

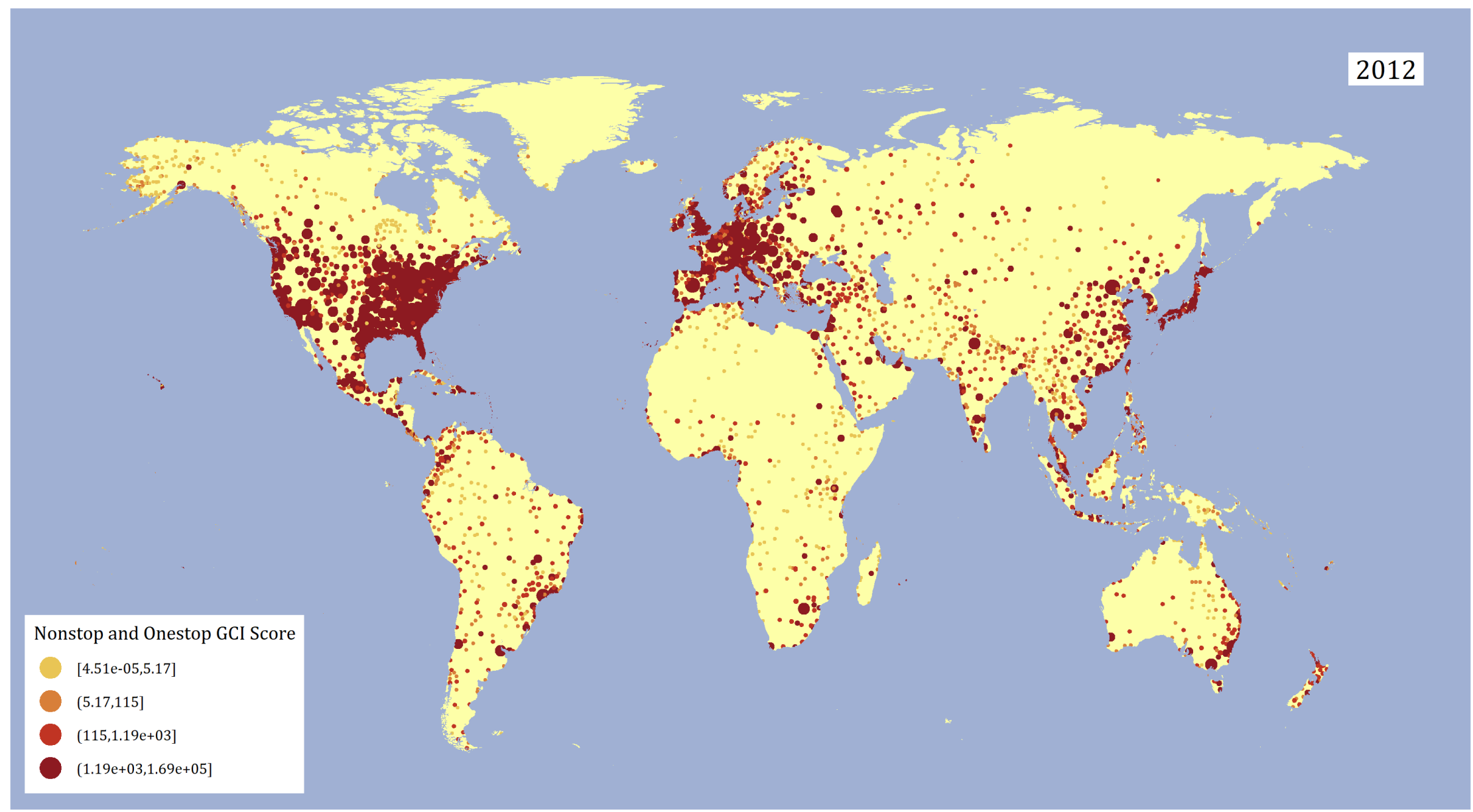
Impact of Air Connectivity on Service Employment in Europe

