



DYNREG



CITIZENS AND GOVERNANCE IN A
KNOWLEDGE-BASED SOCIETY

**Dynamic Regions in a Knowledge-Driven Global Economy:
Lessons and Implications for the European Union - DYNREG**

Final Conference

Brussels, 27 November 2008

**On the dynamics of economic growth:
An expert survey**

George Petrakos, University of Thessaly

Introduction

Research in context

- increasing attention to determinants of economic growth
- no widely accepted theory
- many empirical studies but findings are not conclusive

Current research

Draws on a **questionnaire survey** addressed to various experts (academics, policy makers, business people) to explore their views on the **factors underling economic growth** and economic dynamism

Structure of presentation

1. Theoretical background
2. Instrument design and survey characteristics
3. Analysis and discussion
4. Conclusions

Theoretical perspectives

1. Competing theories and schools of growth
 1. Mainstream vs. Heterodox
 2. Traditional vs. New theories
 3. Pro-active vs. market based
2. Areas of debate include the role / impact of:
 1. Competition / markets
 2. State / intervention / policies
 3. Integration / openness
 4. Geography / accessibility / size
 5. Technology / innovation
 6. Specialization / diversification / structural change
 7. Institutions / cultural factors
 8. Critical scale of activities / initial conditions

Survey instrument and design

Instrument: 5-part questionnaire

1. Definitions and instructions
2. Identify global areas with economic growth potential
3. Factors that support or inhibit economic dynamism
4. Combination of opposite characteristics best promoting growth
5. Evaluation of theoretical backgrounds and research methods
6. Information on respondents

Sample

- DYNREG consortium
 - 10 partners in 9 countries
 - 3 groups: academics (10), policy makers (10), business people (10)
- 46th Congress of European Regional Science Association (ERSA 2006)
- 20th World Congress of Regional Science Association International (RSAI 2008)
- e-questionnaire

The identity of the questionnaire sample

Total Questionnaires: 472

Sample's average age: 38 years

Gender:

Male	340 (72%)
Female	124 (26%)
N/A	8 (2%)

Education:

Less than 12 years	1(0%)
High school	14 (3%)
University/College	100 (21%)
Postgraduate	183 (39%)
Ph.D.	167 (35%)
N/A	7 (1%)

Occupation:

Public sector	129 (27%)
Private sector	170 (36%)
Academia	155 (33%)
N/A	18 (4%)

Expected to exhibit economic dynamism in next 15 years

<i>Rank</i>	<i>Countries/ Regions</i>	<i>%</i>
1	China	87.92
2	India	72.46
3	EU New Member States	45.13
4	South-East Asia	40.89
5	Russia	35.81
6	North America	33.90
7	European core	27.75
8	South America	26.91
9	Eastern and South-Eastern Europe	26.91
10	Japan	14.41
11	Central Asia	8.47
12	Middle East	7.84
13	EU South	7.63
14	South Africa	7.20
15	Central America	6.57
16	Oceania	5.72
17	North Africa	4.87
18	East Africa	1.91
19	West Africa	1.48
20	Central Africa	1.06

No statistically significant differences among the 3 groups of experts are found

Most significant drivers of economic dynamism

Rank	Factors	%
1	High quality of human capital	58.67
2	High technology, innovation, R&D	49.58
3	Stable political environment	41.31
4	Secure formal institutions (legal system, property rights)	37.50
5	Good infrastructure	36.44
6	High degree of openness	34.75
7	Capacity for adjustment	33.05
8	Specialization in knowledge and capital intensive sectors	26.91
9	Significant Foreign Direct Investment	23.73
10	Free market economy (low state intervention)	22.46

No statistically significant differences among the 3 groups of experts are found

Most significant obstacles to economic dynamism

Rank	Obstacles	%
1	Unstable political environment	56.99
2	Low quality of human capital	54.03
3	Insecure formal institutions (legal system, property rights)	47.25
4	High levels of public bureaucracy	39.62
5	Low technology, innovation, R&D	38.98
6	Inadequate infrastructure	37.50
7	Low degree of openness	34.53
8	Poor macroeconomic management	33.47
9	High degree of state intervention	24.79
10	Low Foreign Direct Investment	19.07

No statistically significant differences among the 3 groups of experts are found

The degree of influence of specific factors

<i>Factors</i>	<i>Developed economies</i>	<i>Developing economies</i>	<i>Difference</i>
<i>Statistically significant differences among the 3 groups of experts (*)</i>			
<i>Statistically significant differences between Developed and developing countries (*)</i>			
High quality of human capital (*)	7.93	6.15	1.78
High technology, innovation, R&D (*)	7.91	5.42	2.49
Specialization in knowledge and capital intensive sectors (*)	7.34	4.90	2.44
Good infrastructure (*)	7.19	6.46	0.73
Secure formal institutions (legal system, property rights)	6.96	6.93	0.03
High degree of openness to trade (*)	6.92	6.11	0.81
Capacity for adjustment (flexibility) (*) (*)	6.61	6.05	0.56
Stable political environment (*)	6.49	7.05	-0.56
Free market economy (low state intervention) (*)	6.33	5.50	0.83
Robust macroeconomic management	6.13	6.20	-0.07
Low levels of public bureaucracy (*)	6.09	6.10	-0.01
Capacity for collective action (political pluralism and participation) (*)	5.63	5.02	0.61
Strong informal institutions (culture, social relations, ethics, religion)	5.41	5.55	-0.14
Significant urban agglomerations (population and economic activities)	5.40	5.52	-0.12
Significant Foreign Direct Investment (*) (*)	5.27	6.95	-1.68
Favourable demographic conditions (*)	5.11	5.78	-0.67
Rich natural resources (*)	3.85	6.35	-2.50
Favourable geography (location, climate) (*)	3.68	5.78	-2.10
Random factors (e.g. unpredictable shocks) (*)	3.56	4.50	-0.94

