EMPLOYMENT, PRODUCTIVITY AND POVERTY IN MOLDOVA

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I. Employment and Poverty

For the majority of poor people, the only viable escape route out of poverty in the long term is through employment. Economic growth is of course essential for reducing poverty in a sustained manner, but employment must act as the critical nexus between growth and poverty. Only when growth creates ample opportunities of employment and the poor are able to grasp those opportunities that poverty will decline in a substantial manner. This is true as much in Moldova as anywhere else. However, simply creating jobs may not be good enough. The jobs will have to be productive enough to be well-paid and currently the main problem in Moldova is that well-paid jobs are not being created in sufficient numbers to lift the working population out of poverty rapidly.

The majority of poor people in Moldova can be characterised as what has come to be known as 'working poor'. Of all the people who were poor in 2002, some 20 per cent were outside the labour force and only 2 per cent were unemployed, which means that over three-quarters of the poor people actually had some kind of work to do (Table 1). The problem for them was that the work didn't pay them enough to escape poverty. This is not to suggest that working was not worthwhile for them. After all, those with formal sector job did have a lower rate of poverty (37 per cent) compared to the unemployed (60 per cent) as well as compared to those outside the workforce (46 per cent) despite the fact that the latter group received special favour from the government in terms of generous pension support. So having a job did help to attenuate the burden of poverty. The problem is that it didn't do so for sufficient number of workers because most of them had poorly paid jobs.

The challenge for Moldova is, therefore, to create massive amount of employment opportunities based on productivity improvements so that the employed population can earn enough to escape poverty. At the same time, ways must be found to equip the poor with the requisite skills and assets so that they are able to avail of the opportunities for productive employment as and when they arise. This chapter analyses the nature and extent of this challenge.

Table 1

Work Status	Poverty rate (%)	Percentage of working age population
Formal paid work	37.4	25.0
Informal work (non-agri)	47.3	5.0
Informal work (agri)	40.2	8.0
Multiple jobs	25.0	3.0
Household plot work	46.9	27.0
Other unpaid work	63.8	10.0
Unemployed	59.9	2.0
Out of labour force	46.5	20.0
Total	45.2	100.0

Poverty by Work Status: 2002

Source: World Bank (2004)

II. Trend in Employment and Unemployment

Since 1999, the rate of unemployment has come down from 11 per cent to 7 per cent of the labour force. At the same time, the absolute number of unemployed people has also declined. Unemployment had risen in the wake of the Russian crisis – from 167

thousand in 1998 to 187 thousand in 1999. But since then it has declined to 110 thousand by 2002 - an impressive 40 per cent decline in a span of just three years (Table 2).

Table 2

1996 1997 1998 1999 2000 2001 2002 2003 Absolute number (thousand) Population 3599 3654 3652 3646 3639 3631 3623 3612 Labour force 1686 1671 1809 1682 1655 1617 1615 1474 Employment 1660 1646 1642 1495 1515 1499 1505 1356 Unemployment 167 187 140 118 110 118 Percentage of labour force Labour force 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100 98.5 90.9 Employment 98.5 88.9 91.6 92.8 93.0 92.0 Unemployment 9.1 11.1 8.4 7.2 7.0 8.0

Employment and Unemployment: 1997-2003

Source: DSS (2003) Labour Market in the Republic of Moldova

Notes: Since from 1998 ILO definition of unemployment is added with employment figures to obtain labour force estimates, the proportion of employment figures before and after 1998 are non-comparable.

Viewed in isolation, the state of unemployment does not seem particularly bad. The current rate of unemployment of 7-8 per cent is not high by the standards of either the developed countries of Europe or that of other transition economies. The decline in both the rate and absolute size of unemployment since the late 1990s also seems reassuring. But a closer look reveals a more disturbing picture.

In the first place, the fall in unemployment does not reflect a corresponding rise in employment, as the number of employed people remained more or less constant at around 1.5 ml from 1999 to 2002.¹ Instead, it is partly a reflection of a steadily, albeit mildly, declining size of working age population, driven mainly by out-migration, and partly a reflection of increasing numbers of people becoming economically inactive. Thus the main reason why unemployment has fallen is that many Moldovans have either chosen to migrate out of the country or have become economically inactive for one reason or another.²

Second, the average number of hours worked per week is very low – at around 30 hours for the economy as a whole. This is a reflection of significant underemployment in the economy. There are signs that the extent of underemployment may be declining as the length of working week has risen slowly from 26.6 hours in 1999 to 30 hours in 2002, but this is still way below the standard of western Europe.

Open unemployment is more serious in urban areas, but underemployment is a bigger problem in rural areas. In 2002, unemployment was 12.1 per cent in urban areas as compared to just 3 per cent in rural areas. By contrast, the average number of hours worked per week was only 24 in agriculture as compared with 30 hours for the economy as a whole. The problem of finding adequate gainful employment is thus pervasive throughout the country, although the precise manifestation of the problem differs as between urban and rural areas.

One other feature of the labour market worth noting is that unemployment is more of a problem for men than women. In 2002, 8.1 per cent of the male labour force was unemployed, as compared with 5.5 per cent of females. Although the unemployment rate has declined for both men and women, it has done so at more or less the same rate for both groups. As a result, unemployment rate for males has remained higher than that of females throughout the period since 1999 and the relative gap has remained unchanged.

