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# Labour market states, mobility and entrepreneurship in transition economies

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## **Abstract**

This paper examines the different strategies adopted by individuals in transition economies to cope with labour market restructuring. Using micro-data from seven countries at different stages of transition, we focus on “active” coping strategies, in particular mobility and entrepreneurship. Our results show that there is significant mobility across labour market states in most countries, but little inflow into entrepreneurship from unemployment or inactivity. Entrepreneurship is a high-reward strategy and is more significant in the advanced transition countries of central Europe, where entrepreneurs tend to be male, middle-aged, and more educated than other members of the labour force. However, in the CIS, there is little difference in the demographic profile of entrepreneurs compared to the rest of the labour force.

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*Keywords:* mobility; entrepreneurship; transition

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# 1. INTRODUCTION

The transition from a command to a market economy has profoundly affected the lives of people in the countries of central and eastern Europe and the Baltic states (CEE) and the Commonwealth of Independent States (CIS). For many people, the first decade of transition has been traumatic, with deep recessions, widespread closures of enterprises and resulting redundancies. Double-digit unemployment is prevalent throughout the region, even in a country such as Poland that has enjoyed rapid economic growth for several years.

This paper focuses both on the different labour market states that individuals belong to, and the flows between different states. Chart 1 presents a schematic representation of the different labour market states, highlighting that flows in practice are likely to be much more complex than the stylised two-sector reallocation of labour from state to private sector with unemployment as a buffer zone (Aghion and Blanchard, 1994; Boeri, 1999; Gavin, 1996). One point worth emphasising for transition economies is that the distinction between different categories is often blurred, and the allocation of an individual to one category rather than another may not be clear-cut. Many individuals have adopted passive coping strategies to survive, such as relatively low-productivity subsistence farming for the unemployed and informal multiple-job holdings for the under-employed. This aspect of transition has received increasing attention over recent years, given its overlap with policies aimed at alleviating poverty (World Bank, 2000).<sup>1</sup>

Our paper focuses on more active adjustment strategies to transition by examining mobility across labour market states and entrepreneurship. We assess the extent of movement across jobs and the type of employment obtained by those who were previously unemployed or inactive. The paper also focuses on one choice: “active” self-employment or entrepreneurship. We examine the profile of entrepreneurs and the extent to which this profile differs from the rest of the labour force.

Mobility and entrepreneurship issues in transition economies are generating increasing attention in the literature.<sup>2</sup> Few studies, however, have attempted a cross-country comparison. One example is Earle and Sakova (2000) who examine the effect of predicted earnings differentials on entry into self-employment in six countries: Bulgaria, Czech Republic, Hungary, Poland, Russia and the Slovak Republic. We believe that our paper is the first one based on labour force surveys for a range of countries that includes a substantial number of CIS countries as well. In addition to Poland, Hungary and Croatia, our cross-country analyses include Armenia, Kyrgyzstan, Russia and Ukraine. Not only does this give us a wide geographical spread, but it also covers countries at very different stages of transition, as measured by the EBRD transition indicators.<sup>3</sup>

