International Conference on "Governance and Education for Sustainable Development and European Integration„
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Economic Growth, National Competitiveness and Education

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CSEND, www.csend.org

Main Theme of the Conference

"To reconsider the role of education for democratisation, stability and economic development in the region as well as for its inclusion into an Enlarged Europe"

Focus of This Presentation

"To situate the discourse on education and human capital formation in the context of national competitiveness"

Changing Landscape

21st Century Is Driven by 2 Complementary "Revolutions" --

- Globalisation of world economy
- Proliferation of Information and communication technology

And by 2 economic realities –

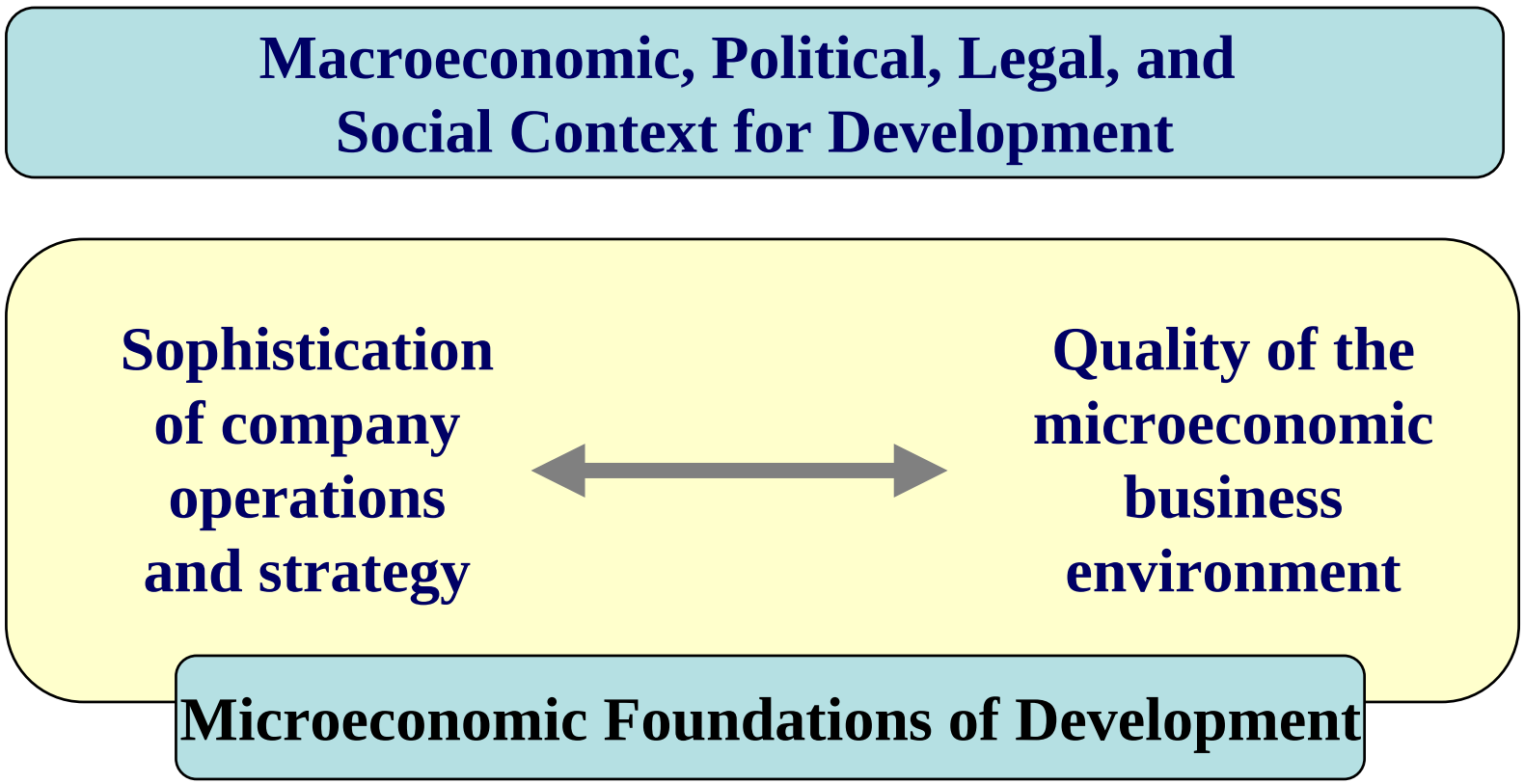
- Intensified competition
- Growing economic power of China, Brazil, India

