The replenishment of the rural labor force in Poland through 2030

Poland's Ageing Workforce

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Through 2015, all of the growth in Poland's working-age population will occur in rural areas. After then such growth will start to wane, enabling the Polish agricultural sector to be restructured, i.e. for agricultural employment to be downsized

The period of socioeconomic transformation initiated in Poland in 1989 coincided with a stage of demographic growth characterized by particularly strong reproduction in the population of economically productive age. This was a consequence of two overlapping factors: large cohorts of individuals from what is called the echo of the postwar surge entered productive age, while the smaller cohorts of individuals born during WWII came into retirement age. This situation was conducive to rapid growth in the labor force.

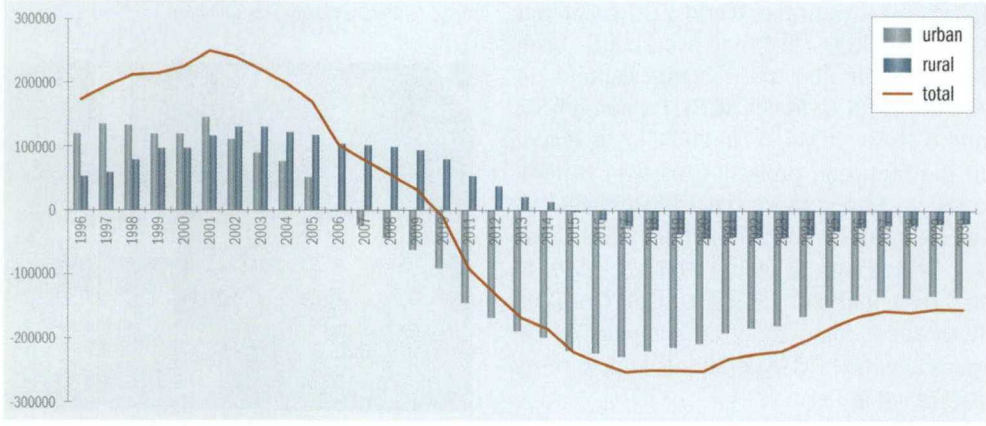
Over the past 10 years, the rural population of economically productive age has increased by more than 100,000 individuals per year on average. That means that each year, over 100,000 more individuals reached economically productive age than entered retirement age. As a result, the rural labor force has surged.

Rural areas surpassing the cities

Increments in production-age population (and therefore also in labor force) were also observed in urban areas. Yet while that trend has already now reversed for the cities, the labor force in rural areas will continue to grow through the year 2014. It is noteworthy that in 2006-2014, all of Poland's growth in labor potential will occur in rural areas.

The difference in the pacing of this process between rural and urban areas is a consequence of rural-to-urban migrations in the 1970s, which were highly selective in terms of age. At that time, the net migration into the cities was approximately equivalent to the natural population growth in rural areas. While the size of the rural population did not change, the urban population was increased not only by the natural growth rate but also by migration from rural areas. We might say that all of the natural rural population growth (even with a certain surplus) was channeled into the cities. This had a significant structural impact on future processes of demographic reproduction in both groups.

Poland is considered to have seen exceptionally large growth in its production-age population, one of the main determinants of the labor force, in the period 1991-2010. The



Annual increase (decrease) in the number of individuals of economically productive age (1996-2030)

Source: own calculations based on GUS (Central Statistical Office) Demographic Yearbooks for 1996-2004 and GUS population forecasts through 2030; http://www.stat.gov.pl

Robert Gardziński/Fotorzepa

Through 2015, all of the growth in Poland's production-age population will occur in rural areas, which will sustain the agrarian overpopulation

nature of that growth can be illustrated as follows: if there were 22 million people of production age in Poland in 1990 (14.1 million in cities, 7.9 million in rural areas), and 24.7 in 2010 (15.3 million in cities, 9.4 million in rural areas), that means that this population category will have seen more than 10% growth. Yet if we look closer, the growth rate will have been 8.5% in cities but as high as 19% in rural areas – and at a time when the country's population as a whole is shrinking (albeit only by 0.7% – from 38.1 million to 37.9 million).

We should point out that the cited data are partly based on forecasts, and therefore uncertain.