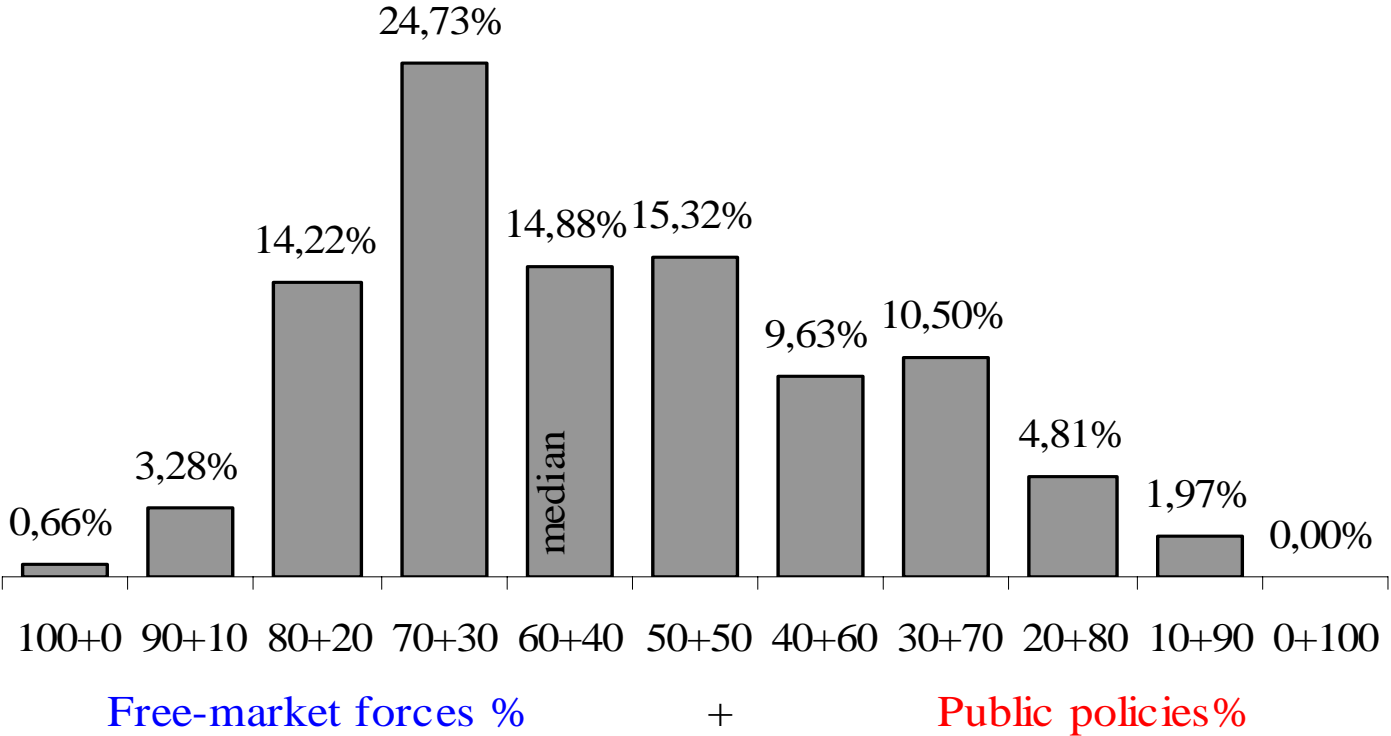
Top-10 factors advancing dynamism

rank	Developed economies	Developing economies
1	<i>High quality of human capital (7.93)</i>	<i>Stable political environment (7.05)</i>
2	<i>High technology, innovation, R&D (7.91)</i>	<i>Significant FDI (6.95)</i>
3	<i>Specialization in knowledge int. sectors (7.34)</i>	<i>Secure formal institutions (6.93)</i>
4	<i>Good infrastructure (7.19)</i>	<i>Good infrastructure (6.46)</i>
5	<i>Secure formal institutions (6.96)</i>	<i>Rich natural resources (6.35)</i>
6	<i>High degree of openness to trade (6.92)</i>	<i>Robust macroecon. management (6.20)</i>
7	<i>Capacity for adjustment (6.61)</i>	<i>High quality of human capital (6.15)</i>
8	<i>Stable political environment (6.49)</i>	<i>High degree of openness to trade (6.11)</i>
9	<i>Free market economy (6.33)</i>	<i>Low levels of public bureaucracy (6.10)</i>
10	<i>Robust macroeconomic management (6.13)</i>	<i>Capacity for adjustment (6.05)</i>