 $^{^{1}}$ In 2003, total employment dipped suddenly to 1.35 ml, the fall being concentrated mostly in agriculture. On this, more below.

It was noted earlier that the recent decline in the rate of unemployment for the labour force as whole does not indicate improved employment prospects. This is also true separately for males and females. Since 1999, the employment rate (the number of employed people as a percentage of working age population) has remained practically constant at just over 42 per cent for men and 40 per cent for women, in spite of a slightly falling size of working age population.

Thus the problem of employment generation remains an all-encompassing one – afflicting both urban and rural population, albeit in a slightly different manner, and affecting both men and women equally.

Taking a somewhat longer time perspective, it may be noted that the recent stagnation in employment is part of a longer term trend of declining employment since Moldova embarked on transition. Thus in 1996, total employment was 1.66 ml, which declined to 1.5 ml in 1999 in the aftermath of the Russian crisis and never recovered from there. It is significant that employment has failed to recover since the Russian crisis even though overall GDP has done so to a large extent.

III. The Structure of Employment

In order to understand the nature of the employment problem more deeply, it is necessary to analyse the structure of employment – how it is distributed among different sectors of activity and how that distribution has been changing over time. This will indicate which sectors are pulling up employment and which are pushing it back, with significant policy implications.

In 1996, service sector was the leading employer of labour force, with a share of 45 per cent of employment (Table 3). Agriculture followed closely behind, with a 43 per cent share, while industry came a distant third, with a share of just about 12 per cent. As the Russian crisis deepened, agriculture took on the role of the leading employer

 $^{^{2}}$ The reason for the rise in inactive population is not clear, as the number of discouraged workers joining the ranks of inactive population has not risen in this period.

absorbing many workers laid off from other sectors. This situation prevailed until 2002, when agriculture came to employ exactly half the labour force, while service's share went down to 40 per cent. In 2003, however, the share of agriculture suddenly fell to 43 per cent, making services once again the largest employer, with a share of 45 per cent – an identical situation as in 1996. All this time, the share of industry remained more or less static – hovering between 10.5 and 12 per cent.

Table 3

	1996	1997	1998	1999	2000	2001	2002	2003
Agriculture	42.8	41.6	45.7	48.9	50.6	51.0	49.6	43.0
Industry	11.7	11.6	11.1	10.7	10.6	11.0	11.4	12.1
Services	45.4	46.8	43.2	40.4	38.8	38.0	39.0	44.9
Construction	3.3	3.2	3.5	2.9	2.9	2.9	3.1	3.9
Trade	16.3	16.8	12.7	10.0	10.8	10.9	11.6	13.0
Transport	4.0	4.4	4.7	4.7	4.2	4.3	4.1	5.0
Public admin	16.8	17.6	17.5	17.8	16.5	16.1	16.1	18.0
Others	5.0	4.9	4.8	5.0	4.4	3.9	4.1	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The Structure of Employment by Economic Sectors: 1996-2003

The long-term decline in employment has been shared more or less equally by all three broad sectors of activity (Table 4). In 2003, the level of overall employment stood at 18 per cent below the 1996 level. The corresponding sectoral figures were 18 per cent for agriculture, 16 per cent for industry and 19 per cent for services.

There are, however, some aspects of inter-sectoral variation that are worth noting. After the Russian crisis employment was beginning to pick up in both agriculture and industry, but not in services. Thus industrial employment was 7 per cent higher in 2002 than in 1999 (Table 5). But since industry is the smallest of the three sectors, the effect of this mild increase on overall employment was minimal. More significant was the slight tendency for employment to rise in agriculture.

However, the picture changed significantly in 2003. Agricultural employment dropped precipitously – by more than 20 per cent compared to the previous year. Changes in the other two sectors were relatively minor, with the result that overall employment declined by nearly 10 per cent. Thus taking the whole of the post-crisis period from 1999 to 2003, one finds that overall employment has declined due mainly to a decline in agricultural employment (concentrated in the final year), while industry and services have just about held their own (Table 5).

Table 4

	1996	1997	1998	1999	2000	2001	2002	2003
	1770	1777	1770	1777	2000	2001	2002	2005
Agriculture	100.0	96.2	105.5	102.8	107.7	107.5	105.1	82.0
Industry	100.0	97.9	93.3	82.1	82.6	84.6	87.7	84.1
Services	100.0	102.3	94.2	80.0	78.0	75.6	77.9	80.8
Construction	100.0	94.5	105.5	80.0	80.0	78.2	83.6	96.4
Trade	100.0	101.8	76.8	55.4	60.1	60.5	64.6	64.9
Transport	100.0	109.1	116.7	106.1	97.0	97.0	93.9	103.0
Public admin	100.0	103.9	103.2	95.3	89.6	86.4	87.1	87.5
Others	100.0	97.6	95.2	89.2	80.7	69.9	73.5	81.9
Total	100.0	99.2	98.9	90.0	91.3	90.3	90.7	81.7

