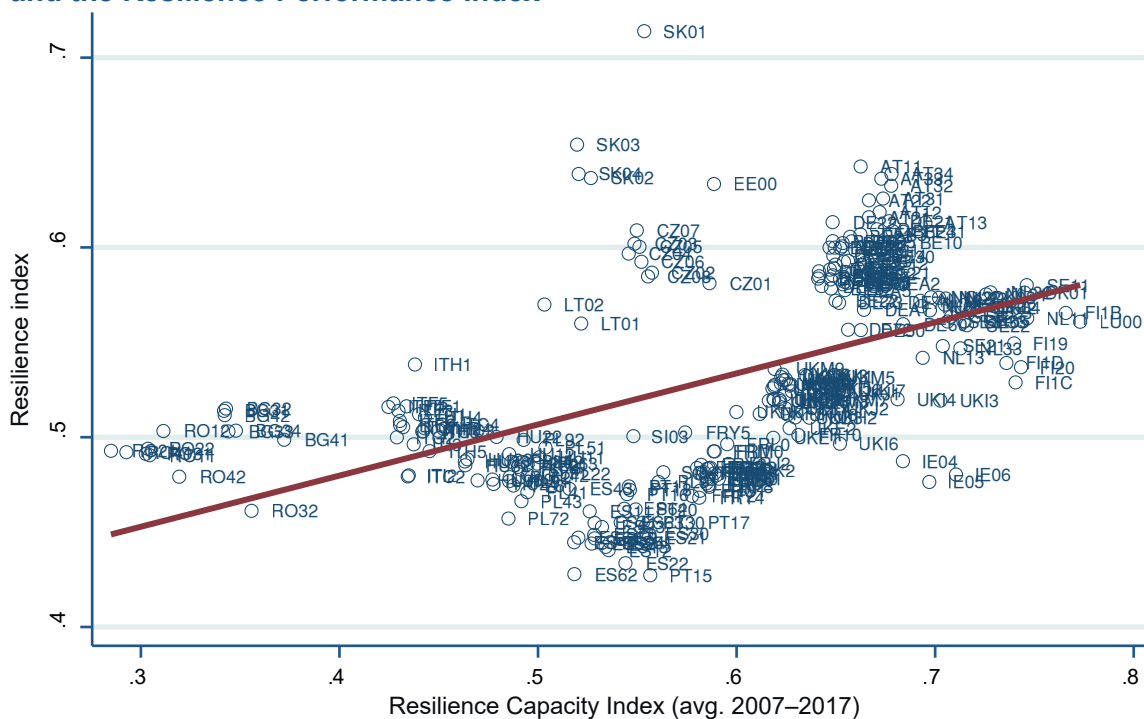


# Capacity – performance relationship

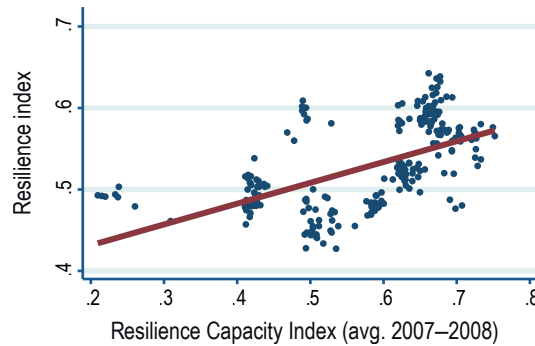
This section delivers results on the relationship between resilience capacity of the EU regions (measured by the Resilience Capacity Index) and the actual performance of the systems (measured by the Resilience Performance Index). Results clearly reveal a positive correlation, confirming that the higher the resilience capacity of regions (according to the Resilience Capacity Index), the better the performance of the regions during the shocks. This result complies with our expectations and confirms the validity of the Resilience Capacity Index since the determinants included in the index were selected according to their statistical significance in explaining the systems' performance over the analysed shock (assessed by the Resilience Performance Index).

