Camera di Commercio
Reggio Emilia
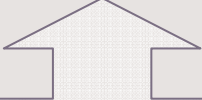
From economic data
to economic information

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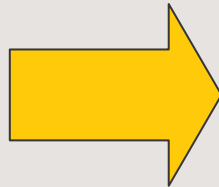
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The Province of Reggio Emilia

Available indicators for Lisbon strategy	2006
Employment rate	70,6%
Female employment rate *	60,0%
Employment rate 55-64 yo*	33,4%
Unemployment rate	2,6%
Long term unemployment*	1,1%
Long term unemployment as part of total unemployment*	28,8%
High school graduates (% of the corresponding age class)*	73,5%
University graduates in science-and-technology-related subjects*	16,5%
Adults taking part in life-long learning*	5,7%
High-school attending rate	86,4%
Poverty index*	2,5%
R&D expenditure (private + public) as a GDP %*	1,2%
Service for Infancy (% less than 3 yo)	30,5%
Service for infancy (% from 3 to 5 yo)	92,7%

* where provincial level data are not available, regional data are used instead

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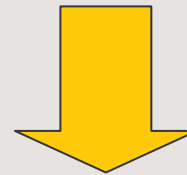ReggioEmilia

The path we followed:
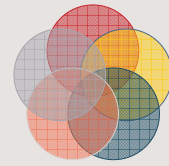
We have large supply of <u>data</u>

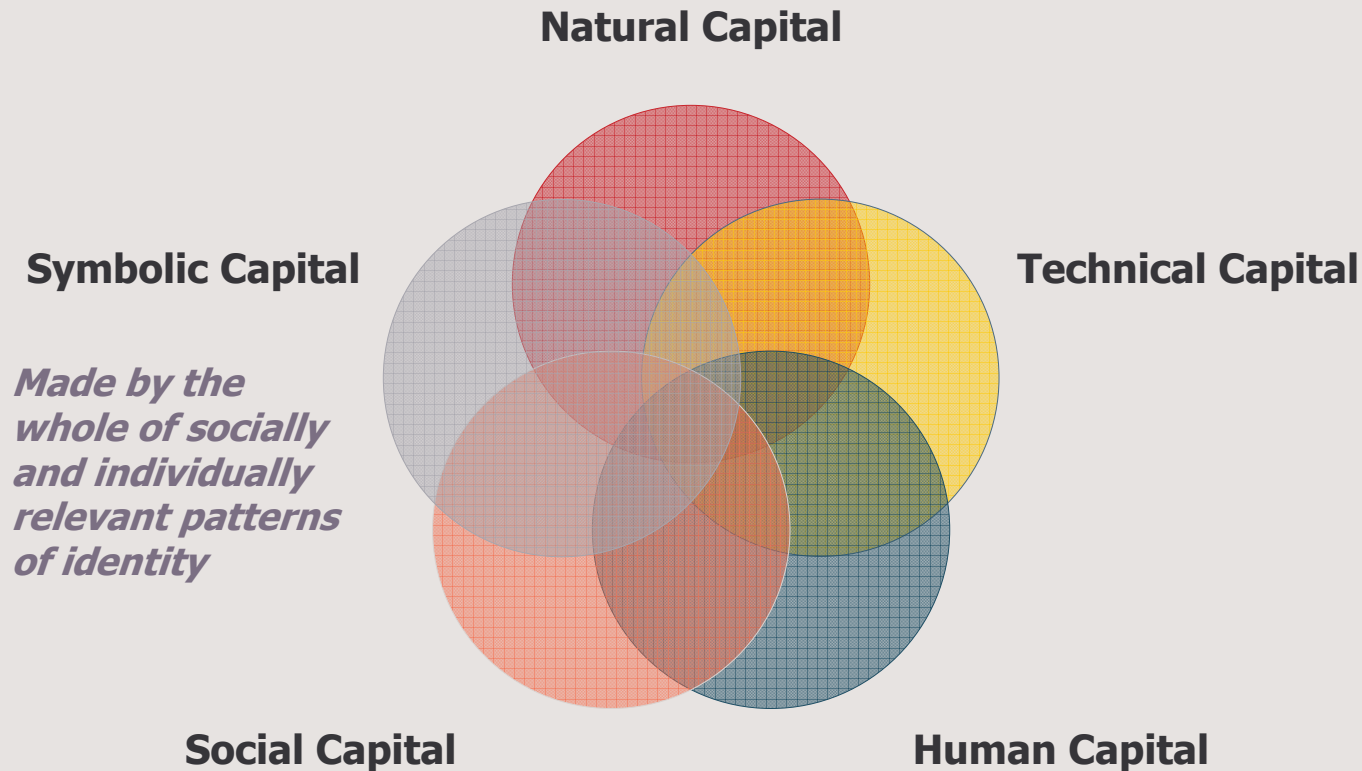**We have little comprehensive <u>information</u>**