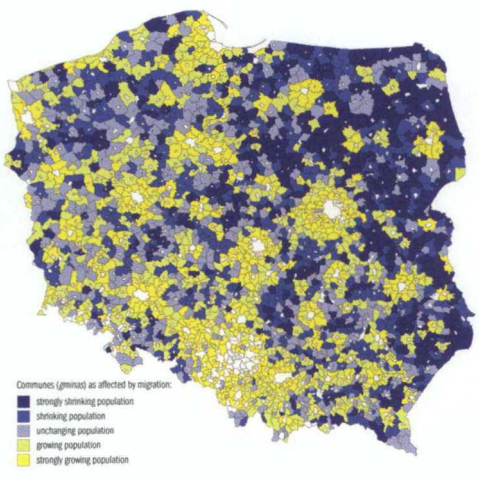
Also important for forecasting is the issue of internal migrations (between cities and rural areas). Statistical data indicate that the balance of rural-to-urban migration is now close to zero. It seems that such migration will not pay a great role in the near future in shaping the proportions of rural and urban populations or in modifying the structures of those groups.

Flows of migration

Still, that does not mean that internal migrations do not occur in Poland. We can indeed perceive shifts in the spatial distribution, causing the population of zones surrounding the largest urban centers to swell. This is the result of a rural-to-rural type of migration, and also migration out of cities into suburban areas. This is illustrated well by what is called the migration attractiveness index.

In general, however, internal migrations have recently not been a significant factor affecting the rural labor market as seen from the national perspective (although they may be such a factor when we look at regional differentiation). Job-driven migrations to EU countries are probably of greater impact, yet their scale is very difficult to estimate: the general flow of such migrations can only be estimated within a very broad range, and those estimates are not broken down by place of origin (city or village). Assuming that 1/3 of the flow of migrants comes from rural areas (meaning some 250,000–350,000 individuals, depending on estimates of the overall flow of migration), we should conclude that such migration still did not offset the pressure on the labor market caused by the demographic replenishment of the rural population of production age.

These trends of change in the production-age population (and indirectly in the labor force during the time-frame under discussion) will have not only quantitative but also



Attractiveness as a target of migration (average for 2000–2004)

Source: own calculations based on BDR data

qualitative consequences. One of them is the age breakdown of the labor force. If we look at the simplest of measures, i.e. the percentage of the population that is of older (i.e. non-mobile) production age, we can note that following relatively small changes in 2002–2016, a profound aging process will subsequently be observed within the production-age population, and thereby also in the labor force.

The phenomena of labor force aging is spatially differentiated. It is gauged as the percentage of all production-age individuals who are of non-mobile age. In terms of economic demographics, its magnitude has very important consequences for the mobility of the labor force – both spatial mobility and professional mobility. To put things most simply, where its value is highest, jobseekers are less inclined to change their place of residence or to acquire new professional qualifications.

Legacy of the past

The spatial breakdown of this indicator confirms the fundamental differences between demographic processes in central and eastern Poland, where the labor force shows a high percentage of individuals of older age, and other regions of the country. The area in question is approximately congruous with the former Russian-occupied segment of the partitioned Polish lands a century ago. The labor force structure most favorable in terms of age breakdown occurs in the former Galicia (Austrian-occupied) partition, in the Pomerania and Warmia regions, and in that part of the Opole region inhabited by an autochthonous population.

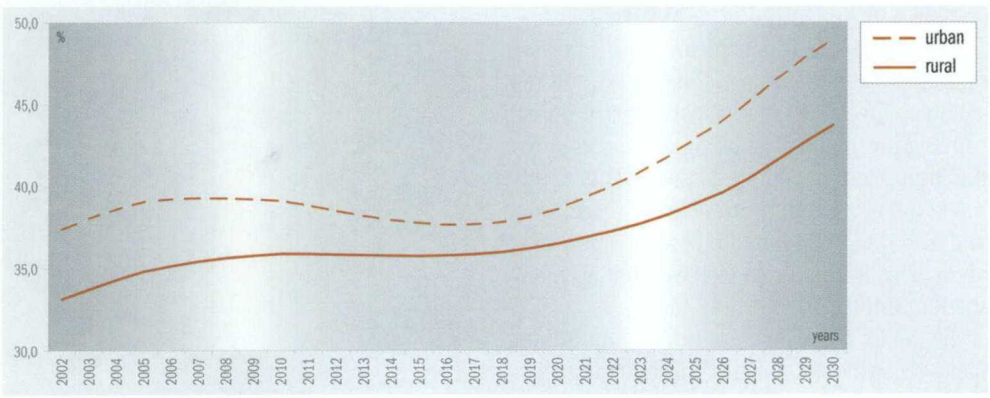
The spatial distribution of structural indicators was definitely most strongly shaped by post-war migration processes related to the settlement of the Western and Northern Lands, which nowadays manifest themselves as a demographically younger population, and the intensive industrial migrations of the 1970s. Moreover, because young people just entering production age are predominant in migrations, areas characterized by greater outflows are growing older, their monofunctional character grows stronger, while areas of population concentration are characterized by relatively favorable structures of age, education, the ratio of young women to young men, etc., and professional activity.

