1 FROM RURAL TO URBAN: A FORGOTTEN TRANSITION

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Abstract

This paper examines the long-term dynamics of population distribution by area of residence, with a particular focus on convergence and divergence patterns at the global level and within the European Union. Using World Bank data for the period 1960–2024, countries are grouped by income level to analyse the relationship between rural–urban population shares and economic development. An econometric framework is developed in which per capita income at purchasing power parity replaces time as the independent variable, allowing the identification of distinct behavioural regimes associated with successive stages of development. The results reveal a strong and nearly perfect inverse relationship between rural population shares and per capita income at the global level, characterised by smooth and quasi-continuous transitions across income groups. In contrast, within the European Union, population dynamics exhibit layered trajectories and discontinuous regime shifts across regional groupings. Romania emerges as a clear outlier, displaying persistent divergence from the EU average in population structure by area of residence despite convergence in income levels—a phenomenon referred to as the "Forgotten Transition." Simulation results suggest that accelerating Romania's rural-to-urban transition could generate substantial macroeconomic gains, including a significant increase in potential GDP growth. The findings underscore the importance of structural and territorial policies in shaping long-run development outcomes and highlight the limits of income convergence in the absence of demographic and spatial convergence.

Keywords: Rural–urban transition; Internal migration; Population structure; Economic convergence; Urbanization dynamics; Regional development; European Union; Romania

JEL Classification: J11, J61, O18, O47, R23

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1. Introduction

Migration can be defined as the relocation of individuals from their customary place of residence to another area. Such movements may occur within national boundaries, in which case they are classified as internal migration, or across state borders, in which case they constitute international migration. A major component of internal migration is the transfer of population from rural to urban areas, a process that holds particular relevance for demographic analysis and socio-economic research (Seker et al., 2025, International Organization for Migration [IOM], 2025).

In general terms, the movement of population from rural areas to cities influences the socio-economic evolution of local communities and, in turn, reshapes the broader features of urban living (Mthiyane et al., 2022). From a demographic perspective, population mobility is regarded as a principal determinant of changes in population size and structure, alongside fertility and mortality (White & Lindstrom, 2005). As a form of internal population movement, rural-to-urban migration raises two fundamental issues: the characteristics of individuals who leave their places of origin and the destinations that experience population growth. The former is shaped by patterns of economic activity, socio-cultural contexts, and public policy frameworks, whereas the latter reflects the relative attractiveness of regions endowed with favourable economic conditions, demographic momentum, and supportive policy environments (Adger et al., 2024, Seker et al., 2025).

Contemporary scholarship at the global level emphasises that accelerated urban growth and population mobility are profoundly transforming social structures, as people increasingly relocate toward regions characterised by stronger economic performance and greater social vitality in search of improved prospects. Empirical evidence of these patterns can be found in studies on developing economies (Selod & Shilpi, 2021), China (Knight & Gunatilaka, 2010; Han et al., 2026), Japan (Kumagai et al.), and comparative analyses covering China, the United Kingdom, the United States, and South Korea (Han et al., 2026), as well as research focusing on the United States, Europe, and China (Huang & Zhao, 2024).

However, movements of population from rural to urban areas have long occupied a central place in the work of economic historians and development economists. In the context of the Industrial Revolution in Europe and North America, internal migration set in motion two interrelated and mutually reinforcing processes: the reallocation of labour from agriculture toward industrial and service activities, and the ensuing expansion of economic output linked to the advance of urbanization (Kim, 2007, Selod & Shilpi, 2021).

Although a substantial share of the international migration literature has traditionally focused on movements from rural areas to cities motivated by fundamental necessities (Lall et al 2006, Shilpi et al 2014, Diamond, 2016) - such as food security, schooling, and access to medical services - this approach is increasingly insufficient for explaining present-day mobility patterns. Across the Americas, Europe, and Asia, contemporary rural-to-urban migration is shaped by a much wider range of drivers, including prospects for income progression, professional development, household strategies, and long-term personal goals (Cai & Wang, 2018; Kumagai et al., 2025). In this context, internal population movements in many regions are less frequently the result of sheer material deprivation and more often reflect heterogeneous and complex motivations. Empirical evidence from recent studies, such as Ji (2024), suggests that decisions to migrate are strongly influenced by employment opportunities, access to tertiary education, availability of childcare services, and preferences related to quality of life. Taken together, these developments indicate a clear shift away from simplified push–pull frameworks toward a more nuanced and multidimensional interpretation of human mobility.

To further develop the contextual foundation of the manuscript and clarify the remaining gap in the literature, we advance two additional arguments. First, urbanization is widely recognised as a major force behind socio-economic development and modernisation (Zhang & Wang, 2018; Han

et al., 2026). As human capacity to alter the physical environment has expanded, contemporary urbanization has increasingly diverged from earlier historical trajectories with respect to scale, pace, spatial configuration, and functional roles (Seto et al., 2010). Urban dynamics—including rates of growth, spatial organisation, and morphological transformation—have been extensively measured across regions and at multiple spatial scales, offering deeper insight into the complexity of urbanization processes (Reis et al., 2016). At the same time, urbanization intensifies pressures associated with urban expansion and population concentration. In urban research, particular attention has been devoted to two core components of urban systems—urban land area and population size—and to the empirical assessment, interpretation, and practical use of their scaling relationships (Lang et al., 2019). Nevertheless, recent empirical work has tended to examine urban expansion and the evolution of urban form within a relatively narrow set of developing and advanced economies (Tian & Wu, 2015; Dong et al., 2019).

