



“Urban Agglomeration and Economic Growth in Latin America”

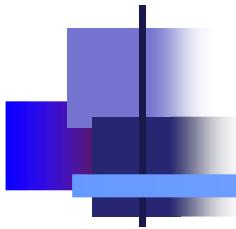
Miguel Atienza and Patricio Aroca y
paroca@ucn.cl, www.idear.ucn.cl www.milenio.ucn.cl
Universidad Católica del Norte, CHILE

International Urban Economic Modeling Workshop at University of Sao Paulo
Sao Paulo, July 10, 2012



Ciencia Regional y Políticas Públicas
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MOTIVATION

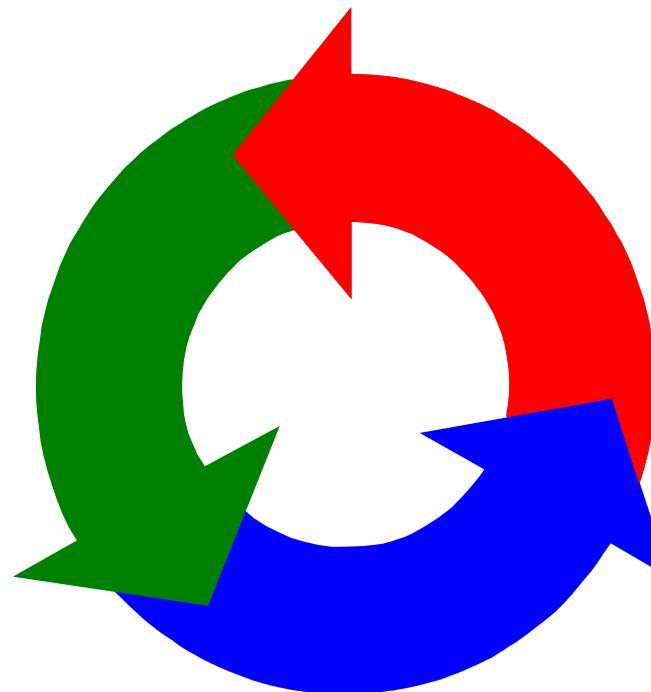
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Chilean Development Economic Model

Open Market

Promote Export Policy



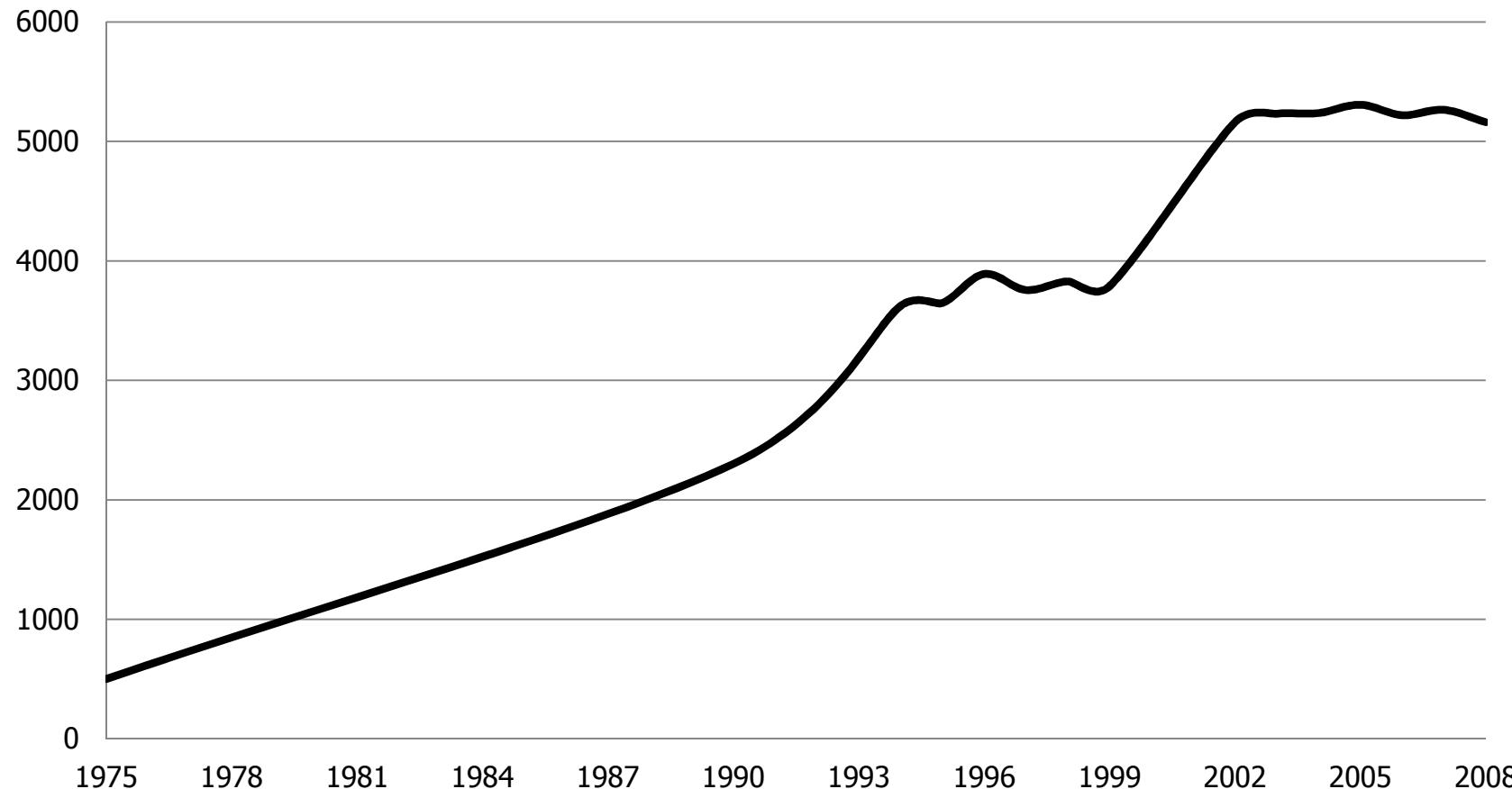
Macroeconomic Stability

I | D | E | A | R



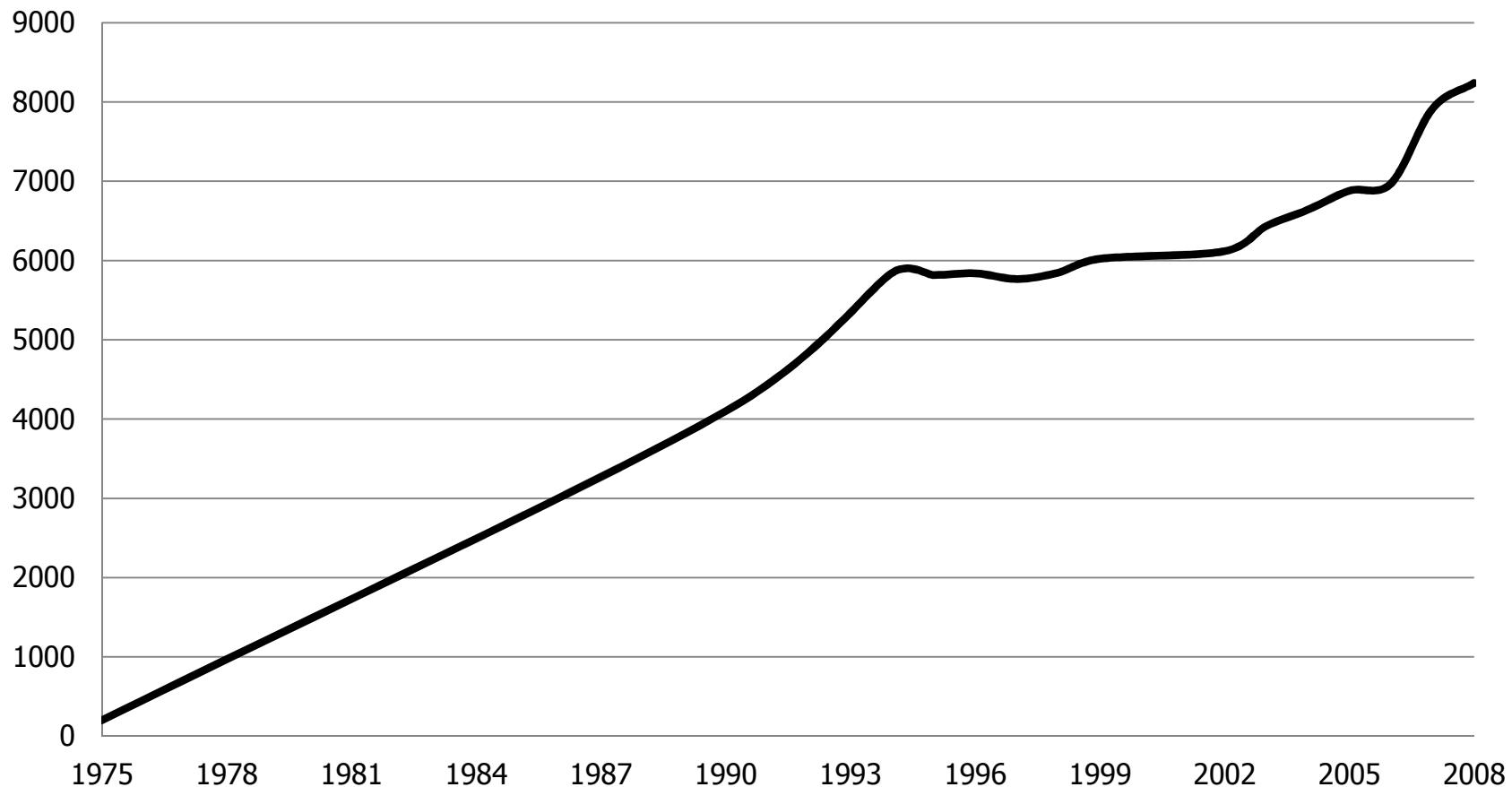
PRODUCT DIVERSIFICATION (1975-2008)