Whether we analyze the pre-shock period (2007–2008), the post-shock period (2010–2017), or the entire period (2007–2017), the index that measures resilience capacity seems to be associated with a better performance of systems captured by the Resilience Performance Index during the Great Recession. This result is also validated when the Resilience Performance Index is correlated with the resilience capacity separately – before and after the shock.

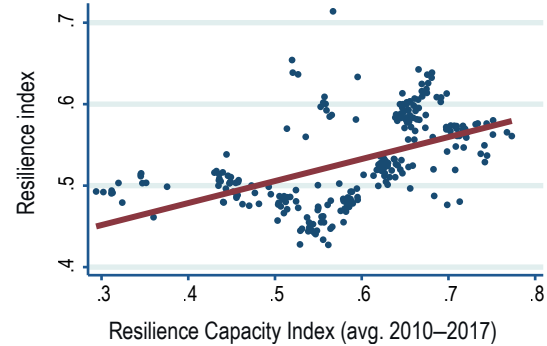
**The relation between the Resilience Capacity Index (average values 2007–2017) and the Resilience Performance Index**



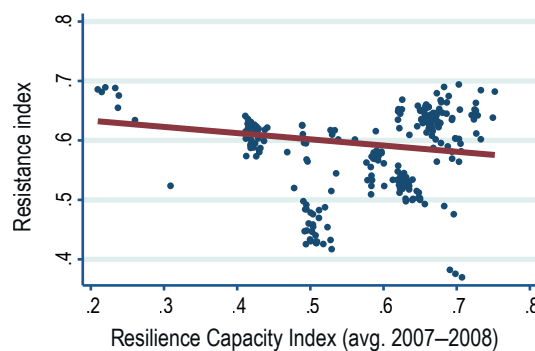
The relation between the Resilience Capacity Index before the shock (average values 2007–2008) and the Resilience Performance Index



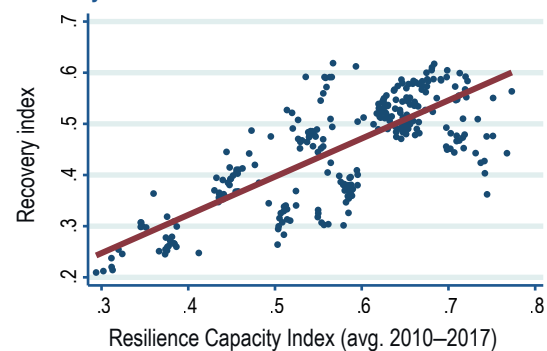
The relation between the Resilience Capacity Index after the shock (average values 2010–2017) and the Resilience Performance Index



The relation between the Resilience Capacity Index before the shock (average values 2007–2008) and the Resistance Performance Index



The relation between the Resilience Capacity Index after the shock (average values 2010–2017) and the Recovery Performance Index



Interestingly, when the Resilience Performance Index is divided into its two distinct components, namely resistance and recovery, the positive association does not seem to hold for all the regions during the pre-shock period. Particularly, it seems that not all the regions characterized by a higher resilience capacity before the shock managed to better resist when the crisis actually emerged. For instance, despite a high resilience capacity, as measured by our index, Ireland showed poor resistance to the crisis. On the other end, Romania overperformed, despite the low resilience capacity. One explanation for this finding might be that the selection of drivers was mainly based on their significance in explaining the overall performance, which is actually the main aim of the Resilience Capacity Index.

Unlike the Resistance Performance Index, faster recoveries also seem to be associated with higher values of the Resilience Capacity Index. The revealed positive correlation clearly hints that the better the resilience capacity, the higher the chances for the regions to react more effectively in front of an unforeseen shock.

However, even if the Resilience Capacity Index can provide some suggestive clues concerning the vulnerability of certain systems to eventual shocks, we need to keep in mind its limitations. More particularly, our analysis is based on the dynamics of systems in the wake of a financial-economic shock, such as the one from the late 2000s. Its specific characteristics and the way of designing the resilience index (which assess the dynamics of all regions by looking at the EU average) might drastically limit the power of our instrument to reflect the vulnerability of regions to some other future shocks (especially those of a different nature, such as health shocks).