Combination of characteristics best contributing to economic dynamism

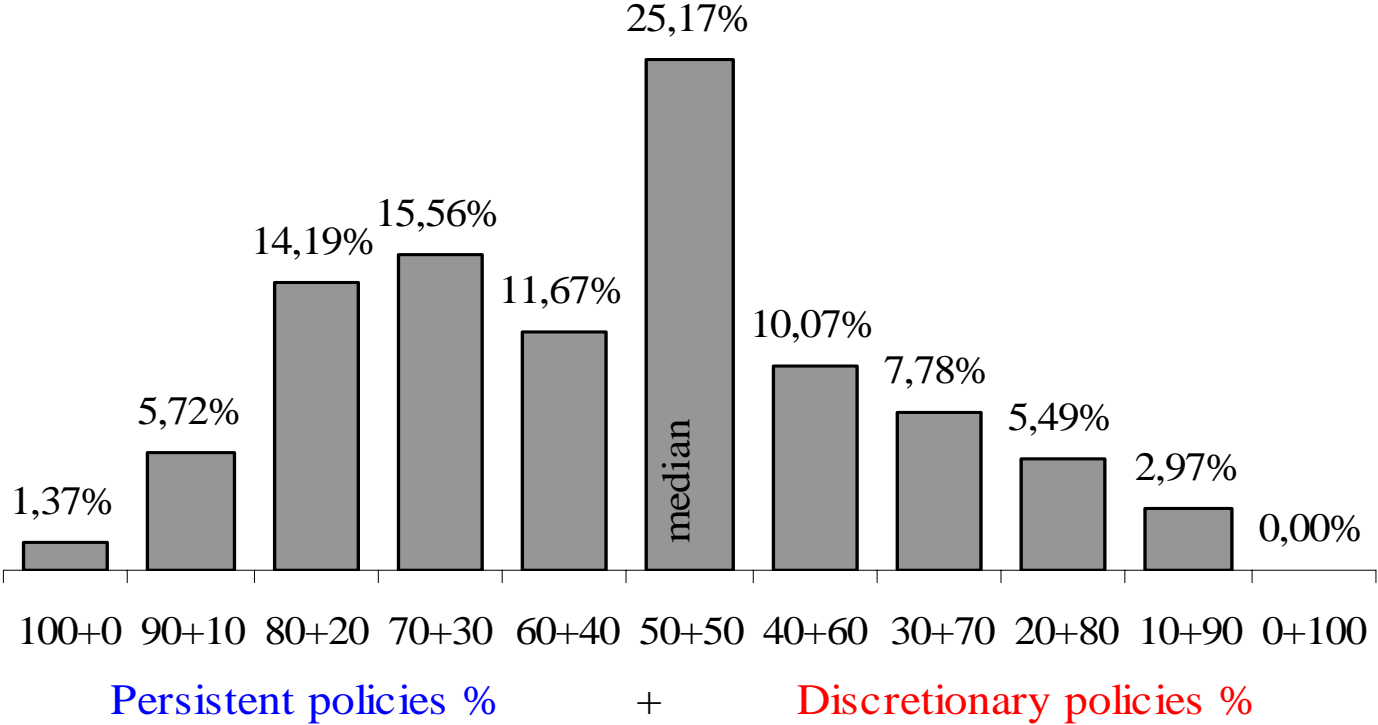
	100+0	90+10	80+20	70+30	60+40	50+50	40+60	30+70	20+80	10+90	0+100	
Free-market forces	0,66%	3,28%	14,22%	24,73%	14,88%	15,32%	9,63%	10,50%	4,81%	1,97%	0,00%	<i>Public policies</i>
Persistent policies	1,37%	5,72%	14,19%	15,56%	11,67%	25,17%	10,07%	7,78%	5,49%	2,97%	0,00%	<i>Discretionary</i>
Cooperation	1,11%	5,09%	7,96%	9,51%	11,06%	27,43%	11,06%	14,38%	9,07%	3,32%	0,00%	<i>Competition</i>
Formal institutions	1,10%	5,51%	12,56%	13,66%	14,54%	20,48%	9,47%	9,25%	8,81%	4,41%	0,22%	<i>Informal arrangem.</i>
Specialisation	0,66%	3,51%	9,87%	14,04%	12,50%	27,19%	8,99%	13,16%	8,55%	1,54%	0,00%	<i>Sectoral diversity</i>
Exogenous forces	0,23%	4,58%	7,55%	9,61%	11,67%	26,09%	13,04%	14,65%	8,92%	3,66%	0,00%	<i>Endogenous qual.</i>
Open economy	10,05%	22,60%	18,49%	13,24%	3,42%	6,85%	2,97%	4,79%	8,22%	8,68%	0,00%	<i>Closed economy</i>
P S centralisation	0,44%	6,59%	9,67%	10,55%	9,01%	21,98%	9,01%	13,41%	13,41%	5,27%	0,66%	<i>PS decentralisation</i>
Stability	0,65%	5,23%	9,15%	8,06%	7,63%	22,44%	13,94%	17,65%	9,59%	4,36%	1,31%	<i>Flexibility</i>
Polycentric system	1,10%	6,40%	12,14%	13,91%	13,02%	27,37%	9,27%	8,17%	6,62%	1,55%	0,44%	<i>Metropolitan dom.</i>
Social cohesion	6,09%	11,30%	12,83%	16,74%	7,39%	13,48%	5,65%	5,87%	7,39%	6,74%	6,52%	<i>Social inequality</i>