Second, migration toward cities tends to concentrate access to services and employment within urban areas (Cattaneo et al., 2021), while simultaneously contributing to economic and infrastructural weakening in rural regions. This pattern is frequently illustrated by "ghost-townization," a process through which many rural communities experience pronounced population decline (Jensen et al., 2020). Rural depopulation, in turn, amplifies deficits in infrastructure provision and limits local economic prospects (Requena, 2016). These developments are consequential because rural vitality is essential for balanced territorial development, long-run economic sustainability, and the maintenance of local social networks. Yet policy initiatives intended to counteract rural decline - such as programmes designed to encourage migration from urban to rural areas - often yield limited results.

From an economic perspective, changes in the distribution of the population by area of residence have a substantial impact on structural transformations within the economy, particularly on the sectoral and branch composition of the labour force, and, implicitly, on the overall process of economic growth.

Against this background, our research is motivated by the need to examine whether a process of convergence exists at the global level and within the European Union with respect to population distribution by areas of residence, while also identifying Romania's position within this framework.

As in the case of changes in the distribution of the labour force across sectors and branches - and in the economy more broadly, which they influence in an almost direct manner - changes in the structure of the population by area of residence represent a process that unfolds over long periods of time.

In this context, based on the available statistical data, we analyse the convergence and divergence processes at the global level over the period 1960 – 2024, grouping countries according to the World Bank methodology into three broad categories: high-income (H), middle-income (M), and low-income (L) economies. The World Bank is also used as the data source for a representative sample of 139 countries and territories for which comparable long-term data are available (for example, GDP per capita data since 1990).

For the analysis of the European Union (EU-27, post - Brexit), the Member States were classified—based on a detailed assessment of their economic structures and macroeconomic behaviour—into three broad, conventionally defined groups: North-Western countries (NW, comprising 10 Member States), Southern countries (S, comprising 6 Member States), and Eastern countries (E, comprising 11 Member States).

The remainder of this paper is structured as follows. **Section 2** examines the long-term dynamics of population distribution by area of residence at the global level, with a focus on identifying convergence and divergence patterns across income groups over the period 1960 – 2024. **Section 3** analyses the dynamics and convergence processes within the European Union (EU-27), highlighting similarities and differences across the North-Western, Southern, and Eastern

groups of Member States. The final section summarises the main findings, discusses their economic implications, and outlines directions for future research.

2. Long-Term Global Trends and Dynamics

The shift of population from rural to urban areas is a long-standing historical process, originating in early societies and accelerating markedly with the Industrial Revolution. Examining the distribution of population by area of residence is therefore essential from both social and economic perspectives. Economically, the rural – urban composition of the population plays a crucial role in shaping structural transformations, particularly those affecting the sectoral and occupational structure of the labour force, and, by extension, the overall trajectory of economic growth. Empirical evidence indicates that changes in population distribution by area of residence unfold gradually over extended periods of time, both at the global scale and within Europe.

Over the past six decades, the global pattern has been marked by a steady decline in the share of the rural population, accompanied by a corresponding expansion of the urban population. Specifically, the proportion of people living in rural areas fell from 66.3% in 1960 to 60.7% in 1980 and further to 53.4% in 2000. This downward trend continued, and from 2007 onward the urban population became the majority worldwide. According to the most recent data, rural residents accounted for approximately 42% of the global population in 2024.

Despite this general trend, substantial disparities persist across country groups, reflecting differences in levels of economic development. In 2024 - the latest year for which World Bank data are available—the rural population represented around 62% of the total population in low-income countries (L), compared with about 45% in middle-income countries (M) and only approximately 18% in high-income countries (H). Within the European Union, roughly 24% of the population still resided in rural areas in 2024, while in North America the corresponding share was below 17%. By contrast, Romania followed a distinct trajectory: in 1960, only 34.2% of its population lived in urban areas, whereas by 2024 this proportion had risen to nearly 55%, with the 50% threshold being surpassed only in 1986.

