

INTERNATIONAL BENCHMARKING FORUM 2009

The power to shape a region: Decentralisation of political decisions

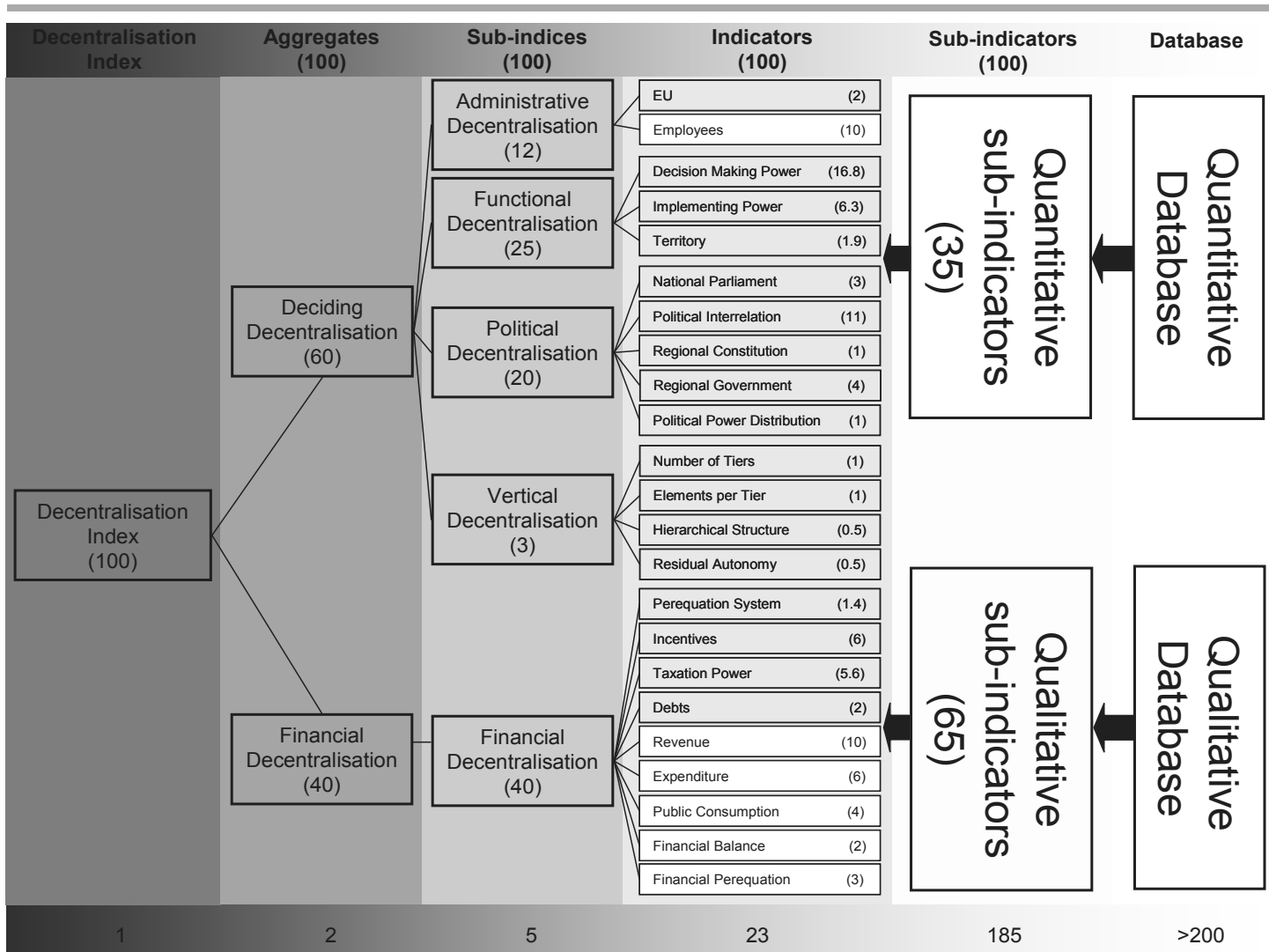
Basel, June 19, 2009

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Director BAKBASEL

Content

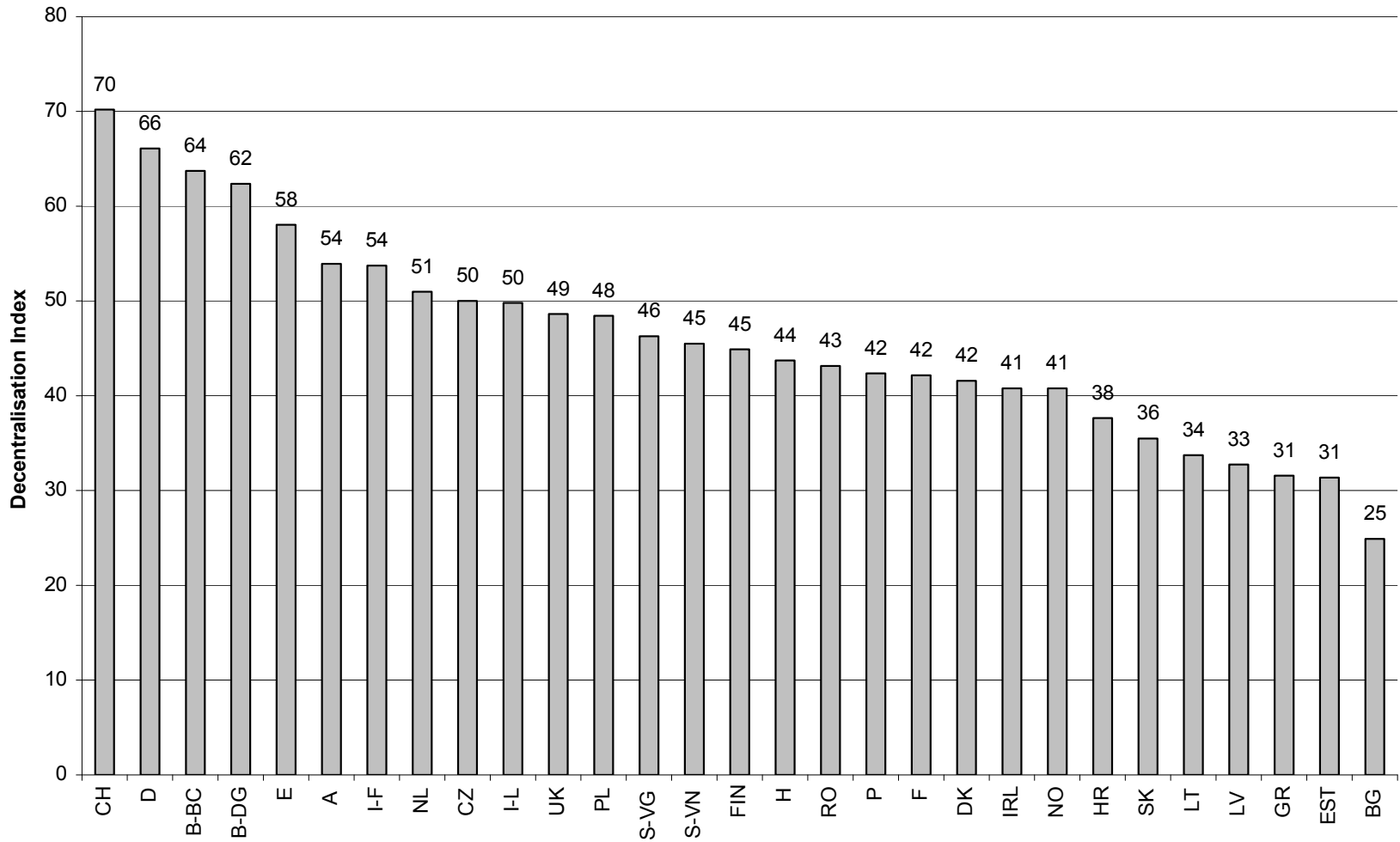
- **Aim of the project:**
Look for links between the degree of autonomy or decentralisation within a jurisdiction (territory, e.g. a region over which