Combination of seemingly opposite characteristics that best promote growth

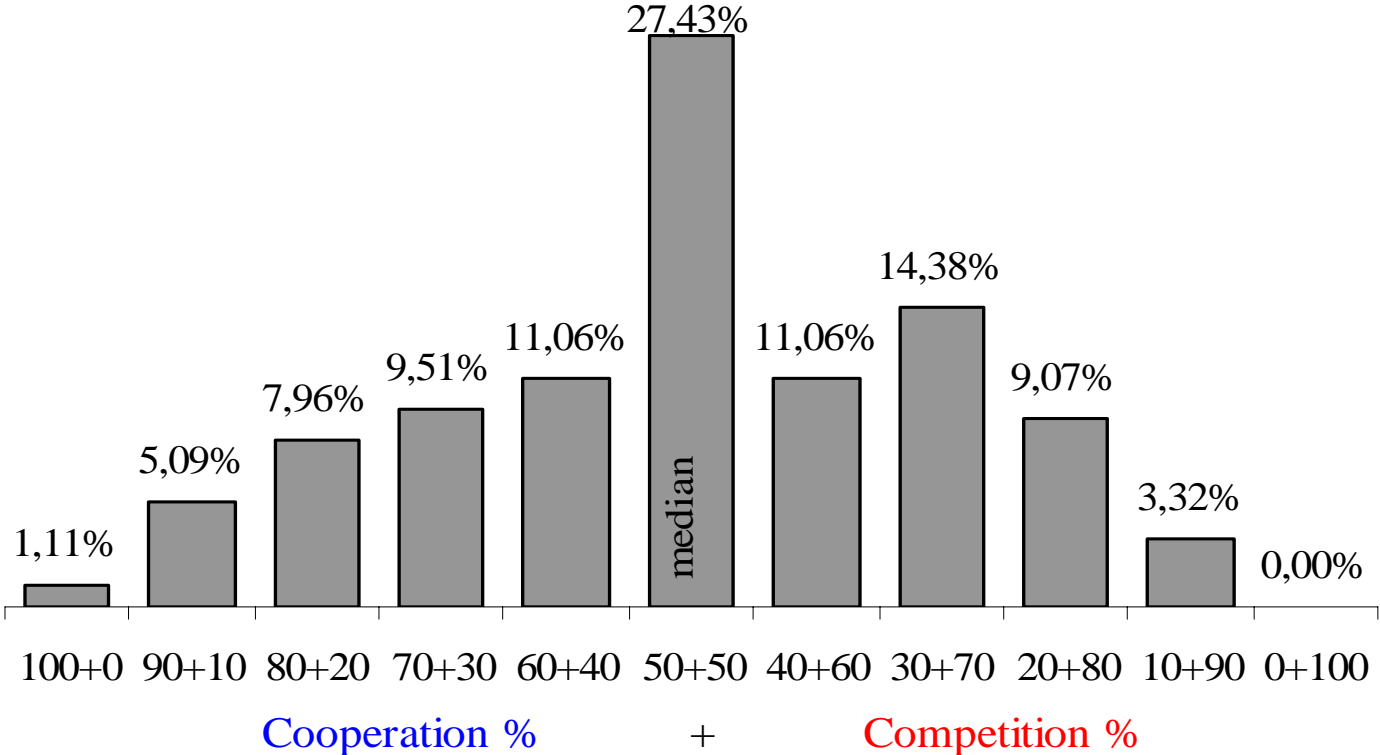


Statistically significant differences among the 3 groups of experts

