

Global Competitiveness Report 2004-05: Sweden's Business Competitiveness

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This presentation draws on ideas from Professor Porter's books and articles, in particular, "Building the Microeconomic Foundations of Prosperity," in *The Global Competitiveness Report 2004-05* (World Economic Forum, 2004); "Clusters and the New Competitive Agenda for Companies and Governments," in *On Competition* (Harvard Business School Press, 1998); *Clusters of Innovation Initiative* (www.compete.org), a joint effort of the Council on Competitiveness, Monitor Group, and ongoing research. 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 the author

Additional information may be found at the website of the Institute for Strategy and Competitiveness, www.isc.hbs.edu

Global Competitiveness Report

- Annual publication of the **World Economic Forum** since 1979; in recent years academic guidance from
 - Professor Michael E. Porter, Harvard Business School
 - Professor Jeffrey Sachs (until 2002)/Professor Xavier Sala-i-Martin (since 2003), Columbia University
- Covers 104 economies; based on statistical data and global **Executive Opinion Survey** of 8,729 respondents (84 per country)

Content

- Core chapters present the **Growth Competitiveness Index** and the **Business Competitiveness Index**
- Nine other chapters by leading researchers on key competitiveness issues
- Extensive data sheets on all economies covered

Ranking Competitiveness

Business Competitiveness

The set of institutions, market structures, and economic policies supportive of high current levels of prosperity

Michael E. Porter

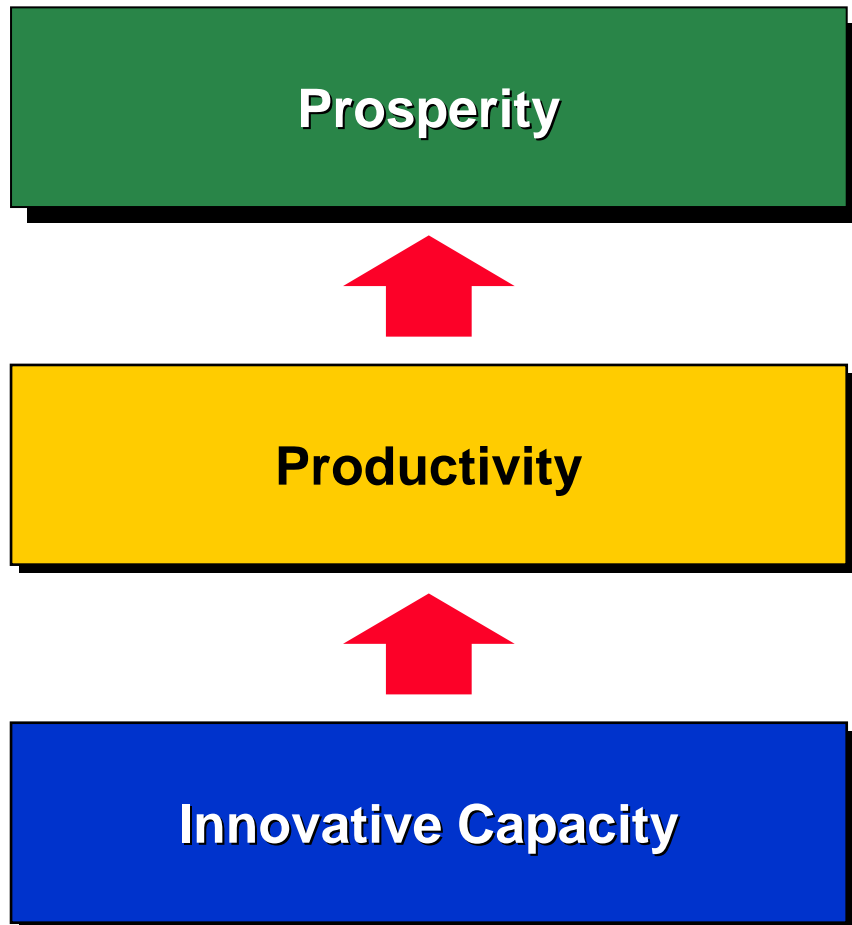
Growth Competitiveness

The set of institutions and economic policies supportive of high rates of economic growth in the medium term (coming five years)

Xavier Sala-i-Martin

Focus of this presentation

Competitiveness and Prosperity



- The Business Competitiveness Index measures the **level of prosperity** (GDP per capita) that an economy can **sustain**
- Sustainable prosperity is set by the underlying **competitiveness** of the economy, which is determined by the level of **productivity** and – over time – innovation achievable by companies
- Countries can **overperform** or **underperform** true competitiveness for substantial periods of time

Determinants of Productivity and Productivity Growth

Macroeconomic, Political, Legal, and Social
Context for Competitiveness

Microeconomic Foundations of Competitiveness

The Sophistication
of Company
Operations and
Strategy



The Quality of the
Microeconomic
Business
Environment

- Nations or regions compete in offering the **most productive environment** for business
- A sound macroeconomic, political, legal, and social context creates the potential for competitiveness, **but is not sufficient**

The Business Competitiveness Index, 2004

Measured Elements

Company Operations and Strategy

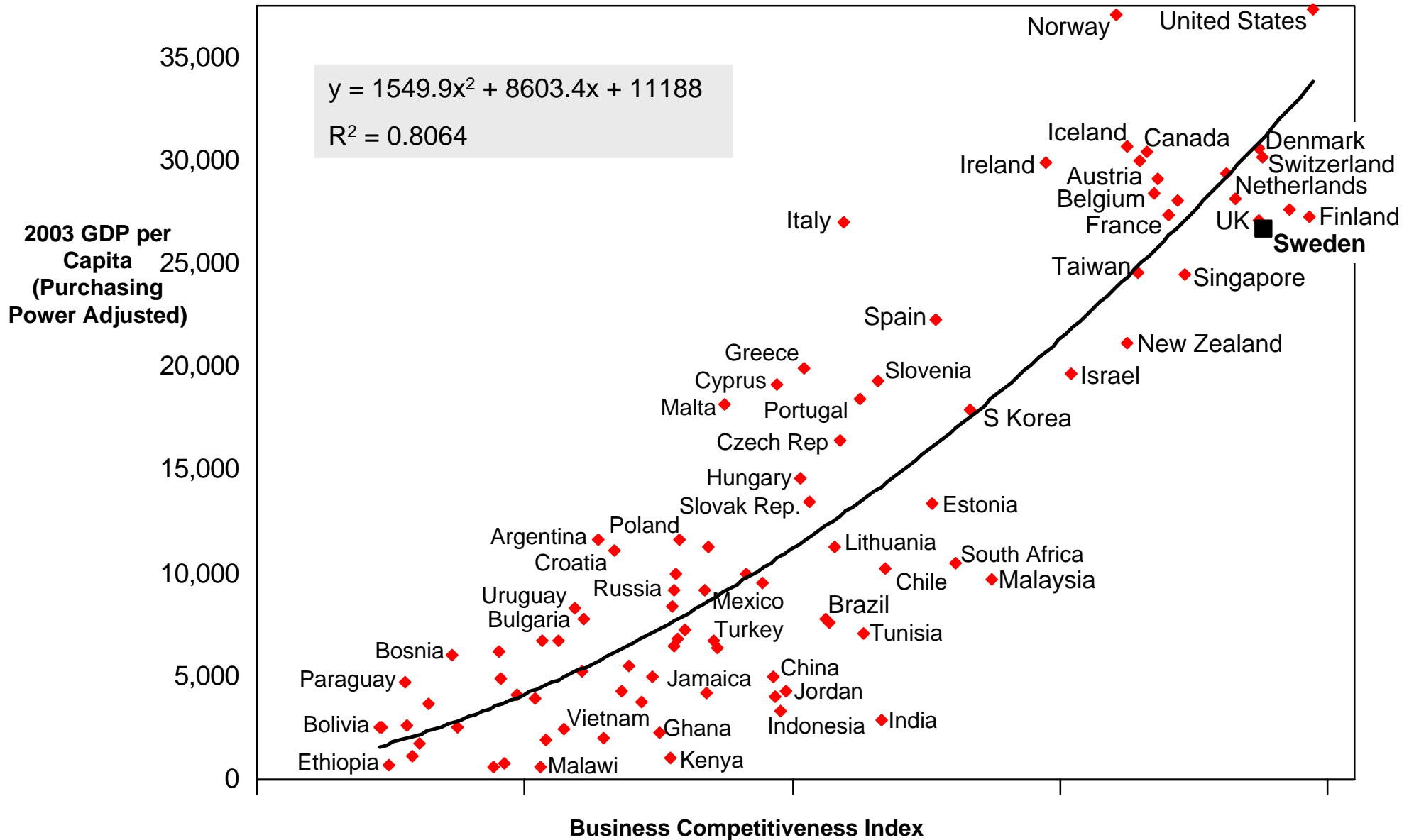
- Nature of Firm's Competitive Advantages
- Extent of Innovation
- Sophistication of Production
- Sophistication of Marketing
- Sophistication of Organizational Structures and Incentives
- Extent of Internationalization

National Business Environment

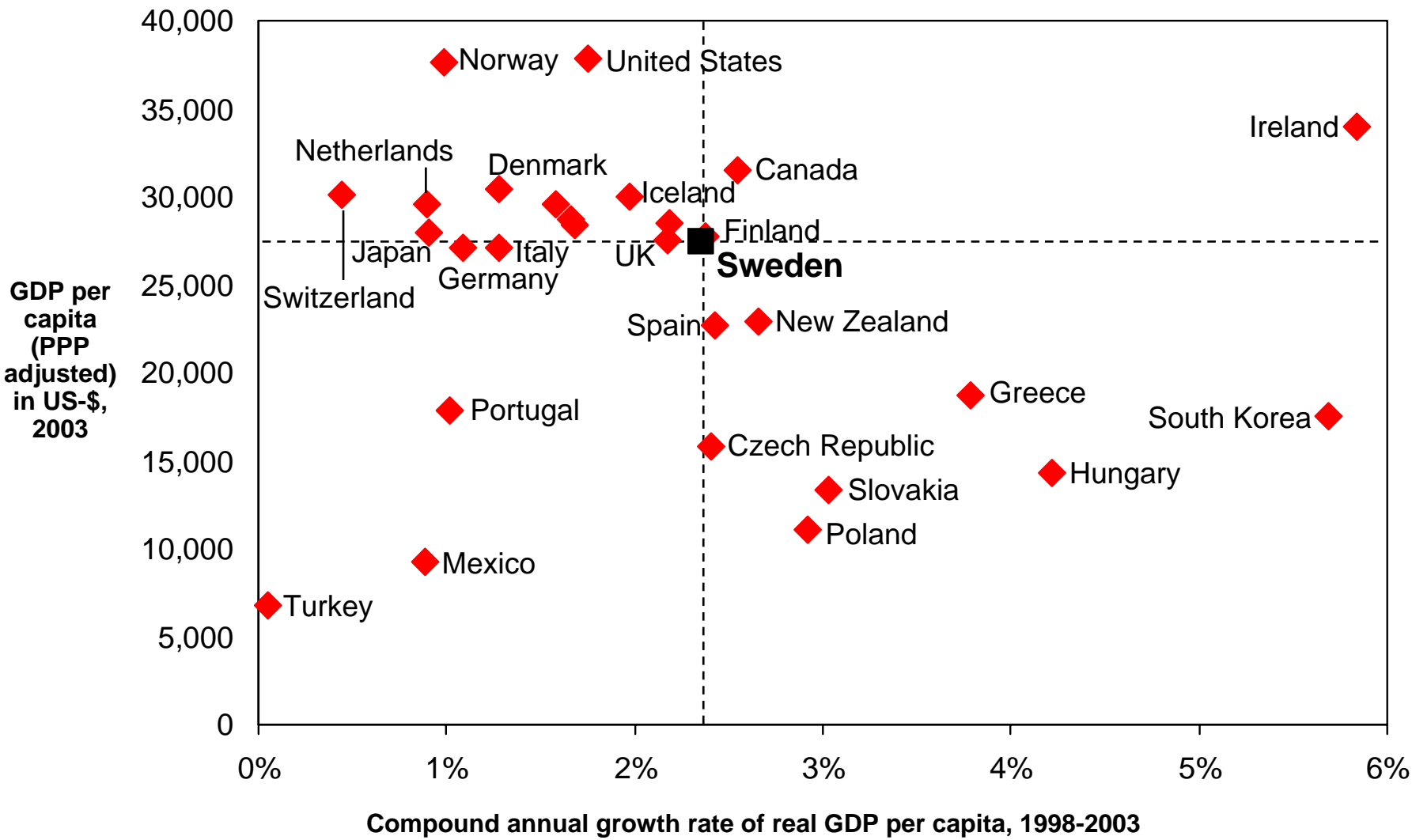
- Factor Conditions
 - Physical Infrastructure
 - Administrative Infrastructure
 - Human Resources
 - Technology Infrastructure
 - Capital Markets
- Context for Firm Strategy and Rivalry
 - Incentives
 - Policies affecting competition
- Demand Conditions
- Related and Supporting Industries