EVOLUTION OF NUMBER OF EXPORT PRODUCTS



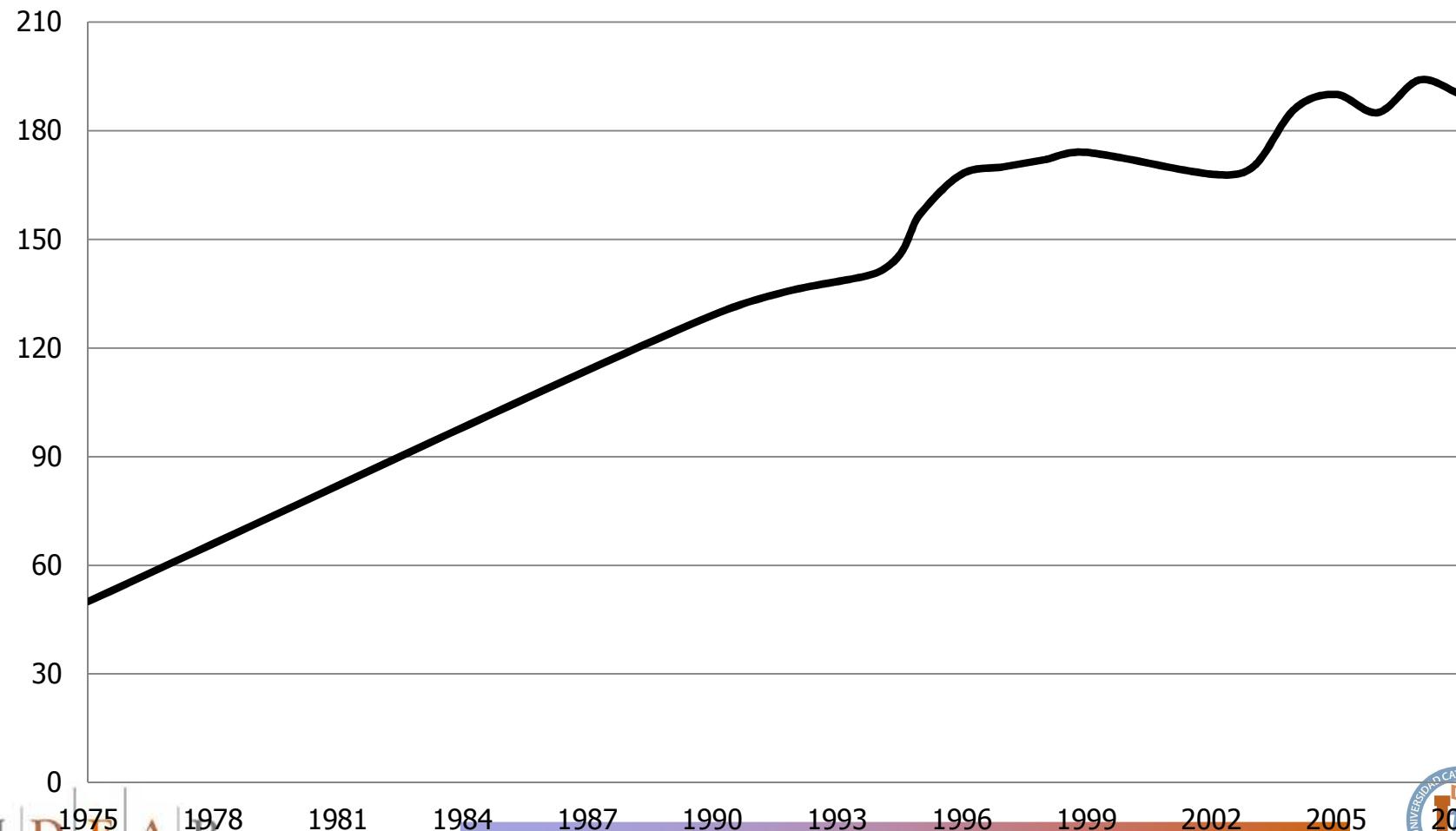
EXPORTER DIVERSIFICATION DE (1975-2008)

EVOLUTION OF NUMBER OF FIRMS INVOLVED IN DIRECT EXPORTS



MARKET DIVERSIFICATION (1975-2008)