The expansion of the urban population has also generated a number of debates. In some cases - often with valid justification - it is argued that maintaining a substantial rural presence within the total population and preserving rural areas can be advantageous, particularly in the context of a development paradigm increasingly oriented toward ecological sustainability and harmony with nature. This perspective also encompasses the emergence of new forms of economic activity, such as mountain - and coastal - based economies. From this viewpoint, the primary challenge facing developing countries is not the relatively large size of their rural populations per se, but rather the degree to which rural areas are integrated into economic, social, and cultural systems.
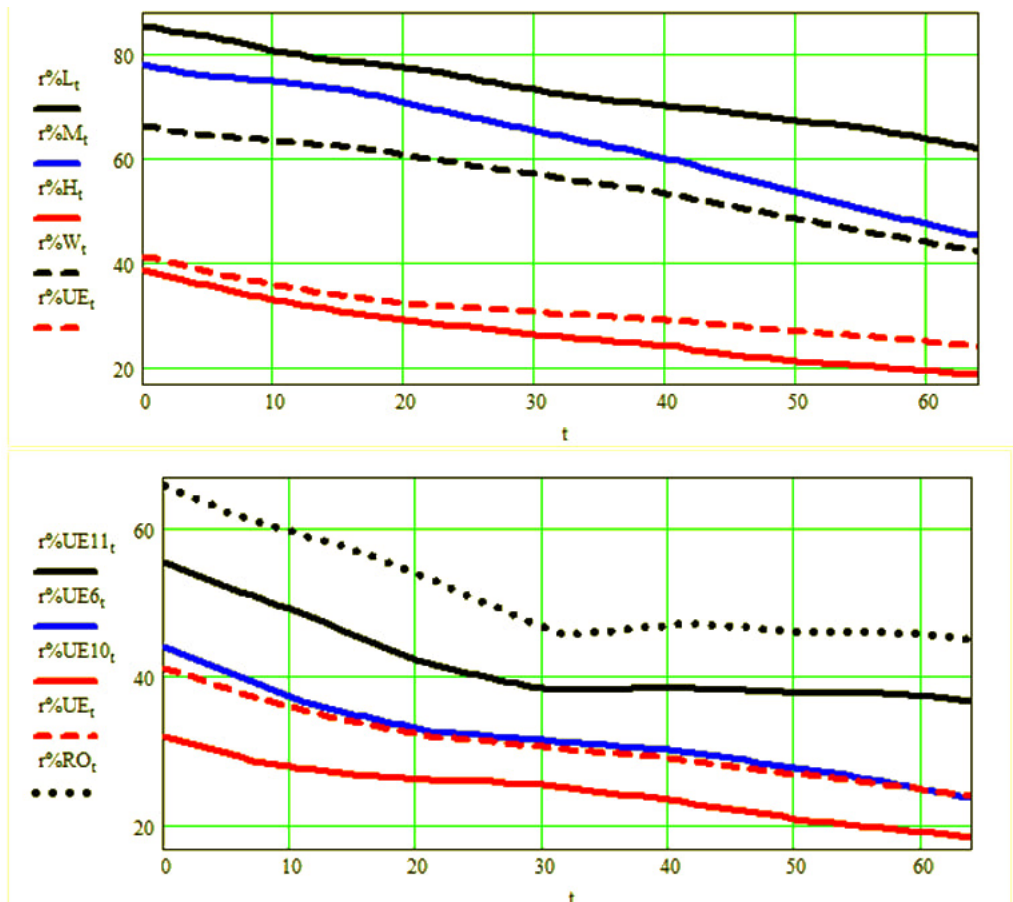
In support of this argument, it is often noted that, even in 2024, sizable rural populations persisted in several advanced economies, including Austria (40.2%), Ireland (35.2%), Italy (27.7%), Switzerland (25.7%), Germany (22.1%), France (18.0%), Canada (18.0%), the United States (16.5%), and the United Kingdom (15.1%). Moreover, at the level of the European Union as a whole, the decline in the rural population share has noticeably slowed, decreasing from 30.6% in 1990 to 24.1% in 2024—a reduction of just over 6 percentage points across more than three decades, corresponding to an average annual decline of less than 0.2 percentage points.

For Romania, the main challenge at present is its persistent lag behind the European Union average, which implies the need to narrow the gap with European standards within a relatively short historical timeframe. In 2024, for instance, Romania ranked second - after Slovakia - in terms of the proportion of its population living in rural areas. At the same time, rural development is closely linked to the challenge of reducing regional disparities. Although regional development

policies require substantial financial resources and investment, they must become a strategic priority, even if this occasionally conflicts with principles of efficient factor allocation or with the pursuit of rapid national-level growth aimed at supporting real convergence.

To assess long-term trends at both the global and European Union levels, we examined population dynamics over the period 1960–2024. At the global level, the analysis was conducted for the three income groups defined by the World Bank - low-income (L), middle-income (M), and high-income (H) economies - while at the EU level, countries were classified into three conventionally defined groups adopted in this study: Eastern (E), Southern (S), and North-Western (NW) Member States. Figure 1 illustrates the evolution of the rural population over time, with the horizontal axis representing the years from 0 to 64, corresponding to the period 1960 – 2024. The upper panel of the figure presents the global trends, whereas the lower panel depicts the corresponding dynamics within the European Union.

Figure 1. Long-Term Dynamics of the Rural Population at the Global and EU Levels (1960–2024)
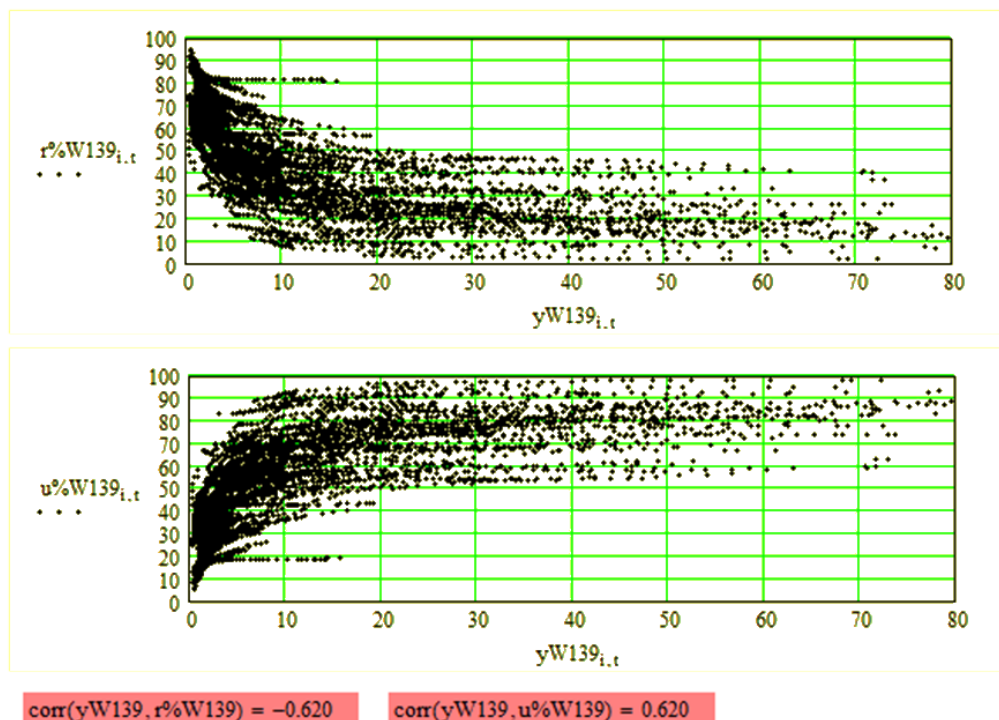

Source: Authors' computation

In the global panel, the country groups are depicted as continuous trajectories: black for low-income countries (L), blue for middle-income countries (M), and red for high-income countries (H). The chart also displays population-weighted global averages (W), shown by the black dashed line, as well as the corresponding population-weighted average for the European Union, indicated by the red dashed line.

