

## Chapter 3

### Internal Migration in Ethiopia

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#### 3.1. Spatial and Professional Mobility

##### 3.1.1. Introduction

Knowledge about the processes and trends of internal mobility in the country and its contribution to urbanisation processes is very limited. The main factor contributing to the limitations is mainly the non-availability of systematically collected statistical information. However, the 1994 Population and Housing Census provided an updated picture (though, with the well-known limitations in quality and being representative) of a specific situation in which the dynamics of the urbanisation processes and mobility are shown, prudently using some retrospective information.

After the census, as mentioned in Chapter 1, in 1999, the Labor Force Survey (henceforth referred to as LFS), was conducted (CSA, 1999). This survey allowed the updating of census information, above all, it enabled an improved analysis of internal mobility. This survey especially focused on knowledge of the migration routes developed within Ethiopia, which in the census were examined only on a general basis. First of all, it should be stressed that in the survey (which despite the known drawbacks often mentioned<sup>1</sup>, extended to all the segments of the population, including those aged under 10). Moreover, a certain degree of detail on the place of origin of migrants was provided by retrospective questions<sup>2</sup>, at least for recent migrants, i.e. those who stayed in a certain area for less than 5 years.

In this chapter, there is an analysis of the characteristics of internal mobility in Ethiopia in the more recent period. Moreover, on the basis of the information collected by the LFS, after the identification of an intermediate geographical location satisfying the requirements of the analysis as well as being representative, we created origin-destination matrixes. These are highly useful to get a picture of the characteristics of internal mobility by identifying the "strong" areas of the country with regard to attraction or "pull" capacity and those which are in a subordinate position in the migration transfers linking the various areas.

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<sup>1</sup> We should recall the *non total coverage of the sample* used in the LFS, since two of the eleven Regions of Ethiopia, Affar and Somali, were only partly sampled. This is because the rural part - extremely large in these two areas of the country - cannot be considered as well represented in the results, so that it was decided not to apply weighting of the regional figure on the overall population. Problems were likewise encountered for the survey conducted in the rural portion of Addis Ababa, though only for the area of Bahir Dar and in 5 *special weredas* in SNNP. For further information, besides the data in Chapter 1, see the volume published by the Central Statistical Authority (1999, pages 3-9).

<sup>2</sup> This refers to the fact that in the questionnaire, those who have been present for less than 5 years (new migrants) are asked for exact information on the town of origin or, when the person comes from a rural area, at least the *wereda* where this rural portion is located. It follows that the definition of migrants varies according to whether they move from an urban or rural area. This is apart from errors in the exact geographical location of the place of origin, relevant in a country where geographical knowledge is often approximate and the borders between areas are sometimes changed by the authorities. The reference in case of transfer from one town to another seems to be more accurate, while for the other forms of movement (rural-urban; rural-rural; urban-rural), the geographic reference is more inaccurate.

Secondly, obtaining information on the reasons for the moves enabled us to make a more in-depth analysis, for example, distinguishing, within the majority of flows, the moves made for work reasons. Furthermore, multivariate analysis has been applied to identify some clusters of different areas regarding urbanisation, ageing of the population structure and the capacity to select masses of migrants according to their urban or rural origins. A preliminary analysis of the structural indicators that can be set up using the LFS source is shown in the first part of the chapter. Then, there is an analysis of the migration levels and of the interchange matrixes between the areas, conducted on the total mass of transfers and on the number of transfers taking place for job-seeking or work reasons.

### **3.1.2. Characteristics of the Ethiopian Population in 1999**

On the basis of the census and the LFS data, we tried to obtain a picture of the changes in the Ethiopian population and of its urbanisation, comparing the figures derived from the two surveys. The attempt must, however be considered purely experimental, since the difference in the methods used to obtain the information makes it hard to draw an absolutely reliable comparison.

First of all, we have to consider that in various areas of the country, the population was not surveyed with the same accuracy in 1994 and 1999. It was particularly difficult to make the survey, both the census and the LFS, in Affar and Somali. So it was decided to exclude the two regions from any attempt to reconstruct trends. Other areas were likewise excluded since they were not completely covered by the sample created in the LFS (See Note 1).

It should be pointed out that in the survey on the workforce, some categories of population (collective quarters, homeless, visitors, and foreigners) are excluded. The survey is limited to what is called the conventional population, those living in a more stable housing. Although, it is theoretically possible to isolate the latter category in a census to make a correct comparison with the LFS, we cannot ignore the fact that there was a different way of defining the reference population in the two surveys.

These and other considerations (See Chapter 1)<sup>3</sup> induce us to consider the figures shown in Table 3.1 as being approximate. Even, with this precaution, however, the picture that emerges is partly unexpected. In particular, the weight of the population classified as living in urban areas in the five years between census and survey does not show any significant growth. It actually seems to be falling, though limiting the comparison to the areas called *Sub-regions*, where this result does not seem altogether implausible and in any case shows an urbanisation rate still around 13-14 percent. Only Gambella seems to show an urbanisation growth that could be defined as sharp (from 17 to 22 percent in five years).

Never the less, for the reasons stated above, these rates should be considered as purely indicative. What can be concluded in this picture is the absence, at least in the short period considered, of significant urbanisation processes in Ethiopia and this at least partially seems to coincide with data from other sources.

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<sup>3</sup> The Sample Design used in the LFS is unlikely to enable us to achieve exhaustive data which is above all independent from that obtained in the census. On this point, see pages 5-9 of the book with the LFS results (CSA, 1999).

**Table 3.1 - Urban and Rural Population in 1994 and 1999 by Sub-regions**

<i>Sub-Region</i>	<i>Population</i>		<i>Urban Population</i>		<i>percent Urban</i>	
	<i>Census '94</i>	<i>LFS '99</i>	<i>Census '94</i>	<i>LFS '99</i>	<i>1994</i>	<i>1999</i>
Mirabawi	733,267	759,449	84,058	82,687	11.5	10.9
Mehakelegnaw	943,585	1,003,152	90,882	89,834	9.6	9.0
Misrakawi	584,771	622,616	85,432	82,738	14.6	13.3
Debubawi	872,847	877,399	206,804	198,154	23.7	22.6
Tigray	3,134,470	3,262,616	467,176	453,414	14.9	13.9
Semen Gondar	2,087,687	2,122,626	235,756	245,742	11.3	11.6
Oromiya	462,555	463,228	39,400	39,330	8.5	8.5
Debub Gondar	1,768,544	1,761,209	116,535	111,323	6.6	6.3
Semen Wello	1,259,947	1,266,734	88,862	109,395	7.1	8.6
Debub Wello	2,122,580	2,180,733	209,749	193,795	9.9	8.9
Semen Shewa	1,560,479	1,575,385	146,705	156,579	9.4	9.9
Misrak Gojam	1,699,888	1,982,405	144,885	131,937	8.5	6.7
Mirab Gojam	1,779,200	1,787,568	106,815	112,505	6.0	6.3
Wag Hemra	275,603	300,158	11,643	15,709	4.2	5.2
Agew Awi	716,970	777,407	65,149	66,632	9.1	8.6
<i>Amhara<sup>b</sup></i>	<i>13,733,453</i>	<i>14,217,453</i>	<i>1,165,499</i>	<i>1,182,949</i>	<i>8.5</i>	<i>8.3</i>
Mirab Wellega	1,546,623	1,811,574	132,125	139,545	8.5	7.7
Misrak Harerge	1,605,901	1,989,282	95,743	115,776	6.0	5.8
Bale	1,217,631	1,383,826	130,170	143,174	10.7	10.3
Borena	1,398,001	1,582,481	126,974	114,926	9.1	7.3
Misrak Wellega	1,253,105	1,400,018	138,437	144,190	11.0	10.3
Illubabor	846,613	1,052,705	79,918	95,865	9.4	9.1
Jimma	1,960,033	2,138,547	189,222	191,841	9.7	9.0
Mirab Shewa	2,329,250	2,591,182	225,752	228,283	9.7	8.8
Semen Shewa	1,157,808	1,344,803	86,176	92,377	7.4	6.9
Misrak Shewa	1,665,815	1,868,703	442,139	581,619	26.5	31.1
Arssi	2,216,648	2,638,436	216,007	245,935	9.7	9.3
Mirab Harerge	1,268,021	1,440,215	9,916	92,368	7.3	6.4
<i>Oromiya</i>	<i>18,465,449</i>	<i>21,241,771</i>	<i>1,955,579</i>	<i>2,185,898</i>	<i>10.6</i>	<i>10.3</i>
<i>Benishangul-Gumuz</i>	<i>460,325</i>	<i>609,460</i>	<i>35,905</i>	<i>47,348</i>	<i>7.8</i>	<i>7.8</i>
Gurage	1,556,850	1,564,280	76,921	92,495	4.9	5.9
Bench Majii	322,263	349,410	23,349	27,101	7.2	7.8
Hadiya	1,050,004	1,108,514	67,629	78,243	6.4	7.1
Kembata Alabana Tembaro	727,310	781,224	50,977	58,754	7.0	7.5
Sidama	2,044,445	2,415,702	143,163	187,162	7.0	7.7
Gedeo	563,578	635,346	64,880	68,828	11.5	10.8
Semen Omo	2,602,278	3,034,137	175,846	198,309	6.8	6.5
Debub Omo	327,717	360,037	21,943	23,551	6.7	6.5
Keficho Shekicho	724,769	768,314	55,805	61,563	7.7	8.0
SNNP <sup>c</sup>	9,919,214	11,016,964	680,513	796,006	6.9	7.2
Gambella	162,271	180,787	27,058	39,277	16.7	21.7
Harari	130,691	139,425	75,931	73,284	58.1	52.6
Addis Ababa	2,100,031	2,186,646	2,071,882	2,161,997	98.7	98.9
Dire Dawa	248,549	248,683	169,874	162,658	68.3	65.4
Ethiopia (excluding.	<b>48,354,453</b>	<b>53,103,806</b>	<b>6,649,417</b>	<b>7,102,829</b>	<b>13.8</b>	<b>13.4</b>

Notes a. only conventional population is considered (nomads, visitors and homeless are excluded).

b. Bahir Dar excluded. c. Excluded five special Weredas (Yem, Amaro, Burji, Konso and Dirashe)

Source: own calculations from 1994 Census and 1999 Labor Force Survey

Table 3.2a shows some of the population indicators for 1999 on the basis of the LFS Survey data. This information is presented for the nine regions under consideration. The documentation for the 40 sub-regions identified, each divided into the rural and urban type of area, is shown in the Annexe (Table A.3.1).

The indicators emerging here basically confirm what was presented and discussed when the census indicators were formulated. With regard to the capacity of attraction, this seems to have fallen, since the percentage of those who have resided for less than 5 years has fallen from 5 percent in 1994 to just over 4 percent in 1999.

Women characterised by marriage instability, i.e. widows and separated women, still contribute significantly to internal mobility in the country, especially in the north (Amhara and Tigray) where they account for between 15 percent and 20 percent of the total migrants.

**Table 3.2a - Some Indicators on Total Population and Migrants**

Sub-region <sup>a</sup>	Type	Young and old dependency		percent Widowed		percent Migrant		percent New-migrant		percent New-migrant from rural area		percent New-migrant from urban area	
		M	F	M	F	M	F	M	F	M	F	M	F
Tigray	rural	126.9	96.2	1.5	11.9	15.8	5.3	2.9	2.6	1.3	1.4	1.6	1.2
	urban	132.2	80.4	1.5	12.8	45.2	38.6	17.7	19.3	6.2	7.7	11.5	11.5
	total	127.5	93.6	1.5	12.0	19.4	10.4	4.7	5.2	1.9	2.4	2.8	2.8
Amhara	rural	107.7	96.8	1.2	8.6	11.9	5.5	2.4	2.8	1.5	2.0	0.8	0.7
	urban	95.8	68.7	1.3	10.6	47.4	37.8	16.8	18.9	8.2	10.0	8.5	8.9
	total	106.8	93.8	1.2	8.8	14.4	8.5	3.4	4.3	1.9	2.8	1.4	1.4
Oromiya	rural	119.0	107.5	1.3	10.1	13.0	6.0	2.5	3.0	1.8	2.3	0.7	0.6
	urban	84.0	75.7	1.5	9.7	48.8	34.0	17.1	17.0	9.1	8.8	7.9	8.2
	total	115.0	103.6	1.4	10.1	16.5	9.0	4.0	4.5	2.5	3.0	1.4	1.4
Benish.-Gumuz	rural	110.2	98.4	1.4	8.2	28.4	13.1	5.3	6.6	4.5	5.7	0.8	0.8
	urban	77.4	73.8	1.1	7.3	58.4	52.8	24.7	26.4	8.1	8.5	16.6	17.9
	total	107.3	96.2	1.4	8.1	30.7	16.3	6.8	8.1	4.8	5.9	2.0	2.1
SNNP	rural	115.8	97.7	1.4	10.4	11.1	4.5	2.2	2.3	1.1	1.6	1.1	0.7
	urban	82.8	78.2	1.0	8.8	45.4	36.9	18.4	18.5	9.6	9.1	8.8	9.3
	total	113.1	96.2	1.4	10.3	13.5	6.9	3.3	3.4	1.7	2.1	1.6	1.3
Gambella	rural	75.6	69.8	2.2	10.8	38.9	16.3	10.6	8.2	8.5	6.6	2.0	1.6
	urban	64.3	65.7	1.4	10.4	60.5	44.1	20.5	22.1	6.0	7.1	14.5	15.0
	total	73.0	68.9	2.0	10.7	43.6	22.4	12.7	11.2	8.0	6.7	4.7	4.6
Harari	rural	112.0	101.6	1.3	14.1	6.9	2.2	1.0	1.1	0.6	0.8	0.4	0.3
	urban	50.1	52.5	1.5	15.2	51.0	30.3	14.4	15.2	3.6	4.5	10.8	10.5
	total	74.7	72.1	1.4	14.8	29.7	17.2	7.9	8.6	2.1	2.8	5.8	5.7
Addis Ababa	rural	94.2	101.7	1.1	8.9	24.2	14.9	7.2	7.5	5.8	7.0	1.4	0.4
	urban	49.0	44.1	1.6	8.6	45.2	20.4	6.9	10.2	3.2	5.0	3.6	5.1
	total	49.4	44.5	1.6	8.6	44.9	20.3	6.9	10.2	3.3	5.0	3.6	5.1
Dire Dawa	rural	108.6	99.8	2.7	12.5	10.9	4.3	2.2	2.1	0.9	0.6	1.3	1.5
	urban	76.9	55.4	2.1	13.4	46.7	28.0	10.1	14.0	2.6	5.2	7.4	8.8
	total	87.2	67.7	2.3	13.2	33.7	20.1	7.2	10.1	2.0	3.7	5.2	6.4
Ethiopia (exclude Affar and Somali.)	rural	115.1	101.2	1.4	9.8	12.7	5.6	2.5	2.8	1.5	2.1	0.9	0.7
	urban	75.0	63.5	1.5	9.8	47.1	31.1	14.0	15.5	6.7	7.6	7.2	8.0
	total	109.0	94.8	1.4	9.8	17.1	9.2	3.9	4.6	2.2	2.8	1.7	1.7

a. See notes in Table 3.1

Source: own calculations on Labor Force Survey, 1999

The Amhara and Oromo ethnic groups have contributed significantly to the mass of new transfers to their respective regions of origin. Particularly, the former, has accounted for over 95 percent of the flow towards the Amhara region. The flow for the years 1994-1999 was probably characterised by a significant number of unemployed people (at least this was how they defined themselves at the time of the survey) and actually, more unemployed women (Table 3.2b).

