

**IMPACT OF NATIONAL INSTITUTIONS ON COMPANIES' GLOBAL  
COMPETITIVE ADVANTAGE: DOMINANCE OF COMPANIES FROM COUNTRIES  
WITH ADVANCED SOCIAL CAPABILITIES**

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**Abstract**

The paper attempts to examine the relationships between companies' ability to achieve a global competitive advantage and national institutions. Companies' global competitiveness is measured by a composite ranking of the world's 2,000 largest public corporations. Unlike other rankings that measure the size of companies from a single-dimension metric, Forbes has designed a ranking (Forbes Global 2000) based on the following four strategic characteristics: sales, profits, assets, and market value.

National institutions are related to tenacious societal characteristics referred to as social capabilities and involve such factors as education system, and political, legal and economic environments. Several indicators have been proposed to measure national institutions. Some of the most important indicators are the Index of Freedom, Index of Globalization, Index of

Country Risk, and Index of Global Competitiveness. Because of the interrelationships among institutional factors (this study found that all four indices were highly correlated), the measure of national institutions used for the analysis was the Index of Economic Freedom. The Index of Economic Freedom was developed by the Heritage Foundation and Dow Jones & Company and combines ten different freedoms: business freedom, trade freedom, fiscal freedom, freedom from government, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labor freedom.

Data for both companies' global competitiveness and national institutions were collected for more than one hundred countries. The empirical results indicate that the largest and most competitive companies are clustered in countries with enlarged social capabilities. These countries include primarily nations with high per capita income and located in the region called the Organization for Economic Co-operation and Development (OECD). Also, companies from a few newly industrialized nations of East Asia and Latin America are showing signs of gaining competitive strength. Firms from South Asia, the Middle East, North Africa, and especially Sub-Saharan Africa lack competitive advantage. The reason suggested in the paper is that countries from these regions have poor social capabilities.

## **Introduction**

In today's world marketplace, very few firms can afford to remain entirely domestic and still have a competitive advantage. In the new competitive landscape, the single most important challenge facing companies is globalization (Hitt, Ireland and Hoskisson 2007; Spulber 2007). Globalization can be seen as a shift toward a more integrated and interdependent world economy (Hill 2007). A twenty-five year study of over two hundred corporations suggests that virtually every industry is a global industry (Gupta, Govindarajan, and Wang 2008). As barriers to the free flow of goods, services and capital have been declining and technologies have been changing at an accelerated pace (Lopez-Claros 2007), distinctly separate national markets are merging into one marketplace. More companies are in turn doing business (i.e. buying, making or distributing goods and services) in locations around the world. By going global, companies are in a position to take advantage of opportunities (e.g. consumers, raw materials, capital, etc.) that arise in other countries so they can achieve competitive advantage that they are unable to create and/or sustain domestically (Mpoyi, Festervand, and Sokoya 2006).

Despite the general trend toward globalization, several national differences persist. Differences among countries may be based on societal orientations (individualism versus group orientations), and on cultural, political, economic and business environments. These differences have been used to explain why companies from specific countries tend to be more competitive than companies from other countries. The purpose of this research is to relate countries' institutional characteristics to the competitive strength of companies.

## **Brief Review of Research on National Competitive Advantage**

Companies that develop and carry out strategies that result in strong financial and strategic performance are said to have a competitive advantage. Competitive advantage can be defined as a firm's ability to create more economic value than its rivals (Barney and Hesterly 2008). As will be shown in the next section, developed countries have a disproportionately large number of companies that are competitively dominant in the world. To explain such predominance, a few frameworks have been discussed.

