



Babbage Seminar

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4 February 2013

A new approach to industrial policy

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Emilia Romagna Regional Government



università di ferrara
DA SEICENTO ANNI GUARDIAMO AVANTI.

A New Approach to Industrial Policy

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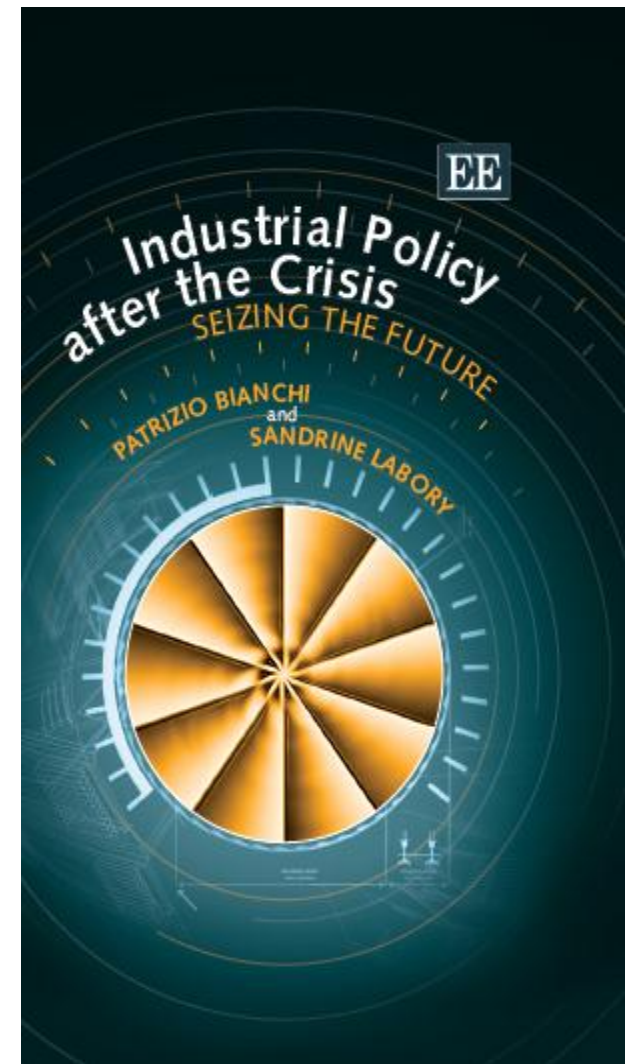
^Regione Emilia – Romagna Government

Cambridge, Feb. 4, 2013

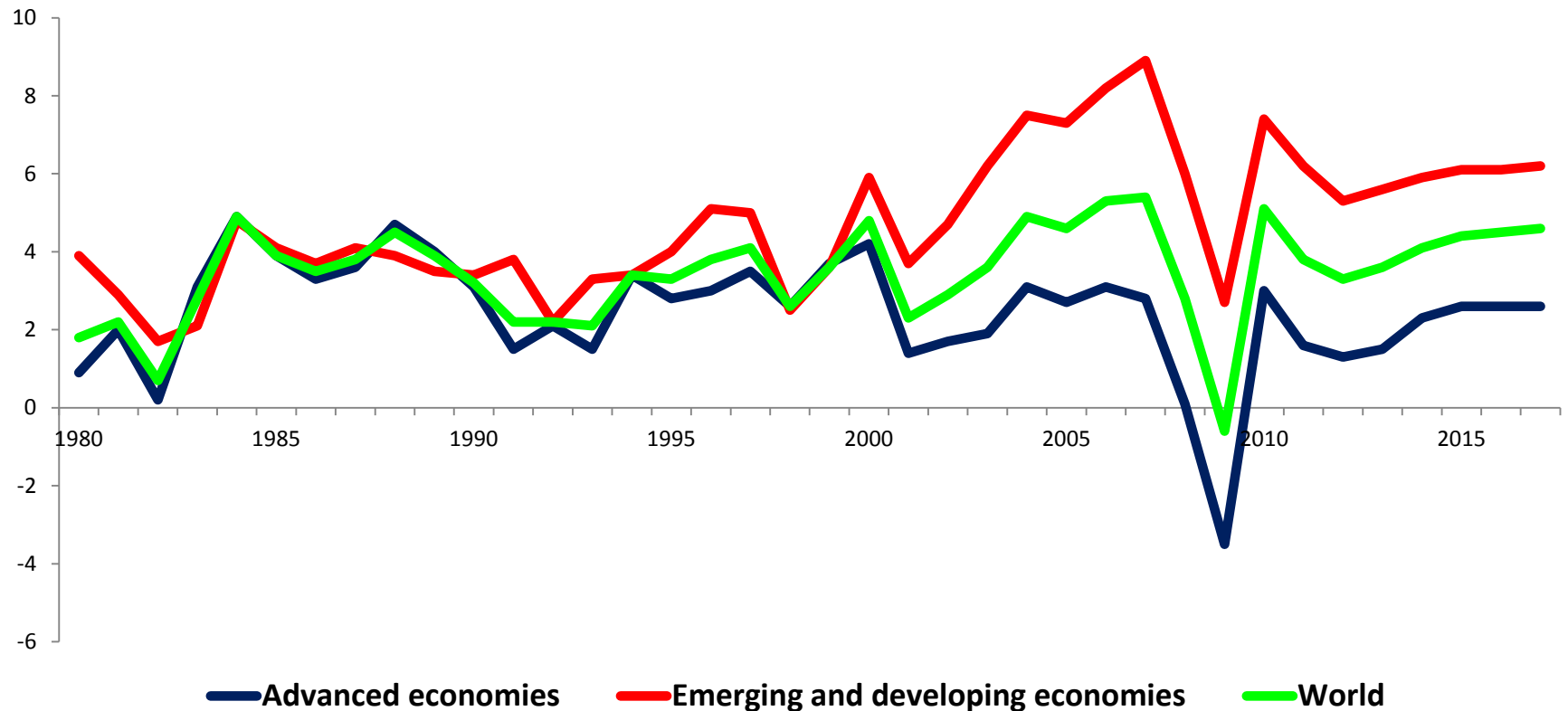
PATRIZIO BIANCHI SANDRINE
LABORY

INDUSTRIAL POLICY AFTER
CRISIS:
SEIZING THE FUTURE

EDWARD ELGAR PUBLISHER
LONDON, 2011



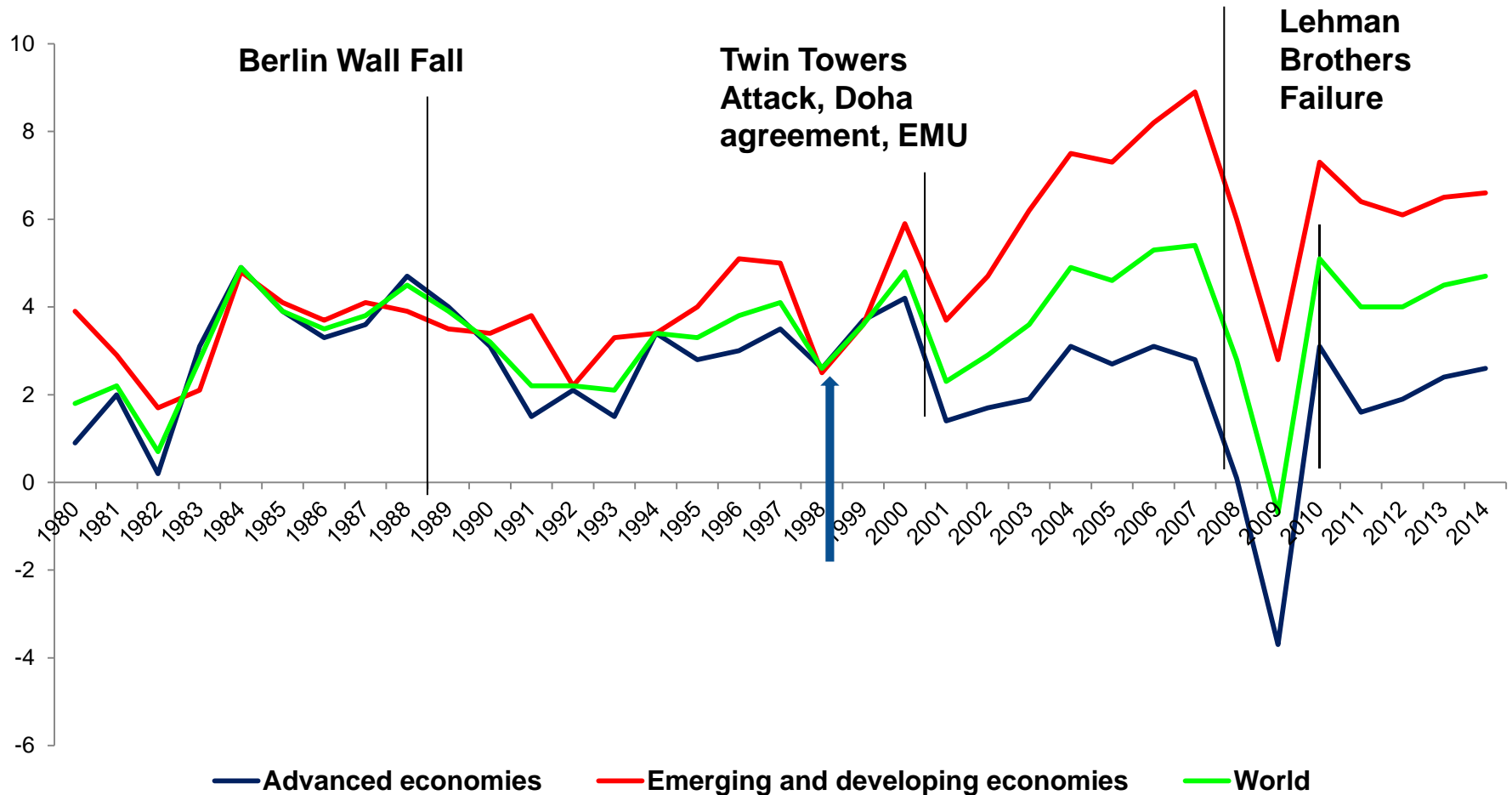
Real GDP Growth (annual % change), 1980 - 2014



The world crisis is not only the dramatic effect of the financial collapse, but it is the structural readjustment after the end of Bilateral Equilibrium and starting of Globalisation

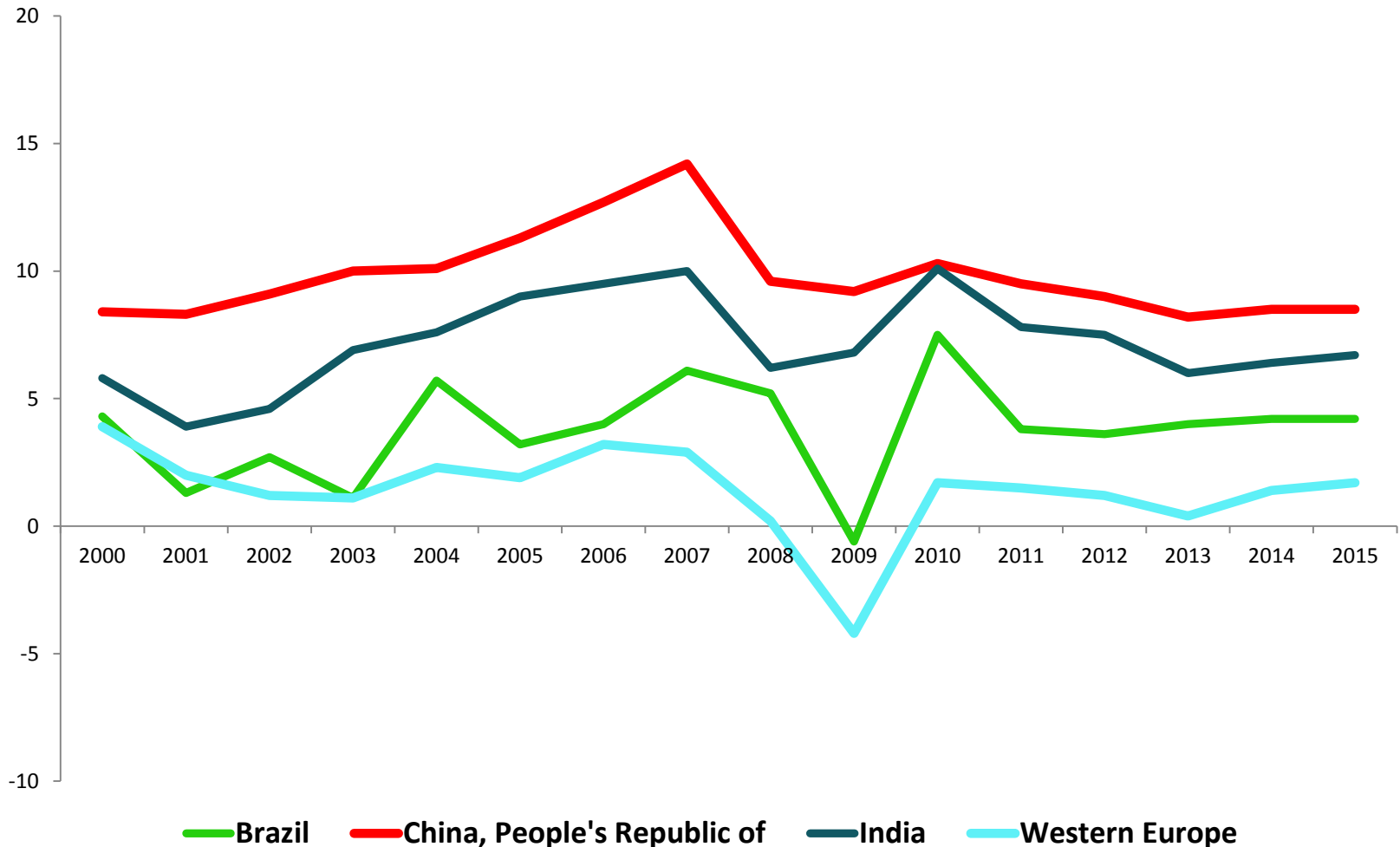
(IMF data: IMF Data Mapper Jan 2013)