**Table 3.2b - Some Indicators on Total and Migrants**

Sub-region <sup>a</sup>	Type	New migrant by ethnic group per 1000 resident population				percent New migrant by ethnic group per 100 new migrant				Percent N.M. of Muslim Religion per 1000 residence.	Percent N.M. of Muslim Religion per 100 New M.	percent New Migrant Illiterate per 100 New Migrant		percent Usual Unemployed per 100 New Migrant			percent Female widow+sep per 100 new migrant	
		Amhara	guragie	oromo	Tigreway	Amhara	garage	oromo	tigreway			urban	rural	M	F	MF	rural	urban
Tigray	Rural	2.8	0.0	0.0	23.5	10.5	0.0	0.0	89.5	0.9	3.3	26.7	40.5	16.2	40.1	28.1	16.6	11.5
	Urban	9.6	0.7	0.6	170.3	5.3	0.4	0.3	94.0	16.1	8.7	18.4	22.8	33.3	53.4	45.9	12.4	15.6
	Total	3.7	0.1	0.1	43.9	7.8	0.2	0.2	91.8	3.0	6.1	22.4	31.3	23.8	47.8	37.3	14.2	13.8
Amhara	Rural	23.6	0.0	0.6	0.2	96.6	0.0	2.4	1.0	4.1	15.9	16.9	61.6	13.0	31.4	23.4	17.3	8.8
	urban	160.4	0.6	4.8	4.0	94.4	0.4	2.8	2.4	28.6	15.9	13.2	29.0	40.1	53.2	48.1	18.6	11.3
	total	35.0	0.1	0.9	0.6	95.8	0.1	2.5	1.5	6.1	15.9	15.4	48.7	23.1	40.6	33.3	17.8	9.8
Oromiya	rural	5.3	0.3	20.7	0.0	20.2	1.0	77.9	0.1	13.8	50.2	13.0	64.2	13.0	34.8	25.1	8.7	3.8
	urban	41.5	14.3	103.8	1.6	25.4	8.8	63.5	1.0	43.1	25.3	12.6	24.3	37.6	58.2	48.4	9.0	8.3
	total	9.1	1.7	29.2	0.2	22.3	4.2	72.0	0.5	16.8	39.8	12.9	47.5	23.8	44.4	35.0	8.8	5.7
Benish.-Gumuz	rural	18.6	0.1	24.0	1.3	42.1	0.3	54.4	3.0	9.7	16.2	7.0	64.1	21.9	29.5	26.2	5.7	2.1
	urban	118.8	6.1	63.9	8.0	60.2	3.1	32.4	4.0	47.0	18.4	20.1	14.4	23.4	47.6	36.4	9.9	13.2
	total	26.4	0.6	27.1	1.8	47.1	1.1	48.4	3.3	12.6	16.8	10.5	50.7	22.4	34.5	29.1	6.9	5.2
SNNP	rural	1.8	5.3	0.6	0.0	13.1	38.8	4.2	0.2	4.5	20.4	17.0	45.2	18.2	39.0	28.8	7.5	1.7
	urban	30.6	30.8	10.6	1.8	26.5	26.7	9.2	1.6	20.0	10.8	10.0	20.5	39.6	62.3	51.1	4.3	5.2
	total	3.9	7.2	1.3	0.2	18.4	34.1	6.2	0.7	5.6	16.7	14.2	35.6	26.6	48.1	37.6	6.3	3.1
Gambella	rural	26.7	0.0	6.0	2.6	73.8	0.0	16.5	7.3	9.9	10.6	7.8	57.0	17.8	51.5	32.0	11.3	3.7
	urban	67.3	12.4	46.1	13.7	47.5	8.8	32.5	9.6	27.1	12.7	11.5	13.9	32.3	59.3	46.7	4.5	9.0
	total	35.5	2.7	14.7	5.0	60.1	4.6	24.8	8.5	13.7	11.4	9.2	40.3	22.7	55.0	37.7	8.3	6.1
Harari	rural	0.3	0.0	10.1	0.0	3.3	0.0	96.7	0.0	10.6	100.0	14.1	63.4	22.2	76.6	52.8	3.9	0.0
	urban	58.5	23.6	39.3	11.5	43.7	17.6	29.4	8.6	42.6	28.8	12.4	14.2	28.2	62.2	46.3	2.7	10.5
	total	30.9	12.4	25.5	6.1	41.0	16.5	33.8	8.1	27.4	33.2	12.5	17.2	27.9	63.1	46.8	2.8	9.8
Addis Ababa	rural	28.6	5.2	36.4	0.0	39.8	7.2	50.7	0.0	1.7	2.3	2.5	81.1	4.9	74.9	37.5	18.9	0.0
	urban	40.7	15.9	16.1	6.2	50.9	19.9	20.2	7.7	18.8	21.7	11.4	23.2	38.0	57.9	50.5	7.6	7.1
	total	40.6	15.8	16.4	6.1	50.8	19.8	20.5	7.7	18.6	21.5	11.3	23.7	37.6	58.1	50.4	7.7	7.1
Dire Dawa	rural	1.6	0.0	18.6	0.0	7.7	0.0	92.3	0.0	20.8	94.8	44.9	16.3	24.3	48.4	37.1	0.0	3.5
	urban	39.7	15.8	41.9	1.8	40.1	15.9	42.3	1.8	62.8	51.8	19.1	20.2	38.8	68.2	56.9	5.9	11.8
	total	26.5	10.3	33.9	1.2	36.9	14.3	47.1	1.6	48.3	55.5	21.4	19.8	37.3	66.7	55.2	5.5	11.2
Ethiopia (excluding Affar and Somali.)	rural	9.6	1.3	9.2	1.5	41.7	5.8	39.6	6.5	8.3	31.4	15.7	58.0	14.6	35.2	25.8	11.2	5.2
	urban	58.5	13.5	40.1	14.0	44.4	10.2	30.4	10.7	30.9	20.9	13.1	23.9	37.7	57.2	48.8	10.2	9.2
	total	16.2	3.0	13.3	3.2	43.0	7.9	35.3	8.5	11.3	26.5	14.5	41.9	25.3	46.0	36.8	10.7	7.2

a. See notes Table 3.1

Source: own calculations on Labor Force Survey, 1999

### 3.1.3. Recent Internal Mobility

The LFS identified about 2,300,000 people who stated that they had lived in the place of current residence for no more than 5 years<sup>4</sup> (Table 3.3).

**Table 3.3 Recent Migrant Population by Area of Origin and Destination**

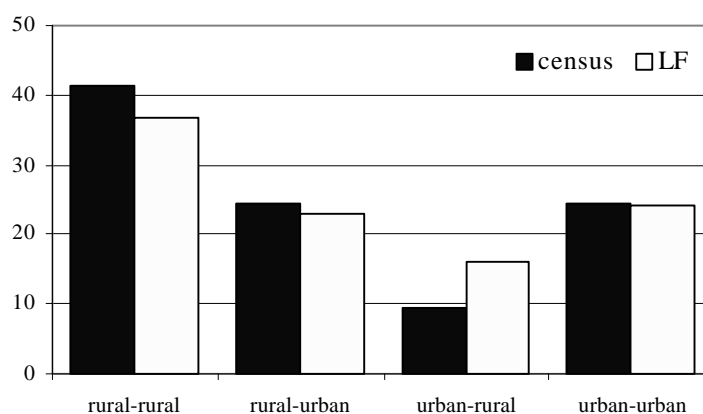
<i>Area of origin</i>	<i>Area of destination</i>					
	<b>Rural</b>		<b>Urban</b>		<b>Total</b>	
	<b>A.V.</b>	<b>Percent (on tot.)</b>	<b>A.V.</b>	<b>Percent (on tot.)</b>	<b>A.V.</b>	<b>Percent (on tot.)</b>
Rural	849,935	36.8	527,712	22.9	1,377,647	59.7
Urban	372,469	16.1	558,990	24.2	931,459	40.3
<b>Total</b>	<b>1,222,404</b>	<b>52.9</b>	<b>1,086,702</b>	<b>47.1</b>	<b>2,309,106</b>	<b>100.0</b>

Source: own calculations on Labor Force Survey, 1999

In the census, the amount was very similar (about 2,500,000 people). The structure by major migration routes was also fairly similar to the one observed in the LFS. There are some differences in the amount of flows from rural origin or destination. For example, over 65 percent moved from rural areas; amount considerably lower in the LFS data (under 60 percent; Table 3.3 and Fig. 3.1).

The LFS shows a consistent rural – rural flow of nearly a million people and rural-urban flow of over half a million people. The flow inside rural areas is significant and typical of Ethiopia. This is the largest flow, which is unsurprising considering that 86-87 percent of the Ethiopian population lives in the rural areas. There is also a significant flow (about 370,000 people) moving from urban to rural areas and again more than a million people moving from urban to urban areas

**Figure 3.1 Estimated Flows by Origin and Destination Area According to 1994 Census and 1999 Labor Force Survey (Percent Distribution)**



Source: own calculations on CSA and LFS data

This initial picture of Ethiopian migration at the end of the millennium is completed by a significant amount of people moving between the towns. It should be stressed that urban

<sup>4</sup> The data correspond only partially to the published data since they exclude people coming from abroad (about 60,000 people) and also exclude people who failed to state their place of origin. In subsequent processing, there is a gradual exclusion of those who have only given a generic statement of their place of origin. For example, the regional analysis includes those who have not clearly stated the area of origin but who have given the region; the latter are excluded in the area-based analysis.

areas have a very approximate definition. As we shall see (Chapter 4), the Ethiopian urban setting, consisting of nearly a thousand towns (925) defined as urban, is mainly characterised by settlements with a very low population size. Nearly 75 percent of the towns consist of settlements with a population of less than 5,000 and it is not uncommon to find towns with less than 200 people.

Female population mainly dominates the flows. In fact, about 55 percent of those who move are women and these form about 57 percent of those who leave from a rural area. However, women are less involved than men in the phenomenon of *counter-urbanisation*, mentioned previously, forming only 44 percent of the flows from urban areas to rural areas.

The regions (Oromiya, Amhara, Southern Nations-Nationalities and People's Region (SNNPR)) most targeted for migration are also naturally those with the largest populations. The city-regions (Addis Ababa, Dire Dawa and Harari) have 140,000 new residents basically directed to the urban portion. The very low attraction of the rural part of these regions depends on its small size, besides the problems mentioned regarding the lack of coverage of the LFS sample in these areas.

Similarly, the largest ethnic groups, the Oromo and the Amhara, generate the highest percentage of migrants totalling about 80 percent. However, the Amhara have a certain tendency towards an urban destination and the Oromo have particular destination features. That is, they represent about 40 percent of those arriving in rural areas, compared to 30 percent in the urban areas.

The majority of these moves, which has led to the classification of population as migrants at the date of the survey depends basically on work-related reasons. The reasons are either job seeking or employed people who consider access to different types of job related to professional mobility, horizontal and vertical. Nearly a quarter of the migrants moved from one sub-region to another for these reasons (Table 3.4). Considering their importance, a specific analysis is made on transfers occurring for these reasons (Section 3.1.4).

Besides the high percentage of migrants moving due to the transfer of a family member (25.1percent), there are considerable flows for reasons related to the celebration (13.7 percent) or the dissolving (3.1 percent) of a marriage. It is important to observe that these movements have a greater weight for the flows towards rural areas. The signs of the conflict and the serious famine of the 1980s can be seen in the weight for the moves related to displacement in Tigray. Though, very low at the national level, this category accounted for nearly 10 percent of the transfers in the country's northernmost region (Kidane, 1989).

Three other factors account for a similar percentage in the reasons for transfers between 1994 and 1999. These are education (9 percent), to live with relatives (8.3 percent) and go back to home (9.9 percent). The documentation on the 40 sub-regions, each divided into the urban and rural type of area is shown in Annexe (Table A3.1). The calculation of some rough rates (the ratio between movements, migrated population and host or origin populations recorded in 1999) enabled us to eliminate the effect of the size of the population in comparing the rate between areas in attracting flows (in-migration rate), in producing outflows (out-migration rate), in showing a net (out- and in-) migration rate deriving from the algebraic sum of the two previous rates (net-migration rate) and finally, in containing the movements within the area of reference.

**Table 3.4 Percent Distribution of Total Migrant Population by Reason and Region of Destination**

<i>Region</i>	<i>Type of area</i>	<i>Education</i>	<i>Marriage arrangement</i>	<i>Marriage dissolution</i>	<i>Labor reason</i>	<i>Displacement</i>	<i>Along with family</i>	<i>Returned back to home</i>	<i>To live with relatives</i>	<i>Others (a)</i>	<i>Total A.V.</i>	<i>percent per type of area</i>
Tigray	<i>rural</i>	0.6	11.7	4.2	11.8	12.5	20.6	25.8	7.4	5.3	77,463	6.3
	<i>urban</i>	8.7	6.7	1.6	25.2	15.0	24.8	8.7	5.3	4.1	84,162	7.7
	<i>total</i>	4.9	9.1	2.8	18.7	13.8	22.8	16.9	6.3	4.7	161,625	7.0
Amhara	<i>rural</i>	1.9	24.0	7.5	15.4	3.0	19.7	16.7	7.6	4.2	324,150	26.5
	<i>urban</i>	14.4	5.5	3.2	28.2	4.8	26.7	6.0	6.1	5.1	212,507	19.6
	<i>total</i>	6.8	16.6	5.8	20.5	3.7	22.5	12.5	7.0	4.6	536,656	23.2
Oromiya	<i>rural</i>	1.8	20.7	2.8	14.7	1.7	28.9	11.1	11.2	7.0	519,245	42.5
	<i>urban</i>	18.8	4.7	1.5	27.5	0.9	27.6	7.1	6.7	5.1	372,527	34.3
	<i>total</i>	8.9	14.1	2.3	20.1	1.4	28.3	9.5	9.3	6.2	891,772	38.6
Ben.-Gumuz	<i>rural</i>	1.7	17.1	1.8	11.2	4.1	43.5	7.5	5.2	8.0	33,156	2.7
	<i>urban</i>	14.3	5.4	2.9	41.1	2.3	23.7	5.4	2.8	2.1	12,112	1.1
	<i>total</i>	5.0	14.0	2.1	19.2	3.6	38.2	6.9	4.6	6.5	45,268	2.0
SNNP	<i>rural</i>	3.3	21.4	2.8	18.2	2.8	22.3	15.3	10.2	3.7	235,131	19.2
	<i>urban</i>	20.6	5.0	1.0	30.5	1.8	27.4	3.7	7.3	2.6	150,322	13.8
	<i>total</i>	10.0	15.0	2.1	23.0	2.4	24.3	10.8	9.1	3.3	385,454	16.7
Gambella	<i>rural</i>	3.7	4.1	2.9	31.8	0.8	28.8	4.6	10.2	13.0	13,233	1.1
	<i>urban</i>	8.3	4.6	0.8	40.9	0.5	37.0	2.2	5.1	0.7	8,375	0.8
	<i>total</i>	5.5	4.3	2.1	35.3	0.7	32.0	3.7	8.2	8.2	21,608	0.9
Harari	<i>rural</i>	7.7	31.4	-	28.2	5.3	4.8	1.7	15.2	5.7	702	0.1
	<i>urban</i>	10.9	5.0	1.5	37.6	0.4	16.4	9.0	13.8	5.3	10,752	1.0
	<i>total</i>	10.7	6.6	1.4	37.0	0.7	15.7	8.6	13.9	5.3	11,453	0.5
Addis Ababa	<i>rural</i>	-	12.1	2.8	45.6	-	23.5	8.3	7.6	-	1,812	0.1
	<i>urban</i>	20.2	3.8	1.3	40.4	3.4	12.1	6.2	7.6	4.9	186,562	17.2
	<i>total</i>	20.0	3.9	1.3	40.5	3.4	12.2	6.2	7.6	4.9	188,374	8.2
Dire Dawa	<i>rural</i>	13.3	14.9	2.1	11.1	-	19.2	17.8	8.6	12.9	1,885	0.2
	<i>urban</i>	11.1	3.6	1.2	30.1	2.3	14.9	10.4	18.4	8.1	19,700	1.8
	<i>total</i>	11.3	4.6	1.2	28.5	2.1	15.3	11.0	17.5	8.5	21,584	0.9
Ethiopia <sup>b</sup>	<i>rural</i>	<b>2.1</b>	<b>20.8</b>	<b>4.1</b>	<b>15.6</b>	<b>3.0</b>	<b>25.1</b>	<b>14.1</b>	<b>9.5</b>	<b>5.7</b>	<b>1,222,404</b>	<b>100.0</b>
	<i>urban</i>	<b>16.9</b>	<b>4.9</b>	<b>1.8</b>	<b>30.8</b>	<b>3.6</b>	<b>24.2</b>	<b>6.3</b>	<b>6.9</b>	<b>4.6</b>	<b>1,086,702</b>	<b>100.0</b>
	<i>total</i>	<b>9.0</b>	<b>13.3</b>	<b>3.0</b>	<b>22.7</b>	<b>3.3</b>	<b>24.7</b>	<b>10.5</b>	<b>8.3</b>	<b>5.2</b>	<b>2,309,106</b>	<b>100.0</b>

Notes: (a) included shortage land, lost family, health reason, reason not stated and NR; (b) included Affar and Somali

Source: own calculations on Labor Force Survey, 1999

With regard to the material explained below, the latter refers to 9 Regions, with the documentation on the 40 sub-regions being shown in the Annex (Table A.3.2). For every 1,000 residents in the 9 Regions studied in the LFS survey, there are 42 new residents (Table 3.5). This figure moderates the strong attraction of the urban areas in which the in-migration rate is 148 per thousand and the much lower one recorded in rural areas (25.9). The urban areas show an attraction rate that seems to have a surprising equilibrium with respect to the area of origin of the flows. For every thousand residents in urban areas, there are, in fact, 72 new residents coming from rural part of the country and 76 new residents coming from other

areas classified as urban. There is a much less balanced ratio in the new residents who have chosen a rural destination. Compared to 18 per thousand coming from the rural part of the country, there are only 7.9 coming from urban areas.