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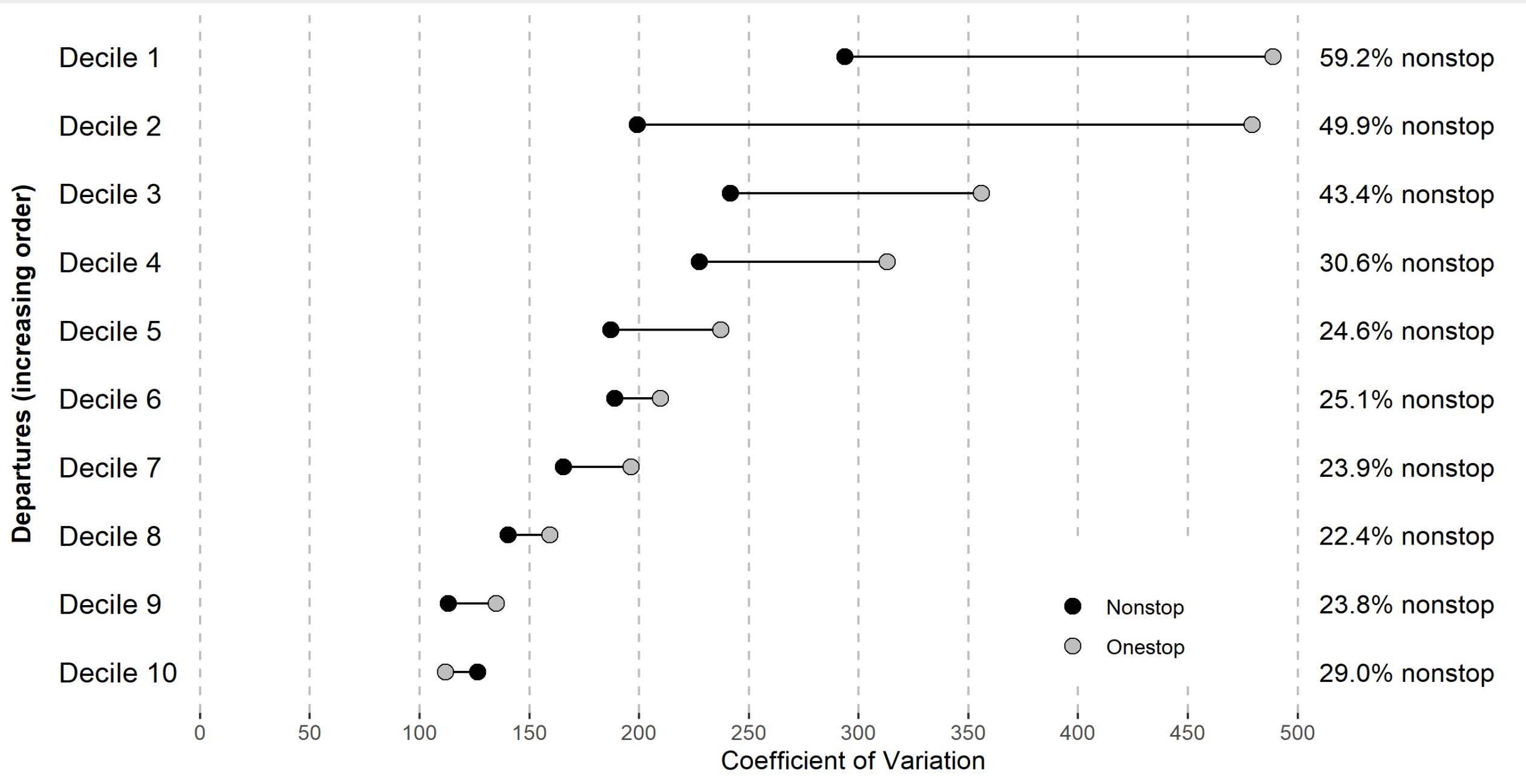
Aviation offers air transport mainly through nonstop and onestop connections

- Passengers can reach destinations through direct flights or by taking a second flight at a hub airport.
- Feasible onestop connections require sufficient layover time, airline agreements and small physical detour between origin and final destination.
- Travel options generate market access, for example face-to-face interaction with remote clients or colleagues.
- Airport connectivity is unevenly distributed across space.



