

Bulgarian Competitiveness: A Framework and Preliminary Evidence

Professor Michael E. Porter
Harvard Business School

*Visit of President of Bulgaria Rosen Plevneliev
Boston, MA
September 27, 2012*

This presentation draws on ideas from Professor Porter's articles and books, in particular, [The Competitive Advantage of Nations](#) (The Free Press, 1990), "Building the Microeconomic Foundations of Competitiveness," in [The Global Competitiveness Report](#) (World Economic Forum), "Clusters and the New Competitive Agenda for Companies and Governments" in [On Competition](#) (Harvard Business School Press, 2008), and ongoing research on clusters and competitiveness. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording, or otherwise - without the permission of Michael E. Porter. Further information on Professor Porter's work and the Institute for Strategy and Competitiveness is available at www.isc.hbs.edu

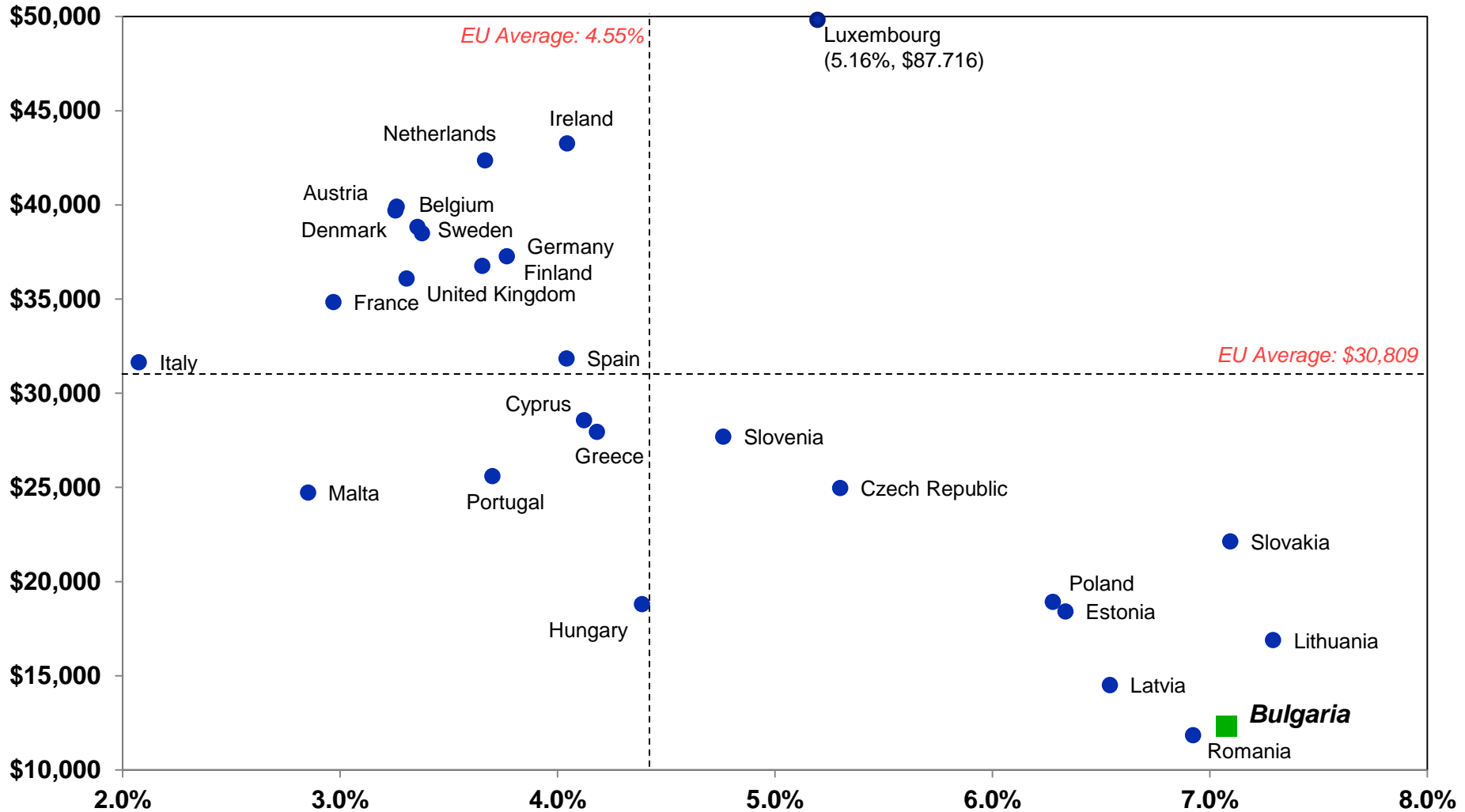
Agenda

- **Bulgaria's Performance**

- Diagnosing Competitiveness

Prosperity Performance EU Countries

PPP-Adjusted GDP per
Capita, 2010 (\$USD)



Growth of Real GDP per Capita (PPP-adjusted), CAGR, 2000-2010

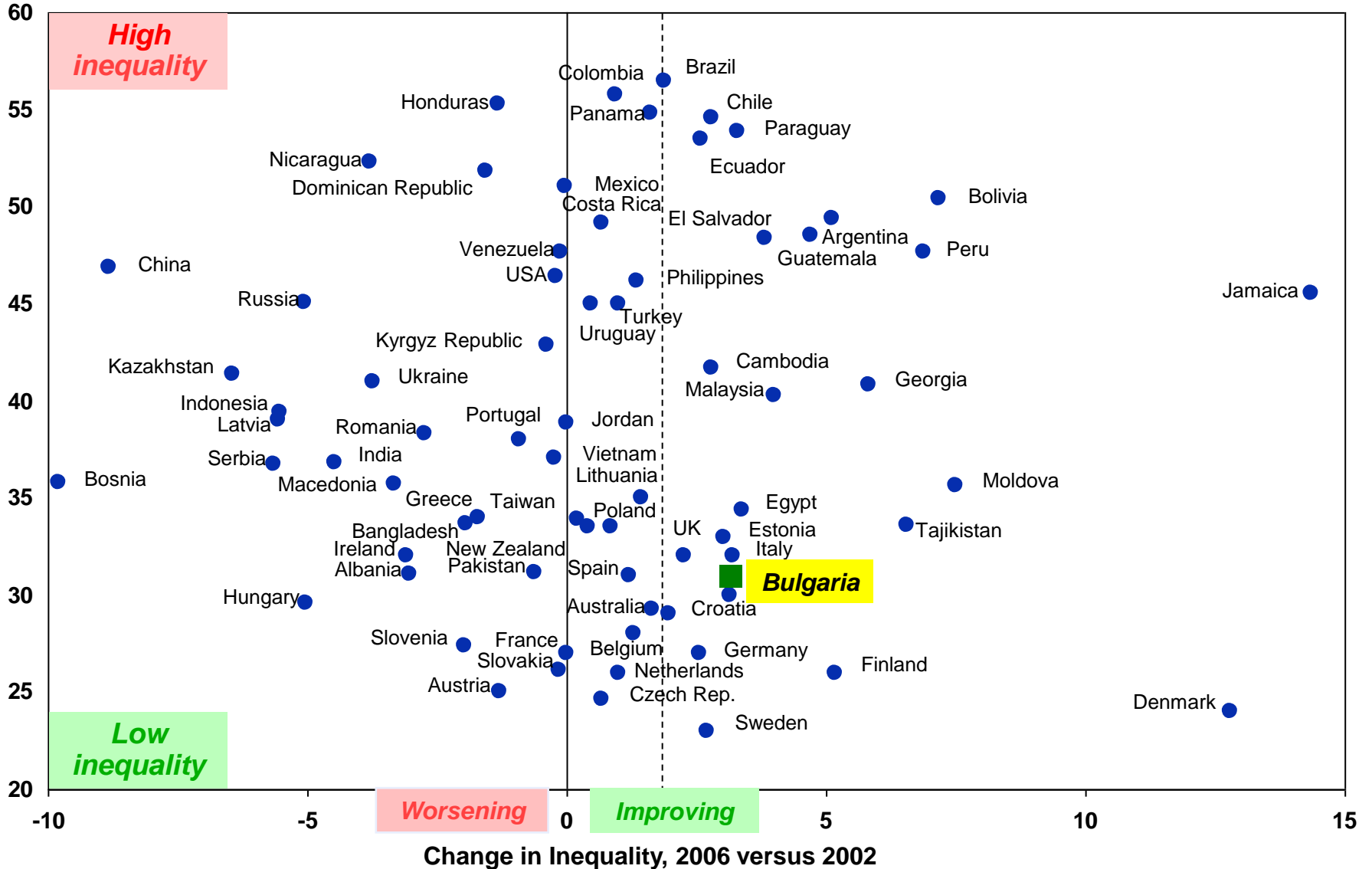
Source: EIU (2012); author's calculations

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Income Inequality

Selected Countries

Index of Inequality (2006)*



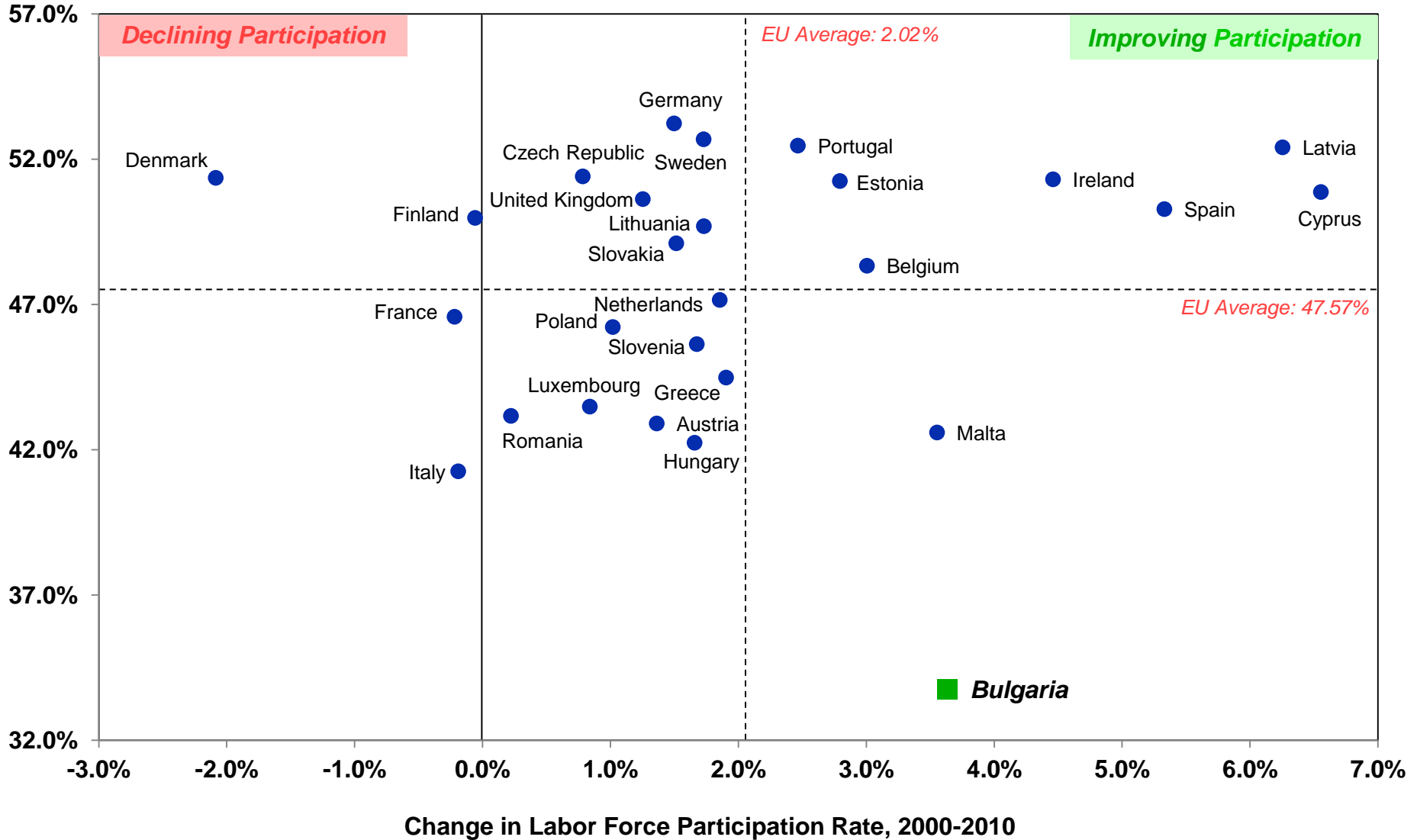
Note: * latest data available used (in some cases earlier years data used)