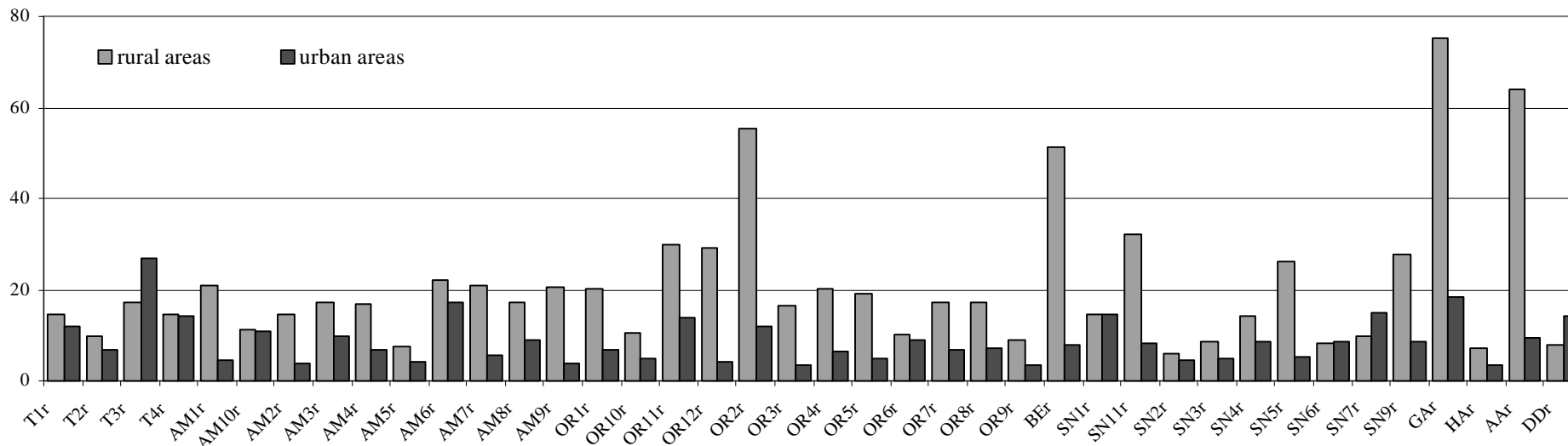
**Table 3.5 Rates (Migrant Population Per 1,000 Current Residents) of In-migration (by Area of Previous Residence), Out-migration, Net and Intra-migration by Region of Origin/Destination. Total Migrant Population**

Region of origin/destination	Type of area	In-migration previous residence			Out-migration	Net-migration	Intra regional-migration current residence		
		rural	urban	total			rural	urban	total
Tigray	<i>rural</i>	13.4	13.7	27.1	21.7	5.5	6.2	9.0	15.2
	<i>urban</i>	70.7	114.7	185.9	149.7	36.2	31.8	39.6	71.4
	<i>total</i>	21.4	27.7	49.2	39.5	9.7	9.8	13.3	23.0
Amhara	<i>rural</i>	17.4	7.4	25.0	31.9	-7.0	12.7	7.0	19.7
	<i>urban</i>	92.2	87.4	179.6	160.8	18.8	39.1	39.4	78.5
	<i>total</i>	23.7	14.1	37.8	42.7	-4.8	14.9	9.7	24.6
Oromiya	<i>rural</i>	20.5	6.7	27.3	30.9	-3.6	14.4	7.8	22.3
	<i>urban</i>	89.4	80.9	170.4	146.9	23.5	31.7	38.1	69.8
	<i>total</i>	27.6	14.3	42.0	42.9	-0.9	16.2	10.9	27.2
Benishangul-Gumuz	<i>rural</i>	51.1	7.9	59.0	31.5	27.5	17.1	3.6	20.7
	<i>urban</i>	83.2	172.6	255.8	170.7	85.1	46.9	45.7	92.6
	<i>total</i>	53.6	20.7	74.3	42.3	32.0	19.4	6.8	26.2
SNNP	<i>rural</i>	13.2	8.8	22.0	24.9	-2.8	8.3	5.4	13.6
	<i>urban</i>	93.5	90.4	184.1	155.0	29.1	41.6	33.3	74.9
	<i>total</i>	19.0	14.6	33.6	34.1	-0.6	10.6	7.4	18.0
Gambella	<i>rural</i>	75.3	18.2	93.5	31.8	61.7	19.8	8.3	28.1
	<i>urban</i>	64.4	147.8	212.2	120.2	92.0	27.5	60.7	88.2
	<i>total</i>	72.9	46.4	119.3	51.0	68.3	21.5	19.7	41.2
Harari	<i>rural</i>	7.1	3.5	10.6	28.2	-17.6	0.2	2.4	2.6
	<i>urban</i>	40.1	105.4	146.6	163.7	-17.1	0.1	0.0	0.2
	<i>total</i>	24.5	57.1	82.1	99.4	-17.3	0.1	1.1	1.3
Addis Ababa	<i>rural</i>	64.1	9.5	73.5	81.9	-8.4	0.0	7.5	7.5
	<i>urban</i>	41.9	44.4	86.3	46.7	39.6	0.1	0.0	0.1
	<i>total</i>	42.1	44.0	86.1	47.2	39.0	0.1	0.1	0.2
Dire Dawa	<i>rural</i>	7.7	14.2	21.9	9.9	12.0	0.2	6.2	6.4
	<i>urban</i>	39.7	80.6	120.6	76.5	44.1	6.2	0.8	7.0
	<i>total</i>	28.6	57.6	86.4	53.4	33.0	4.1	2.7	6.8
<b>Ethiopia</b>	<i>rural</i>	<b>18.0</b>	<b>7.9</b>	<b>25.9</b>	<b>29.0</b>	<b>-3.1</b>	<b>11.9</b>	<b>7.0</b>	<b>18.9</b>
	<i>urban</i>	<b>71.8</b>	<b>76.0</b>	<b>147.8</b>	<b>118.7</b>	<b>29.1</b>	<b>23.6</b>	<b>25.3</b>	<b>48.9</b>
	<i>total</i>	<b>25.3</b>	<b>17.1</b>	<b>42.4</b>	<b>39.3</b>	<b>3.1</b>	<b>13.5</b>	<b>9.5</b>	<b>23.0</b>

Source: own calculations on Labor Force Survey, 1999

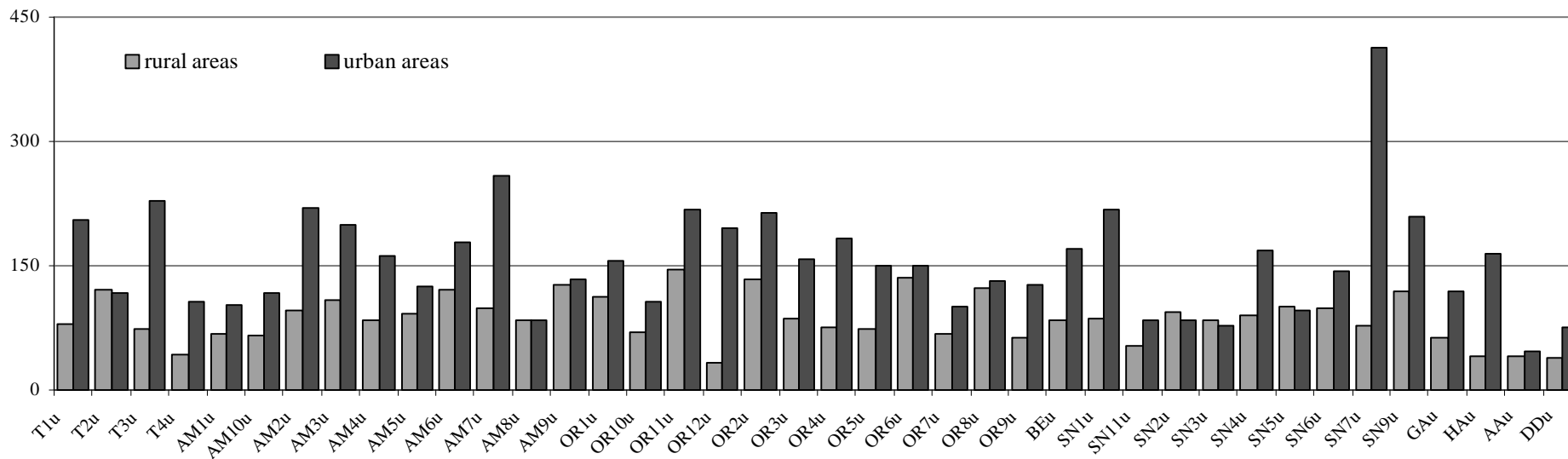
The two smallest regions, Gambella and Benishangul-Gumuz, seem to have a greater mobility of their own population, since the in-migration rate has significantly higher values than the national average one. The urban portions of these areas, though limited in size, show rate levels far over 200 per thousand. Addis Ababa, on the other hand, seems to be characterised by a moderate capacity of attraction (rate 86.4 per thousand).

**Figure 3.2a Rates of In-migration by Area of Previous Residence. Global Flows. Rural Areas**



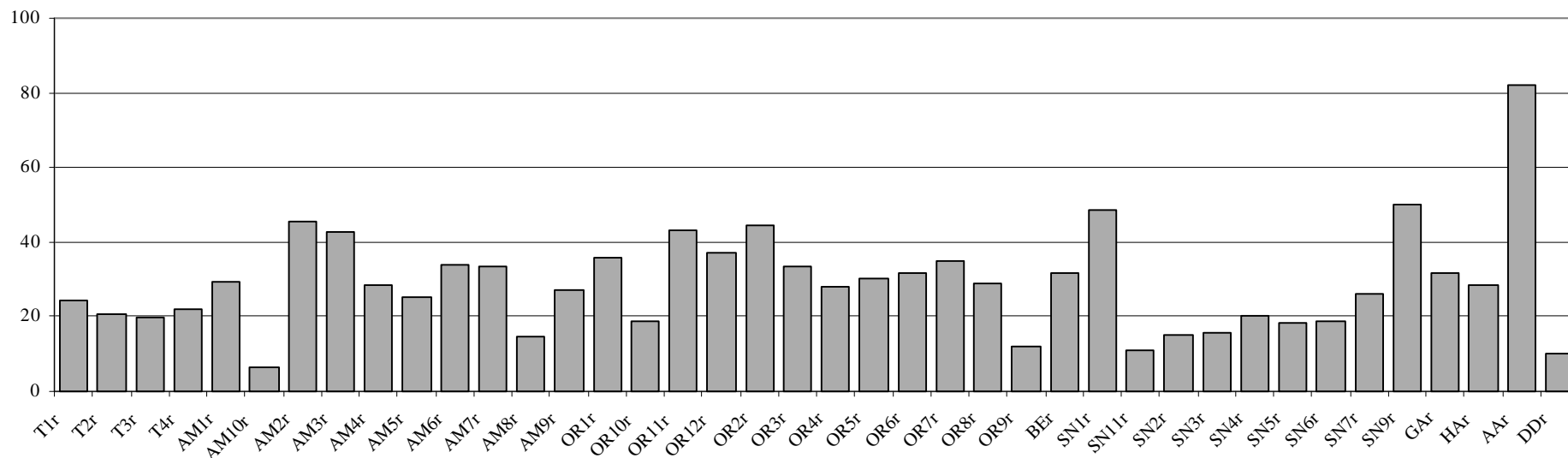
Source: own calculations on Labor Force Survey, 1999

**Figure 3.2 b Rates of In-migration by Area of Previous Residence. Global Flows. Urban Areas**



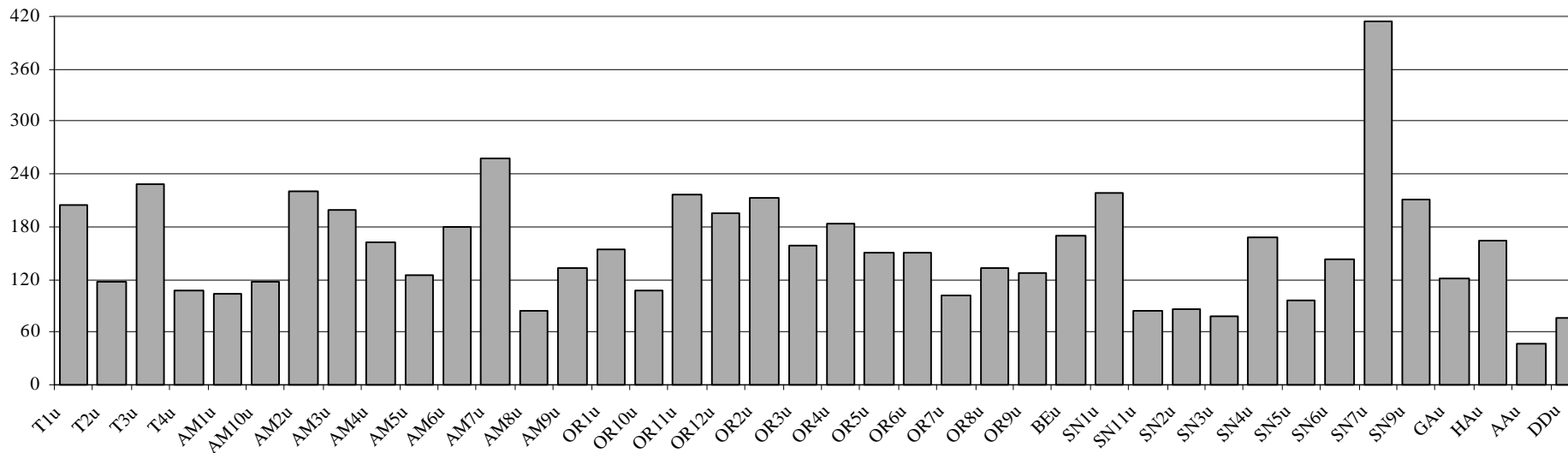
Source: own calculations on Labor Force Survey, 1999

**Figure 3.3a Rates of Out-migration from Rural Zones**



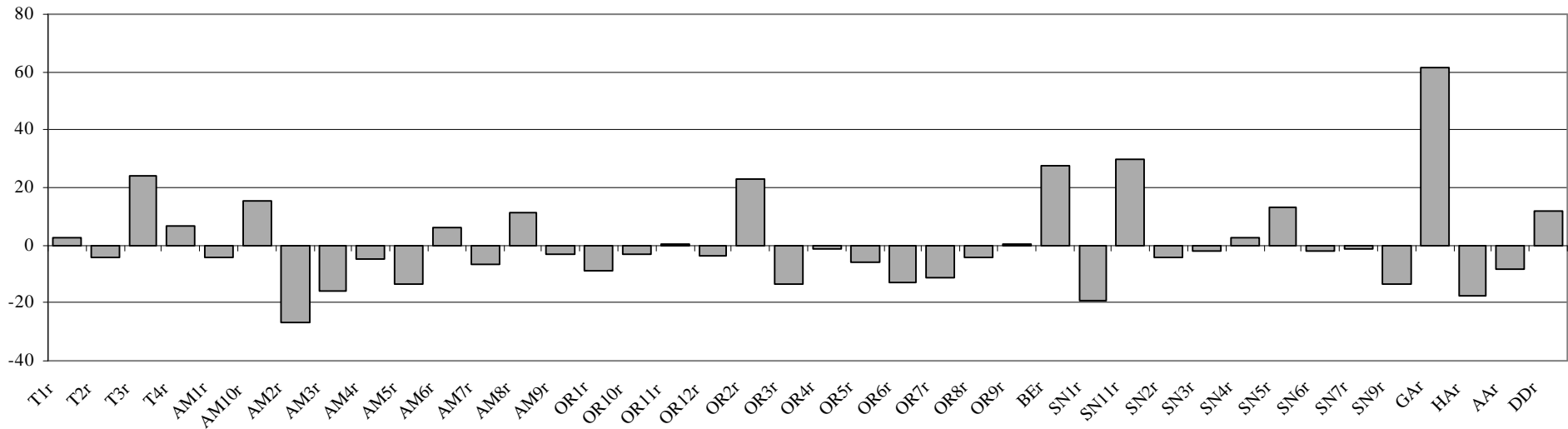
Source: own calculations on Labor Force Survey, 1999

**Figure 3.3b Rates of Out-migration from Urban Zones**



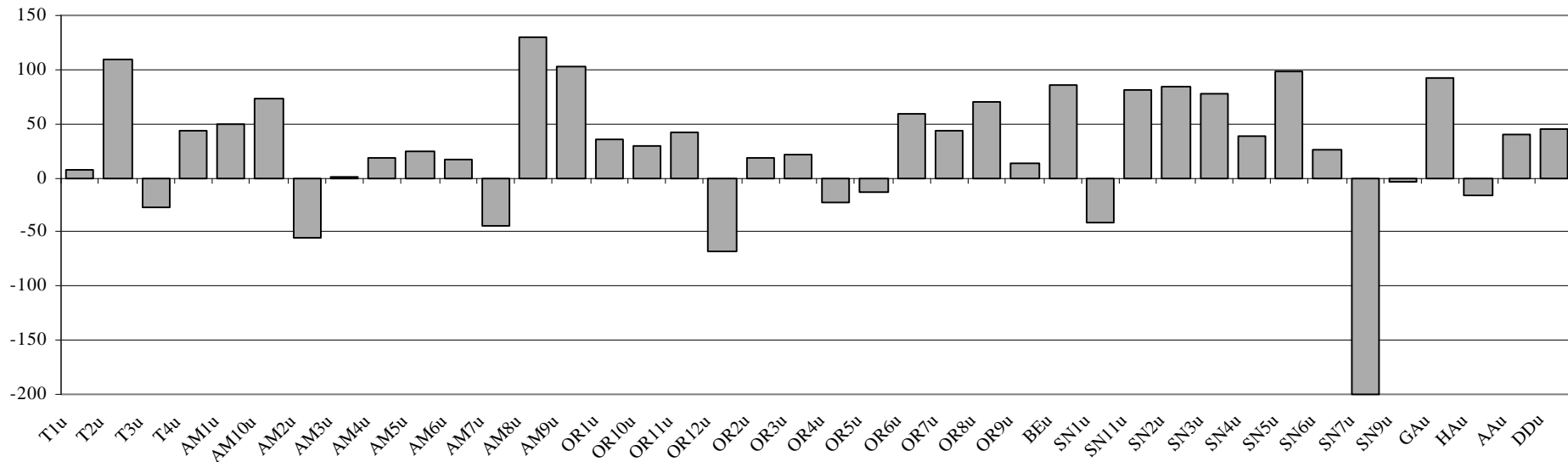
Source: own calculations on Labor Force Survey, 1999

**Figure 3.4a Rates of Net-migration for Rural Zones**



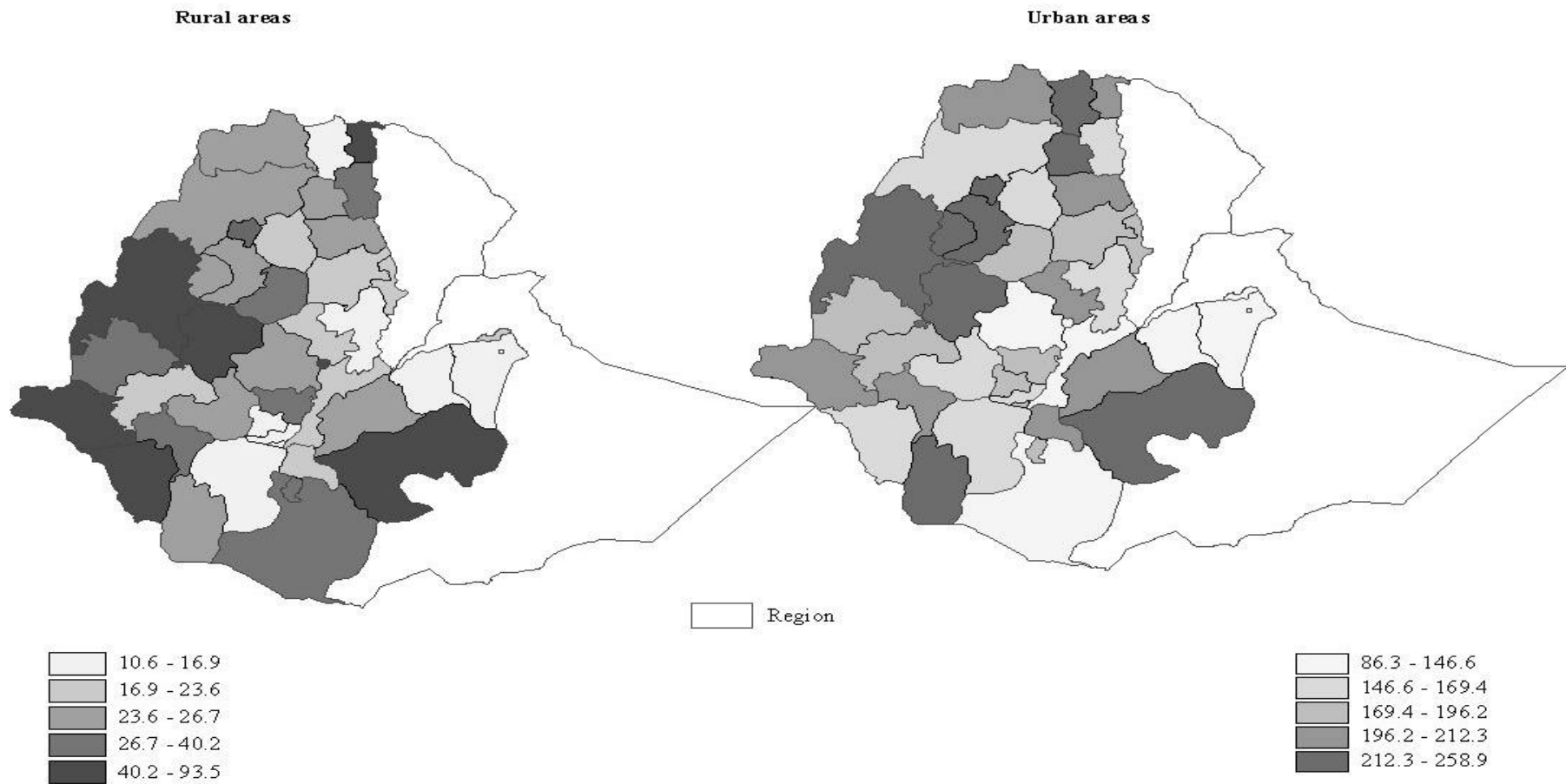
Source: own calculations on Labor Force Survey, 1999

**Figure 3.4b Rates of Net-migration for Urban Zones**



Source: own calculations on Labor Force Survey, 1999

**Figure 3.5 In-migration, Total Rate (Per 1,000 Population). Ethiopia**



Source: own calculations on Labor Force Survey, 1999

*Unofficial map used only for graphical representation*

Beyond the study of the out-migration rate, net-migration rates show interesting indications. While on the national level, the rural world, net of origin/destination transfers, has lost just over 3 per thousand (if this outflow refers to the arriving population, as used here). This obviously means an increase of nearly 30 per thousand in the urban portion of the country. Gambella shows the greatest attraction capacity. Together with a high net-migration of about 92 per thousand residents in 1999, it is interesting to observe that the rural part of the region also highlights a strong migration growth (61.7 per thousand). The urban areas show a moderate or sharp migration growth. The only exception is the Harari region, where both the areas, rural and urban, show a net out-migration of about 17 per thousand.