Business Competitiveness Index 2004

Relationship with GDP Per Capita



Prosperity



Source: EIU (2004)

Sweden's Economic Performance

- Swedish prosperity continues to be high but lags leading OECD peers



Key drivers of Swedish prosperity

- Key strength is Sweden's high labor **productivity**, among the best in the world although the gap to the United States has widened in recent years
- **Labor input** is also high – Sweden reports a high share of employees in the population that is still compensating for low and falling work hours
- Key weakness is the high level of local **prices** in Sweden, among the highest in the world, that are reducing the benefits Swedes derive from high productivity

Sweden's Economic Performance

Other Indicators

Strong

- Sweden has a strong position in **international patenting**
- **FDI stocks and inflows** are substantial
- Sweden's **world export market share** has stayed roughly stable over the last decade
- Sweden continues to be home to a relatively high number of **multinational companies**



Or not so strong?

- Patenting is reflecting **high R&D spending**
- FDI inflows are at the level **predicted** given the structure of the Swedish economy
- Sweden has lost ground on world markets in some **key clusters**
- Increasing concerns and reports about **relocations**, not only by large companies

The Microeconomic Foundations of Economic Performance

Using the Business Competitiveness Index

- Overall **level of sustainable prosperity** that can be supported given a country's current competitiveness
 - **Strengths and weaknesses** of a country's business environment relative to its overall level of competitiveness
 - **Developments** in the overall competitiveness and the strengths and weaknesses of individual countries
-
- Overall patterns in the **competitive environment for locations** in the world economy

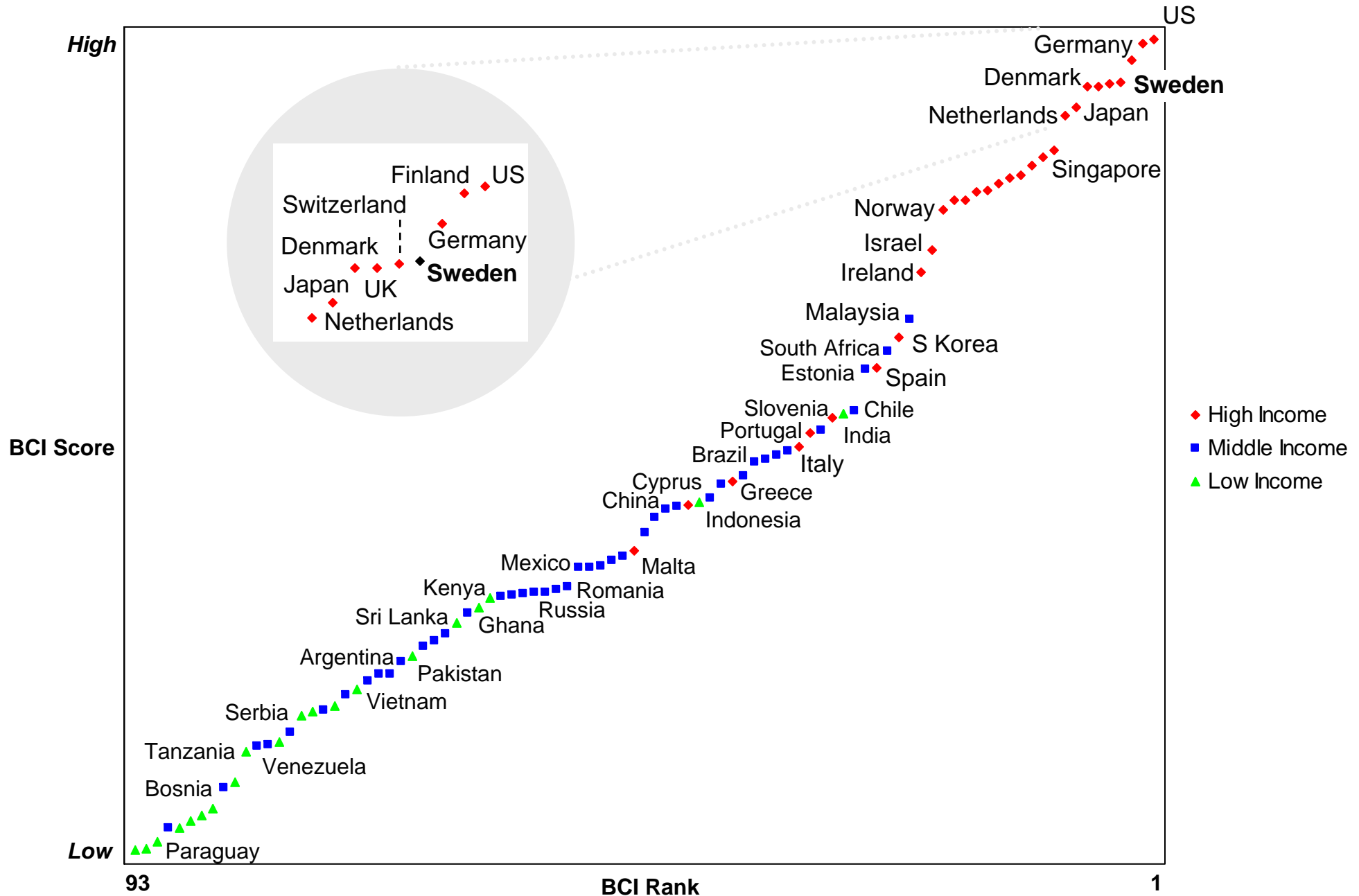
Business Competitiveness Index 2004

Top 25	Country	Change
1	United States	+1
2	Finland	-1
3	Germany	+2
4	Sweden	-1
5	Switzerland	+2
6	United Kingdom	0
7	Denmark	-3
8	Japan	+5
9	Netherlands	0
10	Singapore	-2
11	Hong Kong SAR	+8
12	France	-2
13	Australia	-2
14	Belgium	+1
15	Canada	-3
16	Austria	+1
17	Taiwan	-1
18	New Zealand	0
19	Iceland	-5
20	Norway	+2
21	Israel	-1
22	Ireland	-1
23	Malaysia	+3
24	Korea	-1
25	South Africa	+2

Note: Constant sample
of countries
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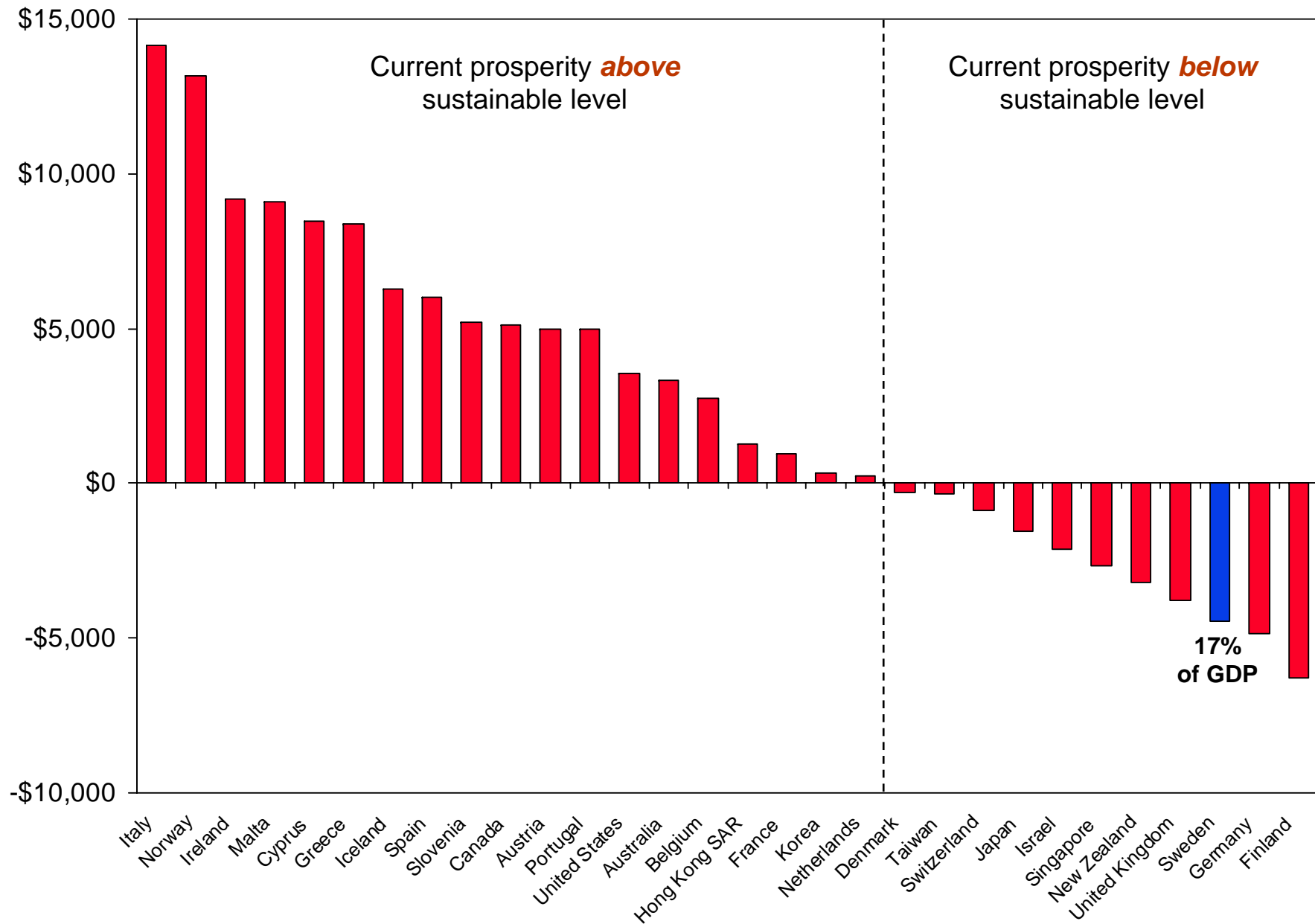
Business Competitiveness Report 2004

