A TALE OF TWO ROMANIAS. THE URBAN/RURAL SPLIT ON DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS

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Abstract
This paper presents the differences between urban and rural areas from a demographic and socio-economic perspective. The demographic pyramid shows a slightly older rural population, more evenly distributed across ages. However, differences are mostly due to higher proportions of youths and seniors in rural areas. Migration patterns show that rural areas are gaining people from internal migration. Labour force age distribution shows more uniform patterns in rural areas, with many seniors working past retirement age. Unemployment rate differences are mostly explained by different socio-economic patterns. Also, inactivity rates among core working age rural population are significantly higher, questioning potential socio-economic issues. While major income differences persist, they have not grown deeper, and the share of monetary income is rising in rural areas. Overall, statistics show that no major imbalances exist between the two areas when several key socio-economic statistics are taken into account. Information on some of the relatively large differences could inform policy making, and limitations of the available statistics require further research.

Keywords: rural-urban split, demography, labour market, incomes, poverty, unmet health care needs

JEL classification: R11, N34, J11, I14, I31

1. Introduction

When discussing socio-economic characteristics, it is not unusual to refer to the rural areas of Romania as being significantly different than urban areas. There are good reasons behind it, as major changes in the economic and social fabric of the country since the 1990s have left their mark on the entire

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society, with the pace of change and its dynamics. In particular, the agricultural sector has been affected by changes in land ownership and how agricultural production was organized, with dramatic effects on the living standards of the rural population.

From the urban, industrialized side, the transition to a market economy has also put pressure on the urban workers and made the rural potentially attractive for those who found themselves out of work following massive restructuring of large, state-owned companies. However, diverging standards of living and the possibility of working abroad have led to massive migration from Romanian rural areas, bolstered by increasing socio-economic inequalities between them and urban areas, and a larger array of opportunities in terms of potential careers.

Marked differences between urban and rural areas are not confined to Romania. In many Eastern-European countries, there are marked differences between urban and rural areas, which point out to similar phenomena taking place. They have caught the attention of policymakers and academics alike, and raise broader questions as to the sustainability of development in a particular country in relation to its urban and rural parts. Strong urbanization and industrialization against a backdrop of an increasingly intensive agriculture, or agriculture as a buffer sector needed to maintain a minimum degree of socio-economic cohesion, are trends that are currently analysed against their sustainability and long-term effects. Effective policies that focus on socio-economic sustainability increasingly need to balance the characteristics and specific issues of both areas as a condition for a harmonious development at country level.

In this respect, our paper tries attempts to present a picture of the differences between rural and urban Romania by looking at the demographic and socio-economic characteristics of both areas. The outcomes and main results are intended to be useful inputs for policy makers, and inform future research which focuses on specific issues, that need a distinct treatment and policy response as a condition for effective, sustainable development, and a lowering of current disparities which are potentially affecting Romania's future development.

2. Literature review

Romania is seen as a country with a relatively large rural area and a large agricultural sector, even compared with other Eastern European

countries. According to MADR (2013), Romania's rural population was between 45% and 47% of total, a relatively high percentage compared to other European countries. INS(2010), cited by Mihalache and Croitoru (2011) states that Romania has the highest share of rural population in Europe. According to Baum and Weingarten (2002), in 2001 Romania had the highest proportion of rural population working in agriculture (74%). The same authors point out that most disparities in Central and Eastern European countries are due to accentuating differences in living standards between rural and urban areas (Baum and Weingarten ,2002).

The forced industrialization has caused massive population movements from rural to urban areas (Kupiszewski et al, 1997). Communist Romania's quest to become an industrialized country has altered the population structure. From 1948 to 1990 the share of rural population dropped from 76,6% to 45,7%. This trend was reversed during the 90s, when significant urban to rural return migration occurred (Andren and Roman, 2010, Kupiszewski et al, 1997, Sandu et al., 2004). However, the lack of economic opportunities in the rural areas enticed return rural migrants to emigrate (Sandu, 2005, cited by Andren and Roman, 2010).

Demographic decline has affected urban and rural areas alike. Mihalache and Croitoru (2011) show a decline in rural population from 10.8 million inhabitants in 1990 to 9.6 million in 2010. While causes are the natural decline of the population, migration flows and area designation changes from rural to urban (Mihalache and Croitoru ,2011), the urban-rural shares of population remained fairly constant since 1990, showing that demographic decline is impacting both areas to almost the same extent. Demographic decline, and a higher share of the elderly in rural areas are also observed by Cristina et al. (2015).