A major component of these inflows consists of short-range movements, i.e. originating in the region. The incoming movements in the rural area are clearly limited. The rate of 26 per thousand for incoming movements in this part contrasts with 19 per thousand (therefore 75 percent) of movements taking place within the regions. The same proportion calculated for the movements towards urban areas gives a value approximately equal to 30 percent (of 148 per thousand, 48.9 are intra-regional movements). The material shown in Figures 3.2-3.4 provides an accurate picture of the levels of the incoming and outgoing moves and of the respective sub-regional net-migration rates.

After taking into account the rate of the flows<sup>5</sup>, the analysis of the origin/destination matrix, focusing on the volume of exchange occurring between the sub-regions, is developed. This matrix refers to the 80 basic geographical units selected for the analysis, i.e. the 40 sub-regions, each subdivided into the urban and rural portion<sup>6</sup>.

The matrix has a large number of cells (80 geographical units and  $80 \times 80 = 6400$  cells). An in-depth examination of this material is undoubtedly impossible. It has, therefore been decided to establish a *set of indexes*, which suitably sums up the main characteristics of the documentation on the flows. It involves some of the most important aspects of the structure of internal mobility, isolating, within a migration stream in an area, the so-called *self-contained* flow, i.e. the flow, which has its destination (or origin) within the same area.

Having done this premise, the indexes are set up in order to identify some aspects of internal mobility<sup>7</sup>, more specifically:

- a. The ***pull forces (attraction)*** of an area, so that the **self-contained** flow is contrasted with that coming from the rest of the country;
- b. The ***push forces (repulsion)***, by which the **self-contained** flow is contrasted with that starting from the area;

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<sup>5</sup> As often stressed, it is improper to refer to flows, since there is a matrix reconstructed on the basis of retrospective questions asked to a sample of individuals present in the areas of destination. For sake of simplicity, however, this terminology is used in the text.

<sup>6</sup> For sake of completeness, the analysis is also extended to the case of the rural portion of Addis Ababa, although this area cannot be considered as well covered by the LFS sample (CSA, 1999, page 7).

<sup>7</sup> In this layout, ample reference is made to the series of indicators proposed in the study of commuting mobility by Gesano (1987).

- c. The **net change**, obtained as the algebraic difference between inflows and outflows;
- d. The **interchange**, which provides an idea of the overall openness of the area concerned, so that the outflows and inflows are summed up;
- e. The **preference in attraction and preference in repulsion**, to obtain the percentage absorbed by the area most contributing to the inflow or outflow, respectively towards/from a given area. This is a sort of useful indicator of the concentration in the structure of the flows subdivided by the area of origin/destination.

To express the proposed indexes analytically, with  $a_i$  being the overall inflow towards a generic area  $i$ ,  $a_i$  the outflow from an area  $i$ ,  $a_{ii}$  the self-contained flow,  $\max a_i$  the maximum flow of the inflows in area  $i$  and  $\max a_i$  the maximum flow of the outflows from a given area, the mobility indicators for a generic sub-region  $i$  in the formula are set up according to a procedure shown in Prospect 1.

***Prospect 1 - Mobility Index Used in the Analysis***

Attraction	$(a_i - a_{ii})/a_i$
Repulsion	$(a_i - a_{ii})/a_i$
Net change	$(a_i - a_i)/(a_i + a_i)$
Interchange	$(a_i + a_i - 2a_{ii})/(a_i + a_i)$
Preference in attraction	$\max a_i / a_i$
Preference in dependency	$\max a_i / a_i$

In accordance with the procedure used in the analysis of the mobility rates, attraction is broken down distinguishing the rural or urban nature of the area of origin of the flows. The indicators calculated for the nine regions (those for the 40 sub-regions are usually shown in Annexe table A3.3) appear in Table 3.6.

In the country as a whole, **the attraction index** is 44 percent. In other words, on an inflow of 100, just under half comes from another region. The urban areas are characterised by a capacity to attract longer range flows (index equal to 58.8) compared to rural areas (34.8) (Table 3.6). In the urban areas, this index mediates two different situations. A greater attraction when the flows come from urban areas of the country (64.3) and a lesser attraction if the initial area is in rural areas (50.7). There is an exception here in the case of Benishangul-Gumuz and, above all, Gambella, where the rural areas show a greater interregional attraction capacity<sup>8</sup>.

The **repulsion** index seems to be rather high in the northern areas of the country (Tigray and Amhara), very low in the two smallest regions of Ethiopia, Gambella and Benishangul-Gumuz (in this case, the rural part depends very little on the urban regions) (Table 3.6).

If we observe the **net change**, except for the case of Gambella and Benishangul-Gumuz, which gain or do not lose in the rural and the urban part, most of the regions

<sup>8</sup> Table 3.6 does not show the values of some indexes for the three State-regions (Harari, Dire Dawa and Addis Ababa) where, considering their very small size, it seems to be exaggerated to identify a self-contained flow, and in any case this appears to be absolutely non-comparable with the other sub-regions.

seem to be characterised by a variety of situations, which are hard to summarise. This is because of the fact that each seems to be nearly a unique case. While the urban parts of the regions seem to prevail with regard to exchanges (though this is not the case of Amhara), the rural ones generally have either a consistently negative or almost balanced net-migration rate. The regions of Addis Ababa and Dire Dawa show a considerable capacity of attraction due to the in-migration rate recorded in their mainly urban portions. It is different in Harari, where the urban part shows an out-migration rate (-22.6 percent) that is especially significant with regard to the Harari-urban exchange with the rural part of the other regions (-88.6percent).

Examination of the overall rate of **openness** of an area by combining dependency and attraction shows that besides the two smallest regions often mentioned, SNNP has a high rate of interchange (46.5 percent). This is basically due to the intense level of exchange of the towns of this region (58 percent). In general, there is less **openness** in the rural areas and in particular in the rural areas of the northern regions.

The observation of the **concentration of preference** adds further elements to the picture obtained thus far. In general, we can expect a greater *concentration of preference* for the rural areas that often seem to be subordinated to an area, which mainly seems to attract the outflow (high preference in repulsion). As a matter of fact, observing the national data, as expected, we see that on average 41.3 percent of the outflows from rural areas are concentrated towards a single destination region, while the corresponding figure for the urban areas is much lower (28.2 percent). It is interesting to note that the indicator increases in case of rural-urban flows (on average 41.8 percent) than with respect to the urban-urban category. For Ethiopia, the rate is 33 percent.

Considering the **preference in attraction** and therefore observing for each area the weight of the one providing the most migrants, we see a greater concentration in the case of the rural areas than with respect to the urban ones. The greater concentration in attraction is, in fact, seen in the rural areas of the regions of Harari, Gambella, SNNP and Dire Dawa. The lowest is in the Benishangul-Gumuz, Dire Dawa and above in all Addis Ababa urban areas, where the most important region supplying flows accounts for only 17.6 percent in the case of flows coming from rural areas and 8.8 percent in the case of flows from other towns.

### 3.1.4. Mobility for Work Reasons

#### a) The Overall Situation

In the analysis of the migratory movements of the Ethiopian population shown in the Labor Force Survey, the changes of residence due to work reasons are considered, and account for about a quarter (23 percent) of the overall migrations<sup>9</sup>. It should be

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<sup>9</sup> It is however quite probable that work-related reasons actually account for a greater volume of migrations than the one considered here. The changes of residence under the category "along with family", for example, may be partly induced by the decision of the head of the household to migrate to seek a job.

**Tab. 3.6 – Index<sup>a</sup> on Migrant Population by Region (Rural/Urban) of Origin/Destination and Area of Previous Residence**

Region of origin/destination	Type of area	Attraction			Dependency			Prevalence			Interchange			Preference in attraction			Preference in destination		
		Rural	urban	total	rural	urban	Total	rural	urban	total	rural	urban	total	rural	Urban	total	rural	urban	total
Tigray	rural	44,7	20,1	32,4	39,1	21,3	29,7	4,8	-0,8	1,9	42,0	20,7	31,0	58,2	51,0	46,6	48,9	56,2	46,3
	urban	47,3	56,8	53,0	32,4	61,2	52,1	12,4	-5,4	0,9	40,8	59,1	52,6	44,9	32,4	30,4	49,2	35,2	33,4
	total	47,0	41,1	43,5	36,3	44,8	41,5	9,2	-3,3	1,5	42,1	43,0	42,4	44,2	34,0	29,0	42,2	38,8	33,6
Amhara	rural	27,2	15,8	24,6	38,7	37,4	38,4	-8,6	-14,7	-10,1	33,4	28,2	32,2	41,7	46,2	39,8	31,7	49,5	41,0
	urban	50,2	50,0	50,1	31,3	62,1	51,2	15,9	-13,8	-1,1	42,2	56,9	50,6	48,9	30,2	37,6	56,6	41,8	36,1
	total	36,2	31,6	33,2	37,2	48,7	42,3	-0,8	-14,2	-7,3	36,7	41,4	38,1	32,8	30,7	30,1	48,7	44,8	36,1
Oromiya	rural	29,7	23,8	27,7	27,6	27,8	27,6	1,5	-2,7	0,1	28,7	25,8	27,7	43,9	27,0	35,5	42,8	53,9	38,4
	urban	44,4	52,1	48,9	46,1	56,6	52,4	-1,6	-5,0	-3,6	45,3	54,5	47,4	44,0	28,2	29,8	39,2	34,9	24,3
	total	33,9	37,1	34,8	32,3	41,7	36,4	1,2	-3,7	-1,2	33,1	39,5	35,6	37,2	21,4	28,2	32,0	40,3	27,4
Ben-Gumuz	rural	66,2	49,0	64,1	37,0	17,1	34,3	30,2	23,8	29,4	56,1	36,8	53,6	48,5	46,0	44,1	55,6	32,6	53,2
	urban	45,2	73,3	64,0	45,4	46,1	45,7	-0,1	33,8	20,2	45,3	64,3	56,7	11,7	20,7	21,5	16,0	10,9	19,7
	total	64,0	65,4	64,1	38,8	35,2	37,9	26,0	30,3	26,7	54,7	54,9	54,5	19,2	23,6	34,4	45,4	23,1	40,2
Snnp	rural	37,6	24,9	33,1	35,1	54,7	44,6	1,9	-24,7	-9,4	36,4	43,5	39,4	60,1	42,0	53,2	48,9	55,2	45,1
	urban	63,4	62,9	63,2	42,8	59,0	51,4	21,9	5,0	13,8	55,4	61,0	58,1	47,4	27,7	34,1	59,8	33,9	33,7
	total	48,1	43,6	46,2	37,5	56,2	46,8	9,3	-12,5	-0,6	43,3	50,7	46,5	49,4	26,0	38,0	49,6	44,9	37,9
Gambella	rural	73,7	53,4	69,8	7,7	19,6	11,5	55,7	26,6	49,1	59,1	41,0	55,0	52,5	90,3	48,1	53,8	22,1	49,9
	urban	58,0	59,0	58,7	24,9	27,3	26,6	28,3	27,8	27,9	46,1	47,5	47,1	26,0	22,3	27,2	24,9	7,3	28,6
	total	70,7	57,5	65,5	13,2	24,9	19,3	49,5	27,7	40,1	56,2	45,7	51,6	46,7	15,9	34,1	60,8	21,9	20,2
Harari	rural							-27,0	47,5	29,2				96,9	38,5	35,9	76,5	34,1	41,3
	urban							-88,6	-7,6	-22,6				65,2	21,9	21,5	67,4	51,6	37,0
	total							-72,4	3,8	-11,6				88,7	15,8	20,3	69,3	50,4	34,9
Addis Ababa	rural							21,8	97,8	95,7				38,1	20,0	26,9	44,5	27,4	24,6
	urban							-99,1	27,5	-6,9				17,6	8,8	8,8	24,6	12,2	13,6
	total							-93,3	55,6	27,1				37,1	15,8	15,8	24,9	12,3	13,7
Dire Dawa	rural							81,2	78,2	78,4				86,0	76,1	42,5	100,0	37,7	62,8
	urban							-58,5	17,7	0,3				9,5	21,0	21,0	43,4	20,9	32,0
	total							-42,6	34,5	19,1				80,8	23,5	26,3	54,9	20,9	31,2
Country <sup>(b)</sup>	rural	32,7	22,0	29,2	33,1	36,9	34,6	-0,3	-0,2	-0,2	32,9	30,2	32,0	48,0	31,6	38,3	39,9	53,3	41,3
	urban	51,4	54,6	53,1	40,9	58,8	51,7	0,5	0,0	0,2	46,7	56,8	52,4	46,3	22,8	28,0	41,8	33,0	26,9
	total	39,2	38,2	38,1	36,2	46,7	40,6	0,2	-0,2	0,0	37,8	42,8	39,4	39,4	22,6	28,2	39,2	39,1	30,6

Note a: see text for the explanation of the index; b: excluded Harari, Addis Ababa and Dire Dawa.

Source: own calculations on Labor Force Survey, 1999

specified that the total moves for work reasons consist of two components, job-seeking and job transfer migrations. The analysis regards 520,952 changes of residence within Ethiopia and not considering migrations from abroad<sup>10</sup>.

Table 3.7 provides an outline of the total migratory movements for work reasons ("total work reason") and in the two components, job seeking and job transfer, by area of previous and current residence (rural or urban). The migrations due to job seeking (about 400,000) represent 77 percent of the overall movements. We can observe that most of them consist of flows from rural to urban areas (35 percent), while the urban-rural moves are much lower<sup>11</sup> (11 percent). This is an expected pattern, for it is perceived that there is a wider range of job opportunities (above all in the informal sector) in towns than with respect to rural areas. The job seeking migrations occur in 58 percent of the cases outside the sub-region of previous residence. We can therefore state that they cause longer moves than with respect to migrations due to transfer of the place of work (the latter cause outflows from the place of origin only in 44 percent of the cases). Migrations due to transfer of the place of work (about 120,000, or 23 percent of the total) have a specifically urban character. In fact, 61 percent of them take place between urban areas (about 75,000) and of these half remain in the urban area of origin. The urban character of this type of moves is confirmed by the fact that one third of the migrations for work reasons from the capital take place for this reason. The characterisation of this type of flows seems to be dubious, and could involve the moves of tradesmen and white-collar workers from one town to another<sup>12</sup>.

**Table 3.7 Total Migrant Population by Type of Area (Rural/Urban) of Previous and Current Residence. Labor Flows**

Reason of migration and type of previous residence area	Type of current residence area		total absolute values
	rural percentage	urban percentage	
<b>Search for work</b>			
<i>rural</i>	45.1	54.9	257,670
<i>urban</i>	30.5	69.5	144,059
<i>total</i>	39.9	60.1	401,729
<b>Job transfer</b>			
<i>rural</i>	41.7	58.3	29,224
<i>urban</i>	18.2	81.7	90,034
<i>total</i>	24.0	76.0	119,223
<b>Reasons of work (in general)</b>			
<i>rural</i>	44.6	55.4	286,803
<i>urban</i>	25.8	74.2	234,149
<i>total</i>	36.2	63.8	520,952

Source: own calculations on Labor Force Survey, 1999

<sup>10</sup> Migrations from abroad account for more or less 7percent of the overall flows coming from abroad. Most of them go to the areas of Misrakawi Tigray (probably from Eritrea), Misrak Harerge and Addis Ababa.

<sup>11</sup> Examining the flows between sub-regions, we see that job-seeking accounts for 88percent of the migrations to Addis Ababa (67,000) and Misrak Shewa (35,000), and 95percent of the moves from Gurage (38,000), only citing the largest flows in absolute terms.

<sup>12</sup> Migrations for change of workplace are more numerous than those for job-seeking in only two regions: Gambella (71percent) and Benishangul (58percent).