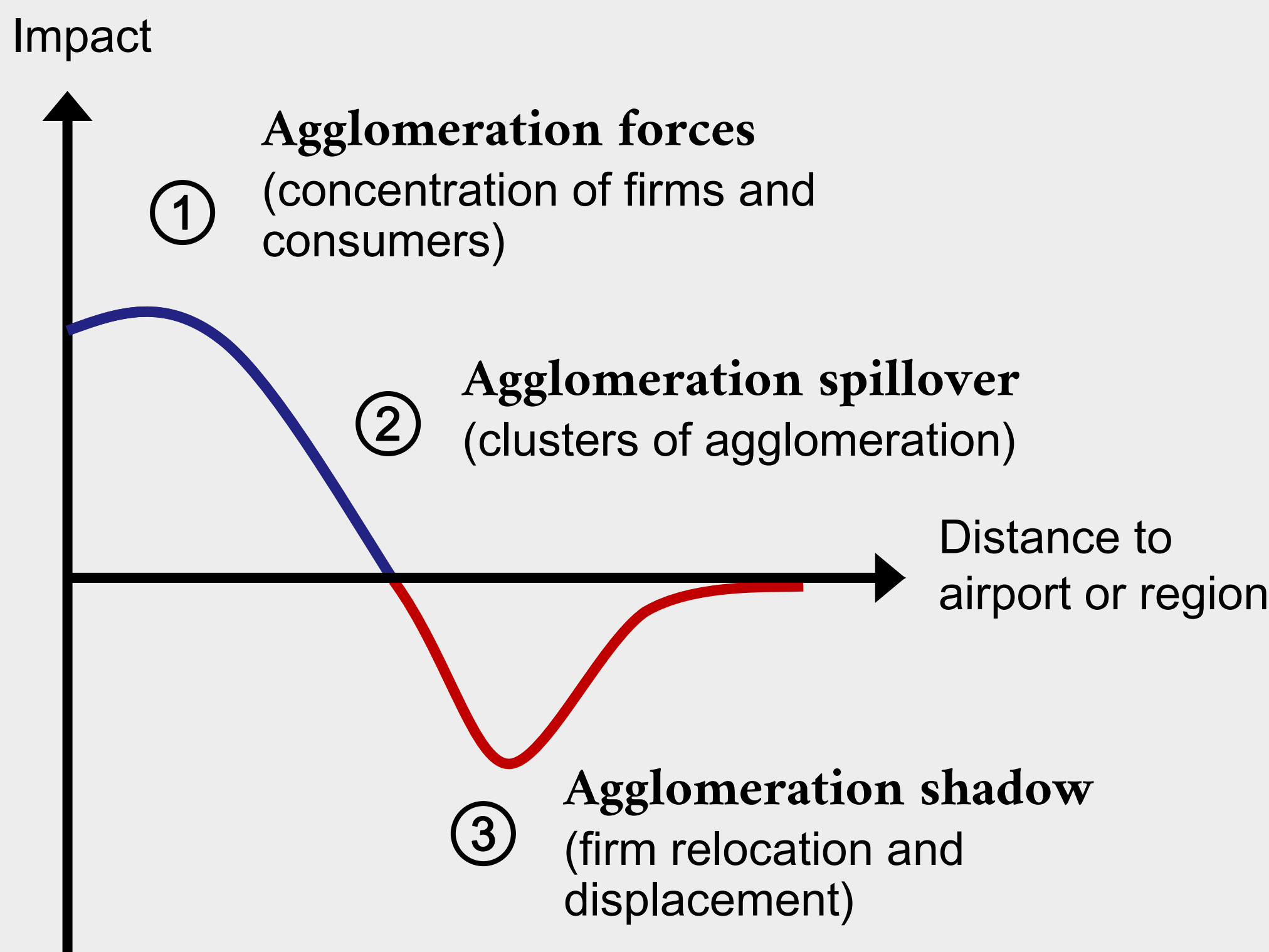
Small airports have substantial potential for improving connectivity

- Airports with limited flights have large variation in connectivity and rely more on nonstop connections.
- Small airports have great potential to improve connectivity through onestop connections, by flying to hub airports instead of leisure destinations.
- Airport managers can use connectivity to justify spending and rank their airport according to the market access generated.