This is a common challenge for economists and for those policy makers who want their regions to reach the real aim of the Lisbon Strategy

Thus, we tried to organize the available data in a _<u>non-standard</u>_ tool that could provide useful new reading schemes about the economic (and social) development

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Natural Capital

Symbolic Capital

Made by the whole of socially and individually relevant patterns of identity

Technical Capital

Social Capital

Human Capital

The economic development of an area is a consequence of the interaction of these different kinds of capital: their different level and different combinations can explain the variety of economic performance between areas (we analyzed the Italian Provinces).
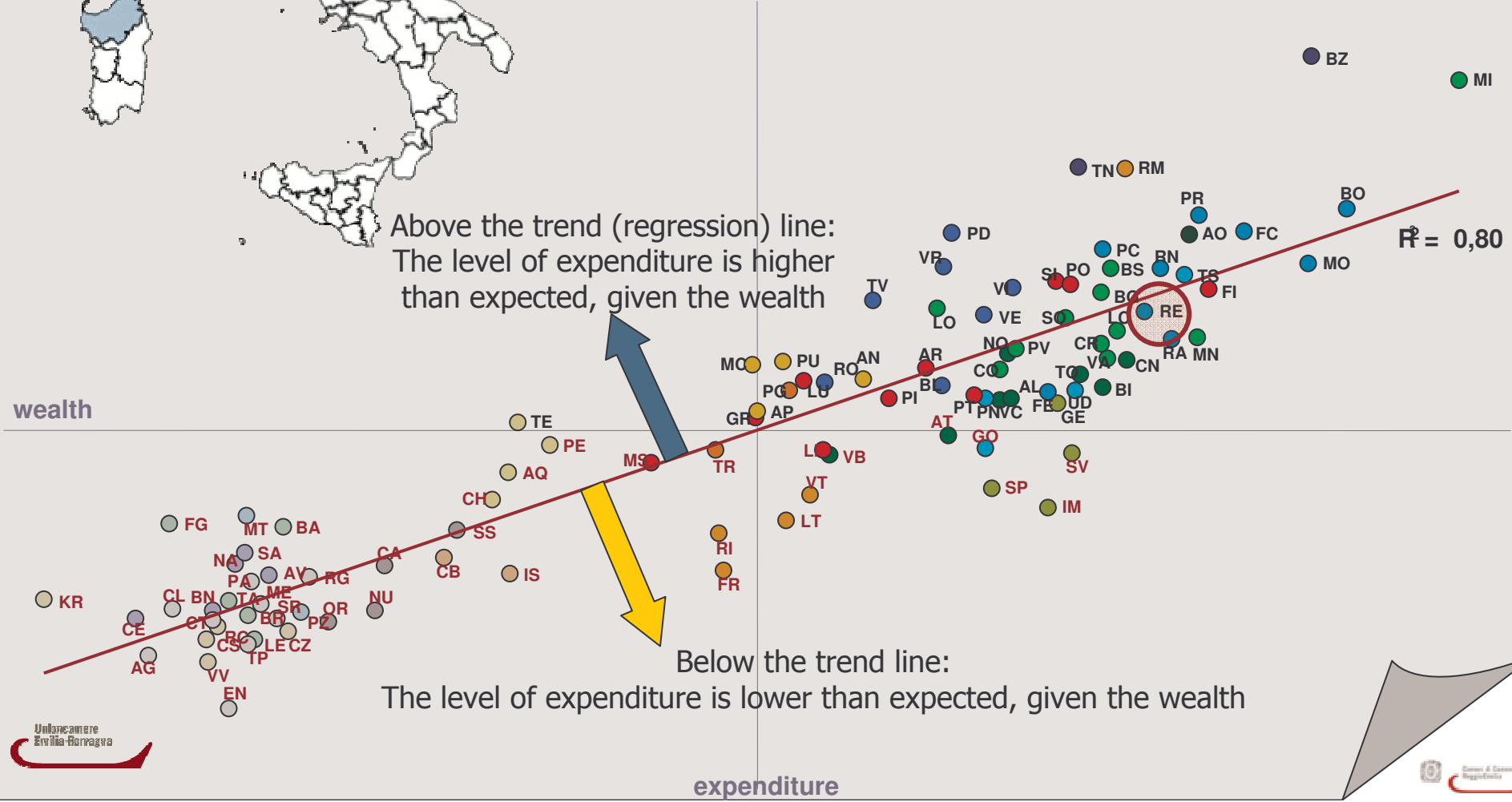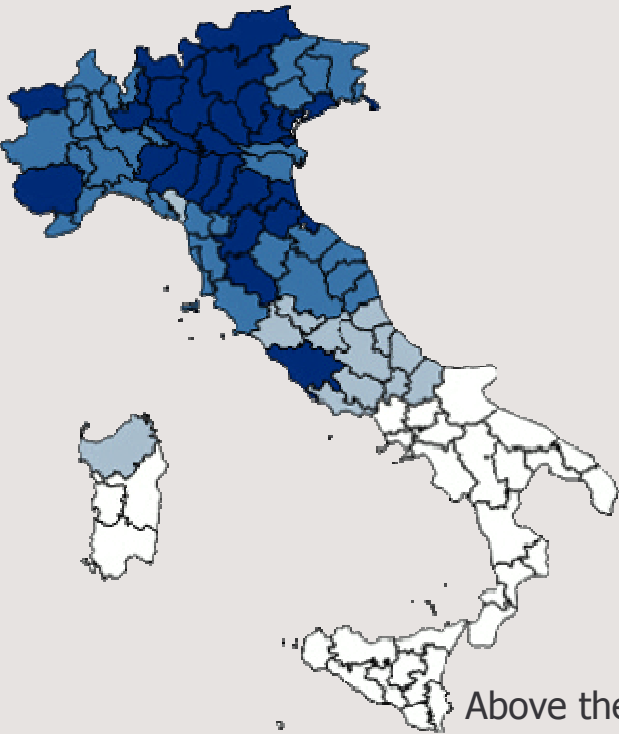
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The path we followed:

