

## COMPETITIVENESS OF NATIONS IN THE GLOBAL ECONOMY. IS EUROPE INTERNATIONALLY COMPETITIVE?

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### Abstract

The Lisbon Agenda from 2000 aims to make the European Union the most competitive economy in the world in 2010. This paper discusses the concept of international competitiveness of nations. While journalists and politicians believe that it is important for a country to be competitive, economists have often a different opinion. The World Economic Forum (WEF) presents two indices: the Global Competitiveness Index (GCI) and the Business Competitiveness Index (BCI). While Europe and the EU on average seem to be not very competitive, several of the European countries are internationally highly ranked. For the WEF a consequence of competitiveness is high standard of living. The paper shows that several of the European countries belong to the ones with the highest living standard in the world. In the sample, 40 European and 4 non-European countries are included. Finally, it could be shown that the correlation coefficients between the rankings of GCI, BCI and living standards are high and positive.

*Keywords:* Lisbon agenda, competitiveness of nations, European Union members, Europe, Global Competitiveness Index, Business Competitiveness Index, living standards.

### Introduction

Though the international economic discussion is mostly about the world wide financial crisis and the global recession, we should not forget to investigate, whether there exist some long-term trends, questions and problems. One of these questions consists of the one of international competitiveness of nations. The Lisbon Presidency Conclusions<sup>1</sup> in the year 2000 established a new aim for the European Union (EU): to become in 2010 the most competitive economy in the world with rising employment and growth, social cohesion and environmental sustainability (Presidency Conclusions, Lisbon 2000). Since then the EU has enlarged with 12 new members, with on average lower incomes and living standards.

The purpose of this paper is firstly to discuss, whether countries could be seen as competitive. After all, firms are competing on international markets and not countries. Secondly, the EU consists now of in economic terms much more different countries than in 2000, and the differences between countries in economic performance is growing with each enlargement to the South and the East. Therefore it seems to be reasonable to look at the perceived competitiveness of individual member countries<sup>2</sup>, compared with countries and regions both inside and outside Europe and not at Europe or the EU as a total region. As the Lisbon Agenda (2000) and the public discussion show, Europe and the EU is often seen as an whole and compared with the USA and East Asia (see, e.g. WEF 2006). Thirdly, the purpose is to describe competitiveness of nations and its consequences, based on the argumentation of the World Economic Forum (WEF).

The method of this paper is both theoretical and empirical. We are arguing, based on Porter, (1990,1998), and Krugman (1994), that competitiveness and competition means something very different on the firm level on one hand and on the country level on the other hand<sup>3</sup>. The empirical description and argumentation is based on figures from WEF and United Nations Development Programme (UNDP). We investigate 44 countries (27 EU members, 3 membership candidates, 10 countries in Europe, and USA, Singapore, Japan and Canada, which belong to the ten most competitive countries in the world).

The paper is organized in the following way. After the introduction, in section 2 some ideas about competitiveness and international trade are presented. Section 3 defines competitiveness of nations, based on WEF. In section 4, the competitiveness of mostly European countries is measured. Section 5 consists of the conclusions and in section 6 the references are presented.

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<sup>1</sup> In this paper, the expression Lisbon Agenda is used, when the Presidency Conclusions from Lisbon, 2000, are discussed

<sup>2</sup> Or possible future member countries: according to the Maastricht Treaty, every European country has the possibility of becoming a member of the EU (Maastricht Treaty article 49).

<sup>3</sup> Krugman argues that firms can disappear, e.g. because of bankruptcy, while countries cannot. On the country level, we can argue, that even when a country can produce everything cheaper and better than other countries, the superior country cannot produce everything at the same time: a choice has to be made.

## Some theoretical ideas about competitiveness and international trade<sup>4</sup>

While politicians and journalists seem to believe that international trade is a zero sum game (the gains for e.g. one country are equal to the losses of another one), exports and imports make it possible for nations to consume outside their national production frontiers. From a national point of view, competitiveness refers to the competitive environment that a country's firms face. Identification of a nation's competitive advantages can improve productivity and income. International trade makes it possible to increase living standard and well-being of the citizens in all countries.

One of the major concerns in economics is that resources are limited. With other words, what ever we are doing, there is always an opportunity costs. Choices have to made and resources have to be utilised as efficiently as possible, to maximize standard of living and economic welfare. This holds for individuals, firms as well as for nations.

Traditional economic theories propose that a country engaging in international trade has the possibility to grow beyond its own production potential. Instead of producing everything it is consuming, a country can concentrate on goods and services, where it is relatively better. This leads to specialisation and as a consequence, to rising productivity.

Many theories explain benefits from trade with differences in technology, such as the theories of comparative advantages, economies of scale and the availability of production factors. The relevance of such theories, yet, on the economic environments and technological advances has been questioned. The discussion raised concerns that these theories were developed in a different time and in an environment different from what the world is today (Porter, 1990, 1998).

