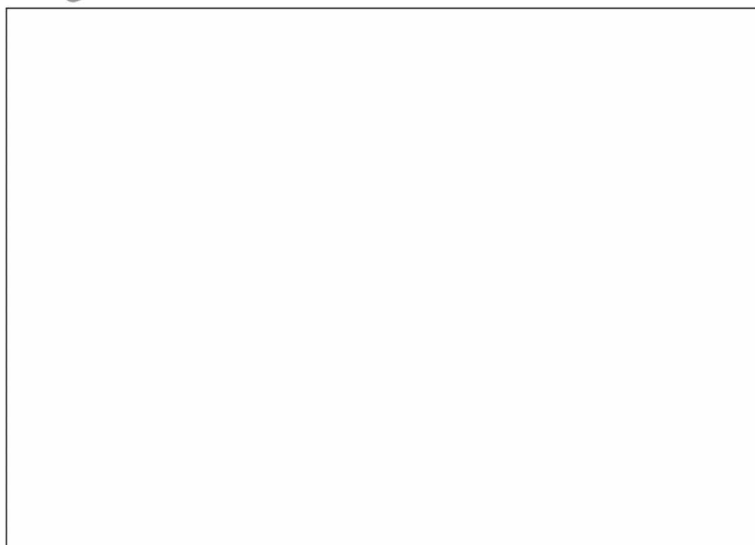


Automatic Funding and Demographic Vulnerability in Valencian Rural Areas (Spain)



Sergio Bellés-Monserrat, Jaume Pla-Bañuls

Universitat de València, Spain

DOI: 10.4422/ager.2026.14

ager

Revista de Estudios sobre Despoblación y Desarrollo Rural
Journal of Depopulation and Rural Development Studies

Automatic Funding and Demographic Vulnerability in Valencian Rural Areas (Spain)

Highlights:

1. The allocation of anti-depopulation funds aligns with demographic and structural vulnerabilities of the municipalities.
2. The non-competitive model, rooted in objective indicators, minimizes discretionary bias and enhances the efficiency of resource distribution.
3. The fund's transformative capacity should be interpreted with caution, given the small share of this aid in municipal budgets.

Abstract: This Rural Graphic examines how the Municipal Cooperation Fund to Fight Depopulation has been distributed across the Valencian Community between 2018 and 2025. Drawing on 137 municipalities that received continuous funding over the period, it explores whether changes in per capita funding are associated with demographic vulnerability indicators. The analysis combines simple correlations with bivariate maps, allowing for a joint statistical and spatial reading. The results point to weak and non-systematic relationships. This suggests that the mechanism operates mainly through eligibility thresholds rather than through a gradual differentiation of funding intensity once municipalities are included in the programme. While the allocation remains broadly consistent with vulnerability criteria and ensures access to resources for disadvantaged municipalities, the relatively limited weight of these funds constrains their potential impact.

Keywords: Rural demographic decline; municipal funding; demographic vulnerability; territorial coherence; Valencian Community.

Financiación automática y vulnerabilidad demográfica en los espacios rurales valencianos (España)

Ideas clave:

1. La asignación de los fondos contra el despoblamiento es coherente con la vulnerabilidad demográfica y estructural municipal.
2. El modelo no competitivo por indicadores reduce la discrecionalidad y optimiza la financiación.
3. La capacidad transformadora del fondo debe interpretarse con cautela, dado el reducido peso de estas ayudas en los presupuestos municipales.

Resumen: Este Gráfico Rural analiza cómo se ha distribuido el Fondo de Cooperación Municipal para la Lucha contra el Despoblamiento en la Comunitat Valenciana entre 2018 y 2025. A partir de 137 municipios que han recibido financiación de forma continuada, se examina si la evolución de la financiación per cápita guarda relación con los indicadores de vulnerabilidad demográfica. Para ello, se combinan análisis de correlación con cartografía bivariada, lo que permite una lectura conjunta desde el punto de vista estadístico y territorial. Los resultados muestran relaciones débiles y poco sistemáticas. Esto sugiere que el mecanismo funciona principalmente a través de umbrales de elegibilidad, sin traducirse en una diferenciación progresiva en la intensidad de la financiación una vez que los municipios forman parte del sistema. Aunque la asignación se ajusta en términos generales a los criterios de vulnerabilidad y facilita el acceso a recursos para los municipios más desfavorecidos, el reducido peso de estos fondos limita su capacidad de transformación.

Palabras clave: Declive demográfico rural; financiación municipal; vulnerabilidad demográfica; coherencia territorial; Comunidad Valenciana.