Combination of seemingly opposite characteristics that best promote growth

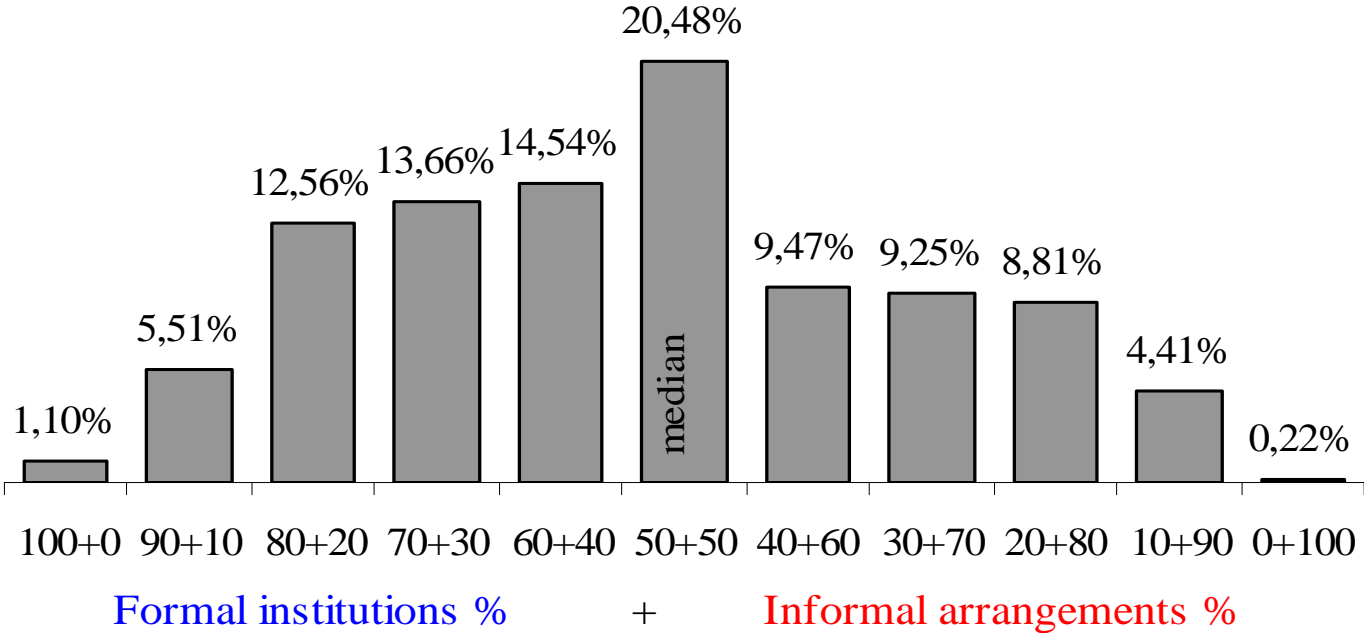


Combination of seemingly opposite characteristics that best promote growth