A model extensively mentioned in the literature is the 'national diamond'. Proposed by Michael Porter (1990), the national diamond identifies four sets of characteristics that are crucial in determining whether companies from a specific country will be more likely to achieve global competitive advantage in their particular industries. These characteristics include factor endowments, demand conditions, related and supporting industries, and firm strategy, structure and rivalry. Porter's model has made a significant contribution to the understanding of how the national context shapes the competitive strength of companies in the world (Grant 2008; Hill 2007). However, Porter's work is heavily influenced by differences in economic and business environments among countries. In particular, the model is based on the premise that a government is playing an active and constructive role in maximizing the level and growth of a nation's living standard. While such a role is economically idealistic, it does not necessarily reflect the extent to which a country's institutional environments are conducive to the success of a nation's businesses. For example, it is difficult to imagine companies in a number of Sub-Saharan African countries develop a global competitive advantage in an environment where civil wars and massive displacements of populations are taking place.

Another framework, initially developed to explain why Sub-Saharan companies were largely unable to create competitive advantage, divides relevant national characteristics into macro-level and micro-level factors (Mpoyi, Festervand, and Sokoya 2006). Macro-level factors are institutions such as the political, legal and market systems, and government policies devised to support businesses. Micro-level factors involve the ability of a nation's companies to build needed competencies and to formulate effective competitive strategies. This framework advances that it is the inappropriateness of national institutions and the strategic inability of companies that put Sub-Saharan African businesses at a competitive disadvantage in the world.

Lastly, research done by several regional and international organizations' experts lays out the conditions that are permissive to the ability of a nation's companies to achieve global competitiveness. For example, the World Bank Group has been conducting studies aimed at highlighting the importance of key areas that need improvement if companies from developing countries are to become more competitive. The latest publications from the World Bank in this regard are an analysis of the World Development Indicators, and a study that compares countries from the prospective of the Ease of Doing Business (International Bank for Reconstruction and Development 2006; World Bank's Development Data Group 2007). Other organizations that

work to improve business performance and competitive advantage include the World Economic Forum with its Global Competitiveness Report (Lopez-Claros 2006), the Heritage Foundation and Dow Jones & Company, Inc. that have developed the Index of Economic Freedom (Kane, Holmes, and O’Grady 2007), and Coface that organizes a Country Risk Conference annually (Coface 2007).

As the literature review suggests, there are several theoretical models, and economic and business studies and data that are available to assess the competitive strength of companies from various countries. The next section will provide evidence of competitiveness differences among countries.

### **Nations’ Competitiveness Differences**

One approach for evaluating firm competitiveness is the ranking of companies. There exist several rankings of companies, including those published in business periodicals (e.g. Fortune, Business Week), and government agencies (such as the UK’s Department of Trade and Industry). Many of these rankings are developed from a single-dimension measure. This research however will be based on Forbes Global 2000 which is a ranking of companies that uses a multi-dimensional measure. The Forbes Global 2000 is a composite ranking of the world’s 2,000 largest public companies obtained from four metrics: sales, profits, assets, and market value (DeCarlo 2007). Because Forbes Global 2000 assesses performance along four strategic characteristics of companies, a major assumption that this study is making is that this ranking provides an acceptable measure of companies’ ability to achieve a global competitive advantage.

Forbes Global 2000 is used in the paper to classify the largest companies in the world in 2005 by countries’ income level and by regions (the distribution of the largest companies by country, countries within income group, and countries within region, is provided in Appendices). In addition, tables and most appendices break down Forbes Global 2000 by size as follows: first 500 largest companies (1-500), next 500 largest (501-1000), following 500 largest companies (1001-1500), and last 500 largest companies (1501-2000).

**Table 1. Distribution of Forbes Global 2000 Companies by Countries’ Income Group**

Income group*	Largest Companies				
	1-500	501-1000	1001-150	1501-2000	Total
Developed economies (High Income)	460	450	433	432	1775
Developing economies					
- Upper middle income	17	30	23	26	96
- Lower middle income	18	17	27	30	92
- Low income	5	3	17	12	37
Sub-Total	40	50	67	68	225
<b>TOTAL</b>	500	500	500	500	2000

\* The classification of economies by income level is from the World Bank Group.