BCI Rank Versus Value



Business Competitiveness Report 2004

The Prediction Gap: High Income Countries



Business Competitiveness Report 2004

Explaining the Prediction Gap

Factors Influencing the Prediction Gap

- Location
 - Prosperity of neighbors
 - Population with access to ocean
 - Governance
 - Government Accountability
 - Government Effectiveness
 - Natural resources (NR)
 - NR export revenues
- Other
- Transitory impact of macroeconomic or political climate
 - Structural factors with no simple relationship to prosperity, e.g. taxation, imbalance of competitiveness profile

Actual GDP per Capita

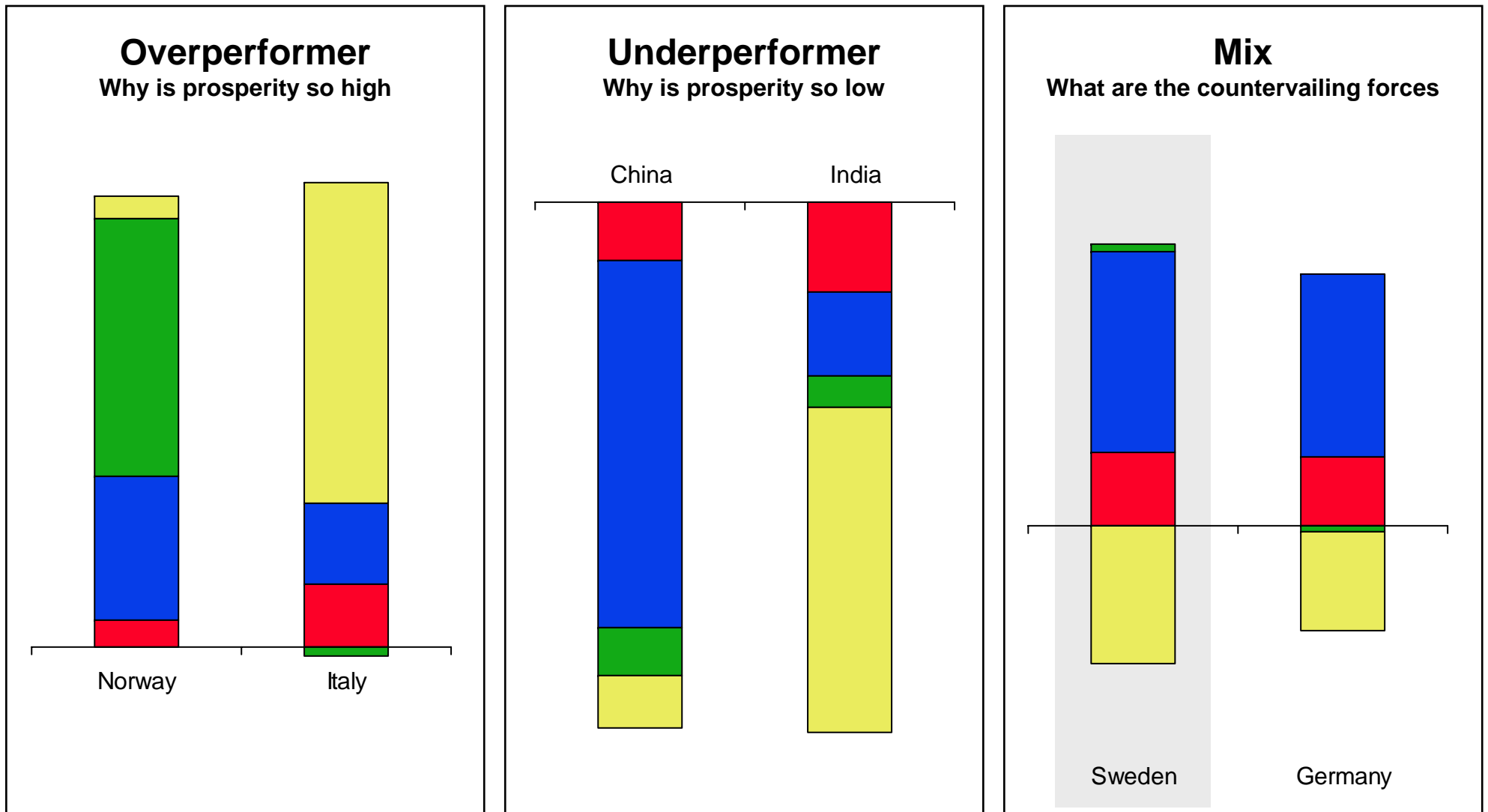


Predicted GDP per Capita

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Explaining the Prediction Gap: Examples

■ Location
 ■ Governance
 ■ Natural resources
 ■ Other factors



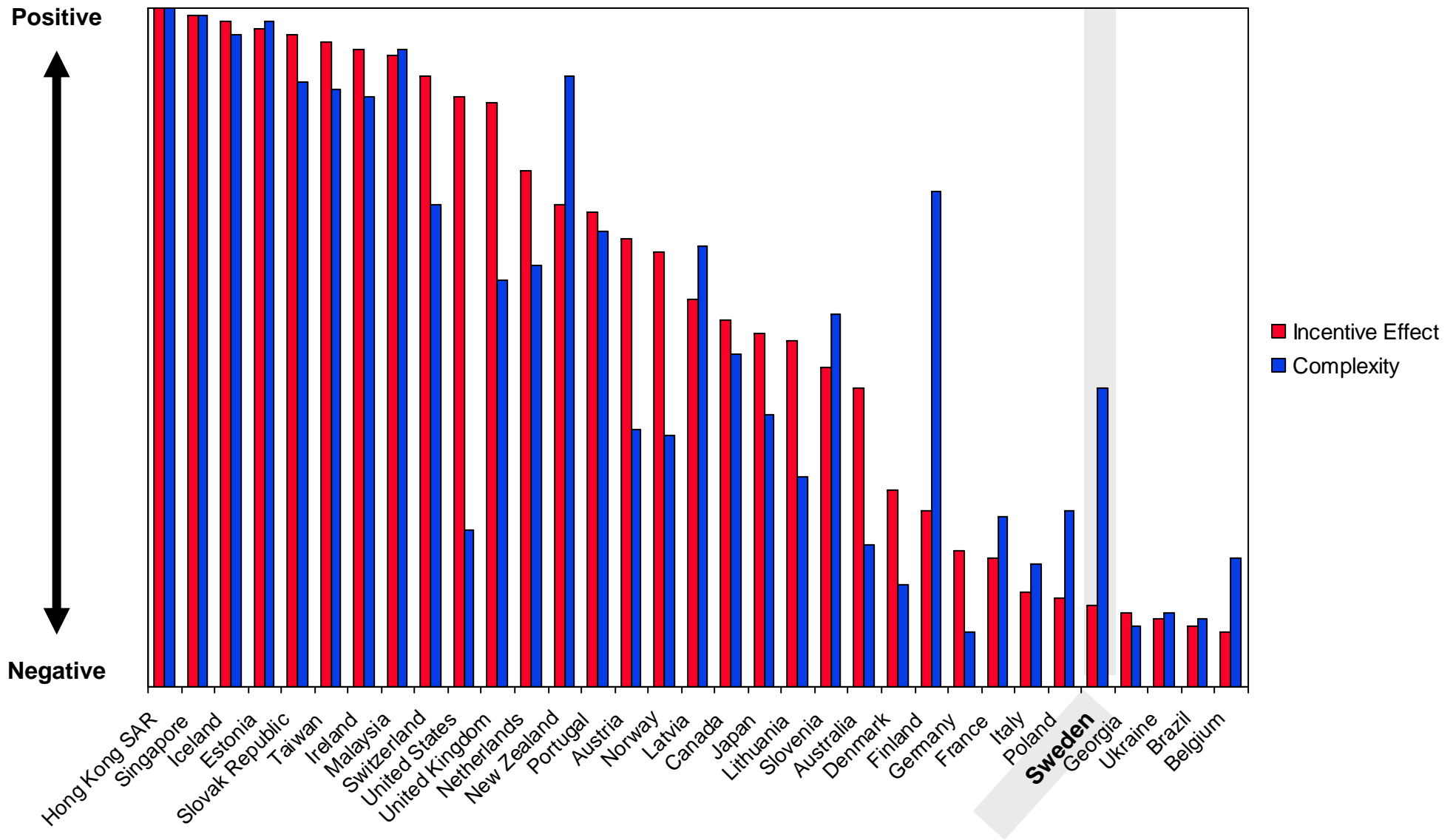
Note: Effect of each factor normalized by the average of all countries

Source: Global Competitiveness Report 2004

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Business Competitiveness Report 2004

Explaining the Prediction Gap: Taxation



Global Competitiveness Report 2004

Business Environment and Company Sophistication

The national business environment
has advanced beyond company
sophistication

Estonia
Tunisia
Norway
Cyprus
Portugal
Australia
Malaysia
Jordan
Botswana
Hungary
New Zealand
Algeria
Hong Kong SAR
Chile
Singapore

Company sophistication is
more advanced than the
national business environment

Philippines
Japan
Germany
Korea
Italy
Guatemala
Venezuela
Switzerland
Costa Rica
France
Brazil
Poland
Honduras
Argentina
Sweden

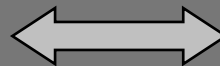
Sweden's Competitiveness Profile

Strengths and Weaknesses

Macroeconomic, Political, Legal, and Social
Context for Competitiveness

Microeconomic Foundations of Competitiveness

The Sophistication
of Company
Operations and
Strategy



The Quality of the
Microeconomic
Business
Environment

- Relative strengths in areas of innovation, investment, and organizational structures
- Relative weaknesses in marketing and the presence along the value chain

Company Operations and Strategy

Sweden's Relative Position 2004

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Willingness to delegate authority	1
Capacity for innovation	2
Production process sophistication	3
Extent of staff training	3
Company spending on research and development	4
Extent of branding	4

Competitive Disadvantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Extent of regional sales	16
Extent of marketing	12 ↓
Value chain presence	10
Extent of incentive compensation	10
Nature of competitive advantage	9
Reliance on professional management	9 ↓
Breadth of international markets	8
Degree of customer orientation	6
Control of international distribution	6 ↓

Note: Rank by countries; overall Sweden ranks 4 (5 on Company Operations and Strategy, 19 on GDP pc 2003)

