

# In focus: Bulgaria's structural transformation

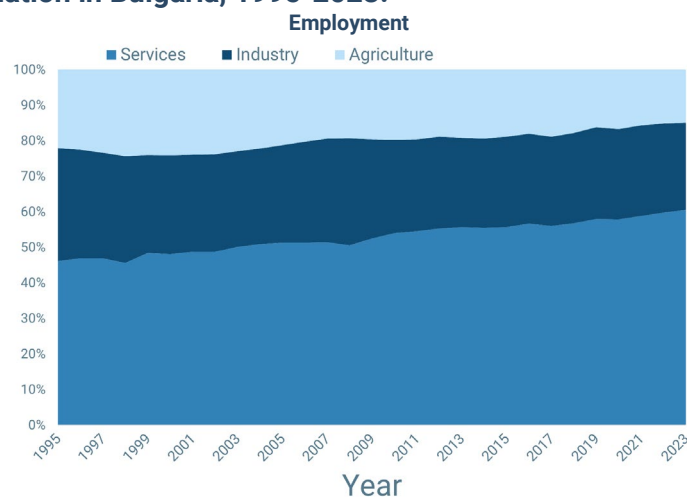
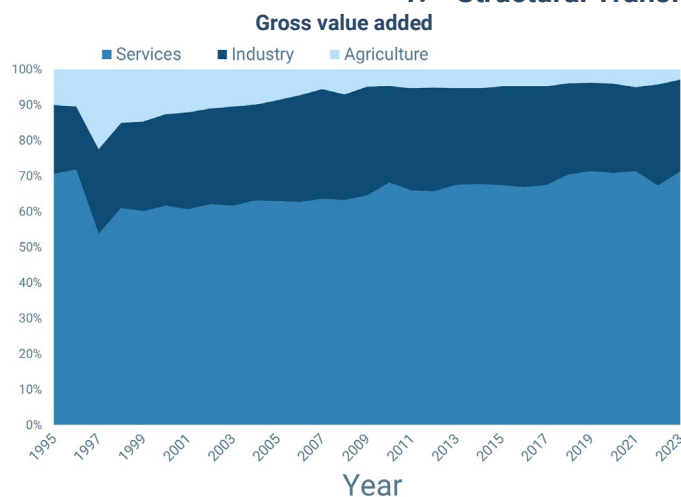
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The reallocation of resources across sectors over time from agriculture to industry and then to services – a process referred to as Structural Transformation – has long been considered a fundamental and robust stylized fact of economic development.<sup>1</sup> The vast majority of countries have followed this standard pattern of structural transformation: a large decline in the share of agriculture, a hump-shape pattern in the share of industry, and an increase in the share of services. The share of each sector is usually measured in

terms of employment or nominal value added. Recent literature has further provided a more nuanced view of this general pattern of development, by pointing out that some countries have prematurely deindustrialized – they exhibit a very low level of industry share and an increase in the share of services observed too early in the structural transformation process.<sup>2</sup>

Given its importance for economic development, we provide an overview of the structural

## 1. Structural Transformation in Bulgaria, 1995-2023.



Source: Eurostat

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<sup>1</sup> See Herrendorf, Rogerson, and Valentinyi (2014).

<sup>2</sup> See Rodrik (2016), Huneus and Rogerson (2024), and Nguyen (2025).

transformation process in Bulgaria over the last 30 years and also analyze how Bulgaria compares with new and old European Union members. We use data from Eurostat and compute the share of agriculture, industry, and services in terms of their nominal value added or employment.

Figure 1 reports the gross value added and employment share of each sector over the 1995-2023 time period. Over most of this period Bulgaria experienced significant and persistent economic growth.

Several important facts stand out. First, Bulgaria follows the standard pattern of structural transformation observed in other developed economies. Its agricultural share has declined substantially over time, while the service sector is now the dominant sector in the economy accounting for nearly 70% of value added and 60% of employment. Second, there is no evidence of premature deindustrialization. The share of manufacturing is large (around 30% in terms of both value added and employment) and exhibits either a hump shape (in terms of value added) or a small decline over time (in terms of employment). Third, the decline in the agricultural share (and the increase in the service sector share) is much more pronounced when measured in terms of value added rather than employment.