For the past twenty years or so, attention has been drawn to the importance of the competitive advantages of nations and its impact on economic growth and standard of living (Porter, 1990, 1998, WEF, 2005). The basic idea is that if countries effectively identify the true sources of competitiveness, then they are less likely to suffer in their economic development than if these resources are not found. In this set-up, competitiveness is linked to productivity. The limitations of resources suggests that no nation can have competitive advantages in everything. Similarly to comparative advantage, *competitive* advantage is about making the best of a country's resources.

On a daily basis, people are talking about competitiveness. Competitiveness in a national framework differs from that in a firm sense (Porter, 1990, 1998, Krugman, 1994). The discussion often focus on competitiveness of nations. However, it is a country's firms and individuals that compete. While competition of individuals can be seen as a zero-sum game, on a country level, competition can be a plus-sum game. A zero-sum game can be explained in the following way. Assume that two players are competing in a game of some sort, both with the intention to win. In harmony with the rules of the game and considering the risks involved, both participants will choose a strategy which will result in the highest possible gain or dividend. This dividend can be positive, negative or zero. Economists talk about a *zero-sum* game, when the sum of both players' share is independent of the strategies chosen, i.e. when the sum is constant. Thus, the characteristics of such a game is as follows: should the first player's dividend increase, the dividend of the second one would fall.

Firms competing on an open market are under constant pressure to adjust the design and price of their product, to meet the request of consumers. When a firm makes choices, it faces constraints imposed by nature (inputs, etc), customers and competitors. Consequently, to keep up with the pace of the market, the firm must try to function as efficient as possible. Failing to do so, the firm will not be able to hold its position nor make sufficient profits and eventually cease to exist. Competition between firms implies a strive for every profit driven firm to become better and more efficient. Failing to do so, firms roughly face two options: change of management or file for bankruptcy. Competitiveness refers to features allowing a firm to compete effectively with other firms, either because of lower costs or due to superior technology. Competitiveness can be described as a comparative measure of a firm's ability to supply and sell goods and services on a given market.

We now set out to explain competitiveness in a national framework. Consider the following two expressions: "the competitiveness of Sweden" and "the competitiveness of Swedish firms". Nations do not compete economically, but firms and individuals do. Thus the former expression bids little meaning compared to the latter when discussing the economic environments of nations. However, when discussed by

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<sup>4</sup> Section 2 is based on Lidbom, M. (2006)

the general public, competitiveness, along with trade, is often expressed in terms of the absolute performance of countries. Economists do not view absolute performance as an important matter, since it is more interesting to find out how well countries perform, when compared to others. The general public claims that they are alarmed by the increasing competitiveness of *other* nations, allegedly leading to decreasing market shares and causing the domestic country to sell less of its products. But some doubts can be mentioned. What says that a decreasing share on the world market causes a country to sell fewer goods? Could it not be so that it is not the country's market share that is diminishing, but rather the market that is increasing? What happens for example when a formerly closed economy opens up for foreign trade? Such a scenario is likely to expand the world market and the market share of the countries, which participated in world trade before opening the closed economy will fall, with the possibility of rising foreign trade.

In many countries, most of what is produced is generally also consumed there, which has been shown in the EU (Boschini & Eriksson, 2005). This makes the economy less susceptible to things happening in other countries. However, discussions on competitiveness often come with expressed concerns that positive economic developments in one part of the world are to a disadvantage for another part. This is not necessarily true. Suppose that the firms of an internationally trading country find ways which make them more competitive on the world market. This enables their products to be sold in larger amounts both on domestic and foreign markets, i.e. both domestic supply and exports grow. The increasing supply and demand of domestically produced goods and services boost the circular flow of income in the economy as productivity is rising. Consequently, both public and private incomes increase. Saving, investment, consumption, export, but even import will rise.

Thus, positive economic developments in one part of the world are not automatically a disadvantage for other parts<sup>5</sup>. It should be clear from the discussion that national competitiveness is not a zero-sum game, but rather a plus-sum game – success breeds success. As mentioned before, countries engaging in international trade have the possibility to grow beyond their production potential, and raise average productivity. This gives an opportunity to all participants in international trade to gain. A country should not be seen as a gigantic firm. Running an economy differs obviously a lot from managing a firm. As discussed above, a firm not being able to make profits will soon be forced out of the market, unless it improves its performance. But since trade between countries is not profit driven, nations do not have a distinct bottom line. In a democracy with bad economic outlook, the individuals have the choice to vote and to express their disappointment by not re-electing the ruling government. A nation going bankrupt is virtually unheard of<sup>6</sup>.