legal or other authority extends) and the jurisdiction's economic development.
- 1. How do we measure decentralisation?**
 - 2. What is the impact of decentralisation on economic performance?**
 - 3. What is the impact of decentralisation on innovation?**
 - 4. What have we learned?**

The Decentralisation Index Family



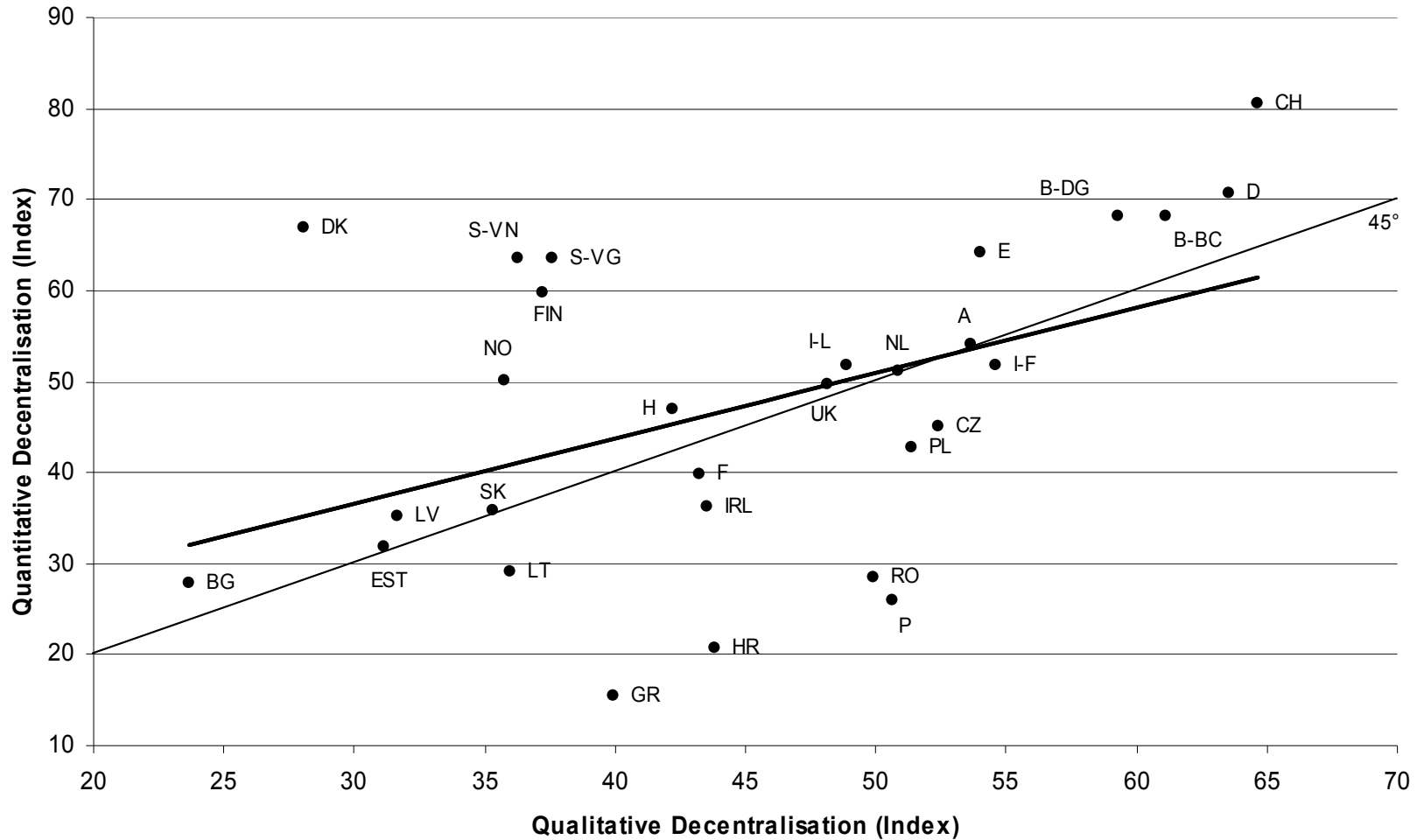
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The Decentralisation Index



