

Competitiveness: Issues for Iran

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Teheran, Iran
by video link
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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 2006](#) (World Economic Forum, 2006), "Clusters and the New Competitive Agenda for Companies and Governments" in [On Competition](#) (Harvard Business School Press, 1998), 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

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The Changing Nature of Domestic and International Competition

- **Falling barriers** to trade and investment
- Globalization of **markets**
- Globalization of company **value chains**
- Increasing **knowledge and skill intensity** of competition
- Value is increasingly concentrated in **service functions**, not manufacturing activities themselves
- Shift from vertical integration to relying on **outside suppliers, partners, and institutions**
- **Rising logistical costs** due to costs of energy and emissions

What is Competitiveness?

- Competitiveness is determined by the **productivity** with which a nation uses its human, capital, and natural resources.
 - Productivity sets a the **standard of living** (wages, returns on capital, returns on natural resources) that a country can sustain
 - It is not **what industries** a nation competes in that matters for prosperity, but **how it competes** in those industries
 - The productivity of **“local” or domestic industries** is fundamental to competitiveness, not just that of traded industries




- Nations compete in offering the **most productive environment** for business
- The public and private sectors play **different but interrelated roles** in creating a productive economy

Sources of Prosperity

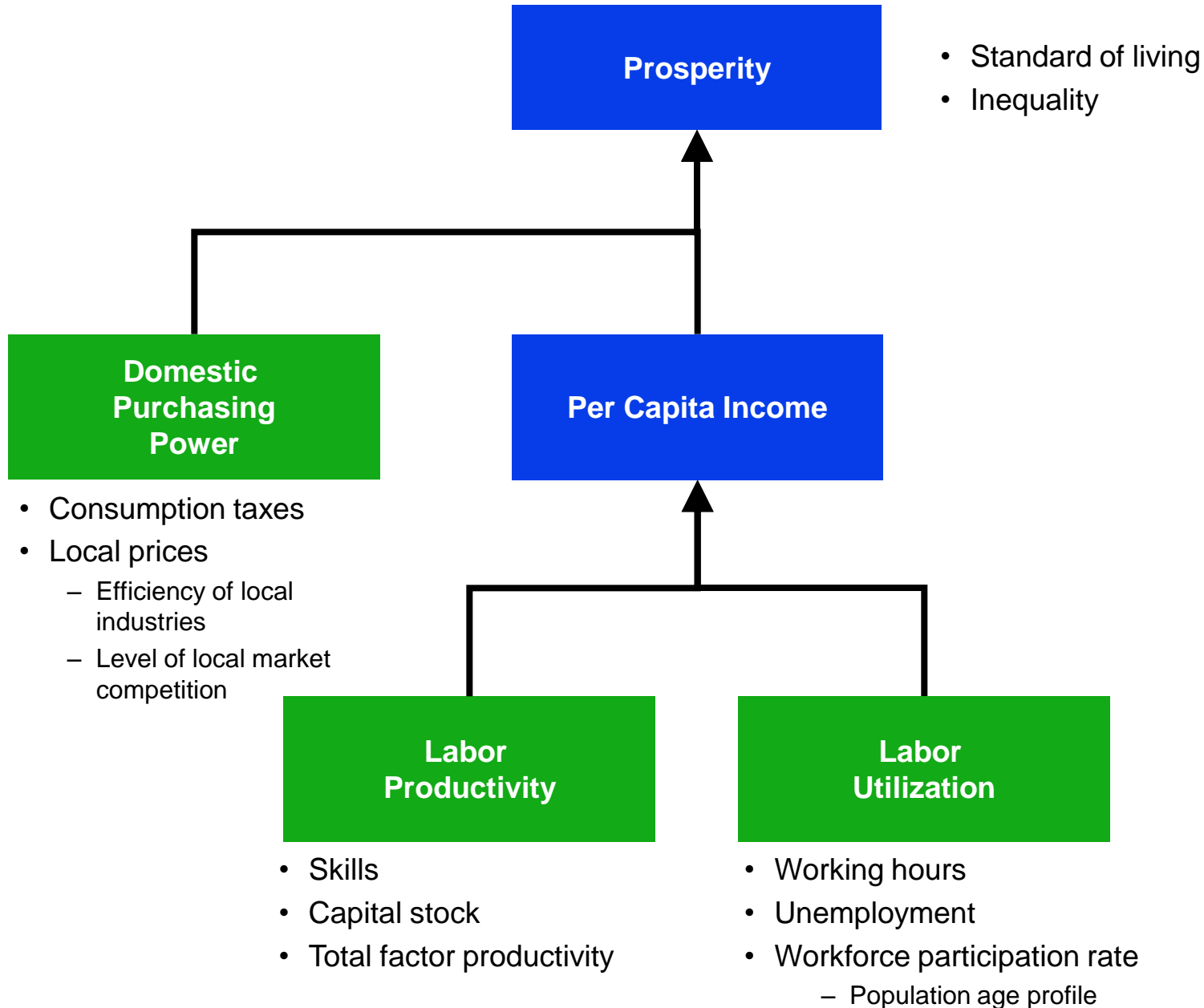
Inherited Prosperity

- Prosperity is derived from selling or exploiting **inherited natural resources**
 - Prosperity is **constrained**
 - **Dutch disease** and macroeconomic **volatility** undermine the non-resource economy
- 
- **Government** is the central actor in the economy as the owner and distributor of resource wealth
 - Resource revenues allow **unproductive policies and practices**
 - Government policy gravitates towards the **distribution of wealth** as interest groups seek a bigger share of the pie

Created Prosperity

- Prosperity is derived from **creating valuable products and services**
 - Prosperity can only be created by **firms**
 - Prosperity is **unlimited**
- 
- **Companies** are the central actors in the economy
 - **Government's** role is to create the enabling conditions for productivity and foster private sector development

Decomposing Prosperity



Determinants of Productivity

Microeconomic Competitiveness

Sophistication
of Company
Operations and
Strategy

Quality of the
National
Business
Environment

State of Cluster
Development

Macroeconomic Competitiveness

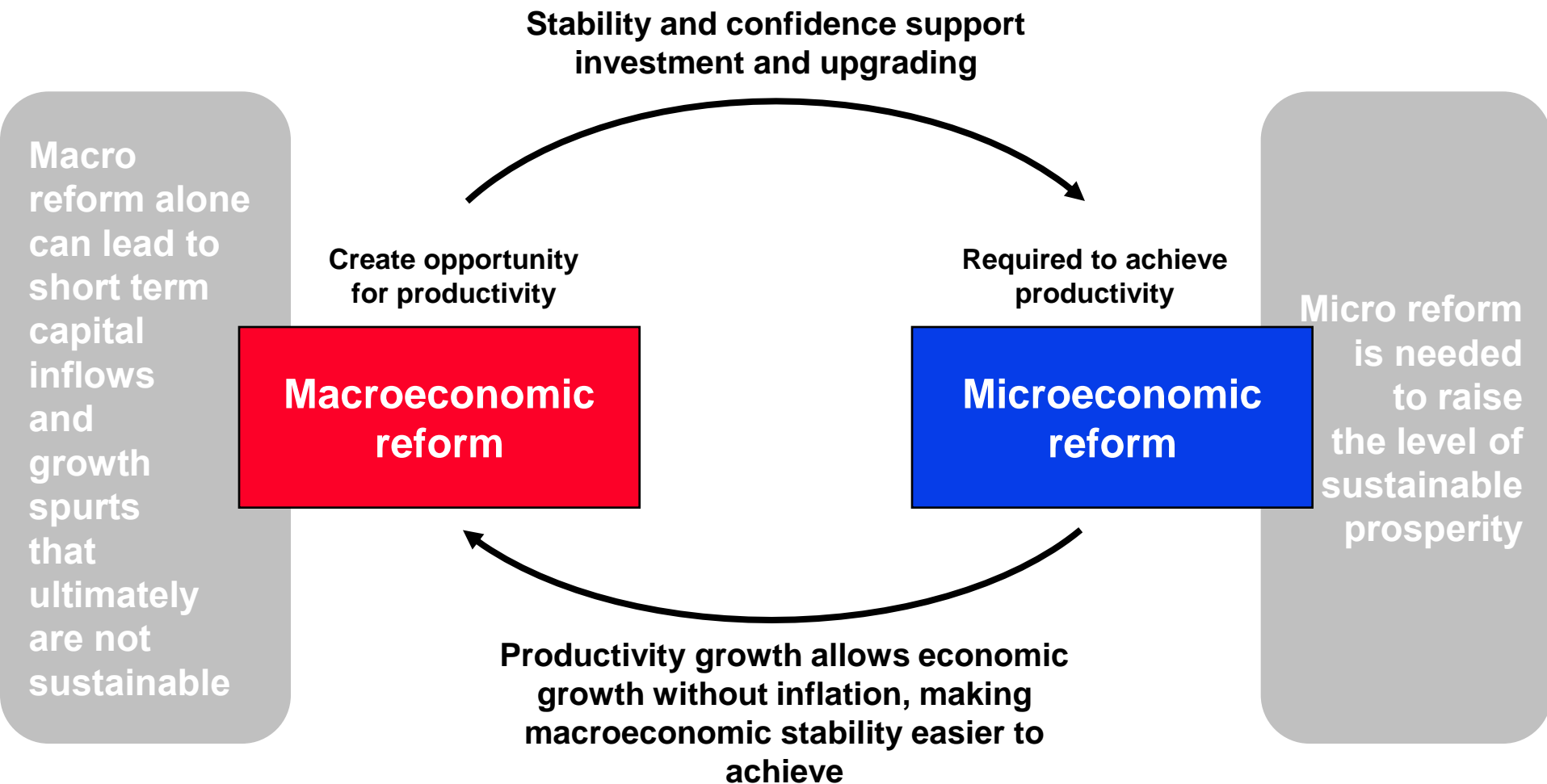
Social
Infrastructure
and Political
Institutions