For comparative purposes, the European Union panel (the lower chart in Figure 1) presents the conventional country groupings as continuous trajectories, with black denoting Eastern Member States (E), blue representing Southern Member States (S), and red indicating North-Western Member States (NW). The figure also includes the population-weighted EU average, depicted by the red dashed line, as well as, for reference, the trajectory for Romania, shown by the black dotted line positioned at the upper part of the graph.

To examine the relationship between the level of economic development and the population structure by area of residence, we employ a global representative sample (W139) comprising 139 countries and territories. The key graphical results illustrating the association with per capita income - measured by gross domestic product at purchasing power parity (GDP PPP, expressed in international dollars and serving as the primary indicator of real convergence) - are presented in Figure 2.
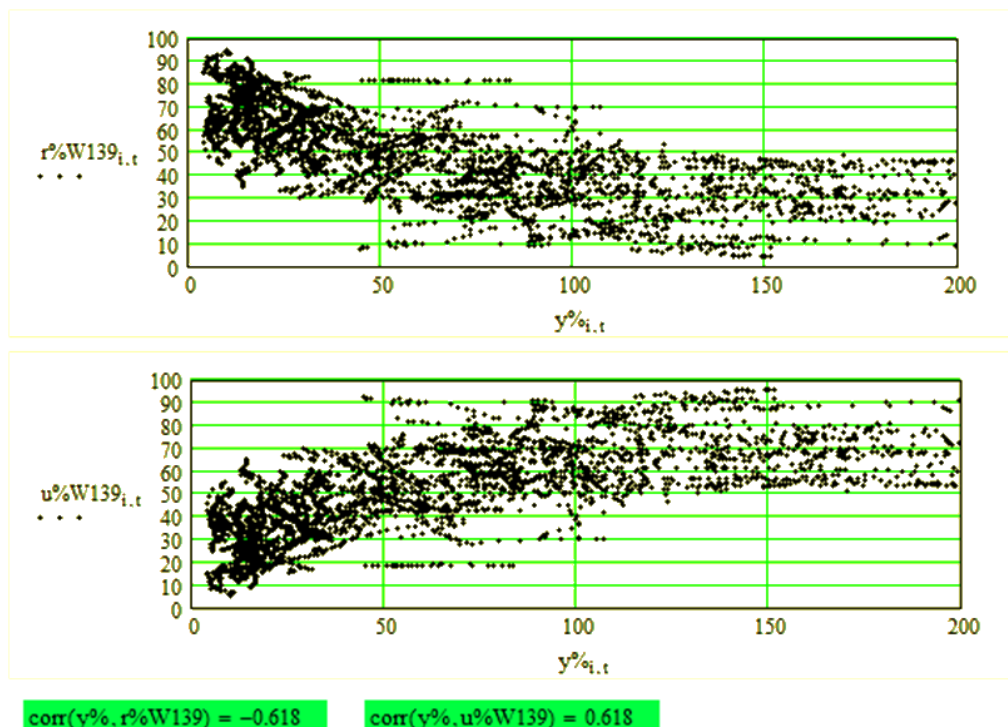
Figure 2. Relationship Between Per Capita Income (GDP PPP) and Population Distribution by Area of Residence (Global Sample, W139)

corr(yW139, r%W139) = −0.620   corr(yW139, u%W139) = 0.620

Source: Authors' computation

Figure 3 presents the corresponding graphical results obtained by replacing the absolute levels of per capita income for countries in the W139 sample (y_W139) with the relative measure defined as the ratio between each country's per capita income and the W139 sample average (y% = y_W139 × 100 / y_M). This transformation allows for a clearer comparison of income positions relative to the sample mean. For graphical clarity and optimisation, the upper bounds of the horizontal axes were truncated at 80,000 international PPP dollars for per capita income (y_W139) and at 200% for the relative income ratio with respect to the W139 sample average.

Figure 3. Population Distribution by Area of Residence and Relative Income Levels (W139 Sample)