Real GDP Growth (annual % change), 1980 - 2014



Since the end of WWII, the world GNP growth was led by the developed countries; after the decade of structural readjustment following the collapse of Planned Economies, the world dynamics is led by other major economies

Real GDP Growth, annual % change



Countries react differently to the global crisis

Adam Smith

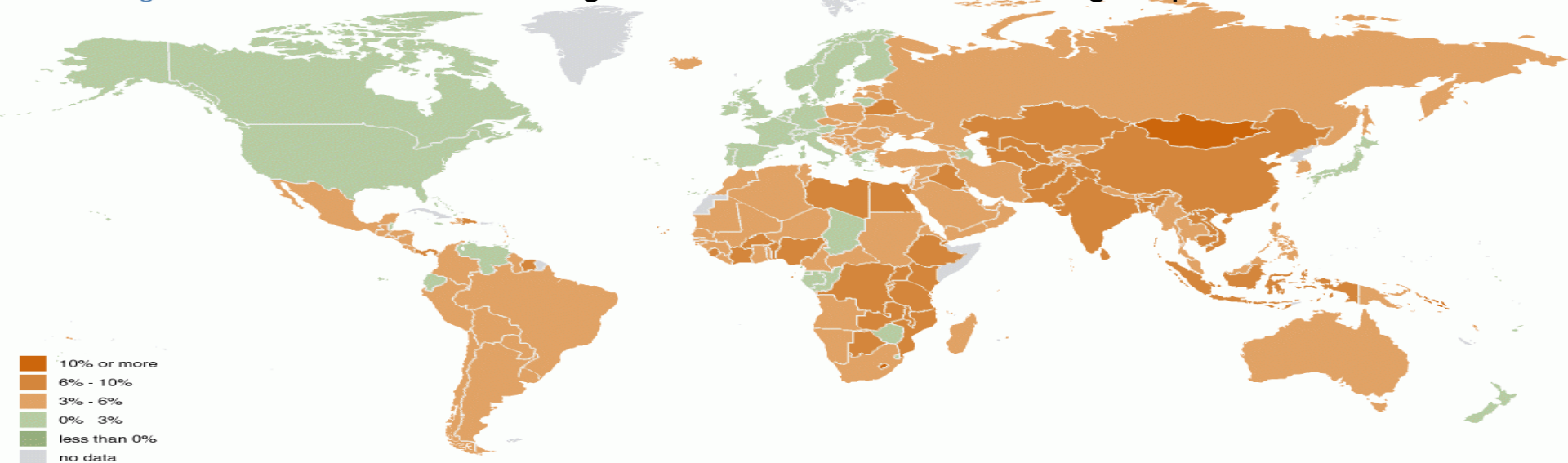
- “As it is the power of exchanging that gives occasion to the division of **labour**, so the extent of this division must always be limited by the extent of that power, or, in other words, by the extent of the **market**” (WN, I,3, p.40)

Extent of the market
Division of labour
Power of exchanging

World-wide industrial reorganization:

- Delocalization of specific production from a country to another country
- World-wide unbundling of the entire production cycle
- De-linking of service and manufacturing steps

IMF Data Mapper
Real GDP growth 2015

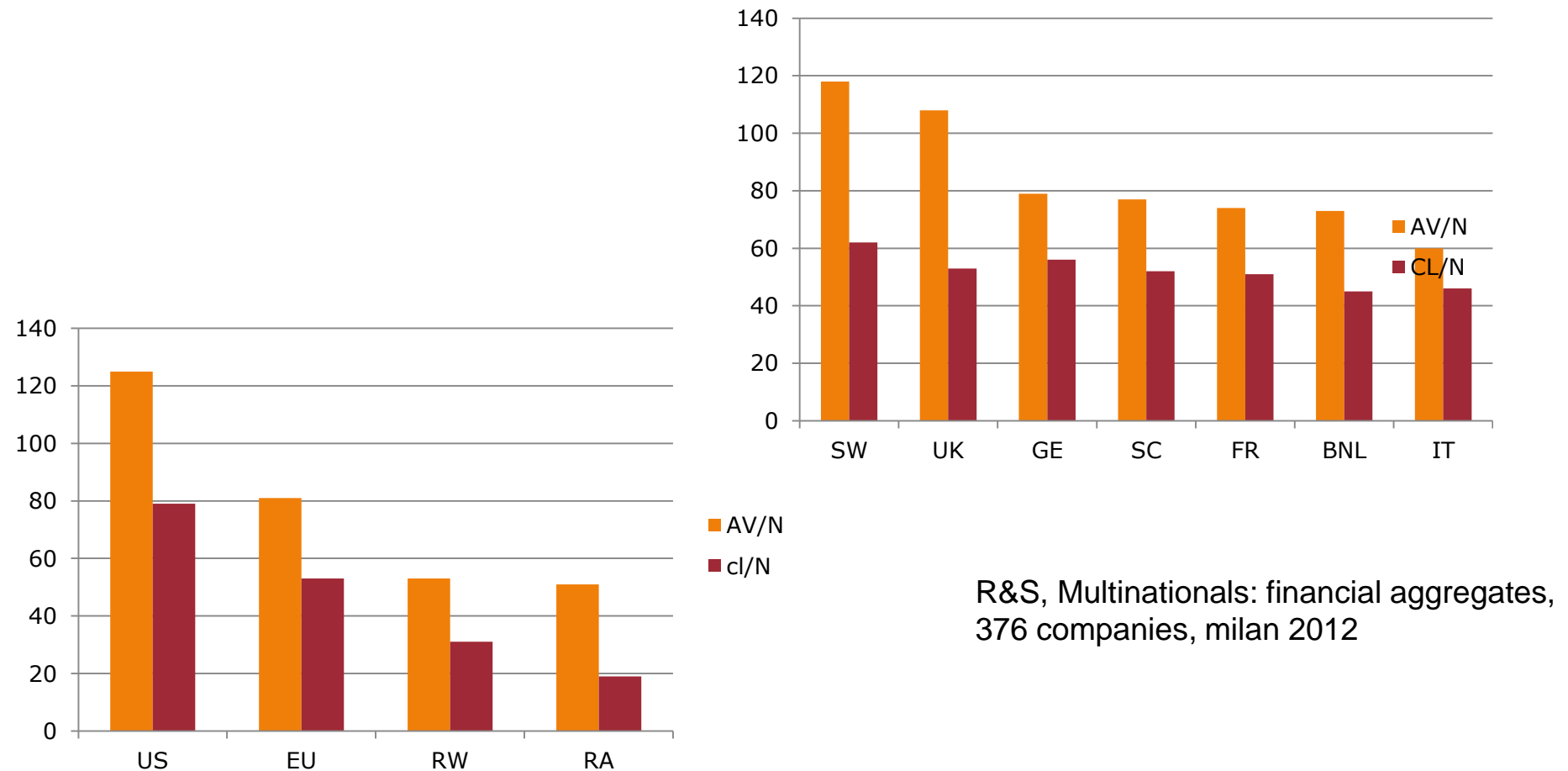


Annual percent change

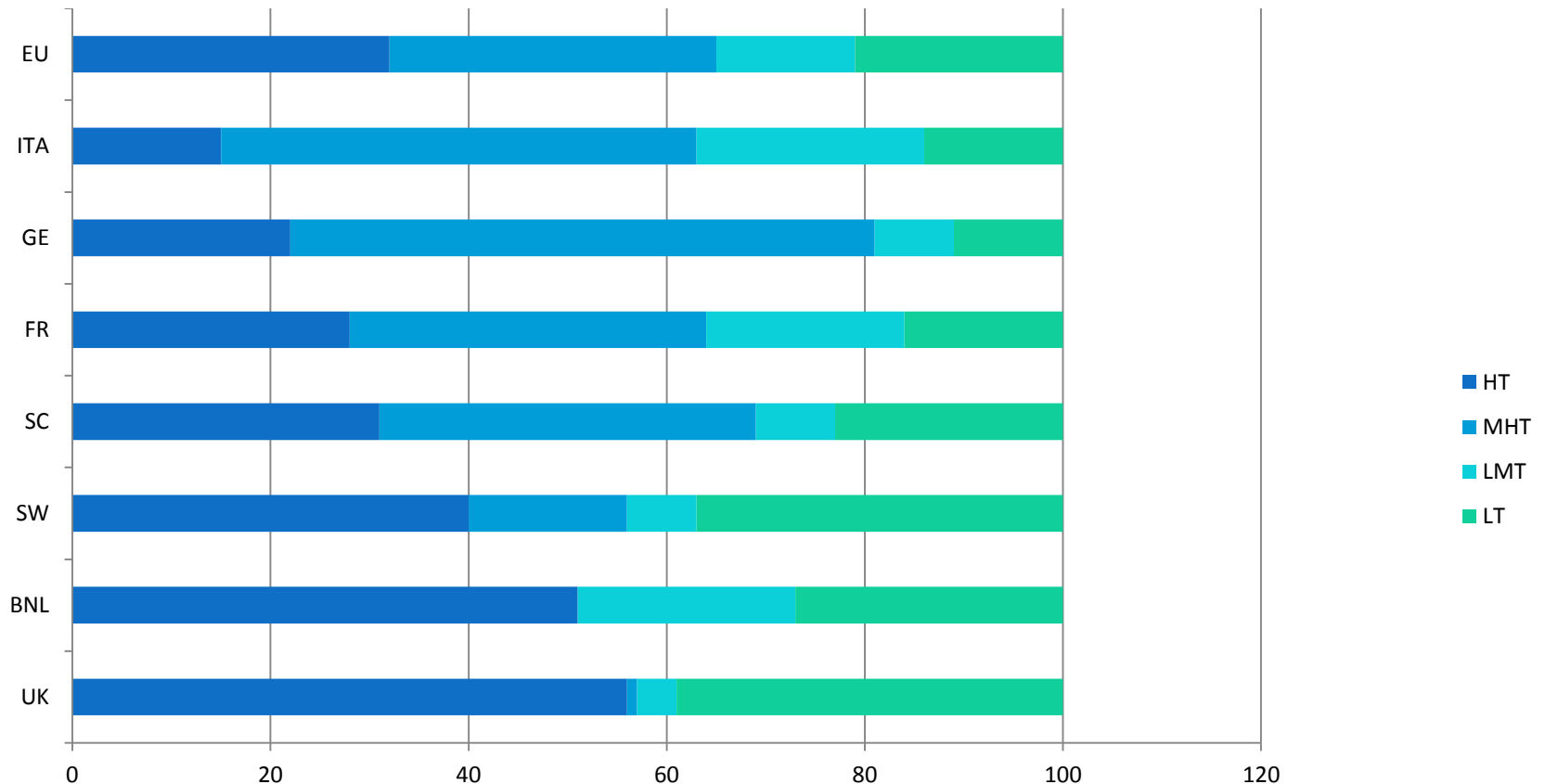
Copyright: ©IMF, 2010 Source: World Economic Outlook (April 2010) (World Economic Outlook - April 2010)

CRISIS:

Countries reacted differently to the change in the extent of the market determined by globalization