Unemployment rates are fairly close in urban and rural areas between 2005 and 2012 (Moldoveanu et al, 2015), except for youths, which enjoy significantly lower unemployment due to self-employment in agriculture. Employment rates were higher in rural areas during the same period of time, probably due to agricultural self-employment (Moldoveanu et al, 2015).

Strong economic disparities between rural and urban have been observed. MADR (2013) citing (MMPS) notes that in 2011, 71% of the population in poverty lives in rural areas. A similar conclusion is reached by Moldoveanu et al, (2015), that 69,65 of Romania's poor live in rural areas, and that population at risk of poverty and social exclusion is almost twice as high

in rural areas compared to urban areas. Between 2005 and 2011, average monthly household income in rural areas were 72 to 80% of those of their urban counterparts (Moldoveanu et al, 2015). Goschin (2017) shows that GDP/Capita growth has a divergent trend, indicating increasing socio-economic disparities among Romanian counties, supporting polarization and centre -periphery inequality theories. Also, a lack of insufficient or missing infrastructure is a strong factor hampering rural development (MADR, 2013).

3. Main approaches and methods

The nature of the differences between rural and urban environments is rather complex and can be explained using different theories that are mainly economic and sociological. However, their complexity and interactions among different drivers and outcomes requires an objective analysis based on current data, aimed at taking stock of the current situation and making a data-driven assessment of the existing disparities.

Thus, the analysis undertaken in the following sections is based on officially available demographic and labour market data coming from the National Institute of Statistics (INSSE), with the purpose of highlighting the existing differences in areas in which differences are known, but seldom analyzed. Our statistics focus mainly on usually resident population which does not take into account emigrants that live outside the country, as it reflects more accurately the living and working conditions within Romania's borders. Only when statistics for the usually resident population are not available, statistics are shown and analyzed using permanent resident population, which includes emigrants.

In order to refine the analysis and verify the conclusions drawn from aggregated data, we used Census 2011 data, available from IPUMS as a 10% sample (IPUMS, 2018).

4. Demographic disparities

Demographics is the driver of many socio-economic phenomena and, to a good extent, defined future trends and evolution of economies and societies (Foot and Stoffman, 1998). The current demographic situation in Romania shows an aging society, with fertility below replacement levels, mostly in line with the situation of other European countries.

However, the current structure of the population shows an entirely different situation in rural areas as opposed to urban areas. In figure 1, the

amphor-shaped structure of the population which characterizes an aging population (Sora and Mihaescu, 2006) contrasts with the stog-shaped structure for the rural areas, which describes an aged population and is similar to the one seen in countries where the aging process is most advanced (Sora and Mihaescu, 2006). The fact that 53.8% of Romania's resident population of 19.7 million lives in urban areas in 2016 makes a back-to-back comparison of the raw population numbers fairly straightforward.

Data on the relative size of the generations, life expectancy and average age of the population completes the portrait of the differences.

Table 1. Shares of main age groups and dependency ratio, Romania, 2016

	Share (%)		
Age Group	Total	Urban	Rural
0-19	21.0%	19.2%	23.1%
20-64	61.6%	65.6%	57.0%
65 +	17.4%	15.2%	19.9%
Dependency ratio (per '000 working age population)	623	525	754

Source: Eurostat, author's compilation

Thus, the relative shares of the main population groups, shown in table 1, look more balanced for rural population, which comes at the expense of a dependency ratio which is higher by 43.7% in rural areas. Otherwise said, the number of youths and seniors supported by those in the working-age population is higher by 230 persons in rural areas compared to urban areas.

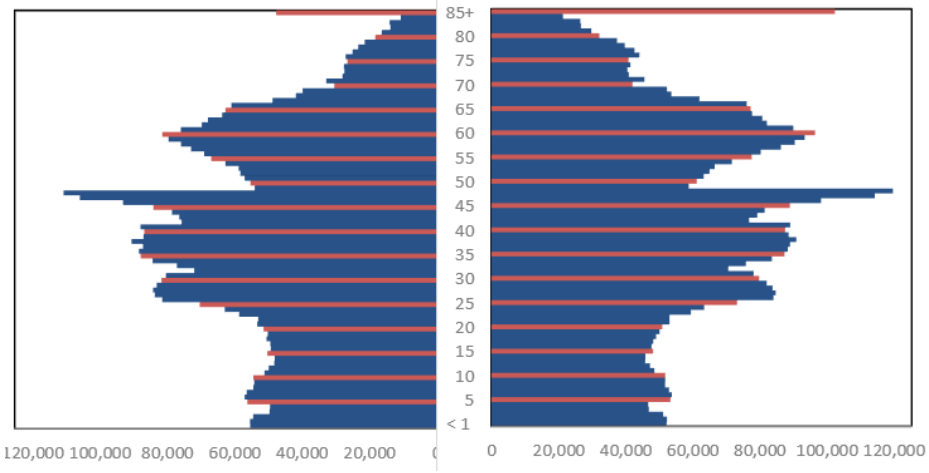
However, one should keep in mind that a flatter age profile for the rural area may be in line with economic conditions that shape the everyday living and make comparisons lest straightforward. Thus, it may be that rural youths are likely to work full-time before they turn 20. However, the biggest imbalance is reflected by the large senior population, which may be forced to work past retirement age due to low pension income.