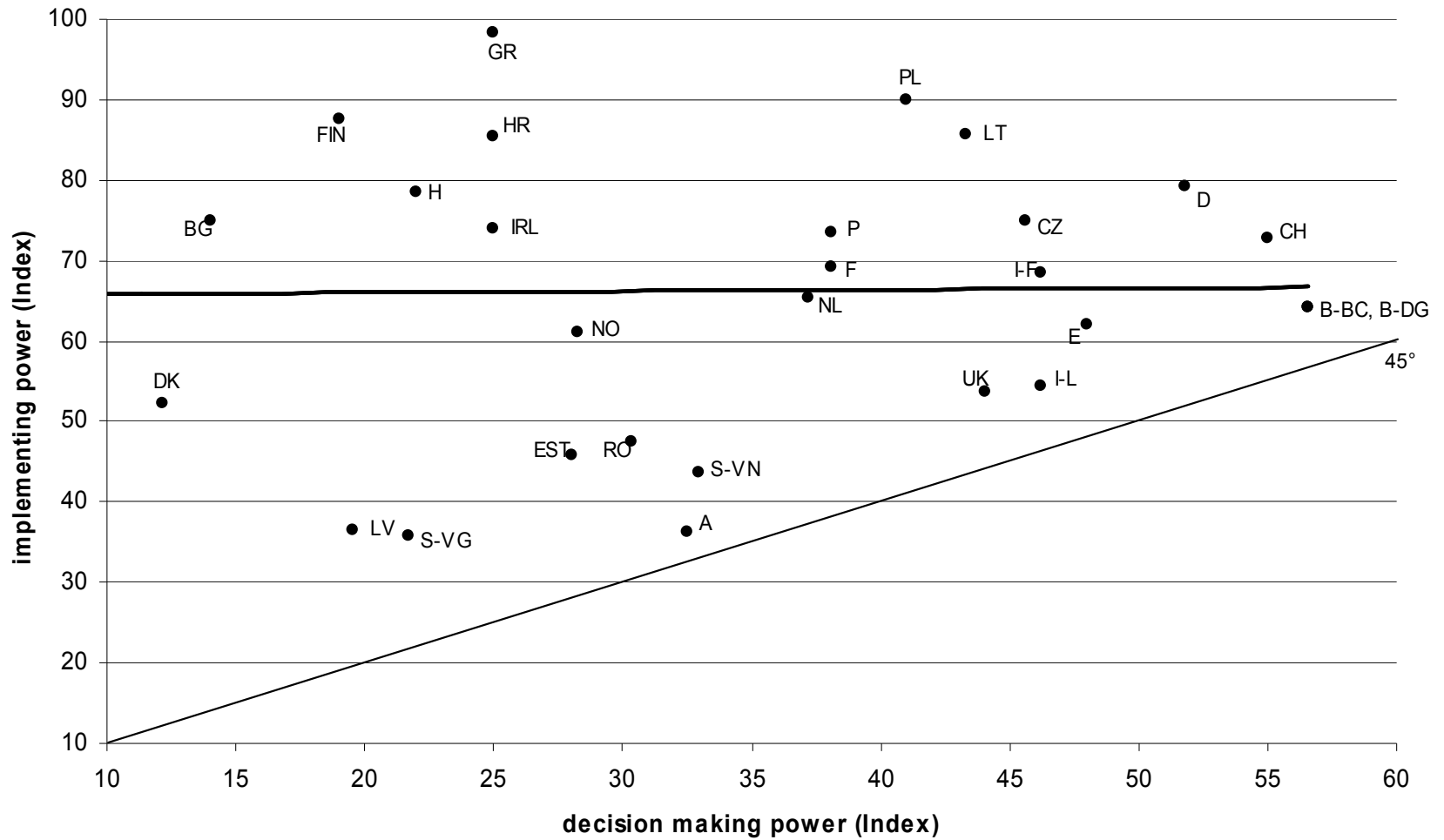
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Qualitative vs. Quantitative