$$corr(y\%, r\%W139) = -0.618 \qquad corr(y\%, u\%W139) = 0.618$$
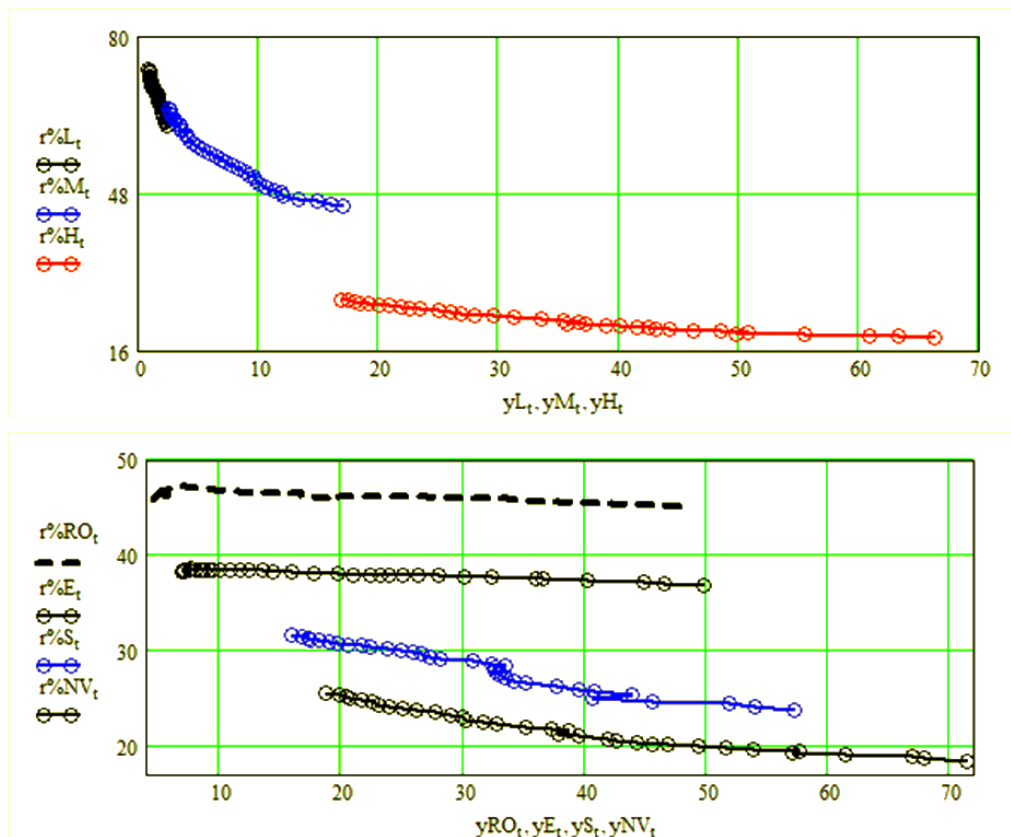
Source: Authors' computation

Returning to the econometric analysis by income groups at the global level, we adopt an alternative methodological perspective to examine the fundamental long-term trends in population distribution by area of residence. Specifically, instead of using time as the independent variable, we replace the horizontal axis with per capita income measured at purchasing power parity (PPP), expressed in international dollars (y). This approach, illustrated in Figure 4, is applied over a shorter time horizon - 1990–2024 - for which internationally comparable data are available. The upper panel of the figure depicts the trajectories of the three World Bank income groups at the global level, while the lower panel presents, for comparative purposes, the corresponding dynamics of the three conventionally defined country groups within the European Union.

The analysis reveals two distinct patterns of dynamics, one at the global level (upper panel of the figure) and the other at the European Union level (lower panel), each comprising three differentiated behavioural regimes corresponding to the respective groups of countries. In addition, the lower panel includes Romania's trajectory, depicted by the black dashed line and positioned above those representing the conventional EU groupings.

For the period under consideration (1990–2024), the figure highlights the presence of distinct sequences of behavioural regimes associated with successive stages of economic development. At the global level, these regimes emerge as successive segments along the curves, whereas at the EU level they appear as partially overlapping layers across country groups.

Moreover, over the 1990–2024 interval, the correlation coefficients between the share of the rural population and per capita income indicate an almost perfect inverse relationship across all country groups. At the global level, correlation values range between − 0.989 and − 0.968, while at the European level they lie between − 0.979 and − 0.967. In contrast, Romania exhibits a noticeably weaker, though still negative, association, with a correlation coefficient of −0.749.

Figure 4. Rural Population Share and Per Capita Income (PPP): Global and EU Dynamics, 1990–2024

Source: Authors' computation

At the global level, the transitions between trajectories appear to follow a smooth and "natural" progression, with a quasi-continuous decline from the black curve (located in the upper-left region of the upper panel), to the blue curve (occupying the intermediate range), and ultimately to the red curve (positioned in the lower-right region). Moreover, based on our estimated parameters, a continuous theoretical trajectory of a hyperbolic form - encompassing the three regimes as successive declining segments - suggests that the share of the rural population is likely to follow an asymptotically decreasing path in the long run, converging toward a stable level of approximately 10% of the total population.

A more direct assessment of the relationship between income level and rural population share can be obtained by examining the correlation between r% (the rural population share) and g% (defined as y*100/yM, where y is GDP per capita at PPP and yM represents the income level of the highest-income country in the sample, effectively normalizing income to a 0 - 100 scale). This measure is arguably more appropriate than the raw correlation between y (in current international dollars) and r%, as the PPP values are highly sensitive to the choice of base year and price level. The correlations between r% and g% vary considerably across country groups: −0.548 for the UE10 group, +0.630 for UE6, −0.970 for UE11, and −0.913 for the rest of the world (RO). The strongly negative values in most groups confirm the expected pattern - higher relative income is associated with lower rural population shares - while the positive value for UE6 suggests a distinct structural pattern in that subgroup.

$$corr(r\%UE10, g\%UE10) = -0.548$$
$$corr(r\%UE6, g\%UE6) = 0.630$$
$$corr(r\%UE11, g\%UE11) = -0.970$$
$$corr(r\%RO, g\%RO) = -0.913$$

Given the inherent complementarity between rural and urban areas, the corresponding evolution of the urban population is effectively a mirror image of this process. Accordingly, the urban population share is expected to approach an upper asymptotic bound of around 90% of the total population, as illustrated in both panels of Figure 5.