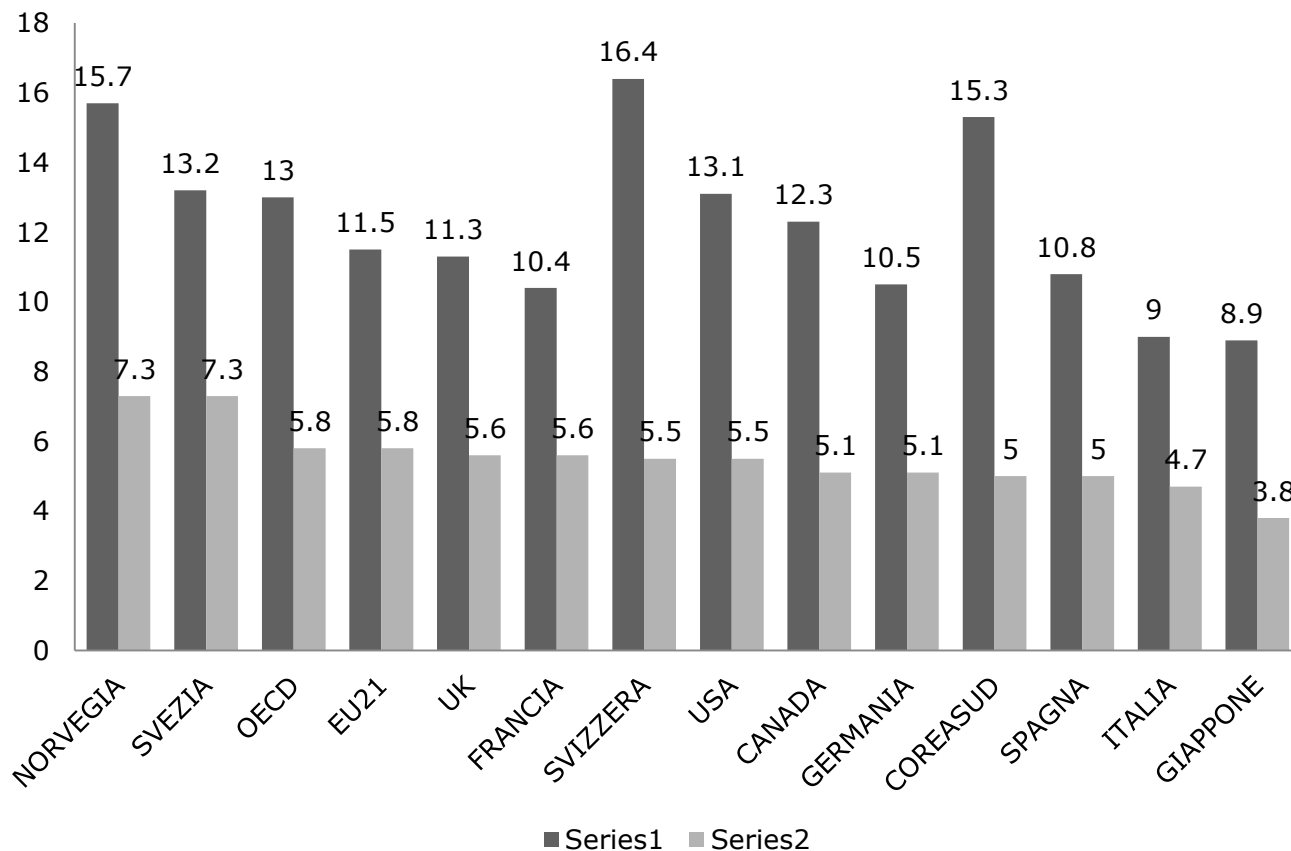
Oecd technology intensity based on % breakdown of net sales



R&S, Multinationals: financial aggregates,
376 companies, milan 2012

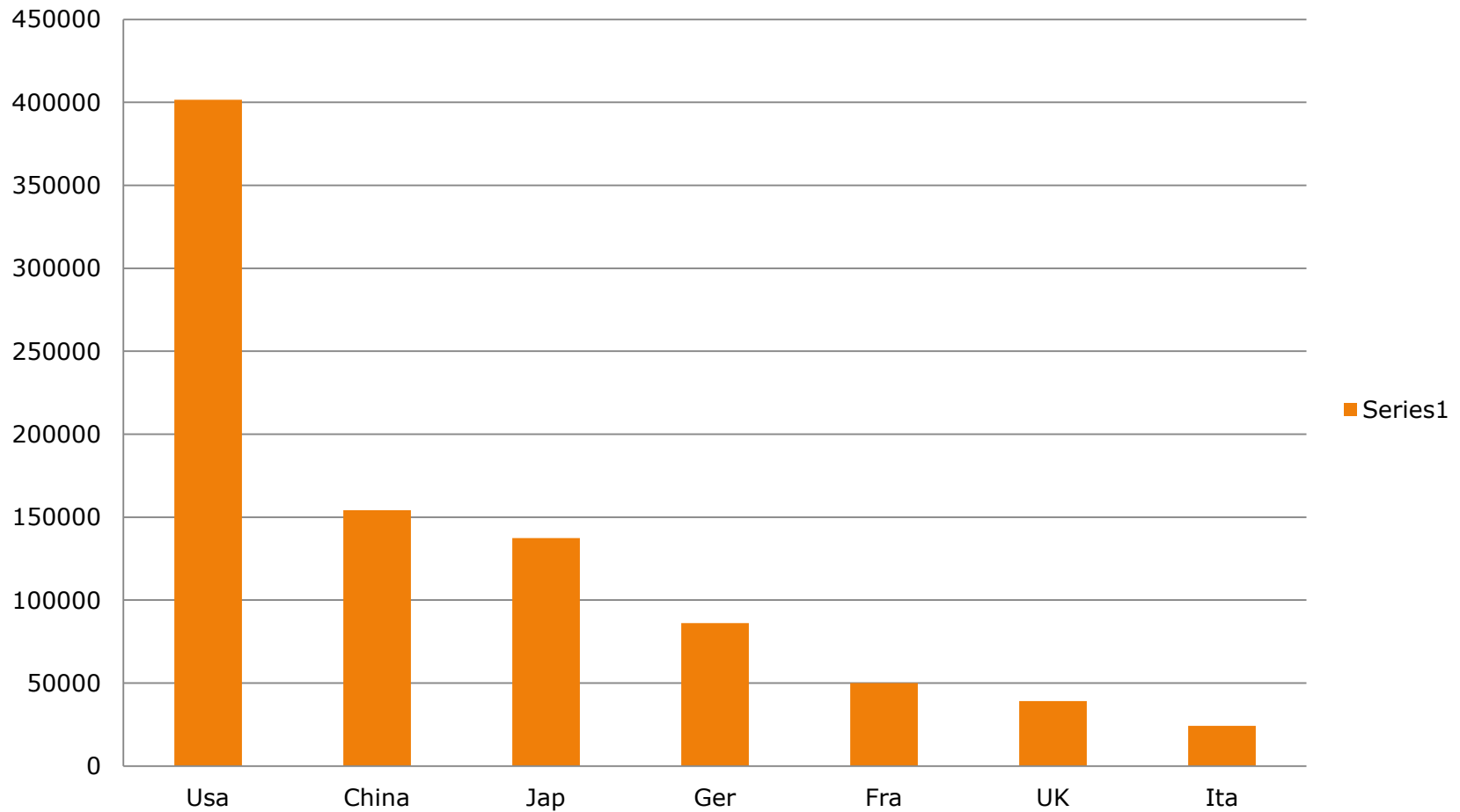
And differently invested in Human capital

Public expenditure on education 2010 as
% total exp. And as %GDP



And in research

GERD OECD, oct 2012



Gerd oecd in mil. dollar current

EVIDENCE ON MANUFACTURING:

strategies of localization of the different stages
and of control of the entire cycle of
production:

Smith again:

Work done and work to be done

(WN, I, VII, 19, 76-77)

- We can delocalize “work done” steps according to static advantages,
 - but “work to be done” requires dynamic advantages
-
- In case 1) the attraction policy is to reduce costs
 - In case 2) the attraction policy is to build positive externalities for human and social capital

the present attention to Manufacturing
Reinassance is the evidence that

De-linking work done and work to be done steps
of production involves the risk of:

- loosing the control of production cycle
- loosing capabilities to transform innovation into production
- loosing the capacity to accumulate knowledge and competences of production

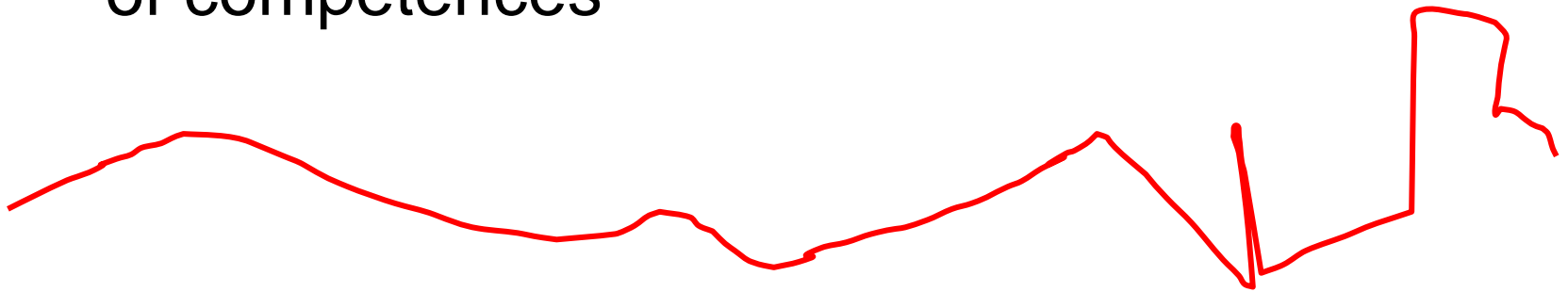
“The greatest improvement in the productive powers of **labour**, and the greater part of the skill, dexterity, and judgement, ...seem to have been the effects of the division of labour”
(WN, I, I, p.13)

The Wealth of Nations, today

A strategy for increasing added value and the efficiency of the production system requires a basic infrastructure for increasing human capital training and mobility



Which are the setting targets for specialization and complementarity of competences



- Adopting the technologies more relevant for our country in our times
 - understanding of the complexity of present world and the relation between the needs of our country and the dynamics of world economy
- Consolidation of the social intangible capital

Rethinking industrial policies today means to redefine the basic concepts of collective, human actions and to put them in a dynamic perspective

In this context it is necessary to redefine the basic concept of development and the instrument to support economic and social growth

The recent debate on development and the experiences of European policy making have stressed two basic concepts to analyse economic dynamics and structural change



INNOVATION



TERRITORY

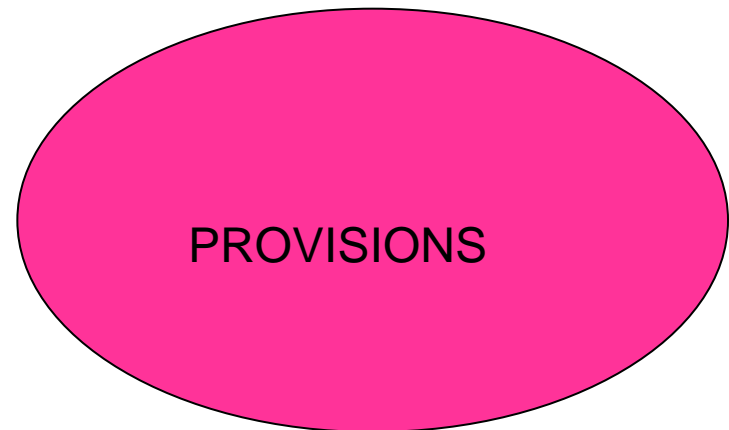
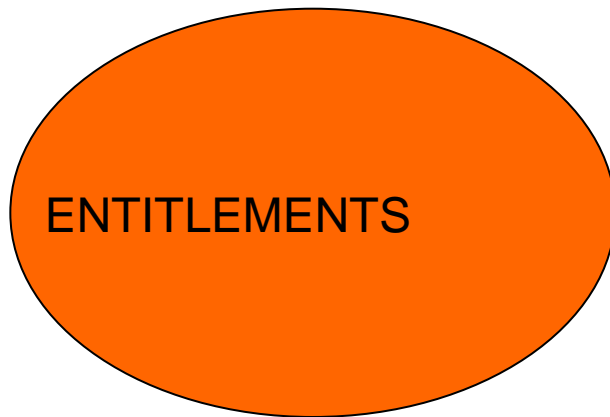
innovation