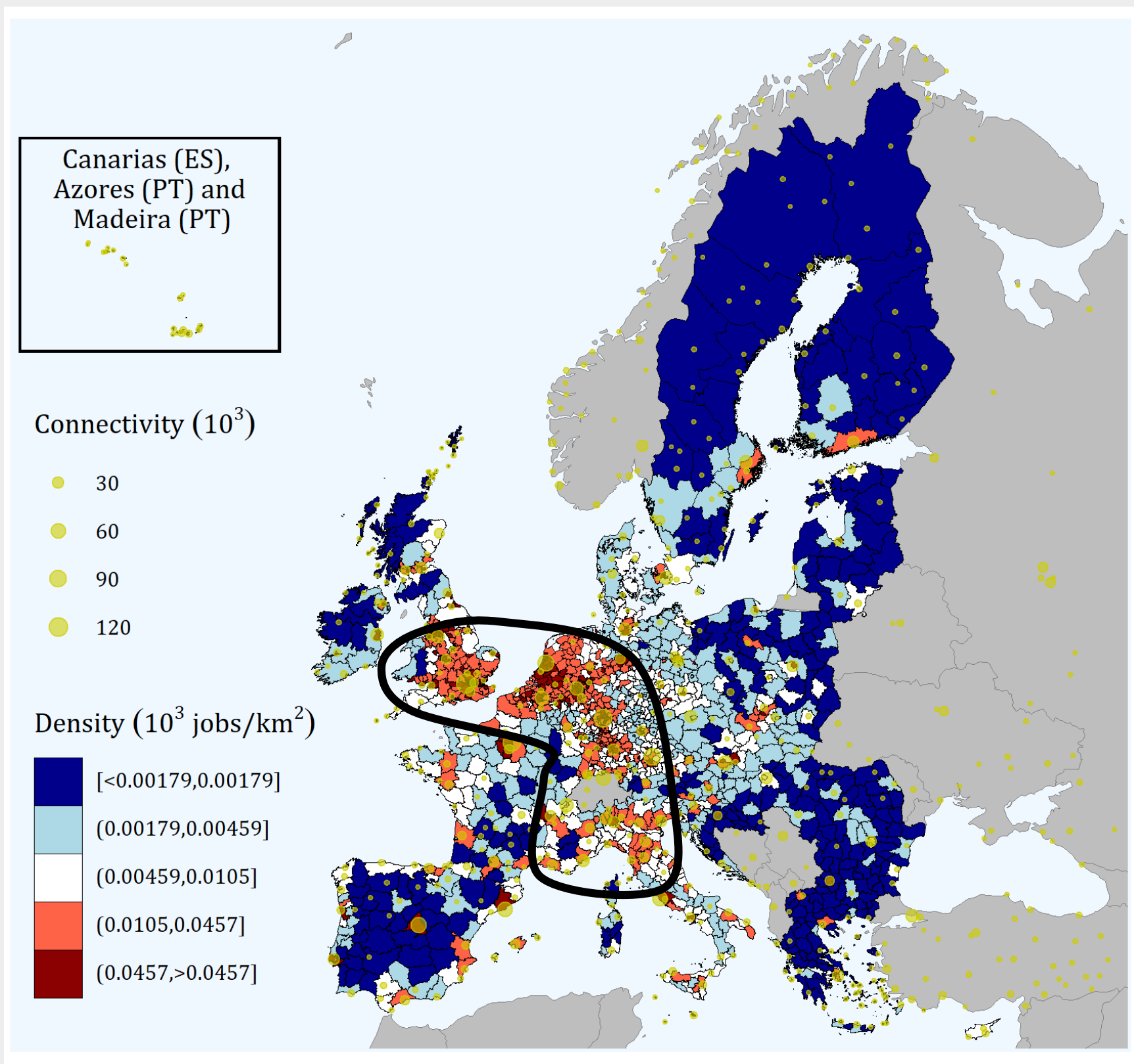


Improved market access leads to spatial-economic restructuring

- Firms and people will relocate to well-connected regions to profit from market access (1).
- The resulting agglomeration also experiences negative effects such as pollution and high land rents.
- Final outcome is a cluster of agglomerations with different densities (2).
- When firms and people move away, the origin region suffers (3).
- We expect positive effects closer to centres of market access and negative effects further away.
- Sufficiently far-away, all effects become zero.



Service employment density and connectivity in Europe: corridor of urbanization



Empirical assessment

1 Spatial Model

We quantify the effect of (A) air connectivity in neighbouring airports and (B) service employment in neighbouring regions on service employment. We break up nearby (first-order) and distant (second-order) neighbours using distance between regions and airports, and between regions. Different nearby-distant cutoffs are compared.