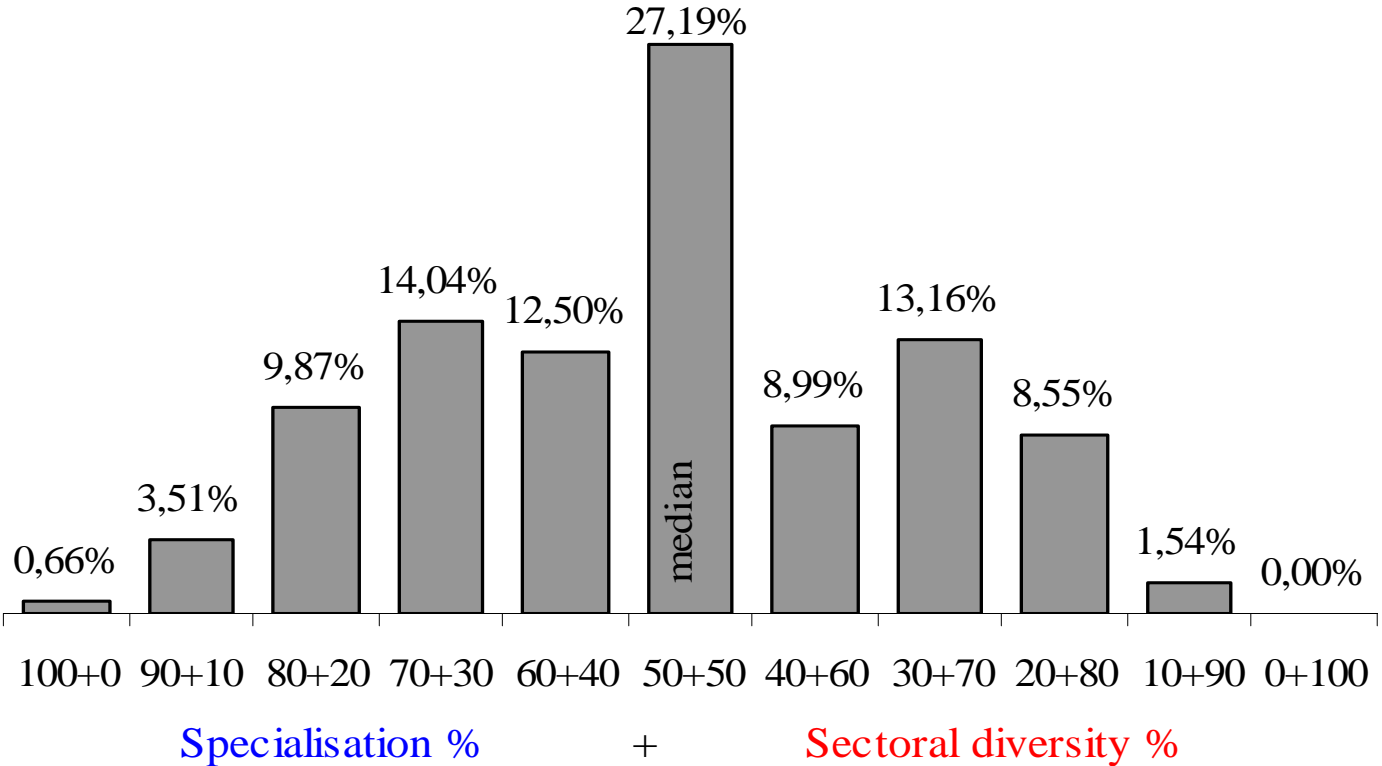


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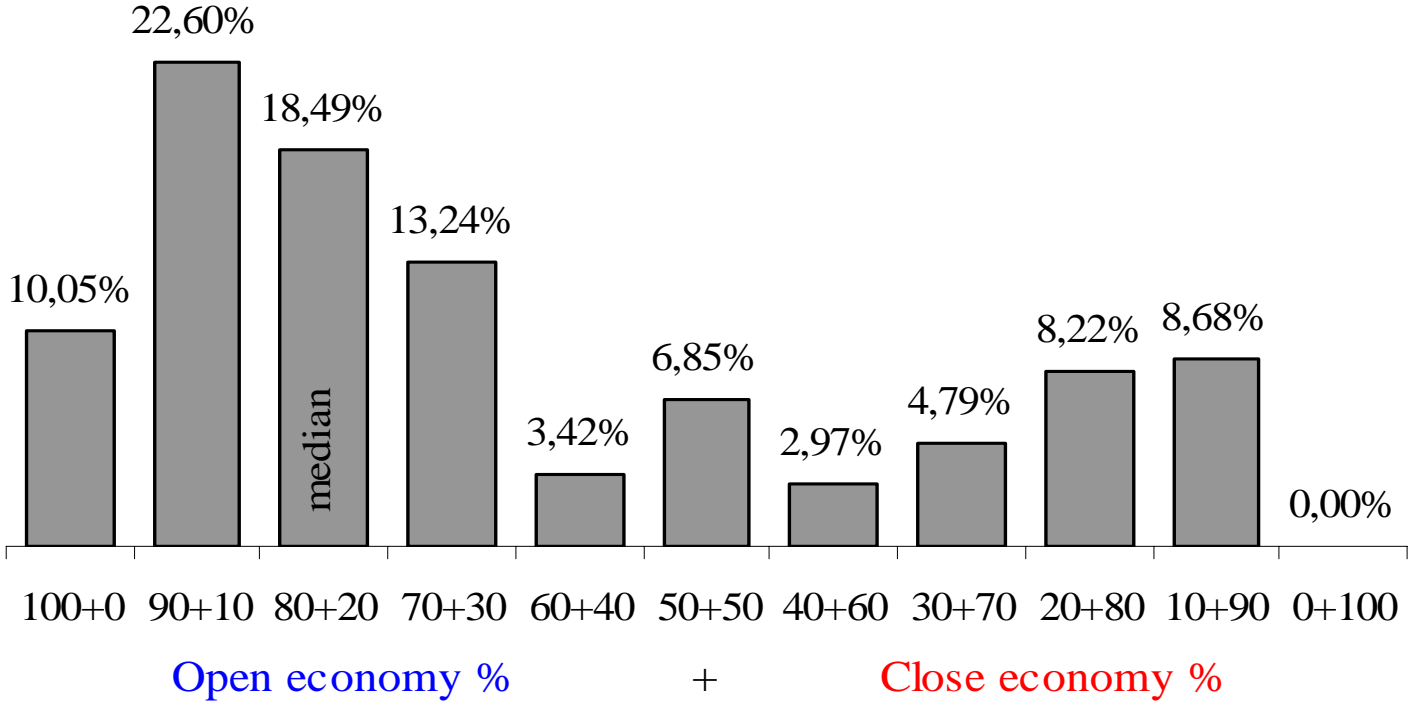
Combination of seemingly opposite characteristics that best promote growth