### **How to define competitiveness of nations**

Economist seem to be not very interested in the international competitiveness of countries. They are arguing that firms have to be competitive, and not nations, because when firms cannot compete, they will disappear, or at least their management will be fired (Porter, 1990, 1998; Krugman, 1994; see even Schuller, 2004). On the other hand, journalist and politicians are very much interested in whether countries are competitive or not. As mentioned before, the Lisbon Agenda from the year 2000 has as one of its goals to make the EU the most competitive economy in the world (Presidency Conclusions, 2000).

According to Porter (1990, 1998), international competitiveness of countries is often described in the following way: (1) macroeconomic phenomena, like exchange rates, interest rates, government deficits, etc., (2) cheap and abundant labour, (3) bountiful natural resources, (4) different management practices, (5) low unit labour costs, (6) a positive balance of trade, and (7) probably most important: high and rising productivity.

To express competitiveness and to compare countries, the World Economic Forum (WEF) has constructed two indices: the Global Competitiveness Index (GCI), and the Business Competitiveness Index (BCI) (WEF, 2007; Schuller, 2008). Furthermore, according to the WEF (2002), a competitive country is able.....”to provide its citizens with high and rising standards of living” (WEF, 2002, p.2). Countries are ranked according to GCI, BCI and standards of living.

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<sup>5</sup> However, if a country is growing slower than other economies, the effect can bring about changes in the employment in some industries, that is decreasing in some and increasing in others.

<sup>6</sup> Perhaps with the exception of the former GDR, if this country can be seen as a nation.

### To measure Europe's Competitiveness

In this section, we will describe competitiveness of countries by using the GCI and the BCI. Furthermore, living standard is described by GDP pc in purchasing power parities (GDP pc PPP) and the Human Development Index (HDI) from the Human Development Report (UNDP). 44 countries are ranked according to the four variables GCI, BCI, GDP pc PPP, and HDI. Two types of rankings are shown: the first one includes the 44 countries of our sample. The second rankings shows each country's position<sup>7</sup> in the total sample of 134 countries. The following countries are included in the rankings: (1) the ten most competitive countries according to the GCI, including 6 European countries and the USA, Singapore, Japan and Canada, (2) the EU 27, (3) 3 EU membership candidate countries (Croatia, Macedonia, Turkey), (4) Remaining European countries<sup>8</sup> (Switzerland, Norway, Iceland, Russian Federation, Montenegro, Serbia, Moldova, Bosnia & Herzegovina, Ukraina and Albania). The rankings are presented in table 1.

**Table 1:** Rankings for 44 countries, GCI, BCI, GDP pc PPP, HDI

	<b>GCI</b>	<b>HDI</b>	<b>GDP pc</b>	<b>BCI</b>	<b>GCI Rank</b>	<b>HDI Rank</b>	<b>GDP pc</b>	<b>Rank</b>
	<b>Rank 44</b>	<b>Rank 44</b>	<b>Rank 44</b>	<b>Rank 44</b>	<b>2008-09</b>	<b>2005</b>	<b>Rank 2005</b>	<b>BCI 2007</b>
USA	1	11	6	1	1	12	6	1
Switzerland	2	6	8	6	2	7	8	6
Denmark	3	13	13	5	3	14	13	5
Sweden	4	5	14	4	4	6	14	4
Singapore	5	21	4	9	5	25	4	9
Finland	6	10	17	3	6	11	17	3
Germany	7	19	18	2	7	22	18	2
Netherlands	8	8	10	7	8	9	10	7
Japan	9	7	20	10	9	8	20	10
Canada	10	3	12	13	10	4	12	14
UK	11	15	16	11	12	16	16	11
Austria	12	14	11	8	14	15	11	8
Norway	13	2	3	12	15	2	3	13
France	14	9	19	16	16	10	19	17
Belgium	15	16	15	14	19	17	15	15
Iceland	16	1	9	15	20	1	9	16
Ireland	17	4	7	17	22	5	7	24
Luxembourg	18	17	1	18	25	18	1	xxx
Spain	19	12	21	20	29	13	21	27
Estonia	20	31	26	19	32	44	26	26
Czech Republic	21	25	25	22	33	32	25	32
Cyprus	22	23	5	28	40	28	5	45
Slovenia	23	22	24	23	42	27	24	35
Portugal	24	24	27	21	43	29	27	30
Lithuania	25	30	30	24	44	43	30	39
Slovak Republic	26	29	28	27	46	42	28	44
Italy	27	18	22	26	49	20	22	42
Russian Fed	28	37	34	35	51	67	34	71
Malta	29	26	2	25	52	34	2	40
Poland	30	28	32	33	53	37	32	56
Latvia	31	32	31	32	54	45	31	54
Croatia	32	33	33	34	61	47	33	60
Hungary	33	27	29	30	62	36	29	47
Turkey	34	43	35	29	63	84	35	46
Montenegro	35	40	40	39	65	xxx	40	85
Greece	36	20	23	31	67	24	23	53