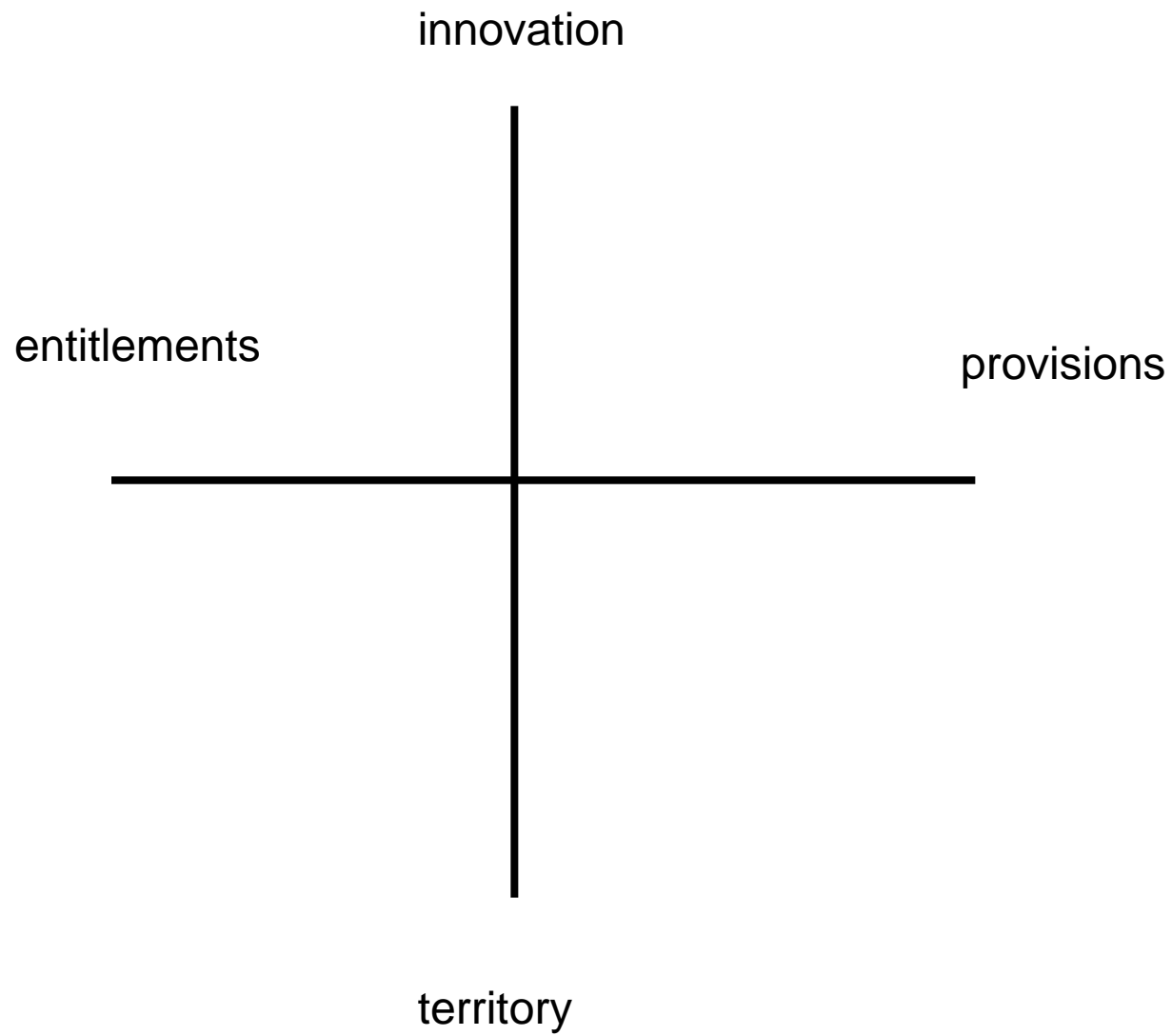


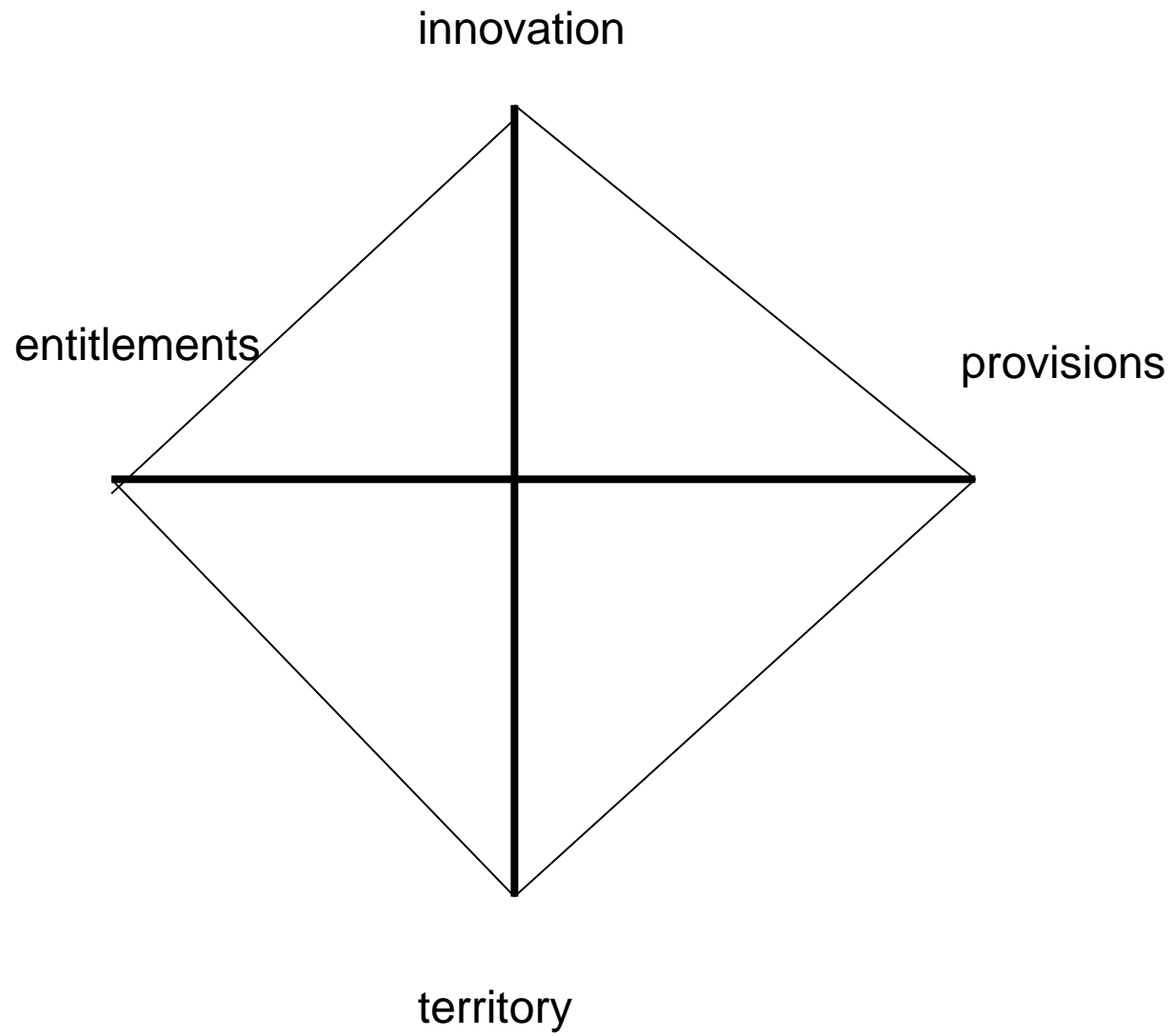
territory

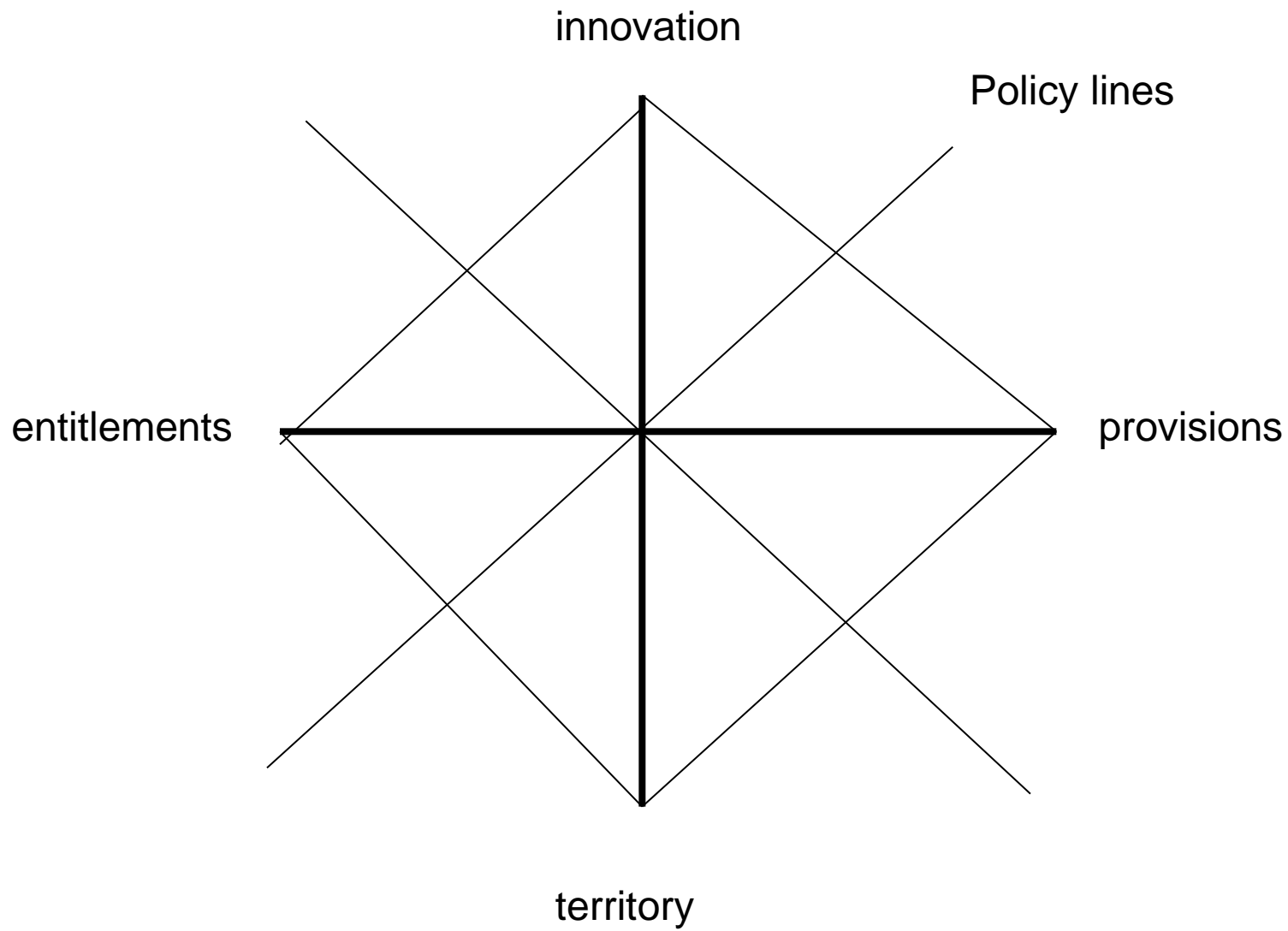
These two concepts are necessary but not sufficient to define the new idea of development

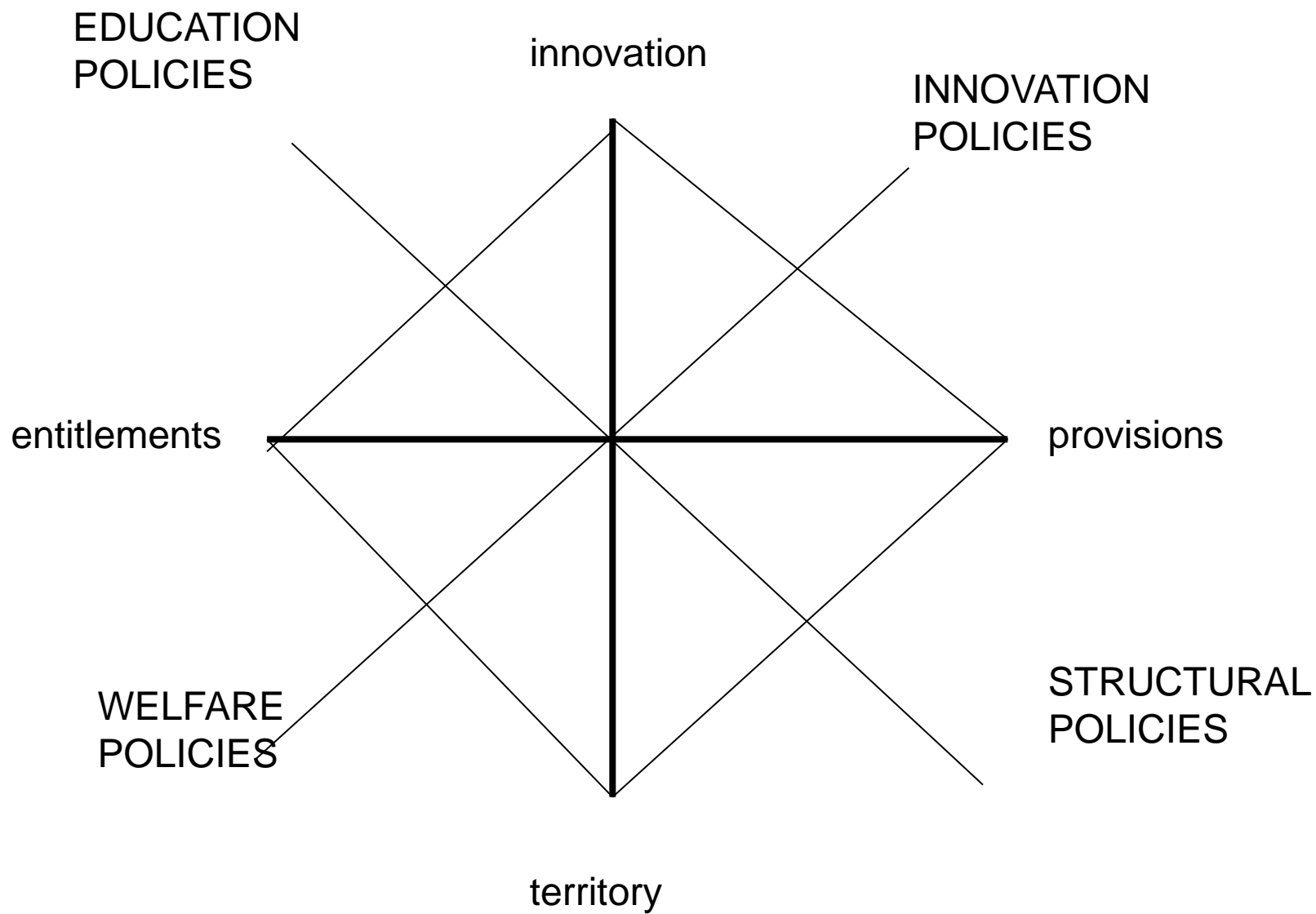
We introduce the two concepts of
ENTITLEMENTS and PROVISIONS