Source: BAKBASEL

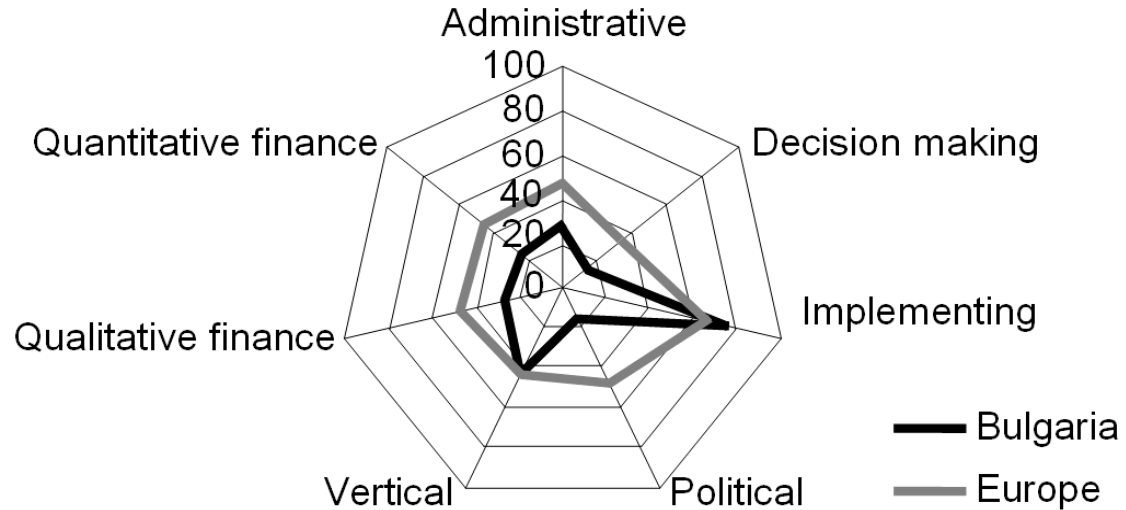
Implementing vs. Decision making



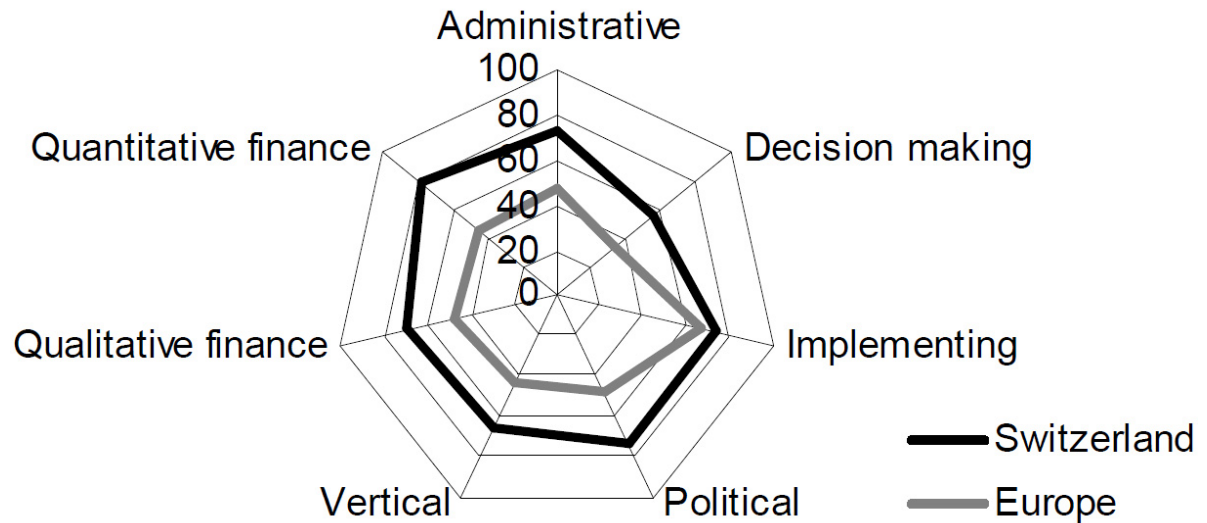
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An example: Bulgaria vs. Switzerland

Bălgarija



**Schweiz
Suisse
Svizzera**



Source: BAKBASEL

2. What is the impact of decentralisation on economic performance?

Why should there be an impact?

Two transmission channels

- **Effectiveness:**
Lower tiers are better able to do the right things.
- **Efficiency:**
Lower tiers are better able to do the things right.

This will result in higher welfare.

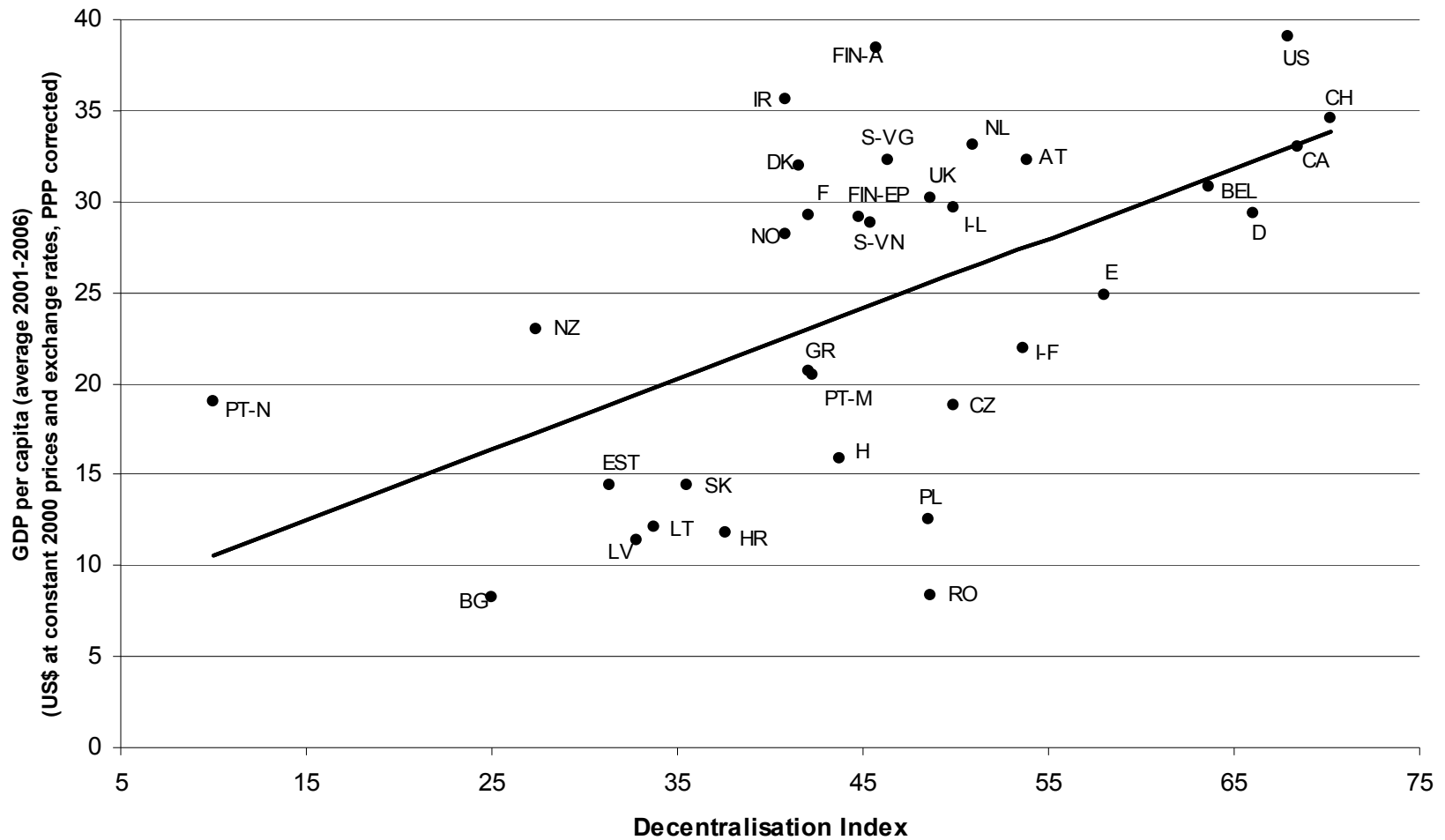
Trade off between centralisation and decentralisation

