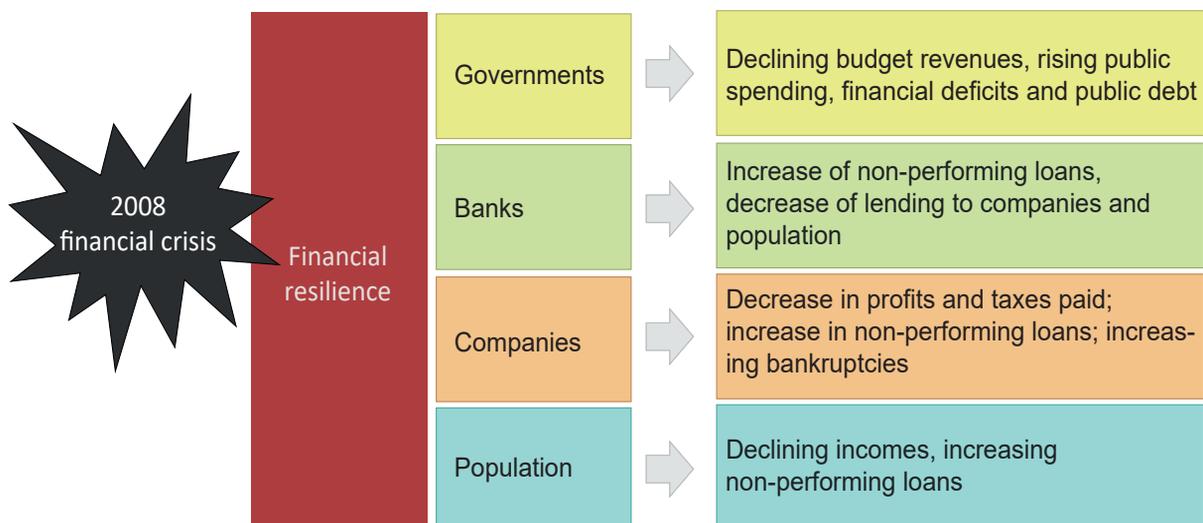


# Financial resilience

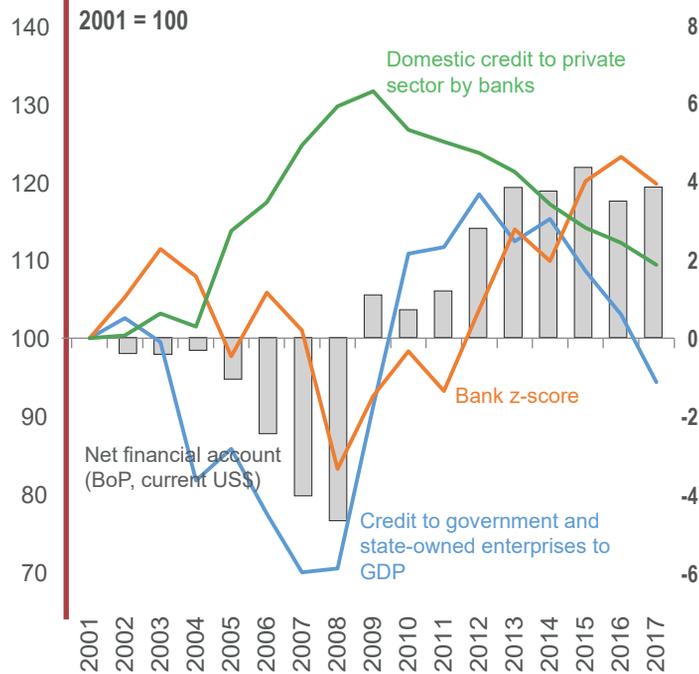
**F**inancial imbalances are often an aspect of economic resilience whose role is underestimated. The accumulation of long-term financial imbalances strongly impacts the resilience and subsequent recovery capacity for governments, banks, companies or the population. Supporting a macro-financial stability framework that takes into account monetary, fiscal and prudential policies has become mandatory for EU countries after the 2008 financial crisis.