Małgorzta Kujawka/Agencja Gazeta

After 2020, Poland's labor force will be aging at a rapid rate. Although that trend will occur in both rural and urban areas, the rural labor force will be relatively younger and thus more mobile

Rise and fall

Our analysis of statistical data and forecasts concerning the Polish population along the urban/rural cross section was limited to crucial information indicating trends in the course of demographic reproduction of the production-age population. However, the findings of this comprehensive analysis encourage us to make several remarks.



Percentage of older production age within the overall production age population

Source: own calculations based on GUS (Central Statistical Office) population forecasts through 2030

Firstly, Poland's structural demographics evidence very strong irregularities which are the product of two processes: a demographic surge and a stage of demographic shift characterized by a relatively rapid drop in childbearing rates.

Moreover, most generally, in the years 1990-2010 we have been seeing a rising supply of workforce. After 2010, the demographic reproduction of the labor force will attenuate (a process that began in the cities in 2005). This will therefore bring favorable conditions for reducing the scale of unemployment. By the middle of the next decade, all growth in the production-age population in Poland will be focused in rural areas, which will maintain the agrarian overpopulation. We can therefore expect an improvement in the urban job market near the end of the next decade, although not on the rural job market.

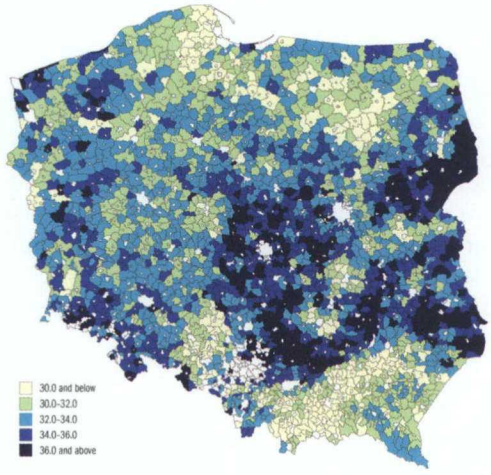
Attenuated reproduction will appear later in rural areas (in 2014) than in cities and will be less dynamic. More favorable conditions will then arise for restructuring agriculture, the objective of which will be to reduce agricultural employment and agriculture's share of overall employment. However, after just a few years, a new unfavorable phenomenon will occur: labor force aging and lesser spatial and professional mobility on the part of jobseekers. The process of labor force aging will intensify relatively rapidly, especially after 2020.

We should not expect any surge in rural-to-urban migration which might offset the differences on the urban and rural job markets. Factors more important for internal migrations will be rural-to-rural shifts leading to higher population of areas around the largest urban centers, and also migrations out of the cities into suburban zones. We can also expect a rise in the phenomenon of rural-to-urban commuting to work.

New social policy

Another important factor for evaluating the job market situation is currently the issue of job-driven migration to the EU countries. Yet these are processes whose magnitude we can only estimate. The demographic trends presented here have already been adjusted for external migrations. Firstly, the exodus of young people (the average age of emigrants being around 26) will transform in part into permanent emigration, and secondly, such emigration will enhance the aging labor force effect. In the short-term perspective, such migration will reduce the extent of unemployment, while in the longer term it will yield unfavorable structural changes in the labor force.

One of the important instruments used for counteracting unemployment (in the 1990s and at the start of the new decade) was the previous professional deactivation of production age individuals (various forms of early retirement benefits and, since EU accession, structural pensions in agriculture). Socioeconomic policy therefore encouraged people to abandon the job market in favor of professional inactivity. The rising demographic burden upon production-age individuals will not only hamper such policy in the future, it will also be conducive to prolongation of the production age. ■



Aging of the labor force (2004) – percentage of non-mobile production-age population within the overall rural production-age population

Source: own calculations based on BDR data

Further reading:

Rosner A. (Ed.). (2007). *Zróżnicowanie poziomu rozwoju społeczno-gospodarczego obszarów wiejskich a zróżnicowanie dynamiki przemian* [*Variation in the socioeconomic development level of rural areas and differentiation in transformation dynamics*]. Warsaw: IRWIR PAN.

Rosner A., Stanny M. (2007). *Wykorzystanie zasobów pracy na wsi do roku 2013. Uwarunkowania, bariery, nowe rozwiązania instytucjonalne* [*Harnessing the Rural Labor Force Through 2013 - Determinants, Barriers, New Institutional Solutions*]. [In:] Kłodziński M. (Ed.). *Wyzwania przed obszarami wiejskimi i rolnictwem w perspektywie lat 2014-2020* [*Challenges Faced by Rural Areas and Agriculture in the Perspective of 2014-2020*]. Warsaw: IRWIR PAN.