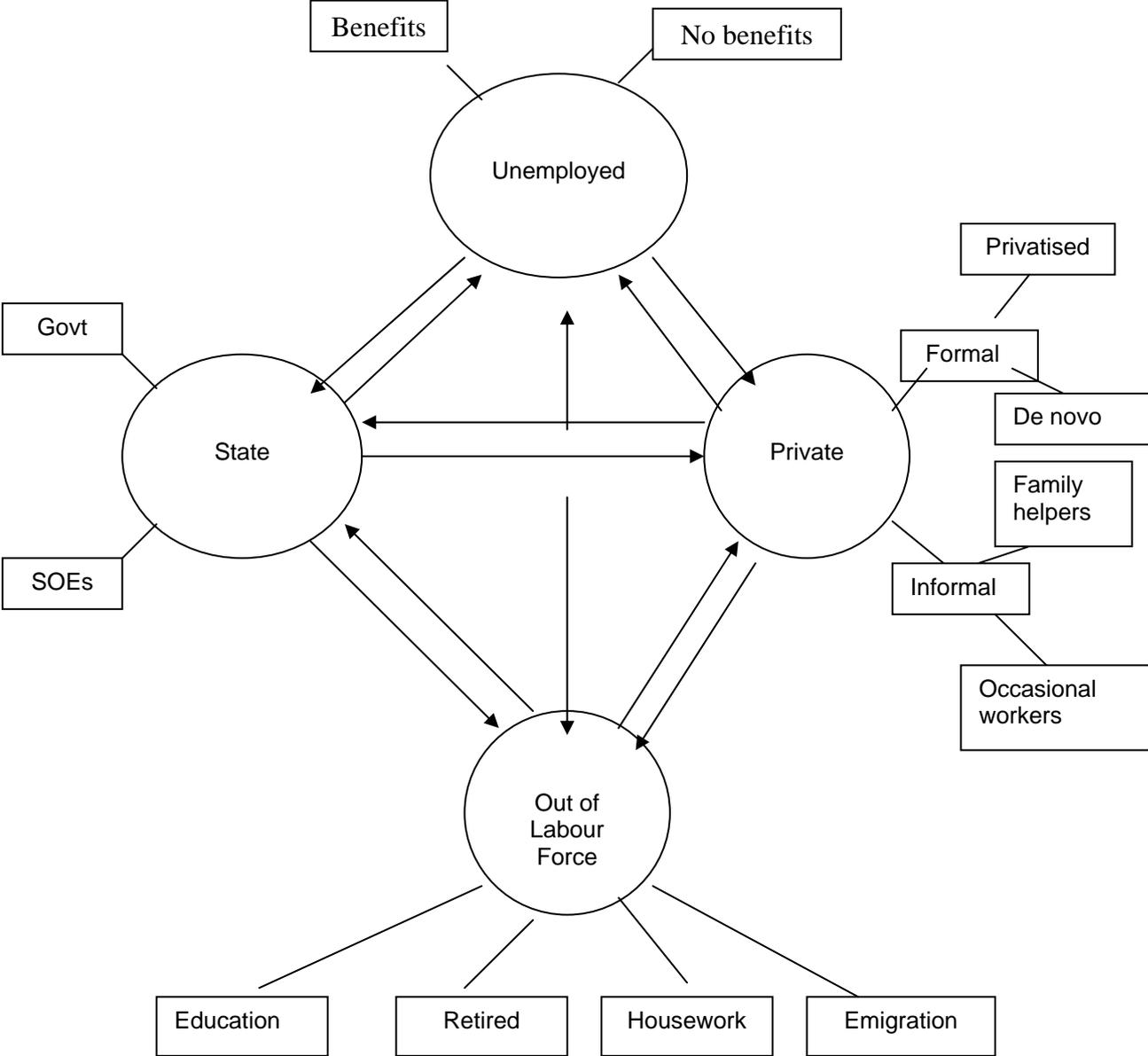
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<sup>1</sup> See also EBRD (2000), Chapter 5.

<sup>2</sup> Recent examples include Lehmann and Wadsworth (1999) on Poland, Scharle (2000) on Hungary, and Sabrianova (2000) on Russia.

<sup>3</sup> See EBRD (2000), Table 2.1.

Chart 1: Labour market flows



Our main results are as follows: we find that there is substantial mobility across sectors in transition economies, comparable to estimates of mobility from Western economies. However, there is very limited mobility in some countries, Russia in particular, from unemployment or inactivity, suggesting that barriers to entry remain high. The degree of entrepreneurship is more significant in advanced transition countries. In Hungary and Poland, those who are self-employed or employing others tend to be in the age range 36-50, are more likely to be male, and are usually more educated than others in the labour force. In contrast, the demographic profile of entrepreneurs in the CIS is not significantly different from the rest of the labour force, suggesting that entrepreneurship may be more of a coping strategy in this part of the region.

The paper is organised as follows. Section 2 describes the main sources of the data. Section 3 presents the findings on mobility, labour market states, and flows from unemployment or inactivity to types of employment. Section 4 presents country-level regressions on the demographic profile of entrepreneurs and data on returns to entrepreneurship. A final section provides concluding remarks.

## 2. DATA

The empirical findings are based on labour force and household surveys from selected CEE and CIS countries. Table 1 provides some basic information on our data. The choice of country coverage was dictated partly by data availability but also by the desire to cover countries from different geographical locations and at different stages of transition. Hungary and Poland represent advanced transition countries, both in the first wave of EU accession negotiations. Croatia has made slower progress in reform and has not yet been formally invited to start EU accession negotiations.<sup>4</sup> Russia and Ukraine are the largest CIS economies, while Armenia and Kyrgyzstan represent smaller economies in the Caucasus and Central Asia respectively.