For this analysis, we considered the following indicators which are significant outcomes to assess the resilience of the financial system: 1. Bank z-score (probability of bankruptcy of a country's banking system; it measures the stability of the financial institutions); 2. Credit to government and state-owned enterprises (% of the GDP, represents the ratio between credit by domestic money banks to the government and state-owned enterprise, and GDP; it measures the efficiency of the financial institutions – in a recession, the states manifest an increase need of liquidities, supplied by the financial market); 3. Domestic credit to private sector by banks (% of the GDP, represents the financial resources provided to the private sector by other depository corporations – deposit taking corporations except central banks; it measures the financial depth, the size of the financial institutions and markets); 4. Net financial account (% of the GDP; it represents the net acquisition and disposal of financial assets and liabilities, being conceptually equal to the sum of the balances on the current and capital accounts; it shows the efficiency of the state in collecting revenues and making expenditures or indicates the inefficiency of the respective government).

## Conceptualization of financial resilience



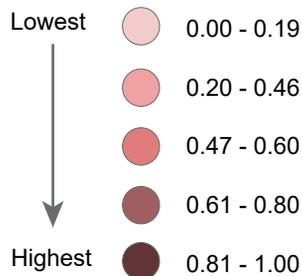
## Dimensions composing financial resilience



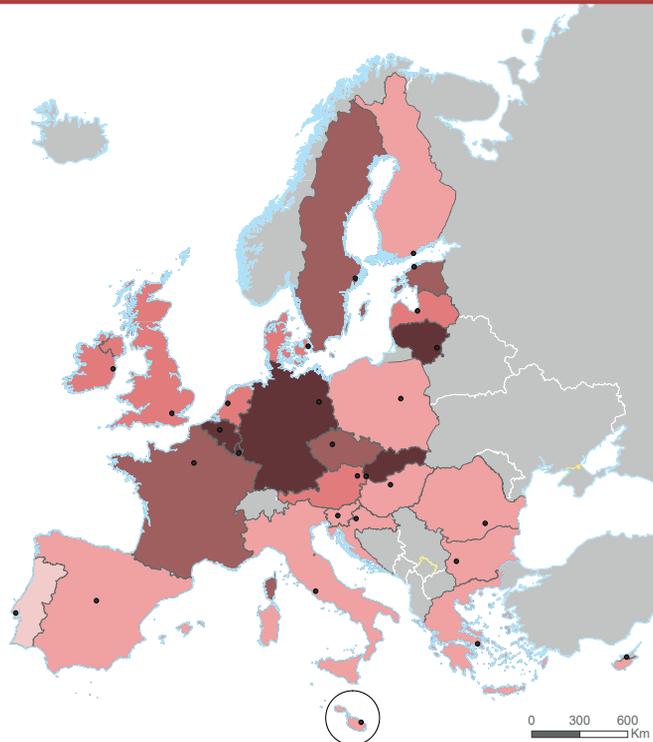
Note: 1) Net financial account (BoP, current US\$) shown in columns with values on the right axis. 2) The other three indicators shown in continuous lines, with values on the left axis (2000 = 100).

The 2008 financial crisis marked a turning point in the financial world. As expected, stability of financial institutions (bank z-score) has seen a severe drop in 2008, followed by a recovery period that took almost four years, until 2013. Afterwards, one may notice a good health of the banking systems, considerably better compared to the pre-crisis level. At the same time, credit to government and state-owned enterprises increased dramatically after the burst of the 2008 financial crisis (a sign of the financing problems encountered by the state and its companies).