indicators for de-/centralisation	power and competences	
	decentral	central
preferences (spatial)	heterogeneous	homogeneous
spatial externalities	negligible	substantial
economies of scale	none / low	relevant / high

Source: BAKBASEL



Decentralisation and GDP per capita



Source: BAKBASEL

Regression results for GDP per capita

Dependent variable: GDP per capita (average 2001 to 2006)	Total	Quantitative Decentralisation	Qualitative Decentralisation
country data set	0.24662 ***	0.18510 ***	0.24208 ***
regional data set	0.09459 ***	0.04927 **	0.10115 ***

** , *** respectively means statistical significance on the 5 and 1 percent error level.

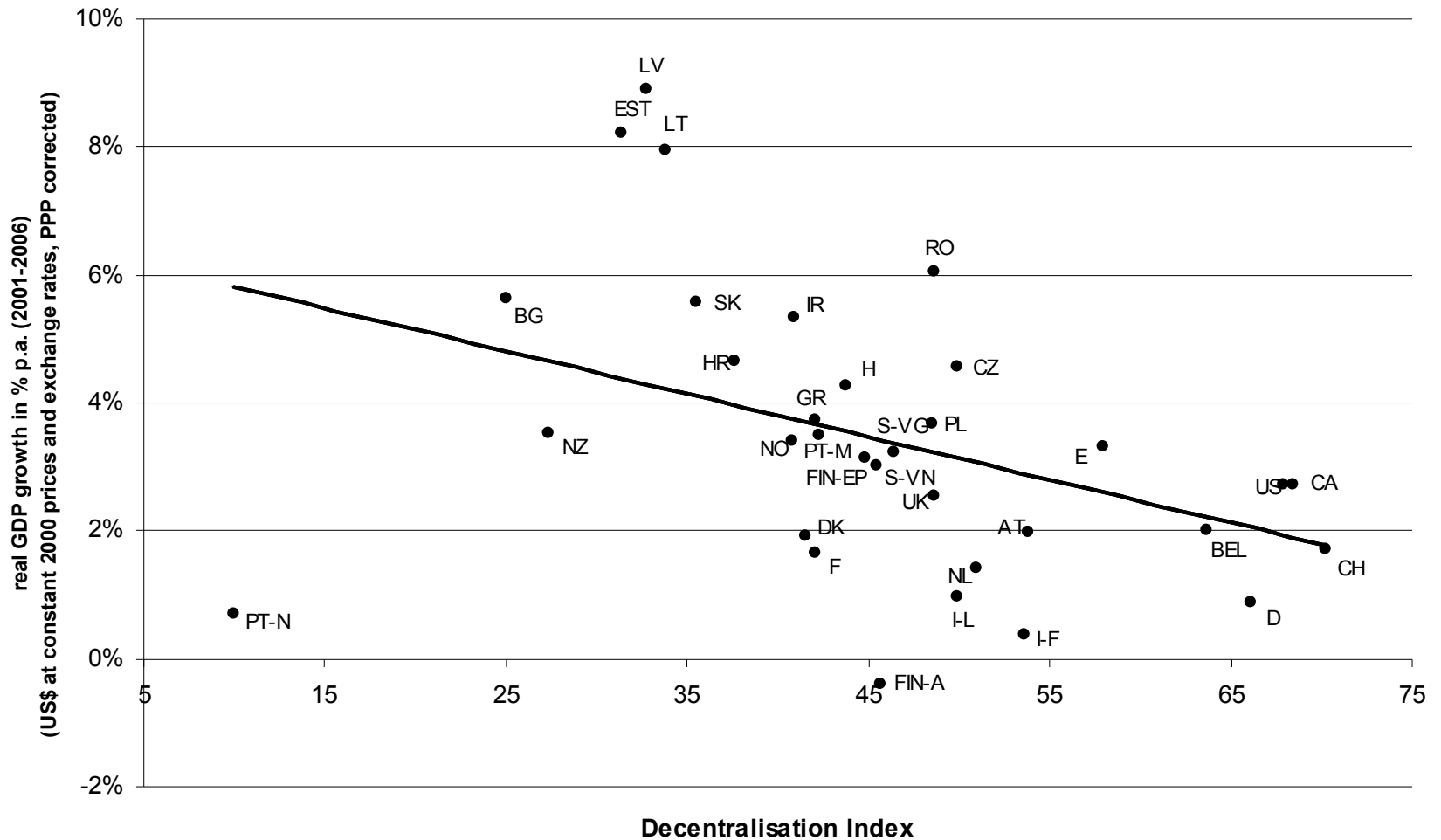
Control variables used:

Country data set: regulation of product markets, high tech patents per capita

Regional data set: regulation of product markets, company taxation, publications per capita, Shanghai index points per capita, industry structure, dummy for capital cities

Source: BAKBASEL

Decentralisation and GDP growth



Source: BAKBASEL

Regression results for GDP growth

Dependent variable: GDP growth (average 2001 to 2006)	Total	Quantitative Decentralisation	Qualitative Decentralisation
country data set	0.00196 **	0.00122 **	0.00283 **
regional data set	0.00182 ***	0.00102 ***	0.00272 ***

** , *** respectively means statistical significance on the 5 and 1 percent error level.

Control variables used:

Country data set: regulation of product markets, Shanghai index points per capita, share of tertiary educated in the labour force, GDP per capita level 2001

Regional data set: company taxation, manpower taxation, Shanghai index points per capita, change in industry structure, GDP per capita level in 2001

In addition a quadratic term of the decentralisation variable was used, which was significantly negative in all six equations.

Source: BAKBASEL

Which parts of decentralisation are of special relevance?

- **Qualitative decentralisation (primarily competences) is at least as relevant as quantitative decentralisation (primarily money)**
- **Having the decision making power is more relevant than having the task of implementation**
- **Most relevant single aspects:**
 - **strong regional impact on the national legislation process**
 - **the presence of a regional constitution**
 - **high independence from the national authorities**
- **Most relevant policy fields (decision making power):**
 - **Infrastructure**
 - **Recreation & Culture**
 - **Education & Research**

3. What is the impact of decentralisation on economic innovation?

- **Innovation is the application of ideas and/or knowledge to increase productivity.**

indicators for de-/centralisation	power and competences	
	decentral	central
preferences (spatial)	heterogeneous	homogeneous
spatial externalities	negligible	substantial
economies of scale	none / low	relevant / high

Why should there be an impact?