Received: March 24, 2026
Returned for first review: May 23, 2026
Returned for second review: June 22, 2026
Accepted: June 22, 2026

How to cite this paper: Bellés-Monserrat, S., Pla-Bañuls, J. (2026). Automatic Funding and Demographic Vulnerability in Valencian Rural Areas (Spain). *AGER: Revista de Estudios sobre Despoblación y Desarrollo Rural (Journal of Depopulation and Rural Development Studies)*, (43), 583-592. <https://doi.org/10.4422/ager.2026.14>

Sergio Bellés-Monserrat. <https://orcid.org/0000-0002-8305-6733>
E-mail: Sergio.belles@uv.es
Jaume Pla-Bañuls. <https://orcid.org/0000-0002-8506-9079>
E-mail: Jaume.pla@uv.es

1. Introduction

Rural demographic decline remains a persistent feature across Europe, particularly in countries such as Spain, where it is closely linked to structural territorial imbalances (Copus et al., 2020). In recent years, public action has relied increasingly on funding mechanisms as a way of addressing these dynamics, although their effectiveness and distributive logic continue to be debated (Pinilla and Sáez, 2021; Serra et al., 2023).

In the Valencian Community, the Municipal Cooperation Fund to Fight Depopulation represents a distinctive approach. Resources are allocated automatically, according to a set of demographic thresholds that define which municipalities are considered vulnerable. This design ensures that certain territories systematically gain access to funding. Less clear, however, is whether the mechanism also reflects differences in the intensity of vulnerability once municipalities are already included.

This Rural Graphic explores that question by examining whether variations in per capita funding growth between 2018 and 2025 are associated with the demographic indicators used in the allocation rules. The interpretation is closely linked to the spatial patterns shown in Figure 1, which provides the central reference for the analysis.

2. Data and methods

The analysis focuses on 137 Valencian municipalities that received uninterrupted funding from the Municipal Cooperation Fund to Fight Depopulation between 2018 and 2025.

Changes in per capita funding over this period are compared with six demographic indicators defined in Decree 182/2018: population density, population growth, natural growth, ageing index, dependency ratio, and migration rate.

The approach is exploratory. It combines pairwise correlations with bivariate maps in order to examine whether funding variation follows identifiable demographic patterns. The aim is not to establish causal relationships, but to assess the internal coherence of the allocation mechanism.

3. Results

Figure 1 brings together the spatial distribution of changes in per capita funding and the different dimensions of demographic vulnerability across Valencian rural municipalities. At first glance, the maps suggest the existence of localized contrasts, particularly in some inland areas.

A more systematic reading, however, points in a different direction. The statistical analysis does not support the existence of clear or consistent relationships between funding growth and most of the indicators considered. Population density, population change, natural growth, migration rates and ageing all show weak and non-significant correlations.

The only statistically significant relationship is found for the dependency ratio, although in this case the association is negative. Municipalities with higher levels of dependency do not show stronger increases in funding over time.

Taken together, these results indicate that once municipalities enter the beneficiary group, the evolution of funding is not clearly adjusted to different degrees of demographic vulnerability. The mechanism effectively determines which municipalities receive support, but it does not differentiate its intensity within the group.

In this context, the maps should be read as an exploratory visualisation of territorial contrasts rather than as evidence of systematic relationships or causal effects.

4. Discussion and conclusion

The Valencian case provides a useful perspective on the functioning of indicator-based allocation mechanisms within the broader debate on rural depopulation policies. Rural decline remains a widespread challenge across European and Spanish territories (Copus et al., 2020), and policy responses based on funding instruments have often been questioned in terms of effectiveness and territorial equity (Pinilla and Sáez, 2021; Serra et al., 2023).

In territorially uneven contexts such as the Valencian Community (Molinero and Alario, 2025), the results show that the fund effectively ensures access to resources for municipalities that meet demographic vulnerability thresholds. However, funding growth within the beneficiary group is not systematically differentiated according to most indicators. The only significant relationship, observed for the dependency ratio, points to a more selective than consistent alignment between funding variation and demographic conditions.

This does not undermine the rationale of the mechanism. Indicator-based allocation reduces discretionary bias and guarantees access to resources for structurally vulnerable municipalities¹. However, the findings suggest that such

¹ Automatic allocation guarantees that city councils with limited human resources can access proportional funding on equal terms with larger municipalities, thereby eliminating the "technical capacity gap" as a barrier to the management of public funds.