**Table 1: Data sources and description**

Country	Type of data	Year	Sample size
Armenia	Living Standards Measurement Survey	1999	15,632
Croatia	Household Budget Survey	1998	18,896
Hungary	Labour Force Survey	1999	31,324
Kyrgyzstan	Living Standards Measurement Survey	1997	13,630
Poland	Labour Force Survey	1996	53,593
Russia	Longitudinal Monitoring Survey	1998	10,222
Ukraine	Household Budget Survey	1999	26,156

The analysis that follows is based on a careful compilation of these different country datasets along similar criteria. In addition to conventional individual data from labour force surveys, household living standard data were available for Armenia, Croatia, Kyrgyzstan and Ukraine. Expenditure and consumption data also were available for Russia.

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<sup>4</sup> Croatia signed a Stabilisation and Association Agreement with the EU in October 2001.

### 3. MOBILITY AND LABOUR MARKET STATES

#### 3.1 MOBILITY

The analysis of mobility across countries is complicated by the need to combine information from different questions for each country, and differing questions related to this topic across countries. The mobility categories reflect questionnaire-specific derivations rather than responses to one question. Based on a comparison of individual responses to similar questions across countries regarding current status of employment and changes over the past year, “employed workers” are those individuals that reported themselves as employed both at the end of the period and throughout the preceding year. This category therefore includes individuals that were employed at the same workplace over the preceding 12 months as well as those that changed place of work (job-to-job mobility), though additional questions that allow the latter component to be separated out are only available for some of the countries. “Inflows” are restricted to those individuals that were unemployed or inactive at the beginning of the year, but no longer so by year end. Conversely, “outflows” correspond to those individuals that reported some form of employment at the beginning of the year but are unemployed or inactive at the end of the period.

**Table 2: Outflows and inflows to employment**

(% of labour pool)

	ARM	CRO	HUN	KYR	POL	RUS	UKR
Employed workers	44.30	39.94	43.82	62.12	45.40	46.51	41.76
(job-to-job mobility)	(2.21)		(2.57)		(2.45)	(5.07)	
Movers in: in-flows	2.11	7.24	4.27	8.22	4.69	3.21	5.73
Movers out: out-flows	3.46	4.50	2.36	3.28	4.20	7.02	7.33
Permanently out of employment	50.13	48.32	49.56	26.38	45.71	43.26	45.18

Source: See Table 1.

Table 2 highlights substantial mobility across countries between employment and unemployment or inactivity. Inflows from unemployment or inactivity across countries on average account for 5.1 per cent of the labour force, while outflows to unemployment or inactivity on average account for 4.6 per cent. Cross-country comparisons are problematic given differences in the year of survey and in derived definitions, and ideally one should also control for other important differences across countries such as the position on the business cycle. Nevertheless, it is noteworthy that the only countries with net outflows from employment are Armenia, Russia and Ukraine.

In order to compare these mobility numbers to others available in the literature, we calculate a measure of job turnover, namely the sum of job-to-job mobility and the inflows from unemployment and inactivity, controlled for the size of the employed pool. According to this measure, turnover is higher in Russia than in Hungary and Poland, with 14.3 per cent of the Hungarian and Polish workforce in new jobs over the relevant one-year period and 16.7 per cent of employed Russians in a similar situation. The comparable turnover number for Armenia is 9.3 per cent. The higher Russia figure is driven by higher job-to-job flows. Lehmann and Wadsworth (1999) report similar results for Poland (14.3 per cent) but a higher turnover for Russia (19.7 per cent), though the latter is based on 1996 data. On this measure,

the pace of reallocation is roughly similar in transition economies to than in advanced market economies, for example, Britain (18.2 per cent).<sup>5</sup>

A critical additional dimension in terms of the income-generating impact of mobility is the specific type of employment that “movers in” are able to secure. In order to explore in greater detail the extent to which inflows into employment result in different types of employment, we next categorise the labour force by labour market states. We then examine inflows to employment by these labour market states.

### 3.2 LABOUR MARKET STATES

The assignment of individuals to labour market states is more straightforward than the assignment to mobility categories. It involves a similar decomposition across countries for employed workers into five categories defined by crossing self-reported employment status with sources of earnings. While the classification of “full-time” and “part-time” employees generally mirrors self-reported status, self-employed individuals have been carefully disaggregated into active “entrepreneurs” (employers and self-employed with self-generated income) versus “farmers” (self-reported farmers plus self-employed with agriculture-only income) and “unpaid family workers” (self-declared as employed, not receiving formal wage or self-generated income).