The most competitive companies are concentrated in developed countries (Table 1). Of the 2,000 largest and arguably the most competitive companies, 1775 (88.75%) are from developed nations (high income countries with a per capita income of \$10,726 or more). The United States has the most competitive companies (659 or 33%), followed by Japan (291), the United Kingdom (126), France (66), Canada (61), and Germany (57). Interestingly, there is a good presence of South Korea, Hong Kong (now an autonomous part of China) and Taiwan, with respectively 52, 45, and 42 companies.

Less than 12% (225) of the most competitive companies are from developing economies (countries with a per capita income of \$10,725 or less). Developing countries include several income levels: low income economies (\$875 or less), lower middle income economies (between \$876 and \$3,465), and upper middle income economies (between \$3,466 and \$10,725). Developing countries with the most competitive companies include China (42), India (34), Brazil (22), and Russia (20). China and India are competitively ahead among developing countries, partly because of the size of their population (1.3 and 1.1 billion people respectively), also in part because their economies are growing very fast, which may be an indication that their companies are improving their competitive standing in the world.

It is significant to note that while high income countries have close to 89% of the most competitive companies, they account for only 16% of world population (1.0 out of 6.4 billion people) (World Bank's Development Data Group 2007). As companies generate most of a nation's wealth, it is not surprising to see that companies from high income economies are dominant in global competition. The unequal distribution of the largest companies can also be noticed at the regional level.

**Table 2. Distribution of Forbes Global 2000 Companies by Region**

Regions*	Largest Companies				
	1-500	501-1000	1001-1500	1501-2000	Total
OECD (Developed region)	440	408	400	381	1629
East Asia & Pacific	26	41	51	59	177
Latin America & Caribbean	14	22	17	31	84
Europe & Central Asia	10	15	8	5	38
South Asia	5	2	17	12	36
Middle East & North Africa	2	8	1	8	19
Sub-Saharan Africa	3	4	6	4	17
<b>TOTAL</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>2000</b>

\* The classification of countries by region is from the World Bank Group.

The OECD (Organization for Economic Co-operation and Development) is the region that has the most competitive companies (1629 or 81%). This situation is in part the result of how OECD countries are grouped. Instead of being defined by geographic proximity (as is the case for other regions), OECD is an income-based region that comprises most developed economies. The

second most competitive region is East Asia and Pacific with 177 companies. This is a region where several so-called newly-industrialized economies are located (e.g. Hong Kong, Taiwan and Singapore). The Latin American and Caribbean region is third with 84 competitive firms.

The least competitive regions are Europe (i.e. Eastern Europe) and Central Asia, South Asia, Middle East and North Africa, and Sub-Saharan Africa. South Asia and Sub-Saharan Africa are each dominated by companies from one country, respectively India (34 out of 36 companies) and South Africa (16 out of 17 companies). South Asia, Middle East and North Africa, and particularly Sub-Saharan Africa are regions known for the complexity of the problems they are facing. Sub-Saharan Africa for example is plagued by the extreme poverty of its people, widespread diseases, poor educational infrastructure, rampant corruption, poor leadership, and a number of structural rigidities such as debt burden and over-reliance on exports of few primary products (Muuka, Harrison and McCoy 1998).

The strong presence of companies from high income economies may be the result of social capabilities. Social capabilities are tenacious societal characteristics such as education system, political and economic institutions (Abramovitz 1986; Lusigi, Piesse, and Thirtle 1998; Nelson 1991). As high income nations are likely to have enlarged social capabilities, their companies tend to prosper and therefore achieve global competitive advantage. Also, companies from newly-industrialized nations are improving their competitive standing because these countries have been socially advancing.

Inappropriate social capabilities may explain South Asian and African companies' poor showing in the global competitive arena. Some studies have for example cited unstable institutional environments as a major reason for Sub-Saharan Africa's competitive disadvantage (Blunt and Jones 1992; Mpoyi, Festervand, and Sokoya 2006; Muuka, Harrison, and McCoy 1998). Next, the paper will examine the effects of national institutions on companies' ability to achieve a global competitive advantage.