Microeconomic Foundations of Prosperity

"It is well understood that sound fiscal and monetary policies, a trusted and efficient legal system, a stable set of democratic institutions, and progress on social conditions contribute greatly to a healthy economy. However, these broader conditions are *necessary but not sufficient".*

(Michael E. Porter, Harvard University, 2004, Global Competitiveness Report)

Determinants of Productivity and Productivity Growth



Changing the Rules of the Game

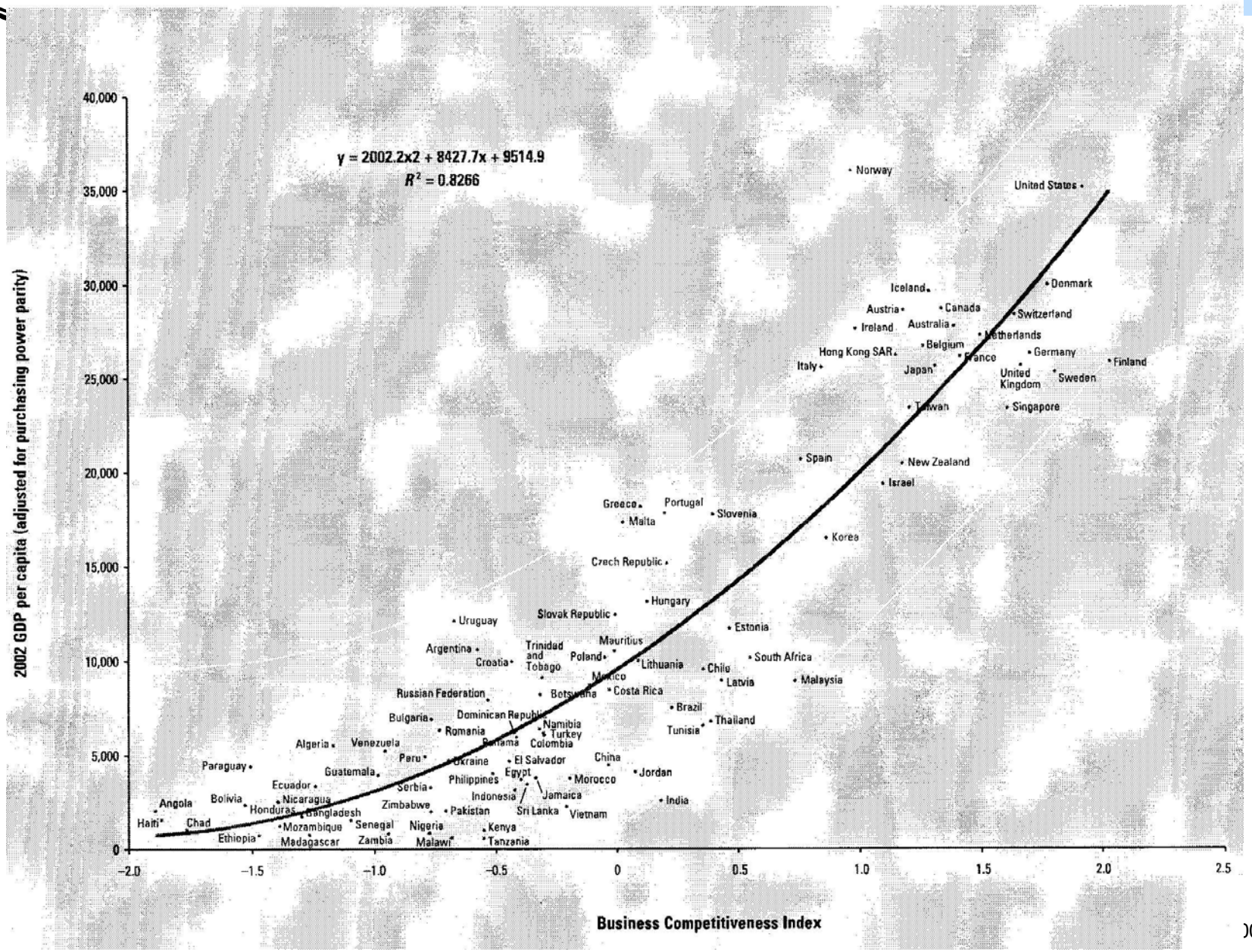
(David Ricardo)