Life expectancy patterns add more detail to the demographic picture of the two parts of Romania. Figure 2 shows that, despite having an older population and supposedly enjoying a healthier environment, life expectancy

for the residing rural population is in fact shorter by 2.8 years, with the largest gap, of 3.2 years, recorded for men.

Average and median age statistics, based on IPUMS (2018) data, however, show little difference between urban and rural areas. While average age is slightly higher, by 0.44 years in rural areas, median age based on 2011 census microdata is 40 years for both areas. A Welch Two Sample t-test performed using RCommander shows the difference in average age is significant at a 1% significance level.

Population pyramid- urban, 2016



Population pyramid- rural, 2016

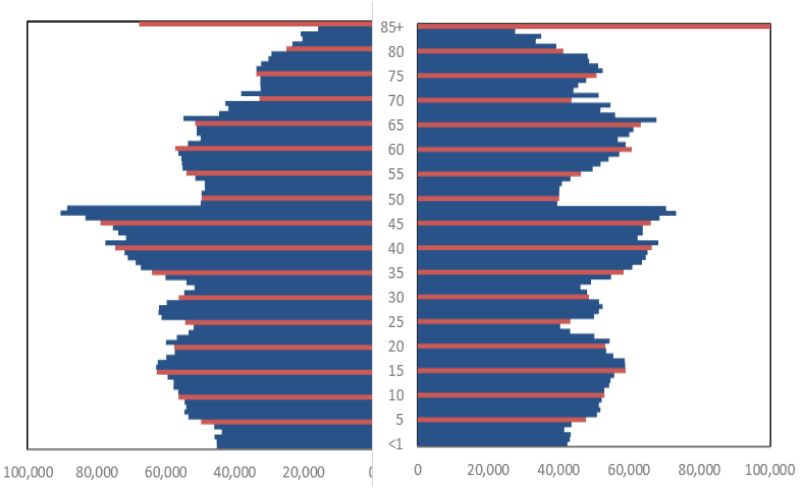
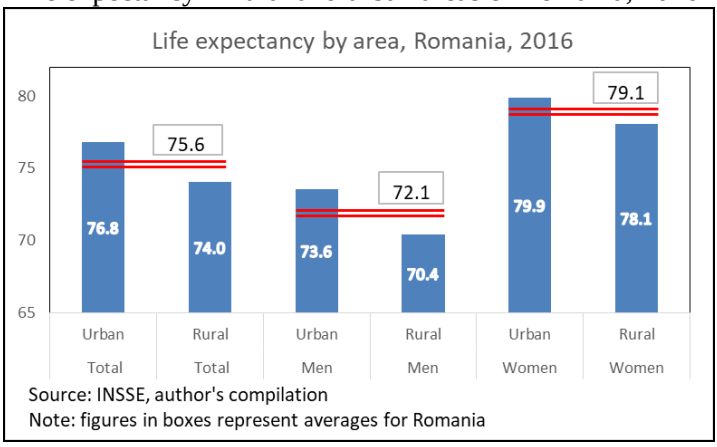


Figure 1. The amphor-shaped population pyramid for urban areas contrasts to an almost flat-shaped pattern for rural areas
Source: author's calculations based on INSSE data

However, it should not be forgotten the fact that these findings are based on people which actually reside as at January 1st 2016 in these areas, and may reflect that fact that rural-born youths move to urban areas, boosting the share of the working-age population to a significant extent.

Figure 2. Life expectancy in rural and urban areas of Romania, 2016



While the overall picture may be distorted by the internal and international migration patterns to a significant extent, data shows some important facts:

-that the rural population has more stable patterns and a more uniform distribution among the main age groups,

-that generational changes are more prominent in urban areas, where their impact is more likely to occur,

-the impact of aging is likely to be stronger in rural areas for now; however, this may change as the generations corresponding to the policy-induced demographic boom from late 60s and early 70s will reach retirement age by year 2030.