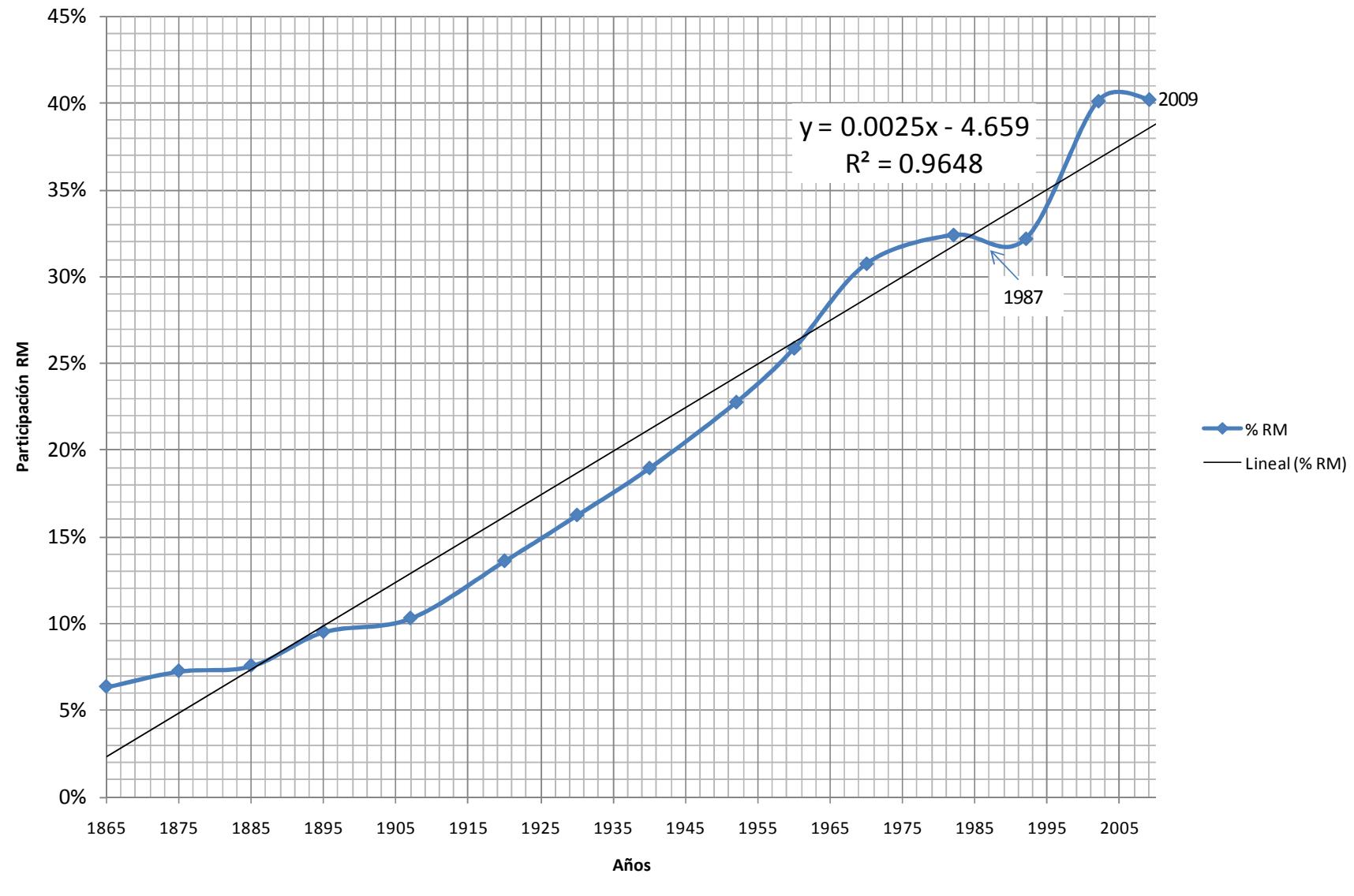
EVOLUTION OF NUMBER MARKETS WHERE CHILEAN EXPORTS GO



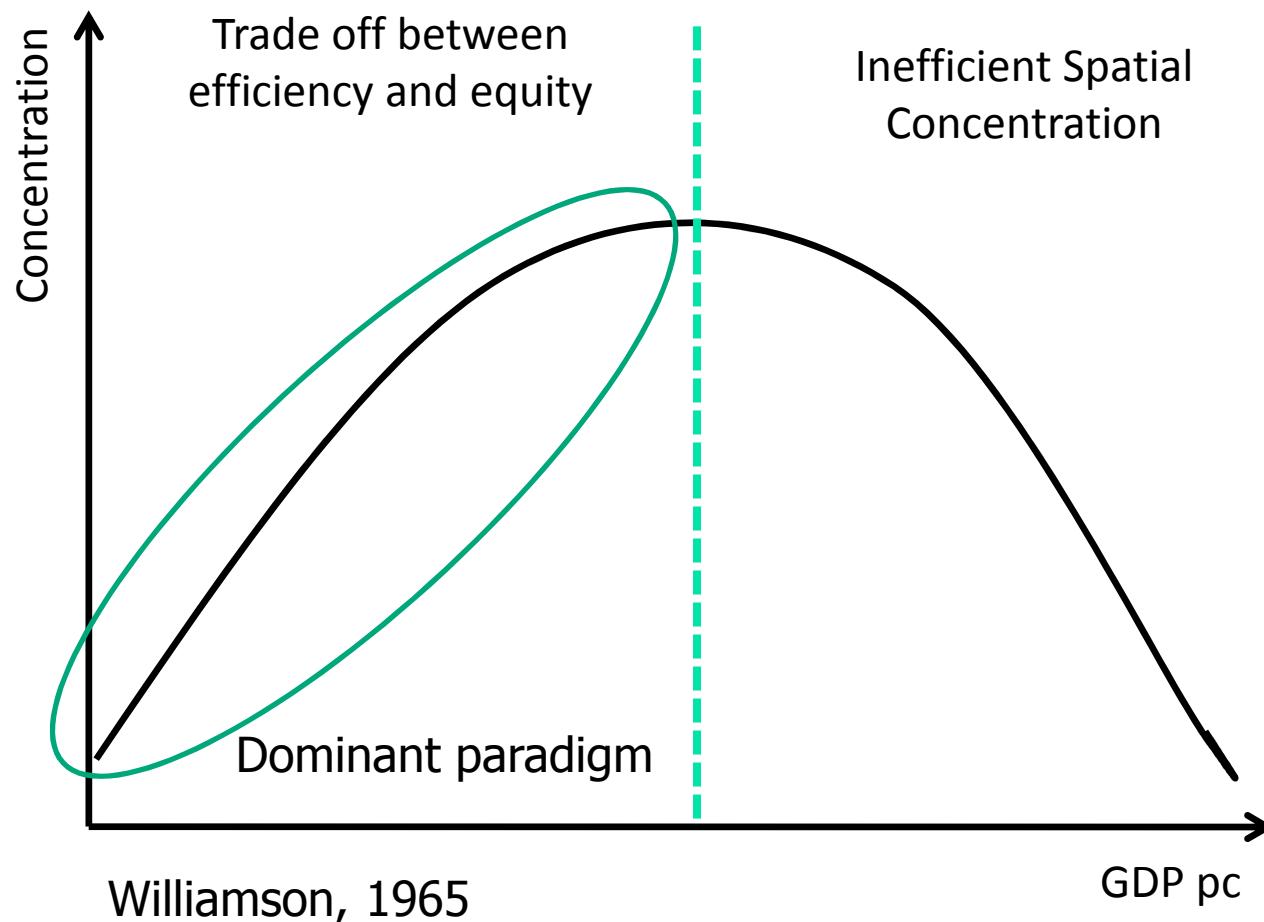
Main explanation

- Reduction on the TFP growth
- There is not spatial consideration on the evaluation
- What about concentration around the main metropolitan area?

Share of Population Living at Santiago



Concentration and Growth



From New Economic Geography or NECG

- **Concentration and Growth reinforce each other**
(Fujita y Thisse, 2002)
- **Spatial Concentration induce more growth and vice versa** (Baldwin y Martin, 2004)
- **Concentration reinforce growth => the more concentrated is the economy the higher the growth** (Martin y Ottaviano, 1999)
- Martin, P. and G. Ottaviano (1999). Growing locations: Industry location in a model of endogenous growth. European Economic Review 43 (2), 281–302.
- Fujita, M. and J-F. Thisse (2002). Economics of Agglomeration: Cities, Industrial Location, and Regional Growth. Cambridge University Press.
- Baldwin, R. E. y P. Martin (2004). Agglomeration and regional growth. In: Henderson, V. J. and J-F. Thisse (Eds.), Handbook of Regional and Urban Economics, vol. 4: Cities and Geography. Elsevier, North-Holland.

Is Agglomeration *really* good for Growth? Global Efficiency, Interregional Equity and Uneven Growth

Fabio Cerina

University of Cagliari and CRENoS

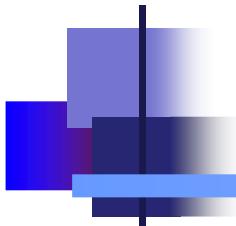
Francesco Mureddu

University of Cagliari and CRENoS

2011

Abstract

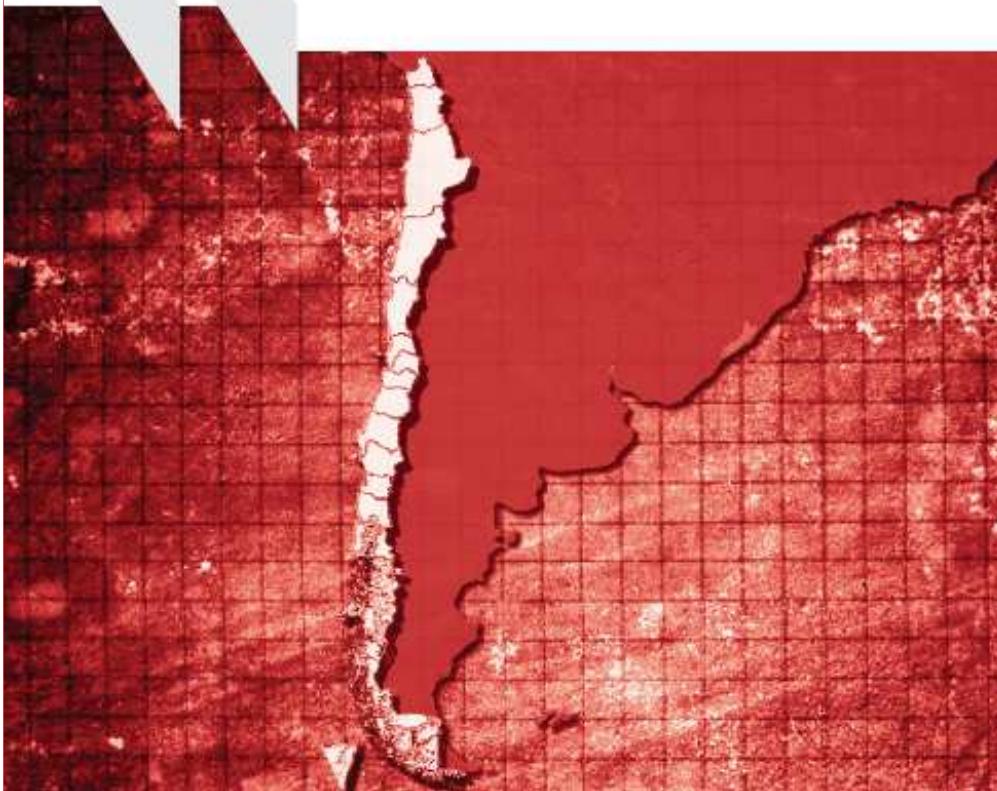
According to NEG literature (Baldwin *et al.* (2004)), spatial concentration of industrial activities increases growth at the regional and aggregate level without generating regional growth differentials. This view is not supported by the data. We extend the canonical model with an additional sector producing non-tradable goods which benefits from localized knowledge spillovers coming from the R&D performing industrial sector. This view, motivated by the evidence, generates both an anti-growth and a pro-growth effect of agglomeration for both the deindustrializing and the industrializing regions and leads to two novel results: 1) when agglomeration takes place, growth is lower in the periphery; 2) agglomeration may have a negative effect on the growth rate of real income, *both* at the regional *and* at the aggregate level.



How much growth cost the current concentration?

