

## *The European Economic Freedom Index*

Gabriele Guggiola\*  
Centro Einaudi, Torino, Italy  
[guggiola@centroeinaudi.it](mailto:guggiola@centroeinaudi.it)

The purpose of this short presentation is to show the main features of the Economic Freedom Index developed in Italy by Centro Einaudi. This index concerns economic freedom in the countries belonging to the European Union, a region that we can consider as relatively homogeneous from an economic and political point of view. We will first begin analyzing the components of the index (and the differences with the world index). We will then proceed analyzing the main results obtained and the development through time of the index, with the inclusion of countries that will probably enter in the future in the EU and the implication on the overall freedom in Europe. We will then try to get some conclusion about the usefulness of this type of indicator and about the possible future development of this index.

\* The European Economic Freedom Index has been realized by Giovanni Ronca, Paolo Bussi and Gabriele Guggiola for Centro Einaudi ([www.centroeinaudi.it](http://www.centroeinaudi.it)) and Corriere della Sera ([www.corriere.it](http://www.corriere.it)).

## I. Introduction

The European Economic Freedom Index was born in the 2000 with the purpose of studying economic freedom in the contest of countries that were relatively similar from an economic and political point of view. The main questions we were trying to answer were: can we refine the analysis of economic freedom concentrating on aspects that are more important in the European countries? If we limit the index to similar nations can we highlight some aspects that otherwise we will find not easy to observe? And, once the index is done, will be possible to observe some kind of “freedom” convergence among countries that are converging from other points of view.

Moreover, the project was sponsored by an important Italian newspaper, “Corriere della Sera”. Of course the interest of this newspaper was more towards the topicality of the index. Another question was so emerging from this project. Since the number of countries analyzed was not so big and since the data on European Union members should be available sooner than in other cases, we were trying to see if it was possible an observation in “real time” of economic freedom. Now, after two editions of the index and some work on these issues, we can try to give some answers.

## II. The components of the index

The starting point of the European Index was, of course, the world index developed by the Fraser Institute. The objective was the same (measuring economic freedom) and we were just trying to adapt this way of measuring to the European countries.

The first big change was to drop from the analysis the indicators concerning the *freedom to use foreign currencies and the freedom of trade*. We were losing some information, both because we can still find some small difference between countries and because, if it's true that now the situation is very similar in all the European Union, that was not true in the past (and the index goes back to 1980). Anyway we were trying to highlight today's differences among countries, so we decided to concentrate on other indicators.

Another big change was the greater emphasis on the *dimension of the government*. Given that all countries reach certain levels of welfare, this can be a clear indicator of economic freedom. It can be difficult to compare countries with radically different institutions and with clearly different levels of State intervention in the economy. But when the framework is similar the task is easier because countries where government presence is

very heavy cannot justify this intervention with the furniture of basic services that other countries in the Union do not offer.

We include seven different indicators in this two big groups (dimension of the government and structure of taxation), incurring in the risk of being redundant but in order to reach the goal of analyzing all aspects of government presence in the economy. As an example, global taxation and global expenditure are linked together but the elimination of one of the two can be a mistake if we want to see the behavior of the index year by year. A government that is reducing taxation without reducing expenditures is putting the basis for future high taxation (and citizens often take in account this) and though the high expenditure is still substituting private expenditure.

Also, in this two groups of indicators, we include two indicators on the *taxation in the labour market* and one on *contributions* that the government collect from labour force.

The first are important because distortion in the labour market were a feature of many European countries, and if some countries are moving towards some kind of adjustment, other are more reluctant on changing the regulations in this sector.

The latter is important since if the state collect a very high amount of contribution, then there will be no space for private pensions, and private funds can be important actors in the market of long run investment.

The willing to construct an index strictly linked with topicality lead us to include, in the indicators about the structure of the economy, one about the development of *information technology*. Although not clearly linked with the freedom of a country, this indicator appeared to us important for two reason. In a country in which new technologies are not developed the “freedom” to embark on new activities is implicitly limited by the scarce presence of technology. Moreover, a rapid adoption of new technology, can be an indirect signal of flexibility in the economy.

The results has been aggregated. We have constructed an aggregate index for all the participants to the European Union and one for the countries in the Euro Area.

## Index components

<b>(I)</b>	<b>Size of government</b>	<b>[10]</b>
	A) Public consumption	(50)
	B) Total revenue	(25)
	C) Total expenditure	(25)
<b>(II)</b>	<b>Structure of the economy</b>	<b>[25]</b>
	A) Quality of bureaucracy	(25)
	B) Unemployment	(25)
	C) Diffusion of <i>information technology</i>	(25)
	D) Conscription	(25)
<b>(III)</b>	<b>Legal framework</b>	<b>[15]</b>
	A) Law enforcement	(50)
	B) Corruption	(50)
<b>(IV)</b>	<b>Structure of taxation</b>	<b>[20]</b>
	A) Tax pressure	(25)
	B) Taxes on wages (as a % on gross wage)	(25)
	C) Total taxes on labour as % of labour costs	(25)
	D) Total contributions received by government	(25)
<b>(V)</b>	<b>Monetary policy and price stability</b>	<b>[15]</b>
	A) Money growth	(34)
	B) Inflation (st.dev. over past years)	(33)
	C) Inflation	(33)
<b>(VI)</b>	<b>Credit market</b>	<b>[15]</b>
	A) Credit to private sector	(75)
	B) Negative interest rates	(25)

### III . Main results

We start now to analyze some of the main results of the index (to see the complete results for the reports of 2001 and 2002 see appendix 1,2). Looking at the various components of the index we can get many information. Anyway I'd like to concentrate on some issues that I think can be of interest. From the observation of the results we can get some information about "regional similarities" and about a quite clear convergence among EU members.