Competitive Advantages

(Michael Porter)

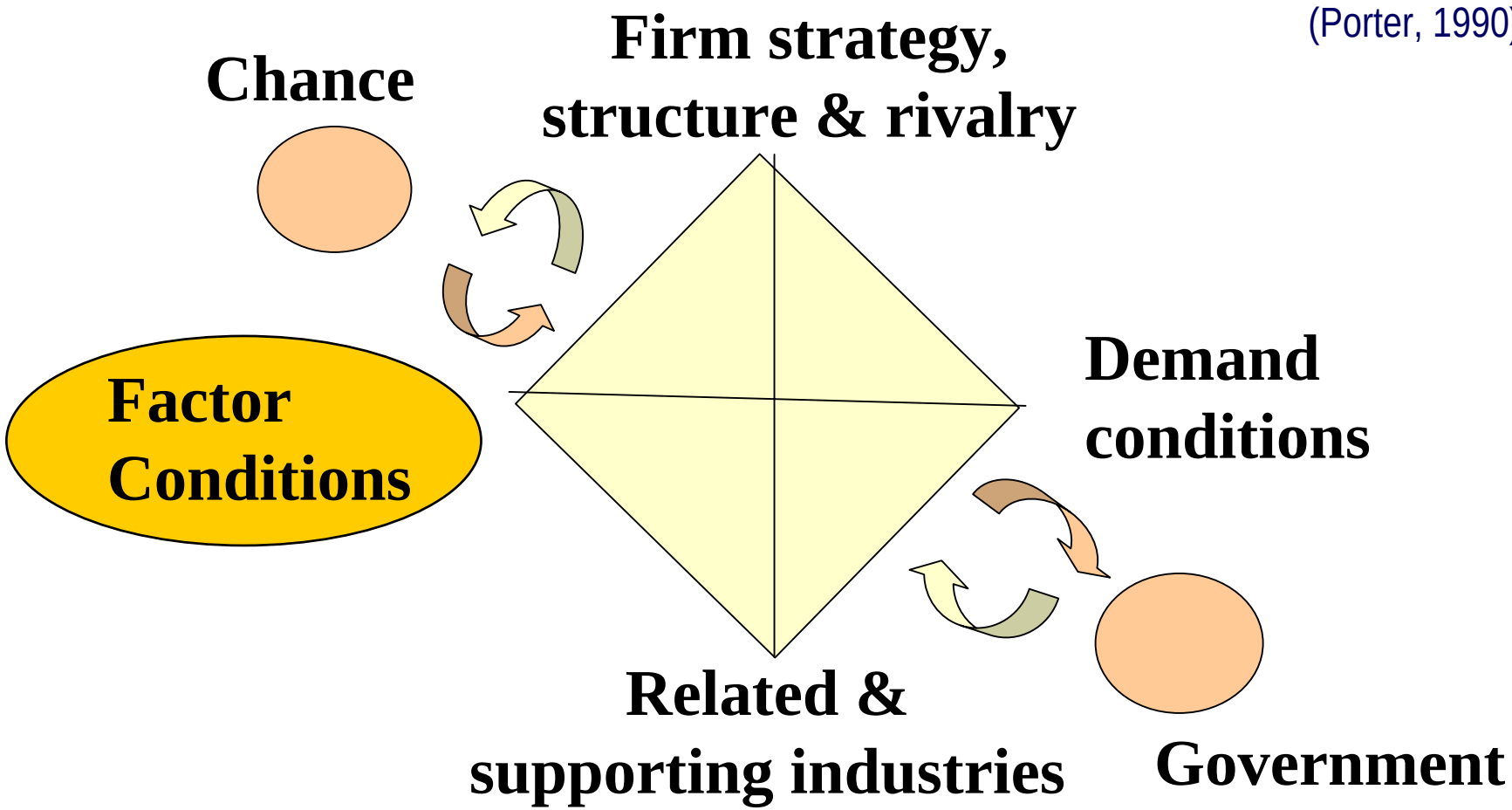
Result?