OECD Territorial Reviews

CHILE

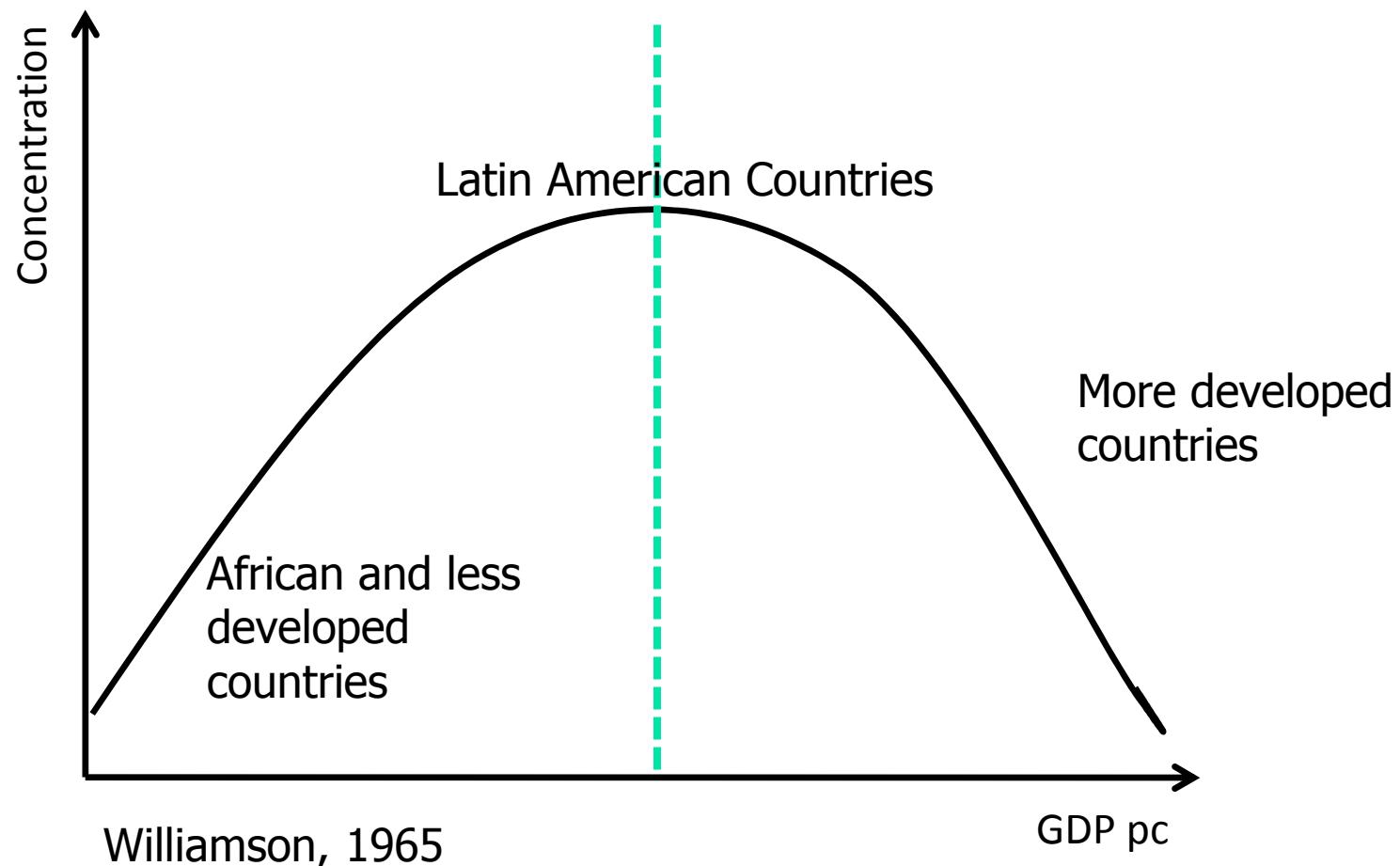


Take more advantage
of regional assets

Concentration might
cost 1 to 1.5 point of
growth per year



Hypothesis: Concentration and Growth



Empirical results



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Wheaton, W. y Shishido, H. (1981). Urban concentration, agglomeration economies, and the level of economic development. *Economic Development and Cultural Change*, 30, 17-30.

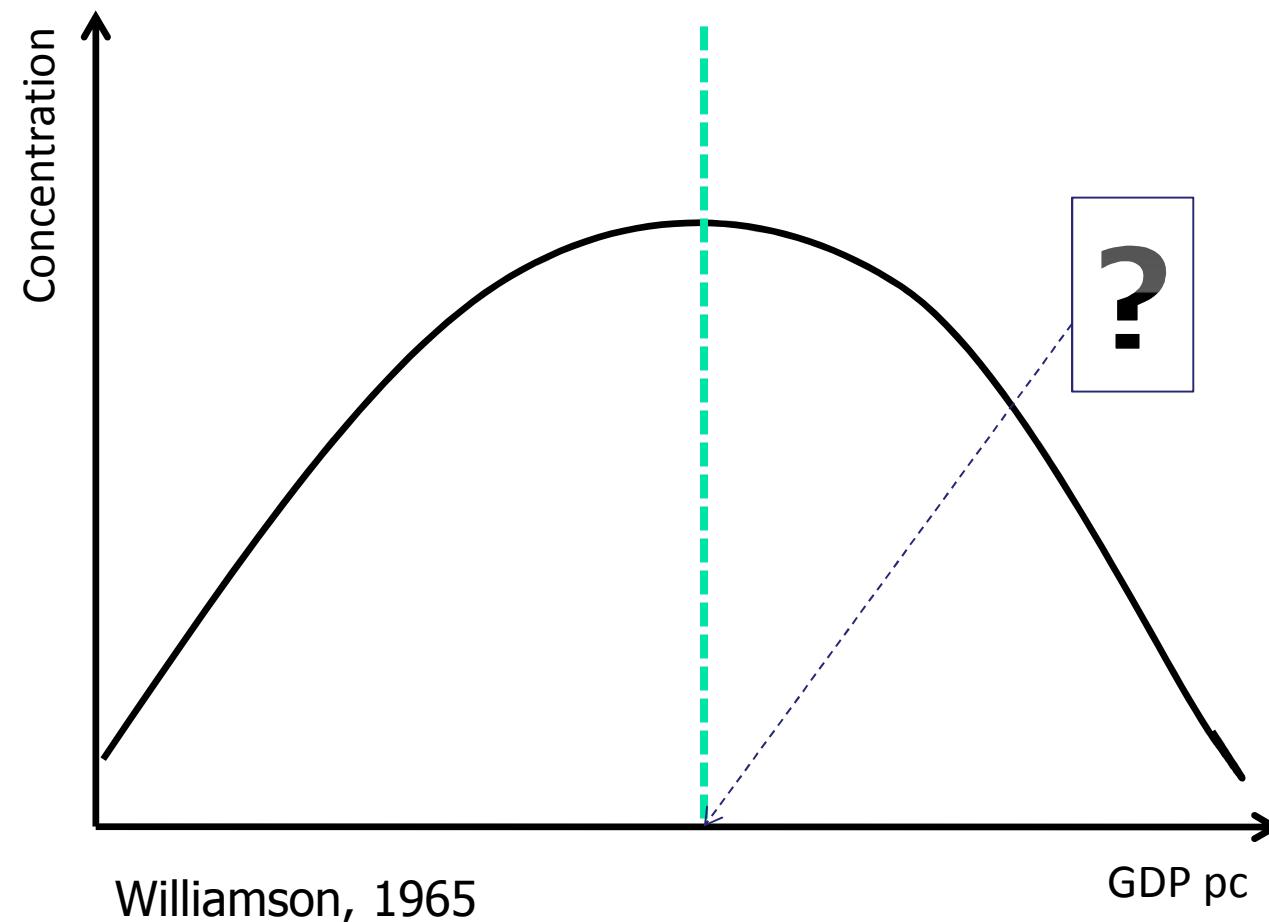
MacKellar, F.L. y D.R. Vining (1995). Population Concentration in Less Development Countries: New Evidence. *Papers in Regional Science*, 74, 3, 259-293.