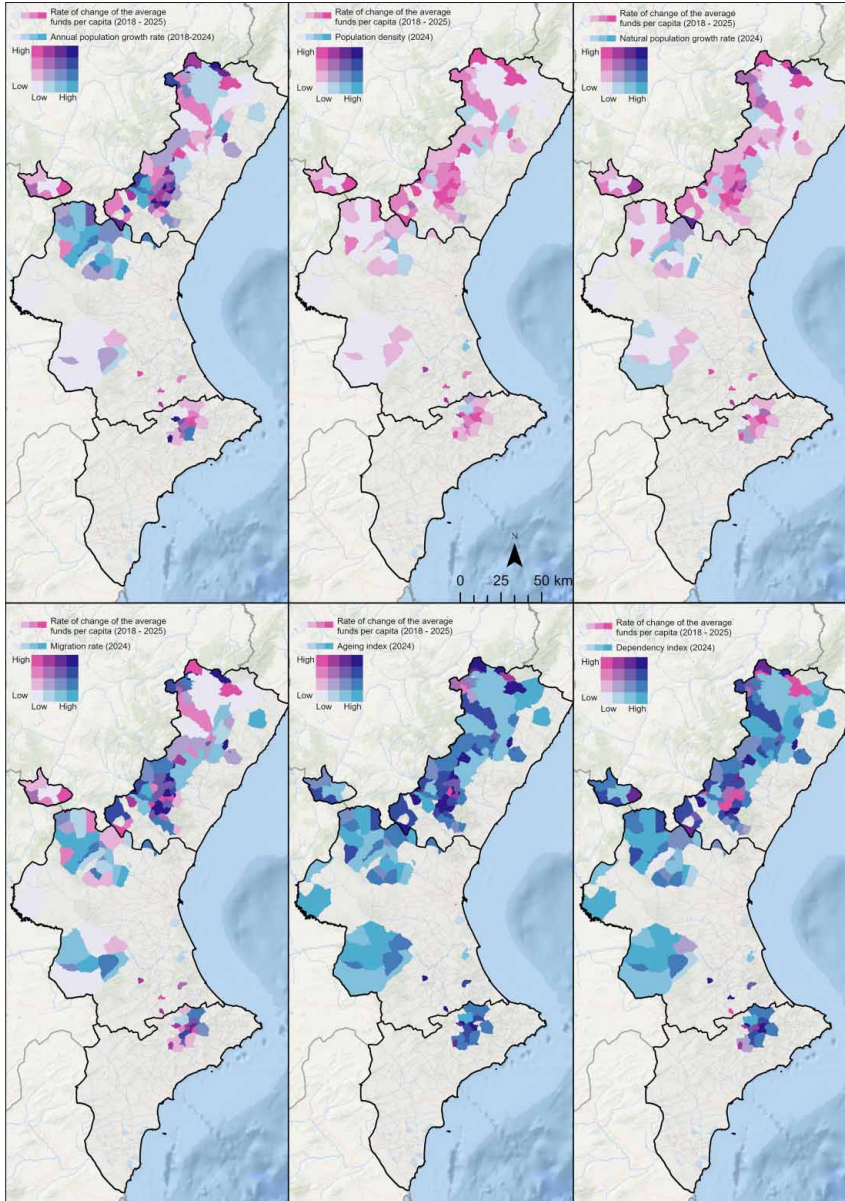
systems are more effective in defining eligibility than in calibrating funding intensity within beneficiary territories.

Given the relatively small weight of these funds within municipal budgets, their capacity to generate structural change remains limited. As highlighted in previous research (Pinilla and Sáez, 2021; Serra et al., 2023), their impact depends not only on allocation criteria but also on how resources are used at the local level.

More generally, the analysis highlights a key distinction between identifying vulnerable territories and responding to their heterogeneity. This remains a central issue in current debates on the design of policies aimed at addressing rural demographic decline.

Figure 1.

Bivariate maps of the relationship between the percentage change in per capita municipal funding (2018–2025) and the demographic indicators used by the Municipal Cooperation Fund to Fight Depopulation in the Valencian Community



Source: Own elaboration using ArcGIS Pro based on data from the AVANT Agenda and the Statistical Portal of the Generalitat Valenciana - PEGV (several years). Note: The fund represents a limited share of municipal budgets (around 4% on average).

5. References

- Copus, A., Kahila, P., Fritsch, M., Dax, T., Kovács, K., Tagai, G., Weber, R., Grunfelder, J., Löfving, L., Moodie, J., Ortega-Reig, M., Ferrandis, A., Piras, S., & Meredith, D. (2020). *ESCAPE European Shrinking Rural Areas: Challenges, Actions and Perspectives for Territorial Governance*. Final Report. ESPON. Retrieved from: <https://archive.espon.eu/sites/default/files/attachments/ESPON%20ESCAPE%20Main%20Final%20Report.pdf>
- Molinero, F., & Alario, M. (2025). ¿Reto demográfico o reto rural? Despoblación y tendencias socioterritoriales del mundo rural en España. *Ciudad y Territorio. Estudios Territoriales*, 57(226), 542-565. <https://doi.org/10.37230/cytet.2025.226.1>
- Pinilla, V., & Sáez, L. A. (2021). What do public policies teach us about rural depopulation? The case study of Spain. *European Countryside*, 13(2), 330-351. <https://doi.org/10.2478/euco-2021-0021>
- Serra, P., Pallares-Barbera, M., & Salvati, L. (2023). Can a long-term economic subsidy counteract rural depopulation? An empirical analysis from two spanish regions. *Quality & Quantity*, (57), 3065-3084. <https://doi.org/10.1007/s11135-022-01505-7>

Authors' contribution

	Sergio Bellés Monserrat	Jaume Pla-Bañuls
Conceptualization	100 %	0 %
Data curation	50 %	50 %
Formal analysis	70 %	30 %
Funding acquisition	0 %	0 %
Investigation	50 %	50 %
Methodology	70 %	30 %
Project administration	100 %	0 %
Resources	60 %	40 %
Software	30 %	70 %
Supervision	70 %	30 %
Validation	50 %	50 %
Visualization	50 %	50 %
Writing – original draft	60 %	40 %
Writing – review & editing	50 %	50 %

For more information, CRediT: <https://casrai.org/credit/>