Source: Global Competitiveness Report 2004

Sweden's Competitiveness Profile

Strengths and Weaknesses

**Macroeconomic, Political, Legal, and Social
Context for Competitiveness**

Microeconomic Foundations of Competitiveness

**The Sophistication
of Company
Operations and
Strategy**



**The Quality of the
Microeconomic
Business
Environment**

- Relative strengths in technology and innovation, level playing field for competition, administrative infrastructure, physical infrastructure, and basic financial market conditions
- Relative weaknesses in competition, human resources, advanced demand conditions, and basic cluster conditions

Factor (Input) Conditions Sweden's Relative Position

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Quality of scientific research institutions	2	↑
Internet users per 10,000 people (2003)	3	
University/industry research collaboration	3	
Efficiency of legal framework	3	
Ease of access to loans	4	
Patents per million population (2003)	6	
Availability of scientists and engineers	6	

Competitive Disadvantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Extent of bureaucratic red tape	23	↑
Quality of math and science education	21	
Local equity market access	18	↓
Air transport infrastructure quality	17	
Quality of public schools	15	↑
Quality of electricity supply	14	
Venture capital availability	13	
Quality of management schools	12	↓
Reliability of police services	11	↑
Cell phones per 100 people (2003)	11	↓
Overall infrastructure quality	10	
Telephone/fax infrastructure quality	9	
Administrative burden for startups	9	↑

Note: Rank by countries; overall Sweden ranks 4 (6 on National Business Environment, 19 on GDP pc 2003)

Source: Global Competitiveness Report 2004

Context for Firm Strategy and Rivalry

Sweden's Relative Position

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Intellectual property protection	1	↑
Tariff liberalization	2	
Hidden trade barrier liberalization	4	
Cooperation in labor-employer relations	5	
Favoritism in decisions of government officials	5	↑
Business costs of corruption	6	
Effectiveness of bankruptcy law	6	

Competitive Disadvantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Intensity of local competition	39	↓
Extent of locally based competitors	33	
Decentralization of corporate activity	24	
Centralization of economic policy-making	22	
Prevalence of mergers and acquisitions	20	
Effectiveness of anti-trust policy	19	↓
Efficacy of corporate boards	17	↓
Foreign ownership restrictions	13	
Regulation of securities exchanges	10	
Protection of minority shareholders' interests	9	

Note: Rank by countries; overall Sweden ranks 4 (6 on National Business Environment, 19 on GDP pc 2003)

Source: Global Competitiveness Report 2004

Demand Conditions

Sweden's Relative Position

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Stringency of environmental regulations 6

Competitive Disadvantages Relative to GDP per Capita

Country Ranking, Arrows
indicate a change of 5 or more
ranks since 1998

Government procurement of advanced
technology products 19

Buyer sophistication 13 ↓

Laws relating to ICT 12

Presence of demanding regulatory
standards 11 ↓

Note: Rank by countries; overall Sweden ranks 4 (6 on National Business Environment, 19 on GDP pc 2003)

Source: Global Competitiveness Report 2004

Related and Supporting Industries

Sweden's Relative Position

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 1998

Extent of collaboration among clusters	6
Local supplier quality	6

Competitive Disadvantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 1998

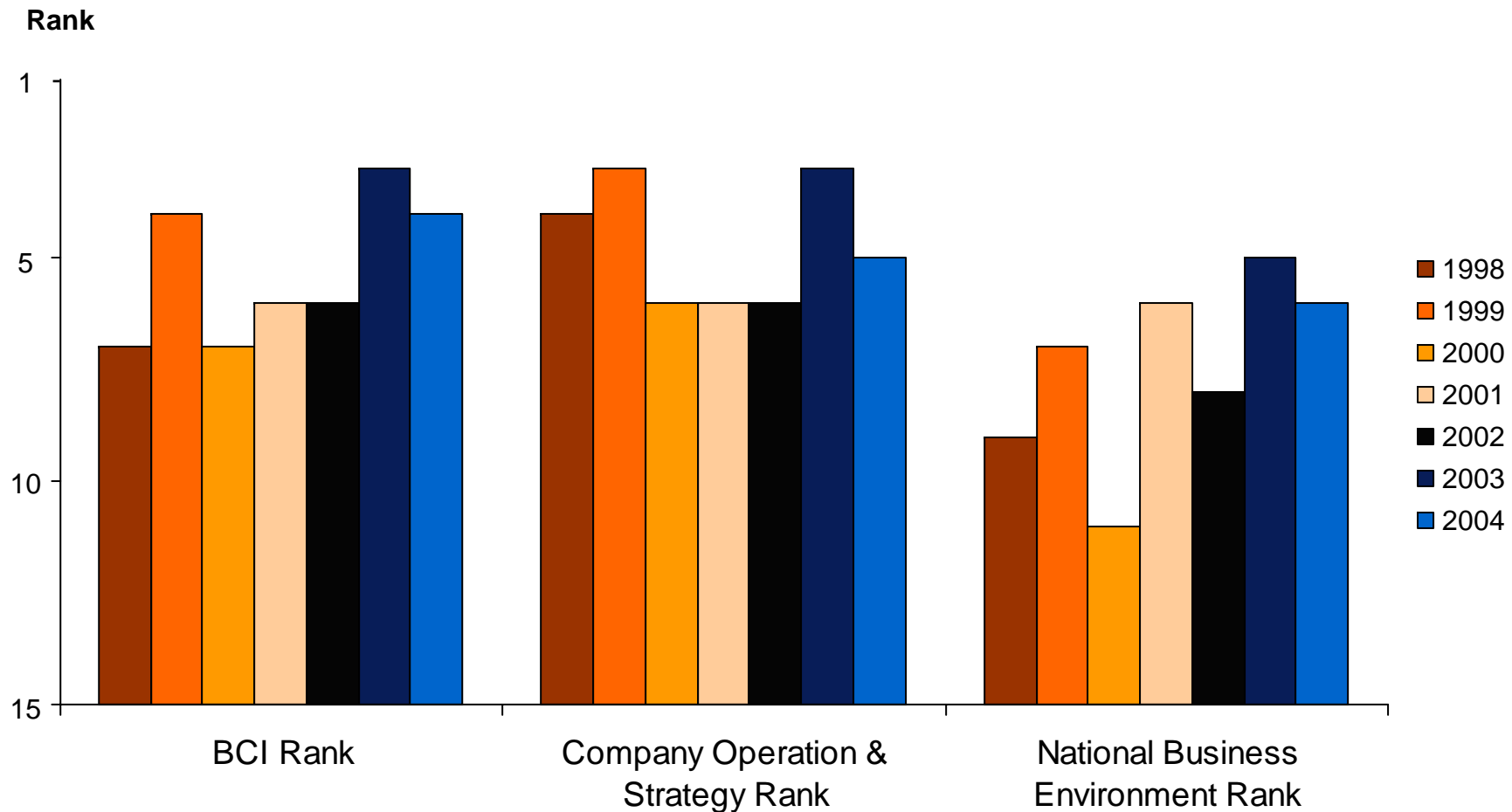
Local availability of components and parts	21
Local supplier quantity	20
Local availability of process machinery	14
State of cluster development	9
Local availability of specialized research and training services	8

Note: Rank by countries; overall Sweden ranks 4 (6 on National Business Environment, 19 on GDP pc 2003)

Source: Global Competitiveness Report 2004

Business Competitiveness Index

Sweden's Position over Time



- Sweden's overall BCI index value has **dropped slightly** (32 advancing/39 falling indicators), balanced across all elements of competitiveness

Swedish Competitiveness 2004

Key Observations

Level of competitiveness

- High and **should** support higher prosperity
- Prosperity held back by **taxes** and imbalance between **company sophistication** and business environment quality

Strengths and weaknesses

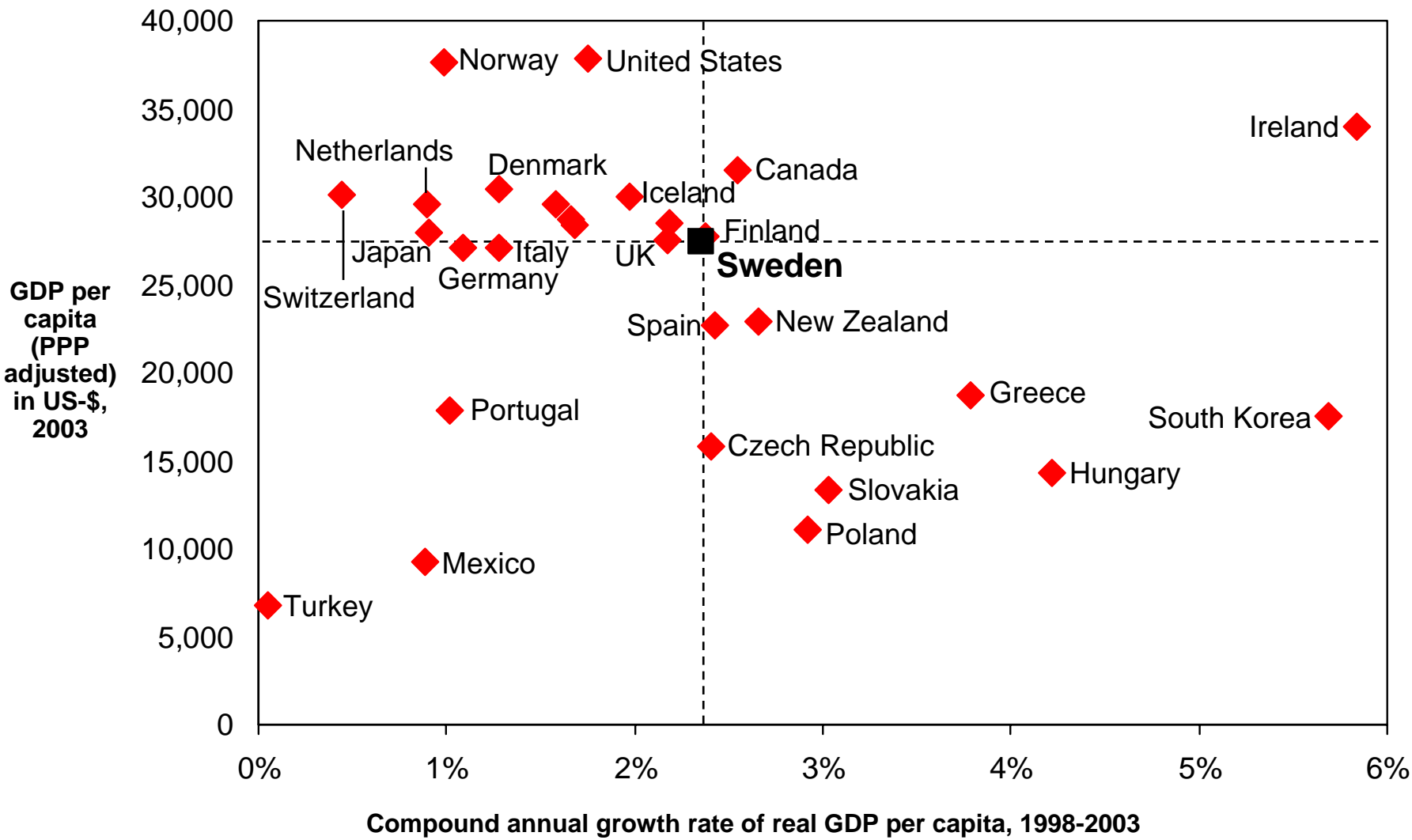
- Strengths in areas related to technology and innovation, level playing field for competition, administrative infrastructure, physical infrastructure, and basic financial market conditions
- Weaknesses in areas related to competition, human resources, advanced demand conditions, and basic cluster conditions