Source: World Bank, World Development Indicators, 2008, United Nations University (UNU-WIDER)

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Workforce Participation EU Countries

Labor Force
Participation (2010)



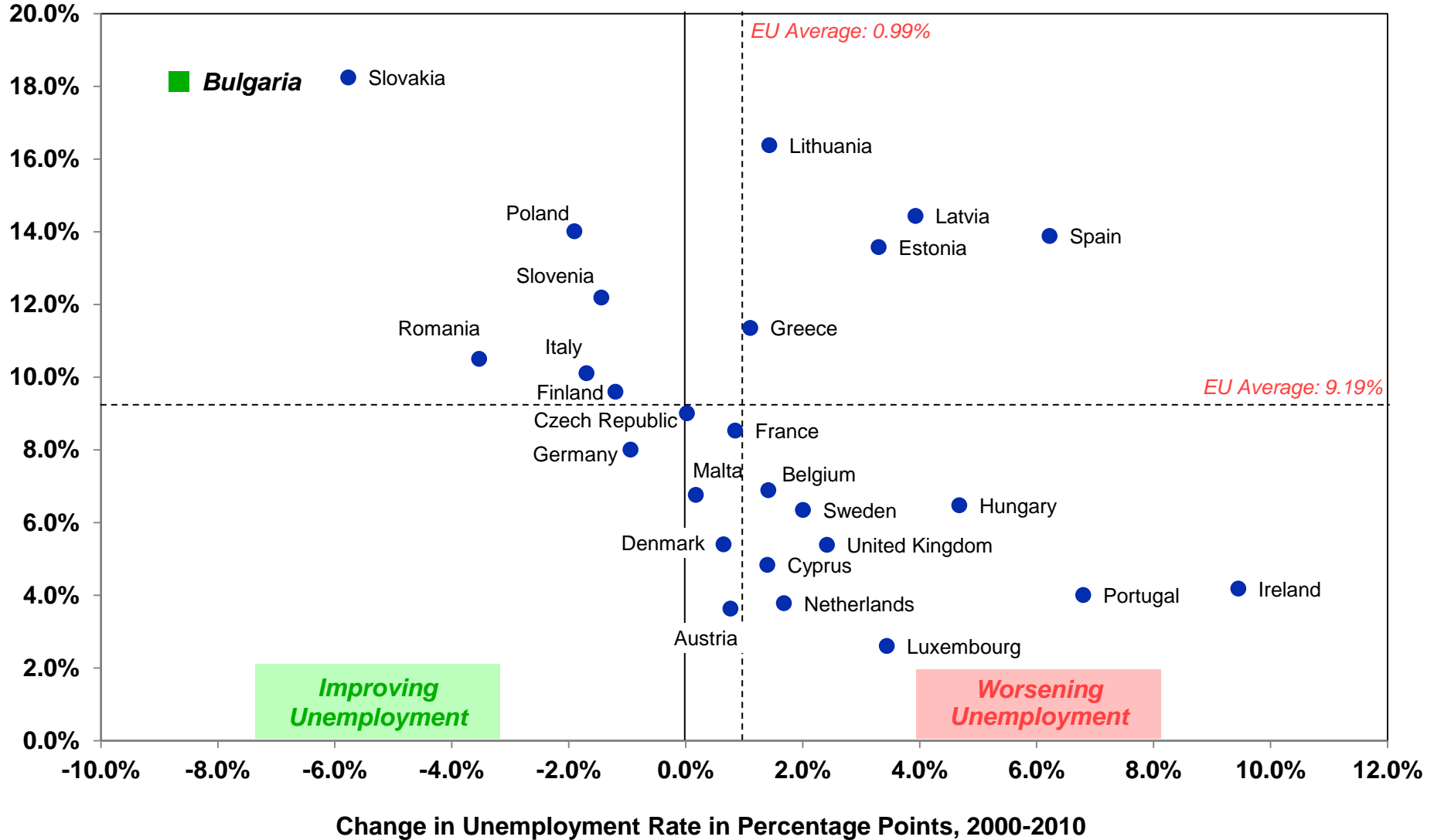
Source: EIU (2012), author's calculations

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Unemployment Performance

EU Countries

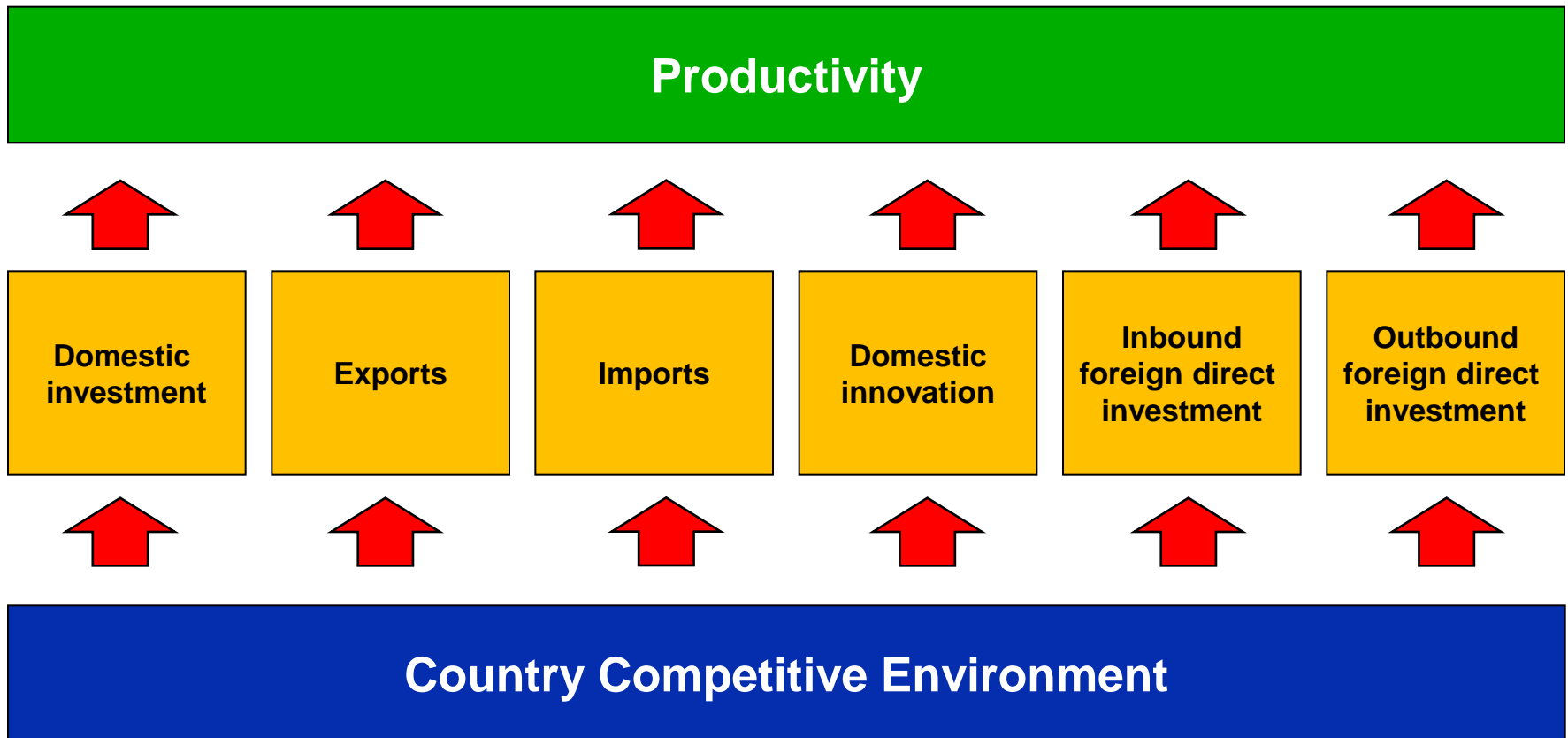
Unemployment Rate (%), 2010



Source: EIU (2012), author's calculations

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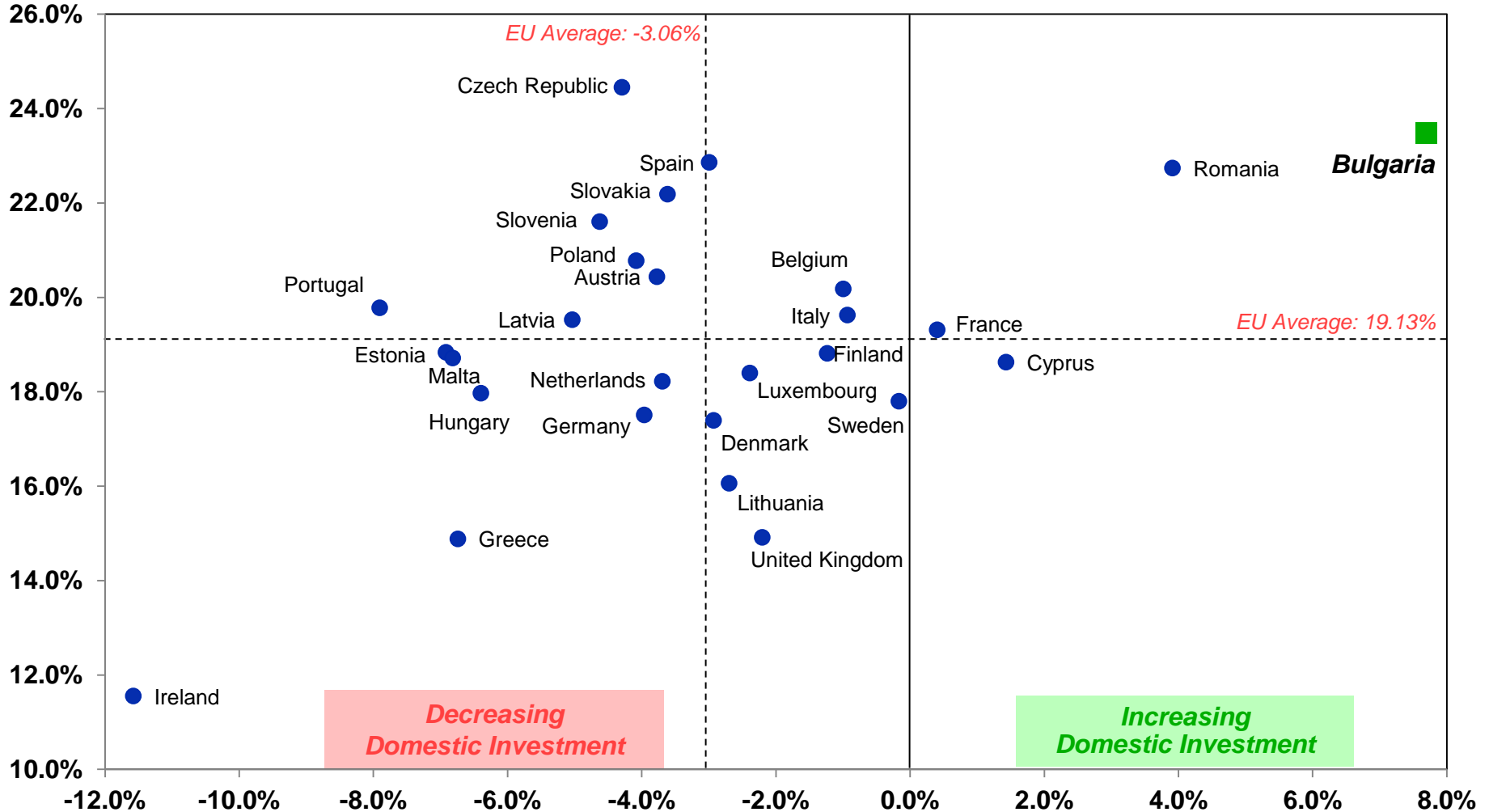
Intermediate Indicators and Enablers of Productivity