1) Studied the level of economic development of the Italian Provinces (103) in terms of wealth and expenditure;
2) Took all the 1.500 statistical indicators available at the provincial level;
3) Analyzed (statistically) their ability to explain economic development and reduced them to the 500 most relevant;
4) Aggregated them into 4 groups according to the nature of the phenomenon each of them describe (4 kinds of capital) building a statistical multidimensional indicator for each of this 4;
5) We compared the level of economic development with each form of capital to assess their capacity to explain economic development differentials between Italian Provinces;
6) Then we built a concise multidimensional statistic indicators for all the 4 kinds of capital put together to attain an indicator of the whole of capital assets of the Provinces;
7) We compared it with the economic development of the Provinces and found out that it's able to explain 93% of it's variability (so, on average, if you know the level of capital assets of a Province, you can predict quite correctly it's economic development → we could say that _investing in social, technical and human capital increase the level of economic development_)
8) The total capital can explain much but not all
9) That's because we took into account 4 out of 5 of the form of capital
10) The 5th kind of capital collect the effect of everything not taken into account by the other 4 kind (from politics to self- esteem)

Economic development
Wealth and expenditure

Reggio Emilia: ranks **13th** (103 Provinces in Italy) for wealth, **23rd** for expenditure, **18th** for economic development av. index


Above the trend (regression) line:
The level of expenditure is higher than expected, given the wealth