EDUCATION
POLICIES

innovation

INNOVATION
POLICIES

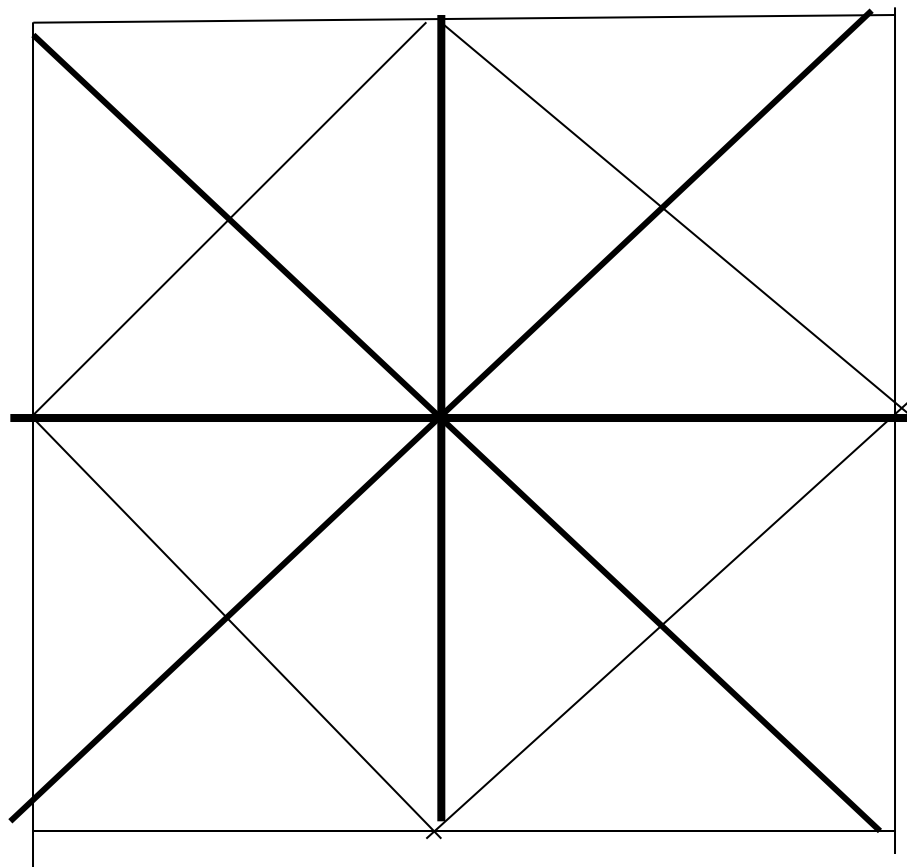
entitlements

provisions

WELFARE
POLICIES

territory

STRUCTURAL
POLICIES



EDUCATION
POLICIES

innovation

INNOVATION
POLICIES

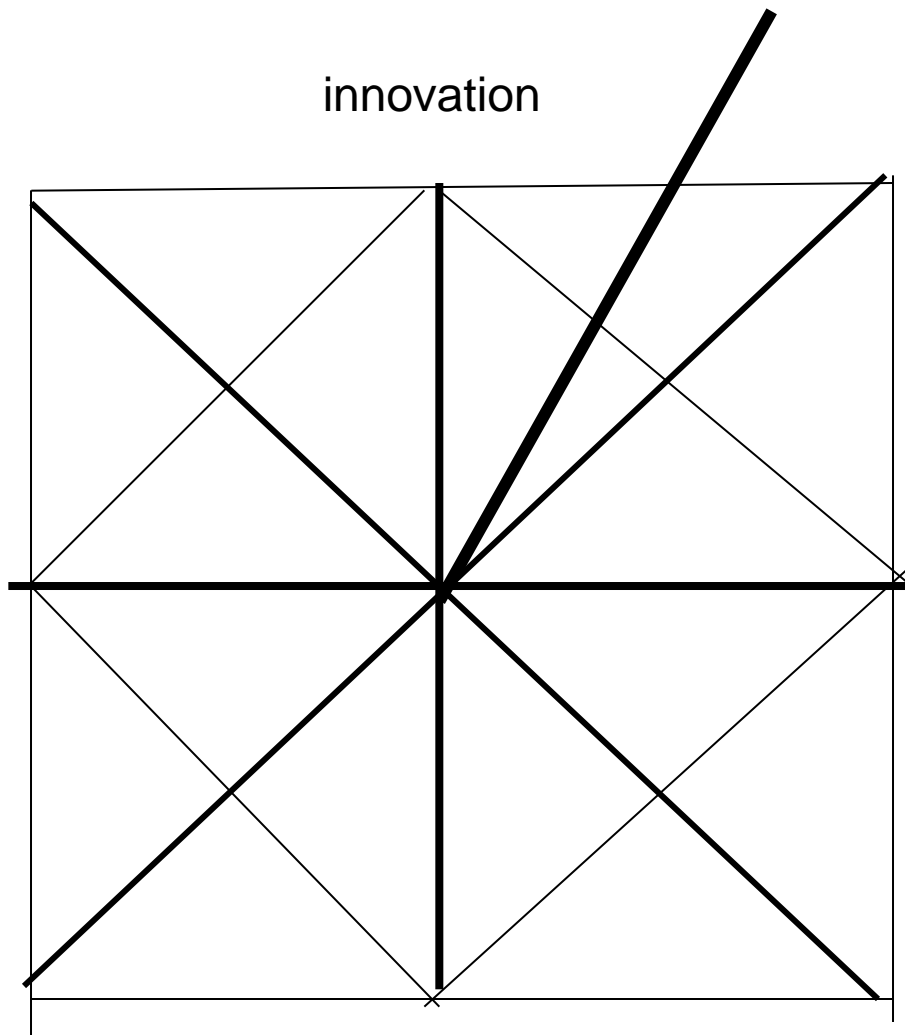
entitlements

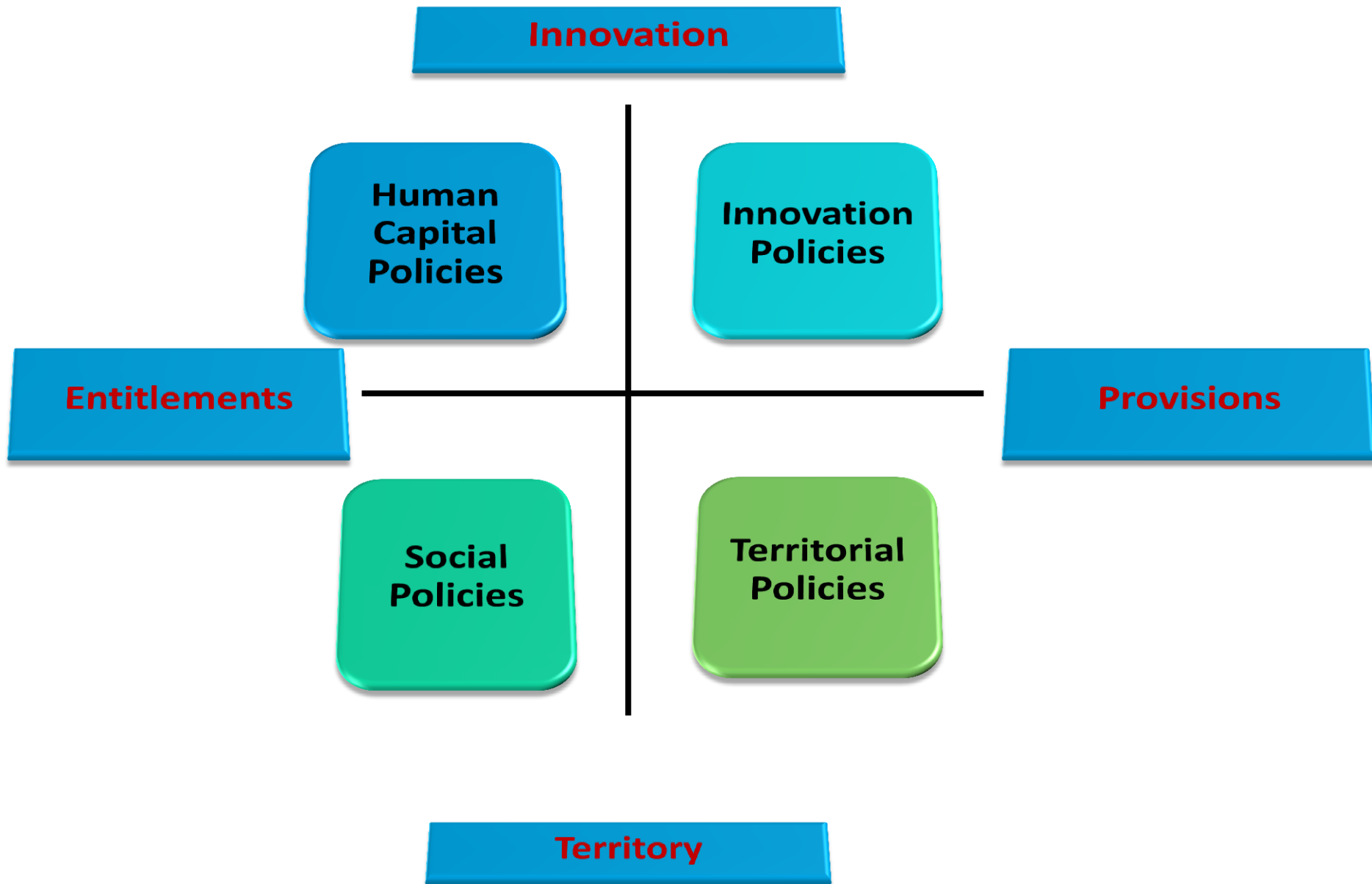
provisions

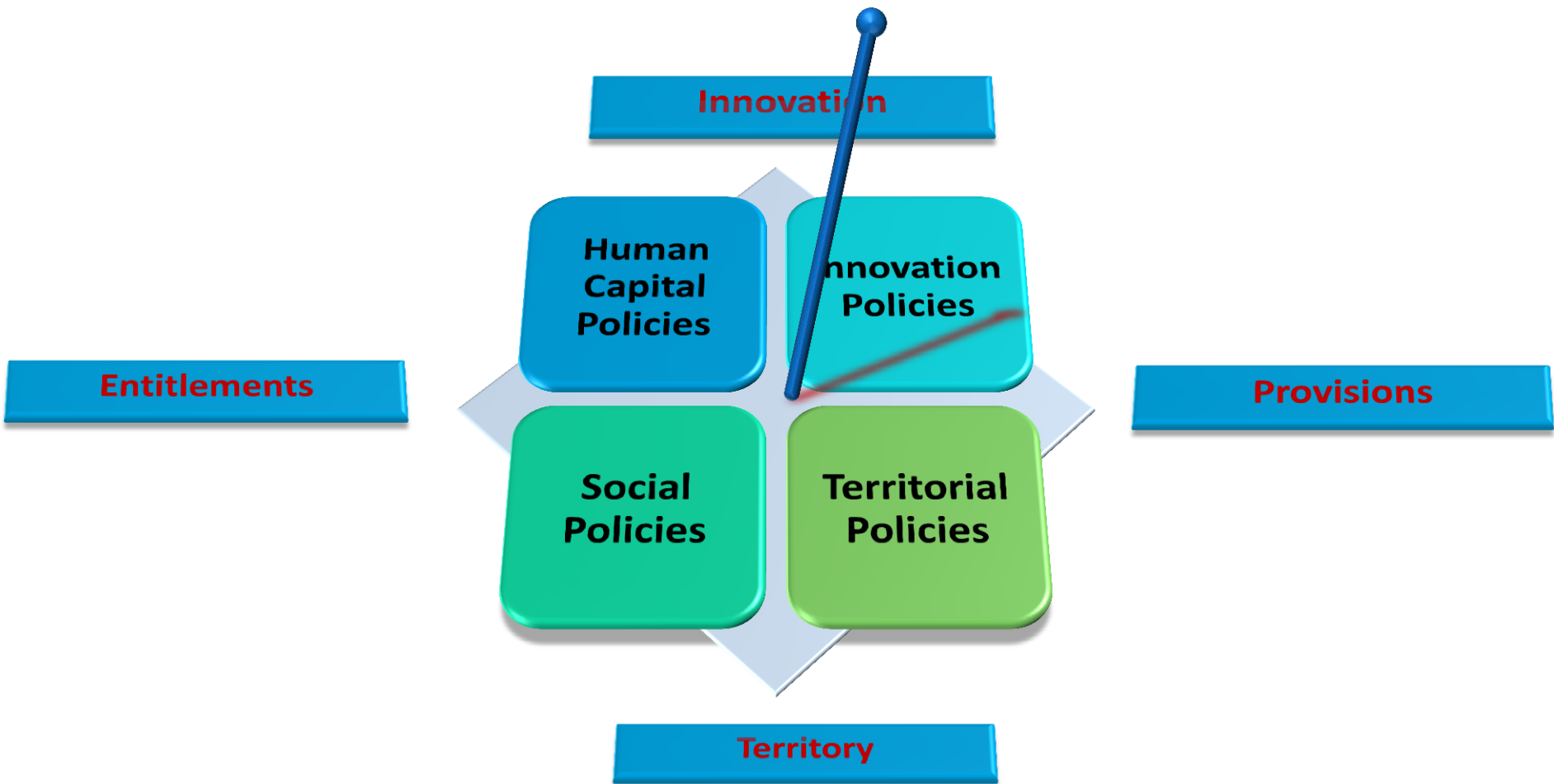
WELFARE
POLICIES

territory

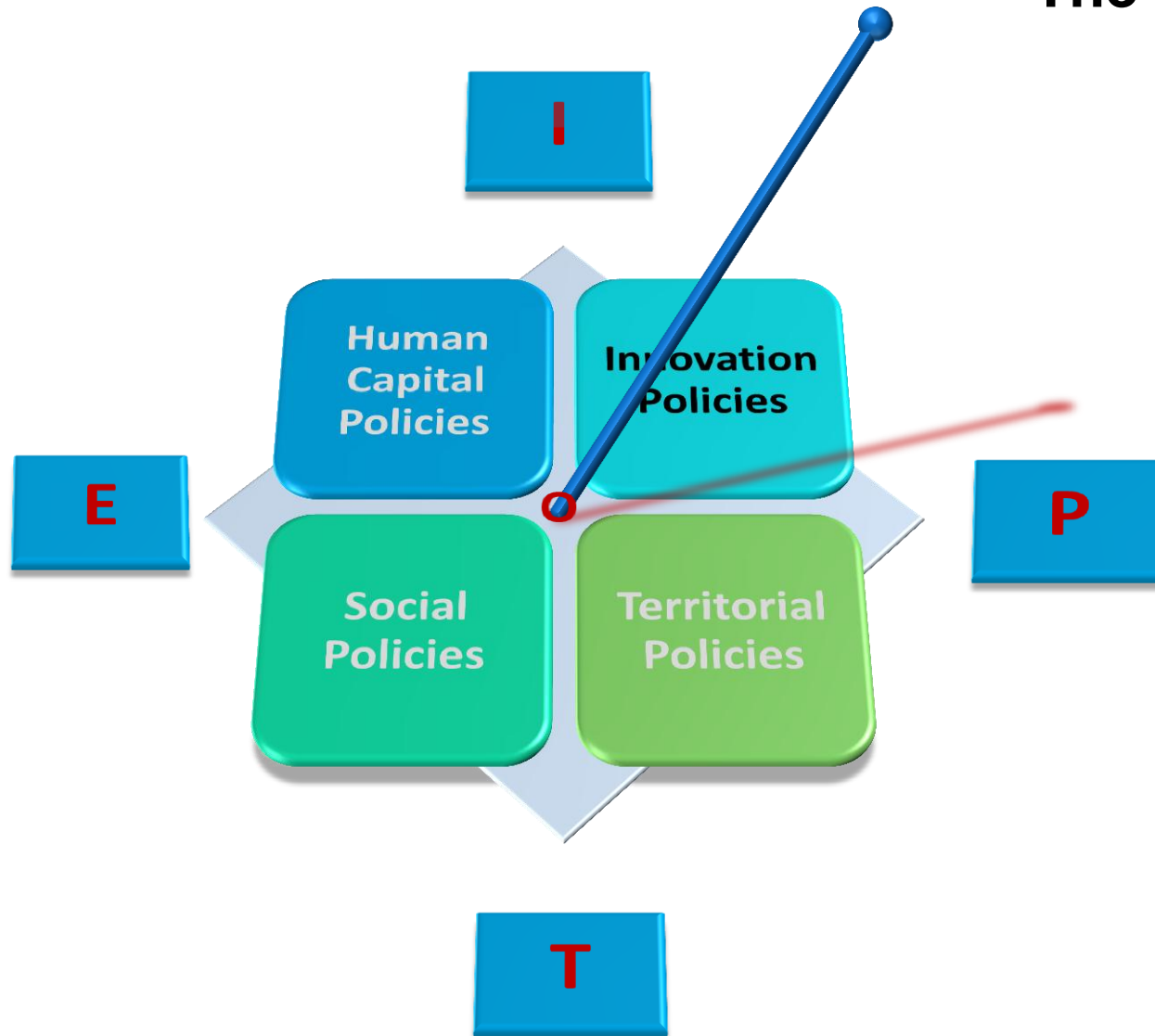
STRUCTURAL
POLICIES



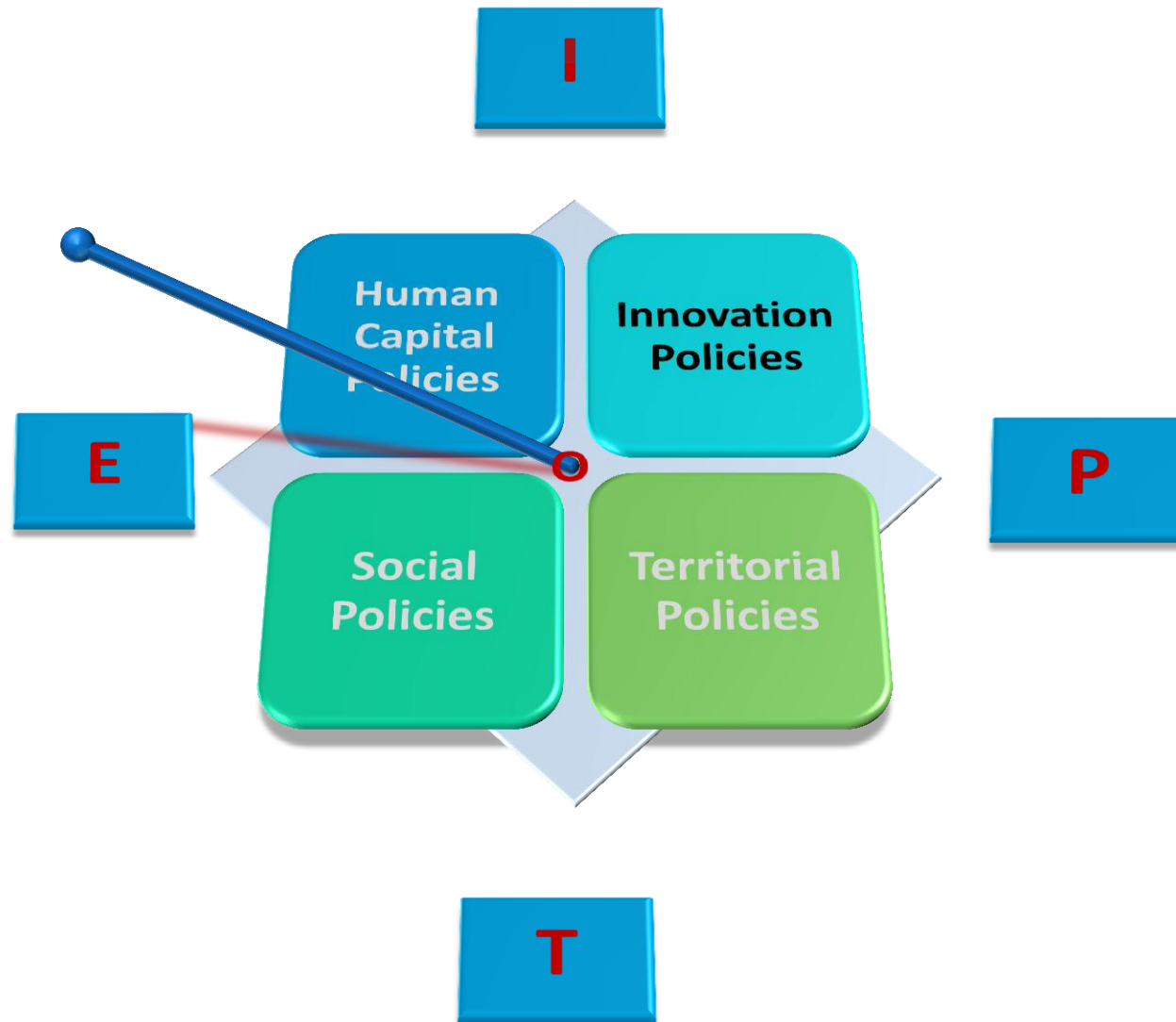




The Case of China

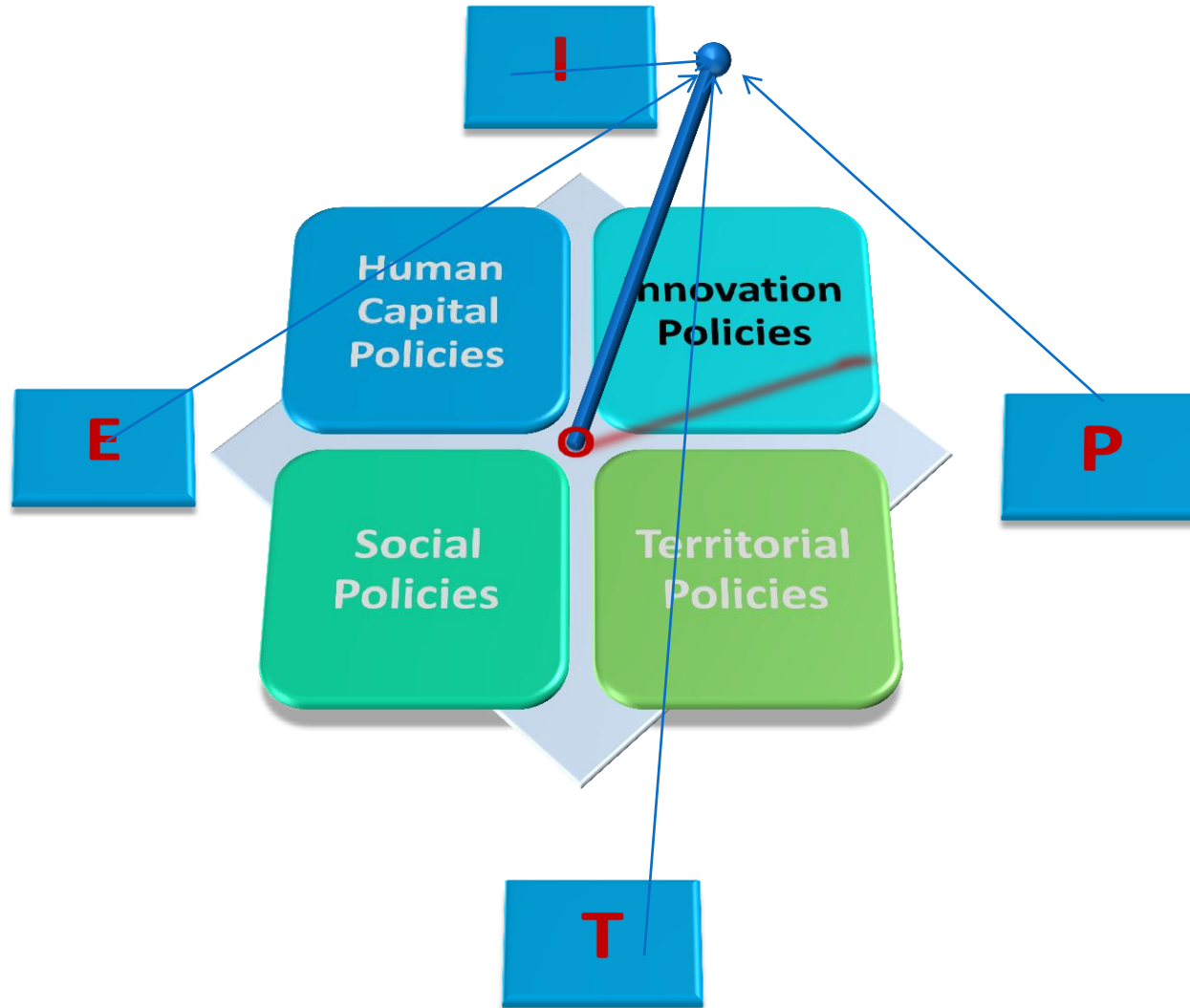


The Case of South Africa

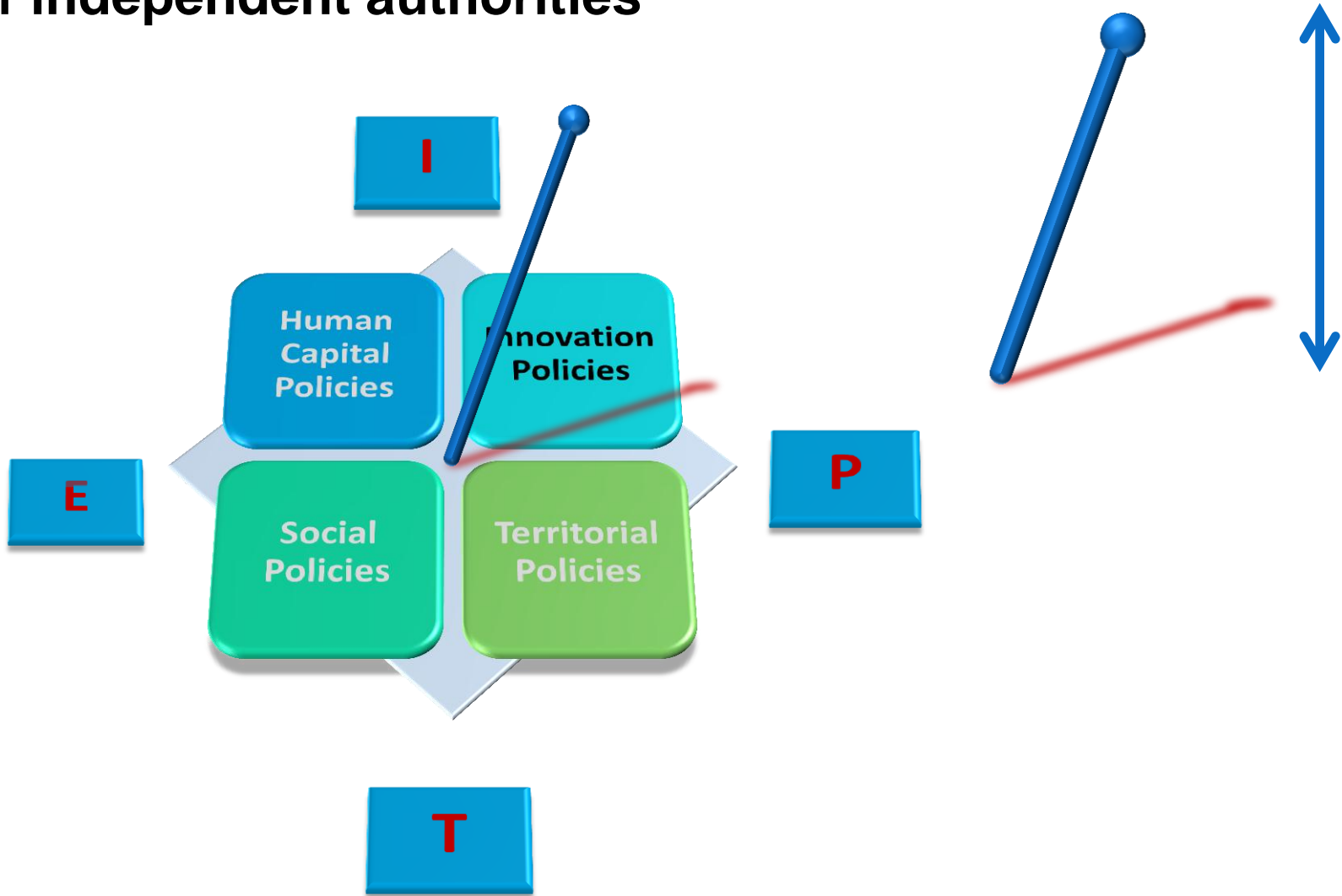


- The new industrial policies is a vision of the future