Index of Employment by Economic Sectors: 1996-2003

Index of Employment During the Recovery Phase:	
1999-2003	

	1999	2000	2001	2002	2003	Annual rate of growth
Agriculture	100.0	104.8	104.5	102.2	79.8	-5.50
Industry	100.0	100.6	103.1	106.9	102.5	0.62
Services	100.0	97.5	94.5	97.3	101.0	0.25
Construction	100.0	100.0	97.7	104.5	120.5	4.76
Trade	100.0	108.7	109.3	116.7	117.3	4.08
Transport	100.0	91.4	91.4	88.6	97.1	-0.72
Public admin	100.0	94.0	90.6	91.4	91.7	-2.14
Others	100.0	90.5	78.4	82.4	91.9	-2.09
Total	100.0	101.4	100.3	100.7	90.8	-2.39

IV. Employment, Growth and Productivity

While employment has either stagnated or declined in most sectors, output and valueadded has increased markedly in most of them. Since 1996, GDP has grown at 1.8 cent per annum while employment has declined at the rate of 2.9 per cent. The contrast between GDP growth and employment growth is even starker if one looks only at the post-crisis recovery period. Between 1999 and 2003, overall GDP has grown at the rate of 4 per cent while employment has declined by 2.4 per cent (Tables 5 and 6).

	1999	2000	2001	2002	2003	Annual rate of growth
Agriculture	100.0	101.9	109.2	115.2	105.2	1.27
Industry	100.0	110.3	117.8	118.1	134.4	7.67
Services	100.0	95.0	99.1	109.3	118.8	4.41
Construction	100.0	69.7	86.7	91.6	112.5	3.00
Trade	100.0	76.4	77.6	80.1	88.1	-3.13
Transport	100.0	121.4	132.4	144.9	157.6	12.05
Public admin	100.0	100.3	99.6	116.6	118.0	4.22
Others	100.0	114.9	121.6	137.5	155.5	11.68
Total	100.0	100.3	106.1	113.0	117.4	4.10

Index of Sectoral GDP at Constant 1996 Prices: 1999-2003

Among the three broad sectors of production, the contrast is the sharpest in industry, where nearly 8 per cent growth of value added since 1999 has been accompanied by a meagre 0.6 per cent growth in employment. In the service sector too, growth of value-added has comfortably exceeded employment growth as 4 per cent growth of value-added per annum has been accompanied by near stagnant employment (with a growth rate of only 0.2 per cent). Within the service sector, transport services show the greatest contrast – 12 per cent rate of growth in value-added as against negative employment growth of -0.7 per cent per annum between 1999 and 2003(Tables 5 and 6).

The situation with agriculture is slightly different. Taking the whole of the recovery period – from 1999 to 2003 – a very sharp decline in employment at the rate of 5.5 per cent per annum has been accompanied by a sluggish growth of just 0.9 per cent in value-added. Thus the divergent movement in employment and output growth that has been observed in other sectors is evident in agriculture as well, but with a difference. Whereas in the other sectors it makes sense to say that employment has failed to keep pace with reasonably rapid recovery in production, in the case of agriculture it is more true to say that the failure of output to recover rapidly has gone hand in hand with even bigger failure on the employment front.

The situation in agriculture raises an interesting question about causality – whether failure of growth has led to failure in employment, or whether an exogenous fall in employment (say, due to immigration) has held back growth of output. Before attempting to answer the question, it is instructive to note that the question arises in the first place because of the special nature of what happened to agriculture in 2003, for if we restrict attention only up to 2002 it is clear that agriculture behaved no differently from the rest of the economy until that time. Between 1999 and 2002, value-added in agriculture grew at the healthy rate of 4.3 per cent per annum whereas employment limped along at the near stagnant rate of 0.7 per cent. Thus, as in the case of other sectors, in agriculture too the scenario was one of failure of employment to keep pace with a reasonably satisfactory pace of recovery in production.

But the picture changed dramatically in 2003, when value-added in agriculture fell by 9 per cent compared to 2002, and employment fell by a whopping 22 per cent. It is this simultaneous fall in production and employment that raises the question of causality mentioned above. It would appear that so much agricultural labour has migrated out of Moldova that labour shortage might have emerged as a critical bottleneck at least in certain types of activities, thereby constraining the expansion of output.³

³ The hypothesis of excessive migration out of agriculture seems eminently plausible in view of the significantly lower levels of productivity and wages that prevail in agriculture compared to other sectors. See the discussion below.

Divergence in the behaviour of employment and production has implications for the growth of productivity and returns to labour. The failure of employment to keep pace with production has meant that the productivity of labourers, who managed to find employment, has increased – in some cases, quite sharply. Looking at the longer period – from 1996 to 2003 – productivity of labour has grown by a remarkable 4.8 per cent per annum (Table 7). Almost all the sectors have enjoyed higher productivity, but the sharpest growth occurred in services (at the rate of 6.9 per cent per annum), and especially in trade-related services (11.5 per cent). Industry saw the slowest growth at 2.2 per cent, and agriculture 3.9 per cent.⁴