### **Impact of National Institutions on Global Competitiveness**

This section is structured as follows. First, the variables are specified. Second, a comparison of institutional (independent) variables will be done. Third, the effect of institutions on global competitiveness of countries' companies is discussed. As will be explained, the study will focus on the index of economic freedom as an indicator of institutional factors.

#### **Variables**

Global competitiveness is measured by the number of companies a country has in the Forbes Global 2000. As mentioned earlier in the discussion, the strategic characteristics taken into consideration in Forbes Global 2000, namely sales, profits, assets, and market value, make the number of companies by country a good indicator of global competitiveness.

Both academic researchers and experts from international organizations have proposed several measures of national institutions that can determine companies' competitive strength (ATKearney 2007; Coface 2007; Dreher 2006; Kane, Holmes, and O'Grady 2007; Lopez-Claros 2006; Mpoyi, Festervand, and Sokoya 2006; World Bank's Development Data Group 2007). To summarize, the most relevant institutions are the stability of the political environment, the laws and regulations, the education and health system, the technological environment, and the implementation of market mechanisms. Several indicators of institutional factors have been developed by international organizations.

Data for both global competitiveness (number of companies among Forbes Global 2000 by countries) and institutional factors were collected for more than one hundred countries. All income groups and regions were represented.

### **Relatedness Among Institutional Factors**

An underlying argument shared by researchers and practitioners is the interrelationship that exists among a country's institutions. For instance, political instability will be associated with changing laws and regulations, extensive government intervention in economic activities, lack of investments in education and health services, and the absence of basic technologies that support innovation and improvement in productivity.

**Table 3. Correlations Among Institutional Factors\***

Institutional indices	Freedom	Globalization	Country Risk	Competitiveness
Freedom	1.000			
Globalization	.716 (.000)	1.000		
Country Risk	-.778 (.000)	-.806 (.000)	1.000	
Competitiveness	.819 (.000)	.875 (.000)	-.890 (.000)	1.000

\* The description of institutional indices is given in Appendix D.

To test the interrelationships among institutional factors, a correlation analysis was performed. The results are presented in Table 3. All institutional indices are highly correlated. Indeed, the description of the four institutional factors (see Appendices) reveals the existence of a few common elements. Nonetheless, these results confirm the interconnectedness among national institutions.

### **Institutions and Global Competitive Advantage**

To measure the impact of institutions, a regression analysis was conducted. Simple regression using one index of institutional factors was used, as the results of a multiple regression for all

four institutional indexes (independent variables) would be altered by high correlation among them. The independent variable chosen in this research was the Index of Economic Freedom. As described in Appendix D, the index of economic freedom involves 10 different freedoms (Kane, Holmes, and O'Grady 2007): business freedom, trade freedom, fiscal freedom, freedom from government, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labor freedom. Because of the nature and number of 'freedoms' included, it is safe to say that the Index of Economic Freedom takes into consideration most aspects of a country's institutional environments.

The results of the regression analysis indicate that the index of economic freedom significantly explains global competitiveness (t statistic was 3.791 with  $p = .000$ ). Therefore, institutional environments (measured by the index of economic freedom) strongly affect the ability of a country's companies to achieve a global competitive advantage. In their study, Kane, Holmes and O'Grady (2007) found a meaningful link between economic freedom and per capita income. The results of this research provide an explanation of why companies from high income economies are more competitive than companies from low to mid-level income economies.

### **Conclusion**

This paper was an attempt to understand why companies from high income countries were overwhelmingly more competitive than companies from low and middle income countries. The results suggest that institutional environments measured by the index of economic freedom were determinant in the ability of companies to achieve global competitive advantage. The study also found that different types of institutional indicators (i.e. various institutional indices) were highly correlated, implying that difficulties in one set of institutions were only an indication of widespread problems in other institutional factors.

It is our hope that this research will add to the findings of other studies that low and middle income economies will benefit from globalization if they rethink how they approach their development issues. Countries of Sub-Saharan Africa, South Asia and other parts of the developing world should address the poor competitive performance of their companies by improving their social capabilities through the implementation of a whole range of institutional changes in their national environments.