Eroding the cost advantage that has been long enjoyed by newly industrialised and developing countries!


y = 2002.2x2 + 8427.7x + 9514.9
R² = 0.8266
2002 GDP per capita (adjusted for purchasing power parity)
Business Competitiveness Index
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
−2.0
−1.5
−1.0
−0.5
0
0.5
1.0
1.5
2.0
2.5
Norway
United States
Iceland
Denmark
Austria
Canada
Switzerland
Ireland
Australia
Netherlands
Belgium
Hong Kong SAR
Germany
Italy
France
Finland
Japan
United Kingdom
Sweden
Taiwan
Singapore
Spain
New Zealand
Israel
Greece
Portugal
Slovenia
Malta
Korea
Czech Republic
Hungary
Slovak Republic
Uruguay
Estonia
Argentina
Trinidad and Tobago
Mauritius
Croatia
Poland
Lithuania
Chile
South Africa
Latvia
Malaysia
Mexico
Costa Rica
Botswana
Russian Federation
Brazil
Bulgaria
Dominican Republic
Thailand
Namibia
Romania
Turkey
Tunisia
Algeria
Venezuela
Panama
Colombia
China
Paraguay
Peru
Ukraine
El Salvador
Jordan
Guatemala
Egypt
Morocco
Ecuador
Serbia
Philippines
Indonesia
Jamaica
India
Angola
Bolivia
Nicaragua
Honduras
Bangladesh
Zimbabwe
Pakistan
Sri Lanka
Vietnam
Haiti
Chad
Mozambique
Senegal
Nigeria
Kenya
Ethiopia
Madagascar
Zambia
Malawi
Tanzania

Success Factors of National Competitiveness - Porter's Concept

(Porter, 1990)



Factors with the most decisive influence on comparative advantages of a region with a future

(Ch. Koellreuter, BAK, 1997)

(1)

Ranking	**Factors**

Factors with the most decisive influence on comparative advantages of a region with a future

(BAK survey, 1997)

Ranking	Factors
8	Telecommunication
9	Quality of life
10	Access to EEA (EU) market
10	Working Hours
10	Predictability of the politico-legal environment
..	.....
25	Price/performance of unskilled labour

Factor Conditions

- Physical Infrastructure
- Administrative Infrastructure
- Human Resources
- Technology Infrastructure
- Capital Markets

Factor Conditions (2)

- Human Resources
  - Quality of management schools
  - Quality of public schools
  - Quality of the educational system
  - Quality of math and science education