Table 7

	1997	1998	1999	2000	2001	2002	2003	Annual rate of growth
Agriculture	116.5	99.8	98.8	96.1	103.2	111.4	130.3	3.86
Industry	91.1	81.0	88.7	97.3	101.3	98.0	116.4	2.19
Services	99.0	106.8	135.2	131.7	141.7	151.8	159.1	6.86
Construction	88.9	67.9	93.1	64.9	82.6	81.6	87.0	-1.97
Trade	92.6	143.3	285.0	200.5	202.3	195.7	213.9	11.48
Transport	96.0	82.4	88.2	117.1	127.7	144.2	143.1	5.25
Public admin	106.3	100.1	86.4	92.2	95.0	110.2	111.1	1.52
Others	101.5	108.3	139.3	176.7	216.1	232.4	235.7	13.03
Total	102.3	96.5	107.5	106.4	113.7	120.6	139.1	4.83

Index of Labour Productivity by Economic Sectors (1996 = 100): 1996-2003

⁴ However, if the special case of 2003 is excluded, then up to the year 2002 productivity grew in agriculture only at the rate of 1.8 per cent – by far the lowest among all the sectors.

Considering only the recovery period from 1999, the overall picture remains the same although the relative positions of the sectors change quite a bit. For the economy as a whole, labour productivity grew at the rate of 6.7 per cent per annum. The highest rate of growth of productivity was observed in agriculture and industry (both just over 7 per cent per annum). Productivity in services grew at the rate of 4.2 per cent, and within services, transport emerges as the leading sector, with a growth rate of 12.9 per cent whereas productivity in trade actually declined (Table 8).

Table 8

Index of Labour Productivity by Economic Sectors During the Recovery Period: 1999-2003

	1999	2000	2001	2002	2003	Annual rate of growth
Agriculture	100.0	97.2	104.4	112.7	131.9	7.16
Industry	100.0	109.6	114.2	110.5	131.1	7.01
Services	100.0	97.4	104.8	112.2	117.7	4.15
Construction	100.0	69.7	88.7	87.6	93.4	-1.68
Trade	100.0	70.3	71.0	68.6	75.1	-6.92
Transport	100.0	132.8	144.8	163.6	162.3	12.87
Public admin	100.0	106.8	110.0	127.6	128.6	6.50
Others	100.0	126.9	155.2	166.9	169.3	14.06
Total	100.0	98.9	105.8	112.1	129.4	6.65

V. Employment, Productivity and Wages

Even though employment failed to respond to growth of production, this does not mean that the labour force did not gain from recovery in economic growth. Their gain took the form of higher wages, which did respond to rising productivity of labour. Real wages had already started to rise from the mid-1990s. The Russian crisis put a halt to that trend temporarily, but since 2000 real wages have been surging ahead at a remarkable pace. From 1996 to 2003, the average real wage for the economy as a whole increased at the rate of 7.7 per cent per annum (Table 9). In the recovery period since 1999, it has galloped ahead at the rate of 14.7 per cent (Table 10).

Table 9

Annual rate of growth Agriculture 5.35 Industry 6.34 Manufacturing 6.15 Mining/quarry 4.37 Utilities 6.88 Services 5.75 Construction 7.83 Trade 4.36 Transport 10.29 Finance 6.12 Real estate 7.12 Health/educ 4.14 Public admin 4.20 Others 5.01 7.69 Total

Index of Real Wages by Economic Sectors (1996 = 100): 1996-2003

	1999	2000	2001	2002	2003	Annual rate of growth
Agriculture	100.0	111.2	126.4	150.6	170.6	14.3
Industry	100.0	100.5	110.6	127.7	144.9	9.7
Manufacturing	100.0	105.0	114.5	130.4	145.9	9.9
Mining/quarry	100.0	95.1	114.8	143.7	150.4	10.7
Utilities	100.0	88.4	99.2	120.7	145.9	9.9
Services	100.0	97.3	120.2	147.7	168.1	13.9
Construction	100.0	96.8	111.3	130.1	165.8	13.5
Trade	100.0	95.2	102.4	133.6	151.7	11.0
Transport	100.0	106.6	131.4	153.4	189.0	17.3
Finance	100.0	107.4	94.5	101.4	103.2	0.8
Real estate	100.0	97.0	115.9	135.0	154.0	11.4
Health/educ	100.0	96.8	119.6	157.6	185.8	16.8
Public admin	100.0	90.1	117.3	149.0	151.1	10.9
Others	100.0	96.2	115.5	142.1	169.2	14.0
Total	100.0	102.2	123.8	150.1	173.0	14.7

Index of Real Wages by Economic Sectors During the Recovery Period: 1999-2003

The rise in real wages has occurred across all the major sectors of the economy. Over the longer period from 1996 to 2003, real wages have increased at the rate of 5.4 per cent per annum in agriculture, 6.3 per cent in industry and 5.8 per cent in services (Table 9). The rise in real wages has thus been fairly uniform across the sectors. Some variation is observed, however, among the sub-sectors within services. Thus transport and construction have seen real wages growing at the rates of 10 and 8 per cent respectively, while at the other extreme trade and public sector services such as health, education, and public administration have experienced the slowest growth of real wages – at just over 4 per cent per annum.

The variations notwithstanding, the fact remains that real wages have gone up everywhere. What is also remarkable is the fact that the growth of real wages seems to have outpaced the growth of labour productivity. Thus while the average real wage for the economy as a whole increased at the rate of 7.7 per cent over the period from 1996 to 2003, labour productivity grew at the rate of only 4.8 per cent during the same period (Tables 7 and 9). Looking separately at the sectors of productivity. Only in services did the opposite happen. However, during the recovery period since 1999, all three sectors saw real wages growing faster than productivity (Tables 8 and 10).