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## Appendices

### Appendix A. Forbes Global 2000 companies by country (2005)

Countries	Total Companies	Countries	Total Companies
Argentina	1	Liberia	1
Australia	43	Luxembourg	6
Austria	13	Malaysia	14
Bahamas	1	Mexico	17
Belgium	11	Morocco	1
Bermuda	25	Netherlands	28
Brazil	22	New Zealand	1
Canada	61	Norway	11
Cayman Islands	5	Pakistan	2
Chile	6	Panama	1
China	44	Peru	1
Colombia	2	Philippines	1
Czech Republic	1	Poland	4
Denmark	10	Portugal	8
Egypt	3	Russia	20
Finland	16	Saudi Arabia	5
France	66	Singapore	14
Germany	57	South Africa	16
Greece	12	South Korea	52
Hong Kong/China	45	Spain	36
Hungary	2	Sweden	28
Iceland	4	Switzerland	36
India	34	Taiwan	42
Indonesia	4	Thailand	13
Ireland	11	Turkey	11
Israel	9	United Kingdom	126
Italy	42	United States	659
Japan	291	Venezuela	2
Jordan	1	<b>TOTAL</b>	<b>2000</b>

Source: Data compiled from DeCarlo, Scott. 2007. "The World's 2000 Largest Public Companies." *Forbes Magazine (Online Article)*.

**Appendix B. Forbes Global 2000 companies by countries' income group (2005)**

Income group	1-500	501-1000	1001-1500	1501-2000	Total
<b>A. HIGH INCOME</b>	<b>460</b>	<b>450</b>	<b>433</b>	<b>432</b>	<b>1775</b>
United States	179	158	180	142	659
Japan	52	74	65	100	291
United Kingdom	37	35	31	23	126
France	33	11	13	9	66
Canada	20	15	13	13	61
Germany	23	16	7	11	57
South Korea	9	12	17	14	52
Hong Kong	6	12	11	16	45
Australia	10	11	11	11	43
Italy	9	13	14	6	42
Taiwan	4	11	10	17	42
Spain	14	8	6	8	36
Switzerland	11	8	7	10	36
Netherlands	12	7	3	7	29
Sweden	9	8	5	6	28
Bermuda	4	6	6	9	25
Finland	4	4	5	3	16
Singapore	4	4	3	3	14
Austria	2	5	3	3	13
Greece	1	4	4	3	12
Belgium	3	4	3	1	11
Ireland	3	3	3	2	11
Norway	4	3	2	2	11
Denmark	2	3	2	3	10
Other Countries	5	15	9	10	39
<b>B. UPPER MIDDLE INCOME</b>	<b>17</b>	<b>30</b>	<b>23</b>	<b>26</b>	<b>96</b>
Russia	8	5	4	3	20
Mexico	3	6	2	6	17
South Africa	3	3	6	4	16
Malaysia	0	5	4	5	14
Turkey	1	6	2	2	11
Other Countries	2	5	5	6	18
<b>C. LOWER MIDDLE INCOME</b>	<b>18</b>	<b>17</b>	<b>27</b>	<b>30</b>	<b>92</b>
China	11	6	15	12	44
Brazil	6	6	3	7	22
Thailand	1	2	4	6	13
Other countries	0	3	5	5	13
<b>D. LOW INCOME</b>	<b>5</b>	<b>3</b>	<b>17</b>	<b>12</b>	<b>37</b>
India	5	2	16	11	34
Other countries	0	1	1	1	3
<b>TOTAL</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>2000</b>