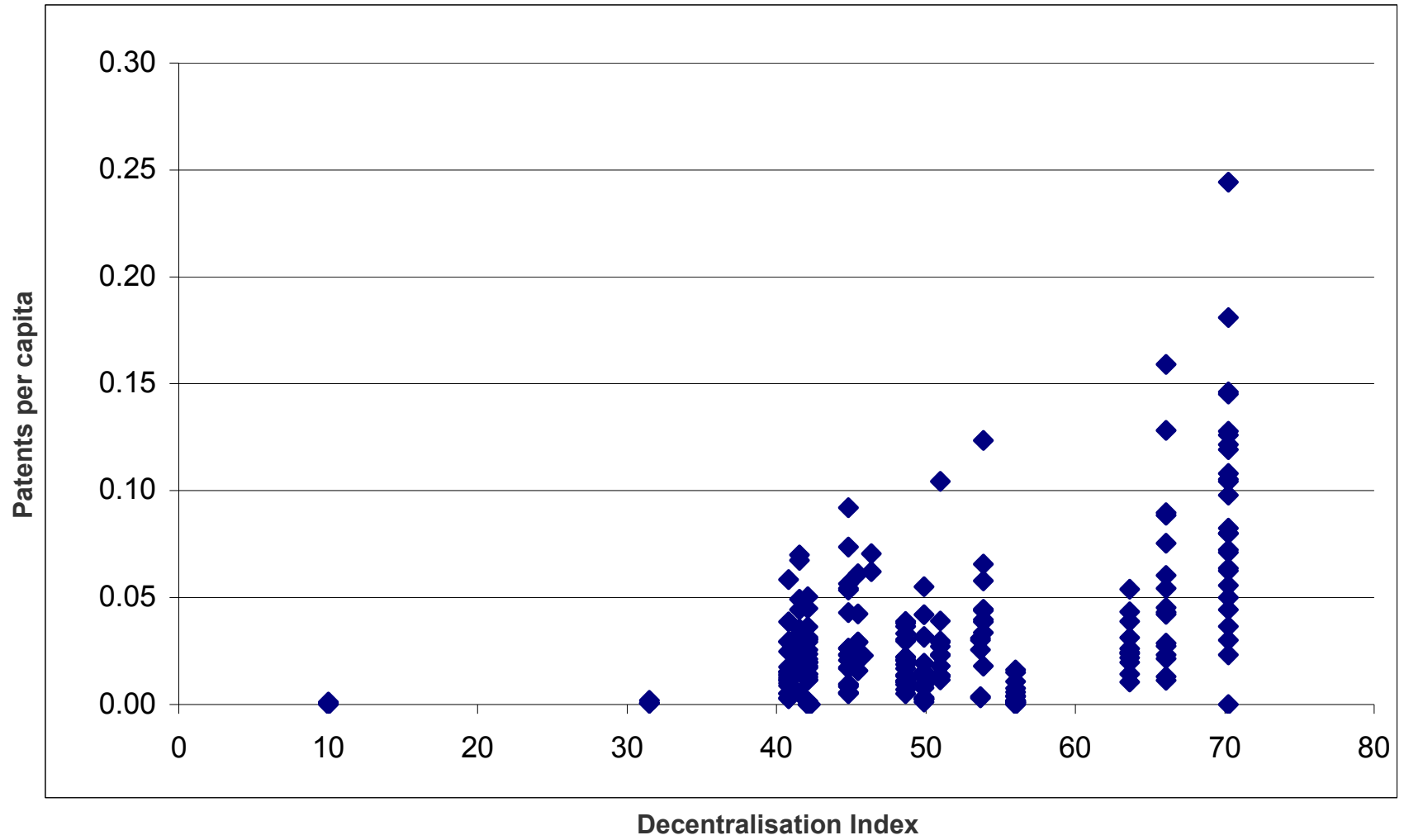
- **Two transmission channels**

- 1. Effectiveness**
- 2. Efficiency**

- **Two competing ideas**

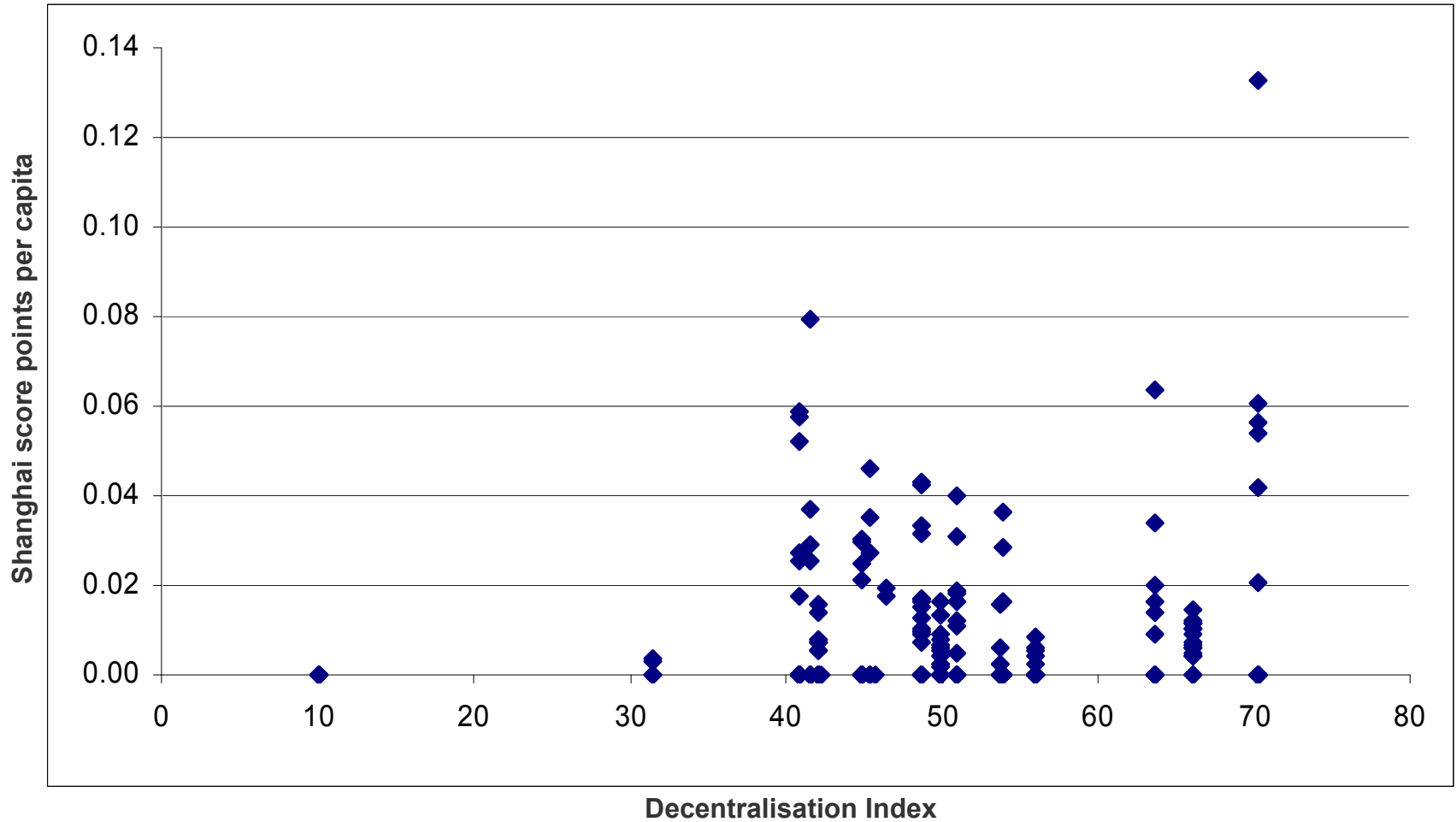
- 1. Concentration**
- 2. Specialisation**