**Table 3: Basic employment categories**

(% of labour force)

	ARM	CRO	HUN	KYR	POL	RUS	UKR
Share of employed	73.72	88.39	92.94	96.87	88.61	86.15	77.51
Of which:							
Full-time	24.25	62.07	62.65	22.04	58.23	70.89	65.53
Part time/temporary	7.44	4.14	15.91	32.21	4.28	8.35	8.69
Entrepreneurs	4.33	5.02	10.86	5.89	8.58	5.42	1.09
Farmers	8.55	7.01	1.66	7.20	12.67	0.28	1.43
Unpaid family workers	29.15	10.15	0.66	29.53	4.85	1.35	0.20
Unemployed	26.28	11.61	7.06	3.13	11.39	13.85	22.49

Source: See Table 1.

Table 3 reveals the wide variation across countries in labour market states. Unemployment, for instance, is significantly higher in Armenia and Ukraine, and also higher in Russia than in Croatia, Poland and Hungary. Regarding the distribution of employed across types of employment, Armenia and Kyrgyzstan have a significantly lower share of full-time employees than other countries and a correspondingly larger share of individuals employed as unpaid family workers, reflecting a lower level of development of formal labour markets. Entrepreneurship, on the other hand, is significantly higher in Hungary (10.9 per cent of the labour force) and Poland (8.6 per cent) than in the less advanced transition countries.

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<sup>5</sup> See Lehman and Wadsworth (1999) for British figures and Farber (1997) for comparable data for the United States.

### 3.3 MOBILITY INTO EMPLOYMENT

Table 4 decomposes inflows from unemployment or inactivity into the different states of employment for the countries for which this breakdown is possible. By country, mobility into employment reflects the combination of both supply and demand-side factors, both the relative attractiveness and the relative ease of entry into the different types of employment. Across countries, most successful movers out of unemployment or inactivity end up as full-time employees (on average 62 per cent of movers). Again, Armenia appears as an outlier with its lower level of development of formal labour markets. The relatively low numbers for entrepreneurship indicate that this type of employment is a less common choice for the unemployed or inactive, especially in Russia. This may be driven, among other factors, by high barriers to entry or by relatively low remuneration on average for this type of work. In the case of Armenia, the relatively higher mobility into entrepreneurship may be facilitated by high external remittances that may subsidise entry into more risky pursuits, in addition to supporting a much larger share of family-based work.

**Table 4: Inflows from unemployment and inactivity**

<b>LABOUR MARKET STATES</b>	<b>POL</b>	<b>HUN</b>	<b>RUS</b>	<b>ARM</b>
Full-time employees	63.27	61.34	83.04	39.82
Part-time employees	24.75	27.55	12.93	22.57
<b>Entrepreneurs</b>	<b>6.21</b>	<b>8.68</b>	<b>1.43</b>	<b>9.73</b>
Farmers	2.61	1.57	0	1.33
Family workers	3.16	0.86	2.60	26.55

Source: See Table 1.

In order to understand better some of the underlying determinants of mobility into entrepreneurship, the next section examines in greater detail the profile of entrepreneurs and returns to entrepreneurship.

## 4. THE PROFILE AND RETURNS TO ENTREPRENEURSHIP

### 4.1 THE PROFILE OF ENTREPRENEURS

To what extent is the profile of entrepreneurs significantly different from the rest of employees? Depending on the characteristics of entrepreneurs relative to the rest of the labour force, it is possible to gain some insight into whether entrepreneurship in transition economies has been a coping strategy for the unskilled or a creative labour market choice for the more highly skilled.

**Table 5: The profile of the entrepreneurs in the labour force**  
(Standard errors in parentheses)

Entrepreneurs	POL	CRO	RUS	KYR	UKR	ARM
<b>Female</b>	-0.031*** (.003)	-0.015*** (.004)	-0.007 (.005)	0.002 (.004)	-0.003 (.002)	-0.012*** (.003)
<b>Age 26-35</b>	0.039*** (.006)		0.004 (.009)	0.108*** (.007)	0.005 (.004)	0.003 (.006)
<b>Age 36-50</b>	0.444*** (.005)	0.017*** (.005)	0.009 (.008)	0.005 (.006)	0.001 (.003)	0.005 (.005)
<b>Age 51+</b>	0.082*** (.009)	0.012*** (.008)	-0.002 (.009)	-0.001 (.007)	-0.012*** (.003)	-0.001 (.005)
<b>Edu secondary</b>	0.033*** (.005)	0.027*** (.007)	-0.002 (.025)	0.003 (.006)	0.012** (.005)	0.003 (.004)
<b>Edu voc/higher</b>	0.020*** (.004)	0.096*** (.050)	-0.004 (.024)	0.012 (.010)	0.014*** (.006)	0.013** (.007)
<b>Edu university</b>	0.022*** (.006)					
<b>Chi-square</b>	337.88	47.63	4.54	8.13	40.68	25.75
<b>Log likelihood</b>	-6528.76	-457.29	-736.12	-1086.74	-969.76	-536.30
<b>Pseudo R<sup>2</sup></b>	0.025	0.050	0.003	0.004	0.021	0.023
<b>No. obs.</b>	30,500	4,403	4,899	7,157	12,098	6,723