Factor Conditions- Human Resources

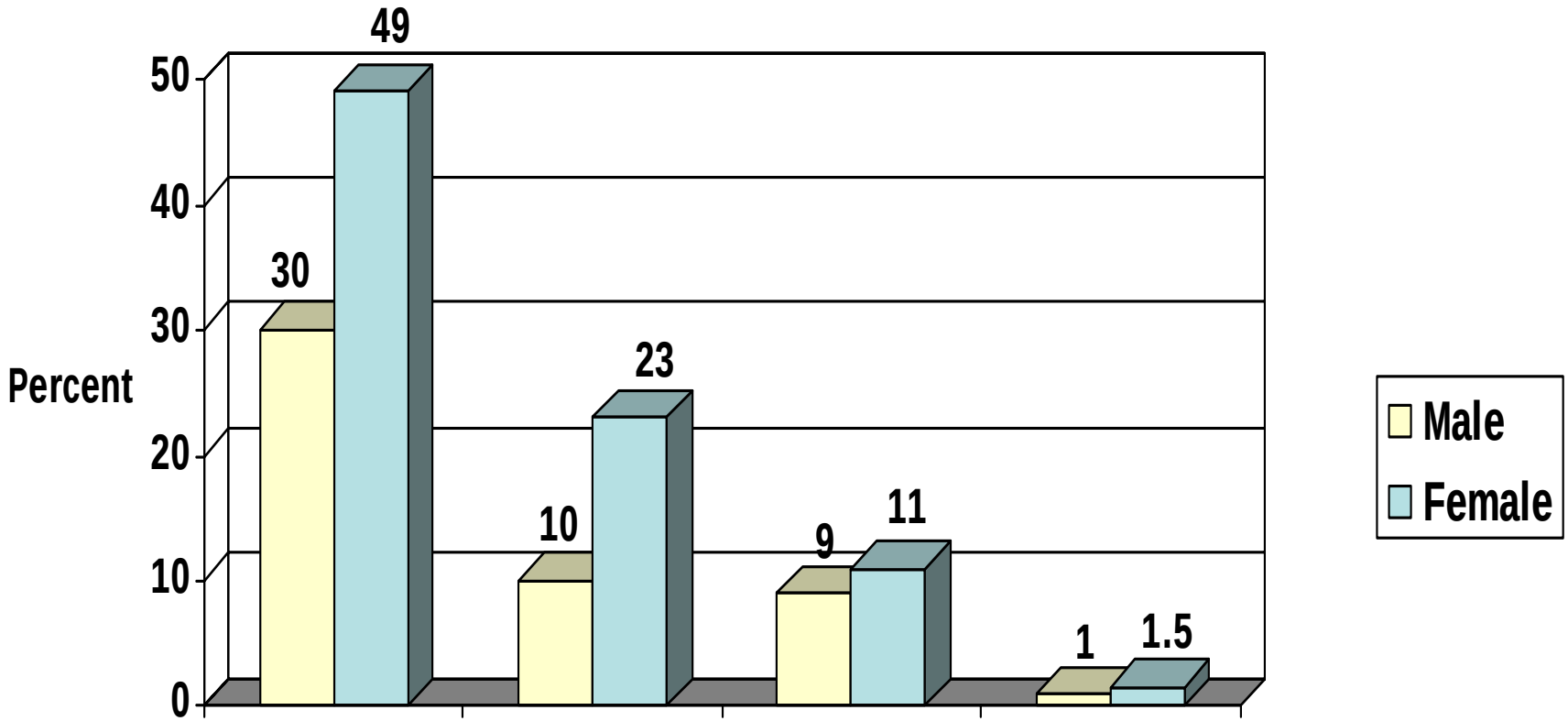
(WEF, Global competitiveness Report, 2003)

	Low-Income Countries (<$4,000, N=28)	Middle-Income Countries (>$4,000 & <$17,000, N=39)	High-Income Countries (>$17,000, N=27)
Quality of Mgmt Schools	3.34	4.19	5.34
Quality of Public Schools	2.30	3.69	5.46
Quality of the educational system	2.41	3.42	4.85
Quality of Math & Science Education	3.21	4.16	5.19

Lester C. Thurow on Quality of Education

"In today's economic world, countries without educated work forces simply cannot set sails economically – what ever their desires……. If countries cannot organise good education systems, there is no such thing as catching up economically." (March, 2001)