2 Reversed effect

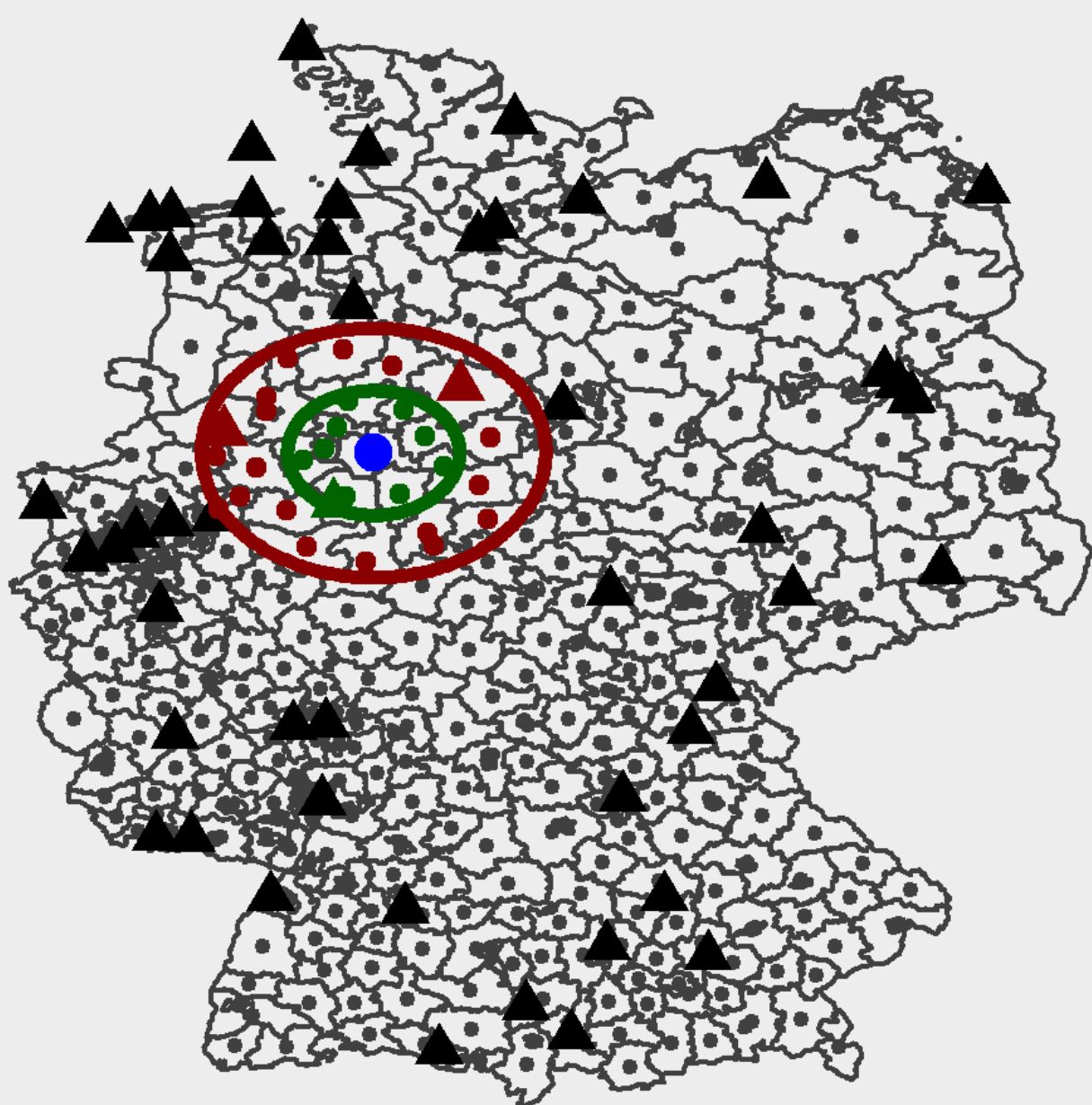
We control for employment affecting connectivity via instrumental variables.