Moomaw, R.L. y M.A. Alwosabi (2004). An empirical analysis of competing explanations of urban primacy evidence from Asia and the Americas. *Annals of Regional Science*, 38, 149–171

6. [Agglomeration and growth: Cross-country evidence](#)

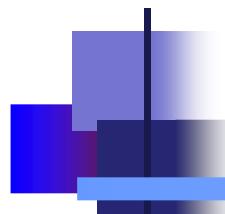
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Marius Brülhart, Federica Sbergami

Concentration and Growth



GDP pc and Concentration

- Wheaton y Shishido (1981) -> US\$ 2000
 - MacKellar y Vining (1995) -> US\$ 5000 (US\$ of 1985, US\$ 8384 in US\$ of 2006)



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Journal of Urban Economics
2009

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Agglomeration and growth: Cross-country evidence [☆]

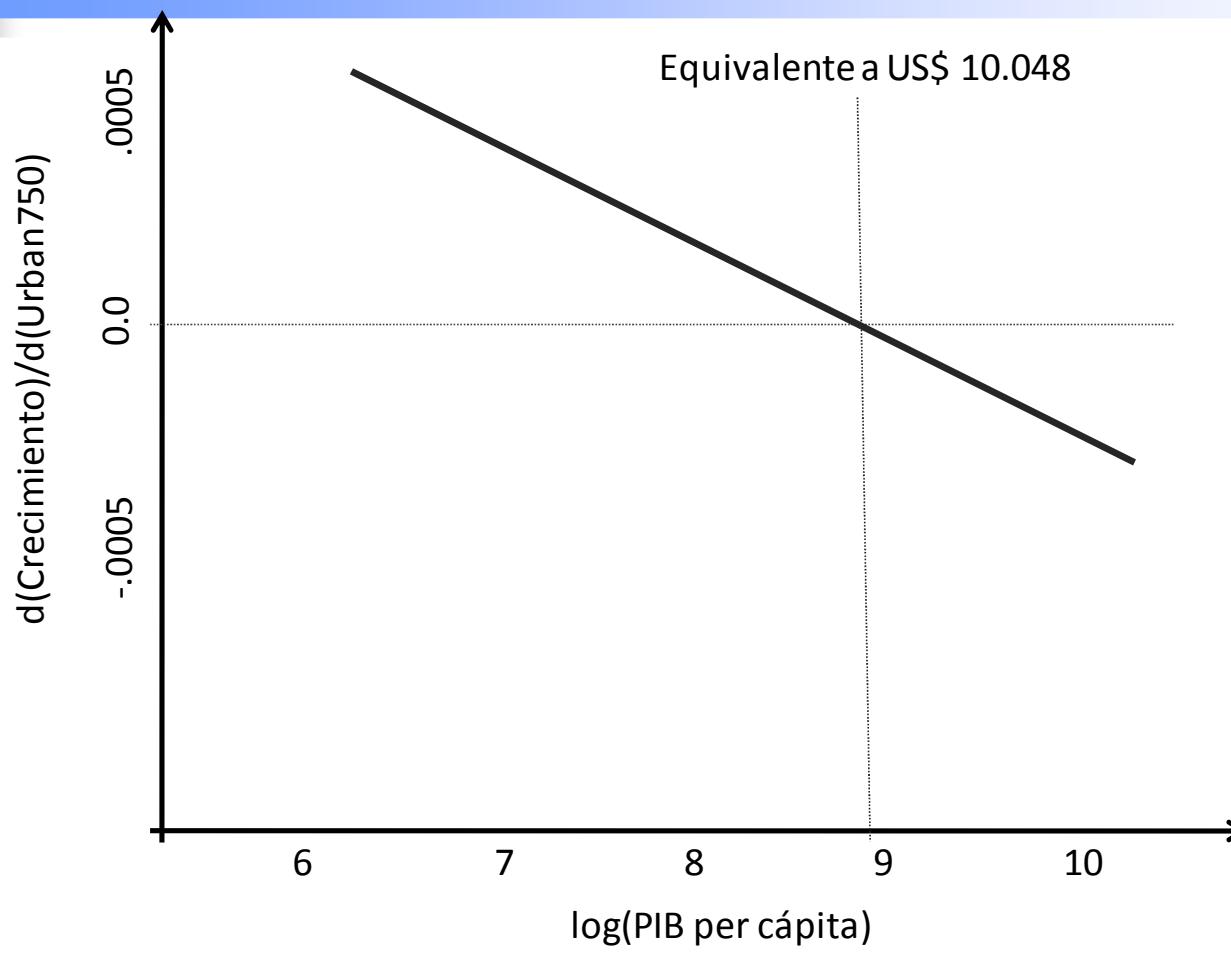
Marius Brülhart ^{a,b,*}, Federica Sbergami ^c

^a Département d'économétrie et économie politique, Ecole des HEC, Université de Lausanne, CH-1015 Lausanne, Switzerland

^b Centre for Economic Policy Research, London, UK

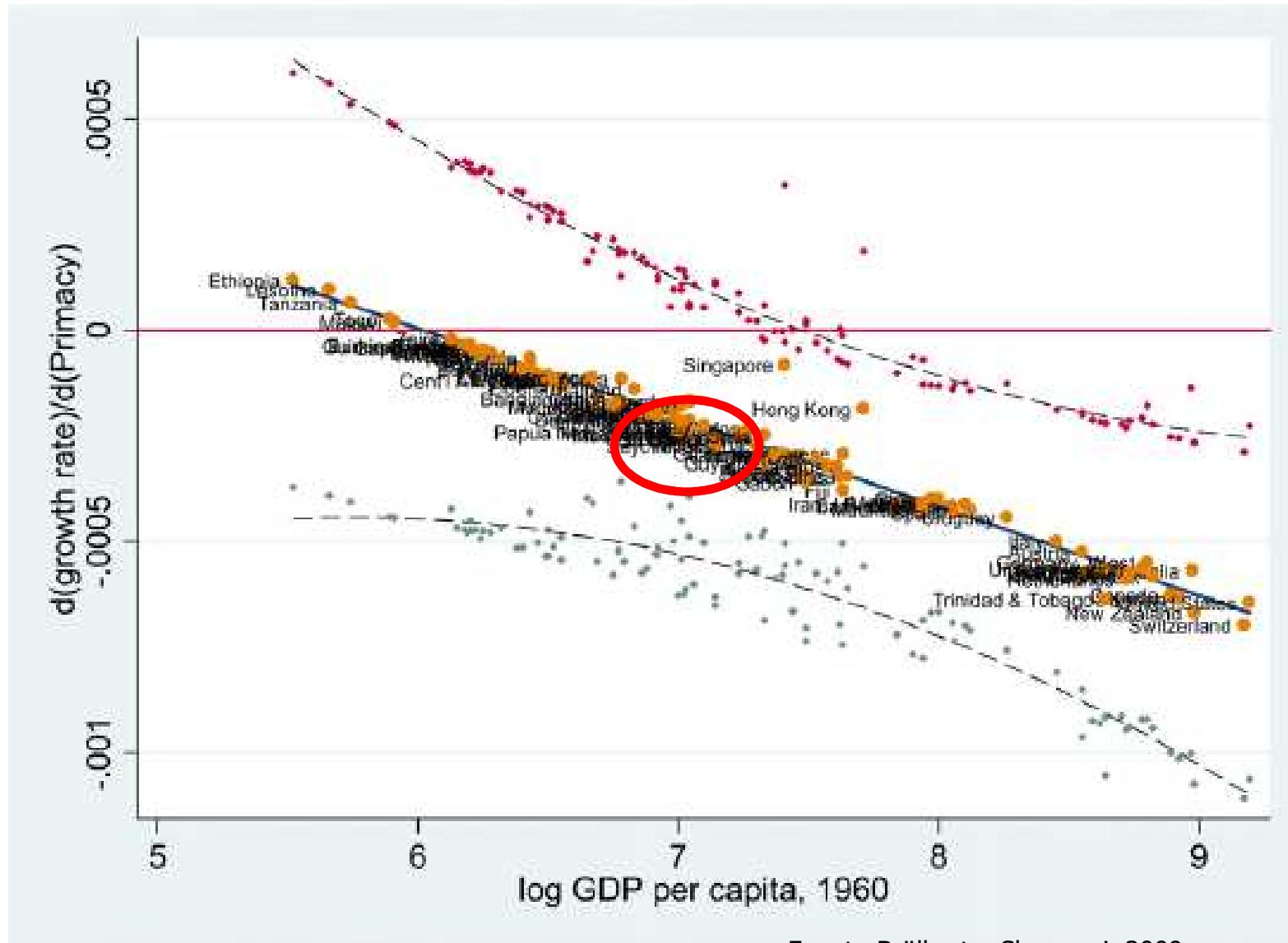
^c Département d'économie politique, Université de Genève, Bd du Pont d'Arve 40, CH-1211 Genève 4, Switzerland