Below the trend line:
The level of expenditure is lower than expected, given the wealth

$R^2 = 0,80$

wealth

expenditure

Natural capital
and economic development

For our purposes, the natural capital includes indicators about the territory, the environment as well as cultural-artistic assets and the demography of the population
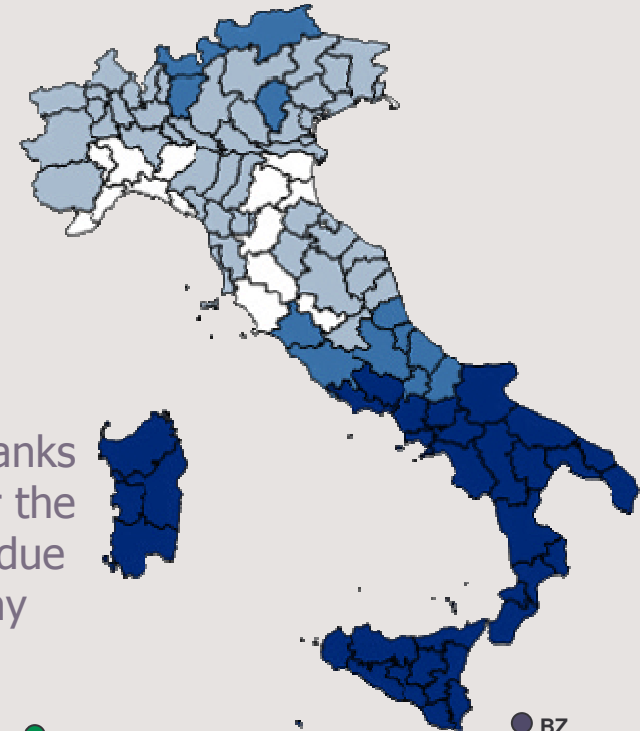
Reggio Emilia: ranks **63rd** in Italy for the natural capital, due to demography