Macroeconomic
Context

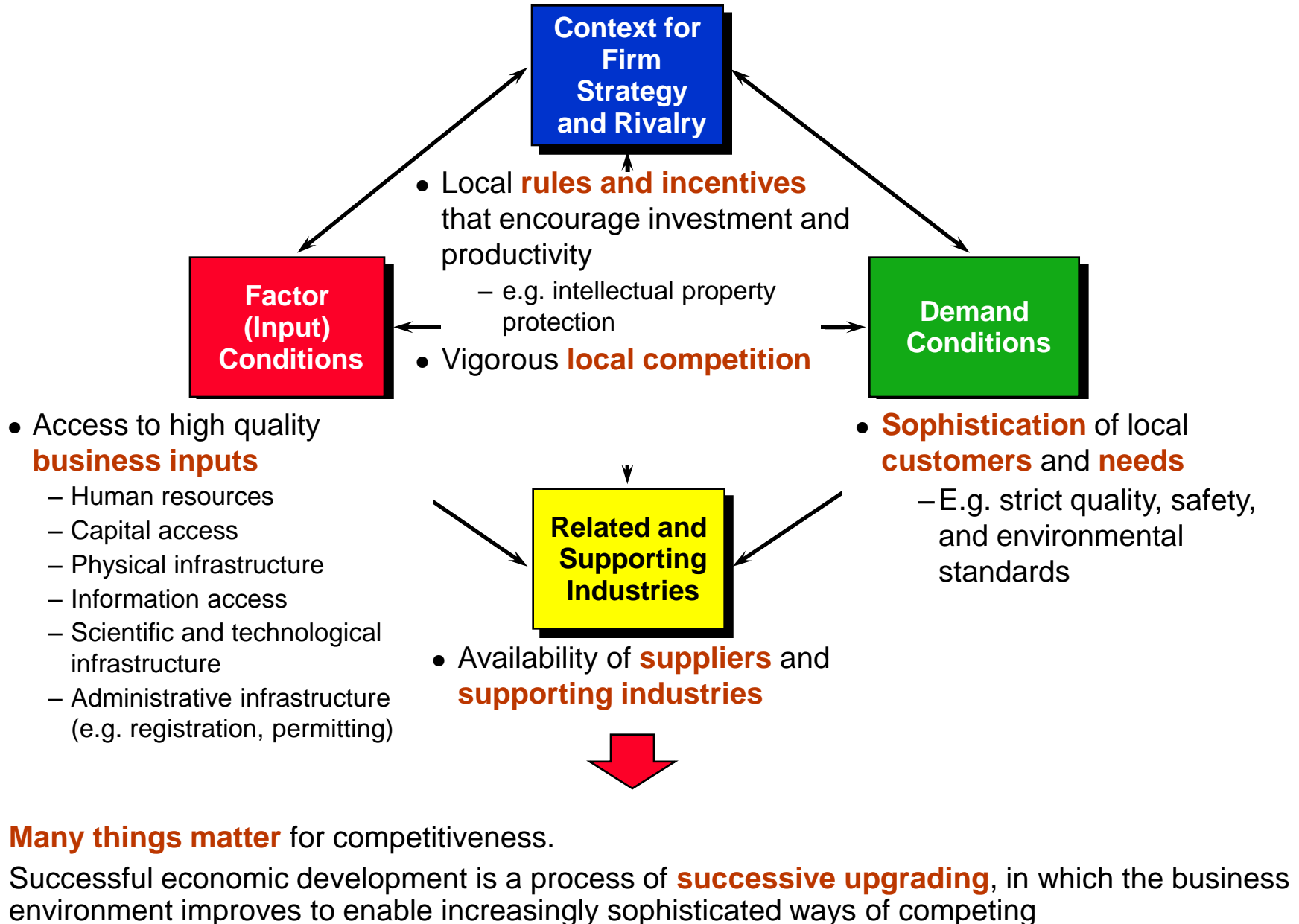


- Macroeconomic competitiveness creates the potential for high productivity, but is **not sufficient**
- Productivity ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local competition**