- Different visions are possible, but each choice involves opportunities and risks
- There is a coherence issue in defining the vision and in making the specific policies

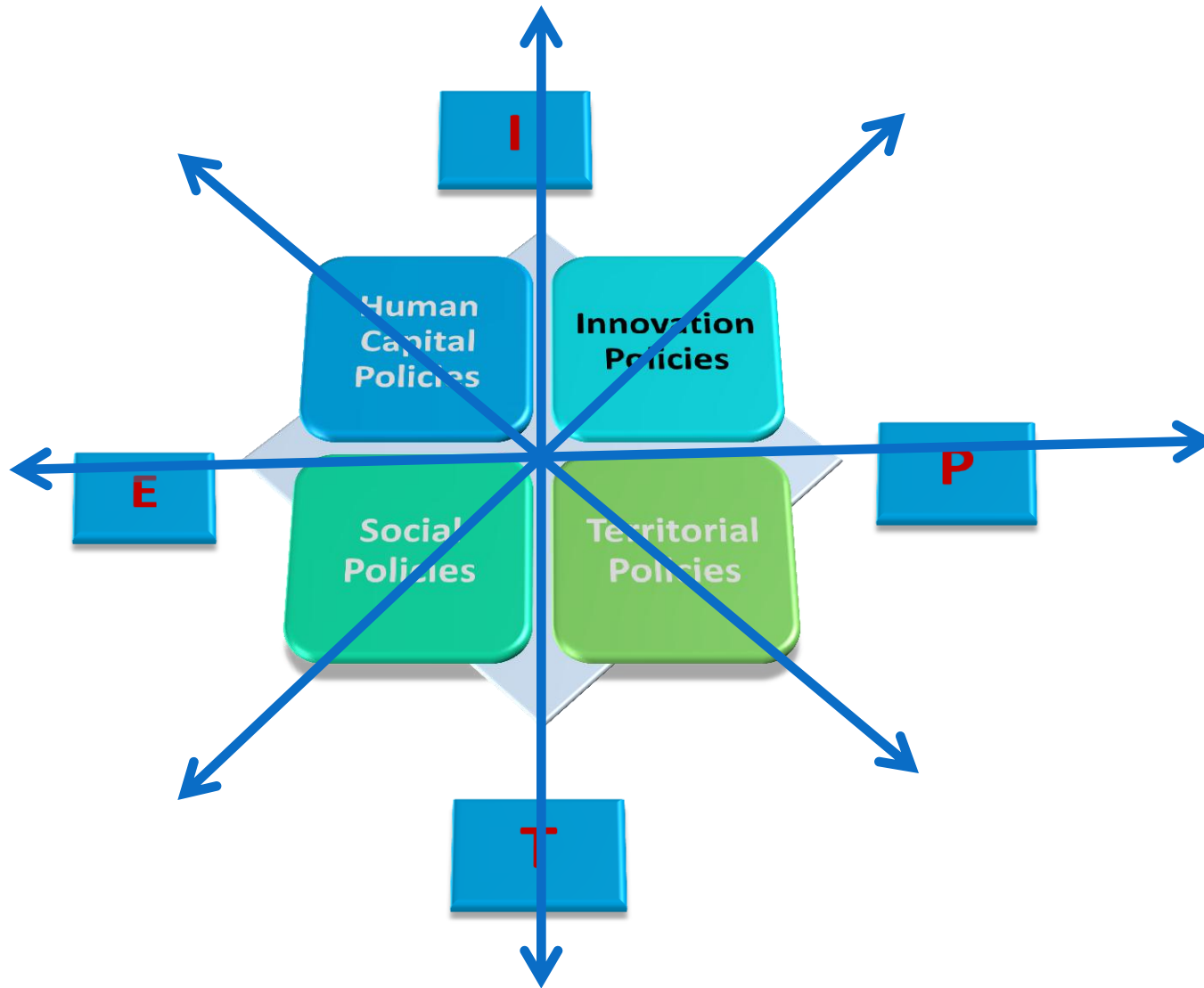
Policy making is a matter of complexity

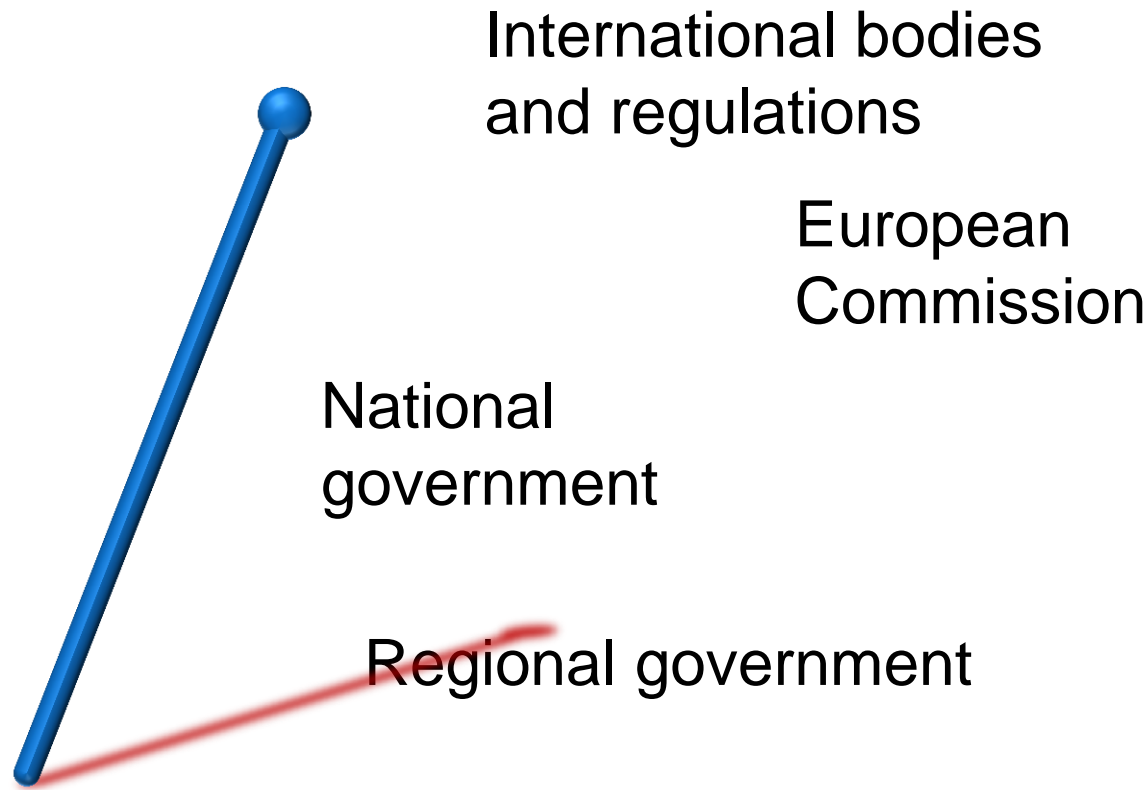


The state in the globalization era is a complex interaction of independent authorities



Whole-of-government approach





Consistency of actions among the different policy makers (“**all-the- governments” approach**)

- What is the proper lever for policy integration?
 - Regional/ macroregional
 - National
 - European
-
- The consistency issue in policy making:
Goals, governance, instruments