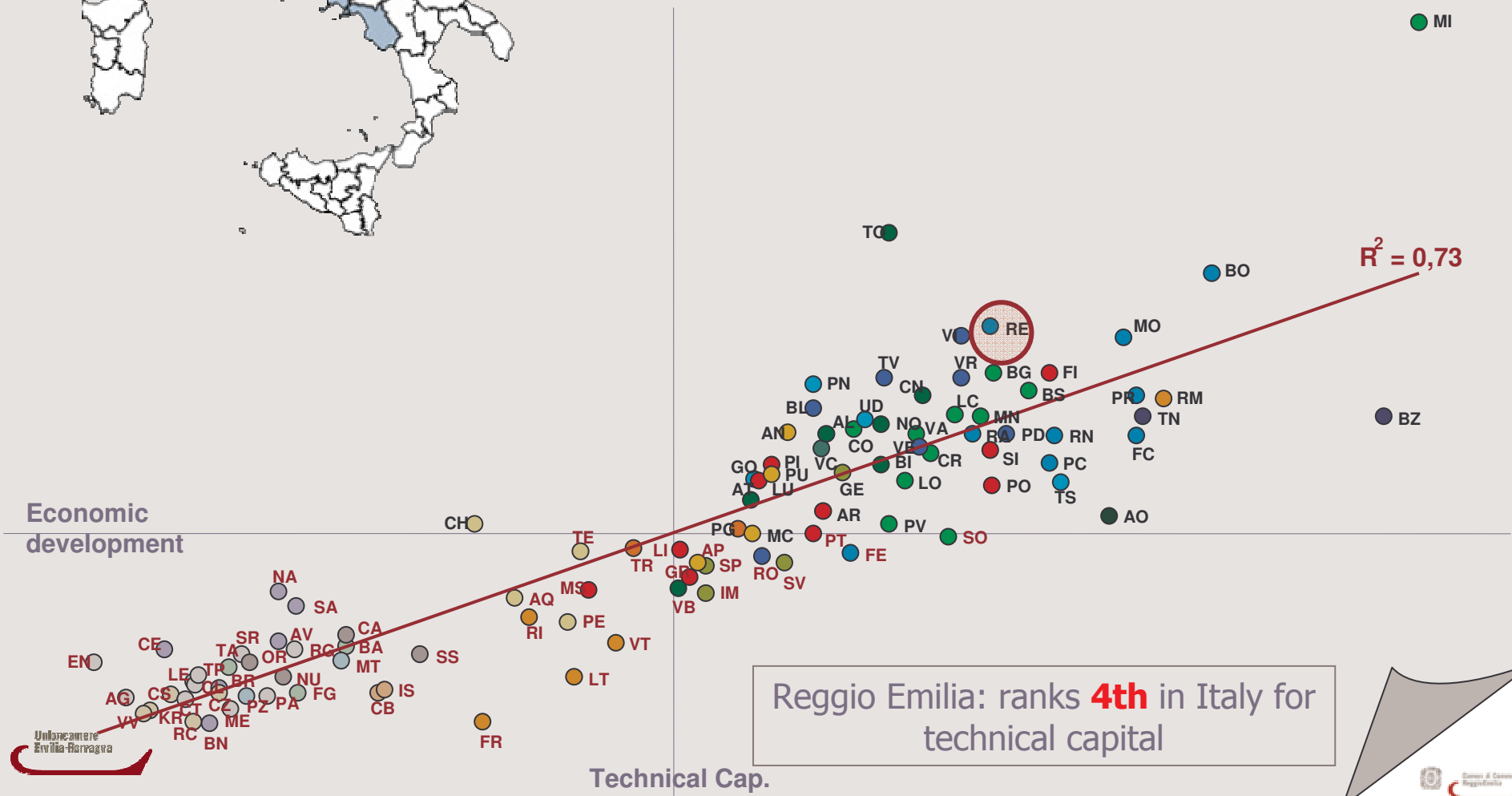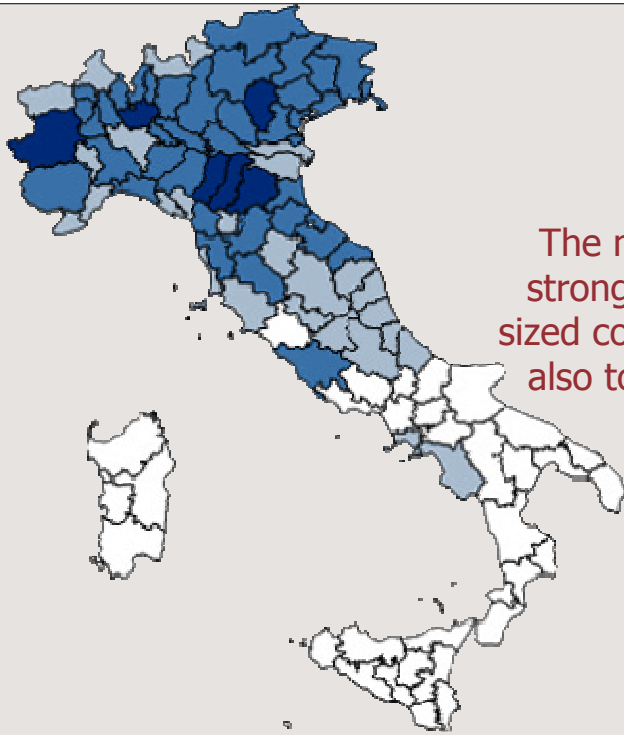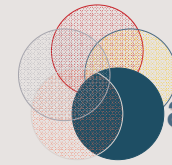
Economic development
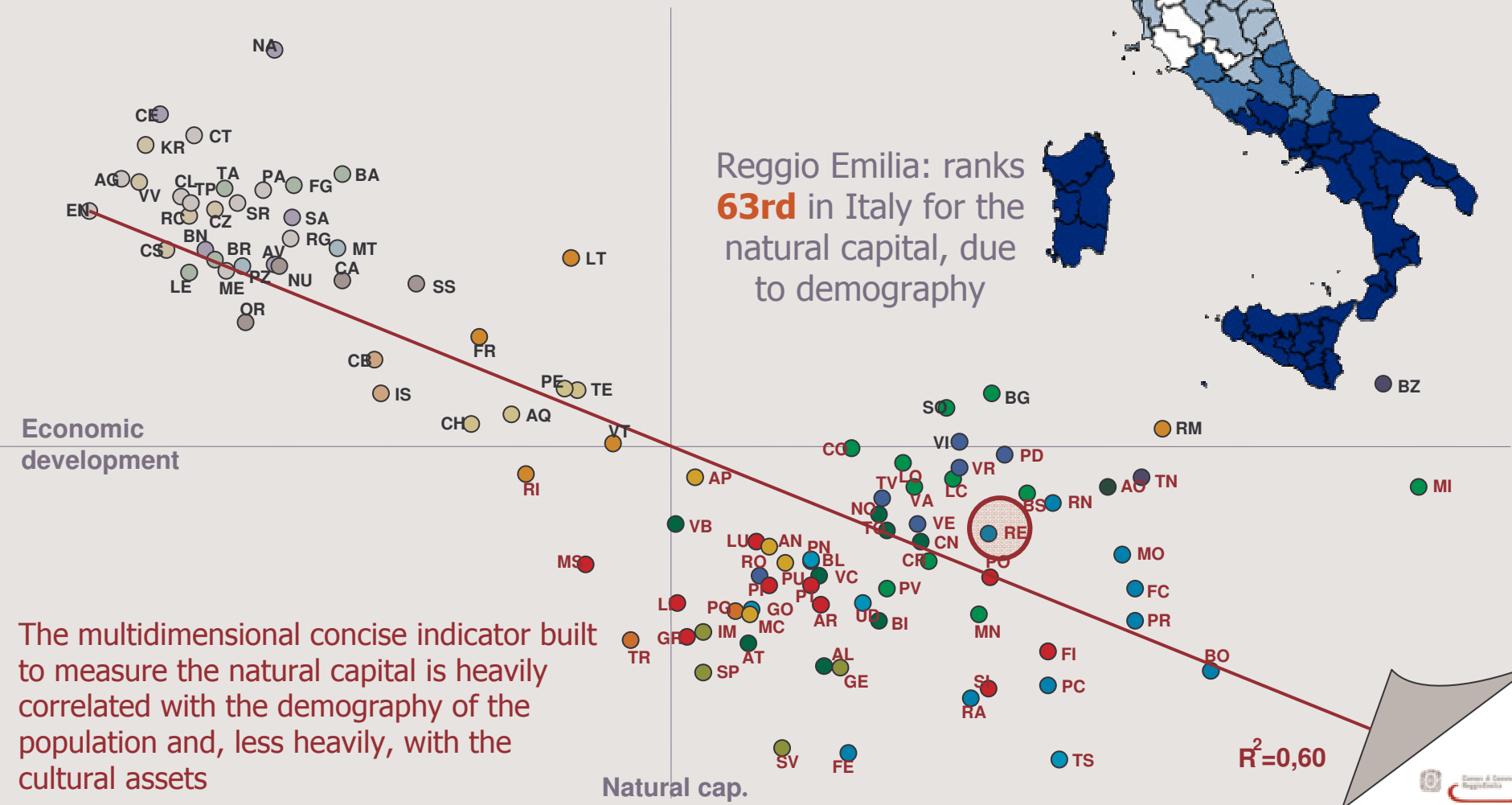
Natural cap.