Trend

- Slightly **positive** development in the last few years
- But 2004 seems to have been a **lost year** for competitiveness upgrading

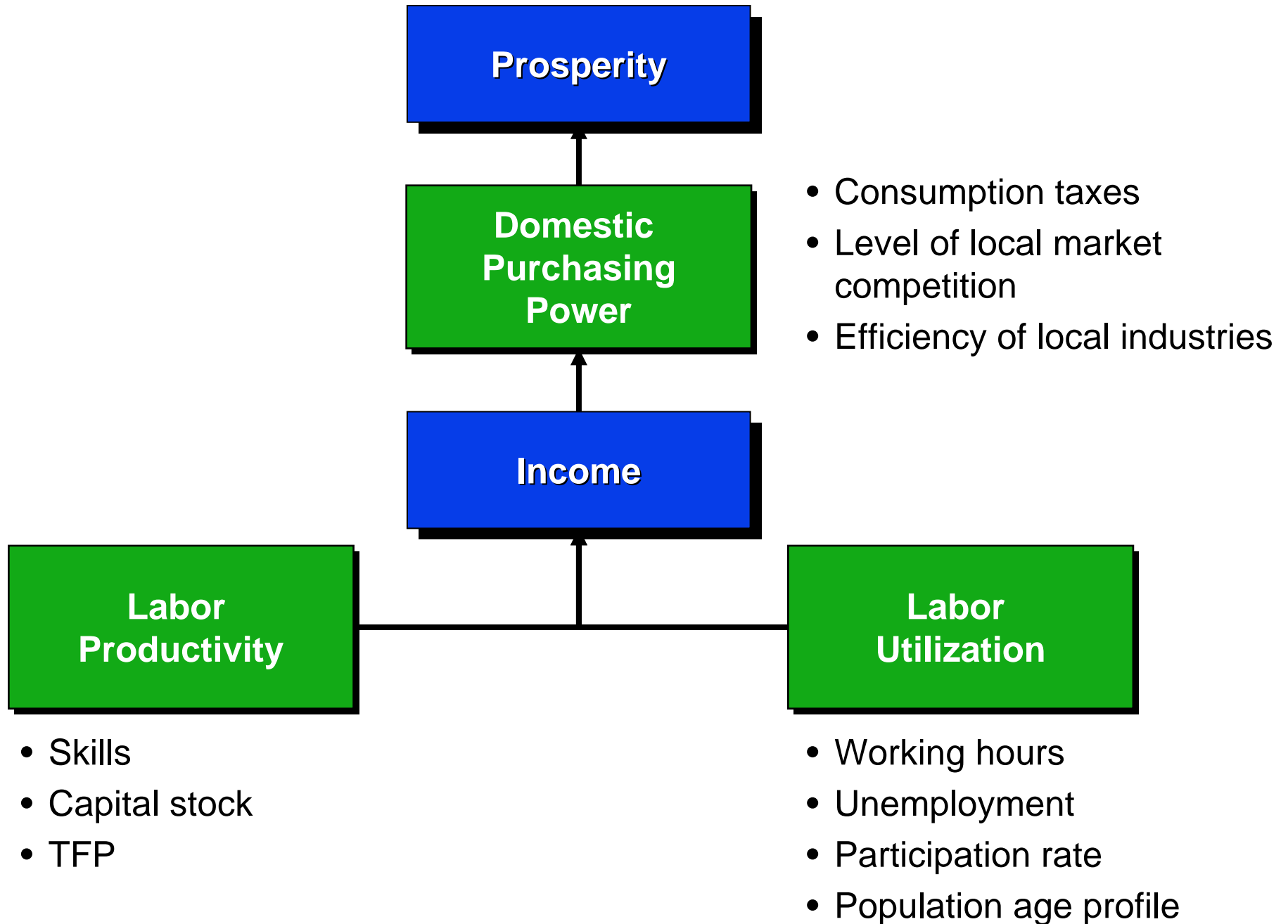
Appendix

Prosperity

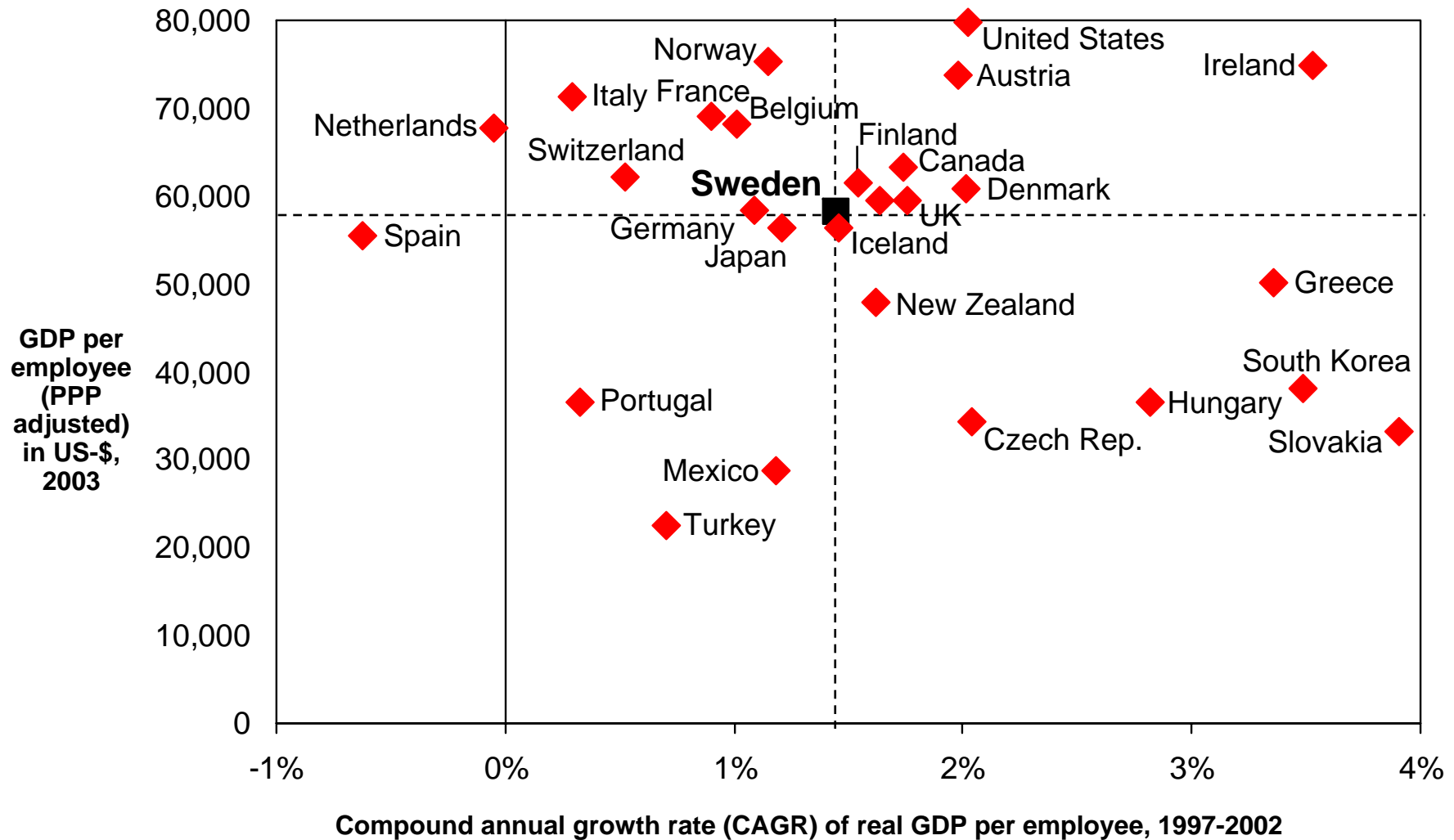


Source: EIU (2004)

Decomposing Prosperity



Productivity

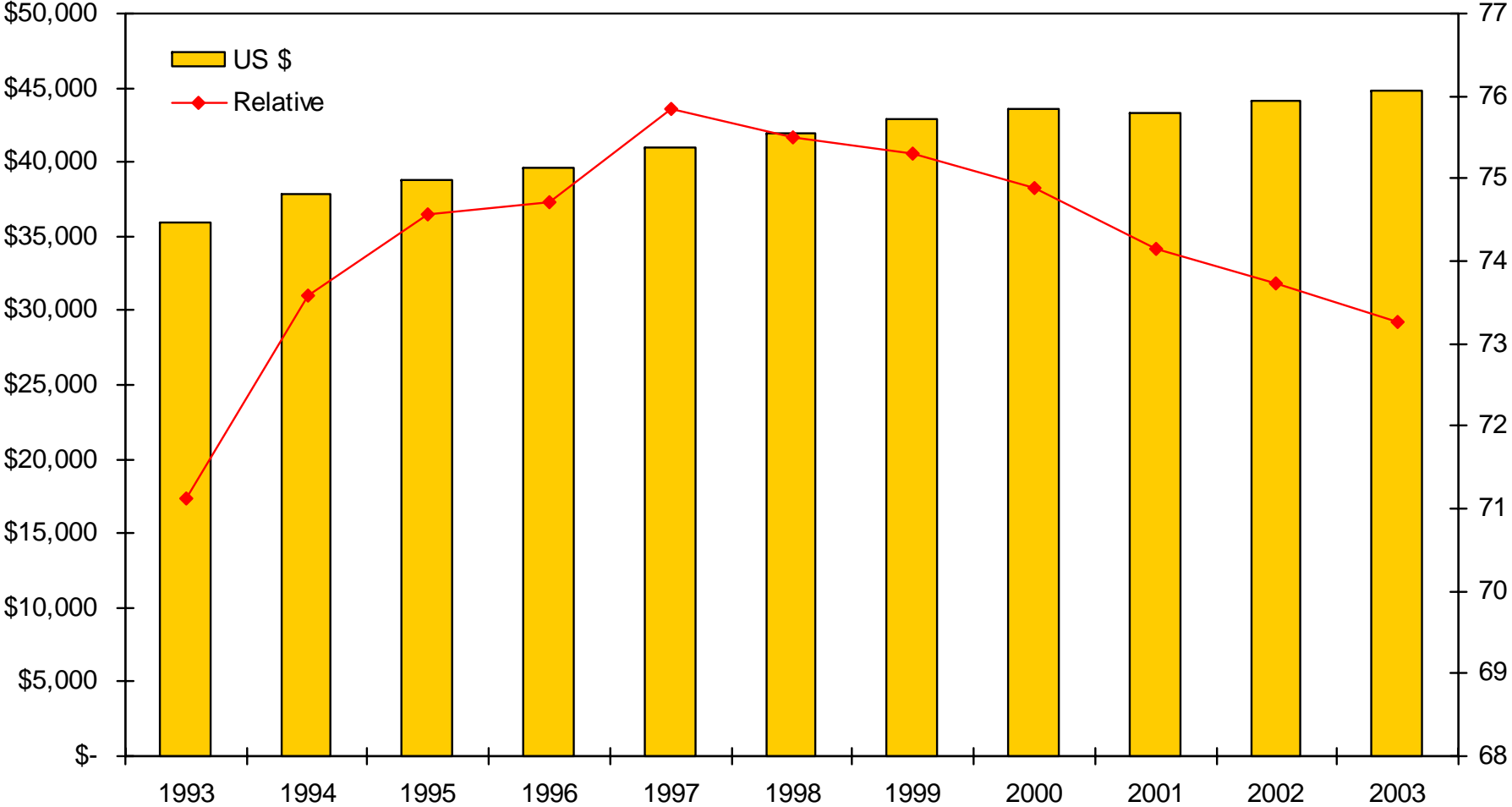


Source: EIU (2004), Groningen Growth and Development Centre and The Conference Board (2004)

Swedish Labor Productivity Growth Versus the U.S.