Domestic Investment Performance

EU Countries

Gross Fixed Investment (% of GDP), 2010



Change in Gross Fixed Investment (% of GDP), 2000-2010

Note: Includes inbound FDI

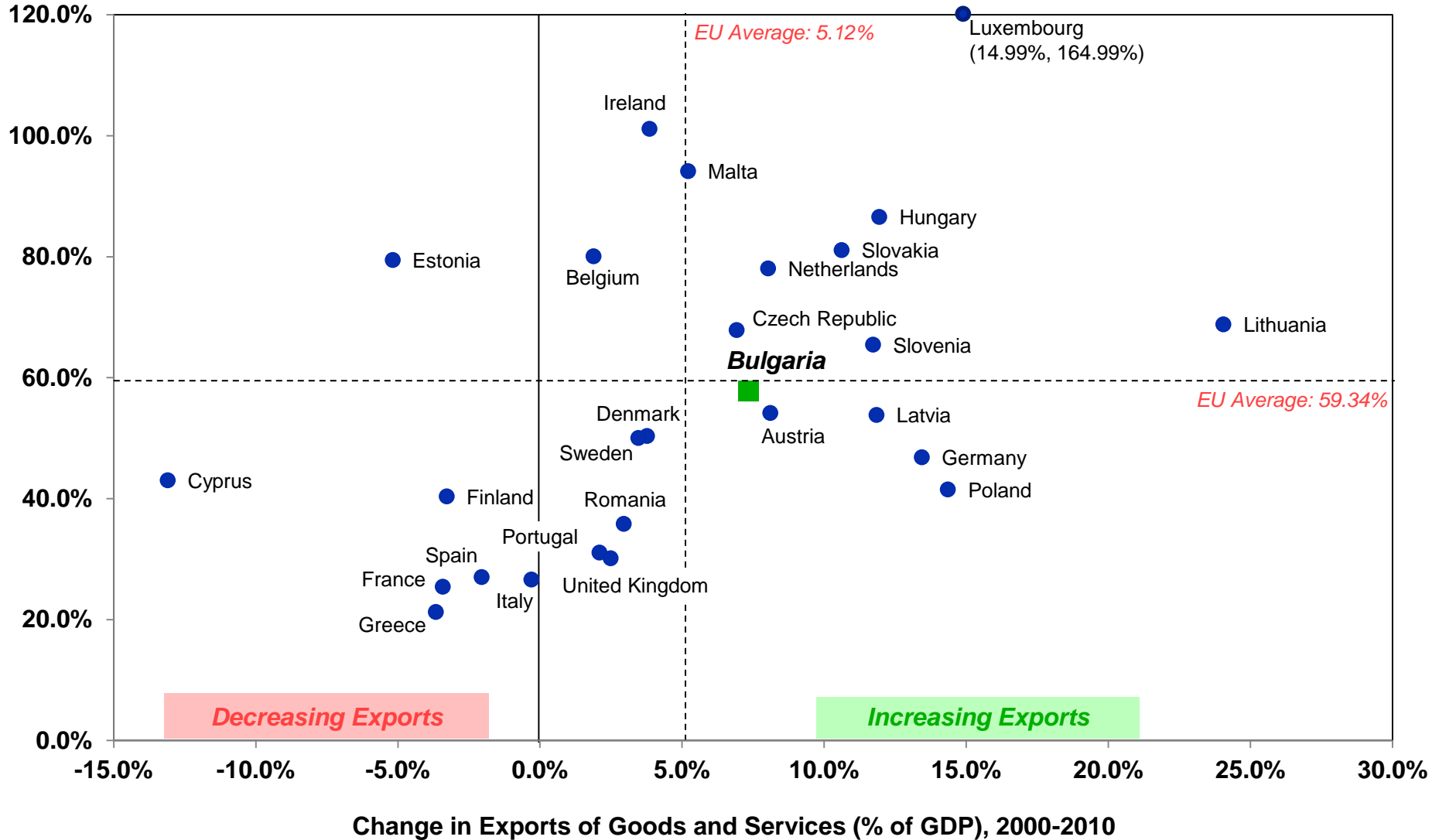
Source: EIU (2012)

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Export Performance

EU Countries

Exports of Goods and Services (% of GDP), 2010

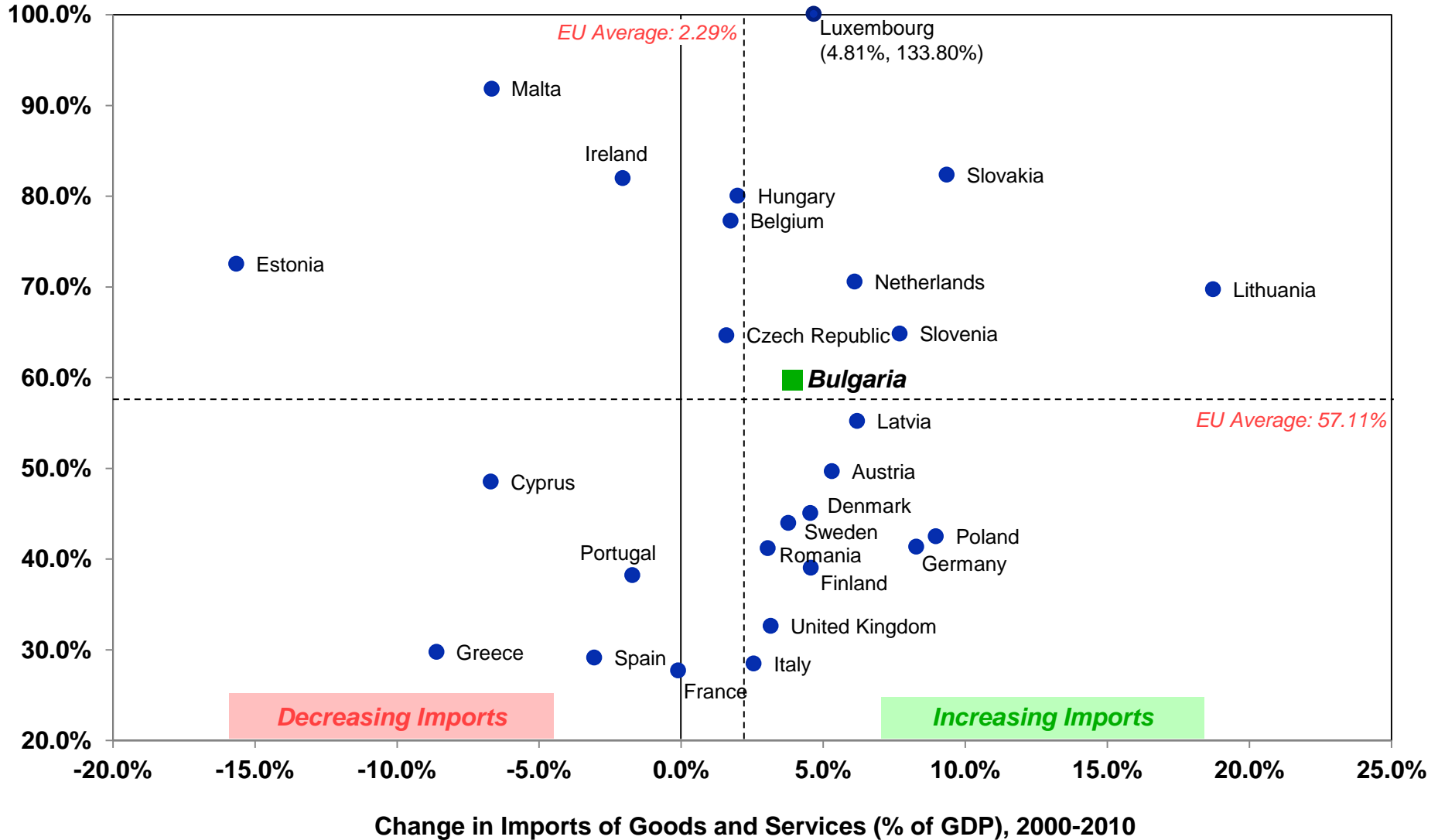


Source: EIU (2012), authors calculations

Import Performance

EU Countries

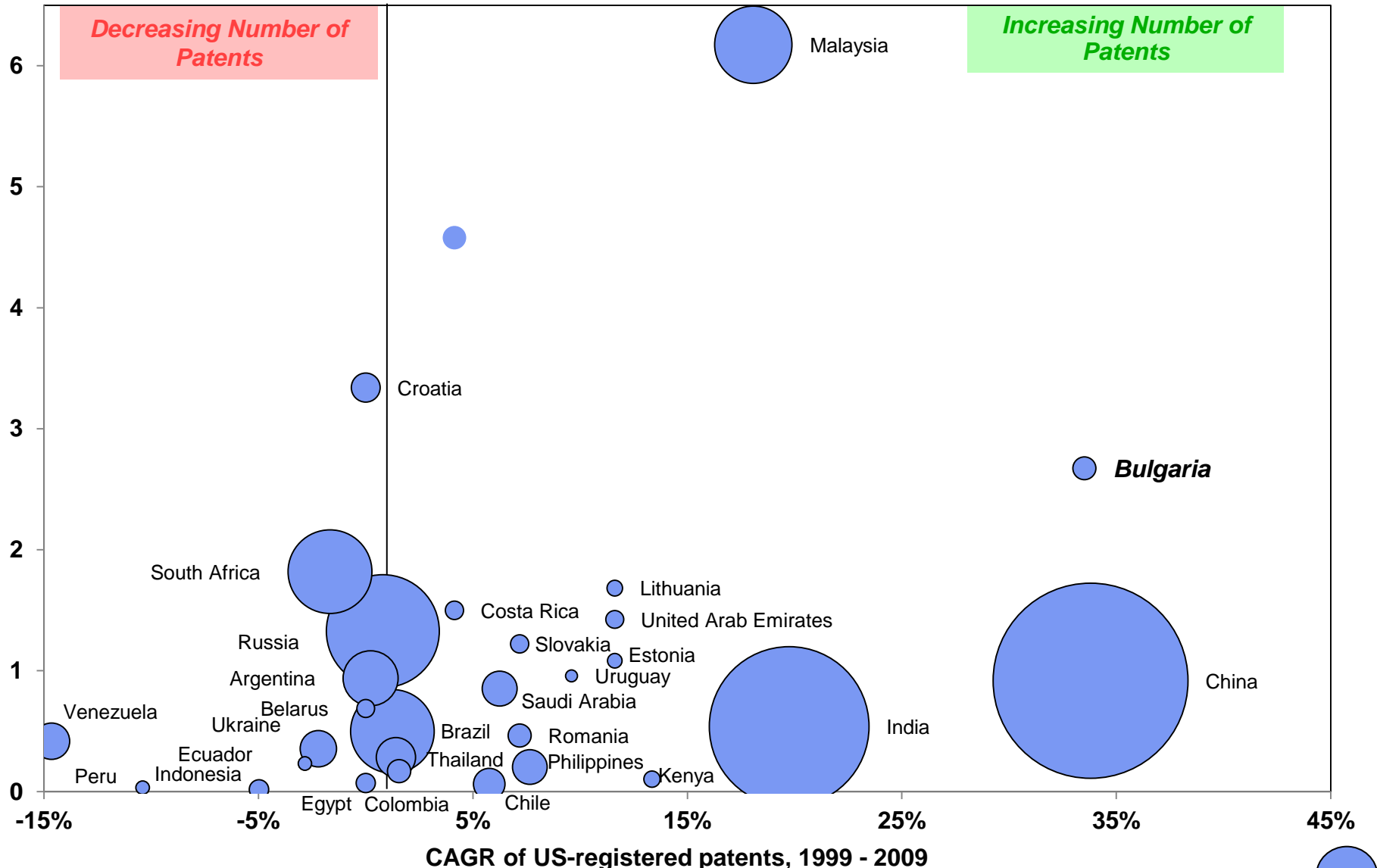
Imports of Goods and Services (% of GDP), 2010