**Appendix C. Forbes Global 2000 companies by region (2005)**

Region	1-500	501-1000	1001-1500	1501-2000	Total
<b>A. <u>OECD</u></b>	<b>440</b>	<b>408</b>	<b>400</b>	<b>381</b>	<b>1629</b>
United States	179	158	180	142	659
Japan	52	74	65	100	291
United Kingdom	37	35	31	23	126
France	33	11	13	9	66
Canada	20	15	13	13	61
Germany	23	16	7	11	57
South Korea	9	12	17	14	52
Australia	10	11	11	11	43
Italy	9	13	14	6	42
Spain	14	8	6	8	36
Switzerland	11	8	7	10	36
Netherlands	12	7	3	7	29
Sweden	9	8	5	6	28
Finland	4	4	5	3	16
Austria	2	5	3	3	13
Greece	1	4	4	3	12
Belgium	3	4	3	1	11
Ireland	3	3	3	2	11
Norway	4	3	2	2	11
Other Countries in this Region	5	9	8	7	29
<b>B. <u>East Asia &amp; Pacific</u></b>	<b>26</b>	<b>41</b>	<b>51</b>	<b>59</b>	<b>177</b>
Hong Kong	6	12	11	16	45
China	11	6	15	12	44
Taiwan	4	11	10	17	42
Malaysia	0	5	4	5	14
Singapore	4	4	3	3	14
Thailand	1	2	4	6	13
Other Countries in this Region	0	1	4	0	5
<b>C. <u>Europe &amp; Central Asia</u></b>	<b>10</b>	<b>15</b>	<b>8</b>	<b>5</b>	<b>38</b>
Russia	8	5	4	3	20
Turkey	1	6	2	2	11
Other Countries in this Region	1	4	2	0	7
<b>D. <u>Latin America &amp; Caribbean</u></b>	<b>14</b>	<b>22</b>	<b>17</b>	<b>31</b>	<b>84</b>
Bermuda	4	6	6	9	25
Brazil	6	6	3	7	22
Mexico	3	6	2	6	17
Other Countries in this Region	1	4	6	9	20
<b>E. <u>Middle East &amp; North Africa</u></b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>8</b>	<b>19</b>
All Countries in this Region	2	8	1	8	19
<b>F. <u>South Asia</u></b>	<b>5</b>	<b>2</b>	<b>17</b>	<b>12</b>	<b>36</b>
India	5	2	16	11	34
Other Countries	0	0	1	1	2
<b>G. <u>Sub-Saharan Africa</u></b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>17</b>
South Africa	3	3	6	4	16
Other Countries in this Region	0	1	0	0	1
<b>TOTAL</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>2000</b>

## Appendix D. Explanation of institutional indices

Institutional Indices	Description
Economic freedom	Kane, Holmes, and O’Grady (2007) designed an Index of Economic Freedom that analyzed 157 countries across ten indicators: Business freedom, trade freedom, fiscal freedom, freedom from government, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labor freedom.
Globalization	<p>Dreher (2006) developed an Index of Globalization that assesses the following variables for each of 122 countries:</p> <ul style="list-style-type: none"> <li>- Economic globalization: trade, foreign direct investments, income payments to foreign nationals, trade barriers (on imports &amp; exports, and capital account restrictions)</li> <li>- Social globalization: personal contact (international tourism, internet users, telephone, transfers, foreign population, international letters), information flows (internet hosts, trade of newspapers &amp; radios), and cultural proximity (number of McDonald’s, number of Ikea, trade of books)</li> <li>- Political globalization: # of embassies, membership in international organizations, and participation in U.N. Security Council missions.</li> </ul>
Country risk	With the participation of more than 1,200 leaders from business and universities, Coface (2007) ranked 154 countries based on the level of short-term non-payment risk associated with firms in a country. Coface’s ranking combined seven risks: growth vulnerability, foreign currency liquidity crisis, external over indebtedness, sovereign financial vulnerability, banking sector’s fragilities, geopolitical and governance vulnerabilities, and companies’ payment behavior.
Global competitiveness	The World Economic Forum (Lopez-Claros, 2006) developed a Global Competitiveness Index based on an Executive Opinion Survey given to over 11,000 business leaders in 125 countries. The survey assigned a score to each country based on the following nine items: institutions, infrastructure, macroeconomy, health and primary education, higher education and training, market efficiency, technological readiness, business sophistication, and innovation