Decentralisation vs. Patents



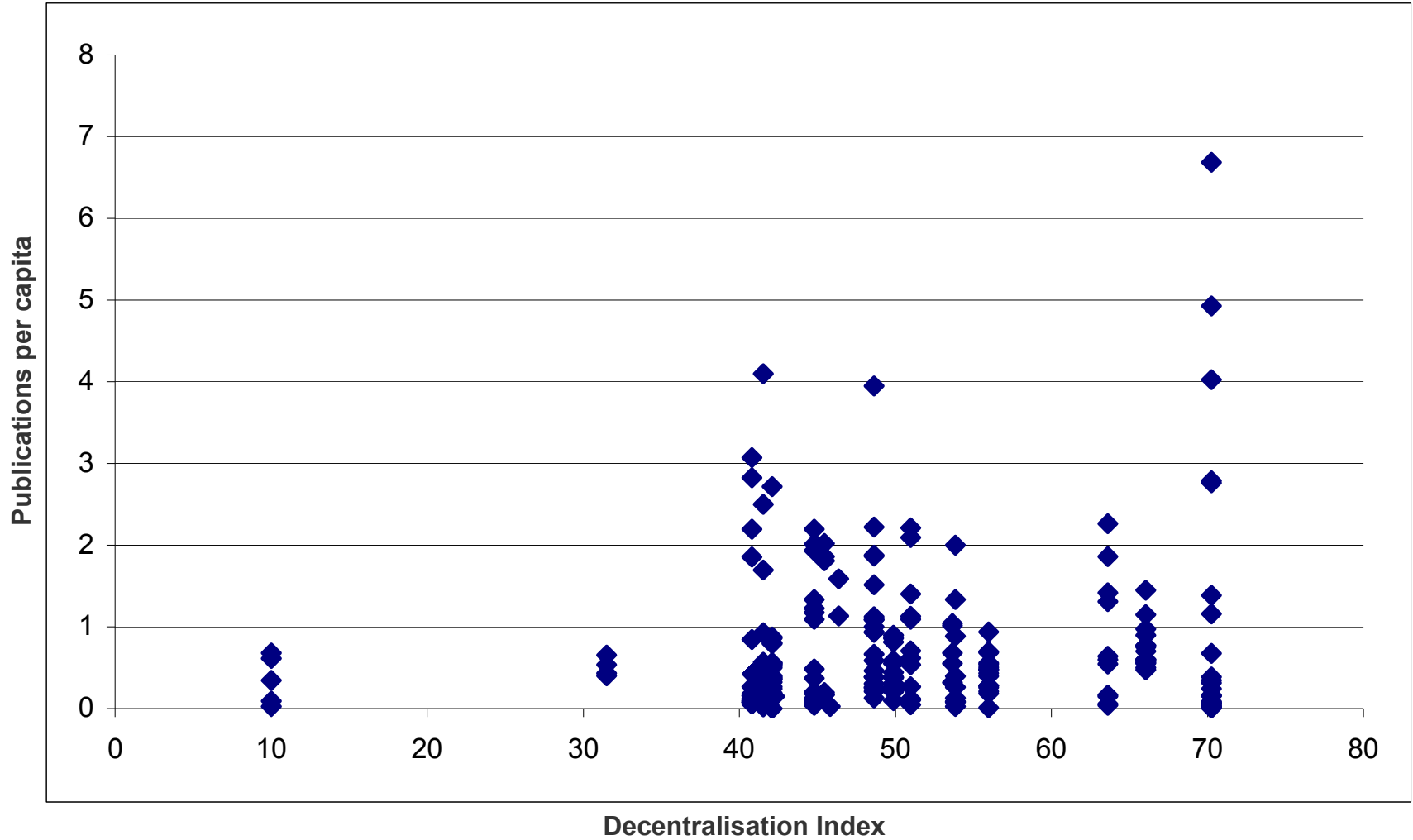
Source: BAKBASEL

Decentralisation vs. Shanghai Index



Source: BAKBASEL

Decentralisation vs. Publications



Regression results for innovation

Dependent variable:	Total	Quantitative Decentralisation	Qualitative Decentralisation
Patent density	0.00111 ***	0.00086 ***	0.00084 ***
Shanghai score density	0.00012 *	0.00006	0.00013 **
Publication density	-0.01464 ***	-0.01116 **	-0.01125***

Regional data set

*, **, *** respectively means statistical significance on the 10, 5 and 1 percent error level.

Control variables used:

Patent equation: Shanghai index points per capita, publications per capita, company taxation, continental accessibility, GDP per capita level 2001-2006

Shanghai equation: patents per capita, publications per capita, industry structure, company taxation, GDP per capita level 2001-2006

Publication equation: Shanghai index points per capita, patents per capita, company taxation, GDP per capita level 2001-2006

Source: BAKBASEL

Interpretation

- **Decentralisation matters**
- **There is a strong positive impact of decentralisation on patents (specialisation on applied research)**
- **There is a strong negative impact of decentralisation on publications (concentration on theoretical research)**
- **There is a weak positive impact of decentralisation on the quality of universities (primarily from quantitative decentralisation)**
- **The most relevant aspect is financial decentralisation**
- **The most relevant policy field is Education & Research**
- **Decentralised regions have a higher innovation capacity**

4. What have we learned? Summary results

	Country data set (33)	Regional data set (234)
GDP per capita	+++	+++
GDP growth	++	+++
Patent density		+++
Shanghai score points density		+
Publication density		---

+, ++, +++ respectively means positive statistical significance on the 10, 5, 1 percent error level.

--- means negative statistical significance on the 1 percent error level.

4. What have we learned?

- **Do regions with more competences develop better than others?
Are countries with a higher degree of decentralisation economically more successful than centrally governed countries?
The answer is YES.**
- **Theory: Decentralisation increases both efficiency and effectiveness.**
- **Empirical results: Decentralisation increases economic performance (both GDP per capita and GDP growth).**
- **Decentralisation also increases the quality of universities and the research output of applied research (which is essential for long term growth).**

Political conclusions

- **Regions with more competences develop better than others.**
- **Countries with a higher degree of decentralisation are economically more successful than centrally governed countries.**
- **Giving more competences to sub-national tiers fosters the economy.**
- **Most relevant aspects for the regions:**
 - **More influence of the regions on the national level**
 - **More independence of the regions from the national level**
 - **More financial competences and resources for the regions**
 - **More competences in (1) recreation and culture, (2) infrastructure, (3) education and research, and (4) health care.**
- **The application of the subsidiarity principle is a key to economic success.**