In continuing the analysis, it was decided to aggregate the two reasons as being homogenous and in order to avoid excessive fragmentation of the documentation. In the migrations for work reasons considered as a whole, we can therefore note that most of them start in rural areas (55 percent), but nearly two thirds go to an urban area (64 percent). Of the rural flows, 55 percent go towards urban areas, while only 25 percent of the urban flows go towards rural areas<sup>13</sup>. On the other hand, two thirds of those arriving at a rural area come from another rural area, while just under half (47 percent) of the transfers is recorded in an urban area from a rural one.

**Table 3.8 Mobility Rates by Region and Type of Area (Urban/Rural). Labor flows**

Region of Origin/destination	Type of area	Mobility Indexes (referred to the population)								
		In-migration previous residence			Out-migration total	Net-migration total	Intra-migration Previous residence			
		rural	urba	total			rural	urban	total	
Tigray	rural	1.8	1.5	3.2	4.2	-0.9	0.8	2.0	2.8	
	urban	17.8	28.9	46.7	31.7	15.0	2.4	10.6	13.0	
	total	4.0	5.3	9.3	7.4	1.9	1.0	3.2	4.2	
Amhara	rural	2.7	1.1	3.8	7.3	-3.4	1.9	2.1	4.0	
	urban	27.9	22.8	50.7	48.3	2.4	6.6	11.9	18.4	
	total	4.8	2.9	7.7	10.7	-2.9	2.3	2.9	5.2	
Oromiya	rural	2.5	1.0	4.0	5.0	-1.0	1.9	1.3	3.2	
	urban	21.4	25.5	46.9	36.2	10.7	5.7	11.2	16.9	
	total	4.9	3.6	8.4	7.4	1.0	2.3	2.4	4.6	
Benishangul-Gumuz	rural	3.9	2.7	6.6	5.3	1.3	1.4	1.1	2.4	
	urban	28.6	76.4	105.0	40.6	64.4	13.3	18.7	32.1	
	total	5.8	8.5	14.2	8.1	6.2	2.3	2.4	4.7	
Snp	rural	2.2	1.9	4.0	7.4	-3.4	1.2	0.0	1.2	
	urban	26.5	29.7	56.2	47.6	8.7	7.2	0.0	7.2	
	total	3.9	3.8	7.7	10.3	-2.5	1.7	2.1	3.7	
Gambella	rural	23.4	6.4	29.7	3.3	26.4	2.1	1.0	3.1	
	urban	17.1	70.1	87.1	37.7	49.4	5.6	23.9	29.5	
	total	22.0	20.2	42.2	10.8	31.4	2.9	6.0	8.9	
Harari	rural	2.6	0.3	3.0	1.6	1.4	0.0	0.4	0.4	
	urban	14.8	40.3	55.1	46.7	8.4	0.0	0.0	0.0	
	total	9.1	21.3	30.4	25.3	5.1	0.0	0.2	0.2	
Addis Ababa	rural	30.2	3.3	33.6	39.7	-6.1	0.0	7.5	7.5	
	urban	19.8	15.1	34.9	12.8	22.1	0.0	0.0	0.0	
	total	19.9	15.0	34.9	13.1	21.8	0.0	0.1	0.1	
Dire Dawa	rural	0.7	1.7	2.4	2.9	-0.4	0.0	0.7	0.7	
	urban	13.1	23.3	36.5	23.9	12.6	0.7	0.2	1.0	
	total	8.9	15.9	24.7	16.6	8.1	0.5	0.4	0.9	
Ethiopia	rural	2.5	1.3	3.8	6.1	-2.3	1.6	1.5	3.1	
	urban	22.1	22.9	45	31.4	13.6	3.9	7.6	11.5	
	total	5.3	4.2	9.5	9.5	0	1.9	2.4	4.3	

Source: own calculations on Labor Force Survey, 1999

Table 3.8 shows four rates of migration by region. These include in-migration, (distinguishing the area of previous residence as rural or urban), out-migration, net-migration, intra-migration<sup>14</sup>. Limiting for the moment the analysis to Ethiopia as a

<sup>13</sup> The volume of migrations from urban to rural areas (60,000) cannot be considered negligible, since it is over 10percent of the total moves. Naturally, in the case here we cannot refer to "counter-urbanisation" flows since many of the so-called "urban areas" are not very urban, but above all because the urbanisation process is still far from being defined as completed.

<sup>14</sup> The indexes are always much higher for moves from urban areas due to their structure, which contrasts the volume of these migrations (whose number is not very different from those starting from rural areas) to the total urban population, 5-6 times lower than the rural population.

whole<sup>15</sup>, the in-migration rate is 9.5 per thousand (5.3 per thousand rural areas and 4.2 per thousand urban areas) if referring to the overall population. In other words, the number of flows for work reasons is just under one percent of the overall volume of the Ethiopian population. The same rate, for the urban population only, is 45 per thousand (with urban origin only slightly higher) while it is 4 per thousand if referring to rural migrations (with mainly rural origin).

The overall out-migration and in-migration rates are, of course, equal and consisting of the same flows, only seen from opposite points of view. For the same reason, the overall net-migration rates are zero.

Referring the migration movements to the rural and urban populations separately, we obtain a view of the extent of the urbanisation process under way in the country. Compared to an out-migration rate of 6.1 per thousand for the rural areas and 31.4 per thousand for the urban areas, we see a net out-migration rate (-2.3 per thousand) for the rural areas and a net in-migration rate (13.6 per thousand) for the urban ones. Although, these values show a certain increase in the urban population, the rate does not seem to be very high. In fact, a net in-migration rate over five years of 100,000 moves towards the urban areas for work reasons, is certainly not very much if compared to an overall population of about 54 million (CSA 1994).

Other analyses indicate that in Ethiopia there is a much more extensive urbanisation process (as shown, for example, in the UN research: see Chapter 4). We should therefore wonder why there is not much confirmation of this information in the analysis involved here.

As stated in Note 1, some of the moves classified as "along with family" may be included in the category of migrations for work reasons, since they derive from the decision of the head of the household to migrate for job seeking. Another reason, perhaps more important, may be linked to the particular type of urbanisation under way in Ethiopia, based on a dense network of small towns (or large villages) developing around the larger towns. This is a quite dynamic new phenomenon and since therefore hard to quantify, and thus may have escaped the attention of the Labor Force Survey.

The intra-migration rate is 4.3 per thousand for Ethiopia as a whole, meaning that the volume of the migrations having their origin and destination within the same sub-region is 4.3 per thousand of the total population. Subtracting this value from total out-migration (9.5 per thousand), we obtain the quota of out-migrations from the sub-regions, which is therefore equal to 5.2 per thousand of the total population. Going back to the intra-migration rate, 1.9 per thousand move to the rural part of their own sub-region, and 2.4 per thousand to the urban part, thus confirming the greater attractiveness of the urban areas. The rate is 3.1 per thousand for the residents in rural areas (almost equally distributed between rural and urban with regard to destination) and 11.5 per thousand for the residents in urban areas, who prefer moves between the towns in the sub-region of reference (7.6 per thousand).

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<sup>15</sup> The in-, out-, net- and intra-migration rates for Ethiopia as a whole have been calculated on the basis of the origin-destination matrix of the migration movements between sub-regions.

### **b) Analysis by Regions**

Having identified some characteristics of the migrations for work reasons in reference to Ethiopia as a whole, we can now make an analysis of the individual regions<sup>16</sup>. If we observe the origin-destination matrix of the migration movements between the regions, we can note the considerable attraction of Addis Ababa compared to the most populous areas (Amhara, Oromiya and SNNP), with inflows exceeding 20,000. Tigray and Harari have also their highest outgoing moves towards the capital. The Oromiya region has inflows of over 20,000 people from SNNP, in addition to consistent migrations from Amhara (15,000) and Addis Ababa (10,000). We can note the low rate of migration from Benishangul Gumuz, Gambella, Harari and Dire Dawa, always under 5,000 people. Note 8 explains the low rate of the self-contained flows of Harari, Addis Ababa and Dire Dawa.

The in-migration rate of Gambella is very high both for the region as a whole (42.2 per thousand) and for the migrations with urban (87.1 per thousand) and rural (29.7 per thousand) destination. This confirms a strong capacity of attraction, which must, however, be compared with the low resident population (180,000 people in the entire region and 40,000 in the urban areas). The same applies for Benishangul Gumuz, with an urban area showing a rate over 100 per thousand, but compared to an urban population of 45,000. The figure for Amhara is interesting, with high urban in-migration rate (50.7 per thousand) closely linked to the attraction capacity from the rural areas (on 1,000 residents, 28 come from rural areas of the country), in definite contrast to all the other regions (except Addis Ababa). On the other hand, the capacity of attraction of the cities towards the other urban areas of the country is stronger. The overall rates for Harari (30 per thousand), Dire Dawa (25 per thousand) and Addis Ababa (35 per thousand) are also very high.

The highest out-migration rates are those of the three city-regions, with values ranging from 25.3 per thousand for Harari to 16.6 per thousand for Dire Dawa. The presence of high in- and out-migration rates indicates a good level of mobility within the country's three most important urban areas. The indexes in Amhara and SNNP are quite high (10-11 per thousand), above all in reference to the rural areas (over 7 per thousand), which show major outflows. The lowest values are in the Tigray and Oromiya regions (7.4 per thousand).

Most of the regions (In particular, Gambella 31 *per thousand*, total and 50 per thousand, urban and Addis Ababa 22 per thousand) show net in-migration rates. The only net out-migration rates are in Amhara and SNNP (about -2.5 per thousand). In any case, despite a total net out-migration rate, both the regions show a net in-migration rate for the urban area (Amhara 2.4 per thousand and SNNP 8.7 per thousand). This rate is positive for all the regions, confirming a widespread process of urbanisation under way. The net-migration rates for the rural areas are generally negative or almost zero, except for Gambella with a definitely net in-migration rate of 26 per thousand, Benishangul Gumuz and Harari: about 1 per thousand).

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<sup>16</sup> It should be recalled that the regions of Affar and Somali have been excluded from the analysis, since they are not completely covered by the sample created in the Labor Force Survey.

The intra-migration rate<sup>17</sup> (Table 3.8) is on the whole high for Gambella (8.9 per thousand of the total population of the region migrates within itself) and for Amhara (5.2 per thousand), while it is low for the SNNP region. With regard to internal mobility in urban areas, the Benishangul Gumuz and Gambella regions show a rather high index (30 per thousand of the urban population of these regions moves within the regions), while the indexes for Amhara (18.4 per thousand) and of Oromiya (16.9 per thousand) are also considerable.

We can now continue the analysis by regions observing the mobility index<sup>18</sup> (Table 3.9). With regard to the capacity to attract migrants, we can observe significant values (between 67 percent and 79 percent) for the Benishangul and Gambella regions, with the difference that the former is more attractive in the urban area (70 percent), and the latter in the rural area (89 percent). Gambella is an exception in this respect, since in all the other regions, the urban areas attract more migrants. Amhara is the least attractive region (above all in the rural area) with a rate of 32 percent.

The highest **dependency** indexes are those in SNNP and Amhara, with both regions sending over half of the migrations outside their territory (respectively 63 percent and 51 percent). The value for Gambella is very low (18 percent). All the regions show a especially high repulsion index towards the urban areas.

The **net change** index is definitely negative for the Amhara and SNNP regions (about -15 percent), but falls further if we consider only urban migrations (-23 percent for both), thus confirming a migration flow towards the urban areas, above all from rural areas (-40 percent for SNNP). The net change index is definitely positive for Gambella (59 percent), Addis Ababa (45 percent) and Benishangul (28 percent).

Gambella is the region with the greatest **interchange** (67 percent), above all on the rural level, and with major levels of mobility in Benishangul and SNNP (58 percent for both). There is low mobility in Amhara and Oromiya (44 percent).

Gambella and Amhara tend to attract flows from an area in particular, as shown by **preference** in the very high attraction index (respectively 42 percent and 37 percent). On the contrary, the low indexes of **preference in attraction** of Addis Ababa, Harari and Benishangul (about 20 percent), mean inflows sub-divided into several areas.

Finally, with regard to the rate of **preference in dependency**, the low values of Addis Ababa (12 percent) and Dire Dawa (22 percent) indicate outflows distributed among various areas, while Benishangul, Gambella and Harari tend to concentrate their out-migrations (40 percent).

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<sup>17</sup> The intra-migration rates of the three city-regions (Hararii, Addis Ababa and Dire Dawa) are virtually nil, since the way in which the question was asked (in the Labor Force Survey) regarding the status of migrant, did not allow for identification of the moves within the towns.

<sup>18</sup> The failure to survey the self-contained migrations (See Note 8) prevented the calculation of the indicators of attraction, dependency and interchange for the regions of Hararii, Addis Ababa and Dire Dawa.

**c) Analysis by Sub-regions**

The highest flows between sub-regions are towards Addis Ababa (13 out of 2,000 people) and come above all from the Amhara region, although the highest in absolute terms is the flow from Gurage (over 16,000). The area of Misrak Shewa attracts major

**Table 3.9 Migrant Indicators by Region and Type of Area (Urban/Rural). Labor Flows**

Region of origin/destination	Type of area	Mobility Indicators (referred to the migrant population)																	
		Attraction			Dependency			Prevalence			Interchange			Preference in Attraction			Preference in Dependency		
		rural	urban	total	rural	urban	Total	rural	Urban	Total	rural	urban	total	rural	urban	total	rural	urban	total
<i>Tigray</i>	<i>rural</i>	54.8	28.8	38.7	35.4	30.2	31.7	17.7	-1.0	5.4	46.8	29.5	35.4	70.7	44.2	47.6	62.4	68.8	51.7
	<i>urban</i>	63.0	61.2	61.5	38.6	61.2	58.4	24.9	0.0	3.9	53.8	61.2	60.1	80.0	35.5	34.3	97.9	34.0	34.9
	<i>total</i>	57.9	50.1	51.0	36.4	48.8	46.4	20.3	1.3	4.6	49.3	49.5	48.8	74.4	31.6	32.7	75.0	41.7	39.7
<i>Amhara</i>	<i>rural</i>	28.6	17.9	23.4	41.0	47.5	44.5	-9.5	-22.0	-16.0	35.4	35.9	35.7	57.8	46.0	48.8	35.7	48.8	31.2
	<i>urban</i>	46.8	47.5	47.3	33.0	69.2	61.8	11.5	-26.0	-16.0	40.7	61.2	55.7	80.5	33.4	46.6	62.5	45.8	42.3
	<i>total</i>	33.9	31.5	32.4	39.3	57.7	51.1	-4.2	-23.6	-16.0	36.7	47.7	43.2	50.5	29.5	37.5	34.8	46.8	35.2
<i>Oromiya</i>	<i>rural</i>	37.1	45.0	40.6	28.0	43.2	35.2	6.8	1.6	4.4	32.8	44.1	38.1	45.9	30.0	26.9	48.5	64.1	43.8
	<i>urban</i>	34.8	55.9	50.5	39.4	58.3	53.4	-3.7	-2.7	-3.0	37.2	57.1	52.0	74.5	31.4	29.5	61.2	35.2	32.1
	<i>total</i>	36.5	51.1	44.8	31.3	51.7	43.5	3.9	-0.6	1.2	34.0	51.4	44.1	39.4	21.5	21.9	39.1	44.9	35.3
<i>Benishangul-Gumuz</i>	<i>rural</i>	65.0	56.4	61.7	67.8	6.6	54.8	-4.2	36.3	8.2	66.4	40.5	58.5	30.3	32.8	26.7	50.0	100.0	48.7
	<i>urban</i>	59.1	75.5	70.6	0.0	31.4	21.1	41.9	47.3	45.7	41.9	63.9	57.1	33.4	22.4	19.3	0.0	49.8	49.8
	<i>total</i>	62.5	70.3	67.0	53.5	23.2	41.6	10.8	44.2	27.7	58.5	57.1	57.8	26.0	18.6	19.7	50.0	45.2	41.5
<i>Snnp</i>	<i>rural</i>	42.3	29.5	36.1	51.1	70.1	63.5	-8.2	-40.5	-27.3	47.0	58.0	53.5	62.3	48.0	49.8	50.0	58.9	48.7
	<i>urban</i>	70.1	65.7	67.8	60.3	65.1	63.2	14.1	0.9	6.6	65.9	65.4	65.6	54.3	30.6	33.6	75.0	41.1	39.8
	<i>total</i>	55.2	48.7	51.8	54.3	68.5	63.4	1.0	-23.9	-13.7	54.8	61.0	58.4	51.8	27.5	34.7	56.9	50.8	39.7
<i>Gambella</i>	<i>rural</i>	91.1	78.3	88.9	0.0	16.3	6.0	83.6	58.8	78.9	83.6	65.5	80.2	71.9	25.4	63.1	0.0	67.1	67.1
	<i>urban</i>	75.5	65.9	68.3	0.0	25.5	21.7	60.7	37.2	42.3	60.7	53.2	54.8	51.5	21.1	26.9	0.0	44.3	44.3
	<i>total</i>	87.7	68.3	79.0	0.0	24.3	17.9	78.2	41.0	59.3	78.2	55.3	66.6	62.8	16.3	41.8	0.0	40.7	40.7
<i>Harari</i>	<i>rural</i>							100.0	82.2	84.5				92.1	47.3	40.6	0.0	0.0	100.0
	<i>urban</i>							-89.1	-1.6	-7.4				52.0	27.0	27.1	96.0	49.6	43.8
	<i>total</i>							-33.9	12.7	8.8				81.3	19.7	19.1	96.0	48.3	42.8
<i>Addis Ababa</i>	<i>rural</i>							24.6	97.6	95.6				42.9	32.7	32.2	100.0	28.9	56.9
	<i>urban</i>							-97.9	23.5	7.6				100.0	11.3	11.3	42.2	16.4	12.4
	<i>total</i>							-81.6	57.3	45.1				40.7	21.5	21.4	39.7	16.1	12.1
<i>Dire Dawa</i>	<i>rural</i>							100.0	79.3	79.9				43.1	44.3	44.1	0.0	99.8	99.8
	<i>urban</i>							-61.0	7.3	0.8				53.9	28.3	28.1	67.8	22.3	22.7
	<i>total</i>							-48.6	25.5	19.6				29.2	25.0	25.0	67.8	24.1	21.6
<b>Ethiopia</b>	<b>rural</b>	<b>38.5</b>	<b>33.7</b>	<b>36.3</b>	<b>38.6</b>	<b>52.6</b>	<b>46.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>38.5</b>	<b>44.7</b>	<b>41.7</b>	<b>54.5</b>	<b>35.2</b>	<b>36.3</b>	<b>44.5</b>	<b>56.9</b>	<b>41.6</b>
	<b>urban</b>	<b>52.4</b>	<b>58.4</b>	<b>56.6</b>	<b>44.5</b>	<b>62.0</b>	<b>57.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>48.7</b>	<b>60.3</b>	<b>57.0</b>	<b>65.2</b>	<b>26.0</b>	<b>28.8</b>	<b>61.7</b>	<b>35.5</b>	<b>32.3</b>
	<b>total</b>	<b>43.0</b>	<b>47.5</b>	<b>45.4</b>	<b>40.3</b>	<b>57.1</b>	<b>50.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>41.7</b>	<b>52.8</b>	<b>48.3</b>	<b>48.1</b>	<b>24.0</b>	<b>27.2</b>	<b>44.0</b>	<b>42.7</b>	<b>33.8</b>

Source: own calculations on Labor Force Survey, 1999

moves (a dozen over 1,000), in particular from Gurage, Semen Omo and Addis Ababa (over 3,000). Over 3,000 people also migrated from Gurage and Semen Omo to Sidama, and from Addis Ababa to Misrak Gojam.