Real GDP per Employee
(1990 prices)

Relative
Real GDP per Employee
(US=100)

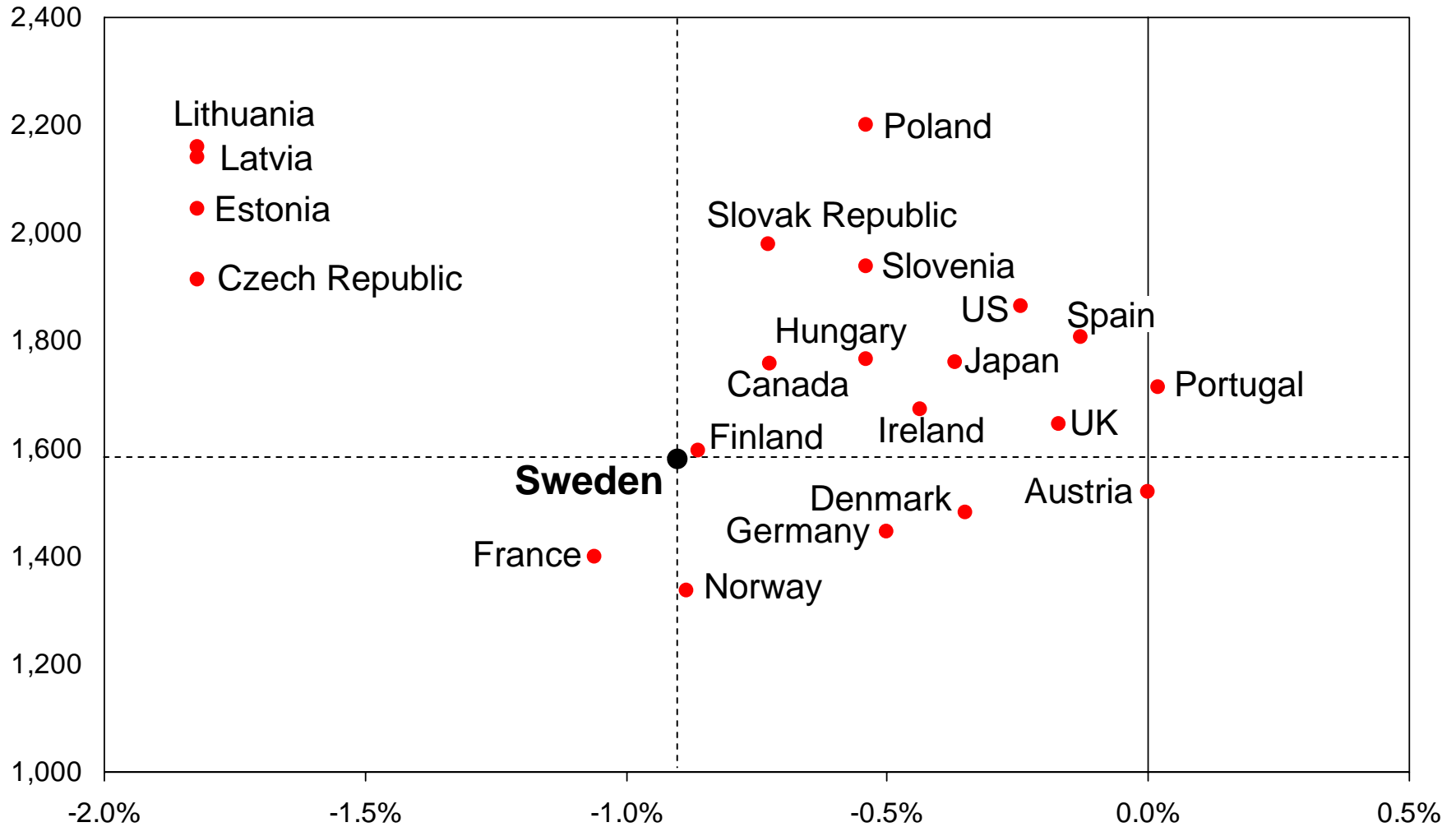


Source: Groningen Growth and Development Centre and The Conference Board (2004)

Labor Utilization

Selected Countries

Annual Hours Worked
per Employee, 2003



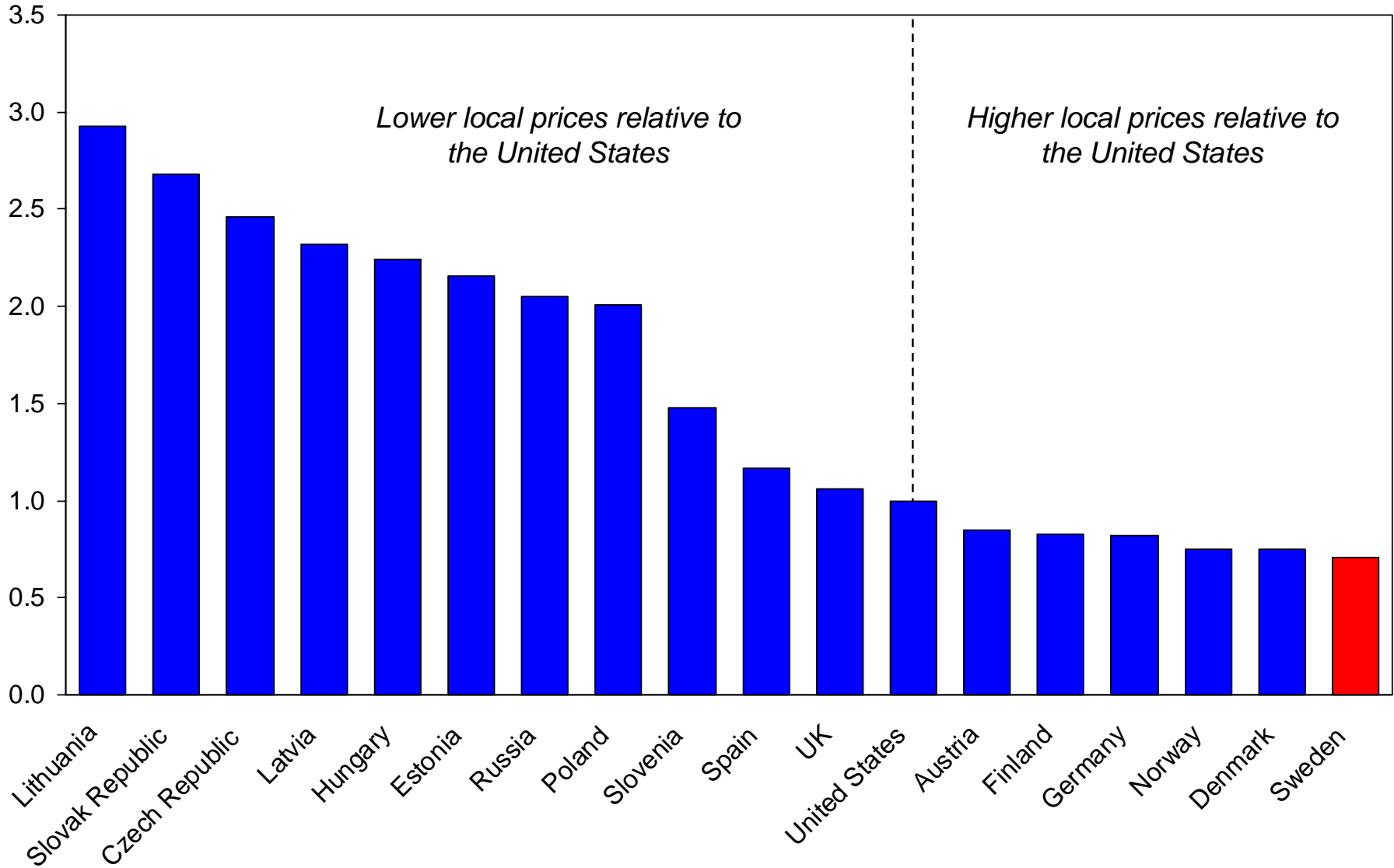
Growth of Annual Hours Worked per Employee, CAGR, 2000-2003

Source: Groningen Growth and Development Centre and The Conference Board (2004), authors' calculations