Source: EIU (2012), authors calculations

Innovative Output Selected Countries

Average U.S. utility patents per 1 million population, 2007-2009



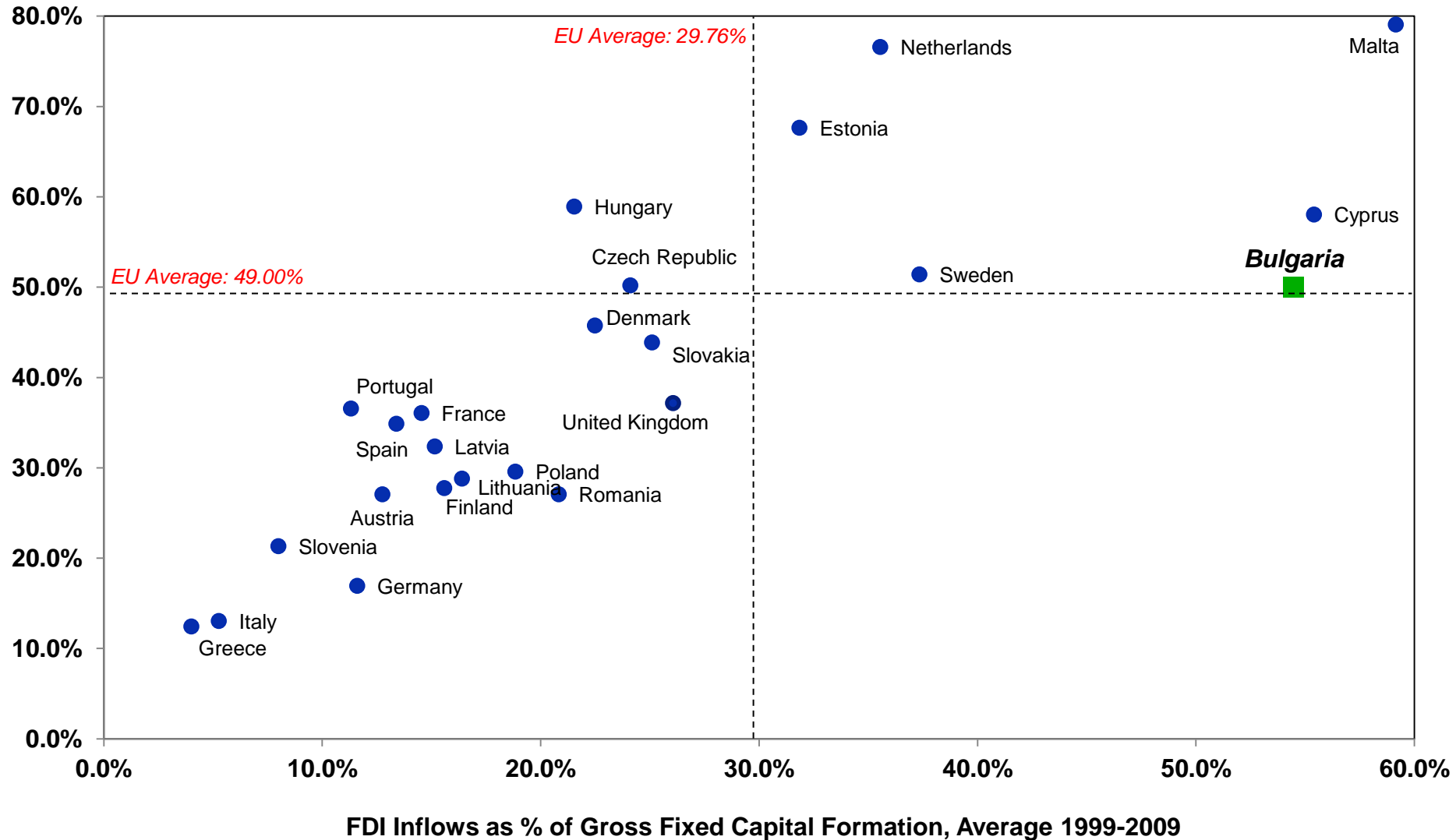
Source: USPTO (2010), Groningen Growth and Development Centre, Total Economy Database (2010)

10,000 patents (avg. 1999 – 2009) = 

Inbound Foreign Investment Performance

Stocks and Flows, EU Countries

Inward FDI Stocks as %
of GDP, Average 1999-
2009



Source: UNCTAD, World Investment Report (2011)

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- **Diagnosing Competitiveness**

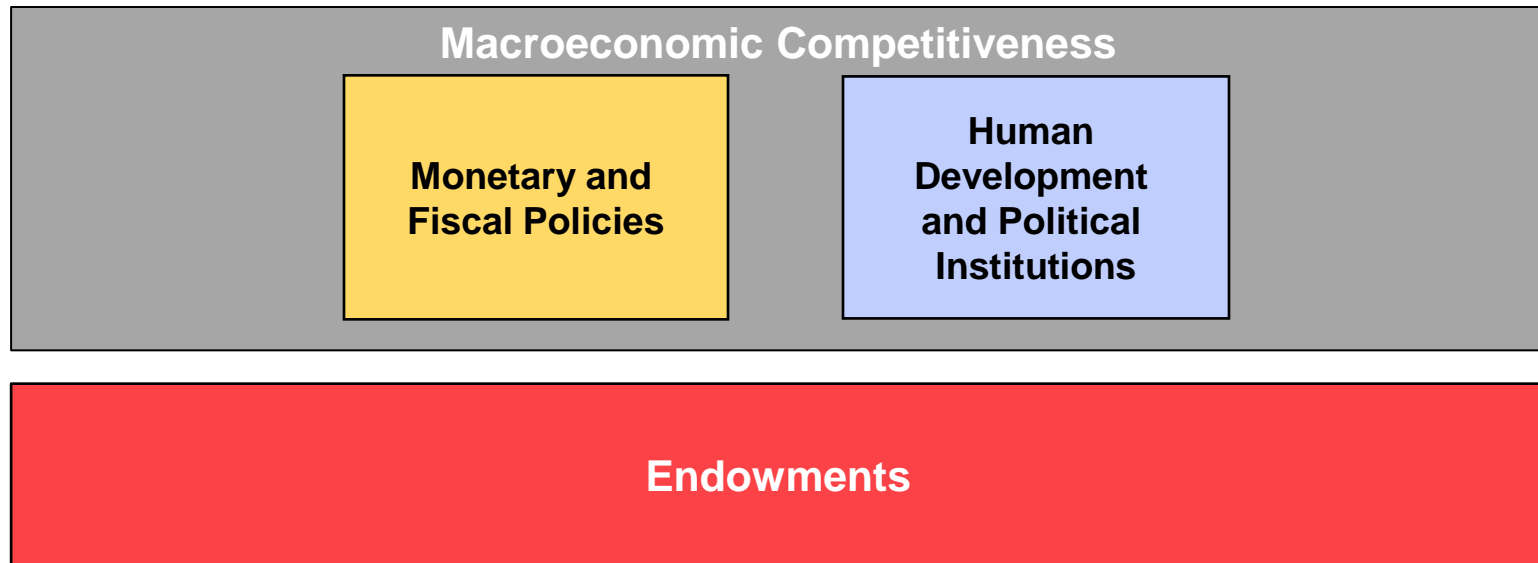
What Determines Competitiveness?



Endowments

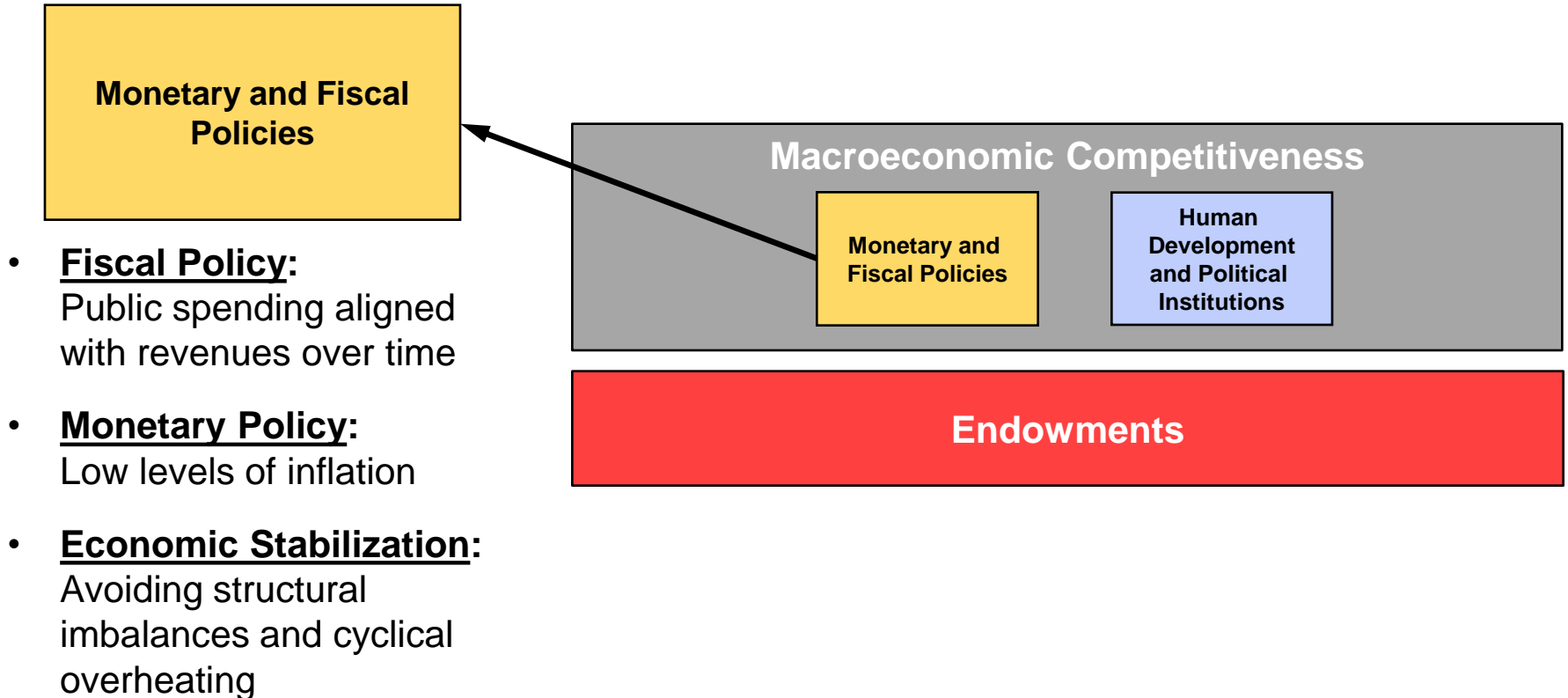
- Endowments, i.e. **natural resources**, **geographical location**, and **size**, create a **foundation** for prosperity, but true prosperity is created by **productivity in the use of endowments**

What Determines Competitiveness?