Notes: Standard errors in parentheses. Stars denote significant at 1% (\*\*\*) and 5% (\*\*) levels.

Source: See Table 1.

Table 5 reports the results of country-level regressions relating the state of being an entrepreneur to individual characteristics of gender, age and education. The reported country-level probit estimations generally have in common the same reference group to which the results should be compared: males under 26 having less than secondary education.<sup>6</sup> For both Poland and Croatia, entrepreneurial individuals are statistically significantly more likely to be male, older particularly in the 36-50 range and more educated than the rest of the labour force. Strikingly, these differences are totally absent for Russia and Kyrgyzstan, where the entrepreneurs are not statistically different from the general pool of employees. While some differences exist between entrepreneurs and the rest of the labour force in Ukraine (not very old, more educated) and Armenia (male, more educated), there remains a stark difference between the profile of the entrepreneurial pool in representative CEE countries versus CIS countries.

<sup>6</sup> Due to lack of fully comparable data, for Croatia, the reference age group is “under 36” while for all countries except Poland a separate disaggregation of higher education into vocational and university education was not possible.

## 4.2 THE RETURNS TO ENTREPRENEURSHIP

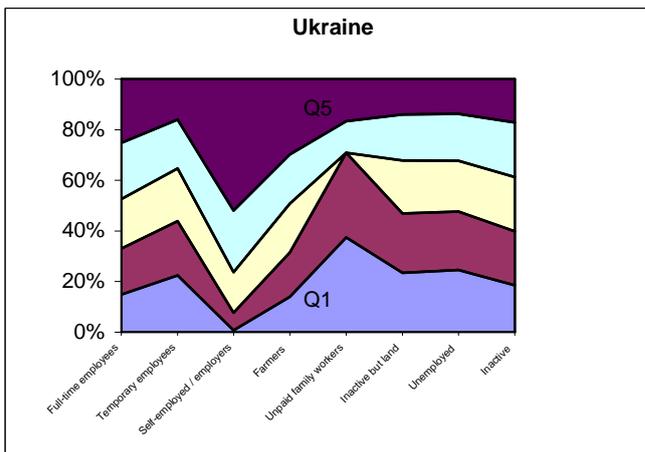
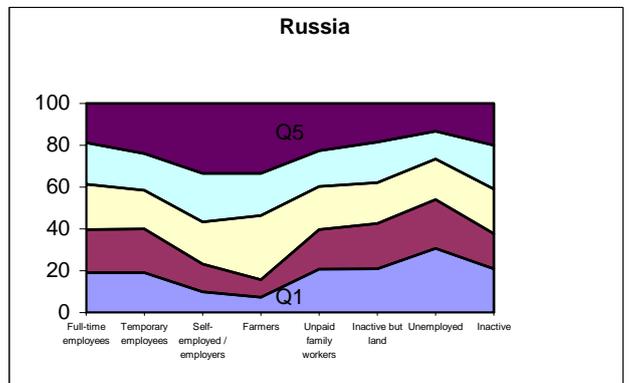
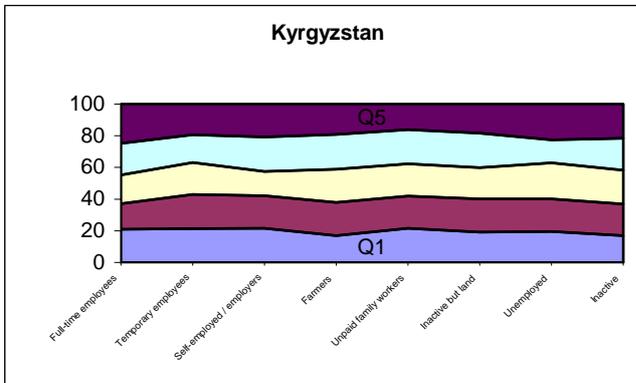
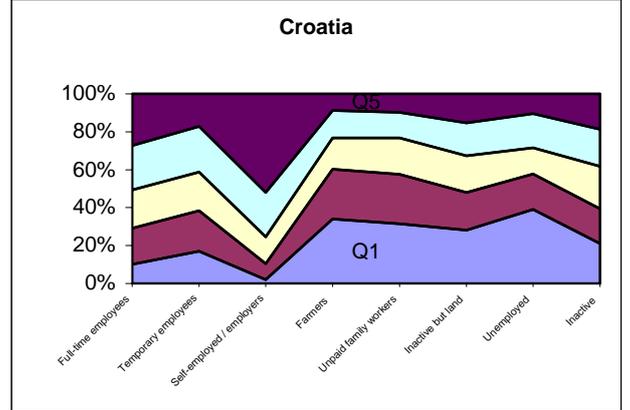
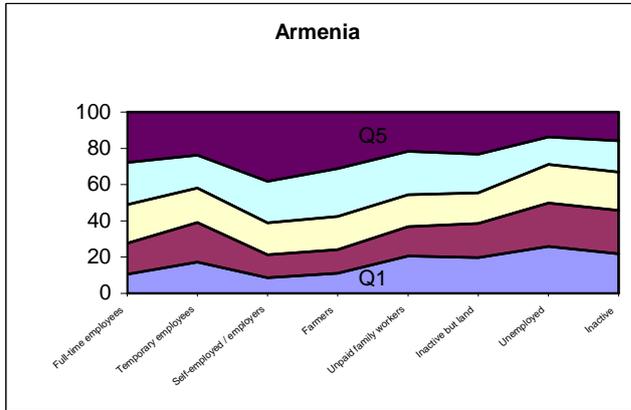
To explore further the extent to which the entrepreneurial pool may be distinct from the rest of the labour force, we present data on the average welfare of entrepreneurs relative to other labour market states within each country. Consumption is used as a measure of welfare rather than income because the latter is measured very imprecisely in these countries and is subject to much larger fluctuations. The available data allow a focus on a few CIS countries, Russia, Ukraine, Armenia and Kyrgyzstan, as well as Croatia.