Integration of Macro- and Microeconomic Reforms

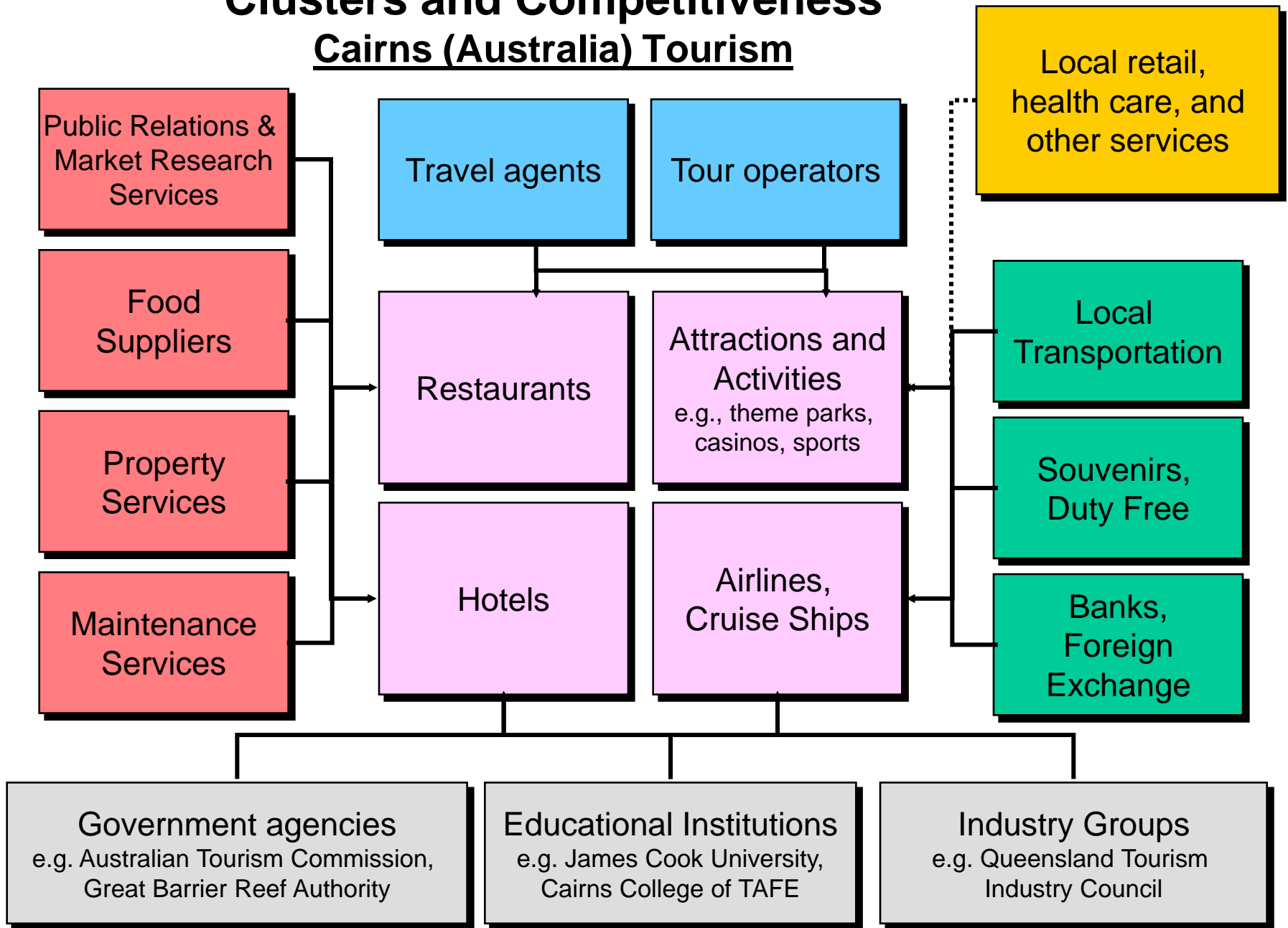


Productivity and the Business Environment

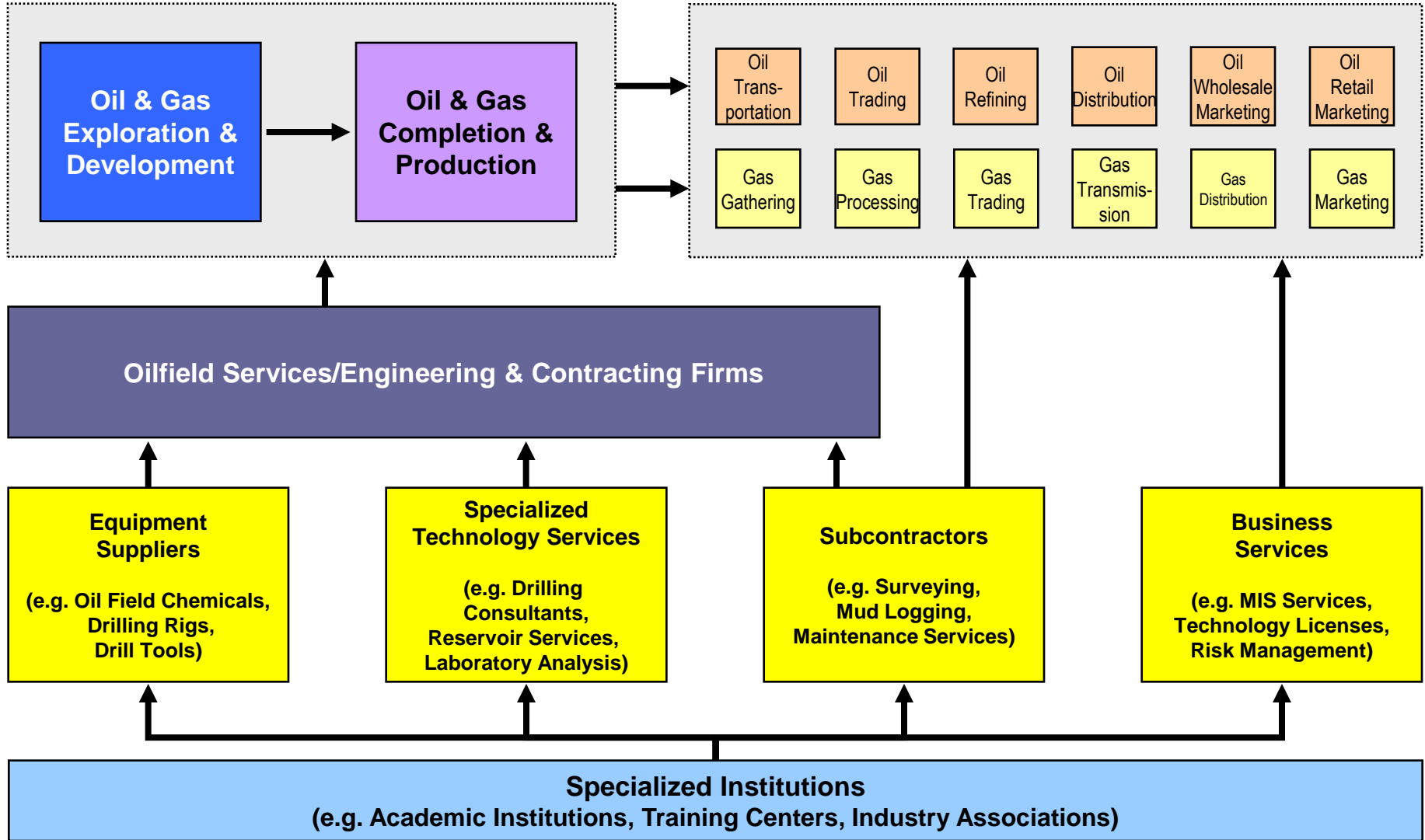


Clusters and Competitiveness

Cairns (Australia) Tourism



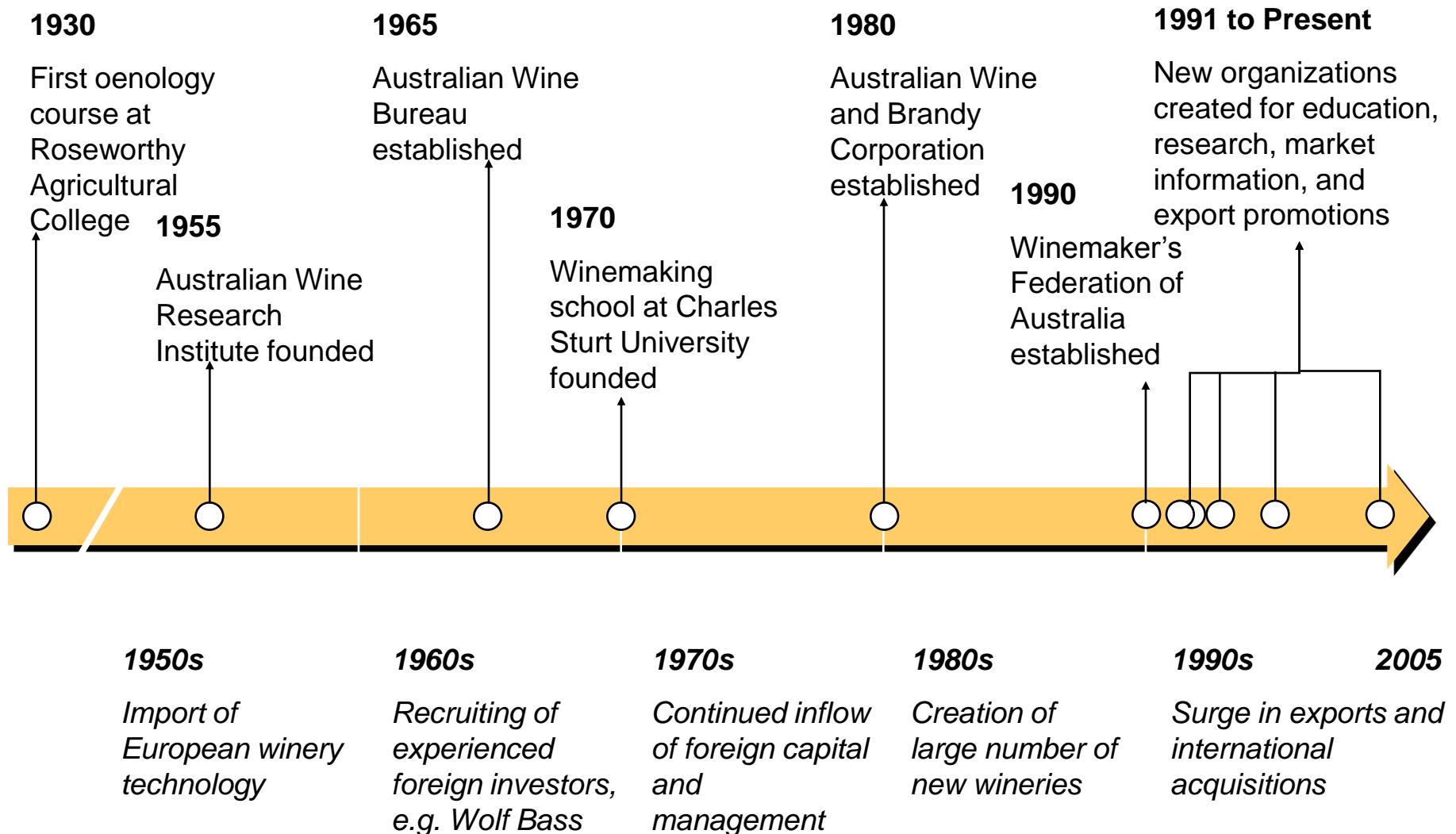
The Houston Oil and Gas Cluster



- Houston exports technology, knowledge, and management, not just resources

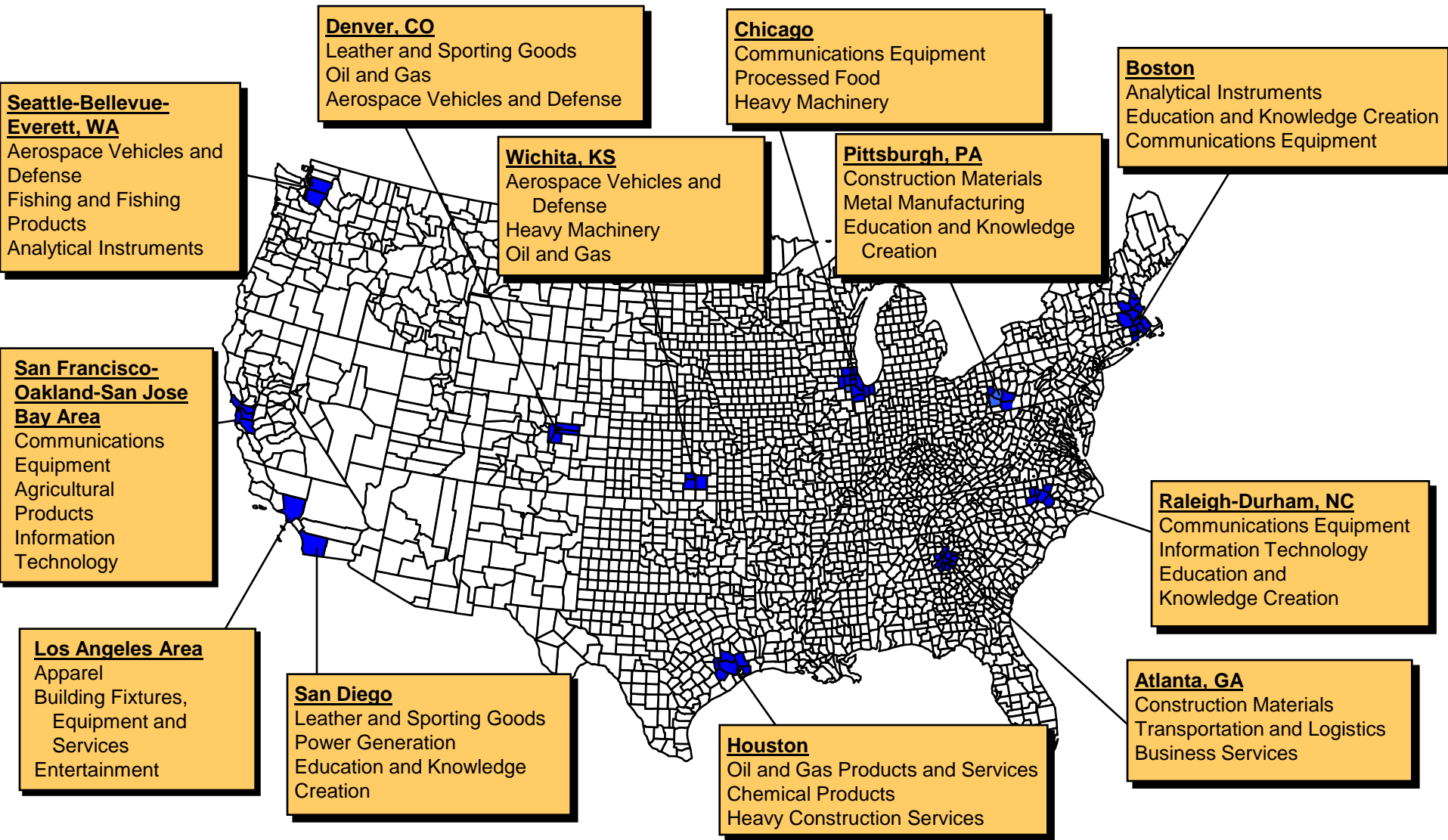
Process of Cluster Development

The Australian Wine Cluster



Specialization of Regional Economies

Selected U.S. Geographic Areas

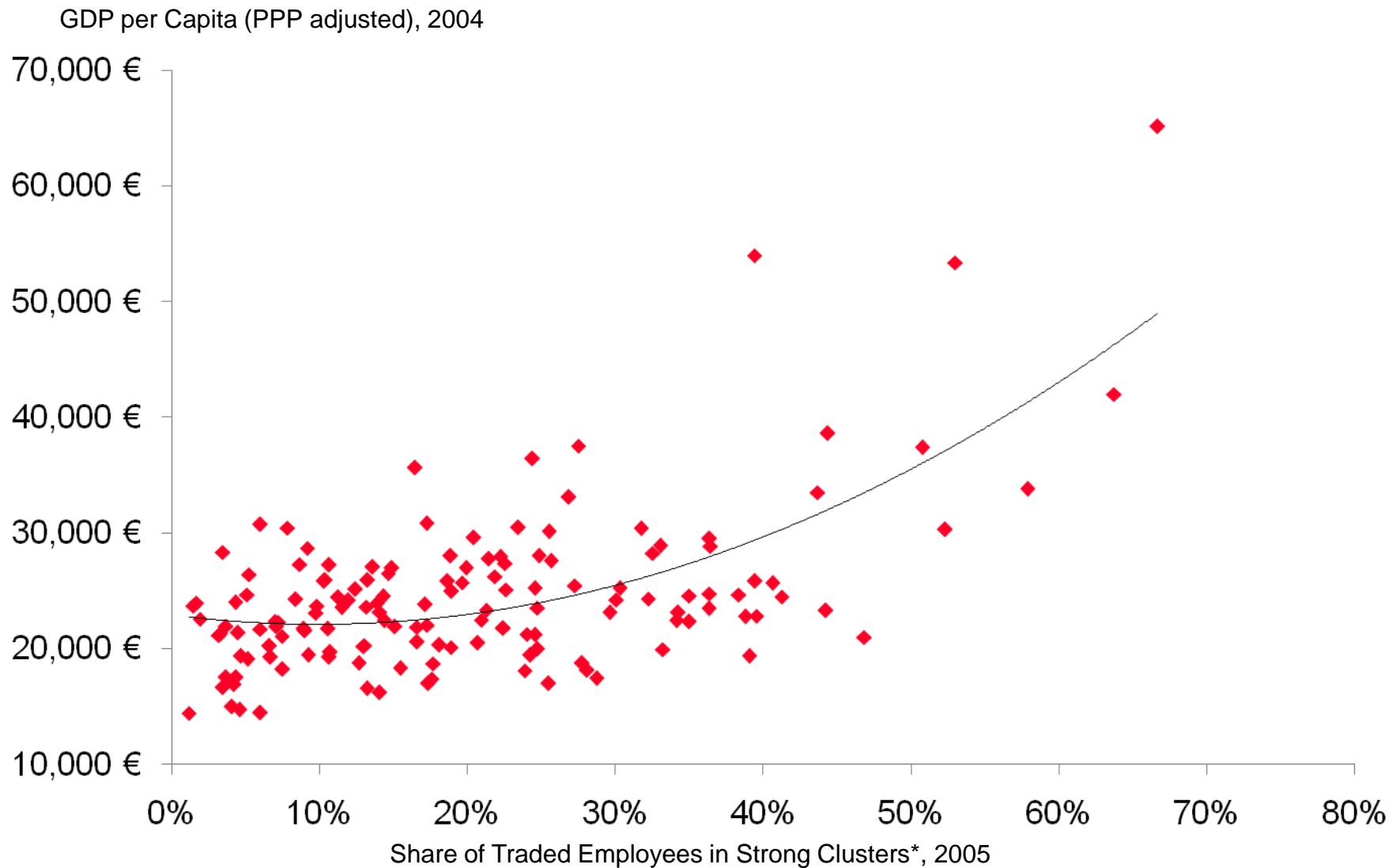


Note: Clusters listed are the three highest ranking clusters in terms of share of national employment.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School, 11/2006.

Clusters and Regional Prosperity

European Regions

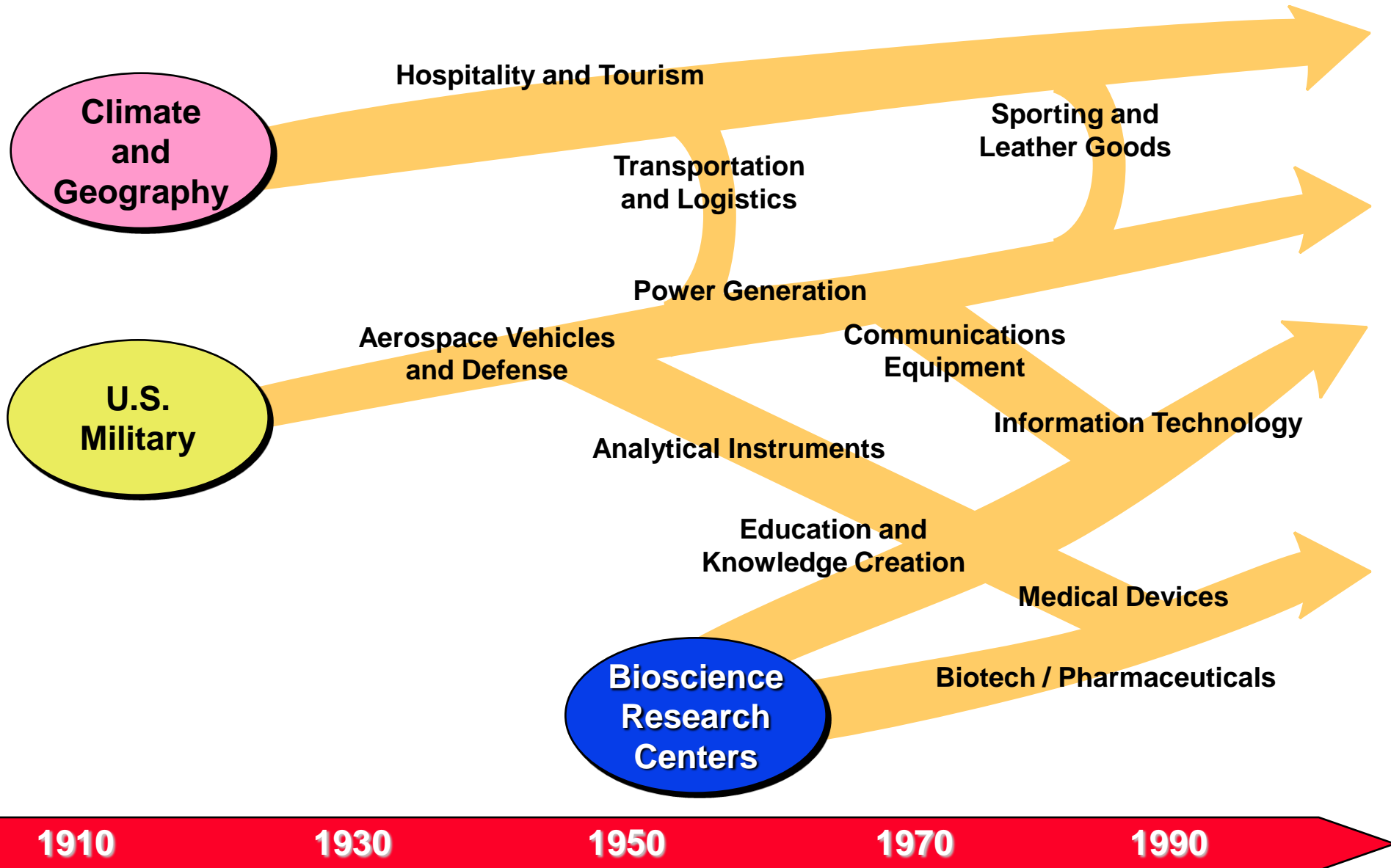


