 1.7 | 0.9 | 2.5 | |
| ling.d.,acut stage | 7.8 | 6.1 | 20.5 | 23.0 | 21.2 | 17.1 | 8.2 | 7.3 | 16.1 | 14.5 | 23.9 | 15.0 | |
| not class. | 5.9 | 12.2 | 5.7 | 2.7 | 6.1 | 6.1 | 5.5 | 3.7 | 3.9 | 5.1 | 5.3 | 4.6 | |
| other | 11.8 | 12.2 | 5.7 | 10.8 | 9.1 | 9.5 | 19.2 | 7.3 | 11.1 | 9.4 | 11.5 | 11.3 | |
| Chronic diseases: does resp. suffer? | 13.7 | 16.1 | 25.3 | 36.4 | 47.1 | 24.0 | 16.8 | 24.9 | 40.4 | 55.6 | 62.0 | 35.7 | |
| otolaryng. | 28.9 | 18.6 | 9.1 | 5.8 | 8.4 | 12.8 | 25.0 | 23.2 | 11.4 | 9.2 | 4.5 | 12.9 | |
| intestin | 27.8 | 32.9 | 34.3 | 28.1 | 21.5 | 29.0 | 23.1 | 19.2 | 21.0 | 17.9 | 24.2 | 21.0 | |
| cardiol. | 10.0 | 7.1 | 17.5 | 24.8 | 23.4 | 17.7 | 11.1 | 15.2 | 22.8 | 33.8 | 33.1 | 24.8 | |
| gyn. | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.2 | 6.5 | 15.2 | 19.1 | 6.2 | 2.8 | 10.8 | |
| skin | 1.1 | 5.7 | 4.2 | 8.0 | 0.9 | 2.4 | 1.9 | 2.4 | 1.1 | 0.0 | 0.6 | 1.0 | |
| bone d. | 0.0 | 7.1 | 4.9 | 9.1 | 11.2 | 6.6 | 2.8 | 3.2 | 4.0 | 5.1 | 6.2 | 4.4 | |
| cancer | 0.0 | 0.0 | 0.0 | 2.5 | 0.9 | 8.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.6 | 0.3 | |
| diabetics | 0.0 | 0.0 | 1.4 | 8.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.4 | 2.6 | 3.9 | 1.5 | |
| rheumatism | 2.2 | 1.4 | 14.0 | 4.1 | 12.1 | 7.7 | 3.7 | 2.4 | 2.2 | 6.2 | 10.1 | 4.9 | |
| specific | 7.8 | 11.4 | 4.9 | 6.6 | 4.7 | 6.6 | 7.4 | 8.8 | 5.9 | 5.6 | 3.4 | 5.9 | |
| other | 23.3 | 15.7 | 11.2 | 17.4 | 16.8 | 16.4 | 17.6 | 12.8 | 11.4 | 13.8 | 10.7 | 12.8 | |

table continues...

| Was resp. hospitalized in last 30 days? | 13.1 | 5.8 | 5.7 | 7.7 | 1.4 | 6.5 | 10.6 | 2.8 | 4.3 | 2.4 | 4.4 | 4.7 |
|-----------------------------------------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|-------|
| Does resp. smoke? (Yes) | 35.7 | 59.5 | 65.1 | 61.6 | 44.7 | 54.2 | 3.7 | 5.0 | 4.0 | 2.9 | 1.1 | 3.6 |
| Cigarettes per day | | | | | | | | | | | | |
| 1 to 10 | 22.4 | 26.9 | 22.5 | 18.4 | 14.0 | 21.8 | 3.3 | 4.8 | 2.5 | 2.0 | 0.4 | 2.8 |
| 11 to 20 | 12.2 | 30.3 | 38.4 | 39.3 | 28.1 | 29.5 | 0.4 | 0.4 | 1.2 | 0.3 | 0.4 | 0.6 |
| 21 to 30 | 0.2 | 1.6 | 3.0 | 2.4 | 2.2 | 1.9 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| More than 30 | 0.0 | 0.5 | 0.5 | 1.2 | 0.4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Did resp. drink alcohol in last 30 days | 21.8 | 60.6 | 66.6 | 59.6 | 54.1 | 52.5 | 18.3 | 38.1 | 42.4 | 41.4 | 17.2 | 33.3 |
| How often did respondent drink alcohol | | | | | | | | | | | | |
| in last 30 days? | 0.40 | 4 00 | 4 70 | 4 50 | 0.40 | 4 40 | 0.00 | 4.04 | 4 00 | 0.07 | 4 40 | 0.00 |
| each day | 0.43 | 1.62 | | 1.53 | | 1.43 | 0.22 | | 1.06 | | 1.43 | |
| 4-6 times/week | 0.43 | 0.00 | 1.05 | 1.22 | - | 0.64 | 0.22 | | 0.45 | 0.29 | 0.00 | 0.27 |
| 2-3 times/week | 0.64 | 4.40 | | 4.59 | | _ | 0.22 | | 1.21 | 0.87 | 0.36 | |
| once a week | - | | 14.76 | | _ | _ | 1.56 | | | 4.35 | 1.79 | 4.03 |
| 2-3 times d.l.30 d. | 9.42 | 24.77 | 27.59 | 22.63 | 20.09 | 21.15 | 8.02 | 13.71 | 17.50 | 13.62 | 5.02 | 12.59 |
| once d.l.30 d. | 8.78 | 16.44 | 14.06 | 14.68 | 15.28 | 13.59 | 7.80 | 18.15 | 17.19 | 21.45 | 8.96 | 15.14 |

Source: 1996 LSMS.