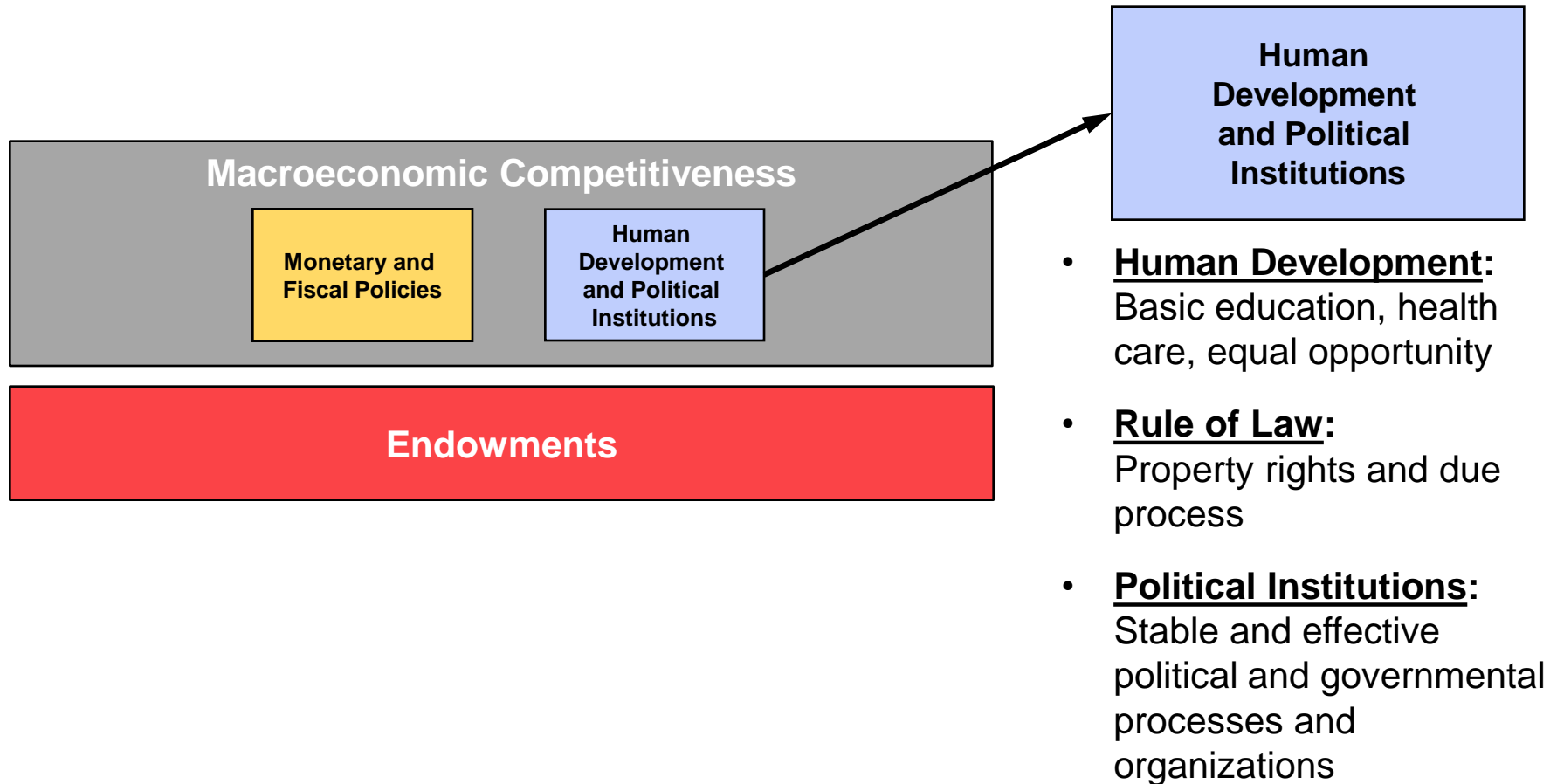


- Macroeconomic competitiveness sets the **economy-wide** context for high productivity to emerge, but is **not sufficient** to achieve this outcome
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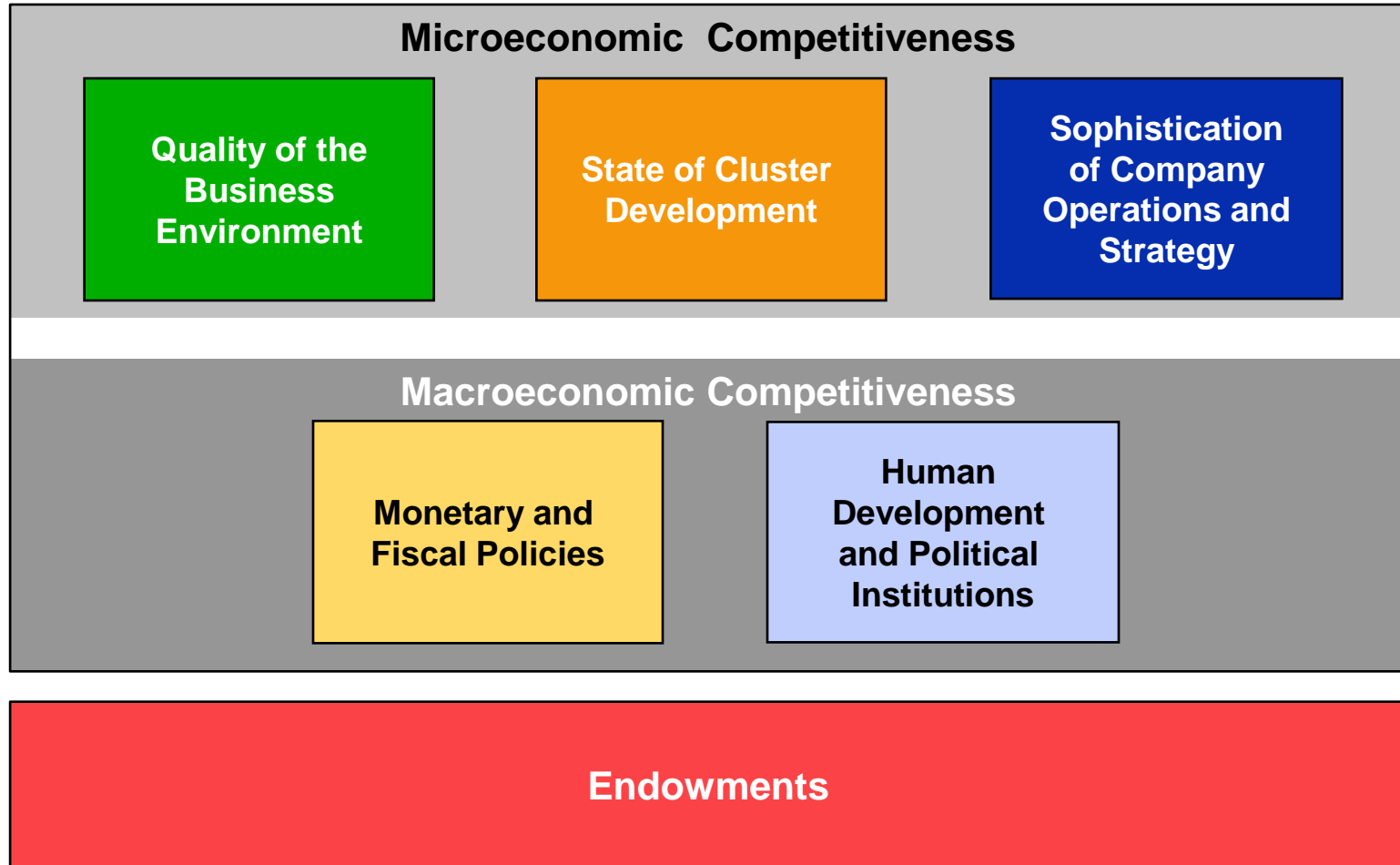
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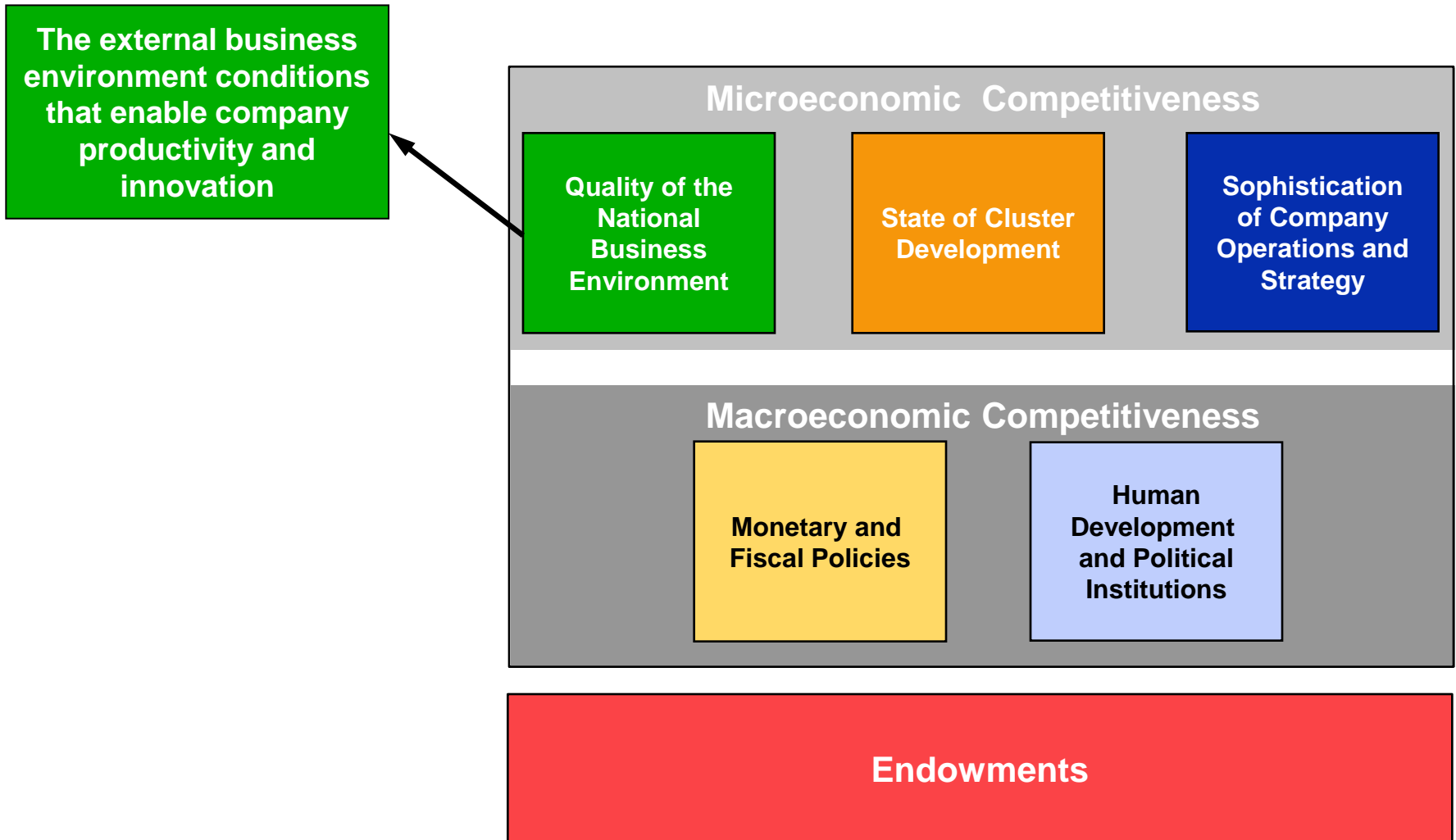