One strategy to raise the added value and the efficiency of the productive system is to provide infrastructure with a view to raise human and social capital



Two examples of systemic approach to industrial policy

- 1) ER technical education reform
June 2010 to June 2012
 - 2) The reconstruction of schools
after the May 2012 earthquake
May – November 2012
-

1. Education reform



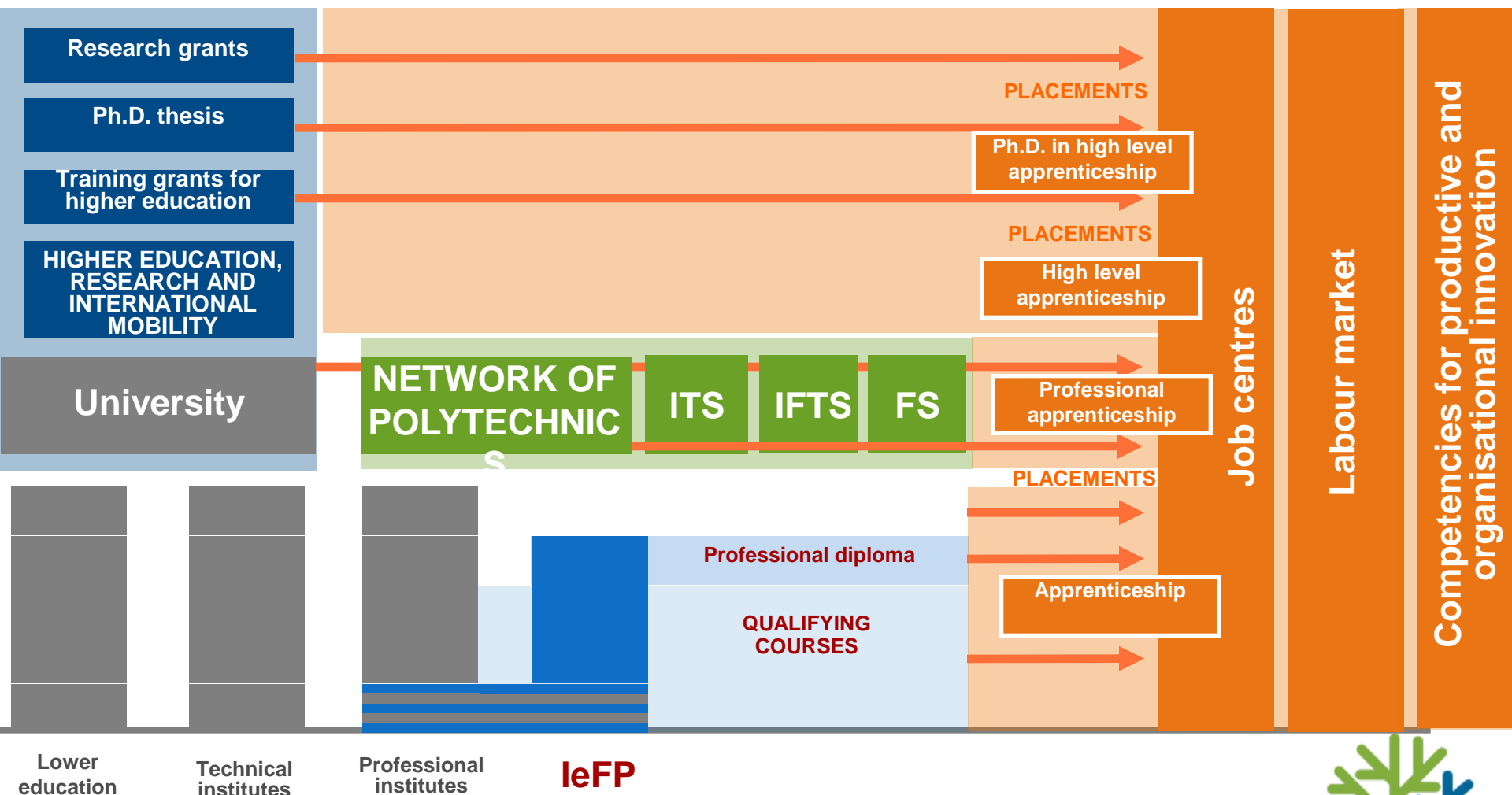
**Education and
professional
training**

**Polytechnics'
network**

**Higher education,
research and
international
mobility**

**Competencies
and labour**

Labour and competencies



Reconstruction of schools in the Emilia-Romagna Region after the 20-29 May 2012 earthquake