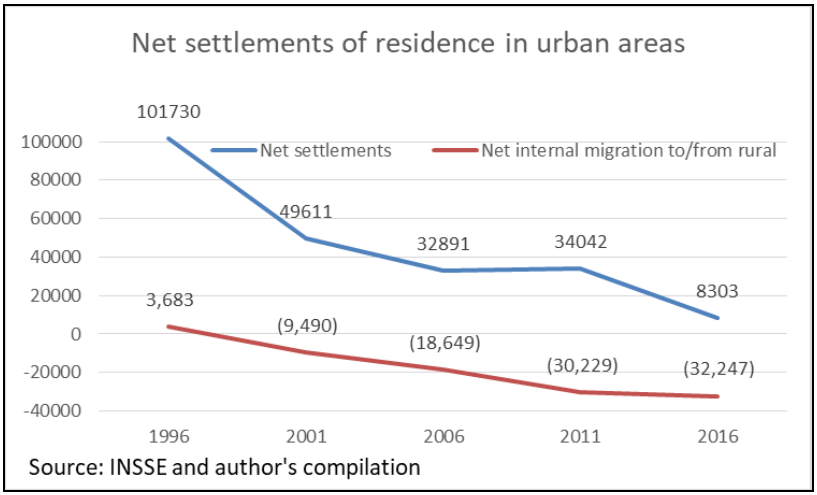
5. Migration imbalances

Some of the demographic statistics presented in the previous section are substantially affected by migration patterns. It is customary for rural youth to venture to cities in order to have access to higher education, better paying jobs and career opportunities, and sources of income that are less affected by weather conditions, as agricultural jobs usually are. More recently, the possibility of moving freely and taking up paying jobs in Western European countries were likely to bolster migratory patterns to a great extent.

Net migration figures however, contradict in part these perceptions. It seems that, while the urban areas are still net recipients of new residents, the trend is beginning to subside and may be reaching equilibrium. It is to be noted that rural areas show a corresponding decline, which is beginning to diminish at the same pace as urban areas net settlements decrease. However, data in figure 3 is not entirely accurate, as it does not discriminate between urban to rural and rural to rural movements.

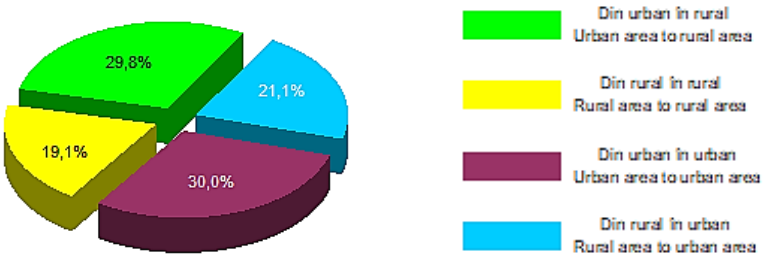
A closer look at the internal migration patterns shows that rural areas have a net influx of urban residents, which started from early 2000s. Compared to the overall internal migration patterns, shown in figure 4, it seems that, indeed, rural areas are gaining more residents from urban areas in both absolute and relative terms.

Figure 3. Net settlements of residence in urban areas, Romania



The age profile of internal migration still follows the pattern of rural youths and young workers leaving for education and job opportunities in urban areas. Even though the profile of net migration to rural areas is positive for most age groups, it can still be seen that youths aged 15 to 29 still move to other areas in quest for better opportunities to a significant extent.

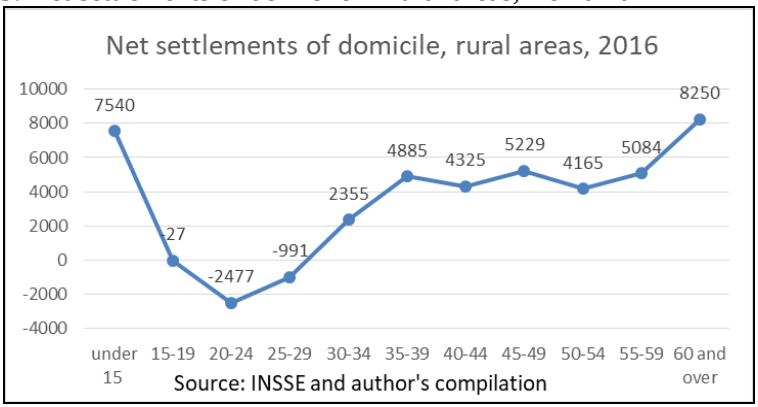
Figure 4. Internal migration flows due to changes of permanent residence, Romania, 2014



Source: INSSE, Annual Demographic Yearbook, 2015, page 537.