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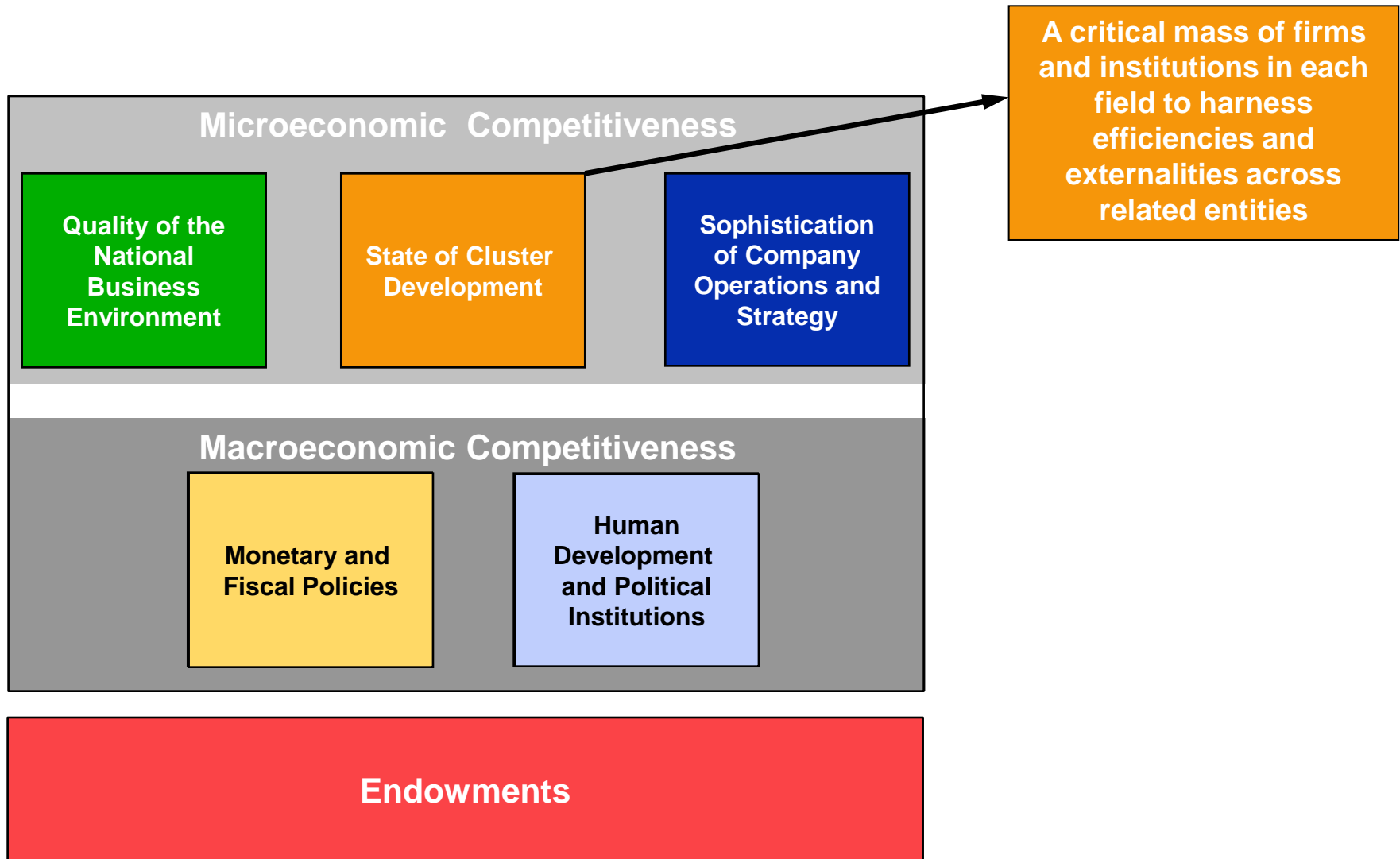


- Productivity ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local competition** revealed at the level of regions and clusters
- Macroeconomic competitiveness sets the **economy-wide** context for high productivity to emerge, but is **not sufficient** to achieve this outcome
- Endowments, i.e. **natural resources**, **geographical location**, and **size**, create a **foundation** for prosperity, but true prosperity is created by **productivity in the use of endowments**

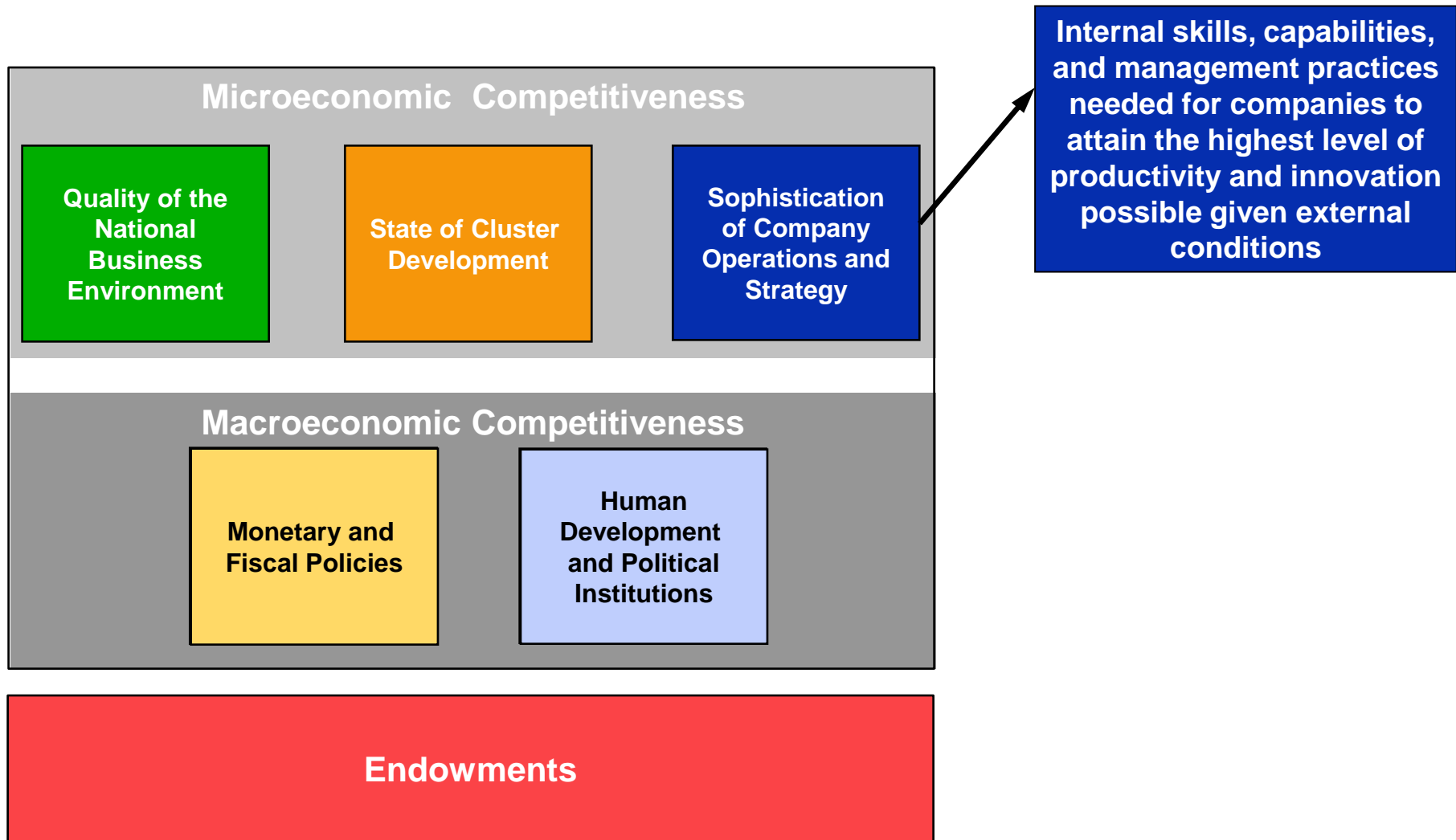
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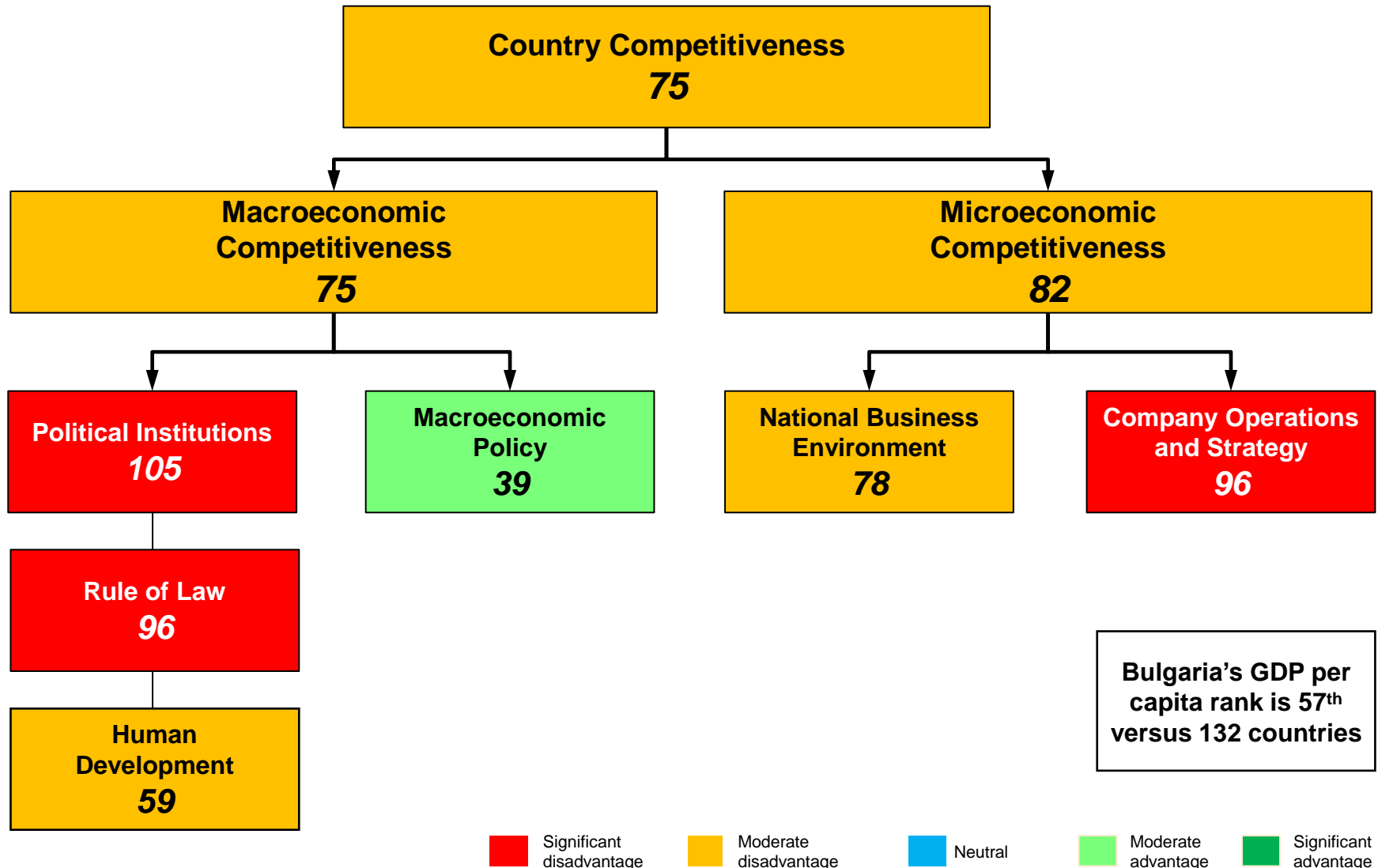


What Determines Competitiveness?