Inter-sectoral variation in real wages

Although real wages have grown in all sectors of activity, the situation in agriculture remains of special concern. Agricultural real wages are the lowest among all the sectors, and the gap has slightly widened over time. Already in 1996, real wage in agriculture was only two-thirds of the national average; by 2003 it had come down to close to half (Table 11).

Industry has all along offered the highest wages, followed by services. Agricultural wage is some 60 per cent below the industrial wage and almost 40 per cent below average wages in the service sector. Within the service sector, the lowest wage obtains in health and education services; but even that was 20 per cent higher than agricultural wages in 2003. The highest real wages, which are found in the financial services sector, was five times as high as agricultural wages.

To a large extent, these inter-sectoral variations in real wages reflect corresponding differences in labour productivity. Agriculture has been characterised by the lowest level of labour productivity among all the major sectors of the economy, and the gap with the national average has slightly widened over time. In 1996, labour productivity in agriculture was 73 per cent of the national average; by 2003, it had come down to 69 per cent (Table 12).

Index of Relative Real	Wages by Economic Sectors (at 1996 prices):
	1996-2003

	1996	1997	1998	1999	2000	2001	2002	2003
Agriculture	65.2	61.5	56.3	56.6	61.9	57.9	57.0	56.0
Industry	155.6	165.4	169.3	169.7	167.8	151.9	145.0	142.5
Manufacturing	150.8	160.3	159.3	161.2	166.6	149.3	140.7	136.4
Mining/quarry	164.7	163.1	153.7	151.8	142.0	140.9	145.9	132.3
Utilities	181.3	194.5	213.6	203.4	176.9	163.3	164.3	172.0
Services	113.7	110.3	109.0	102.9	98.6	100.1	101.7	100.3
Construction	132.6	149.0	144.5	139.3	132.7	125.4	121.3	133.9
Trade	111.8	110.7	103.4	102.0	95.6	84.5	91.2	89.7
Transport	138.0	147.6	150.5	148.8	156.0	158.1	152.7	163.0
Finance	362.6	375.4	453.1	547.2	578.1	418.4	371.1	327.2
Real estate	132.1	129.8	134.1	142.6	136.1	133.7	128.8	127.3
Health/educ	85.0	78.8	73.1	62.5	59.5	60.4	65.9	67.3
Public admin	158.3	149.0	156.5	143.6	127.3	136.3	143.2	125.7
Others	89.8	84.7	90.6	76.9	72.7	71.8	73.1	75.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

As in the case of real wages, labour productivity is the highest in industry, followed by services, with agriculture a distant third. In 2003, labour productivity in agriculture was only one-third of that in industry and two-thirds of average productivity in the service sector. Correspondingly, agricultural wages were 40 per cent of industrial wages and 60 per cent of wages in services. Within services, the lowest labour productivity is observed in public administration and the highest in financial services – the same pattern as in the case of real wages.

Index of Relative Labour Productivity by Economic Sectors: 1996-2003

	1996	1997	1998	1999	2000	2001	2002	2003
Agriculture	73.30	83.47	75.83	67.37	66.21	66.54	67.73	68.68
Industry	224.36	199.71	188.24	185.12	205.22	199.91	182.40	187.65
Services	93.02	89.96	102.91	116.97	115.21	115.93	117.06	106.38
Construction	131.68	114.46	92.65	114.05	80.32	95.68	89.13	82.37
Trade	63.22	57.23	93.85	167.58	119.17	112.47	102.58	97.22
Transport	161.39	151.49	137.72	132.33	177.67	181.21	193.04	165.99
Public admin	86.89	90.30	90.15	69.79	75.34	72.56	79.43	69.40
Others	130.94	129.88	146.89	169.57	217.59	248.86	252.30	221.87
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

But there were some anomalies too. As noted earlier, wages generally rose faster than productivity, and this was especially true for industry. Secondly, while the service sector enjoyed the most consistent as well as the fastest growth of productivity compared to both agriculture and industry, this difference was not reflected in the relative growth of real wages. For instance, between 1996 and 2003, labour productivity grew in services almost three times faster than productivity in industry, and yet average real wages in services grew at a somewhat lower pace than industrial real wages (5.8 per cent per annum in services as against 6.3 per cent in industry). These anomalies suggest that the correspondence between productivity and wages was less than perfect. In general, there was a greater degree of correspondence between the levels of productivity and wage – both over time and across sectors – than between their rates of growth over time.

The overall picture that emerges from the preceding analysis is one of colossal failure to raise the level of employment in the Moldovan economy, even in the recent period when output has begun to recover. Standard unemployment figures do not reflect this failure, thanks to massive outmigration and growing proportion of economically inactive population. But sheer stagnation of employment levels and the existence of severe underemployment bear adequate testimony to this failure.