Domestic Purchasing Power of Income

Selected European Countries

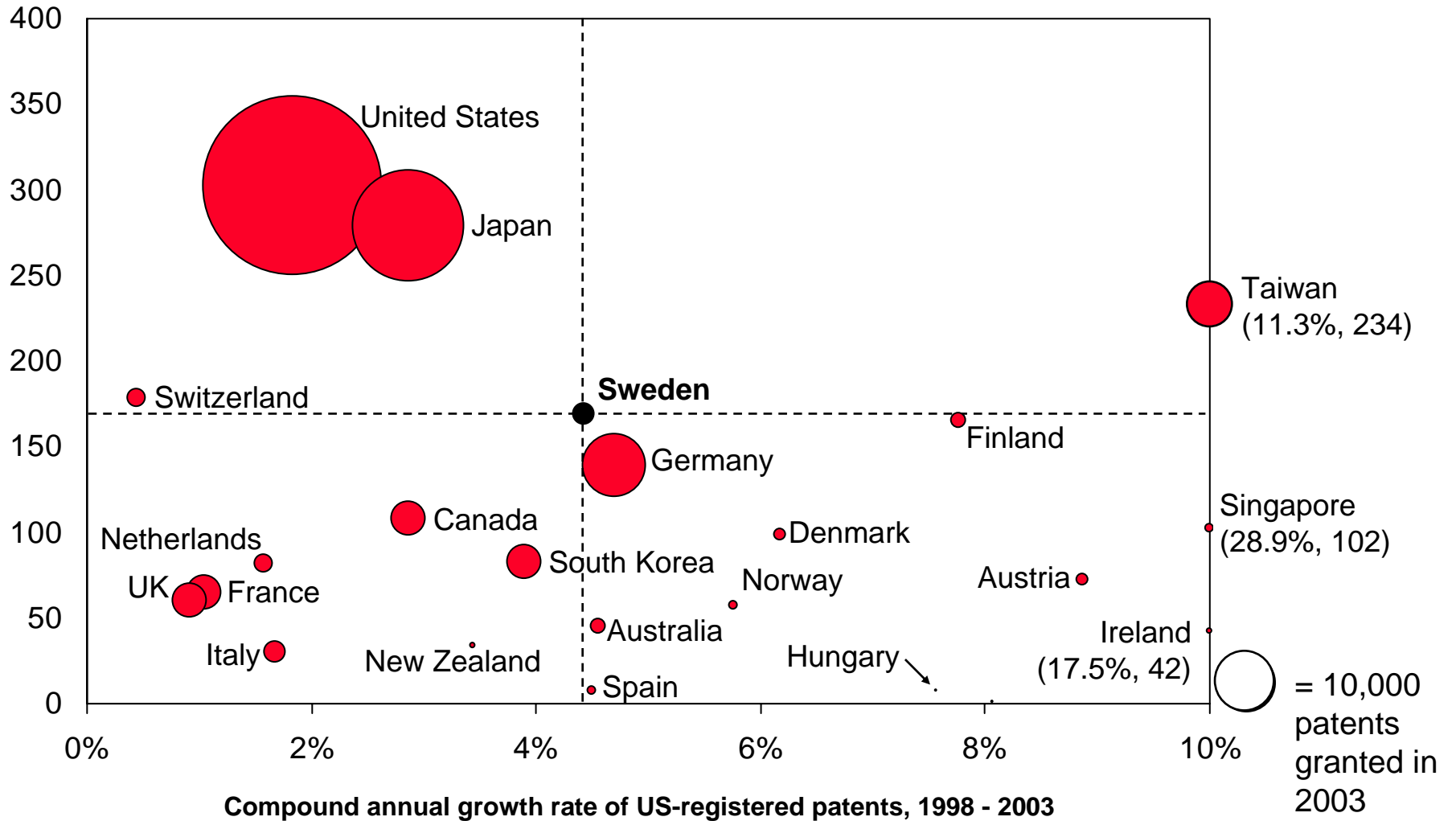
Purchasing Power Parity Factor, 2003



Source: Groningen Growth and Development Centre and The Conference Board (2004), authors' calculations

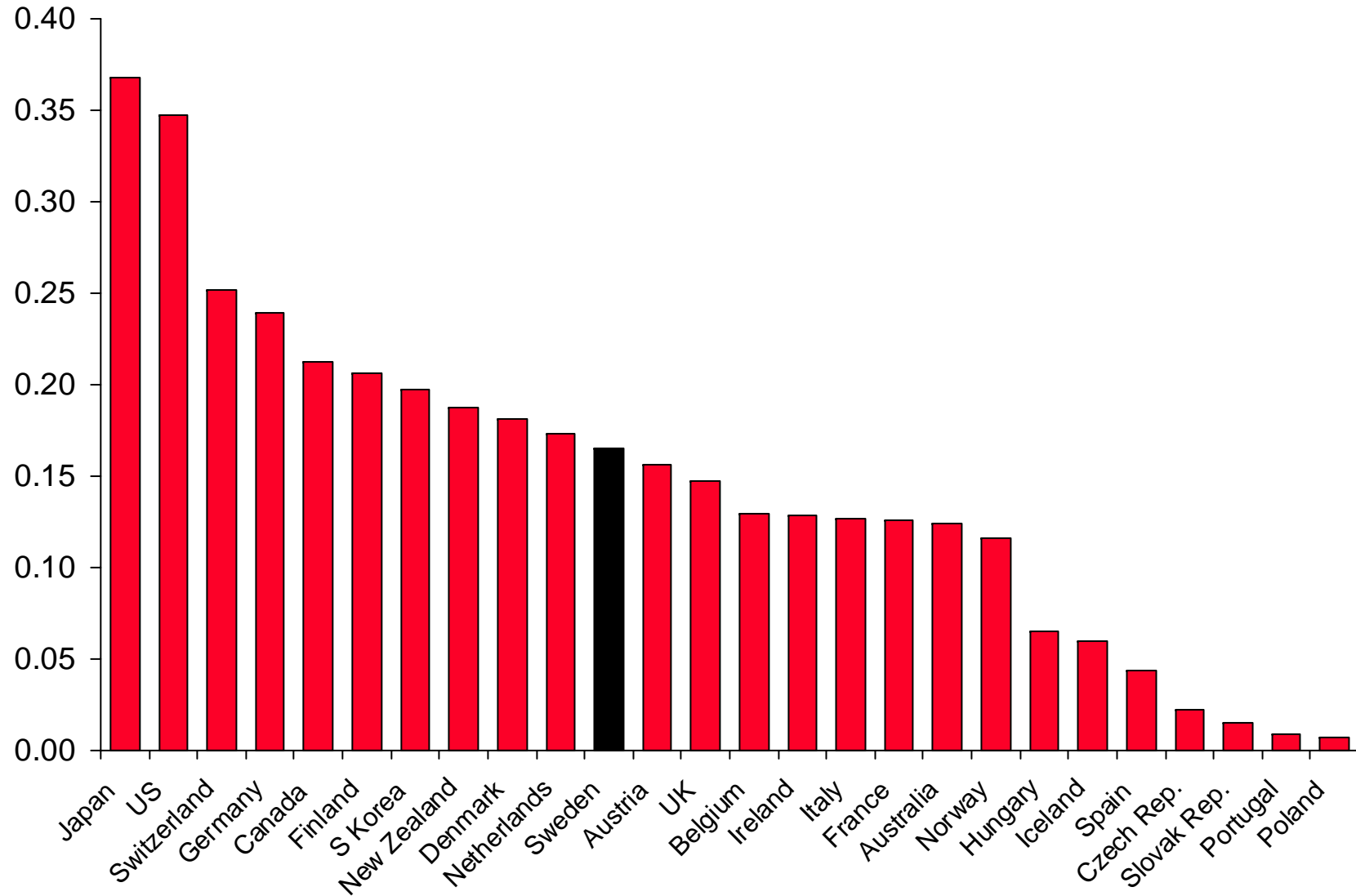
Innovation

Annual U.S. patents per 1 million population, 2003



R&D Spending Effectiveness

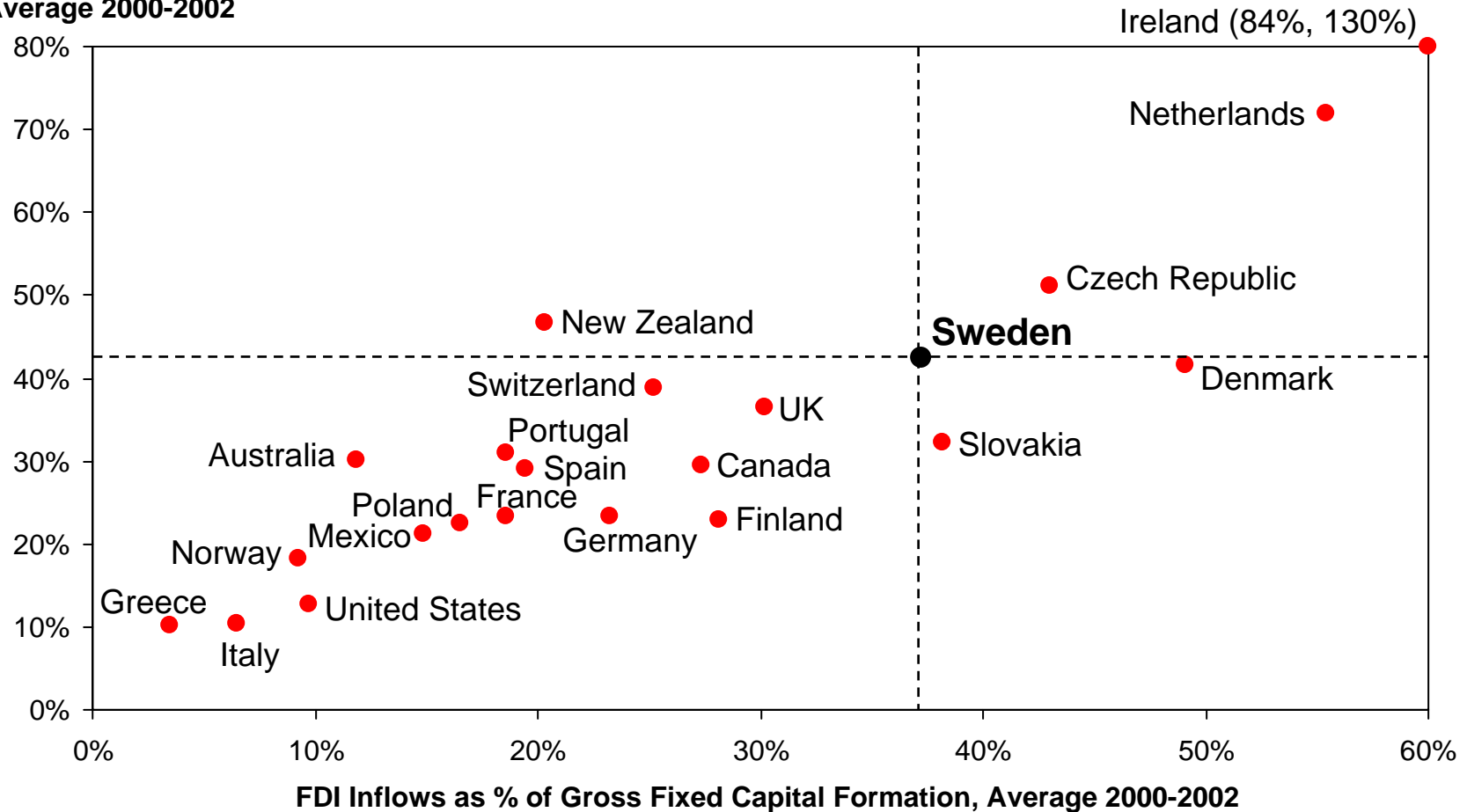
US Patents in 2003 per 1
Mio. R&D Spending in 2001
(or latest available)