Another thing to be taken into account is the fact that net settlements of domicile are less accurate than net settlements of residence, as one can keep the same place of domicile for years while residing in another area. Therefore, while similar statistics are not readily available, it seems that the age profile of migration is likely to show a higher migration of rural youths towards urban areas. Also, the data does not discriminate between rural to urban migration and rural to rural migration, which are comparable in relative terms, according to figure 4.

Figure 5. Net settlements of domicile in rural areas, Romania



For international migration, trends were more difficult to ascertain due to the lack of reliable data, a fact true not only for Romania (Otoiu and Titan, 2015). The lack of reliability concerns not only limitations with respect to whether international emigrants come from urban and rural areas, but in terms of recording the actual magnitude of the phenomenon.

6. Labour market disparities

The labour market characteristics show some differences between urban and rural areas. The difference is, to some extent, expected, given the higher diversity of jobs and industries in urban areas, and the dominance of agricultural work in the rural areas. To a certain extent, it is considered that agriculture in rural areas is merely subsistence driven, i.e. a form of economic

and social support for the rural population, as opposed to employment in urban areas which is profit-driven, or aimed at delivering public services.

The working age population in rural areas, shown in figure 6, resembles the demographic profile, in that the size of the generations is much stable, with more and more people working through retirement in rural areas.

Activity rates, shown in figure 7, show further discrepancies between urban and rural with respect to generational work patterns. Despite the fact that urban-rural difference in total activity rates is only 2.1 percentage points around a national average of 53.7 percent, relatively larger rural cohorts of youths and seniors have higher labour force attachment than their urban counterparts. Thus, activity rates for teens is 17.2 percent in rural areas, more than three times higher than the 5.1 percent rate in urban areas. Rural youths 20 to 24 have an activity rate of 55.6 percent, higher by over 20 percentage points than the one of urban youths. At the other end of the age distribution, activity rates for workers aged 60 to 64 is twice as high in rural areas. While almost all seniors in urban areas stop working past retirement, over one in four rural seniors is still in the labour force.

Imbalances between rural and urban population are also seen for the core working age groups. Participation rates in rural areas are consistently below those in urban areas for people aged 25 to 54. While the difference is mostly between 5 and 10 percentage points, it is still important if we consider the fact that core working age adults are supposed to have activity rates significantly above 80%.

While there is not much difference in overall unemployment rates in urban and rural areas (less than one percentage points for workers aged 15 and over), there are significant differences when it comes to young age groups, as shown in figure 7.

Figure 6. Labour force activity rates by age, in urban and rural areas

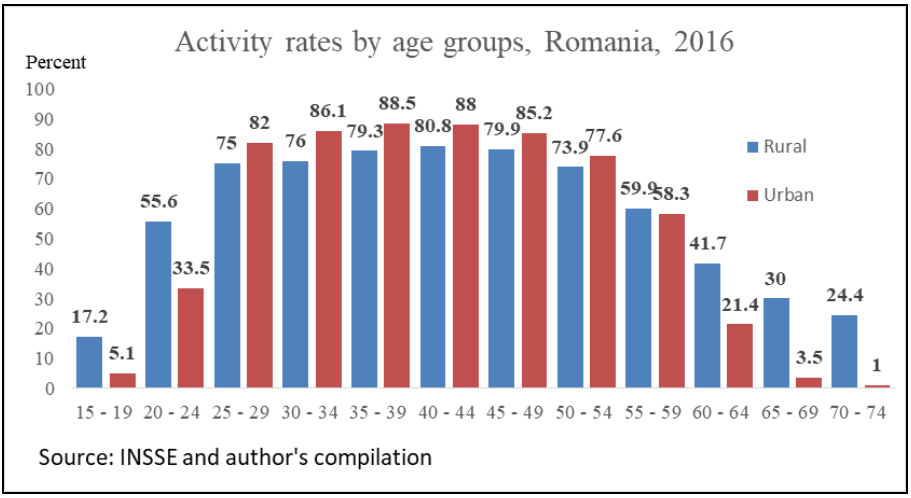
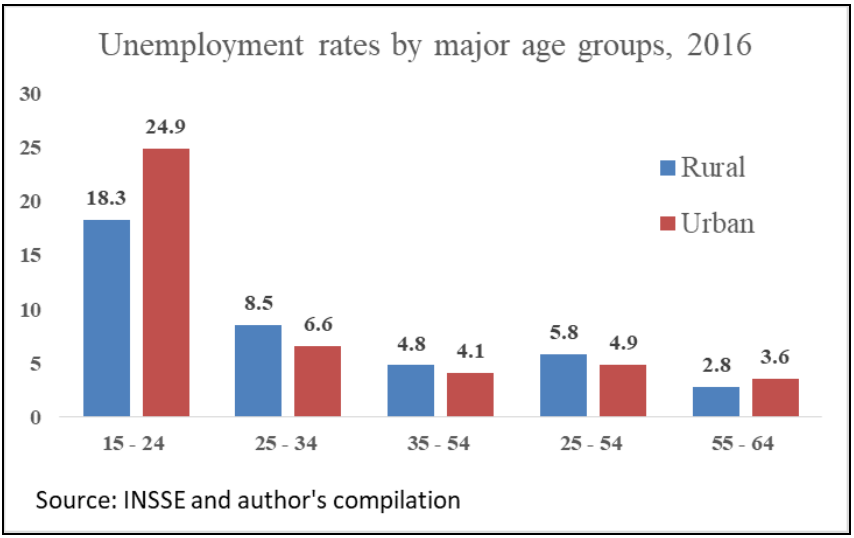