Urban Concentration effect on Growth



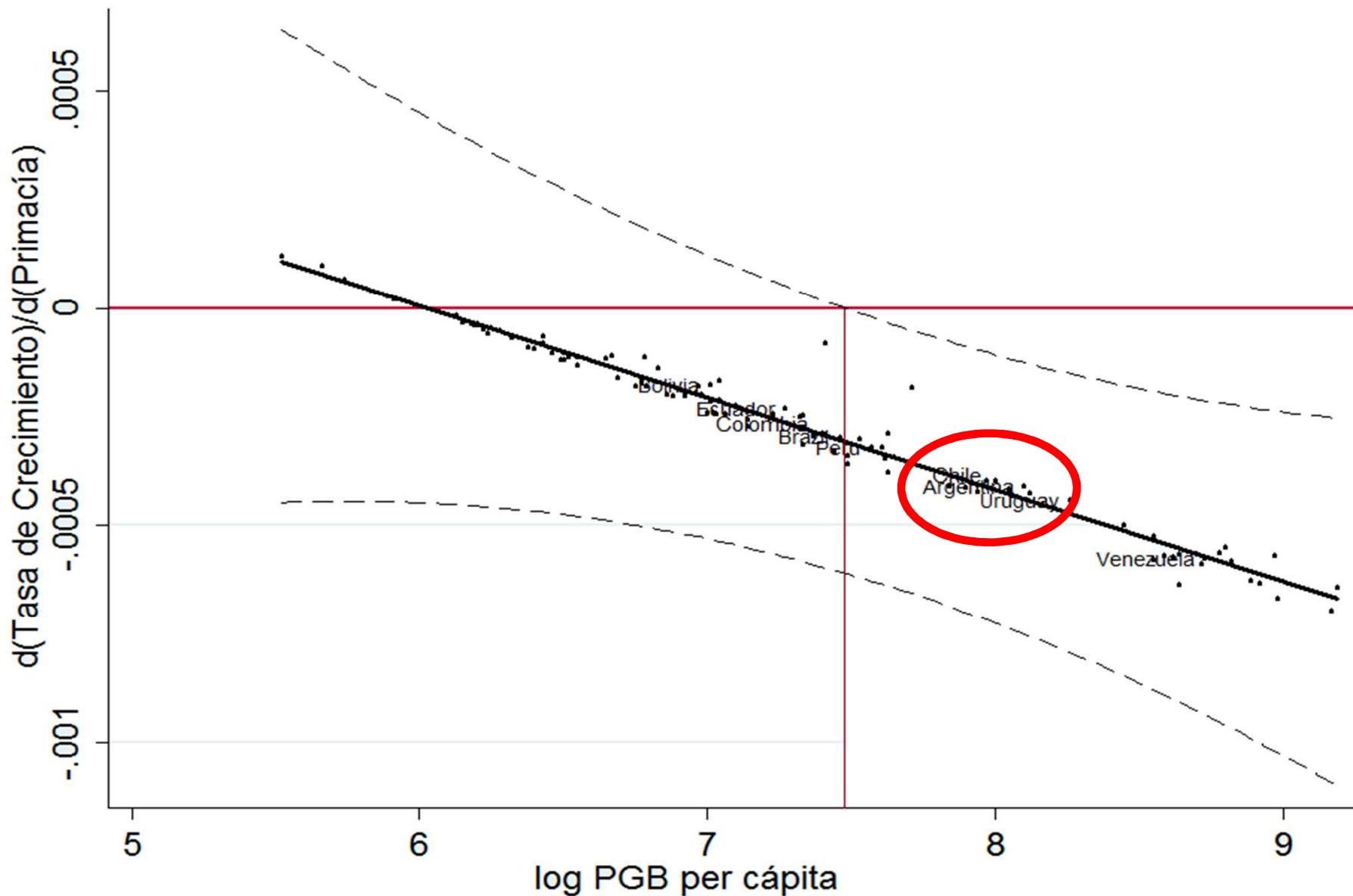
Adaptación Figura 3 de Brülhart y Sbergami, 2009

Concentration and Growth

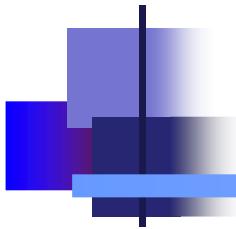


Fuente: Brülhart y Sbergami, 2009.

Concentration and Growth



Fuente: Brülhart y Sbergami, 2009.