Combination of seemingly opposite characteristics that best promote growth

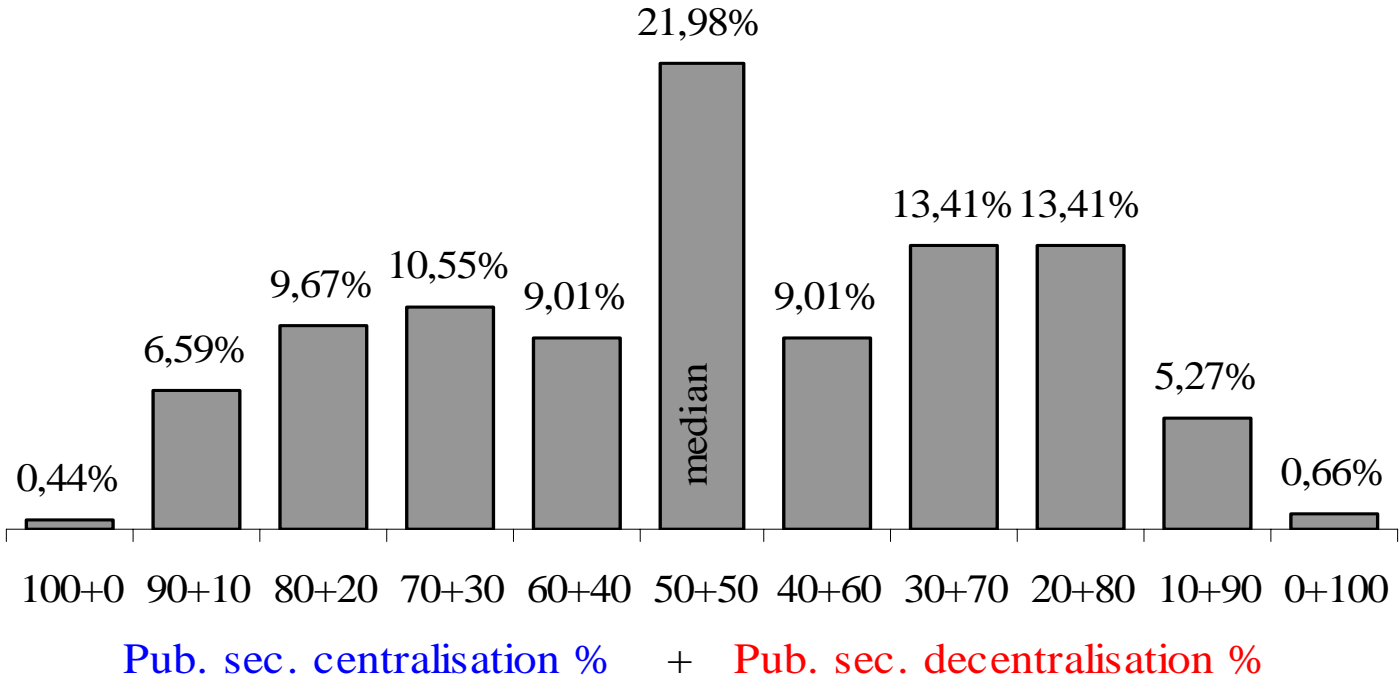


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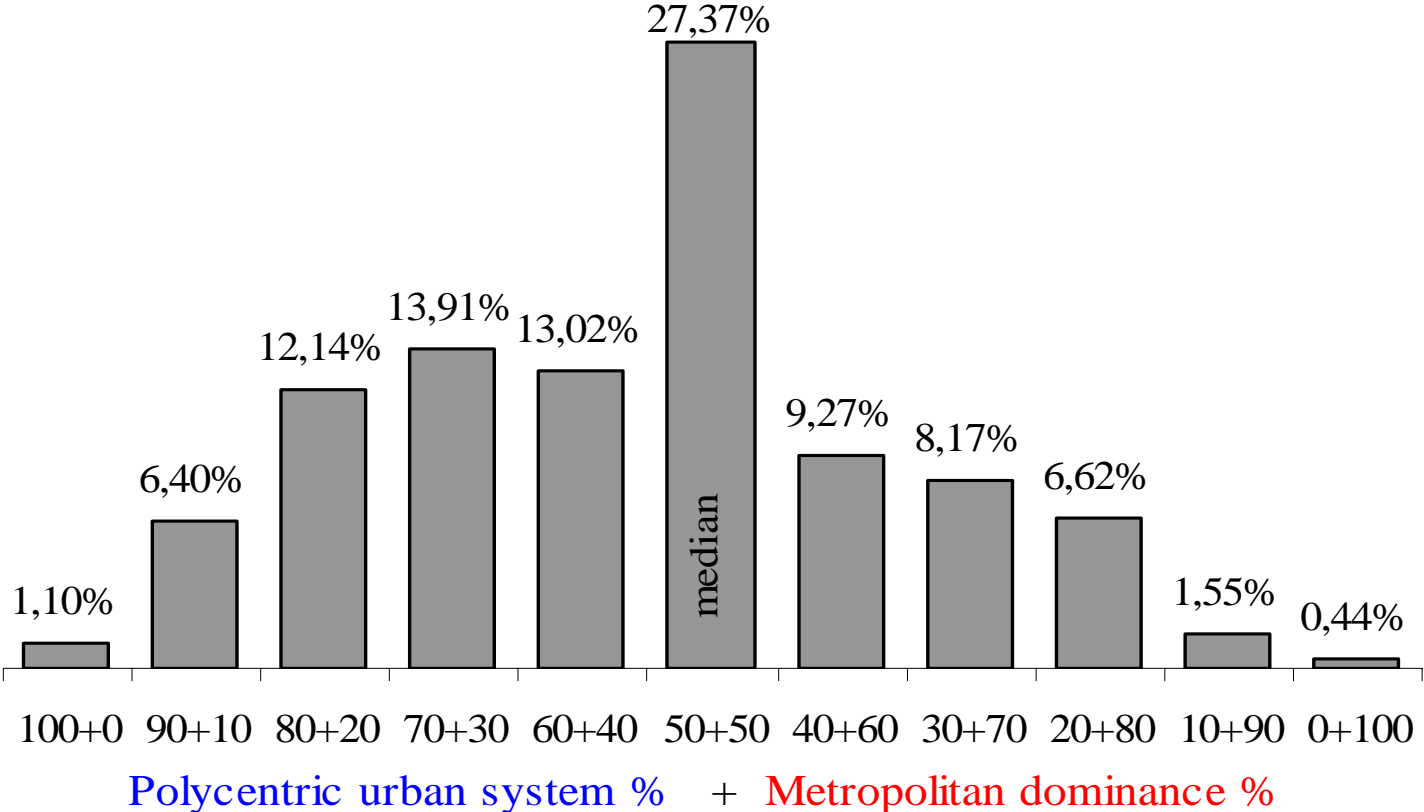