Note: Strong clusters defined by LQ>2; NUTS Regions excluding Portugal and Greece.

Source: European Cluster Observatory. ISC/CSC cluster codes 1.0, dataset 20070510

The Evolution of Regional Economies

San Diego

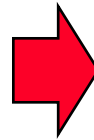


The Process of Economic Development

Shifting Roles and Responsibilities

Old Model

- **Government** drives economic development through policy decisions and incentives



New Model

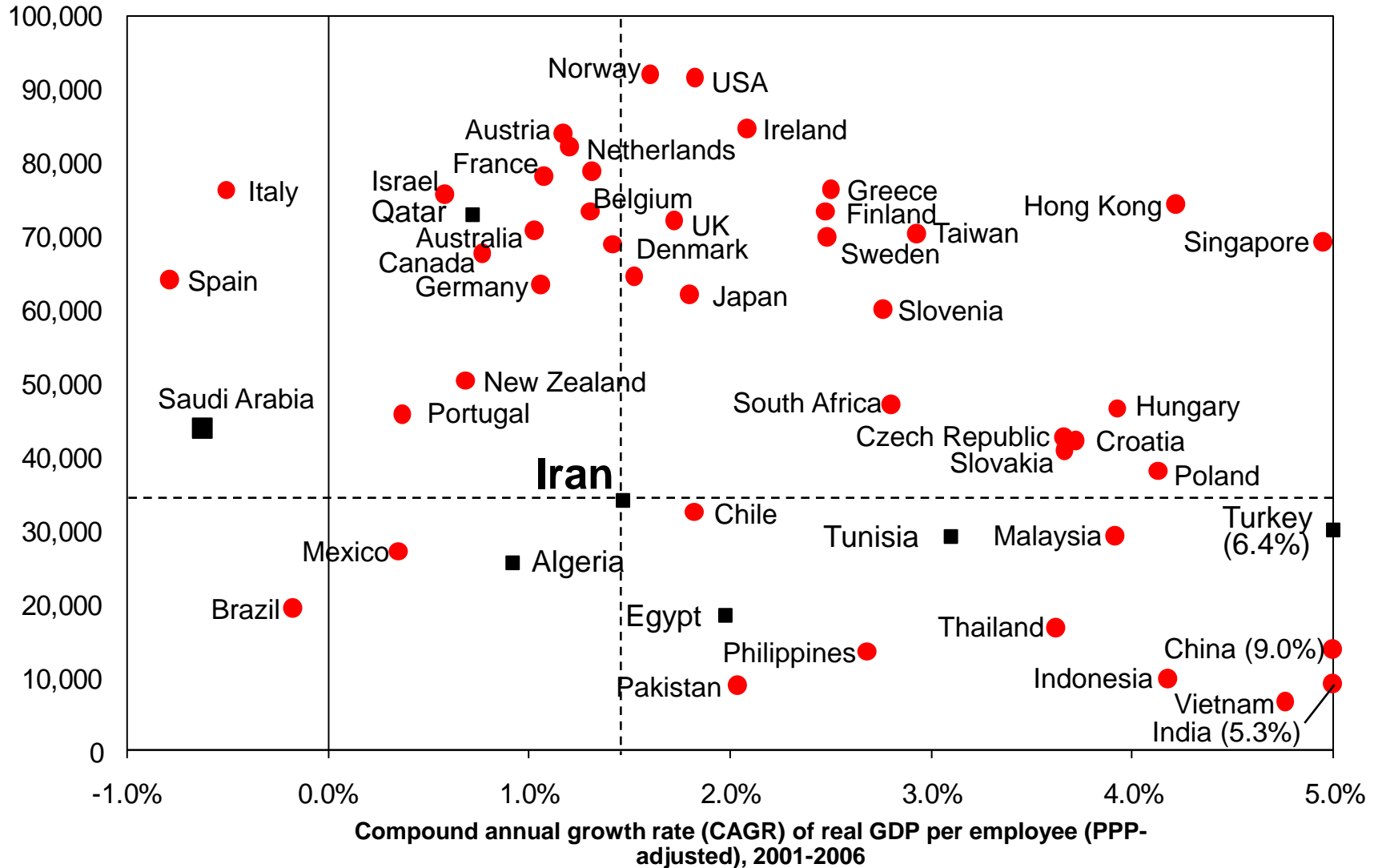
- Economic development is a **collaborative process** involving government at multiple levels, companies, teaching and research institutions, and private sector organizations

- Competitiveness must become a **bottoms-up process** in which many individuals, companies, and institutions take responsibility
- **Every** community and cluster can take steps to enhance competitiveness
- The **private sector** must become more engaged in competitiveness to improve rapidly