Building on the econometric analysis, we estimated a unified model that integrates, for each type of residential area, the three empirical trajectories associated with the respective groups of countries. Drawing on the empirical evidence, which indicates a strong inverse relationship between the level of economic development - proxied by per capita income - and the share of the rural population, we specified a functional form suitable for simulating the dynamics of each of the three country groups comprising the global economy (low-, middle-, and high-income economies).

Accordingly, the rural population share, denoted r%(y), was modelled as a function of per capita income y using the following specification: $r\%(y) = a / (1 + b \cdot y) + u$, where a and b are parameters to be estimated and u represents the stochastic error term.

On the basis of this specification, the corresponding relationship for the urban population share, u%(y), can be derived for each of the three country groups that constitute the global economy as the complement of the rural share, r%(y), namely: $u\%(y) = 1 − r\%(y)$ (or 100% − r%(y) when expressed in percentage terms). The estimation results indicate that this formulation accurately reproduces the observed empirical dynamics, as evidenced by the high correlation coefficients obtained between the actual and fitted values for all three country groups.

$$corr(r\%L, r\%eL) = 0.988 \qquad corr(u\%L, u\%eL) = 0.988$$
$$corr(r\%M, r\%eM) = 0.994 \qquad corr(u\%M, u\%eM) = 0.994$$
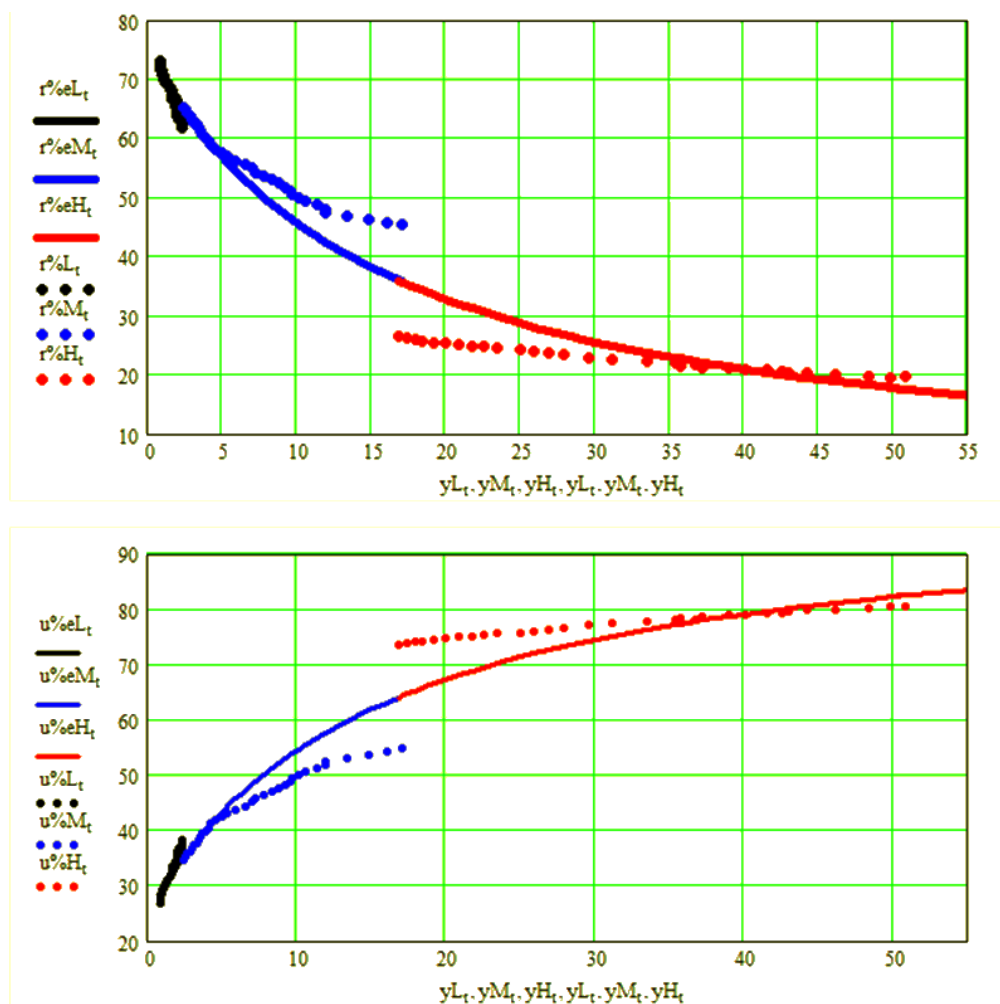$$corr(r\%H, r\%eH) = 0.997 \qquad corr(u\%H, u\%eH) = 0.997$$

Similar correlation-based approaches to modeling the relationship between economic development indicators (such as GDP per capita) and structural variables have been employed in earlier studies on convergence processes in the EU and Eastern European regions. Notably, Albu et al (2019) utilized empirical correlations to simulate convergence dynamics across the EU and the Balkans, while Albu, et al. (2014) developed a nonlinear model relying on long-term correlations between market capitalization and GDP per capita in Eastern EU countries, highlighting the usefulness of correlation analysis in capturing complex interdependencies in regional economic structures.