<sup>7</sup> Of the 44 countries

<sup>8</sup> With access to figures for the variables

Romania	37	35	36	36	68	60	36	73
Ukraine	38	41	41	37	72	76	41	81
Bulgaria	39	34	37	38	76	53	37	83
Serbia	40	42	38	40	85	xxx	38	91
Macedonia	41	39	39	41	89	69	39	95
Moldova	42	44	44	42	95	111	44	99
Bosnia+Herceg	43	36	42	43	107	66	42	107
Albania	44	38	43	44	108	68	43	122

Column 1 - 4 ranks the 44 countries compared with each other, while column 5 – 8 ranks the countries in the total sample of 134 countries.

HDI: 2005 UNDP; HDI is a summary of Life expectation at birth, an education index and GDP pc in PPP

GCI: from Global Competitiveness Report 2008 - 2009

BCI: from Global Competitiveness Report 2007 - 2008

GDP pc in PPP 2007

Sources: WEF 2008, 2007, UNDP 2007

Table 1 illustrates some interesting features. Ranked by the GCI, among the 10 most competitive countries of 134 we can find 5 EU members and Switzerland ( 2<sup>nd</sup> position), i.e. 6 of the most competitive countries are European ones. The situation is similar regarding the rankings according to BCI. While several of the “old” EU 15 members belong to the most competitive countries in the world, ranked by GCI and BCI, the new members (2004, 2007) are much lower ranked. If the average of the EU is calculated, the competitive situation is not very impressive. Future members – with the exception of Norway, Switzerland and Iceland – will deteriorate the *average* competitive position of the EU. Yet, because the competitive situation is quite different, when we compare EU15 with EU25 and EU27<sup>9</sup>, according to us, it could be a good idea to look at the single member countries, as we have done here.

As mentioned above, WEF relates competitiveness with living standards. The next table shows coefficients of correlation between the rankings illustrated in table 1 (table 2).

**Table 2:** Pearson correlation coefficient, Rankings for 44 countries

	GCI Rank	HDI Rank	GDP pc PPP Rank
HDI Rank	0,855		
GDP pc PPP Rank	0,828	0,845	
BCI Rank	0,972	0,866	0,834

Source: Table 1

As table 2 illustrates, the correlation coefficients are very high and positive. Therefore, the following conclusions can be mentioned. Countries, which are highly ranked regarding HDI, i.e. a measure of living standard, are even highly ranked in GCI and BCI. Even the rankings of the other measure of living standard (GDP pc PPP) is strongly correlated with the rankings of GCI and BCI. This seems to confirm the idea of a positive relation between living standard and international competitiveness, which even has been shown by WEF (WEF, 2007). Of course, there is a strong positive correlation between the rankings of GDP pc PPP and the one of HDI, which can be explained with the construction of HDI.

Finally, the largest correlation coefficient is the one for the ranking of GCI and BCI. Countries, which are highly ranking in one of the two competitiveness indices, are even highly ranked in the other one.

## Conclusions

The Lisbon Agenda (2000) established for the European Union the goal to become the most competitive economy in the world in 2010. It seems that politicians, journalists and the general public on one hand and economists – e.g. Porter and Krugman – on the other hand have different opinions about the relevance of international competitiveness of nations. The World Economic Forum (WEF) has constructed

<sup>9</sup> EU15: Finland, Sweden, Denmark, Germany, Belgium, Luxembourg, Netherlands, France, United Kingdom, Ireland, Austria, Italy, Spain, Greece, Portugal; EU25: EU15 plus Poland, Estonia, Latvia, Lithuania, Czech Republic, Slovak Republic, Hungary, Slovenia, Malta, Cyprus; EU27: EU25 plus Bulgaria, Romania

two measures of competitiveness of nations (GCI: Global Competitiveness Index and BCI: Business Competitiveness Index) and has argued that high and rising standards of living is a result of competitiveness.

In this paper we are investigating the competitive positions of 40 European Countries, compared with 134 countries in the WEF rankings and especially the 10 highest ranked ones. On average the competitive position of Europe, compared with the USA and some East Asian countries is not very impressive. An expected enlargement of the EU to the South and the East will probably deteriorate this average position. Yet, 6 of the 10 most competitive economies in the world are European. Furthermore, high positions in competitive rankings are even related to high positions in living standards, expressed by GDP pc and the Human Development index (HDI). The Pearson coefficients of correlation between rankings of the GCI, BCI, GDP pc and HDI are positive and above 0,8.

As final conclusion the following can be mentioned. Using the measures of the WEF, several European countries are belonging to the most competitive ones in the world. Furthermore, countries which are highly ranked regarding competitiveness, are even highly ranked regarding livings standards.

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