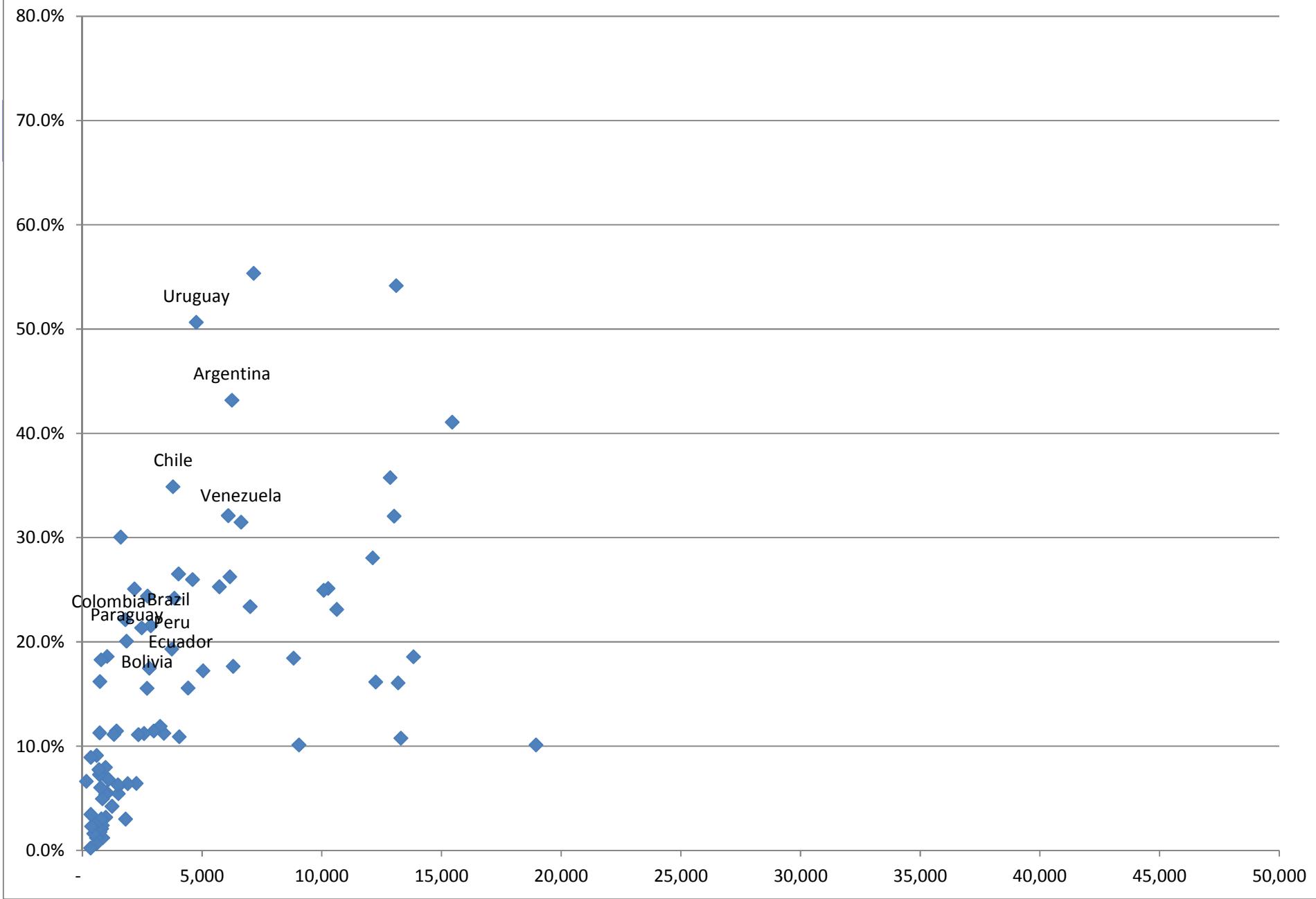


Evolution

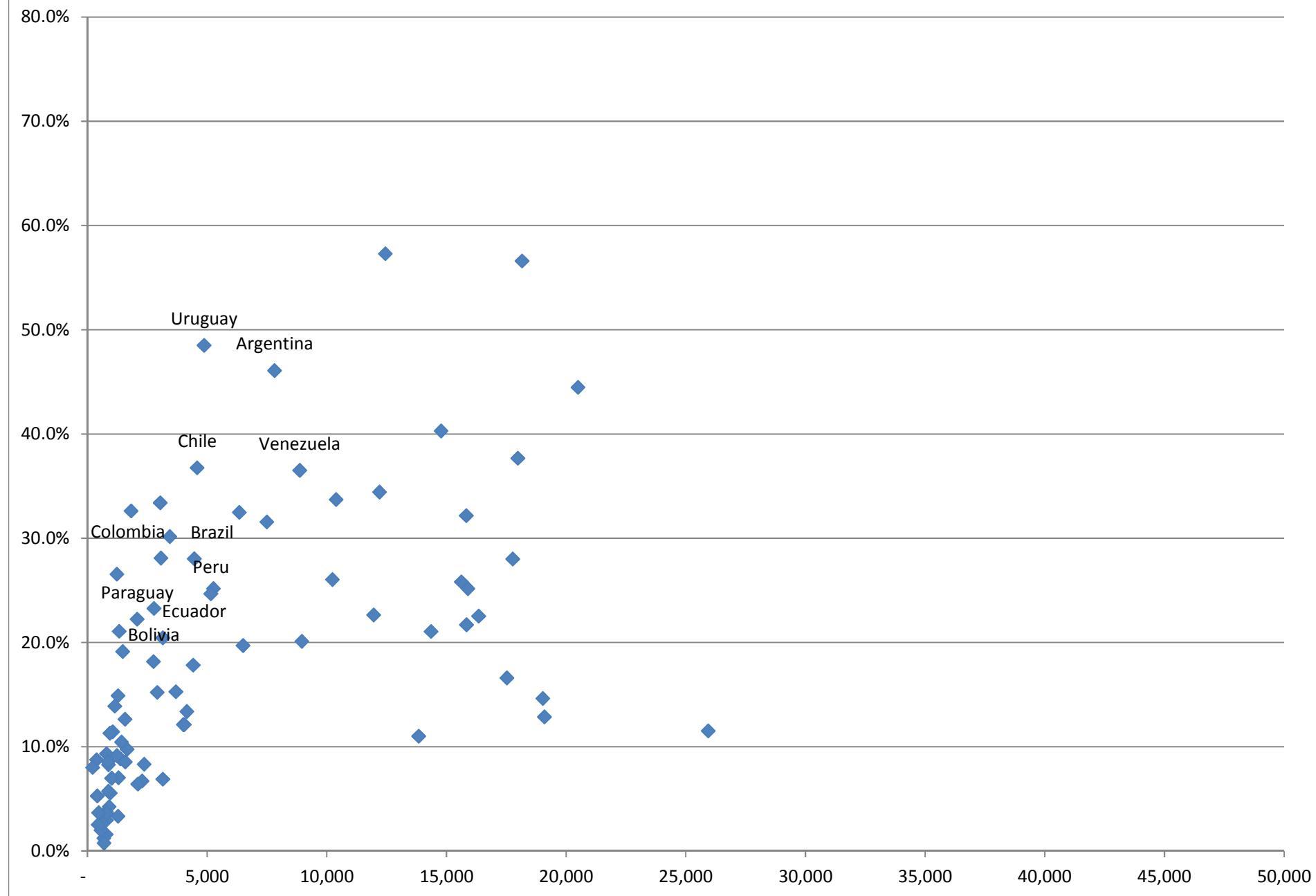
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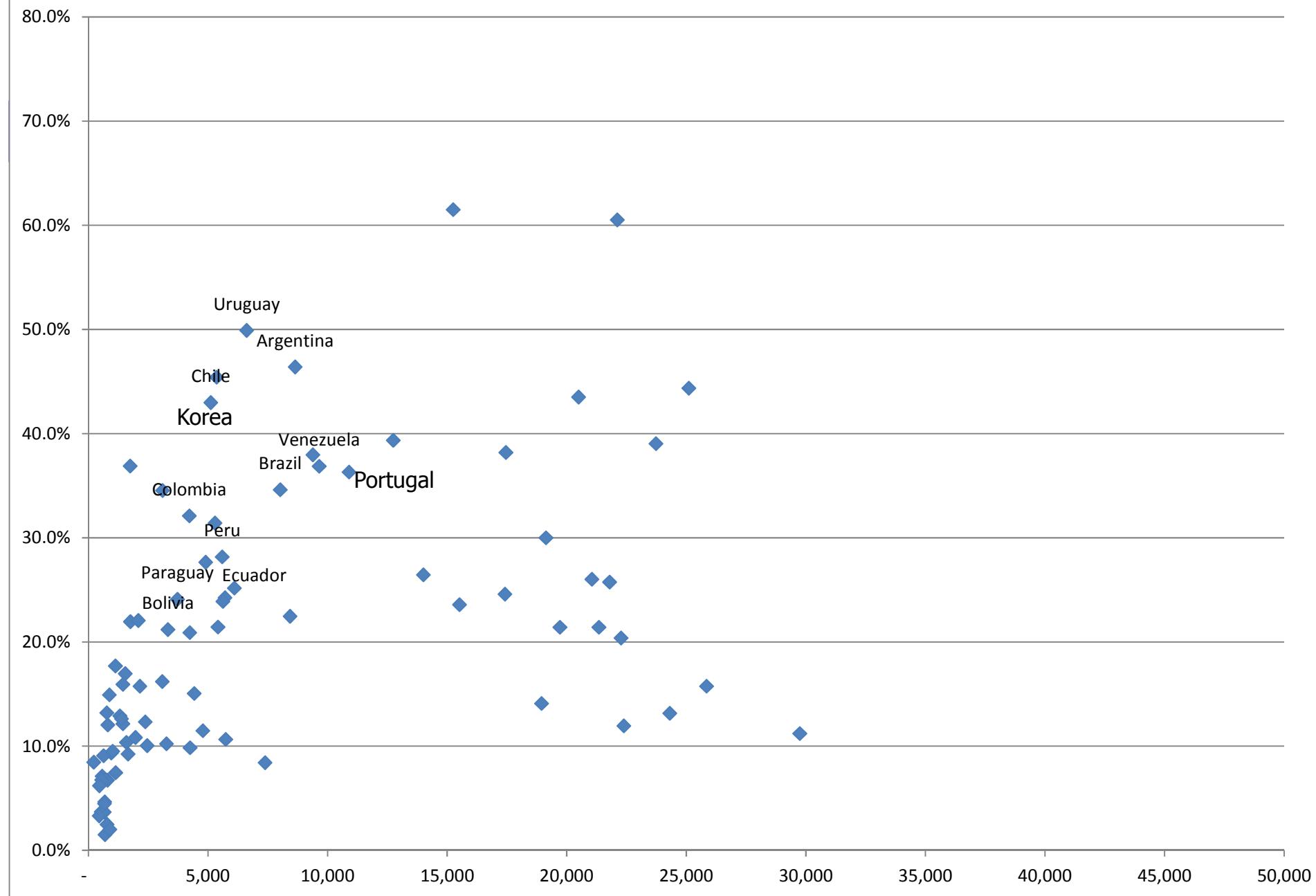
Primacy Index 750 versus GDPpc for 1960 (85 Countries)



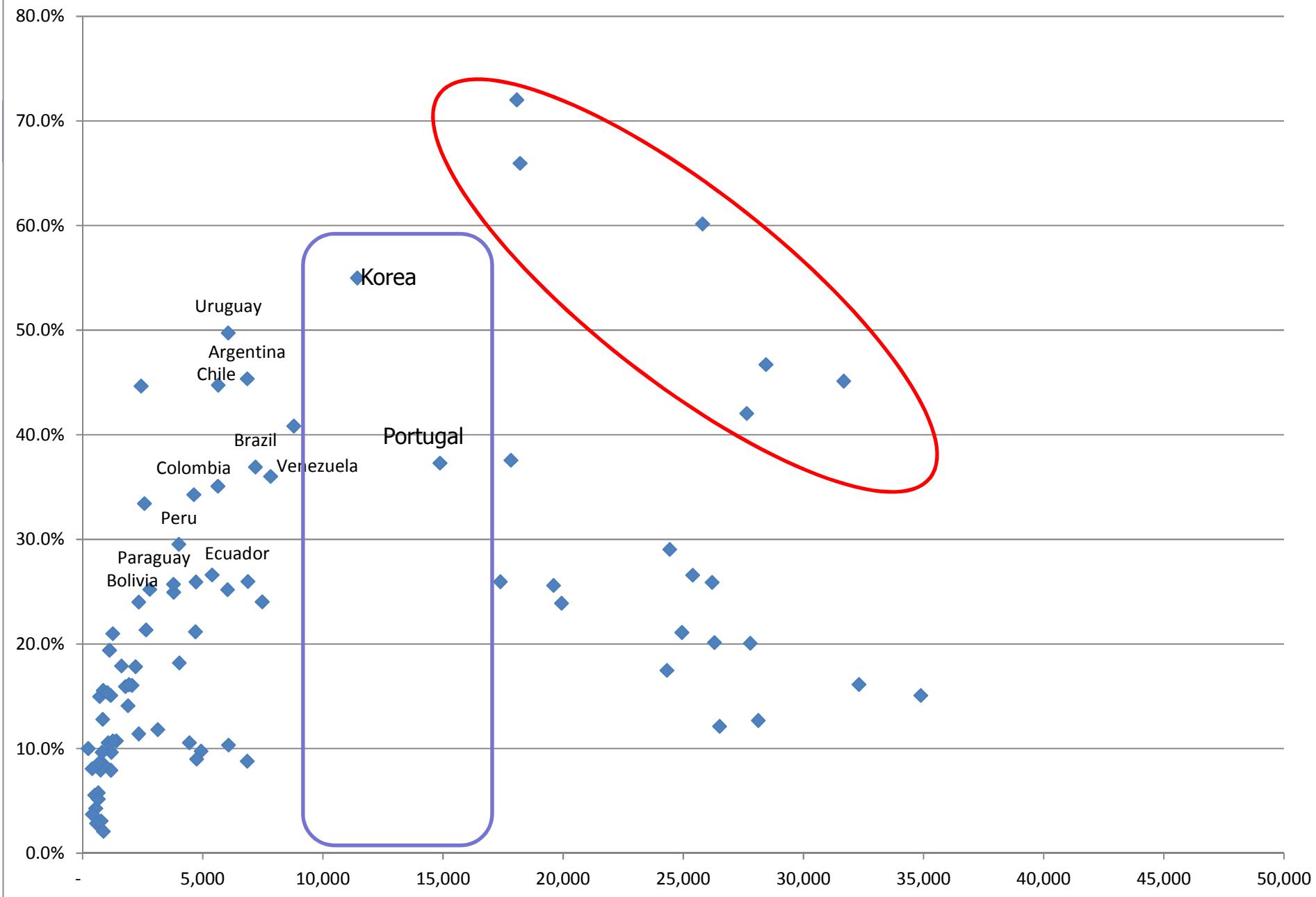
Primacy Index 750 versus GDPpc for 1970 (85 Countries)