Figure 5. Asymptotic Long-Term Dynamics of Rural and Urban Population Shares at the Global Level
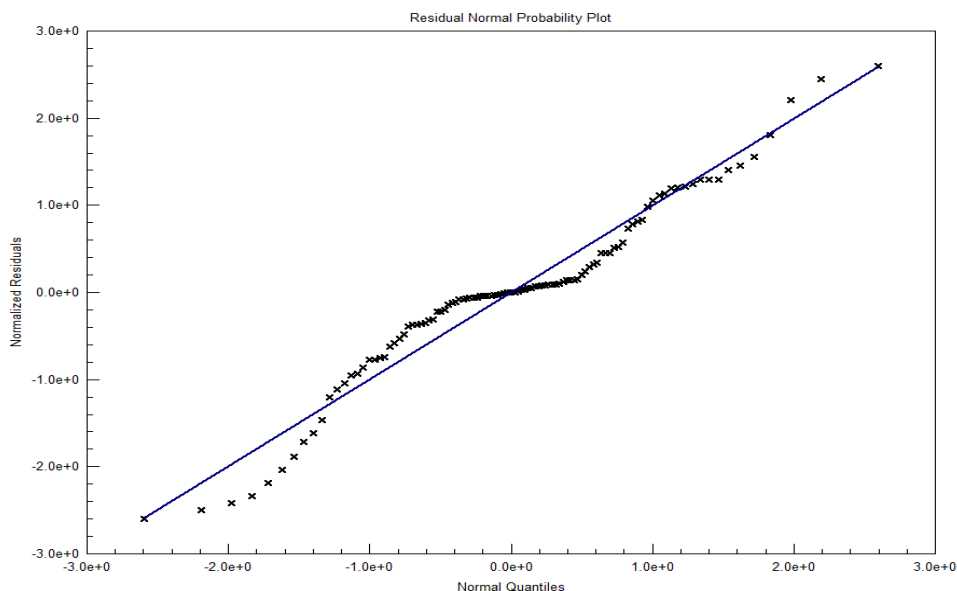

Source: Authors' computation

The correlation coefficients between the observed and estimated values indicate a very strong fit across all country groups. For low-income economies, the correlation between the actual and estimated rural population shares is 0.988, with an identical value obtained for the urban population shares. In the case of middle-income economies, the corresponding correlations are 0.994 for both rural and urban population shares. For high-income economies, the correlation coefficients reach 0.997 for both residential categories.

Figure 6 illustrates the normal probability plot of the model residuals, providing evidence on the distributional properties of the error terms and their conformity with the normality assumption.
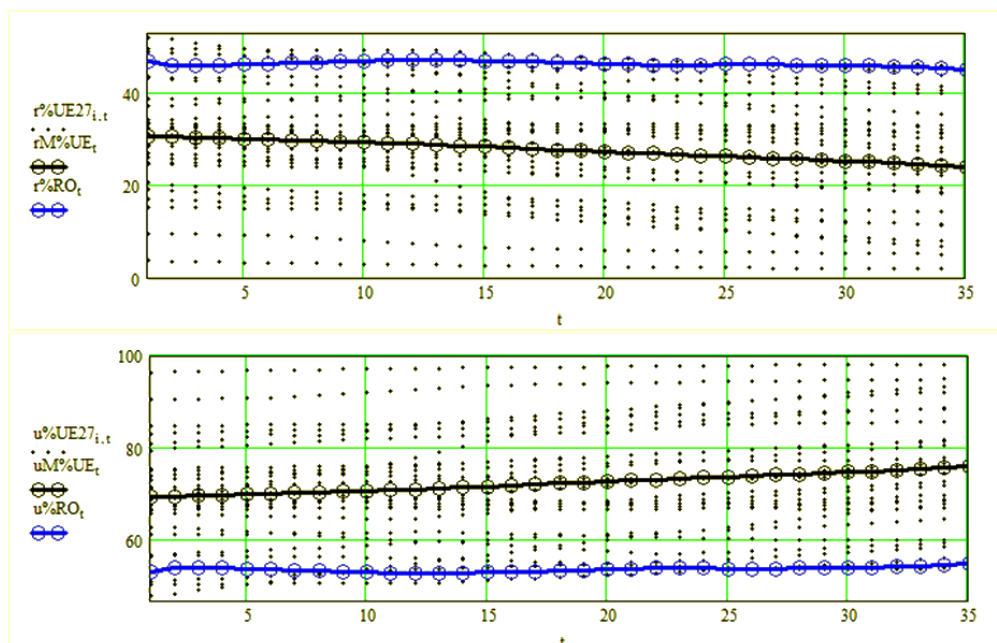
Figure 6. Normal Probability Plot of Model Residuals

Source: Authors' computation

3. Dynamics and Convergence in the European Union

In contrast to the global patterns, the dynamics observed at the European Union level display a distinctly different structure. As shown in the lower panel of Figure 4, the declining trajectories of the conventional country groups are organised in layered formations, with transitions between the behavioural regimes characteristic of each group occurring through discrete shifts rather than smooth continuities. These transitions take the form of abrupt downward movements, first from the black trajectory located in the upper-left region of the figure—corresponding to the Eastern Member States (E) - to the blue trajectory in the central region representing the Southern group (S), and subsequently to the red trajectory in the lower-right region associated with the North-Western group (NW). Within this framework, Romania's trajectory appears distinctly atypical, particularly when assessed relative to its progress in economic development, as captured by the evolution of per capita income along the horizontal axis.

In the European context, the weak performance of Romania in adjusting its population structure by area of residence - referred to here as the "Forgotten Transition" - is clearly evidenced by its divergence from the EU average. This pattern stands in contrast to the convergence typically observed for per capita income and other key macroeconomic indicators. The extent of this divergence is illustrated in Figure 7, which presents the comparative dynamics for rural (upper panel) and urban (lower panel) population shares.