Comparative Labor Productivity

Selected Countries

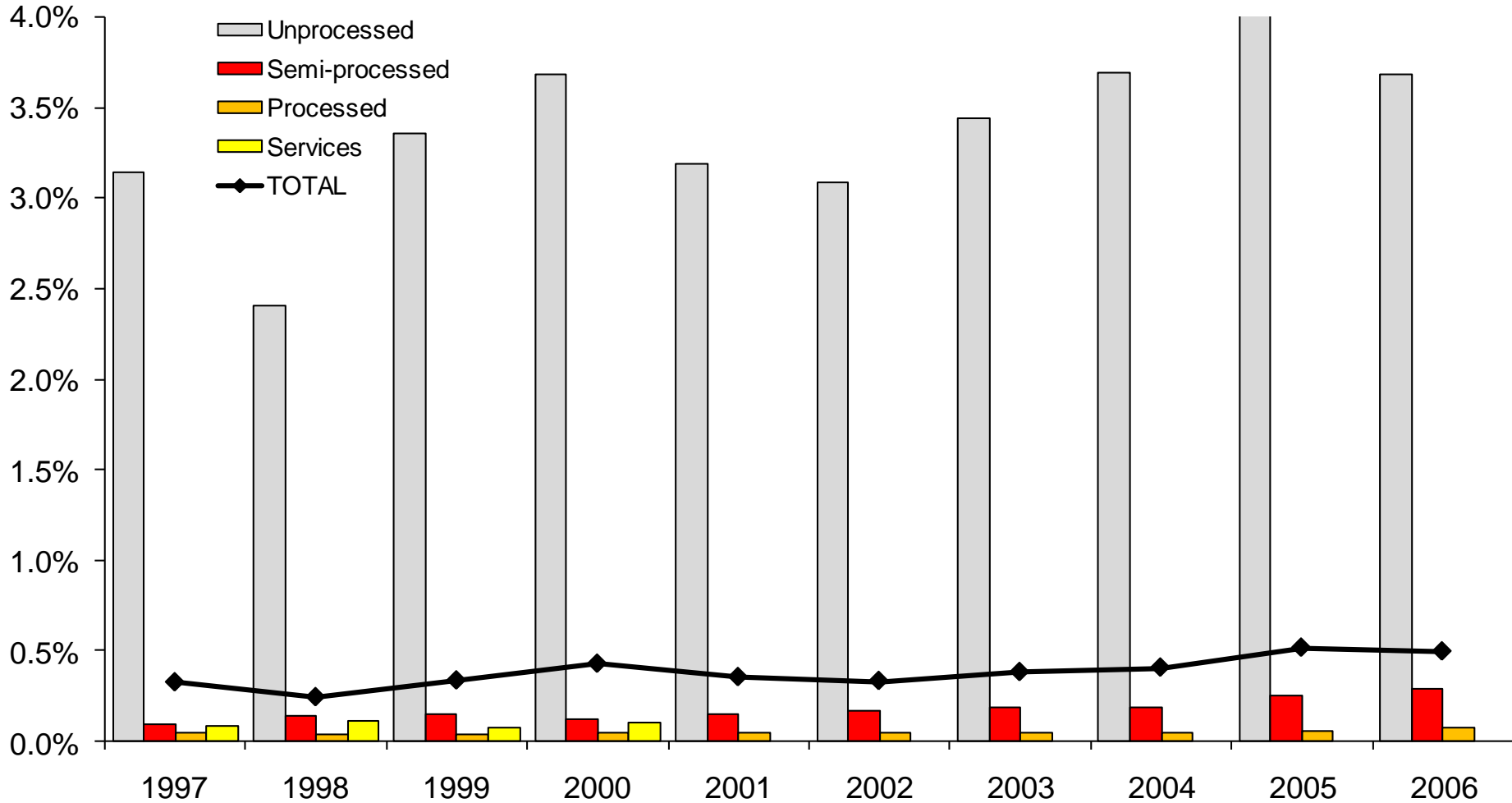
GDP per employee
(PPP adjusted US\$),
2006



Source: EIU (2007), Saudi Arabia employee data (number persons employed) from ILO LABORSTA (2007)

Iran Export Share Trends

World Export Market Share (current USD)



Note: 2001-2006 services data unavailable.

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.

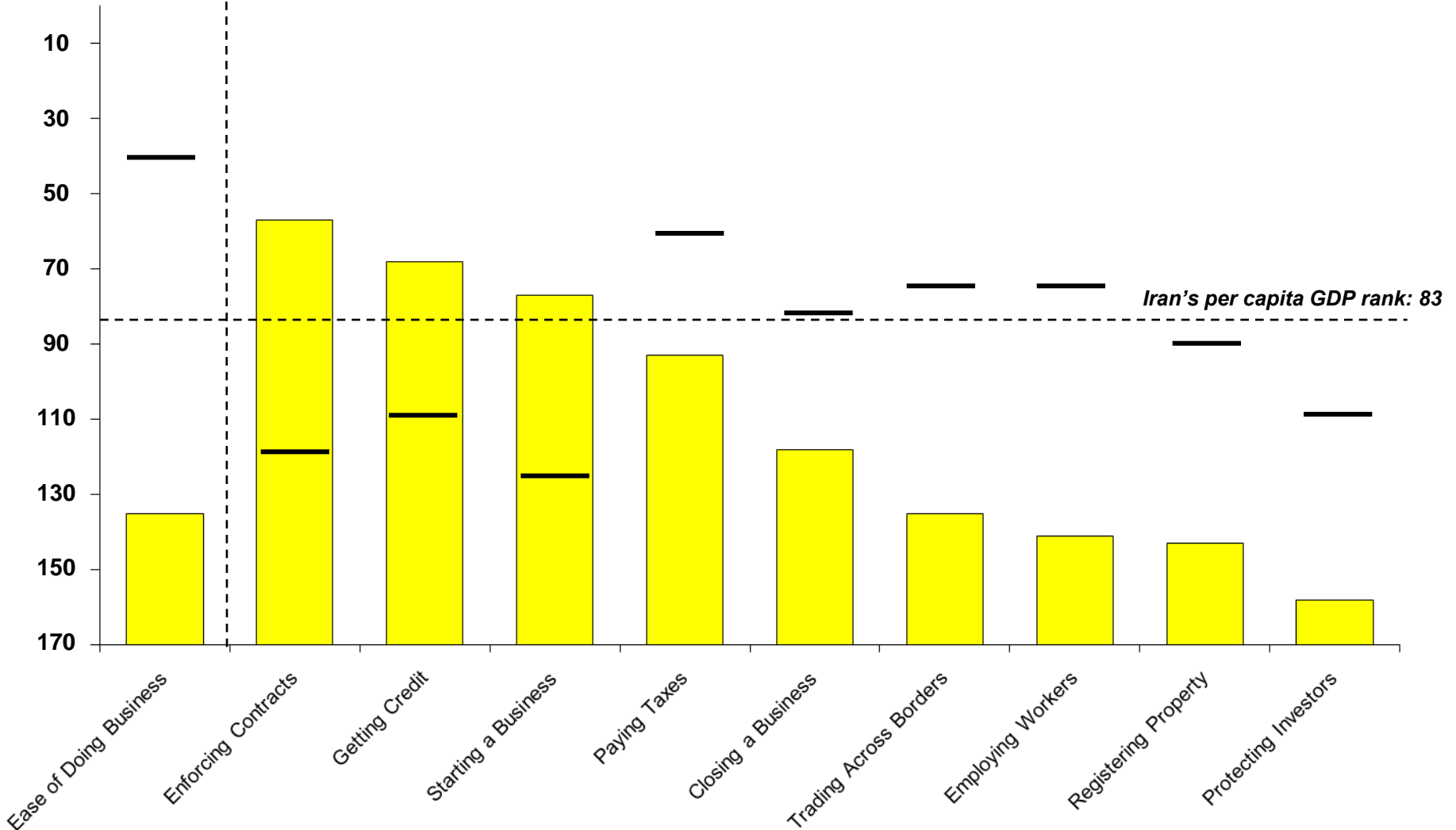
Ease of Doing Business

Iran, 2007

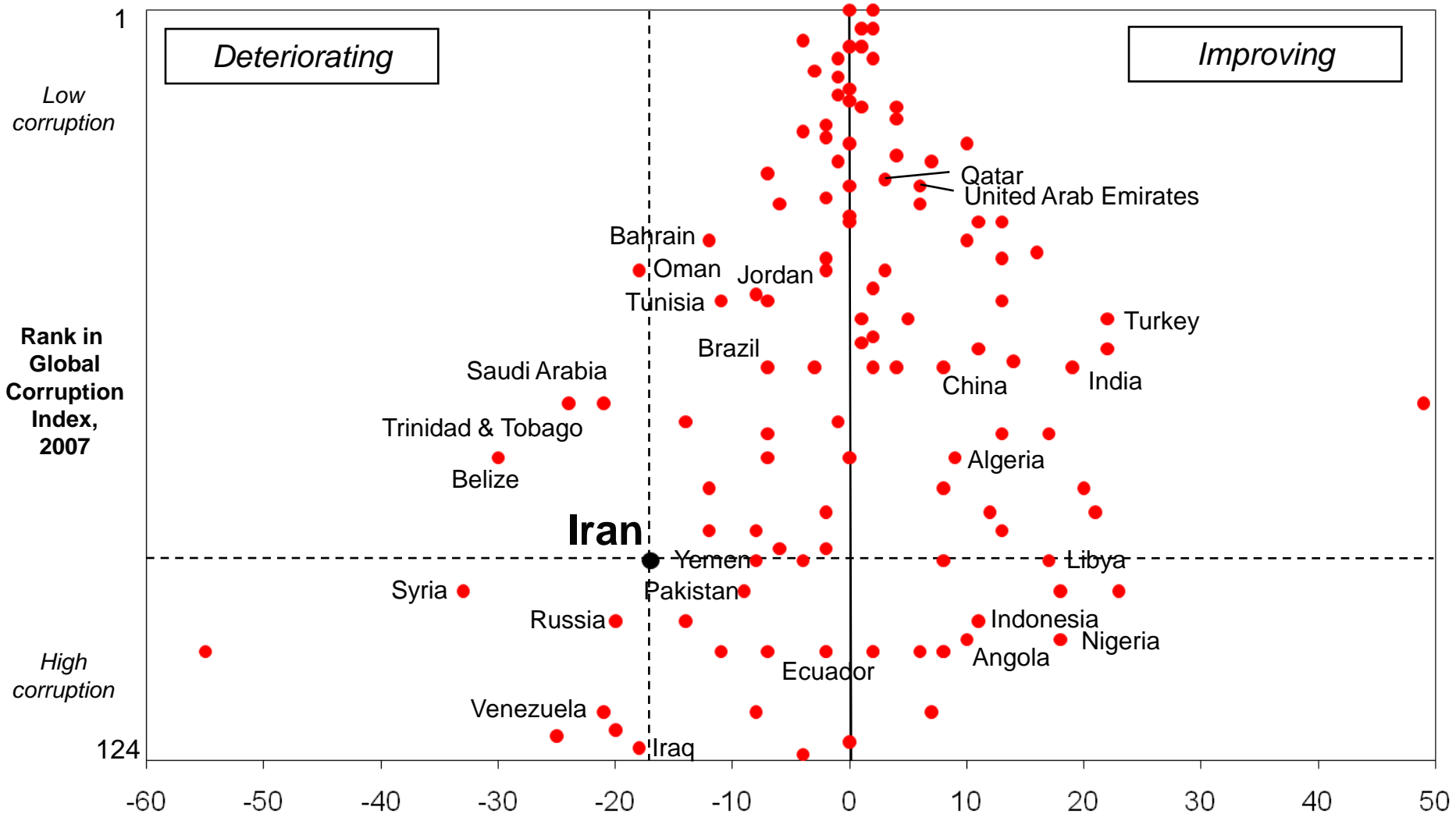
Ranking, 2007
(of 178 countries)