To some extent, the failure of employment to recover fully even during a period of output recovery is expected in a transition economy. Like all ex-communist countries, Moldova carried excess workers in all sectors of the economy before the transition began. As market forces have begun to play a greater role in the allocation of resources, it is only to be expected that enterprises will shed some of this excess labour. As a result, employment growth is likely to lag behind output growth for some time. But what is especially worrying for Moldova is that employment has hardly grown at all. In fact, agriculture – the largest employer – has lost labour, and this loss has not been compensated by corresponding gain elsewhere in the economy. As a result, to tendency to migrate out of the country has continued unabated, which has served to keep the rate of open unemployment down, but at the cost of various social and personal costs that massive outmigration entails.

The process of lagging employment has of course resulted inevitably in rising labour productivity. And thanks to the operation of market forces, rising productivity has in turn led to rising real wages in all sectors of the economy. Obviously, the fortunate few who have managed to retain or find employment have gained as a result. This, together with the fact that the government has made a conscious attempt to protect the pensioners, has resulted in a slight of reduction of poverty in the recent years.

But it is highly improbable that a process of poverty reduction based on static employment and rising wages can be sustained for long. If the demand for labour cannot be stimulated, then either wages will cease to rise (and any productivity gains will be enjoyed mainly by the owners of capital), or if wages do rise the benefit will accrue mainly to a static pool of workers many of whom would have already come out of poverty through past increases in real wages. For the current poor to benefit from the growth process, it is essential to raise the overall level of employment. This is partly a matter of raising the overall level of production. It is important to bear in mind that Moldovan transition is far from complete – it's current level of output is still well below the pre-transition level. Completing the transition process and climbing back to the pre-transition level of output as quickly as possible is a task of the first order priority. Since it is arguable that the Moldovan economy has by now shed most of the excess labour it had inherited from its communist past, once the output recovers to the pre-transition level, any further increase in output will inevitably lead to enhanced demand for labour. Analysis of firm-level data shows that there exists a positive relationship between labour productivity and employment creation in Moldova – i.e. firms that enjoy higher levels of labour productivity are also the ones that create more jobs (Rutkowski 2004). At the present moment, only a small number of firms are doing that – mainly the newly emerging private sector firms (as distinct from the privatised ones) that are small or very small in size and operate mainly outside agriculture. What is needed is to spread this productivitydriven employment-generation process across all sectors and all types of firms. This in turn calls for raising aggregate demand across the economy so that firms of all types are encouraged to expand their output through productivity improvement, leading to enhanced demand for labour.

Viewed from this perspective, the employment problem of Moldova is not primarily a problem of the labour market in a narrow sense, but a problem of incomplete and painfully slow transition of the economy as a whole. In consequence, the main plank of an employment policy needed at the current state of the Moldovan economy can be said to be nothing other than the whole gamut of policy actions – at macro, sectoral and micro levels – that are needed to accelerate the transition process. What those policy actions ought to be at the macro and sectoral levels has been discussed extensively elsewhere in this report. In the remainder of this chapter, attention is focussed on a couple of aspects of labour market where appropriate actions will help the cause of employment for the poor while the general problem of transition is being taken care of by macro and sectoral policies.

VI. Structure of Job Creation in the Formal Sector⁵

Moldova has experienced a slow rate of firm creation, even by the standards of other transition countries. What is more worrying, the rate of firm creation has gone down in the recent years – it plummeted in the aftermath of the Russian crisis and never recovered from that. In 1997, new firms were being created at the rate of 10-14 per cent (depending on the legal status of the firm); by the year 2002, the rate had come down to 5-7 per cent (Table 13). These figures can be contrasted with the average rate of 16-18 per cent prevailing in the transition economies of Central Europe. In neighbouring Romania, the rate of firm creation was as high as 20 per cent or more. (Eurostat 2000).

Table 13

Firm category	1997	1998	1999	2000	2001	2002
Firm openings						
Natural persons	14.3	11.2	4.1	3.4	3.6	4.8
Legal Persons	10.3	9.3	8.1	8.1	7.8	7.4
Firm closures						
Natural persons	1.6	1.6	0.8	2.4	2.8	2.5
Legal Persons	1.6	1.1	0.8	2.4	0.7	0.5
Firm turnover						
Natural persons	15.9	12.8	4.9	5.8	6.4	7.3
Legal Persons	11.9	10.3	8.9	10.5	8.4	7.9

Firm Openings and Closures: 1997-2002

Source: Rutkowski (2004)

⁵ This section draws heavily on the analysis of firm-level data by Rutkowski (2004).

It is noteworthy that the rate of firm closure was not particularly high. In fact, it was one of the lowest among the transition economies. It is, therefore, evident that sluggishness in the creation of new firms rather than loss of jobs through closure of existing firms has contributed more to the stagnation in employment.

The second factor that has had a bearing on employment is the expansion and contraction of existing firms. Firm-level data for 2001 show that expanding firms created jobs at a slower rate than the contracting firms lost them (Table 14). While average employment expanded by 13 persons in the expanding firms, it declined by 16 persons in the contracting ones. The resulting negative effect on employment was exacerbated by the fact that the contracting firms actually outnumbered the expanding ones by the ratio of 4 to 3.