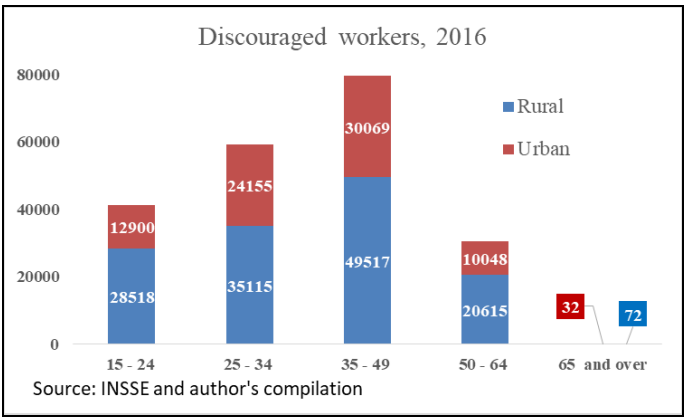
Figure 7. Unemployment rates by age, in urban and rural areas



Youth unemployment in urban areas is much higher compared to rural areas, perhaps reflecting a higher interest for urban youths to find work compared to their rural counterparts. However, there is higher unemployment among young adults aged 25 to 34 in the rural areas, reflecting perhaps a relative lack of work opportunities in rural areas. It seems that the relatively large differences are consistent with significant urban-to-rural migration patterns, and reflect better, more diverse job opportunities available in urban areas. However, as unemployment rates are fairly close for the other age groups we can conclude that, in fact, there are no major labour force imbalances/mismatches between urban and rural areas.

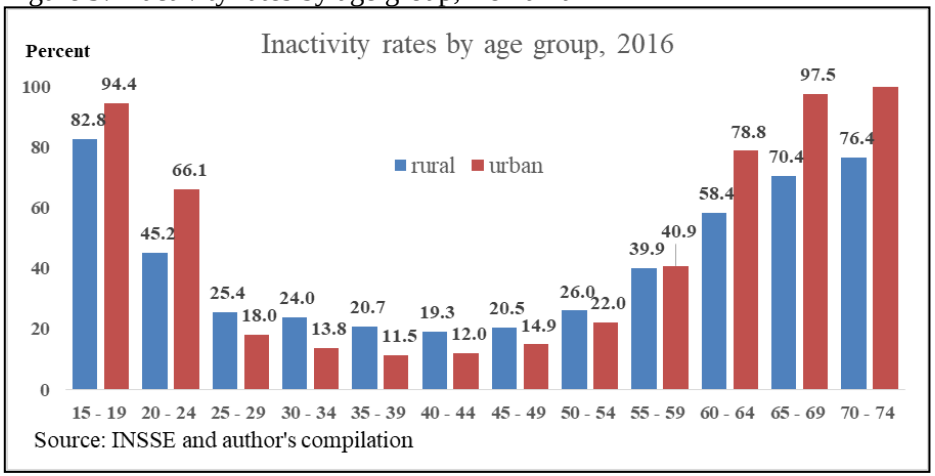
Stronger differences can be observed if a closer look is taken at marginal groups. Albeit the number of discouraged workers, shown in figure 8, of 211 thousands, represent a little over 1% of the total population, their numbers are almost twice as high in rural areas (134 thousand) compared to urban areas (77 thousand). Even for core age groups, which are supposedly less likely to be discouraged due to a better ability to perform tasks and (re)train, the difference is significant. The number of discouraged workers for ages 25 to 49 is over 40% higher in rural areas compared to urban areas. While during the current economic conditions, discouraged workers' numbers are quite small, the situation could change in the event of a recession or other adverse economic event that may limit the availability of jobs and cause structural mismatches between labour supply and demand.