Favorable

Unfavorable

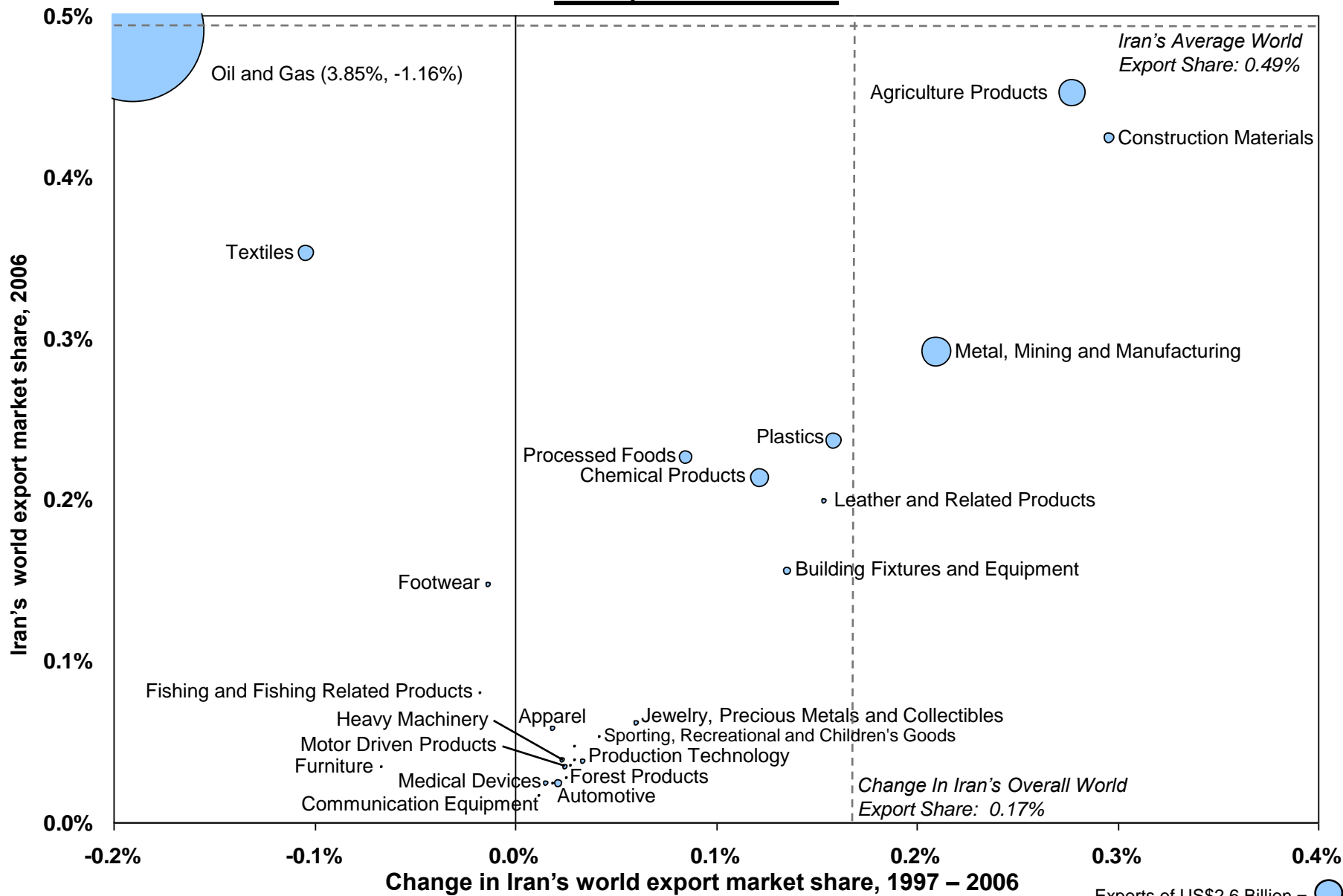


Corruption Perception Index, 2007



National Cluster Export Portfolio

Iran, 1997-2006



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.

Exports of US\$2.6 Billion =

Upgrading Established Export Products

Leading Iranian Export Industries by Value, 2006

	Industry	Cluster	World Export Share	Change in Share (1997-2006)	Export Value (in \$thousands)
1	Liquefied propane and butane	Oil and Gas Products	5.40%	3.25%	\$ 1,031,760
2	Flat-rolled iron, not clad, plated or coated	Metal Mining and Manufacturing	0.85%	0.58%	\$ 583,995
3	Copper, copper anodes and alloys	Metal Mining and Manufacturing	0.93%	0.82%	\$ 514,164
4	Carpets and other textile floor coverings, knotted	Textiles	29.39%	-4.52%	\$ 439,889
5	Petroleum Oils	Oil and Gas Products	0.08%	-0.01%	\$ 317,041
6	Mineral tars and products	Oil and Gas Products	2.82%	2.57%	\$ 312,465
7	Polyacetals, polycarbonates in primary forms	Plastics	0.70%	0.69%	\$ 251,237
8	Cyclic hydrocarbons	Oil and Gas Products	0.74%	-0.23%	\$ 243,243
9	Aluminum and aluminum alloys, unwrought	Metal Mining and Manufacturing	0.49%	0.48%	\$ 220,857
10	Ingots and other primary forms of iron or steel	Metal Mining and Manufacturing	0.71%	0.14%	\$ 214,869
11	Other inorganic bases and metallic oxides	Chemical Products	1.60%	0.95%	\$ 193,113
12	Iron or steel bars, rods, angles, shapes and sections	Metal Mining and Manufacturing	0.31%	0.30%	\$ 186,799
13	Zinc	Metal Mining and Manufacturing	1.22%	1.22%	\$ 183,665
14	Acyclic monohydric alcohols	Chemical Products	1.20%	1.04%	\$ 172,859
15	Petroleum jelly, wax and similar products	Oil and Gas Products	6.02%	5.61%	\$ 146,548
16	Gold, silver jewelry or ware	Jewelry, Precious Metals and Collectibles	0.40%	0.40%	\$ 139,696
17	Passenger transport vehicles	Automotive	0.03%	0.02%	\$ 131,441
18	Petroleum bitumen, coke, bituminous mixtures	Oil and Gas Products	1.71%	1.22%	\$ 131,027
19	Carpets and other textile floor coverings, woven	Textiles	4.74%	2.84%	\$ 120,908
20	Bread, baked goods	Processed Food	0.74%	0.07%	\$ 120,616
21	Polymers of ethylene	Plastics	0.27%	0.26%	\$ 115,667
22	Glaze, enamel, driers	Plastics	1.04%	0.50%	\$ 104,216
23	Acyclic hydrocarbons	Chemical Products	0.64%	0.20%	\$ 99,565
24	Worked monumental or building stone	Construction Materials	0.95%	0.77%	\$ 95,187
25	Non-refractory bricks, tiles, pipes and similar products	Construction Materials	0.68%	0.43%	\$ 94,338

Top 25 Industries (Processed & Semi-Processed) as % of Iran's total goods exports: 9.76%






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.

Established Export Products

Leading Iranian Export Industries by Share, 2006

	Industry	Cluster	World Export Share	Change in Share (1997-2006)	Export Value (in \$thousands)
1	Textiles	Carpets and other textile floor coverings, knott	29.39%	-4.52%	\$ 439,889
2	Textiles	Hand-woven rugs	14.83%	4.37%	\$ 10,934
3	Building Fixtures and Equipment	Drawn, blown glass in sheets	9.26%	8.44%	\$ 27,388
4	Leather and Related Products	Sheep, lamb skin leather	7.83%	7.54%	\$ 85,333
5	Oil and Gas Products	Crude petroleum oils	7.35%	-3.05%	\$ 50,223,930
6	Oil and Gas Products	Petroleum jelly, wax and similar products	6.02%	5.61%	\$ 146,548
7	Oil and Gas Products	Liquefied propane and butane	5.40%	3.25%	\$ 1,031,760
8	Textiles	Carpets and other textile floor coverings, wove	4.74%	2.84%	\$ 120,908
9	Coal and Briquettes	Briquettes from coal	4.06%	4.04%	\$ 2,169
10	Chemical Products	Miscellaneous mixed alkylbenzenes and alkylr	3.85%	3.77%	\$ 44,522
11	Agricultural Products	Spices	3.52%	2.44%	\$ 105,045
12	Agricultural Products	Fruit, nuts excluding oil nuts	3.22%	2.17%	\$ 1,492,355
13	Oil and Gas Products	Mineral tars and products	2.82%	2.57%	\$ 312,465
14	Oil and Gas Products	Miscellaneous petroleum gases	2.76%	2.74%	\$ 266,923
15	Textiles	Sacks, bags of textile materials	2.52%	2.51%	\$ 54,846
16	Chemical Products	Sulphur, unroasted iron pyrites	2.27%	2.27%	\$ 23,721
17	Apparel	Tulles, other net fabrics; lace	2.11%	0.61%	\$ 21,574
18	Agricultural Products	Miscellaneous vegetable products, materials	2.10%	1.48%	\$ 3,549
19	Leather and Related Products	Artificial fur and articles thereof	2.08%	2.07%	\$ 1,410
20	Agricultural Products	Natural gums, resins, and balsams; lac	1.85%	1.52%	\$ 8,272
21	Construction Materials	Building or dimension stone	1.83%	1.43%	\$ 50,371
22	Metal Mining and Manufacturing	Lead ores and concentrates	1.82%	1.53%	\$ 36,033
23	Metal Mining and Manufacturing	Parts of liquid elevators	1.77%	0.05%	\$ 2,056
24	Metal Mining and Manufacturing	Other non-ferrous ores and concentrates	1.73%	-0.76%	\$ 21,930
25	Petroleum bitumen, coke, bituminous mixtures	Oil and Gas Products	1.71%	1.22%	\$ 131,027

Top 25 Industries (Processed & Semi-Processed) as % of Iran's total goods exports: 86.51%

	Processed
	Semi-Processed
	Unprocessed

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.