Table 14

Firm category	Share in firms (%)	Share in employment (%)	Average firm size (persons)	Change change in employment (persons)
All firms	100.0	100.0	57.7	-2.9
Contracting	42.0	61.7	84.7	-16.1
Stable	28.5	6.6	13.4	0.0
Expanding	29.5	31.7	61.9	13.0

Expanding and Contracting Firms: 2001

The preponderance of contracting firms over the expanding ones, together with the fact that the contracting firms shed workers more on the average than the expanding ones employed them, has meant that in the formal sector of Moldova job destruction has outpaced job creation in the continuing firms. Thus in the year 2001, while the expanding firms added 6.7 per cent to total employment, the contracting firms subtracted 11.2 per cent. The net result was that employment shrank by 4.5 per cent in the formal sector.

The relative preponderance of contracting firms is not unique to Moldova – it is shared by other transition economies as well. The problem, however, is that the imbalance of is much sharper in Moldova, owing to an atypically low proportion of expanding firms. For example, while the proportion of contracting firms is virtually the same in Moldova as in Lithuania, the proportion of expanding firms is only 30 per cent in Moldova as against 37 per cent in Lithuania. Thus as in the case of firm turnover so in the case of changing firm size, it is not so much the severity of the downside as the sluggishness of the upside – i.e., slow rate of new firm creation and very low proportion of expanding firms – that has proved the main drag on employment in Moldova.

In short, there is nothing atypical about the extent of job destruction that has been occurring in the recent years in Moldova – in the form of either closure of firms or contraction of the surviving ones. What is atypical, however, is the slow rate of new job creation – either in the form of creation of new firms or expansion of the existing ones. Job destruction, however painful in the short run, is an essential part of resource reallocation that has to occur in a transition economy so as to correct the distortions of the centralised economic system of the past. The fact that this is happening in Moldova not at an atypically high rate is a matter of some comfort. What is worrying, however, is the fact that not enough new jobs are being created to complete the process of necessary resource reallocation. This has deleterious consequences for both efficiency and equity. It leads to loss of output on the one hand and continued hardship of the working class on the other.

Clearly, there are impediments to the creation of new jobs – new firms find it hard to emerge and the existing ones find it hard to expand. The identification of the major impediments is an essential pre-requisite of devising an appropriate employment policy. With this aim in view, Rutkowski (2004) has explored alternative hypotheses to explain the slow rate of job creation in Moldova. In particular, he asked how big a role was played by labour market rigidities (as reflected in the costs of hiring and firing) – a factor that has been held widely responsible for relatively slow pace of job creation in Western Europe. He argues that since the rate of job destruction in Moldova is no less than in other transition economies, there is no reason to believe that the costs of hiring and firing have posed a particularly severe problem in creating new jobs. On paper, of course, there exist quite stringent Labour Codes that make dismissals rather difficult – especially, by requiring approval of trade unions. It also appears from surveys of employers' opinions that they consider the procedural and monetary costs of dismissals an important reason for continued overstaffing – and hence for reduced incentive to create new jobs (ProEra 2002). However, the fact of a high rate of job destruction would seem to suggest that the provisions of the Labour Code are honoured more in breach than in implementation.

In addition to labour market rigidities, Rutkowski also examined the potential role of other factors such as access to credit, export orientation, ownership structure, capital density, investment, and so on, and found no systematic relationship between them and a firm's ability to create new jobs. While allowing for the possibility that any genuine relationship may well be masked by a high degree of 'noise' in the data, he comes down to the hypothesis that the main bottleneck in the creation of new jobs lies in an unfavourable regulatory environment resulting in highs costs of doing business. This conclusion accords well with the prevailing perception in Moldova regarding the problem of governance in the sphere of business regulations. Rutkowski also presents concrete evidence on the presence and magnitude of a range of regulatory impediments.

The notion that the regulatory environment is not especially friendly to business in Moldova cannot perhaps be disputed. But question remains regarding the relative significance of its impact. Rutkowski's own cross-country evidence suggests that while the costs of doing business in Moldova are far higher than in Western Europe, they are not out of line with the rest of the transition economies. The cost of doing business cannot, therefore, be the major explanation of Moldova's relative massive failure to create new employment compared with other transition economies.

One problem with Rutkowski's otherwise very illuminating analysis is that he completely ignores the importance of the demand side in explaining the slow rate of employment creation in Moldova. Supply-side factors, such as costs of doing business, have certainly played a part and reducing these costs must form an integral part of any comprehensive reform package. But Moldova's failure relative to other

transition economies cannot be fully understood without bringing on the demand side. Domestic demand has severely contracted in Moldova due to a sharp contraction in the real income of its people, which is recovering only slowly. And foreign demand has also collapsed in the wake of the loss of the Soviet market, which has yet to be compensated by penetration into new export markets. In the face of the resulting demand constraint, it is hardly surprising that new firms find it hard to emerge and the existing firms find it hard to expand. It is this constraint of demand that has to be addressed on a priority basis if the rate of new job creation is to outpace the high rate of job destruction that is inevitably taking place as part of the process of transition.

Since job creation rates may vary among different types of firms, it is important to know which types of them are more adept at creating jobs. The evidence for the year 2001 indicates the following (Table 15).

First, all three major sectors of the economy – viz. agriculture, industry and services – are creating less jobs than they are destroying. But the problem is the most severe in agriculture and rather negligible in services. Although services can be said to be almost holding their own, the worrying fact is that in most other transition economies services have provided a buffer for absorbing the labourers displaced elsewhere in the process of restructuring, but this has not happened in Moldova.