Chart 2 shows the percentage of each category of employment falling into different consumption quintiles by country. These quintiles capture the share of people falling into five different levels of consumption, ranging from the bottom 20 per cent of consumption to the top 20 per cent.<sup>7</sup> The data suggest that entrepreneurship has been a very successful high earnings strategy by individuals able to actively adapt to the transition. Entrepreneurs account for the largest share of individuals in the top quintile in all countries except Kyrgyzstan. Comparing across countries, the largest proportion of top-earning entrepreneurs as reflected by consumption is in Croatia and in Ukraine, with 52 per cent of entrepreneurs in the top quintile in both countries, and less than 2 per cent in the bottom quintile. The comparable figures for Armenia and Russia are 38 and 33 per cent in the top quintile, respectively, and less than 10 per cent in the bottom quintile. The relationship is weaker in Kyrgyzstan, the poorest country in the group, where there are a roughly equal number of entrepreneurs across each of the quintiles.

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<sup>7</sup> This measure is based on the total consumption per household and then adjusted for the number of people in the household, with children and the elderly being assigned a lower weight than the head of the household.

**Chart 2: Consumption Quintiles**



Note: For each labour market state, the charts represent percentages in each consumption quintile.  
 Source: See Table 1.

## 5. CONCLUSION

We have examined how active strategies adopted by individuals to cope with labour market restructuring differ across transition economies. Using labour force and household surveys from seven countries at different stages of transition, we have focused on mobility and entrepreneurship.

Our results show that there is significant mobility across labour market states in most countries, but little inflow into entrepreneurship from unemployment or inactivity. Entrepreneurship is a high-reward strategy and is more significant in the advanced transition countries of central Europe as represented by Poland and Croatia, where entrepreneurs tend to be male, middle-aged, and more educated than other members of the labour force. However, in the CIS as represented by Russia, Kyrgyzstan, Ukraine and Armenia, there is little difference in the demographic profile of entrepreneurs compared with the rest of the labour force.

Looking ahead, it is clear that different countries in transition face different challenges in labour market policy. These challenges are particularly severe in the CIS, where subsistence levels of existence are common and barriers to entry for entrepreneurs prevent people from escaping the poverty trap. Even in relatively advanced central European transition economies, the legacy of past laws imposes a sometimes unacceptable burden on employers, preventing the necessary adjustments in the labour market.<sup>8</sup>

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<sup>8</sup> See EBRD (2000, Chapter 5).

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