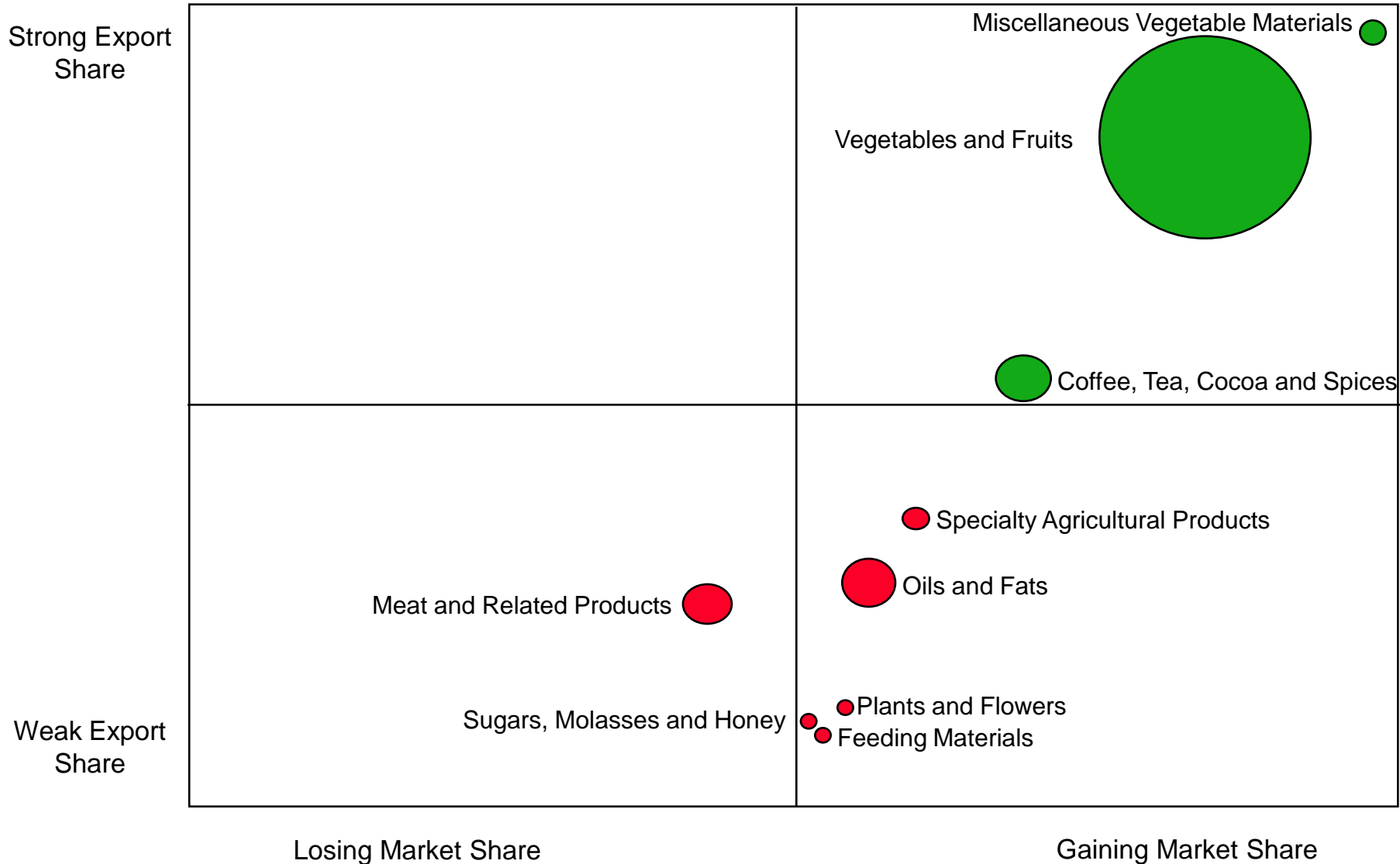
Iran's Competitiveness

Potential Strengths

- Substantial home market
- Strong education system
- Large proportion of university graduates
- Relatively well developed industrial base (though eroding)
- Potential economic hub in its region