In greater detail, the **inter-urban** and **rural-urban** migrations exceeding 1,000 people (apart from Addis Ababa) were to Misrak Shewa, Sidama and Debubawi Tigray. Unsurprisingly, these three areas have growing urban areas such as Nazareth, Debre Zeyit and Shashamane (Misrak Shewa), Awasa (Sidama) and Mekele (Debubawi Tigray).

With regard to **inter-rural migrations**, though rather low, we can recall those from Keficho Shekicho to Gambella and Bench Maji (about 2,000), from Semen Shewa to Misrak Shewa (over 2,000) and from Semen Wello to Bale (1,500). The moves from **urban to rural** areas, not very frequent, exceed 1,000 people in only four cases, i. e., from Addis Ababa to Misrak Gojam and Semen Shewa, from Gurage to Sidama and from Sidama to Semen Omo.

The **in-migration rate**, with regard to the flows with rural destination (Fig. 3.6a), is especially high for Bale, Misrak Shewa and Bench Maji (about 10 per thousand), very low for Mehakelegna Tigray, Mirab Hararige and Hadiya (about 1 per thousand). The flows with rural destination often have rural origins. The main exceptions are Misrakawi Tigray and Semen Omo, with flows of urban origin being more than double with respect to the rural ones. The in-migration rate, for the flows with urban destination (Fig. 3.6b), is very high for the sub-regions of Bench Maji, Mirab Gojam, Agew Awi, Wag Hemra and Debub Omo (between 70 per thousand and 80 per thousand), much lower for Misrak Hararige, Mirab Shewa and Hadiya (between 35 per thousand and 40 per thousand). The origin of these flows is most often urban, but there are seven sub-regions of Amhara with mainly rural migrations to urban areas.

The **out-migration rate**, for the moves with rural destination (Fig. 3.7a), is very high for the area of Gurage (20 per thousand), but is also high enough for Semen Wello, Semen Shewa and Keficho Shekicho (between 10% and 15 per thousand). The lowest values are recorded for Oromiya (in Amhara), Borena and Mirab Hararige (under 2 per thousand). The out-migration rate for the moves with urban destination (Fig. 3.7b) is very high for Gurage (over 100 per thousand) and for Mirab Gojam (75 per thousand) and quite high for Semen and Debub Omo (about 60 per thousand). The lowest values are those of Wag Hemra (10 per thousand), Gedeo (15 per thousand) and Hadiya (20 per thousand).

The **net-migration rates** for urban area (Fig. 3.8a) generally show a surplus. The highest rates are those of Wag Hemra (65 per thousand), Bench Maji (50 per thousand), Agew Awi and Gedeo (about 35 per thousand). Negative indexes are shown for Gurage (-50 per thousand), as well as in the four areas of the Amhara region: Semen and Debub Wello, Semen Shewa and Debub Gondar (between -5 per thousand and -10 per thousand). The net-migration rates for rural area (Fig. 3.8b) are more often negative for Gurage (-17 per thousand), the four areas of Amhara mentioned above and Semen Shewa (over -5 per thousand) and about 15 other areas (with lower net out-migration

rates). The highest net in-migration rates are those of Bench Maji (8 per thousand), Misrak Shewa (4 per thousand), Bale, Borena and Sidama (2-3 per thousand ).

The **intra-migration rate** (Table A3.8) shows very high values for Bale (10.2 per thousand, total and 41.4 per thousand, urban), Semen Wello (9.5 per thousand, total and 8.2 per thousand, rural), Mirab and Misrak Gojam and for Semen and Debub Omo, all about 33 per thousand of the internal moves going towards the urban part. The values of Wag Hemra, Arssi and Misrak Shewa are also significant.

With regard to the **mobility index**, there are higher levels of interchange and of dependency caused by migrations for work reasons (50 percent) with respect to those previously seen for the overall migrations (40 percent). Migrations for work reasons therefore involve a greater number of transfers outside the previous area of residence. This leads us to conclude that they probably involve a greater propensity to longer moves with respect to other types of migration.

The average **index of attraction** for the sub-regions is 45 percent, though the urban component is much more attractive than the rural one (56 percent compared to 36 percent). On average, half of the migrations take place outside the sub-region of previous residence. The urban populations are more mobile than rural ones, especially when moves towards other urban areas are involved. The migrants from rural areas are generally less likely to make transfers outside the area of residence, but more likely to concentrate their moves towards a single outside area, above all, if this is urban.

The analysis of the **concentration rate of dependency** can provide an initial picture of local labor systems. The capital is the favourite destination for migrations from about 15 areas spreading through the country from north to south, half of which belong to the Amhara region, as well as the city of Harari. Dire Dawa attracts flows from some areas in the eastern zone (Mirab and Misrak Harerge), while the regions of Tigray, Benishangul and Gambella are more attractive for some adjacent outlying sub-regions.

In order to identify the characteristics of the migrants of the sub-regions, an analysis was conducted on the main elements using a matrix of the six indicators used up to now (Table A3.9). Therefore, on the basis of the points obtained on the first three factor axes (88.4 percent of the displayed variance), the areas have been grouped in a hierarchical cluster based on the Ward method. The division into seven clusters (Fig. 3.9) was considered to be the most significant. Table 3.10 shows mobility indicator values of the clusters.

**Cluster A** consists of two south-western areas, Gambella and Bench Maji, very attractive and with low dependency, recording a very high net in-migration rate (prevalence over 50 percent) above all, in the rural areas. It should be specified that in absolute terms, both the areas show quite small migration inflows (about 5,000).

**Cluster B** is formed by ten attractive areas, with a very high net in-migration rate and a considerable level of mobility. It includes the three city-regions (Addis Abeba, Harari and Dire Dawa), some areas with at least one town with a population of over

50,000 (Misrak Shewa, Jimma, Sidama and Debubawi Tigray) and other less heavily populated areas (Benishangul and Borena).

**Cluster C** is also formed by two areas, Oromiya (Amhara region) and Gedeo, with a net in-migration rate, characterised by intensive migration interchange with the outlying areas (75 percent) and a considerable concentration of dependency (over 60 percent). Gedeo is attractive in the urban part, while Oromiya is attractive in the rural part.

**Cluster D** includes five sub-regions, not bordering each other and characterised by very high levels of concentration of attraction and dependency. The areas are Misrakawi Tigray, Debub Omo and three areas of the Amhara region (Misrak Gojam, Wag Hemra and Agew Awi). Among these, Wag Hemra is a "strong" area with a definitely high net in-migration rate (30 percent), high attraction and low dependency.

**Cluster E** includes two pairs of areas, rather isolated and with very low dependency (above all, in the rural areas). These are Mirabawi Tigray and Semen Gondar in the north and Arsi and Bale in the central area. Mirabawi Tigray has an average index of attraction (47 percent) distinguishing it from the other three less attractive areas.

**Cluster F** includes eleven areas in of which nine are distributed throughout the country from north to south (from Mehakelegna Tigray to Semen Omo) nearly uninterrupted and two in the central-southern area (Mirab and Misrak Harerge). These are not very attractive areas and the net out-migration rate shows low mobility.

**Cluster G**, formed by six central and adjacent areas, which may be defined as part of the area of attraction of Addis Ababa, especially in the rural component. It is, in fact, characterised by close dependency on the capital (over 25 percent of the outflows), as well as a considerable level of mobility and significantly low net out-migration rates (between -16 percent and -55 percent).

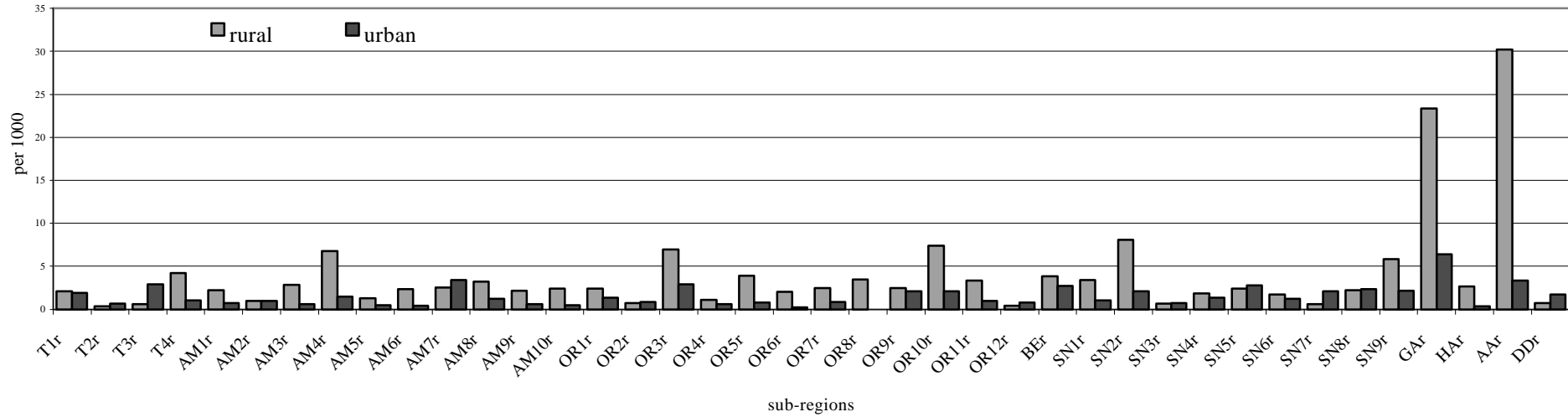
**Table 3.10 – Clusters of Sub-regions: Labor Flows Mobility Indexes**

Cluster s	Mobility Indicators (referred to the migrant population)					
	Attraction	Dependency	Prevalence	Interchange	Preference in Attraction	Preference in Dependency
A	79.9	26.3	56.9	68.5	50.4	42.9
B	63.8	46.5	21.2	57.4	22.4	31.1
C	80.8	72.2	18.4	77.4	29.5	65.0
D	45.6	39.8	4.1	44.0	55.2	60.0
E	28.3	26.7	1.5	28.1	38.8	33.1
F	33.7	46.1	-10.4	41.2	27.6	28.5
G	44.2	69.3	-29.2	61.1	26.9	42.3
Country	45.4	39.8	0.0	48.3	27.2	33.8

Source: own calculations on Labor Force Survey, 1999

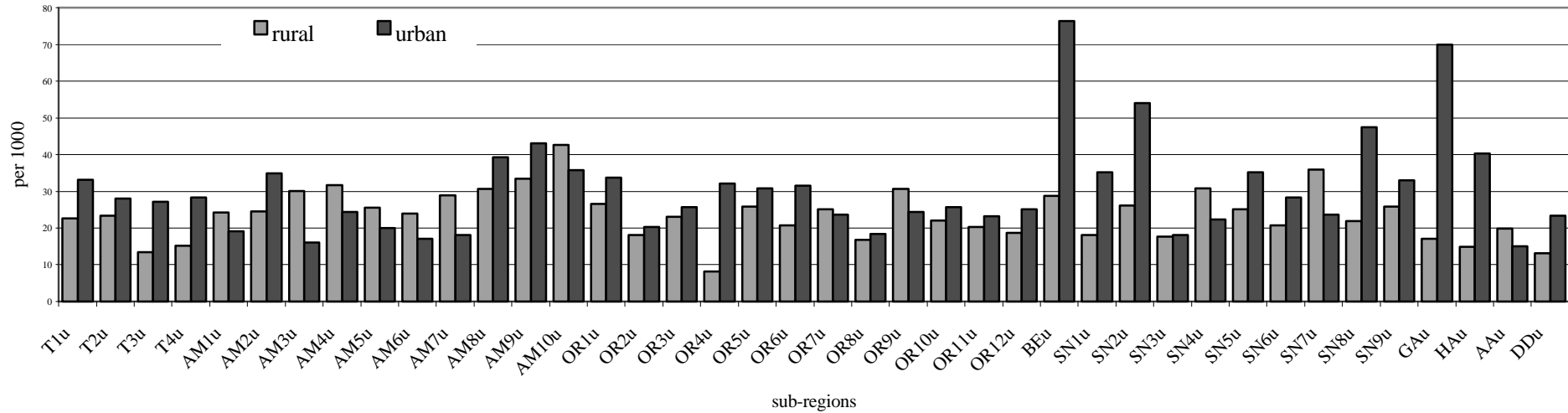


**Figure 3.6a – In-migration Rate by Area of Previous Residence. Labor Flows With Rural Destination.**



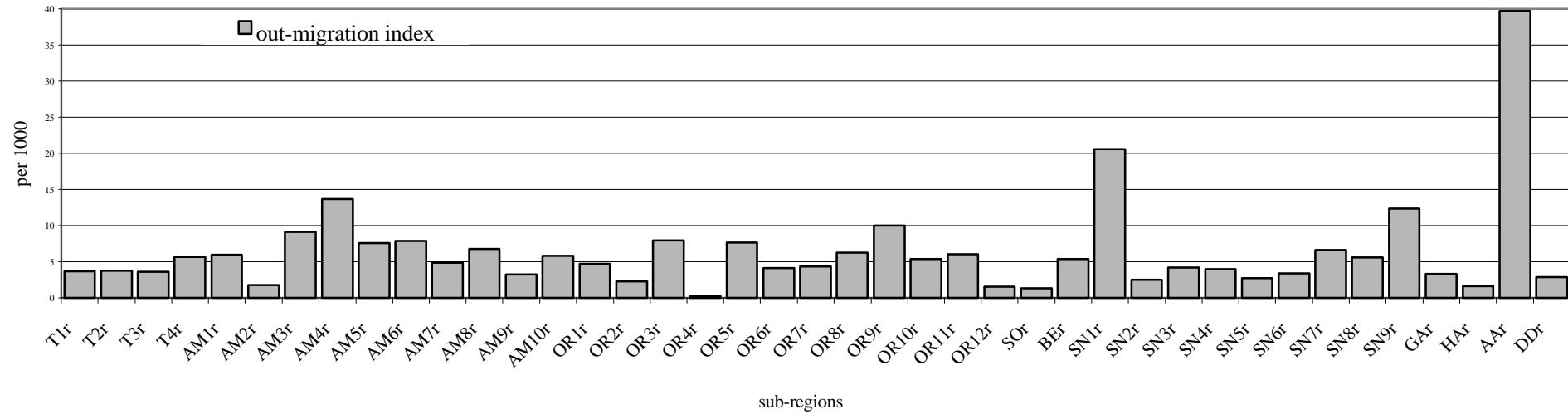
Source: own calculations on Labor Force Survey, 1999.

**Figure 3.6b – In-migration Rate by Area of Previous Residence. Labor Flows With Urban Destination**



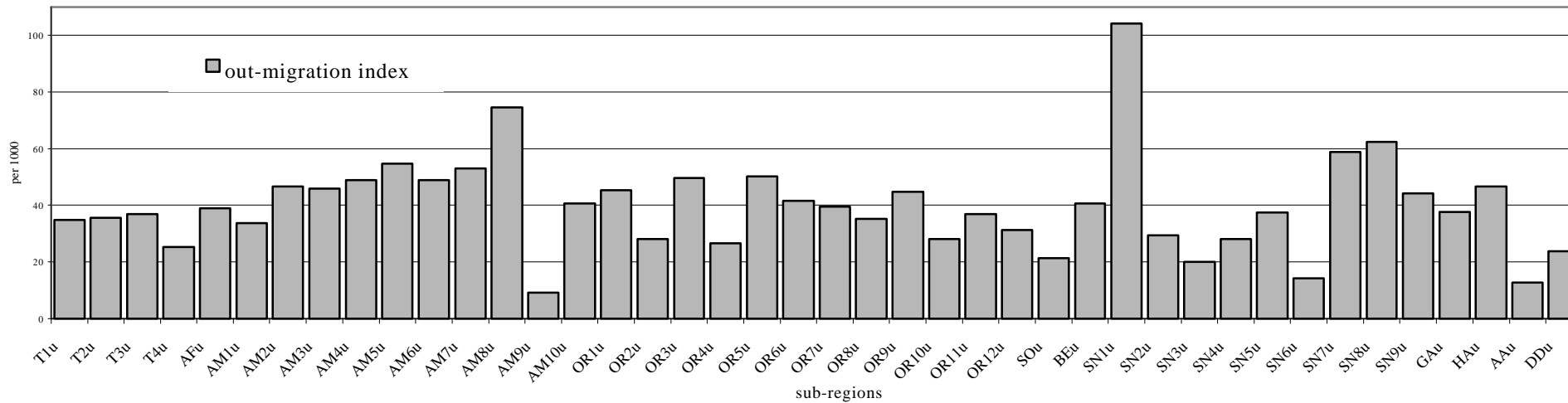
Source: own calculations on Labor Force Survey, 1999.