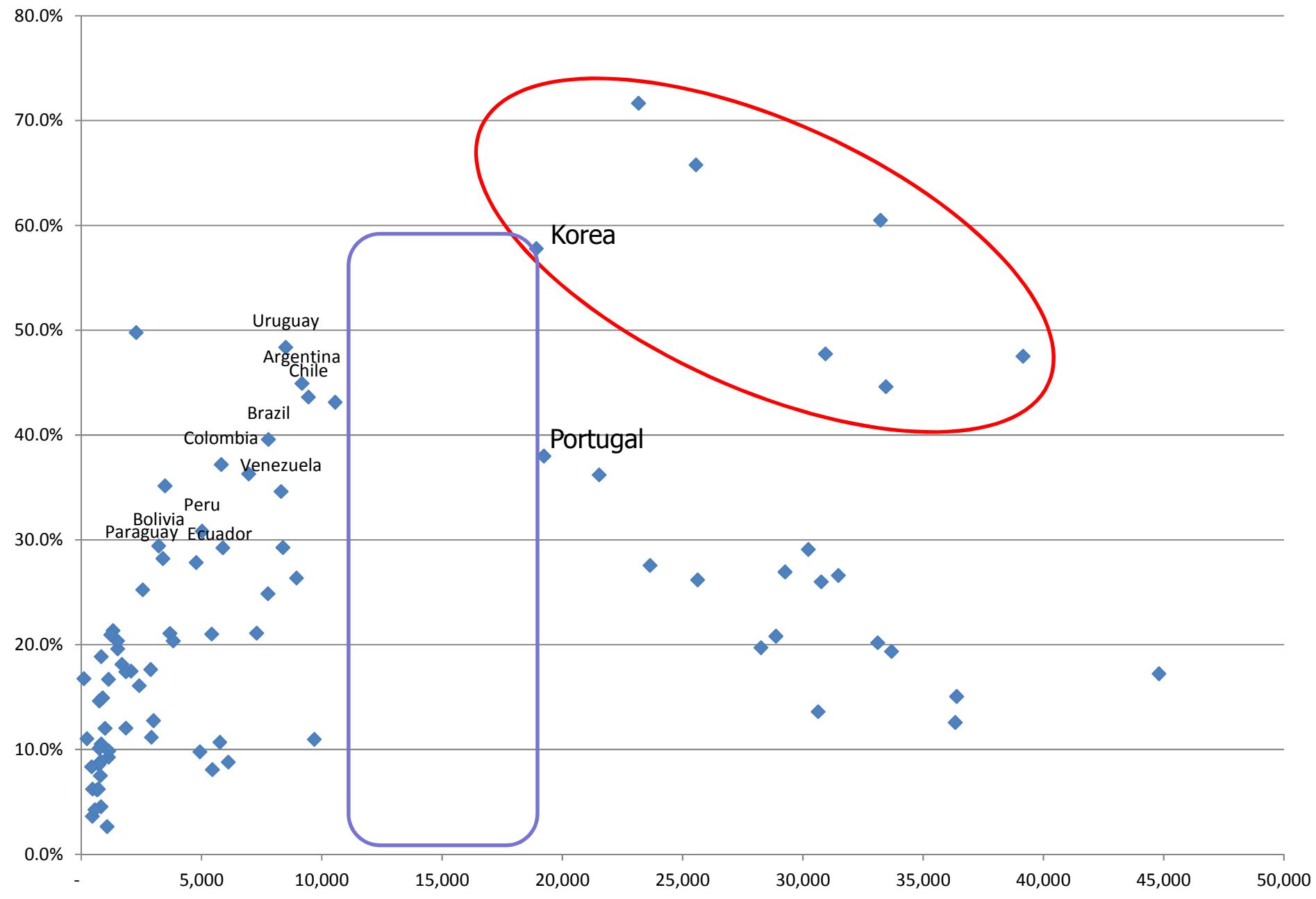
Primacy Index 750 versus GDPpc for 1980 (85 Countries)



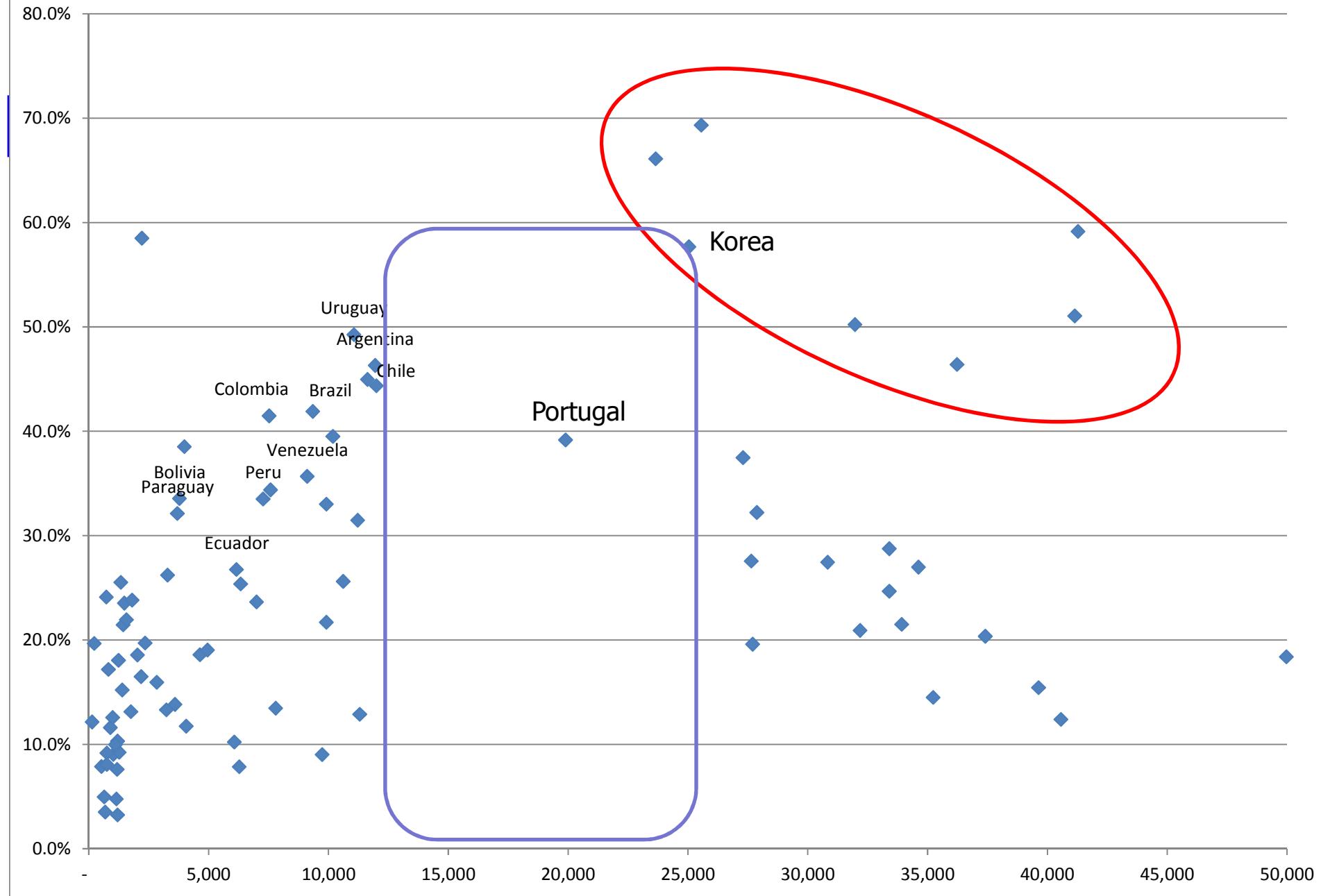
Primacy Index 750 versus GDPpc for 1990 (85 Countries)

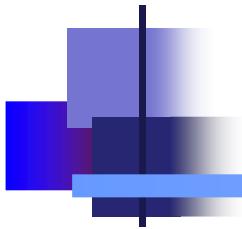


Primacy Index 750 versus GDPpc for 2000 (85 Countries)



Primacy Index 750 versus GDPpc for 2010 (85 Countries)





CHALLENGES & CONCLUSION

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