The multidimensional concise indicator built to measure the natural capital is heavily correlated with the demography of the population and, less heavily, with the cultural assets

R^2=0,60

NA CE CT KR AG CL TA PA FG BA VV TP EN SR SA RC CZ BN BR AV RG MT CS PZ NU CA LE ME OR SS LT CB FR IS PF TE CH AQ VT SO BG RM CO VI RI AP VR PD TV LO LC AO TN MI NO VA BS RN VB VE RE LU AN PN TO CN MO RO BL CR PO FC MS PU VC PR LI PT PV GR PG GO BI MN BO TR IM MC AR UD FI AL SI PC SP GE RA SV FE TS

Technical capital
and economic development

The multidimensional concise indicator built to measure the technical capital is strongly correlated to the indicators of company structure (like weight of middle sized companies and of company groups), to their economic results, and correlated also to innovation, internationalization, the financial system and (even) tourism.

$R^2 = 0,73$

Economic development

Technical Cap.

Reggio Emilia: ranks **4th** in Italy for technical capital

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Human capital
and economic development

The multidimensional concise indicator built to measure human capital is strongly correlated to labour market indicators but also to (employed) labour force training indicators

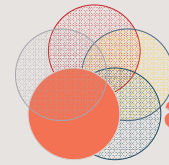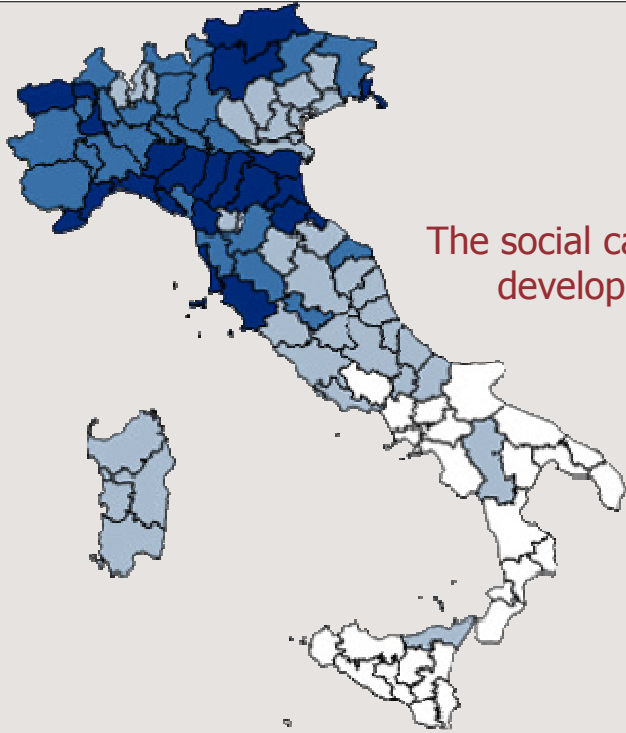Reggio Emilia: ranks **3rd** for human capital

$R^2 = 0,87$
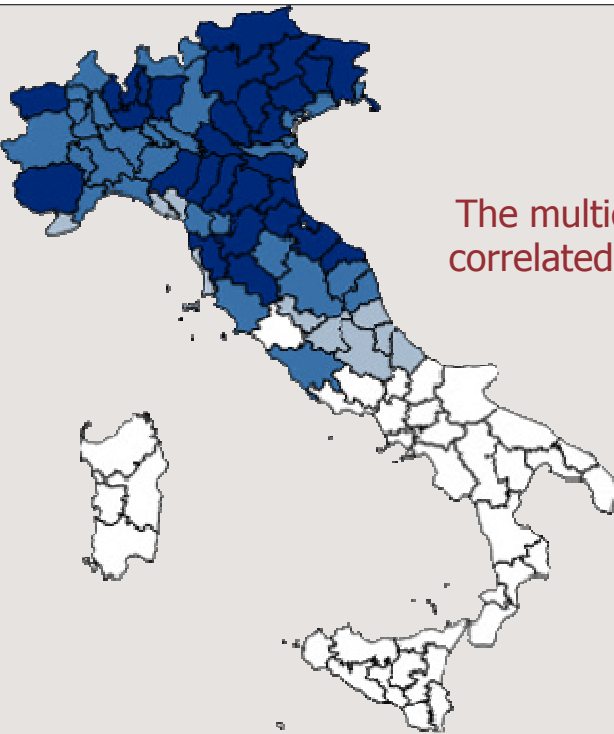
Economic development

Without taking into account the training indicators, the correlation index with the economic development would be lower → showing clearly the importance of training in economic development
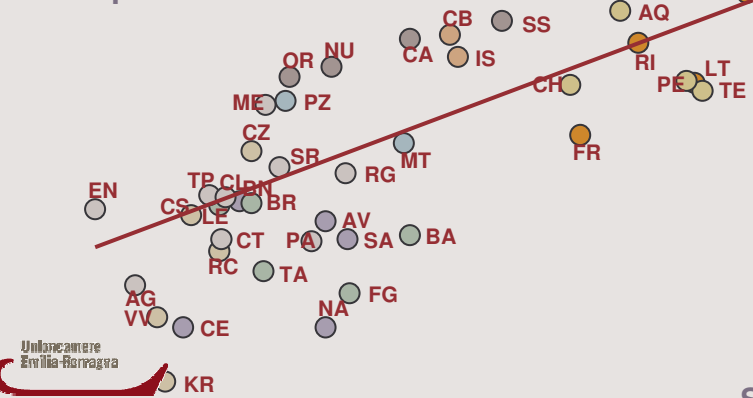
Human capital