**Figure 3.7a – Out-migration Rate by Sub-region. Labor Flows With Rural Origin**



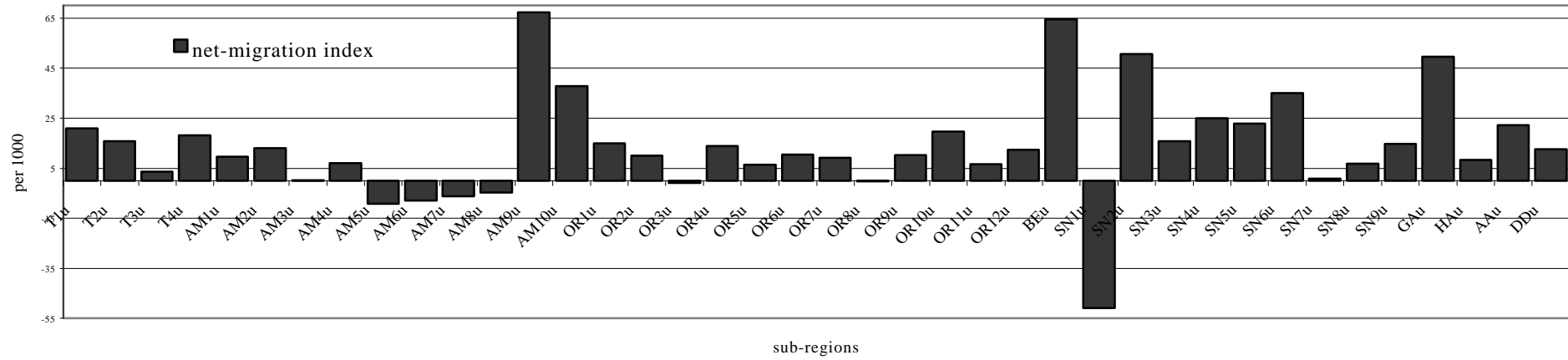
Source: own calculations on Labor Force Survey, 1999.

**Figure 3.7b – Out-migration Rate by Sub-region. Labor Flows With Urban Origin**



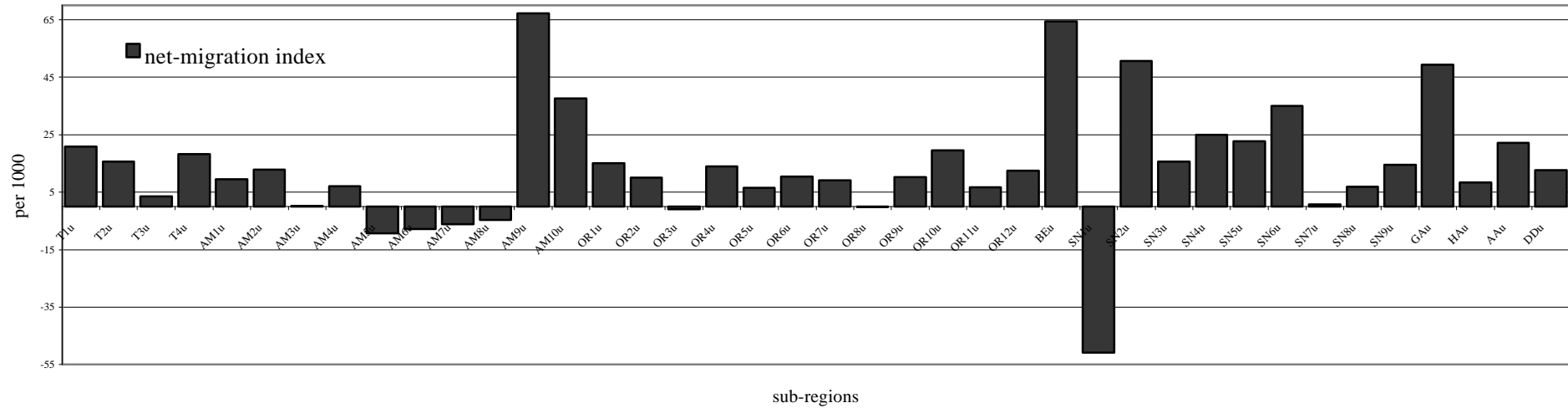
Source: own calculations on Labor Force Survey, 1999.

**Figure 3.8a – Net-migration Rate by Urban Area. Labor Flows**



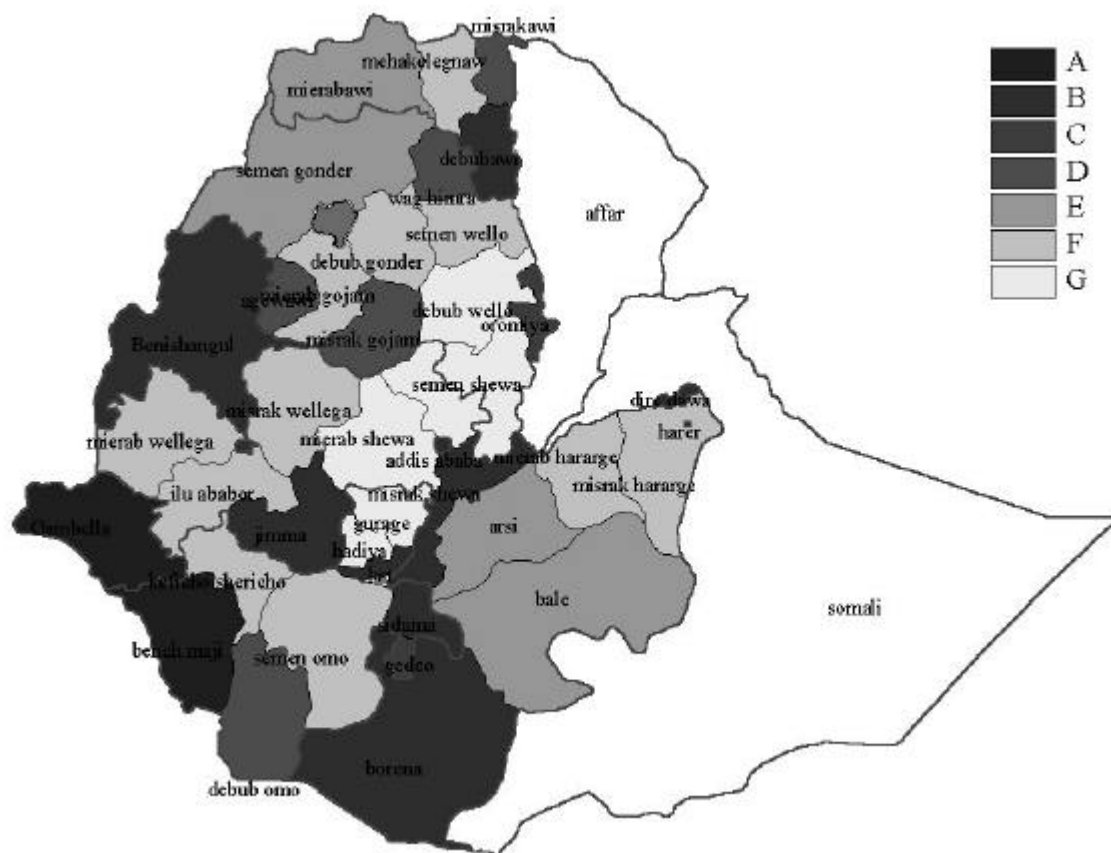
Source: own calculations on Labor Force Survey, 1999.

**Figure 3.8b – Net-migration Rate by Rural Area. Labor Flows**



Source: own calculations on Labor Force Survey, 1999.

Figure 3.9 – Cluster Analysis on the Mobility Index Values by Sub-region. Labor Flows



Unofficial map used only for graphical representation

Source: own calculations on Labor Force Survey, 1999.

#### d) Addis Ababa and Migration for Work

The capital is the only metropolis in the country and thus remains the city attracting the greatest migration flows for work reasons, above all from rural areas. Addis Ababa still offers the widest range of ,more or less, precarious job opportunities and there is a large area of attraction around it (See *Cluster G* above), consisting of not very urbanised areas. The size of this area is shown by the fact that only one fifth of the inflows comes from adjacent areas. The strong attraction of the capital is further confirmed by the fact that migration for work reasons, compared to overall flows, shows a rise in the average concentration of the dependency on Addis Ababa of the sub-regions from 14 percent to 26 percent.

Analysing the absolute values of the moves towards Addis Ababa (Fig. 3.10a), we can note that one fifth of the inflows comes from the Gurage area (16,000 migrants, mostly rural). The flows from Semen Shewa (in Amhara) and Mirab Shewa (over 7,000 migrants, not characterised by area of origin) and from Debub Wollo, Semen Shewa (in Oromiya) and Semen Omo (over 4,000 migrants, mainly rural from

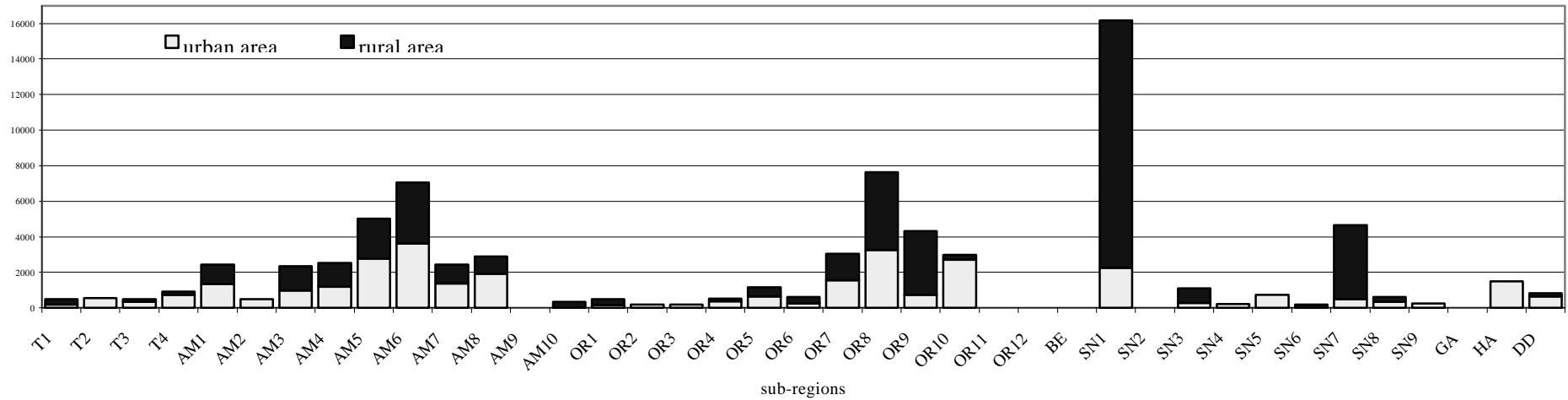
the latter two areas) are also consistent. The moves from Harari and Dire Dawa total about 1,000.

In relative terms (Fig.3.10b), a dozen sub-regions send a considerable amount (between 32 percent and 57 percent) of their out-migration to the capital, especially, Mirab Shewa, Semen Shewa (in Amhara), Misrak Gojam, Gurage and Harari, all with values over 43 percent. Considering only the rural areas, six areas concentrate massive flows towards the capital, ranging between 47 percent from Bale and 62 percent from Mirab Shewa. The moves towards Addis Ababa, in fact, come above all, from rural areas (in 60 percent of the cases). About a third of the outflows from these areas are also directed towards the capital. There are few regions recorded as providing no migration to the capital. These include Wag Hemra, Arssi, Mirab Harerge, Benishangul, Bench Maji and Gambella.

Migrations from Addis Ababa towards a rural area go above all to Misrak Gojam (40 percent) and flows towards an urban area to Misrak Shewa (15 percent). The latter area is the destination of 10 percent of the total out-migration from the sub-regions, attracted by the presence in the area of three towns with a population of over 50,000 (Debre Zeyit, Nazareth and Shashemene). In this area, it is also recorded a net change index higher than that in Addis Ababa. 31 percent of the population of Misrak Shewa lives in the urban area, and only the three city-regions show a higher percentage. There is also a net-migration rate (8.9 percent) higher than that in Dire Dawa (8.1 percent) and Harari (5.1 percent). Of the two city-regions, Dire Dawa has the highest rate of prevalence (20 percent compared to 9 percent), while their net change index is basically at parity.

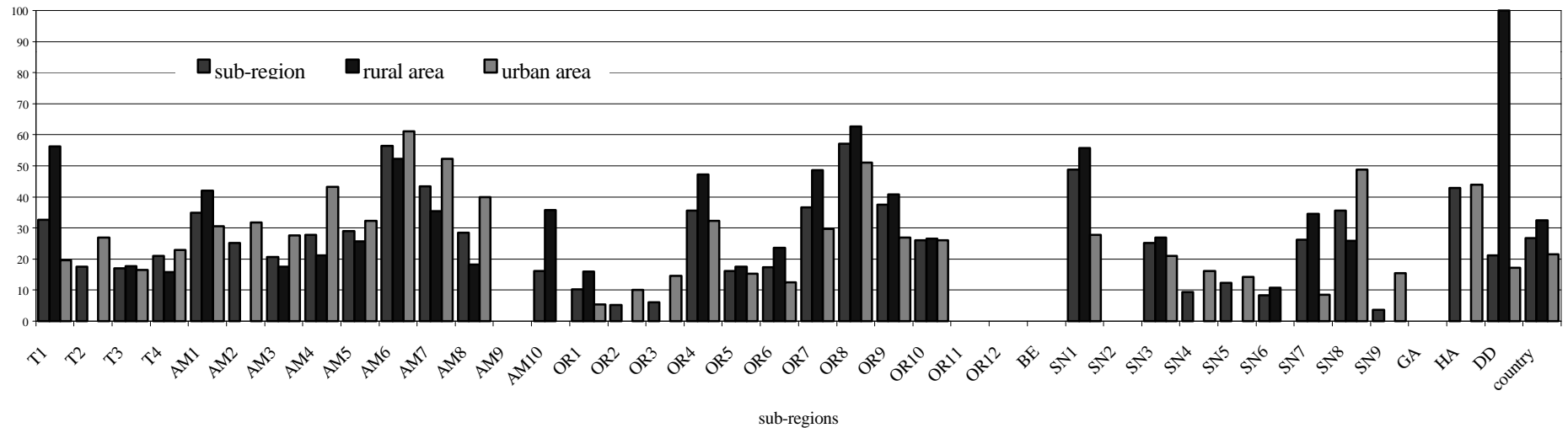


**Figure 3.10a – Labor Reason Migratory Movements to Addis Ababa. Absolute Values by Sub-region of Origin and Type of Area**



Source: own calculations on Labor Force Survey 1999.

**Figure 3.10b – Labor Reason Migratory Movements to Addis Ababa. Percentage Values by Sub-region and Type of Area**



Source: own calculations on Labor Force Survey, 1999.

### 3.2. Determinants of Migration: A Confirmative Analysis

Having completed the exploratory analysis of internal mobility in Ethiopia, some type of interpretation should be provided on the dynamics of the mobility processes occurring recently in Ethiopia. Though it does not actually give causal explanations of the mobility observed, the study seems to be more complete if an exploratory analysis is conducted on the links between population structure and its mobility.

Consequently, a consolidated-analysis strategy was followed to link the indicators introduced in the first part of the report (Chapter 2) with the ones used to summarise the characteristics of migrants in the areas. However, instead of linking each indicator with an objective variable, it was decided to summarise the mass of indexes into a few significant factors by an analysis of the main components. These factors were then used as independent variables in some regression equations<sup>19</sup>. Basically, the objective is to gain a picture of the mobility seen through information on changes of residence recorded indirectly in the LFS for the period 1994-1999 using structural indicators, the ones used for the census, referring to the situation defined in the initial period<sup>20</sup>.

It should also be pointed out that the analysis by components was repeated since a different geographical grid should apparently be used in order to combine the census and the Labor Force data on the geographical level. In fact, with the aim of interpreting the mobility of each of the Ethiopian sub-regions as presented in the previous paragraph, the indicators were recalculated for the date of the census with reference to the same geographical areas. This operation provided a picture of the structural characteristics of the population covered by the census, though different from the one illustrated previously (See Chapter 2). In fact, if we observe the data in the table showing the factor loadings obtained in the analysis by main components, we can see that some indicators are slightly modified with respect to the analysis conducted previously. Others have been introduced *ex novo*, while others, not useful for interpreting the results, were omitted (Table 3.11)<sup>21</sup>. Likewise, this time the objective is not to describe the variability of the indicators using a few axes, but rather to extract a number of significant factors and then verify their capacity to explain, by the multiple regression model, the geography of the internal transfers in the period 1994-1999.

The variables describing characteristics of the migrants (for example, percent of new migrants and many indicators of impact on the population such as QBUT, QBRT, WBUT, etc., See Table 3.11) show high correlations with the first factor, which can be understood as the **axis of migration attraction**. The variables expressing the rural-urban dichotomy are shown in the second factor, which this time seems to definitely indicate an **axis of urbanisation**. The third factor uses the indicators of the age structure of population. The positive semi-axis shows 65\_M (percent of males aged 65 and over),

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<sup>19</sup> This operation is easier because the factors emerging from a multivariate analysis are not correlated to one another. On this point, see Castiglioni *et al.* (1991).

<sup>20</sup> Actually, the moves, recorded in May 1999 with the LFS, refer to the previous 5-year period and therefore cannot be located in 1994. However, it was decided to use the mass of census information since the survey, besides preceding most of the transfers, was not sample-based.

<sup>21</sup> The analysis resulted in seven factors considered useful for the interpretation of mobility. The percentage of variance displayed by these seven factors, after the Varimax rotation, is 79.7percent.

X\_M and X\_F (average age of the male and female population), so that this factor can be considered as the **ageing axis**.