It is instructive to compare the structural transformation process in Bulgaria with the one in other European Union countries. The standard practice in cross-country comparisons of structural transformation trends is to compare the countries' sectoral shares given their level of economic development, measured as real GDP per capita. Thus in this analysis we use 2021 constant international dollars to compute a country's real GDP per capita in the 1995-2023 time period. Figure 2 reports the sectoral shares, in terms of value added or employment, at different stages of economic development for Bulgaria, new EU members (post-2004 accession), and old EU members (pre-2004 accession). The top two panels compare the shares of agriculture. It is clear

that as countries grow economically, the share of agriculture declines significantly. In the most developed European countries, the share of agriculture is negligible, both in terms of employment and in terms of value added. Bulgaria follows the same general pattern, very much comparable to the other new EU members. It is noticeable, however, that the decline in the employment share for Bulgaria is not as pronounced as the decline in the value added share.

The middle two panels compare the share of industry across EU countries. Bulgaria again fits within the general pattern of an industrial sector being in the range of 25-40% of the economy and exhibiting a hump-shaped pattern over economic development that is then declining with economic development.

Finally, the bottom two panels compare the share of the service sector across EU countries. The visible general pattern is that with economic development the share of the service sector increases substantially, eventually reaching 70-90% of the whole economy. Bulgaria's experience is very much consistent with this pattern, with a continuous increase in the service sector share which as of 2023 is around 70% (value added) and 60% (employment). It is noticeable, however, that

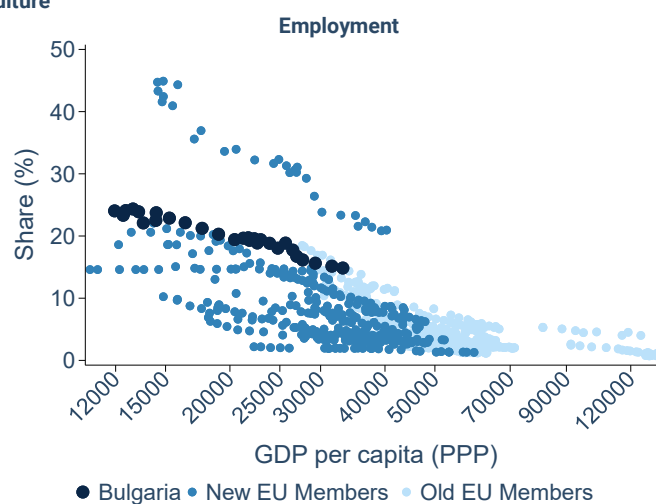
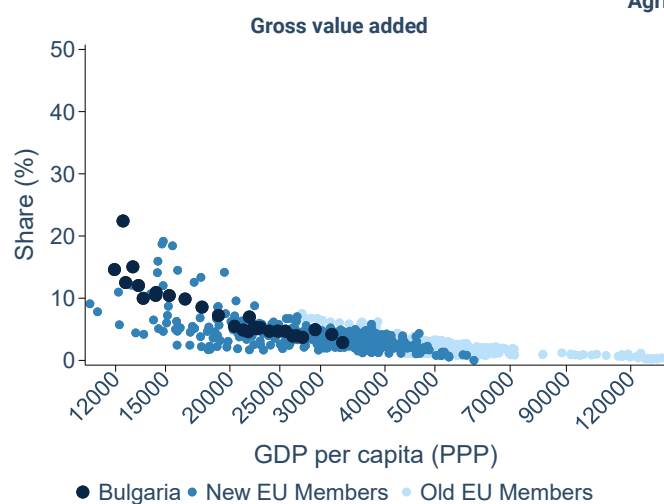
the increase in the employment share for Bulgaria is not as pronounced as the increase in the value-added share, indicating that some of the growth in the service sector has come from high-productive non-labor-intensive areas.

These patterns suggest the following broad policy implications:

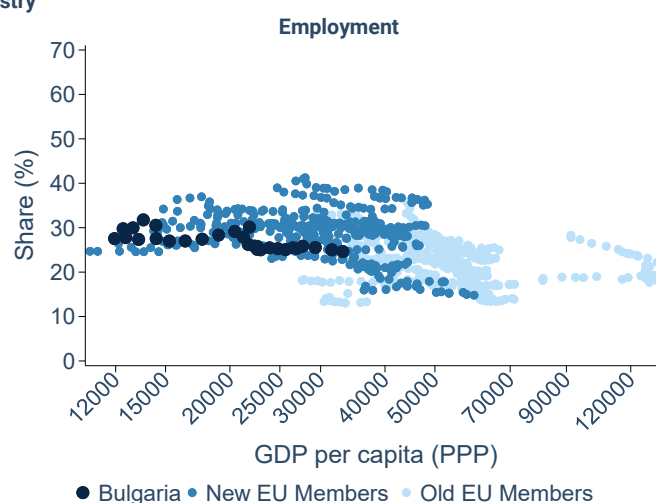
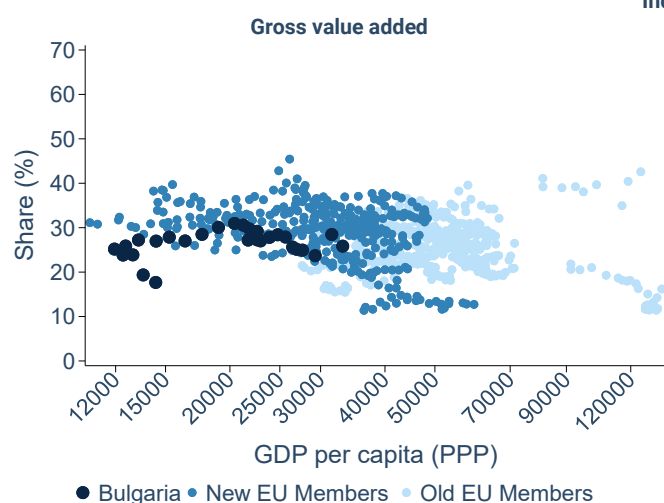
- The decline in the employment share in agriculture is not as pronounced as the decline in its value added share. A large part of Bulgarian agriculture is modernised and highly productive. However, it also appears that a potentially sizable share of Bulgarian agriculture continues to be low-

## 2. Structural Transformation for Bulgaria, New, and Old EU Members, in terms of GDP per capita (PPP).

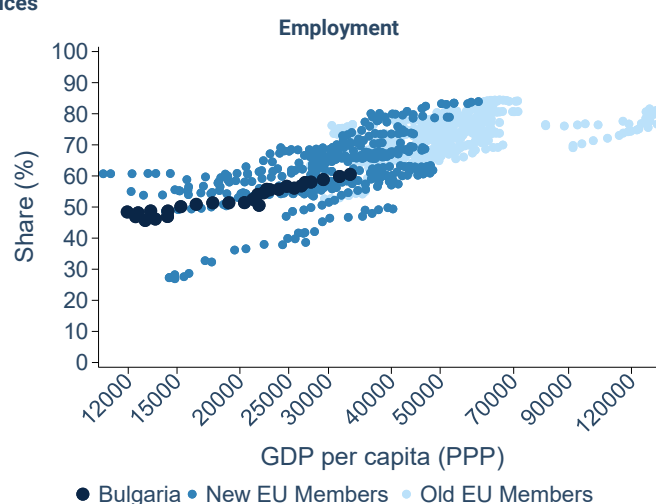
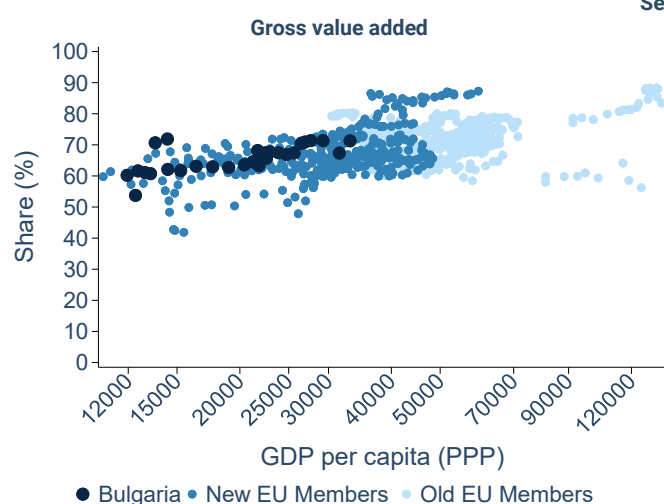
### Agriculture



### Industry



### Services



Source: Eurostat and World Bank.

- productive and labor intensive. Policies towards modernizing the whole agricultural sector and decreasing the share of subsistence farming would, therefore, further facilitate the structural transformation process and economic growth in Bulgaria.
- The share of industry in Bulgaria follows a pattern consistent with those seen in other countries. Economic policy, however, may be important to guarantee that Bulgaria has the right mix of manufacturing in terms of frontier technologies.
- The process of structural transformation clearly indicates that the service sector is

eventually the dominant sector in highly developed economies. There is, however, an important distinction between low-skill and high-skill services. To ensure that Bulgaria receives all the benefits that come with structural transformation, government policy needs to facilitate the constant productivity growth in the high-skill service sector.

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