Figure 7. Divergence of Romania's Rural and Urban Population Structure from the EU Average

Source: Authors' computation

The figure presents the distribution of rural (upper panel) and urban (lower panel) population shares for each EU-27 Member State over the period 1990–2024. For each year - indexed on the horizontal axis from 1 to 35, corresponding to 1990 and 2024 respectively - the vertical sequences of points represent the individual Member States included in the sample. Against this cross-sectional background, Romania's trajectory is highlighted by a solid blue line, while the EU average is indicated by a solid black line.

The figure reveals a pronounced and persistent divergence in Romania's rural and urban population shares relative to the EU average over the period analysed. Rather than converging toward the European pattern, Romania's population structure by area of residence follows a distinct path, underscoring the atypical nature of its transition.

Based on the analysis of demographic dynamics within the European Union and on our empirical estimates, a medium-term objective for Romania can be formulated with a horizon extending to 2050. Specifically, the target would be to achieve a population structure by area of residence comparable to that currently observed in the most advanced EU Member States. In operational

terms, this objective is broadly equivalent to an average annual reduction of approximately one percentage point in the share of the rural population.

Achieving this objective would enable Romania to attain, sequentially, population structures by area of residence comparable to those currently observed across the principal EU regional groupings. Specifically, Romania would reach the present-day profile of the Eastern Member States - characterised by rural and urban population shares of 36.8% and 63.2%, respectively - by approximately 2031. Convergence toward the Southern group's structure (23.7% rural and 76.3% urban, broadly corresponding to the EU average in 2024) would be achieved around 2043, while alignment with the North - Western group (18.4% rural and 81.8% urban) would occur by roughly 2049.

With respect to policy orientation, the foremost strategic priority would be comprehensive territorial–administrative reform. Such reform has been envisaged as a long-term objective since the pre-accession period and has been repeatedly advocated by the European Commission, yet it has remained persistently delayed by the domestic political process. Implementing this reform would substantially reduce the number of territorial – administrative units (UATs), thereby improving the efficiency of public expenditure allocation and strengthening fiscal capacity and financial autonomy at the local level.

Concurrently, the transition from a predominantly rural to a more urbanised population structure necessitates the establishment of a dedicated investment framework targeting territorial–administrative reorganisation and comprehensive infrastructure modernisation. This encompasses improvements across multiple dimensions, including transport, education, healthcare, financial services, cultural infrastructure, and water and energy supply systems. Particular priority should be accorded to rural settlements, which - over the medium term - could progressively attain living standards comparable to those of urban areas, themselves undergoing continuous modernisation. Notably, meaningful progress has already been recorded in this direction in recent years, to a significant extent supported by European Union funding instruments.

To assess the macroeconomic implications of increasing urbanisation, we assume that average per capita income in rural areas is approximately three times lower than in urban areas ($k = 3$), an assumption consistent with observed disparities in labour productivity between non-agricultural sectors and agriculture. This reflects the fact that the majority of individuals employed in the primary sector (agriculture, forestry, fisheries, and related activities), together with their households, reside in rural areas. Under this assumption - and holding total population constant at its 2024 level - a sustained annual reduction of one percentage point in the rural population share (from 45.1% in 2024 to 17.5% by 2050) would, according to our estimates, generate an additional increase in the annual GDP growth rate of approximately 0.9 percentage points. More precisely, the incremental effect is estimated at around 0.96 percentage points during 2027–2028 and approximately 0.91 percentage points during 2030–2031.

4. Conclusions

This paper has analysed the long-term evolution of population distribution by area of residence from both a global and a European perspective, with particular emphasis on convergence mechanisms and structural differentiation across stages of economic development. At the global level, the evidence points to a remarkably stable and systematic relationship between economic development and rural–urban population structure. Across low-, middle-, and high-income country groups, the rural population share declines smoothly as per capita income increases, following a quasi-continuous trajectory that can be approximated by a single theoretical function. This pattern suggests the existence of a broadly "natural" development path, in which rural-to-urban transition constitutes an integral and predictable component of long-run economic growth.

Within the European Union, however, population dynamics display a markedly different configuration. Rather than smooth transitions, the trajectories of population structure are organised in layered regimes corresponding to Eastern, Southern, and North-Western Member States. Transitions between these regimes occur through discrete shifts rather than gradual convergence, reflecting institutional, historical, and structural heterogeneities within the EU. In this context, Romania stands out as a pronounced exception. Despite sustained convergence in per capita income and other macroeconomic indicators, Romania's population structure by area of residence has diverged persistently from the EU average, indicating a decoupling between economic convergence and demographic–spatial transformation.

This divergence - the "Forgotten Transition" - has important economic implications. Simulation results indicate that accelerating the rural-to-urban transition in Romania could yield significant growth dividends, potentially increasing the annual GDP growth rate by close to one percentage point over extended periods. These gains arise from reallocating population toward higher-productivity environments, consistent with observed productivity differentials between agricultural and non-agricultural sectors. The analysis therefore highlights population structure not merely as a demographic outcome, but as a fundamental component of growth dynamics and real convergence.

From a policy perspective, the results underscore the central role of territorial–administrative reform and targeted infrastructure investment in facilitating structural transformation. Without such reforms, income convergence alone may prove insufficient to ensure broader developmental convergence within the European Union. More generally, the findings suggest that sustainable development strategies must explicitly account for spatial and demographic structures, rather than treating them as passive by-products of economic growth.

Future research could extend this framework by incorporating regional-level data, migration flows, and institutional variables, as well as by exploring the interaction between population structure, productivity, and environmental constraints. Nonetheless, the present analysis provides clear evidence that long-term economic convergence cannot be fully understood - or achieved - without addressing the dynamics of population distribution by area of residence.

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