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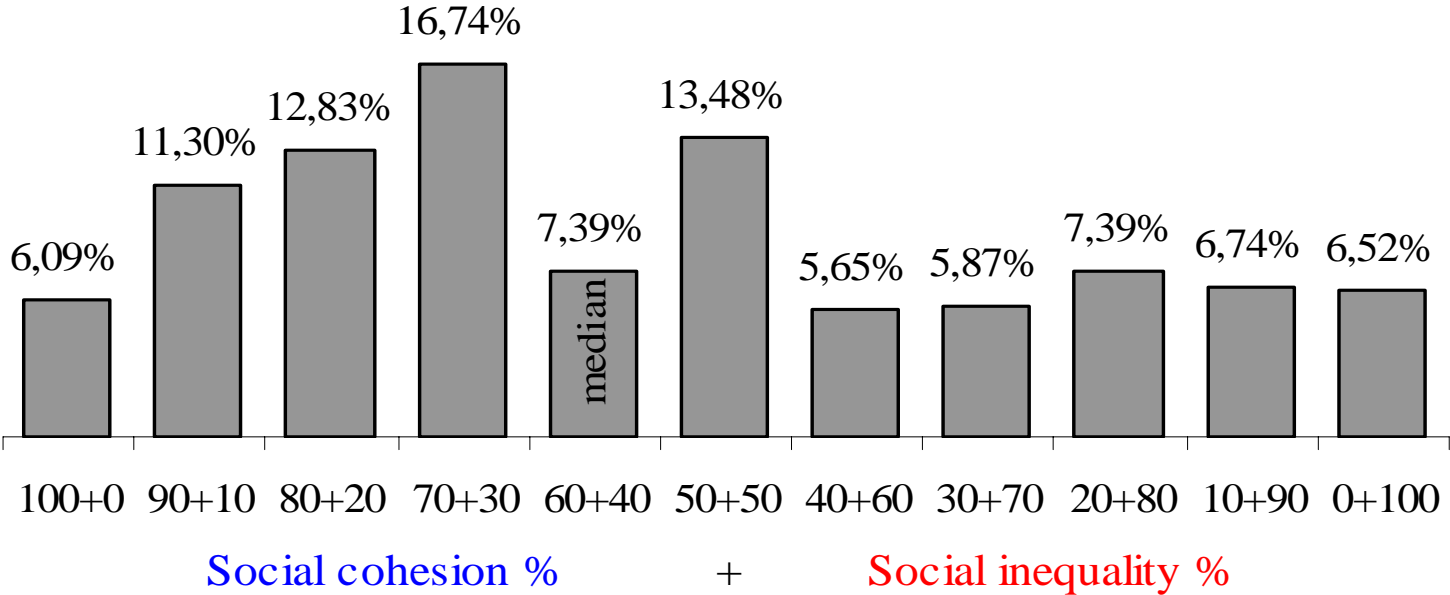
Combination of seemingly opposite characteristics that best promote growth



Combination of seemingly opposite characteristics that best promote growth



Combination of seemingly opposite characteristics that best promote growth



Theory that explains better economic growth

All respondents

<i>Rank</i>	<i>Theoretical perspectives</i>	<i>Average rank</i>	<i>1st choice (%)</i>
1	Endogenous growth theories	3.03	24.32
2	New Economic Geography (new trade)	3.13	22.33
3	(New) Institutional Economics	3.87	14.89
4	Demand management models (neo-Keynesian)(*)	4.06	11.91
5	Supply-side theories (*)	4.08	6.70
6	Neoclassical models	4.34	9.93
7	Path dependence / cumulative causation (*)	4.73	7.69

Statistically significant differences among the 3 groups of experts ()*

Best method to identify determinants of growth

All respondents

	<i>Methods</i>	<i>Average rank</i>	<i>1st choice (%)</i>
1	In depth case studies (*)	1.83	42.79
2	Formalism/modelling (*)	2.08	31.97
3	Historical analysis	2.08	24.04

Statistically significant differences among the 3 groups of experts ()*

Conclusions I

- ✓ Most dynamic and least dynamic countries are in the Third World, indicating the existence of multiple growth regimes and nonlinearities in economic growth and world convergence.
- ✓ Drivers of growth are consistent with both conventional literature (human capital, innovation, openness, investment and infrastructure) and heterodox theories (institutional and political factors).
- ✓ The determinants of economic dynamism do not have the same influence in the advanced and the less advanced economies. Policy mix and priorities should be different in different stages of development.

Conclusions II

- ✓ The mix of opposite characteristics that is considered to best promote growth indicates that a number of determinants and policies are expected to be more effective within a limited range. This raises a question for the validity of the conventional linear models of growth, in which relations and impacts are either positive or negative.
- ✓ New theories (EG, NEG) are considered to explain growth performance better than older ones. Traditional theories (NC, K, CC) find little support, raising questions about their suitability in discussing contemporary economic growth issues. Synthetic approaches that favour active policy interventions are more popular among experts
- ✓ Although In-depth case studies are necessary, a combination of methods provides a better understanding of the process and sources of economic growth



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