Figure 8. Discouraged workers, Romania



Another adverse economic fact with multiple potentially negative implications, not only from the point of view of the productive potential of the resident population, but also because of limitations posed on private consumption, and higher medical and social assistance expenditures, is economic (labour market) inactivity. While the inactivity profile of urban and rural areas, shown in figure 9, mostly mirrors the activity rates shown in figure 6, the relative magnitude of the inactivity for the core working age population deserves further attention due to its special implications. For youths and older population over 60, inactivity can be easily explained by the fact that in urban areas people choose to continue education, and, respectively, retire. These decisions are likely results personal choices that are mostly voluntary and benefit from adequate financial support from family members and pension payments. However, significantly higher inactivity rates in rural areas may reflect increased health and social assistance needs for which resources may be relatively scarce, or pose access issues as recipients may need to travel long distances in order to benefit from the needed services.

Figure 9. Inactivity rates by age group, Romania



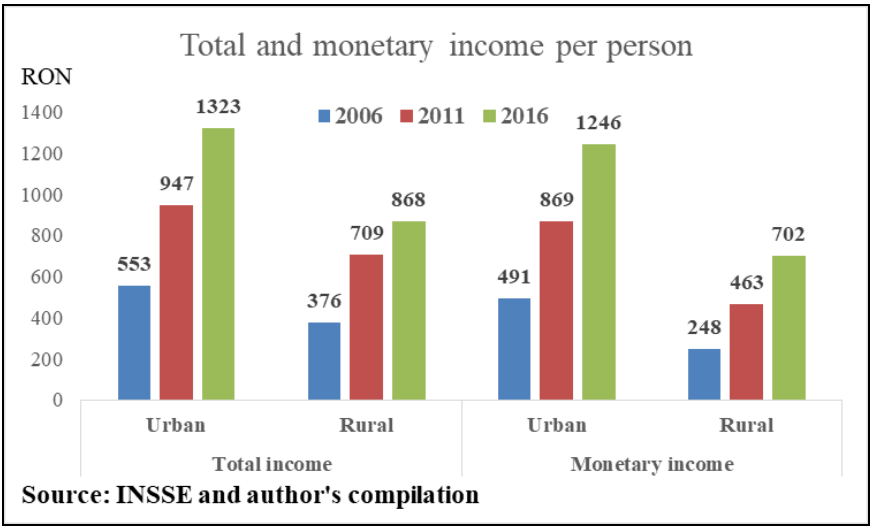
7. Other major economic and social disparities

While demographic and labour market data show a rather balanced picture, with differences that could be explained by the societal structure of

the urban and rural environments, some indicators show some strong differences still lie between the two areas, which demand closer examination and scrutiny with a view of their potentially adverse effects..

A major difference which basically triggers the urban-rural division debate is income, as shown in figure 10. While the incomes are clearly higher in urban areas, rural incomes have kept pace with increases, and represent between 65% and 74% of urban incomes. A notable development is the rise in the share of monetary income in rural areas from around 65% of total income per person to over 80% in 2016. Also, a rather positive development is the fact that the strong rise in incomes between 2006 and 2016 had similar magnitudes in both urban and rural areas, of 2.4 times, and, respectively 2.3 times.

Figure 10. Income per capita, Romania



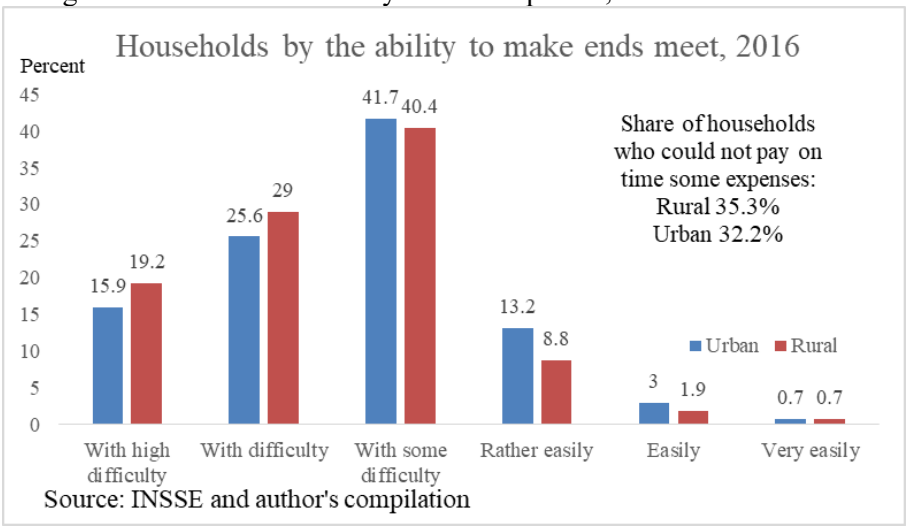
Source: INSSE and author's compilation

The difference between the areas are obvious if we look at the ability to make ends meet, shown in figure 11. Rural households report more difficulties in paying some expenses on time. While in absolute terms, the share of rural households with difficulties in meeting payments on time is 3.1 percentage points higher than their urban counterparts, this translates into around 9% more households in this situation. A closer look at the distribution of