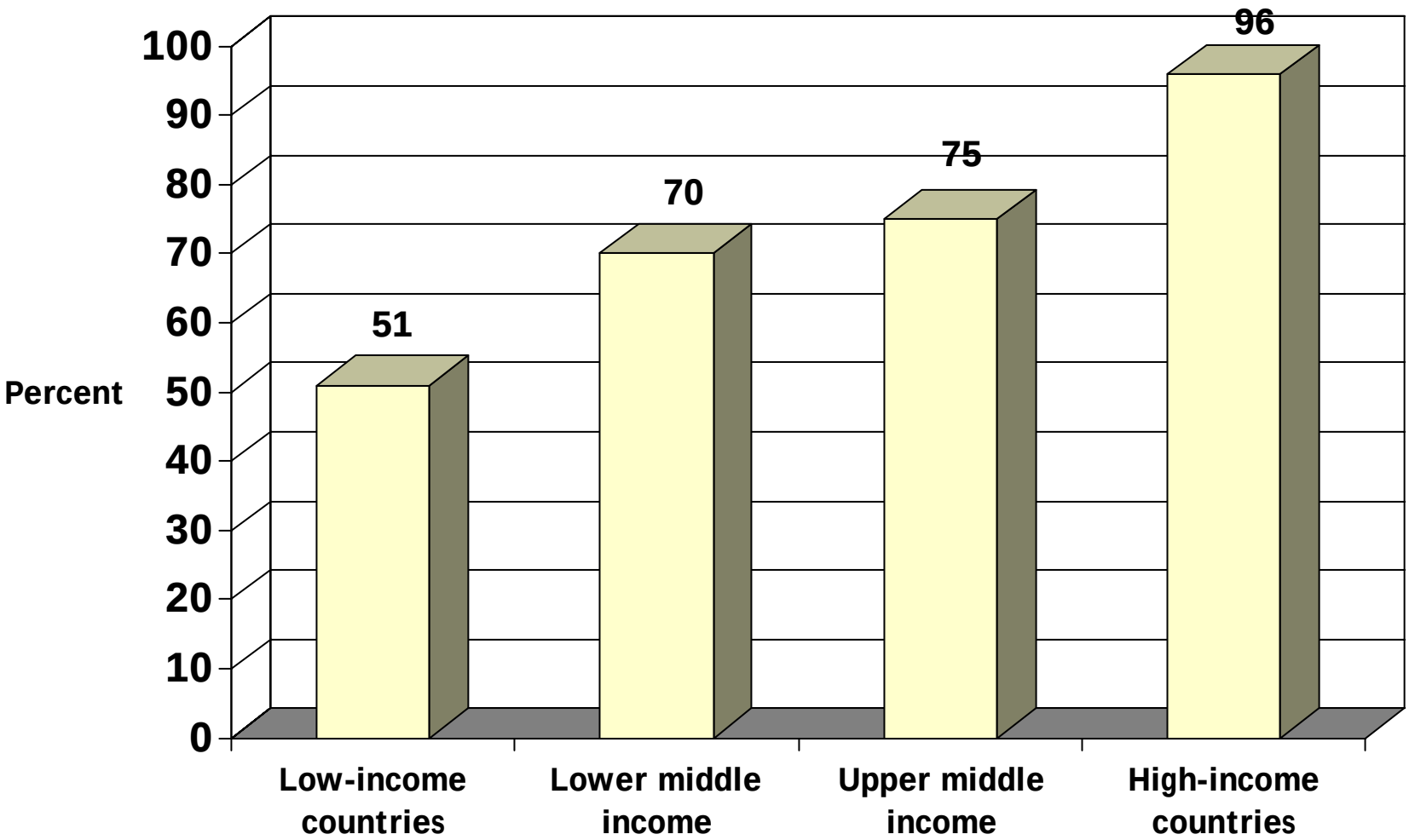
Adult Illiteracy Rate (Percent of People Age 15 & Over in 1998)



	Low-income countries	Lower middle	Higher Middle	High-income countries
Percent world population	45%	36%	10%	15%

(*Source*: **World Bank, 2000/Andrew H. Van de Ven, 2002)**

Secondary School Enrollment Ratio (Percent of Relevant Age Group)



(*Source*: **World Bank, 2000/Andrew H. Van de Ven, 2002)**

Tension: past, present & future for Transition Economies

- Past:
  - High literacy rates & mandatory education
- Present:
  - Decreased budgets & labour market mismatch
- Future:
  - Knowledge and skills acquisition through life long learning, basic & applied education and in-service training (investment in learning)

Past-Present-Future: Strategies

- Peer Reviews of HES/FH (CH)
- Higher Education Review (OECD,e.g. China)
- Educational Reforms (UNESCO-OECD joint project on quality assurance, accreditation, recognition of degrees)

Past-Present-Future:Switzerland

- Peer Review of Universities of Applied Sciences (Polytechs) 2001-2003
  - 200+ Peers assessing teaching, quality assurance, training, consulting to SMEs, research, publications
  - Parliament (new law re: subsidies, programmes)
- Universities
  - OAQ (accreditation)
  - New law in preparation

Past-Present-Future: Example China

- " The deepening imbalance between labour supply and labour demand needs to be overcome by massive investment in human resource development and the expansion and upgrading of vocational training. "
- "Link education and training more closely to economic and employment growth strategies and thus overcome skill mismatches."

(Source: An Employment Agenda for China, background paper for the China Employment Forum, 2003)

Implications?

- Even greater demand on high quality human resources
- Accepted need and practices for life long learning and continuing education
- Increased cross-border mobility for talents (greater brain drain)
- Greater commitment for development of human capital by the countries and by the world class corporations
- Pursuit of intellectual capital formation
- Defending of intellectual property rights

Conclusion

- Competition of the 21st century is a race of knowledge creation and application
- Knowledge society requires knowledge workers which in turn demands quality education and training at ALL levels
- Companies are embedded in the countries/regions that they operate in. Available human resources are constrained by the quality of existing education and training services

Thank You!!