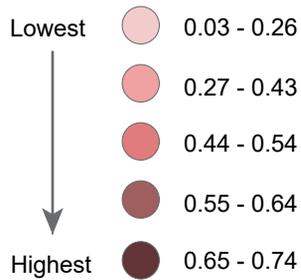
## Resilience Index



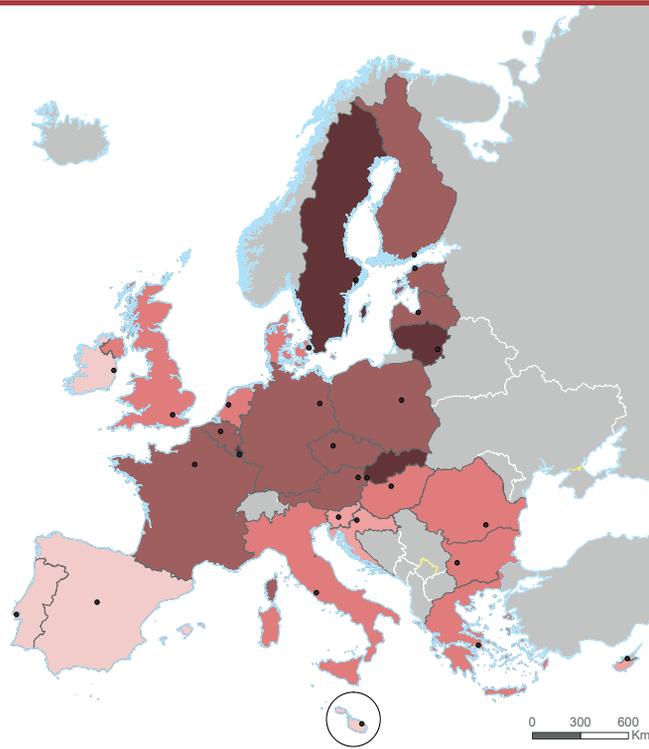
The resistance index, expressing the ability of the financial system to cope with the shock of the 2008 financial crisis, registered high values for the Central and Northern countries, which had a better response when facing the crisis. In contrast, the Southern countries report the lowest values, their financial systems being among the first to collapse during the crisis.



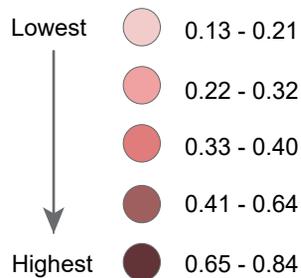
## Resistance Index



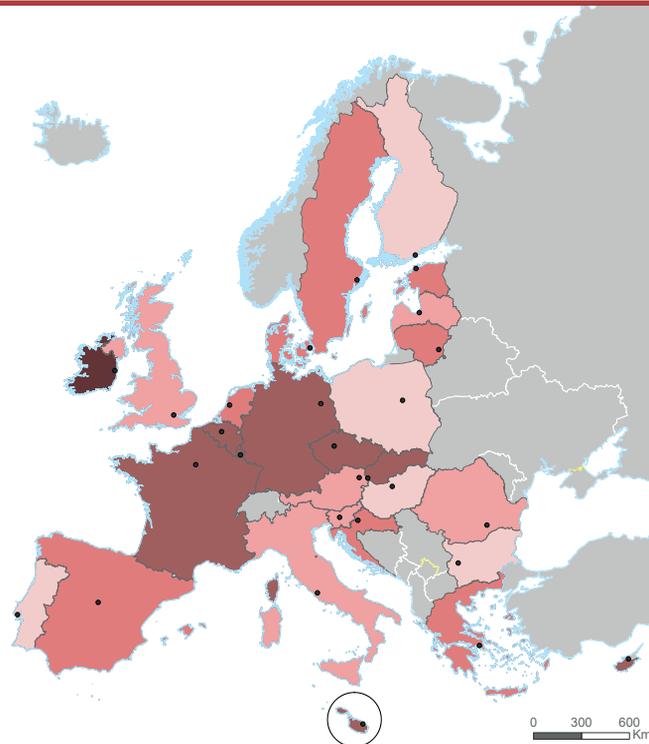
The resistance index, expressing the ability of the financial system to cope with the shock of the 2008 crisis, registered high values for the Central and Northern Europe (Germany, Austria, the Czech Republic, Slovakia, Poland, the Baltic countries) but also in France and Belgium, which had a better response when facing the crisis. In contrast, for the Southern and some Western countries (Portugal, Spain, Italy, Greece, Cyprus, Ireland), the index has lower values, their financial systems being among the first collapsing during the crisis.