896 schools in need of control (building stability)

139 unusable schools

26 unusable schools for external causes

306 partially unusable

70,000 pupils in the whole earthquake territory

18,000 pupils in the unusable schools

5 months after the earthquake:

All pupils are at school

All the unusable schools have been rebuilt in prefabricated class A buildings

All damaged schools have been repaired by the municipalities

We have a new high tech lab in a traditional sector

All policies have converged: territory, education, welfare and innovation

Learning from reconstruction

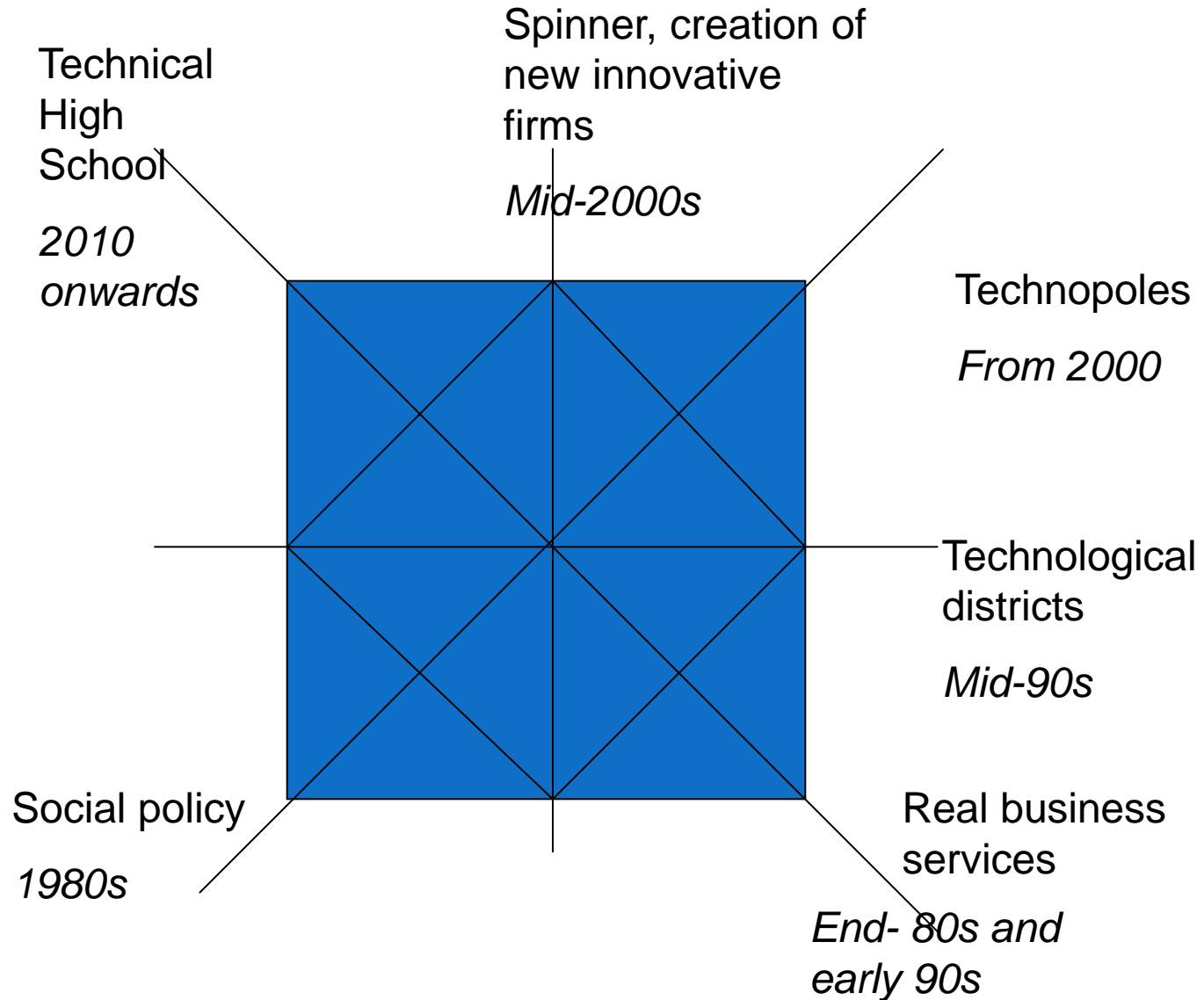
- the capacity of reaction to the external event is depending on the capacity of the local community to be solid and resilient
 - Enforcing entitlements of people to be properly educated stimulates capability for innovation and for rebuilding territorial capacities
-

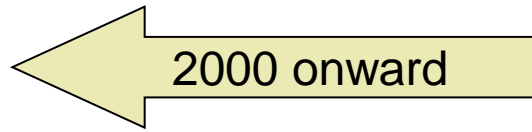
INDUSTRIAL POLICY IN THE EMILIA- ROMAGNA REGION: a long tradition

(Bianchi and Labory, Policy Studies, 2011)

- 1980s: ER is model of flexible specialisation, with industrial districts in traditional sectors
 - 2000s: ER is model of regional innovation system, innovative region
-

RER policies in practice





Technical High School

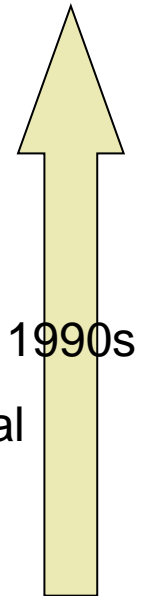
Spinner, creation of new innovative firms

2010 onwards

Mid-2000s

what social policy for a regional innovation system?

Technopoles
(2000-)

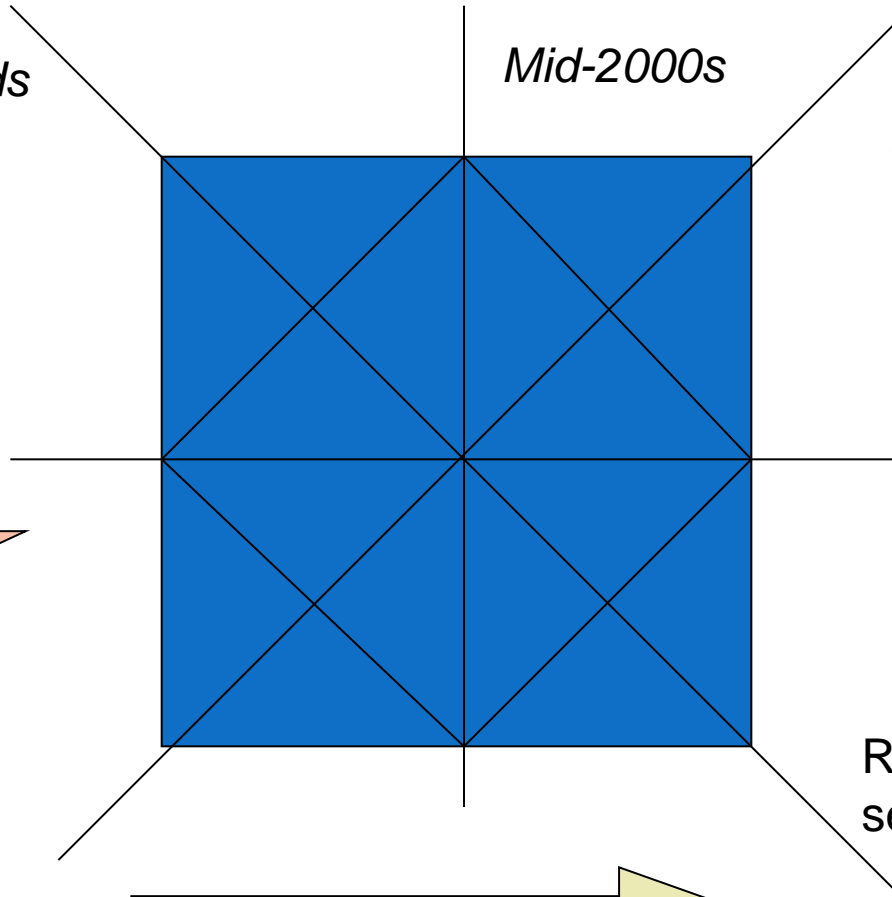
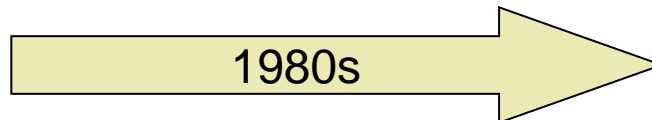


Technological districts
Mid-90s

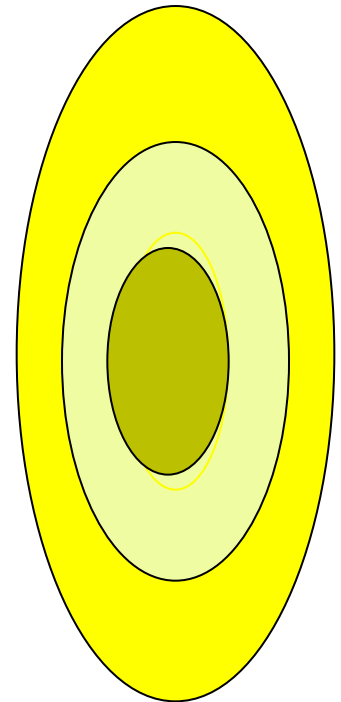
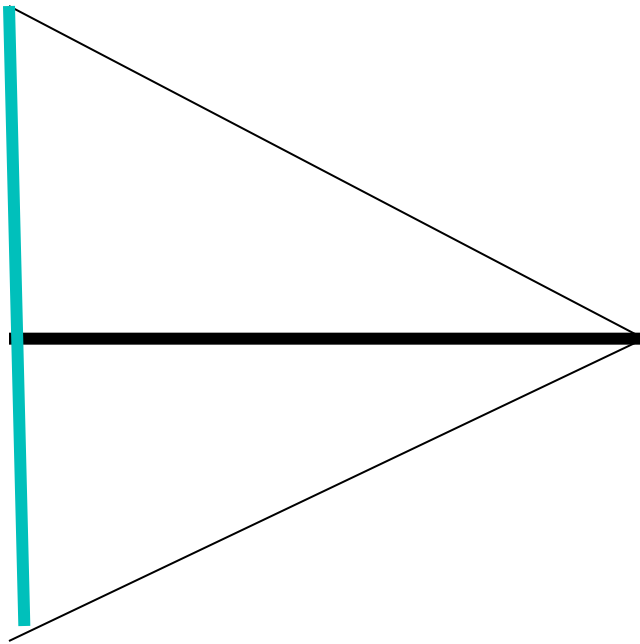
Social policy
1980s

Real business services

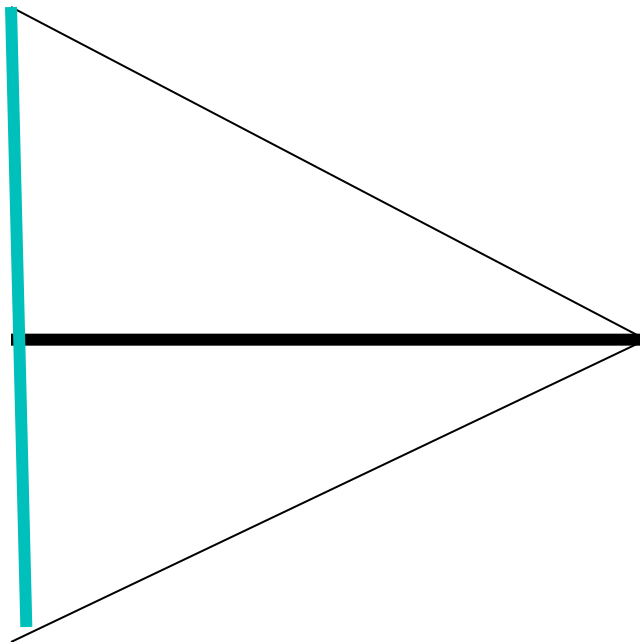
End- 80s and early 90s



What is the goal of policy making?



What is the goal?



growth

development

Social happiness

Rethinking industrial policies today means redefining the basic concepts of collective actions and putting them in a dynamic perspective