households by the ability to make ends meet shows that rural households having difficulties is 6.7 percentage points higher than urban households.

The health status of rural residents, is generally worse than that of their urban counterparts, with 19.8% of them being affected by chronic diseases and invalidity, compared to 18.7% in urban areas.

Figure 11. Households' ability to meet expenses, Romania



Source: INSSE and author's compilation

Table 2. Share and distribution of unmet health care needs, percent, 2016

	Medical examination		Dental examination	
	urban	rural	urban	rural
Percent of population with unmet needs	7.2	10.2	7.4	9.4
Distribution of unmet health care needs by reason (percent of total)				
Can't afford	59.1	62.8	73.2	77.4
Lack of time	4.5	2.7	5.9	3.7
Too far to travel/ lack of transportation	-	9.6	-	2.5
Fear of doctor/ hospital/treatment	5.4	3.5	9.5	6.6
Expected to see if problem got better on its own	6.8	10.2	3.1	6
Another reason	18.8	10.1	7.2	3.3

Source: INSSE and author's compilation

Access to care seems more difficult in rural areas to a significant extent, too. As shown in table 2, there are sizeable differences when it comes to being able to have a specialist medical examination or a dental examination, of 3 and, respectively, 2 percentage points, which translate in fairly large relative differences if we consider the small overall percentages, below 11 percent of the population. Among the main reasons behind these differences are mainly transportation issues, with about 1 percentage point of the rural/urban difference of foregone medical examinations being accounted for by transportation issues. Affordability also seems to be a major reason behind urban rural differences, together with a higher propensity to let medical problems go by themselves rather than going to a doctor.

8. Conclusion

Despite perceived differences between urban and rural, evidence shows a rather balanced picture, where major differences do not seem to be the norm, as it may appear according to recent literature. The older rural population seems to be due rather to a more balanced demographic profile which may be sustained by a net influx of residents coming from urban areas. Thus, the

perceptions that the rural areas are hollowing out under socio-economic pressure seem largely unfounded. Another important point is that ageing and dependency measures, while showing large differences between urban and rural areas, may not fully consider the key socio-economic differences between them, and may require a careful interpretation, or even an adaptation to observed realities.

Labour market statistics also do not show major imbalances, with differences in activity rates and unemployment rates mainly due to socio-economic characteristics of the two areas, where youths study rather than work in urban areas. The most significant differences show that fewer rural residents cease to work close to and after retirement age, which may reflect lack of material support for retirement. Also worrying is the inactivity and discouraged workers gap, which may need to be taken into account and addressed by policies aimed at improving the fortunes of rural areas. They may translate into a window of opportunity in using the spare labour potential of rural areas towards development of non-agricultural sustainable activities.

Particular issues occur with respect to the well-being and quality of life in rural areas. While there is a significant income gap of about one third between urban and rural areas, it seems that the gap has remained constant over the past 10 years. Differences in life expectancy, in particular for men, remain a major concern as the gap is of about 4 years; however, given recent advances in life expectancy in Romania, life expectancy in rural areas in 2016 is above the overall life expectancy of Romanians recorded in 2010, of 73.9 years. The percent of people to make ends meet, and the prevalence of unmet health care needs, however, puts rural areas at a clear disadvantage and points out to the quality of life issues to be addressed by relevant targeted policies.

Some of the major limitations of the analysis reflect the need for future relevant research to be undertaken. Thus, it is still unclear what the impact of international migration is for rural areas, in the absence of reliable data that can help us gauge the magnitude of the phenomenon, and its implications. Data on remittances and investment from return emigrees may be essential in explaining the relative size of the differences between urban and rural areas, with a particular focus on socio-economic sustainability of the latter. Internal migration data does not correct for returned residents, offering just a partial picture of the migratory movements. Also, there is insufficient data to examine the higher prevalence of inactivity from a labour market perspective, in order to better understand its causes and assess the potential improvements with

respect to labour market performance and economic development of rural areas.

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