Source: OECD, USPTO, author's calculation

Comparative Inward Foreign Investment OECD Countries

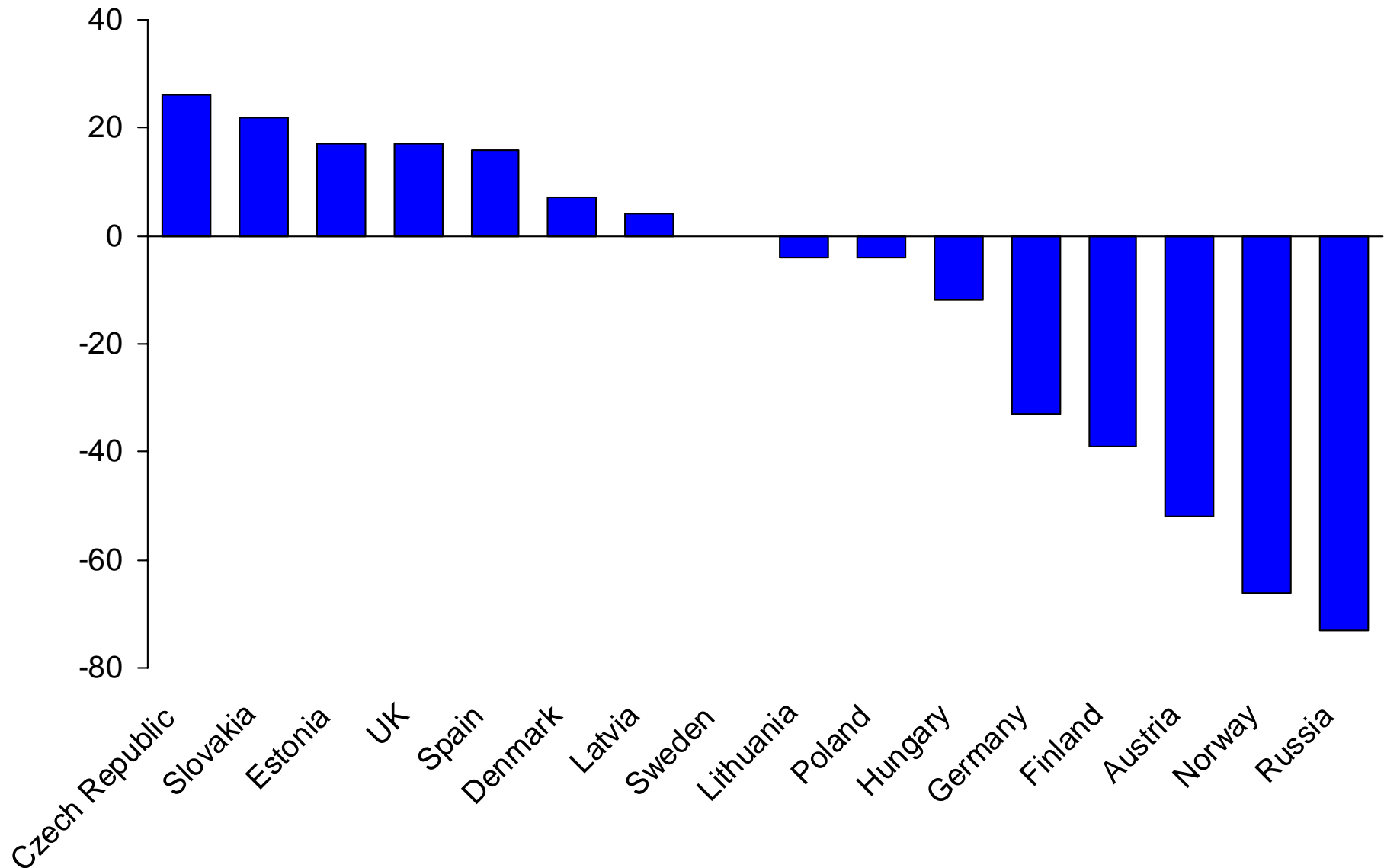
FDI Stocks as % of GDP,
Average 2000-2002



Comparative Inward Foreign Investment

Inward FDI Performance versus Potential

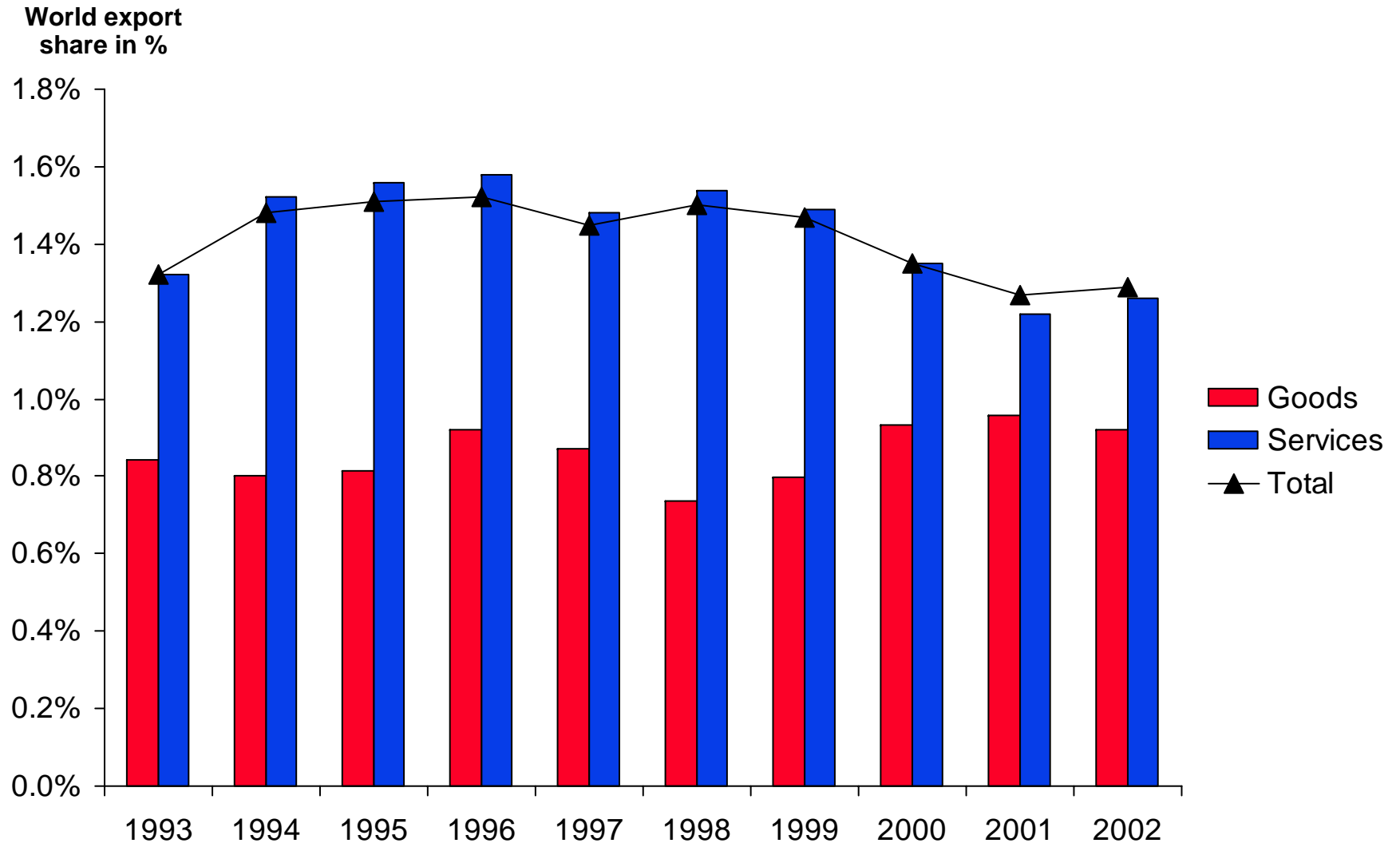
Rank Difference:
FDI Performance – FDI Potential,
2001



Source: UNCTAD (2004), author's analysis.

Sweden's Export Performance

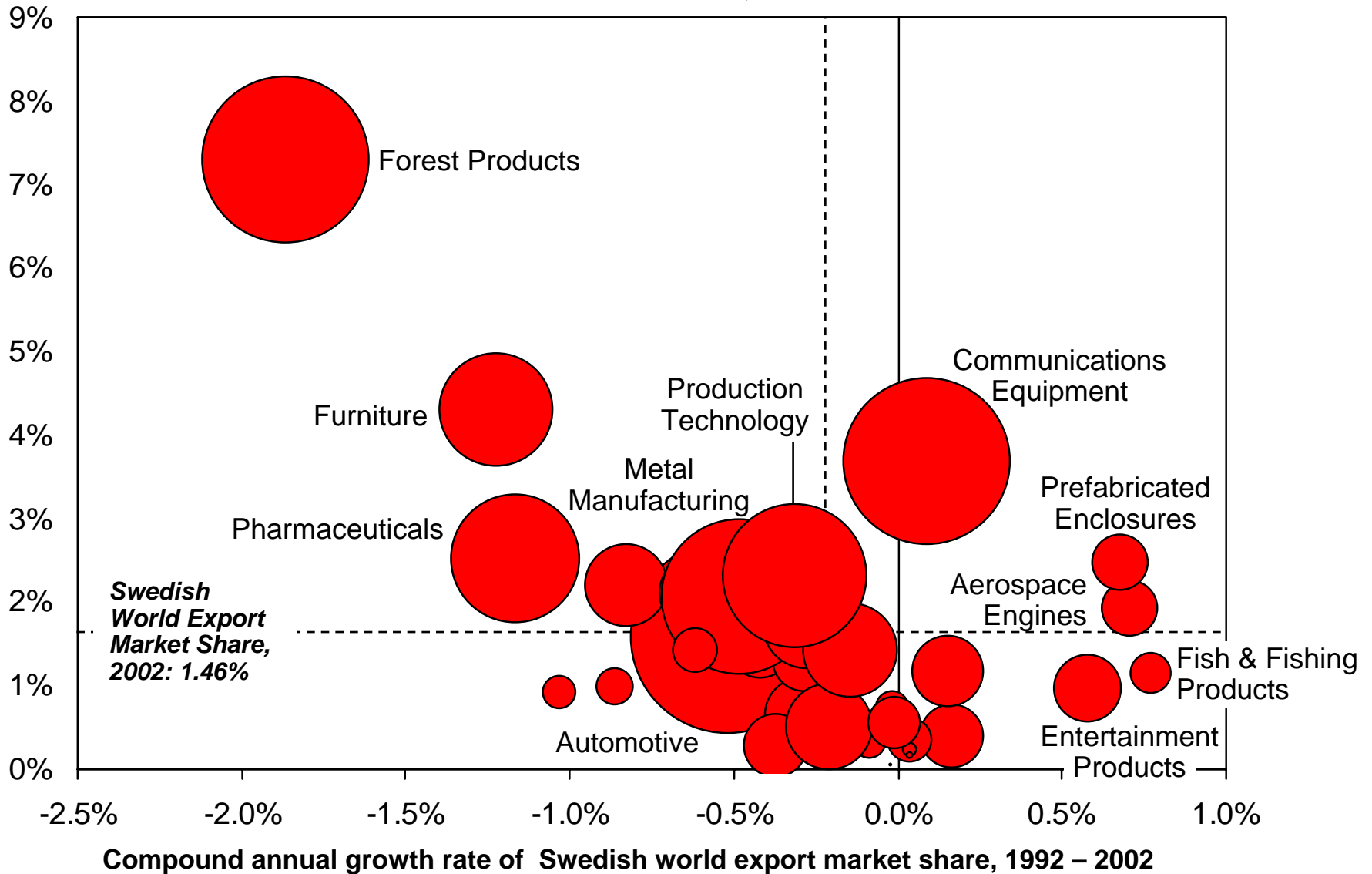
World Export Market Shares



Swedish Cluster Portfolio

Goods Exports, 1992-2002

Change in Swedish World Export Market Share, 1992 - 2002: -0.2%



Source: UNCTAD Trade Data. Author's analysis.

Multinational Companies' Home Base

Business Week 1000

Note: Business Week ranks by Market Value
Source: Business Week (2004), author's analysis.