3 Data

We use economic data at the NUTS 3 regional level from Eurostat and the Global Connectivity Index (GCI) at the airport level for the years 2001-2012.

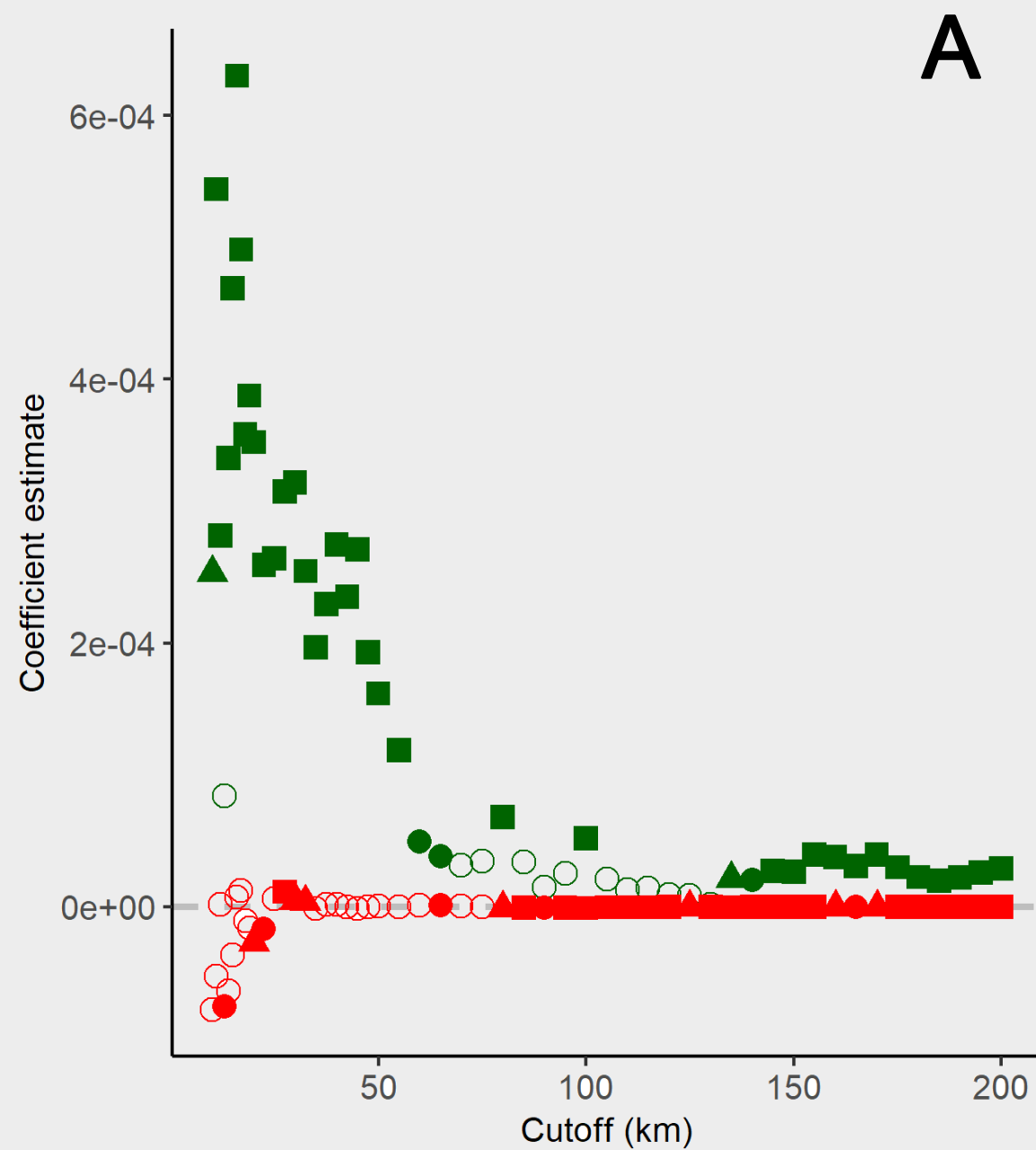
4 Results

We find positive effects nearby and negative distant effects. The net effect is positive.



- Centre NUTS 3 region
- ▲ Airport
- First-order neighbours
- Second-order neighbours

Neighbouring air connectivity



Neighbouring employment

