# PART I

RESILIENCE PERFORMANCE

R esilience performance, also named "end-state resilience" or "outcome resilience", refers to the actual performance of a system in responding to a disturbance (Foster, 2006). This section offers a comprehensive picture on the resilence performance of European territories (countries and regions) following the 2008–09 economic crisis (as well as other shocks presented in each thematic section), by including ten different thematic dimensions, corresponding to five areas (see figure on the right). This multidimensional approach is novel, as most of the literature on resilience (especially to economic crises) focuses on the performance of the economic system, while the other systems are considered rather stable drivers of the economic performance.

For each of the ten dimensions, a common assessment framework was employed, which is based on the two resilience phases widely used in the literature: resistance and recovery. **Resistance** refers to the impact of a shock, in terms of duration and intensity. In our case, it covers the period between the maximum value before the shock (peak) and the minimum value reached in the period corresponding to the shock (trough). It should be noted that the minimum value can be reached even after short periods of return. **Recovery** refers to the bounce back behavior displayed by the region or country in the aftermath of the shock. In our case, it corresponds to the period between the minimum value reached during the trough and the year in which the value of the indicator indicates a full recovery (the pre-schock value is reached or exceeded). If the indicator shows a full recovery and exceeds the value corresponding to the pre-shock period, the limit of the interval becomes the first year in which this happens. If the indicator is still below its pre-shock value, the latest available data has been used.

Main concepts underpinning resilience performance
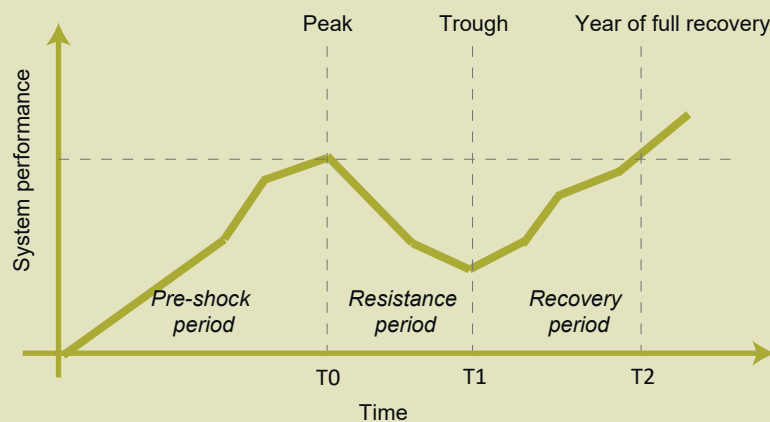
Conceptual framework grounding the multidimensional resilience performance assessement
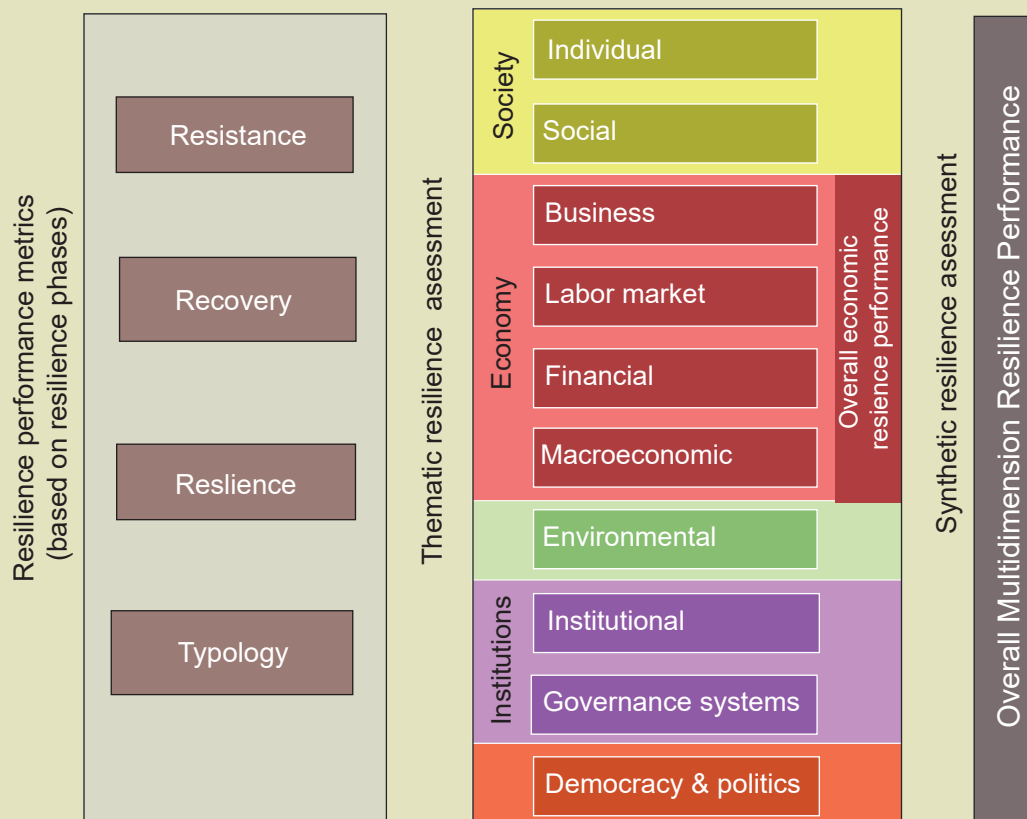
Apart from the resistance and recovery assessment, this section maps a resilience index (based on the statistical integration of the previous two indexes – resistance and recovery), as well as a typology of regions according to their behavior during each of the two phases (resistance and recovery), for each of the ten dimensions. This typology is based on the proposal of Martin et al. (2016) and includes four categories of regions and countries: (1) Resistant and Recovered; (2) Resistant and Non-recovered; (3) Non-resistant and Recovered; (4) Non-resistant and Non-recovered.

The results presented in this section provide a starting point for further scientific research as well as for policy making, in the sense that they allow multiple readings, which can be adjusted to different purposes. One could use the following maps from three different perspectives: (1) a single-region/country perspective, which allows a detailed diagnostic of the respective region's/country's position in the EU context; (2) a cluster perspective, by means of which the groups of regions and countries having similar performance can be identified; (3) a spatial pattern perspective, where general patterns (e.g. South – North, East – West, and other core-periphery territorial divides) can be identified.