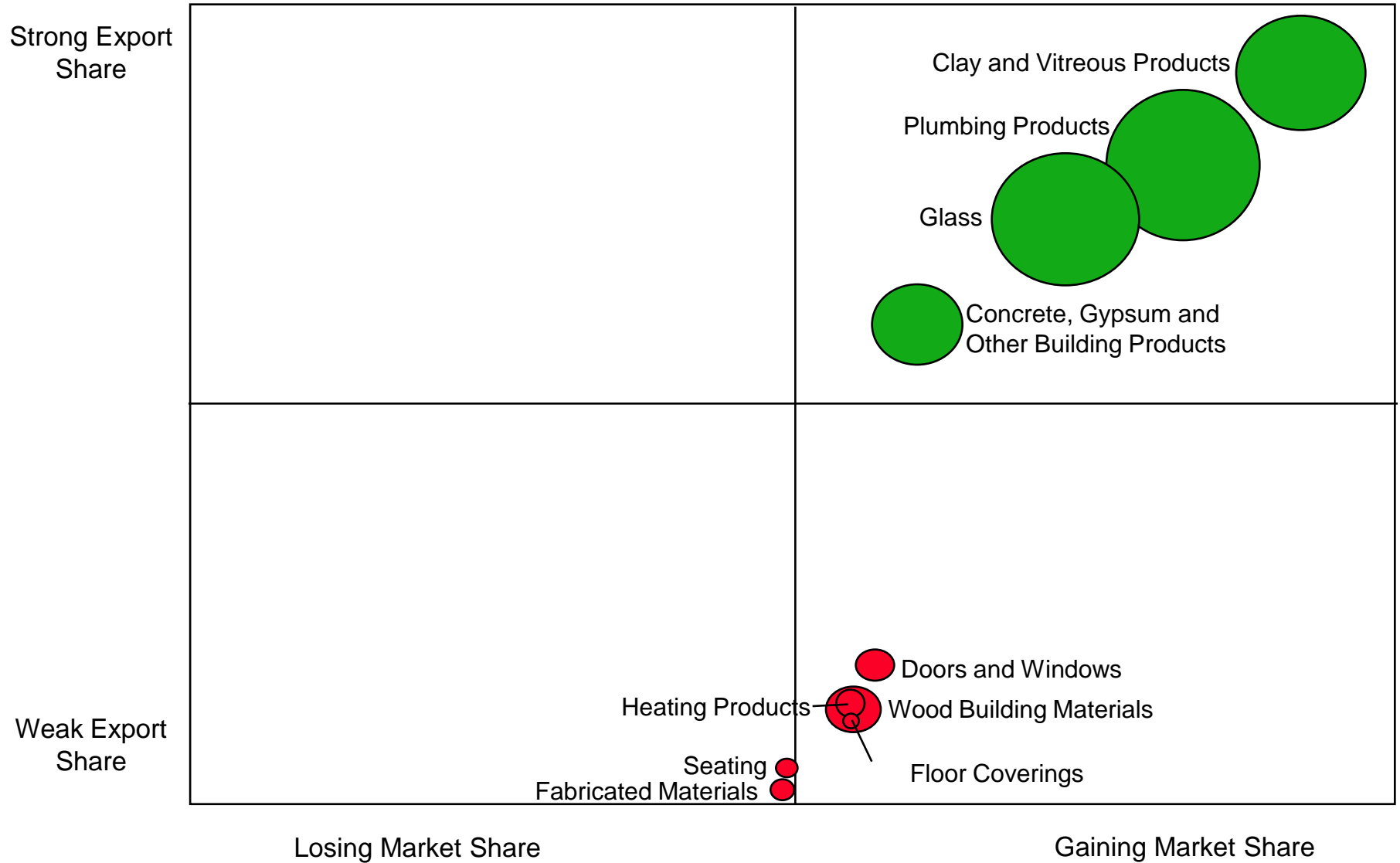
Growth Opportunities within Clusters

Iranian Agricultural Products



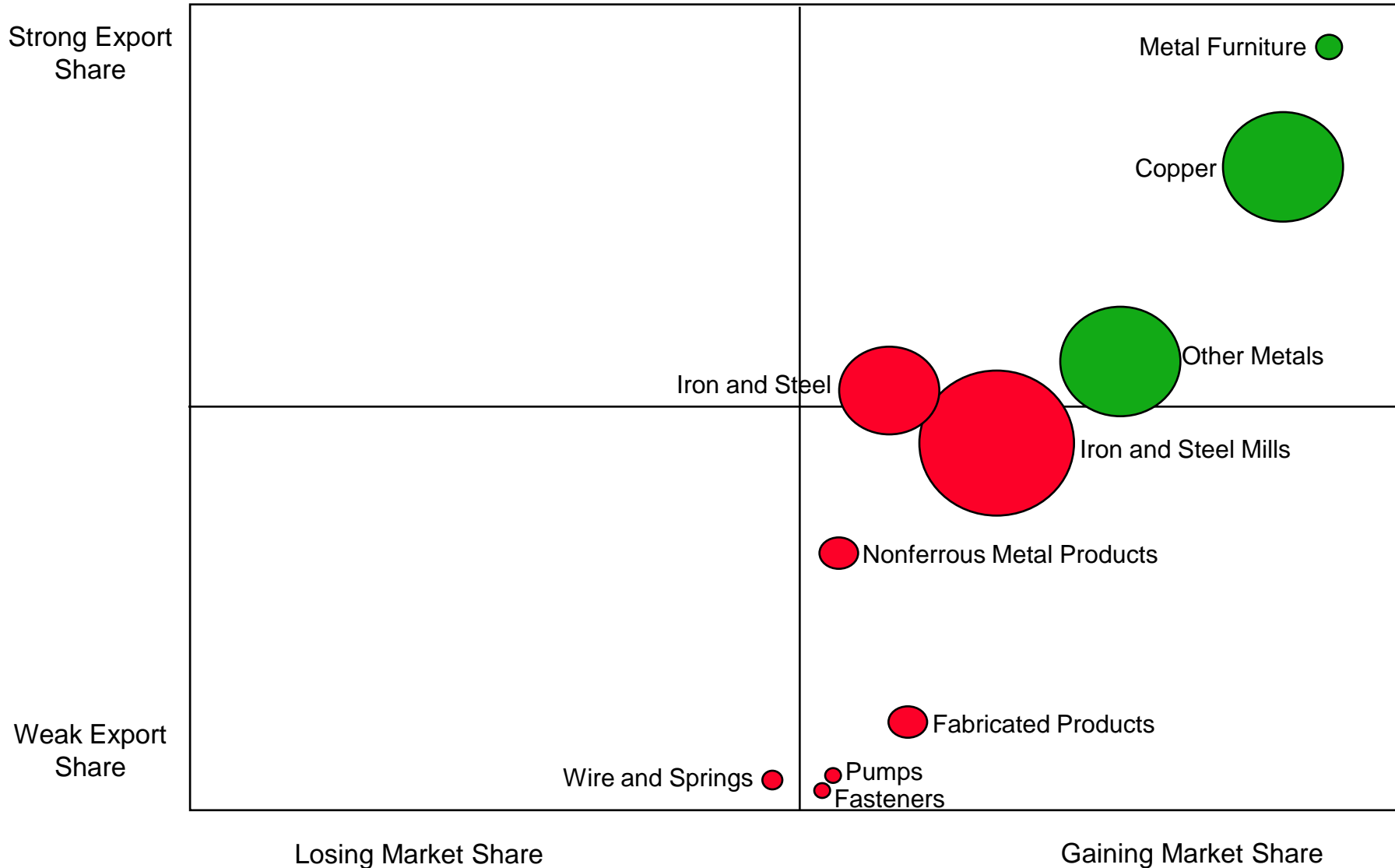
Growth Opportunities within Clusters

Iranian Building Fixtures and Equipment



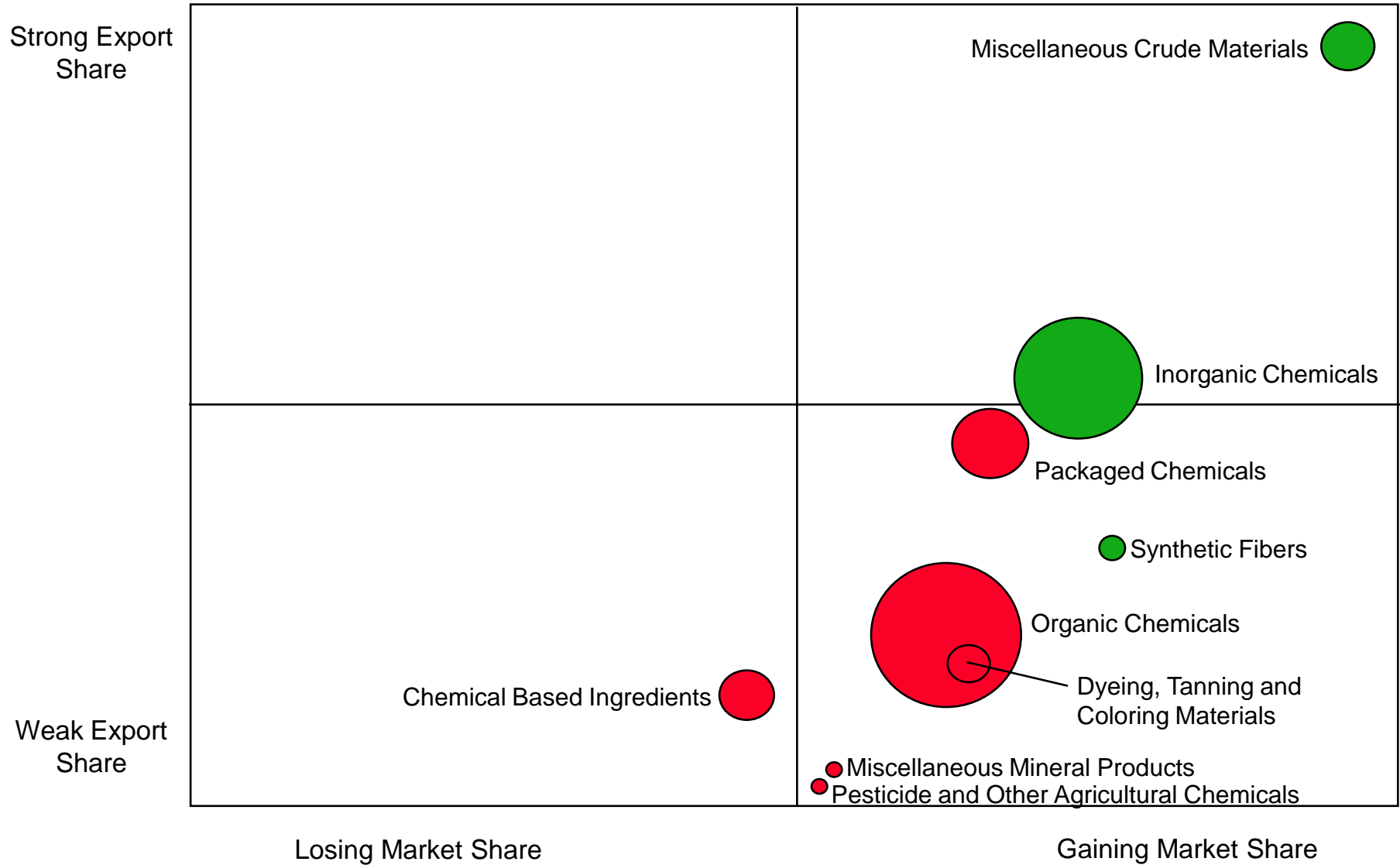
Growth Opportunities within Clusters

Iranian Metal Mining and Manufacturing



Growth Opportunities within Clusters

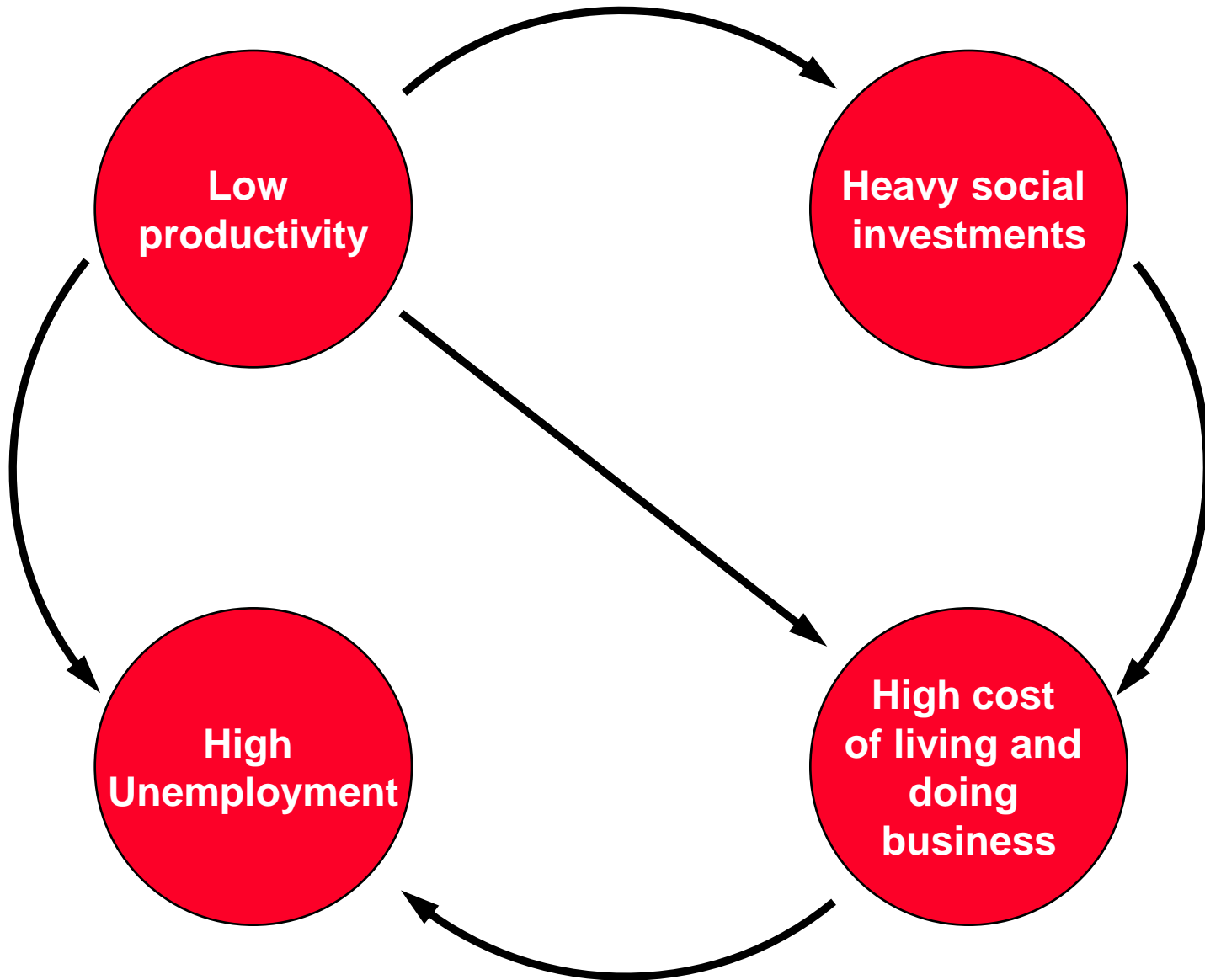
Iranian Chemical Products



Key Challenges for Iran

- **Macroeconomic stabilization:** fiscal imbalances and high inflation inflict huge social costs and distort the incentives for competitiveness
- **Transparency:** lack of transparency leads to corruption that undermines productivity
- **Privatization:** the current dominance of government-owned companies politicizes economic decisions and has high costs for productivity
- **Business environment:** government-set prices, price subsidies and regulations distort economic decisions and reduce productivity
- **Infrastructure:** Iran lacks modern, efficient infrastructure to support productivity
- **Competition:** the absence of open competition reduces productivity and innovation
- **Foreign investment:** Iran needs external management ideas and technology and pays a high cost for political isolation
- **Cluster development:** Iran has not fostered cluster development to drive SME growth and diversify the economy
- **Private sector development:** job creation requires a vibrant private sector rather than state dominated companies
- **Public sector effectiveness:** government is bloated and lacks a professional civil service

Current Approach



Competitiveness Driven Policy