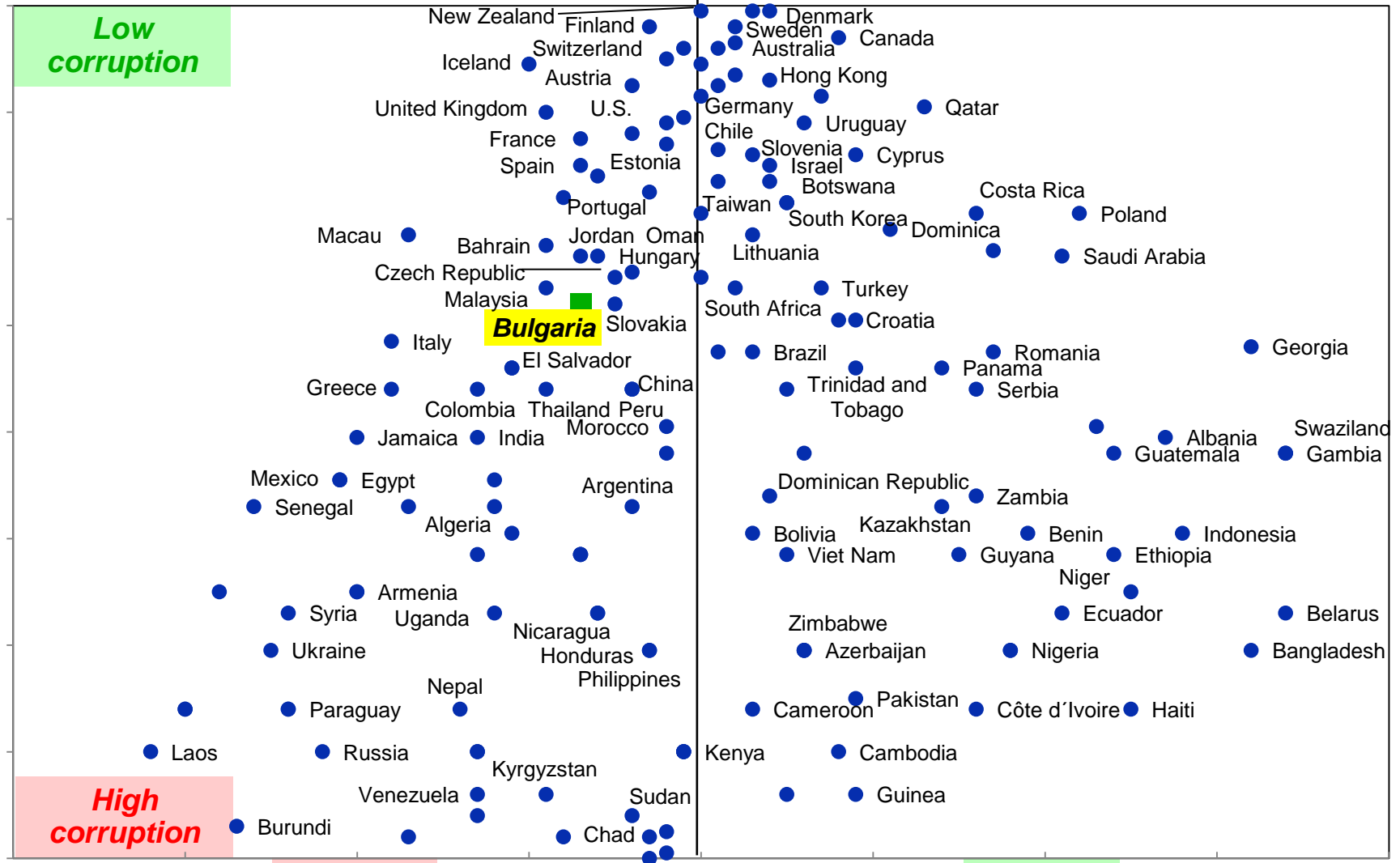
Benchmarking Competitiveness

Bulgaria's Competitiveness Profile, 2011



Note: Rank versus 132 countries; overall, Iceland ranks 57th in PPP adjusted GDP per capita and 75th in Global Competitiveness
 Source: Institute for Strategy and Competitiveness, Harvard University (2011), based in part on survey data from the World Economic Forum.

Corruption Perception Index, 2010



Change in Rank, Global Corruption Report, 2010 versus 2006

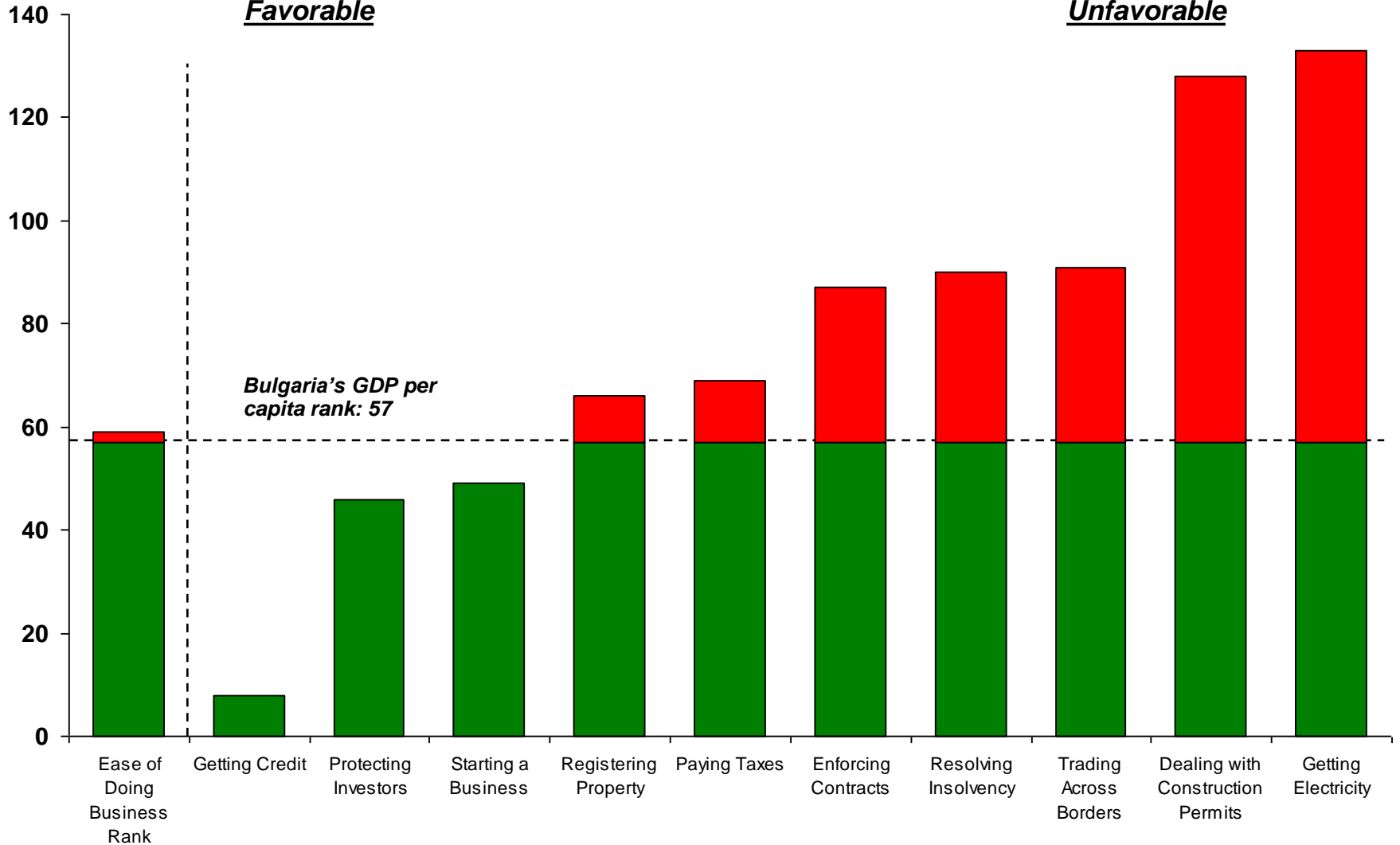
Note: Ranks only countries available in both years (160 countries total)

Source: Global Corruption Report, 2010

Microeconomic Competitiveness Indicators

Ease of Doing Business Rankings (Bulgaria, 2012)

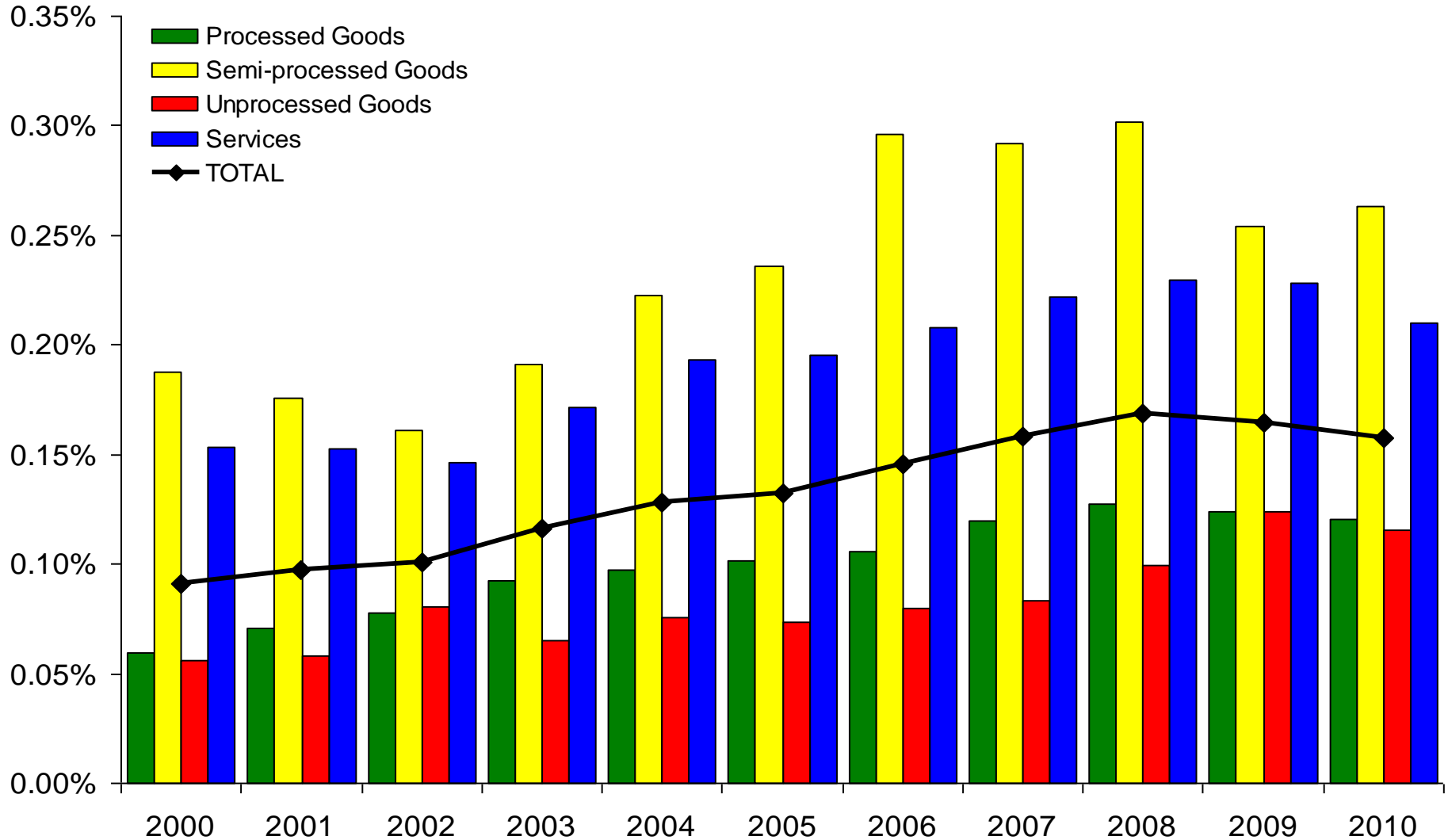
Ranking, 2010
(vs. 183 countries)