Social capital
and economic development

The social capital is generally taken as a product of economic development instead of a development factor itself. The "quality" of a society is seldom considered as an instrument to attain economic development.

Reggio Emilia: ranks **21st** for social capital

$R^2 = 0{,}77$

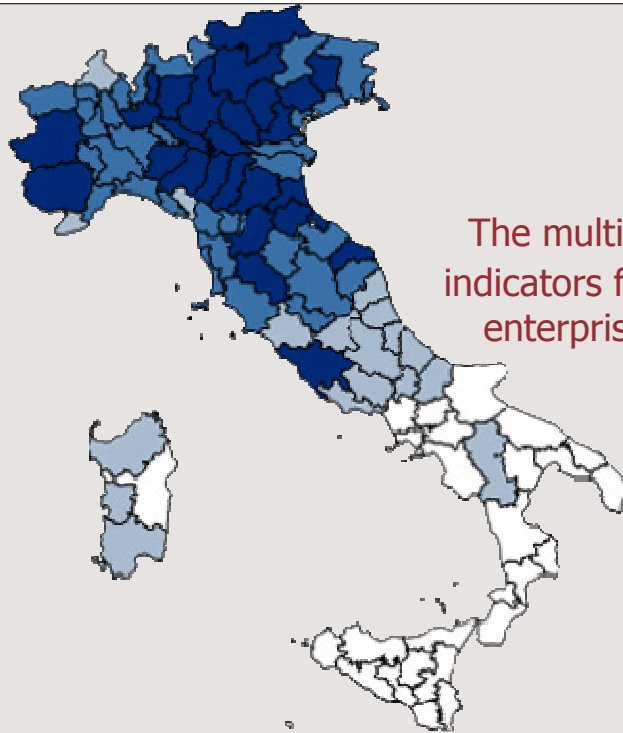Economic development

Social Cap.

The multidimensional concise indicator for social capital takes into account indicators for social cohesion, inclusion and the openness of the community

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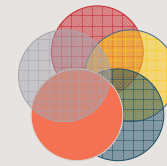
Total capital
and economic development

The multidimensional concise indicator built for total capital is strongly correlated to indicators for employment, innovation, presence of company groups and medium sized enterprises, level of export, training for employed workers, demand of culture and civicness indicators.
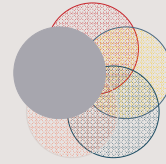
Reggio Emilia: ranks **3rd** for total capital

$R^2 =0,93$

Economic development

The concise indicator is able to explain much of the variety of economic development between the Italian provinces

Total capital

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Total capital
and economic development

The total capital can explain much but not all ... we can see in this gap the influence of the 5th (immeasurable) kind of capital: the symbolic capital that catalyzes the foregoing four kinds of capital (it provides the power for the four engines)

$R^2 = 0,93$

Economic development

Total capital

Reggio Emilia: ranks **3rd** for total capital but **18th** for economic development

1 We can say the real aim of the Lisbon strategy is, in the end, to "move the circles left in the graphic", i.e. not only increasing the capital but the capacity to attain development from it.

If so, the parameters indicated by the Lisbon strategy need to be "*enriched*" to take into account the complexity of contemporary economy and society that is clear considering the Reggio Emilia fulfillment of the parameters but "unexploited" development potential shown in our study.

BUT

to provide economic information besides economic data we need to "*break out of the mould*" . We have to look differently at our reality.

2 This kind of study can be carried out at European level to assess what there is behind our different (economic and social) development performances. The Lisbon Regions Network can be forerunner in this.

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