## Recovery Index



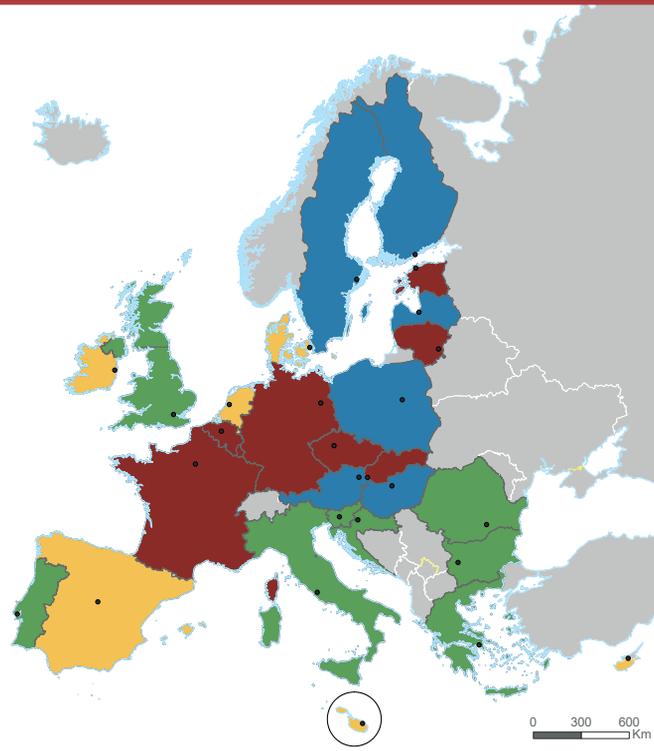
The recovery index, indicating the financial system's ability to recover after the shock, has high values relative to the countries that quickly rebounded after the financial crisis (Germany, France, Ireland, Czech Republic, Slovakia). The lowest values were recorded in the Eastern and Southern border countries, such as Poland, Hungary, Bulgaria, Portugal.



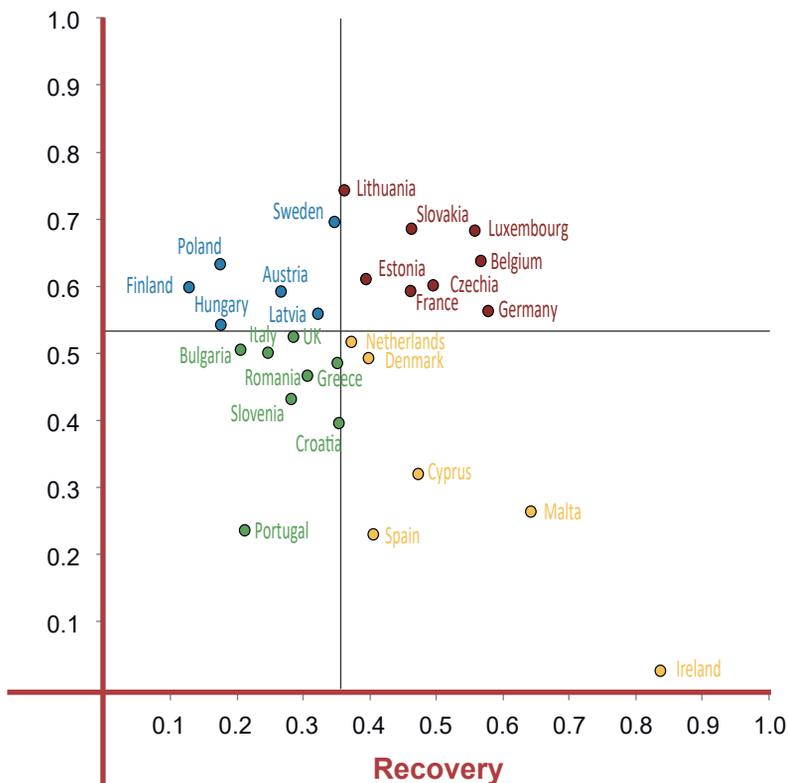
## Typology of resilience

Based on the previously calculated indices, European countries can be grouped into four categories. The first category is represented by the best performers (France, Germany, Czech Republic, Slovakia, Belgium, Lithuania and Estonia), with financial systems operating better both during and after the shock.

The second category consists of the states that faced a relatively good resistance during the crisis, followed by a slower recovery (Poland, Finland, Austria, Hungary, Sweden).



### Resistance



The third category includes states with a low resistance to the shock, but a rapid recovery due to adequate measures taken in assisting the financial system (Spain, Croatia, Cyprus, Greece, Denmark, the Netherlands).

The last category includes countries that both reacted and recovered improperly (Portugal, Italy, Bulgaria, Romania, Slovenia, Ireland), with governments delaying or failing to take appropriate measures to support the financial system.