Second, ownership matters. Three types of ownership may be distinguished – viz. state-owned, collectives, and private. Collectives here refer to mainly formerly state-owned enterprises that have been either fully or partially privatized. Private firms refer privately owned firms that have appeared *de novo*. It is evident that in both state and collective firms, the rate of job destruction exceeds the rate of job creation. Only the private firms are the net creators of jobs in Moldova. The problem, however, is that the private firms account for less than 10 per cent of the workforce outside agriculture – hence the slow overall rate of job creation.

Third, firm size matters too. Large and medium size firms are characterized by negative net job creation. Only small and micro-enterprises – and especially the latter – create more jobs than they destroy. These smaller firms, however, account for only about 16 per cent of the work force in the non-agricultural sector.

Sector	Gross job creation	Gross job destruction	Net job creation	Share in employment (%)	
All ownership units					
State	3.0	8.4	-5.4	30.0	
Collective	7.0	13.2	-6.2	60.9	
Private	16.5	8.6	8.0	9.1	
Non-agricultural sector					
State	2.6	7.0	-4.5	42.1	
Collective	8.9	11.6	-2.7	46.4	
Private	11.6	7.5	4.1	11.4	
Firm size					
Micro (1-10)	37.3	9.5	27.9	3.4	
Small (11-50)	13.5	12.6	0.8	12.9	
Medium (51-250)	6.8	15.4	-8.6	34.0	
Large (250+)	2.8	9.0	-6.2	49.7	
Sector					
Agriculture	3.8	14.0	-10.2	34.0	
Manufacturing	7.4	11.9	-4.5	33.	
Services	9.0	9.2	-0.2	32.5	

Source: Rutkowski

In short, the most dynamic firms in terms of job creation would seem to be the newly emerging small and micro enterprises in the private sector outside agriculture. These firms also happen to enjoy much higher levels of labour productivity than the larger ones – thereby combining the capacity to create more output along with the capacity

to create more jobs (Rutkowski 2004, pp 33-34). Experience from the rest of the world shows that this type of firms faces discrimination of multifarious nature – in terms of access to bureaucracy, credit, market, and so on. As a result, the cost of doing business is likely to be particularly severe for them. The fact that they are nonetheless the only source of net job creation at the present moment in Moldova indicates the potential of entrepreneurship that can be harnessed once market forces are unleashed. This potential ought to be nurtured by pursuing an active policy of assisting them with credit, technical services, and market information, combined with removal of overbearing bureaucratic interference.

VII. Employment and Education

While creating ample opportunities for productive employment is necessary for enabling the poor to escape poverty, it is not sufficient. The poor will have to be capable of availing those opportunities. For this, they will need to have the skills and assets that are required for engaging in more productive work than they have been hitherto. Education is one such asset. And there are reasons to worry that if the current trends continue the poor of Moldova may not be able to acquire this asset in sufficient amount to enable them to graduate to higher levels of productive work even if such work became available.

One of the legacies of the communist era is that basic education is available free to the entire population. As a result, the poor have almost as much basic schooling as do the non-poor. But significant difference exists at higher levels of education and there is evidence to suggest that this difference matters when it comes to gaining access to productive employment.

Disparities between the poor and the rich begin to emerge towards the end of the compulsory cycle and widen at higher levels; moreover these disparities seem to have widened in recent years (World Bank 2004, pp13-14). The main reason for widening disparity lies in the fact that as public expenditure on education has fallen private payments have become a more important source of finance, which inevitably puts the poor at a disadvantage. According to one estimate, the money spent by households for

each student enrolled at the upper secondary level amounts to about a third of the per capita consumption of a household at the poverty line. The situation is much worse for university education. For each student enrolled in the University, cost per student is nearly 25 per cent higher than the per capita consumption level of a household at the poverty line (World Bank 2004, p.15). If this situation continues, the poorer segment of the population will increasingly fall behind in the acquisition of higher education.

This will have serious consequences for the poor people's prospects of escaping poverty through the route of productive employment. Evidence shows that while the relationship between poverty and school education is not very strong in Moldova, the relationship between poverty and higher education certainly is (World Bank 2004). Thus in the year 2002 households with higher education had a significantly lower incidence of poverty than those with just school education. Moreover, between 1997 and 2002, those with higher education were able to reduce their poverty more. By contrast, those with less than college education were found more among the chronically poor. It has been estimated that about a quarter of households in Moldova stayed poor throughout the period from 1997 to 2002 – they are the chronically poor. And this group is disproportionately represented by households whose heads have less than college education.

Clearly, it is the well-educated people who have been able to escape poverty better by availing themselves of whatever opportunities arose to gain access to more productive and well-paid jobs. But as noted above, these well-educated people belong increasingly to the richer segment of the population as poor households are falling increasingly behind in the acquisition of higher education. If this trend continues, simply creating opportunities for productive employment will not help the poor as they will not have the necessary qualification to take up those opportunities. The new opportunities will be taken up mainly by the better off segment of the population. The government of Moldova must take corrective action to reverse the trend of increasing inequality in the access to higher education as an integral part of a pro-poor employment strategy.

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