There follow three factors (from the fourth to the sixth) related to the ethnic composition of the population or of the migrants flowing to the sub-regions. The fourth factor isolates in the positive part of those areas characterised by a greater presence of the Amhara ethnic group in the population, therefore can be defined as the **Amhara ethnic axis**. The fifth factor includes higher part homogeneity indexes, which, as we can recall, are formulated considering the percentage absorbed by the prevailing ethnic group, CONC (ethnic homogeneity in the population) and CONM (ethnic homogeneity among the new migrants). The axis can therefore be defined as the **axis of ethnic concentration**. The sixth factor includes only one significant aspect, 1bNt (correlation with the factor of 0.81); i.e. the new Oromo ethnic migrants per 1,000 residents in the sub-region and to a lesser extent (a rate of 0.59), OROT (percent Oromo in the population), so that the factor can be defined as the **Oromo ethnic axis**.

**Table 3.11 – Factor Loadings for Indicators for Migration Analysis**

Indicators	Description	Factors						
		1	2	3	4	5	6	7
65_m	Male 65 and over per 100 males	-0.20	-0.19	0.78	-0.01	0.38	0.08	0.07
X_M	Average age of male population	-0.08	0.36	0.80	0.23	-0.06	0.01	0.02
X_F	Average age of female population	0.23	0.32	0.84	0.08	0.18	-0.03	-0.02
Y+Om	Dependency Ratio (percent pop. 0-14 and 65 years and over)	-0.23	-0.66	-0.09	-0.26	0.54	-0.06	-0.05
CBR	Current Birth (0-11 months) per 1000 resident	0.00	-0.61	-0.01	-0.37	0.11	0.09	0.29
FSUM	Females per 100 males	0.58	0.23	0.36	0.13	0.38	-0.07	0.06
QT	Illiterate Rate	-0.55	-0.73	0.00	-0.04	0.18	-0.21	-0.09
S_M	percent Single Males	0.28	0.64	0.00	-0.26	-0.21	0.23	-0.15
DIF	percent Divorced Females	0.66	0.10	0.33	0.42	0.24	-0.14	0.24
WIF	percent Widowed Females	0.13	0.11	0.62	-0.49	0.06	0.08	-0.30
HE_M	Male Headship Rate	-0.37	-0.50	-0.02	0.16	-0.42	-0.07	-0.01
HE_F	Female Headship Rate	0.76	0.25	0.40	-0.02	0.16	-0.17	0.07
ACTT	percent Active Population per 100 Aged 10 and Over	-0.62	-0.58	0.04	0.10	0.06	-0.10	0.07
U_T	Unemployment Rate	0.30	0.80	0.09	0.02	-0.04	0.08	-0.12
GE_T	percent Government Employee	0.58	0.69	0.01	-0.02	-0.30	0.10	0.08
PE_T	percent Private Employment	0.45	0.76	0.05	0.13	-0.03	0.13	0.12
W_T	percent White Collar Employee	0.60	0.67	0.02	-0.01	-0.26	0.14	0.07
CRAT	percent Crafts and Related Trades Workers	0.68	0.49	0.08	0.18	0.16	-0.02	0.09
UEXT	percent Workers in Extragricultural Activities	0.60	0.24	0.00	0.28	0.08	0.23	0.05
OROT	percent Oromo Ethnic Group	-0.25	-0.06	-0.05	-0.28	0.11	0.59	-0.47
AMAT	percent Amara Ethnic Group	0.10	0.22	0.26	0.80	0.17	-0.14	0.16
RORT	percent Orthodox Religion	0.28	0.10	0.29	0.13	0.18	-0.01	0.72
RMUT	percent Muslim Religion	-0.18	0.04	-0.03	-0.06	0.06	0.02	-0.89
CONC	percent Maximum Ethnic Group among Population	-0.11	-0.28	0.14	0.05	0.83	-0.04	0.02
PH	percent Permanent Housing Unit	-0.11	-0.05	0.24	0.18	0.24	0.33	0.28
NTW	percent Non Thatch Wall Housing Unit	0.29	0.35	0.17	0.06	0.02	0.02	0.08
NTR	percent Non Thatch Roof Housing Unit	0.51	0.69	0.06	-0.06	0.08	0.18	0.03
XH	Average Number of Rooms	0.18	0.47	-0.09	0.14	-0.07	0.60	0.26
TAP	percent Non Tap Water Housing Unit	0.47	0.79	0.09	0.10	0.02	0.05	-0.11
NOWC	percent No-Toilet Housing Unit	-0.40	-0.71	0.08	-0.05	0.34	-0.32	-0.04
FUEL	percent HU Uses No Fuel for Cooking	-0.08	-0.86	-0.10	-0.02	0.13	0.09	-0.04
NEWT	percent New Migrant	0.91	0.36	-0.02	0.04	-0.13	0.10	0.05
XNMM	Average Age of Male New Migrant (NM)	0.08	0.03	0.81	-0.01	-0.11	-0.02	0.07
XNMF	Average Age of Female New Migrant (NM)	0.00	-0.11	0.89	0.03	0.13	-0.07	0.05
1bNt	Oromo New Migrant (NM) per 1000 Resident	0.21	0.26	0.00	-0.09	-0.14	0.81	-0.14
2bNt	Amara New Migrant (NM) per 1000 Resident	0.50	0.29	0.19	0.64	-0.06	-0.01	-0.05
3bNt	Tigraway New Migrant (NM) per 1000 Resident	0.61	0.03	0.07	-0.50	0.39	-0.33	0.09
CONM	percent Maximum Ethnic Group among New Migrant	-0.02	-0.24	0.18	0.11	0.84	-0.06	0.08

**Table 3.11 Continued**

Indicators	Description	Factors						
		1	2	3	4	5	6	7
CBNT	Christians NM per 1000 Resident	0.89	0.30	-0.05	-0.01	-0.07	0.03	0.23
MBNT	Muslims NM per 1000 Resident	0.40	0.39	0.12	0.19	-0.16	0.24	-0.53
QBMT	Illiterate NM per 1000 Resident	0.95	0.15	0.03	0.14	-0.03	0.02	-0.01
NMBR	NM from rural areas per 1000 Resident	0.26	-0.44	-0.04	0.55	0.19	0.11	0.11
XRAM	Average Age of NM Male from rural areas	0.20	0.05	0.83	0.02	-0.06	-0.03	0.07
XRAF	Average Age of NM Female from rural areas	0.05	-0.13	0.90	0.08	0.04	0.01	0.05
XUAM	Average Age of NM Male from urban areas	-0.31	-0.25	0.02	0.06	0.15	-0.01	-0.14
XUAF	Average Age of NM Female from rural areas	-0.28	-0.29	0.16	0.06	0.28	-0.14	0.00
SRBM	Single NM from rural areas per 1000 resident	0.70	0.42	-0.14	0.18	-0.22	0.36	0.10
SUBM	Single NM from urban areas per 1000 resident	0.81	0.45	0.01	-0.16	-0.19	0.03	0.10
WRBF	Widowed Female NM from rural areas per 1000 res.	0.82	0.19	0.23	0.13	-0.08	0.25	-0.15
WUBF	Widowed Female NM from urban areas per 1000 res.	0.77	0.35	0.12	-0.35	0.18	-0.19	0.04
DRBF	Divorced Female NM from rural areas per 1000 res.	0.78	0.12	0.14	0.43	0.12	-0.06	0.01
DUBF	Divorced Female NM from urban areas per 1000 res.	0.92	0.22	0.09	-0.04	0.01	-0.11	0.06
QBRT	Illiterate NM from rural areas per 1000 resident	0.87	0.06	0.00	0.34	-0.07	0.11	-0.05
QBUT	Illiterate NM from urban areas per 1000 resident	0.90	0.25	0.08	-0.18	0.03	-0.11	0.04
ABRT	Active NM from rural areas per 1000 resident	0.82	0.18	-0.05	0.35	-0.14	0.21	0.06
ABUT	Active NM from urban areas per 1000 resident	0.42	0.43	0.29	-0.29	-0.33	-0.03	0.19
UBRT	Unemployed NM from rural areas per 1000 res.	0.50	0.74	-0.04	0.07	-0.10	0.12	-0.03
UBUT	Unemployed NM from urban areas per 1000 res.	0.59	0.73	0.02	-0.14	0.01	-0.07	0.03
WBRT	NM White Collar from rural areas per 1000 res.	0.74	0.40	-0.07	0.03	-0.14	0.32	0.06
WBUT	NM White Collar from urban areas per 1000 res.	0.84	0.37	0.00	-0.09	-0.19	0.05	0.08

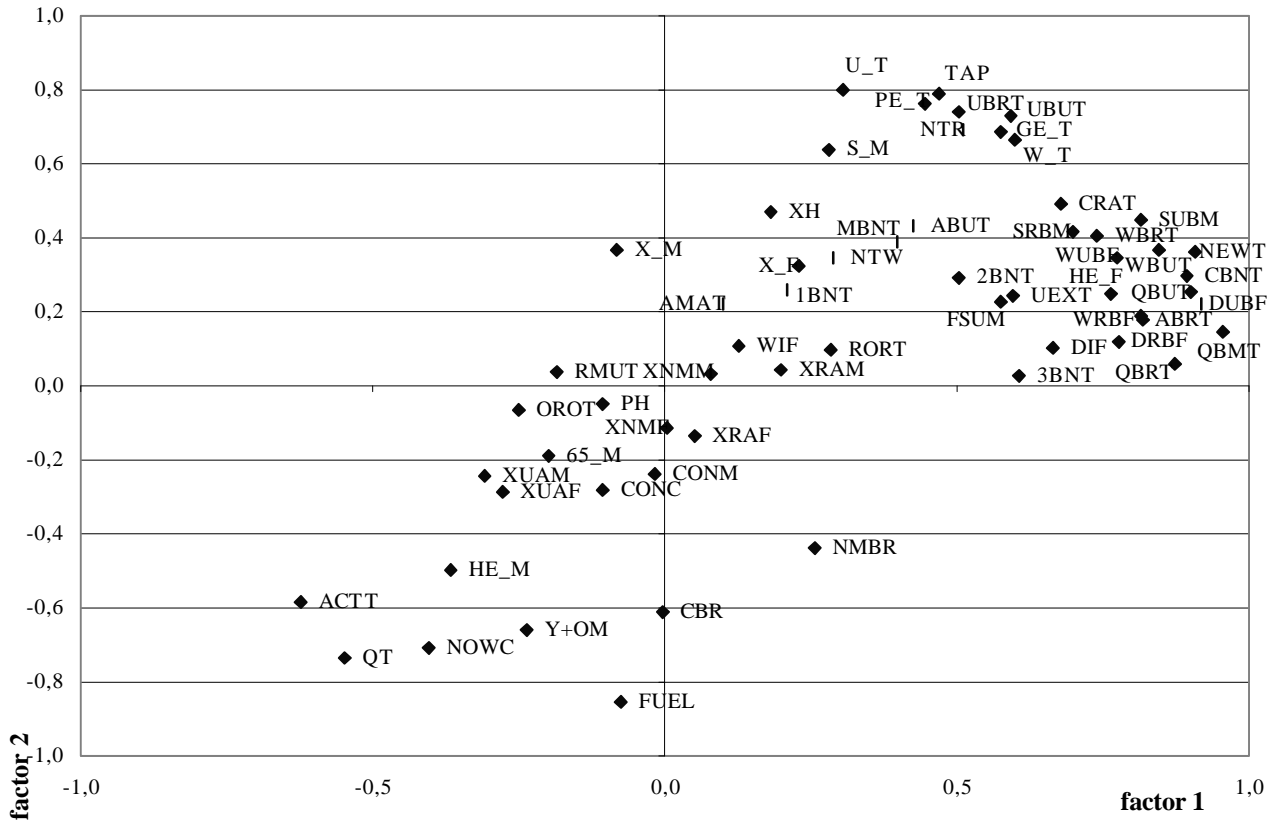
Source: multivariate analysis on 1994 Census data at sub-region level

The seventh and last factor absorbs the variability of RORT (0.72), i.e. the percentage of the population professing Orthodox religion, and RMUT (percent of Muslims: -0.89) and can therefore be defined as the **religious difference axis**.

In the figures shown, we can see the distribution of variables (Fig. 3.11) and sub-regions (Fig. 3.12) on the main aspect, i.e. the one formed by the axes of migration attraction and urbanisation. Without going into detail, we can observe the position of the three major Ethiopian cities (Addis Ababa, Dire Dawa and Harari), which clearly appear in an isolated area of the graph.

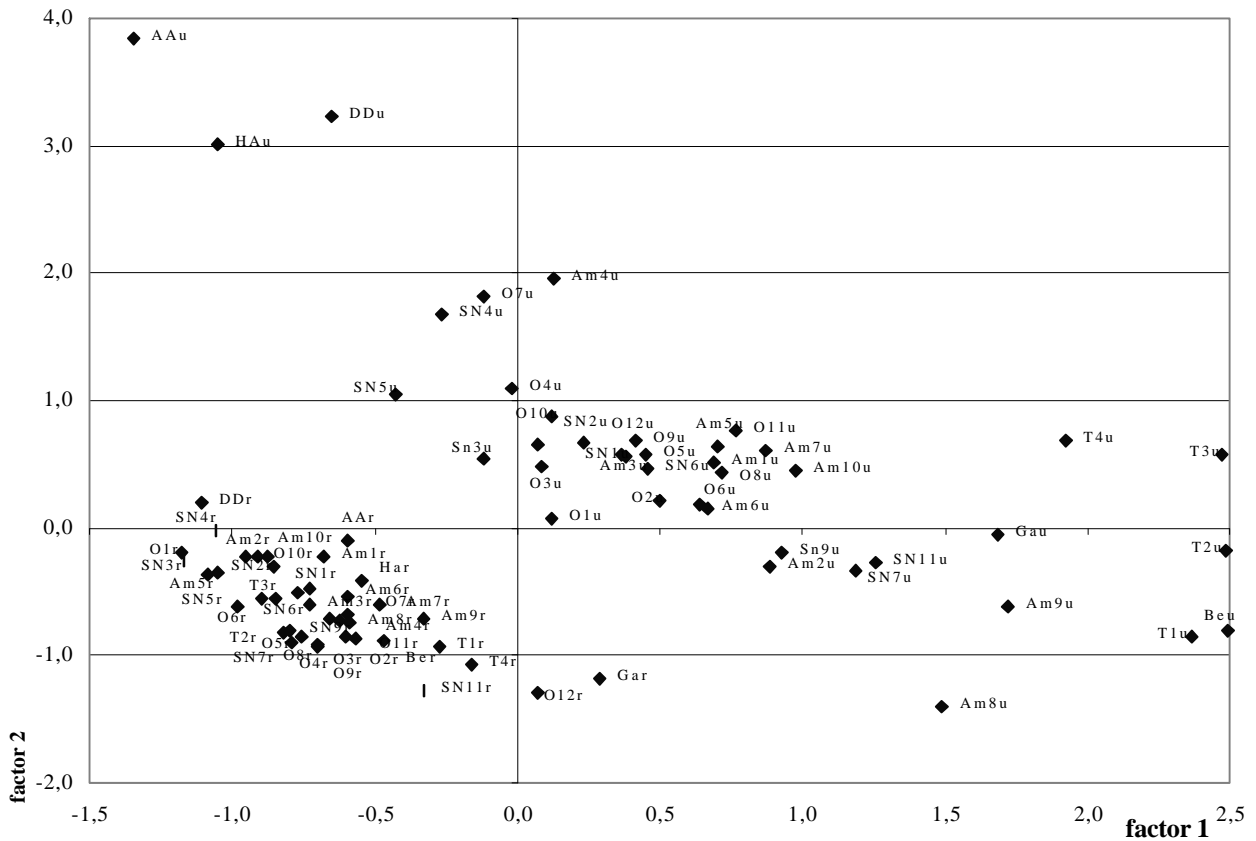
As we have said, these factors form independent variables explaining the migration behaviour of the areas. Among the objective variables proposed, we have decided to consider the in-migration rate observed in 1999 (source LFS), i.e. the ratio between recent migrants and the total population of the sub-region of destination. This is because we can logically expect that the capacity of attraction occurring in the sub-region is linked with the characteristics it had in the initial period (as we have said, the factors refer to the situation in 1994). Different models breaking down from time to time the in-migration rate were then set up by sub-region of origin (rural or urban) and also distinguishing separately the flows for work reasons.

**Figure 3.11 Variables on Principal Plan**



Source: own calculations on Labor Force Survey, 1999

**Figure 3.12 Sub regional Factor Scores on Principal Plan**



The multiple regression model developed on the basis of the independent factors and the objective variables is the classical linear model providing for a set of independent variables,  $X_i$ , a dependent variable  $Y$ , and a stochastic error  $e$  adopting the well-known hypothesis on its distribution (Kapla, 1992):

$$Y = f(X_j) + e$$

The results of this application, shown in Table 3.12, seem to be quite encouraging since the indexes of determination  $R^2$  are always rather high (never under 0.70, often over 0.80). The third factor, population ageing, never occurs in the models, and therefore the sub-regions with a more or less young structure would not be characterised by different levels of attraction, either general or specific.

**Table 3.12 Regression Models: Index of Determination, Significance of the Factors Selected**

Dependent Var.	$R^2$	Attraction	Urbanisation	Amhar a ethnic	Ethnic concent	Oromo ethnic	Religious Different
In-migration	0.877	++	+	+	-	++	+
In-m. from rural area	0.702	++	+	+	-	++	+
In-m. from urban area	0.885	++	++	+	--	+	-
In-m. Labor	0.881	++	++	++	--	++	+
In-m. labor from rural area	0.710	++	++	++	-	+	+
In-m. labor from urban area	0.841	++	++	+	--	+	+

Legend: + (or -): significant at 0.005 level; ++ (or --) significant at 0.001 level

In general, the following results emerge:

- The factors all seem to favour the capacity of attraction of an area, except for the factor of ethnic concentration which acts as an inhibitor of incoming mobility,
- The religious factor, with the difference between the Orthodox Christians (in the positive part) and Muslims (in the negative part), behaves differently according to the model taken into consideration.
- The areas (sub-regions) characterised by a mainly Orthodox population are also characterised by a greater migration attraction, except in the case of the flows coming from urban areas where the factor acts in a contrary manner,
- The models seem to work better in the case of migrations coming from the more advanced areas of the country, the urban ones, and less in the other areas, whether considering the flow in general and migration for work reasons,
- The model better represents the capacity of attraction of the urban areas (indexes of determination over 0.85).