Composition of Exports

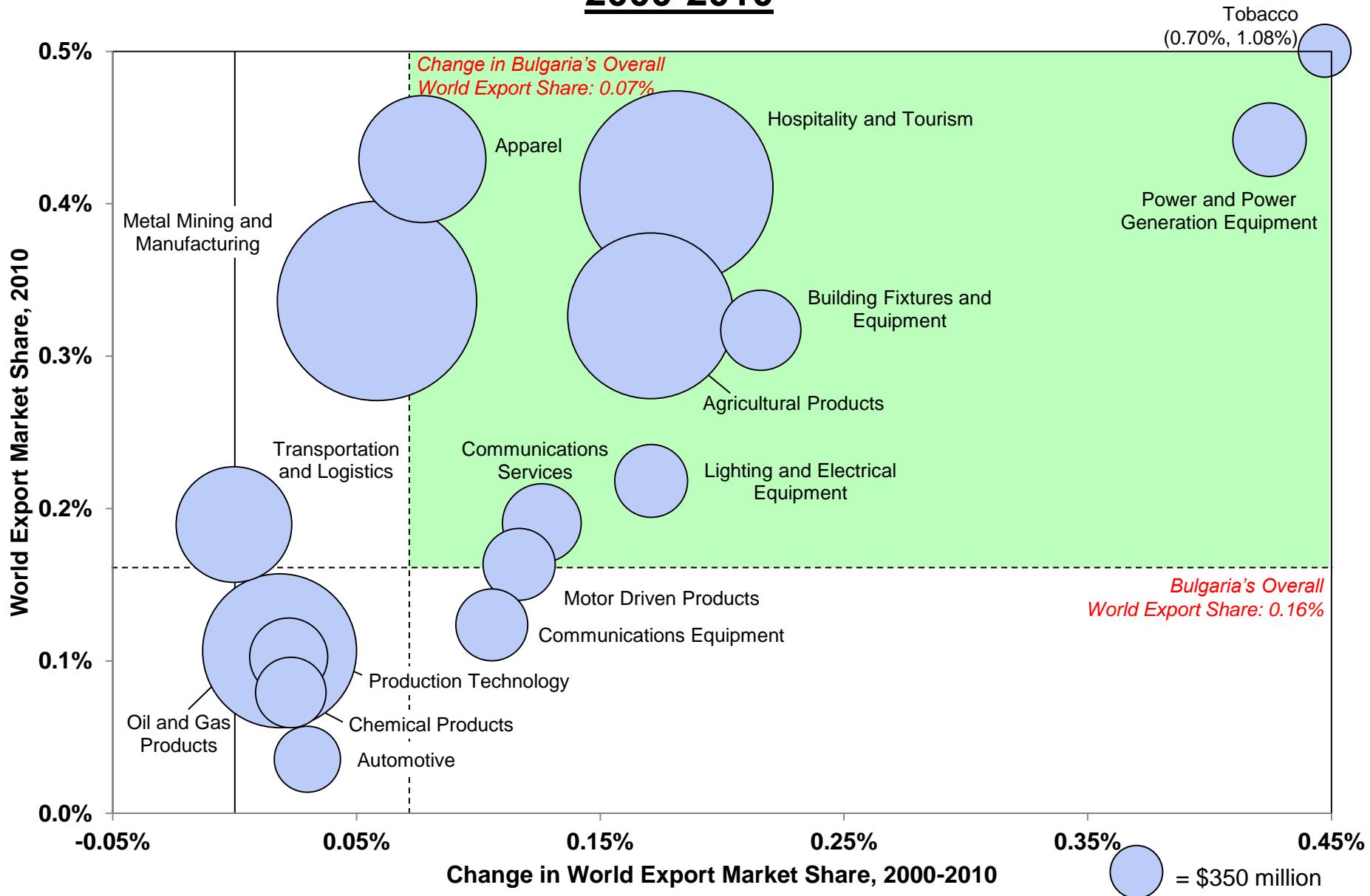
Bulgaria's Exports By Type of Good

World Export Market Share (current USD)



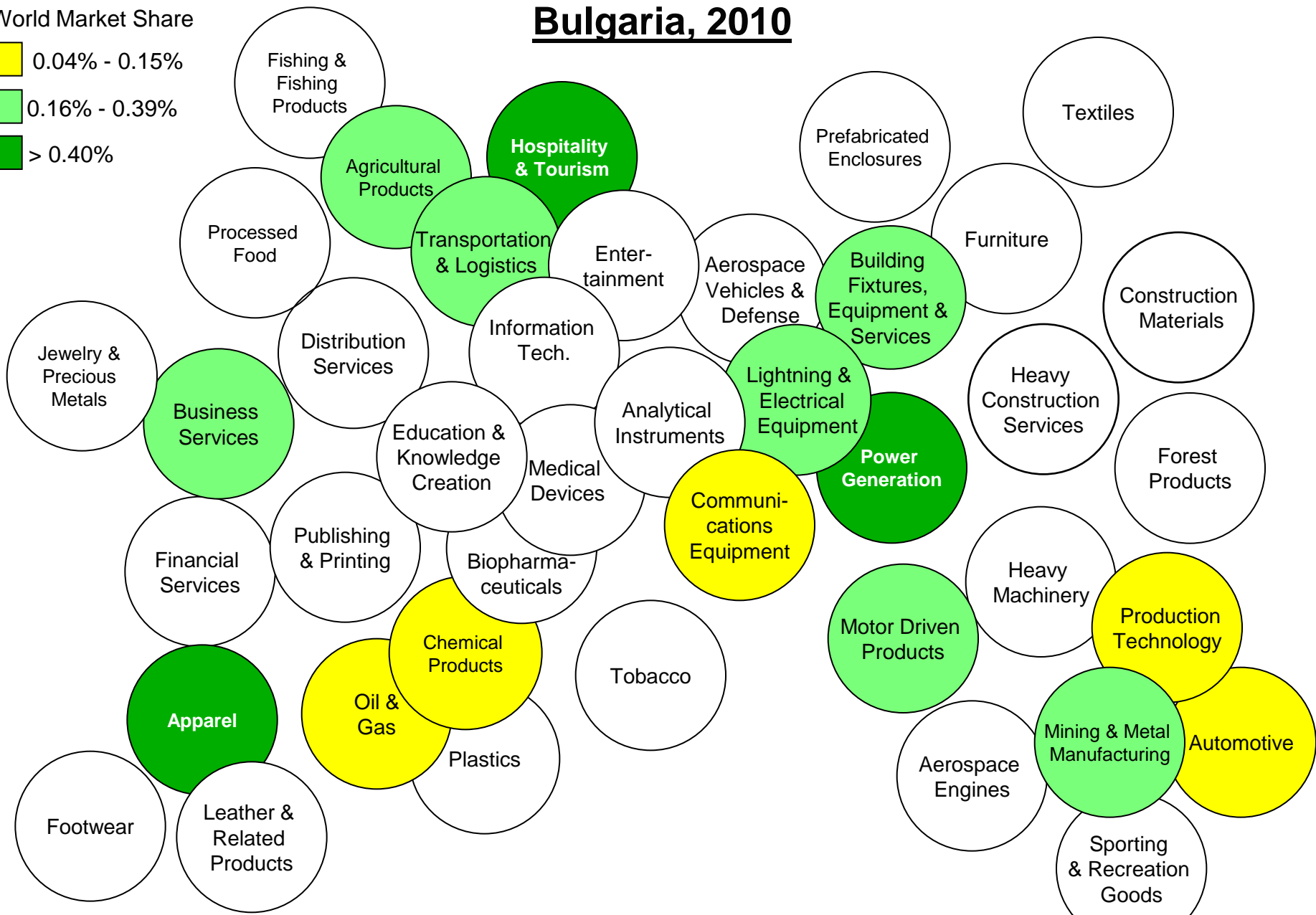
Source: Prof. Michael E. Porter, International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database and the IMF BOP statistics.

Bulgaria's National Cluster Export Portfolio 2000-2010



Cluster Linkages and Economic Diversification Bulgaria, 2010

World Market Share



Established Bulgarian Export Products

Leading Exports by World Share, 2010

Rank	Industry	Cluster	World Export Share	Change in Share (2000-2010)	Export Value (in \$ thousands)
1	Monofilament of ethylene	Plastics	6.43%	5.77%	\$13,883
2	Carbonates, percarbonates	Chemical Products	4.31%	4.25%	\$184,905
3	Cinematograph film, exposed and developed	Entertainment and Reproduction Equipment	3.35%	2.43%	\$21,200
4	Lead	Metal Mining and Manufacturing	3.14%	0.61%	\$174,510
5	Miscellaneous footwear with leather uppers	Footwear	2.74%	-0.40%	\$13,801
6	Pulley tackle and hoists	Production Technology	2.60%	1.57%	\$28,960
7	Wine, cider or similar beverage making machinery	Processed Food	2.51%	2.08%	\$5,614
8	Women's or girls' blouses, shirts and shirt-blouses, knitted	Apparel	2.41%	1.06%	\$134,417
9	Copper bars, rods and profiles	Metal Mining and Manufacturing	2.41%	2.40%	\$134,702
10	Copper, copper anodes and alloys	Metal Mining and Manufacturing	2.14%	-0.18%	\$1,593,226
11	Copper plates, sheets and strip, 15mm+ thickness	Metal Mining and Manufacturing	2.01%	2.01%	\$194,807
12	Miscellaneous simply shaped wood	Building Fixtures and Equipment	1.95%	1.65%	\$4,616
13	Medicaments containing alkaloid	Biopharmaceuticals	1.83%	1.78%	\$64,370
14	Yarn of wool or animal hair	Textiles	1.83%	1.80%	\$56,282
15	Ceramic plumbing fixtures	Construction Materials	1.82%	0.41%	\$70,998
16	Tobacco, unmanufactured	Tobacco	1.77%	0.94%	\$191,240
17	Copper mattes; cement copper	Metal Mining and Manufacturing	1.67%		\$7,366
18	Zinc	Metal Mining and Manufacturing	1.65%	0.17%	\$189,208
19	Barley, unmilled	Agricultural Products	1.61%	1.05%	\$79,445
20	Tobacco working machinery	Production Technology	1.58%	0.81%	\$9,671
21	Dairy machinery	Processed Food	1.57%	1.24%	\$8,032
22	Fuel wood, wood charcoal	Forest Products	1.57%	0.17%	\$15,702
23	Precious metal waste and scrap	Jewelry, Precious Metals and Collectibles	1.54%		\$192,529
24	Miscellaneous measuring, controlling and scientific instruments	Analytical Instruments	1.49%	1.46%	\$121,428
25	Monofilament of vinyl chloride	Plastics	1.42%	1.42%	\$40,260
26	Men's or boys' suits and ensembles	Apparel	1.41%	0.33%	\$61,306
27	Densified, reconstituted wood	Building Fixtures and Equipment	1.39%	1.20%	\$90,637
28	Wheat, meslin, unmilled	Agricultural Products	1.39%	1.03%	\$451,936
29	Parts of footwear; removable in-soles and similar articles	Footwear	1.38%	0.19%	\$94,152
30	Electric current	Power and Power Generation Equipment	1.38%		\$444,712
31	Other cereal meal, flours	Processed Food	1.21%	1.19%	\$12,103
32	Women's or girls' jackets	Apparel	1.19%	0.43%	\$69,112
33	Plants for pharmacy, perfumery, or for insecticidal purposes	Agricultural Products	1.16%	-0.28%	\$23,955
34	Glass containers	Processed Food	1.16%	0.65%	\$88,658
35	Aluminum tubes and pipes	Building Fixtures and Equipment	1.14%	1.13%	\$22,441
36	Household glassware	Building Fixtures and Equipment	1.11%	1.03%	\$92,815
37	Men's or boys' jackets and blazers	Apparel	1.05%	0.41%	\$44,091
38	Oilseed (soft fix vegetable oil)	Agricultural Products	1.04%	0.95%	\$562,108
39	Rice in the husk	Agricultural Products	1.02%	0.98%	\$10,465
40	Cigarettes containing tobacco	Tobacco	0.98%	0.81%	\$167,103