#### III.a) Regional similarities

We can observe that the weakness of groups of countries belonging to the same "area" are often the same and concentrated in some issues. Let's classify some group of countries as homogeneous (the division is of course subjective but can be useful for the analysis).

Let's classify as *nordic countries* Sweden, Netherland, Finland and Denmark, as *continental* France, Germany, as *mediterranean* Spain, Italy and Greece.

Looking at the result concerning state intervention in the economy (size of the government and structure of taxation) and structure of the economy (see app. 3) we can observe that generally nordic countries are at the bottom of the ranking concerning the first issue and generally better classified in the indicator concerning the structure of the economy. Continental countries are always slightly below the half of the rankings, while mediterranean countries are very weak in the structure of the economy.

We can see then that United Kingdom, Ireland and Luxemburg are always near the top of the ranking. We can find a similar result in the general ranking, with two exceptions: Netherlands and Spain (but we will go back to Spanish case).

#### III . b) Convergence (app.4)

One of the uses we can do of this index is to observe whether convergence in Maastricht criteria is followed by a convergence in economic freedom, in order to see if the process of unification occurring Europe is leading to a greater homogeneity even in this field and if economic freedom is generally improving or worsening.

The observation of the results lead us to think that there is convergence but at a different rate depending on the group of indicators we are dealing with.

The reduction of the range between the first and the last of the ranking (from 1980 to 2002) is very high if we look at monetary policy (2,1 points of reduction of the range), relatively high if we observe the structure of taxation and size of the government (1,7 and 1,3

points) while from the point of view of the structure of the economy this reduction is less than one point.

The first result is coherent with the history of European Union, where monetary policies has been unified during these last years. The observation of the other results bring us to the following conclusion: it's probably easier to make a group of country more homogeneous under a financial point of view rather than under a "real" point of view. The structure of the economy is difficult to be changed and this can turn out to be a problem when we will analyze the impact of the entrance of new countries in the EU.

### III . c) General behaviour of European Union and European Monetary Union (app.5)

In the last years the union of monetary policies has greatly improved price stability and so the judgment of the behavior of European Union on this point of view is positive.

Infact we can see that a great part of the increase in economic freedom in Europe is due to the monetary indicators, and in part to an improvement of the structure of the economy.

In general we have then some results given by the year by year analisys of the index. Luxembourg, Ireland, United Kingdom and Netherflands are always at the top of the ranking. Spain, that was at the bottom till last year, has improved the grade a lot (we will go back to the possible explanations of this result and to the implication for the uses of the index in analyzing year by year changes). In general Italy and Greece do not perform very well, while France and Germany are always around the tenth position, without great changes over time.

## IV. Europe enlargement

While preparing the second edition of the index we decided, beside updating all data for EU countries, to try to see the consequences of the enlargement process Europe is facing.

The aim was to see if the improvements in economic freedom experienced in Europe in the last decades were to be influenced by the entrance of new countries.

We introduced in the ranking 7 new countries: Czech Republic, Slovenia, Estonia, Hungary, Poland, Lithuania and Latvia. Aggregating the data for the first five countries (which were judged more ready for integration and for which data were more complete) we obtained an aggregate index for this group of nations (that we will call Ind.5). This aggregate index will be the main instrument we will use to make comparisons with the rest of European Union countries.

We calculated the indicators for these countries only for the last two years, being not easy to collect data for the past.

Measuring economic freedom in these countries can be important for at least two reasons:

- measure the impact on the overall economic freedom of Europe
- test if there are basic conditions (a certain level of freedom, correct institutions...)

in order to permit to these countries to take advantage of the process of entering the Union.

It turns out that the overall result of the index is not much influenced by the entrance of these countries in the European Union. The aggregate index calculated for the five countries gives a result that is lower than the result obtained by the rest of Europe but not much. Moreover, we can observe an improve in the performance over the last two years. It's not enough to argue that there will be some sort of convergence but still we can imagine that the unification process will push this countries to be, year by year, more similar to the rest of Europe.

If we ponderate for the gdp of each country the total points reached by European Union plus these 5 nations are almost the same as the one reached by European Union alone.

If we pay attention to the performance of every single nation we can see that the point of weakness is the structure of the economy (and, in the case of Czech Republic and Slovenia, the size of the government). Again, it appear that is more easy to reach good results in the financial indicators, but it appear difficult to improve in short time the structure of the economy. (See app.6).

## V. Is it possible year by year observation of economic freedom (the case of Spain)

When we began the project of an European index we thought that the sources for European financial data were numerous and that probably was easier a “live” observation of the behaviour of economic freedom. Now, after the second edition of the index, we can say that this kind of observation is possible but with some caution.

An important case under this point of view is the behaviour of Spain during the last years. In 1990 Spain was rated 6,7, it was rated 7 in 1999 and in 2000 it was rated 7,6.

Clearly we can observe a general trend since economic freedom is improving. But can we trust this exceptional improvement over the last two years?

Great part of the improvement is due to a better rating in the indicators concerning the structure of the economy and the credit to the private sector and this is a good point since we have seen that the real side of the economy is the more difficult to change. Moreover the result is obtained through a movement toward the elimination of military conscription and a better rating (given by PRS *International Country Risk Guide*) given to the quality of bureaucracy. These changes are often not reversible, so we can largely trust the results on the improvement of Spanish economic freedom.

But there is a point that we should pay attention to. Oecd, through its *Outlook* is alerting us that Spain still is half a way to be a really competitive country. The management of private banks, suggest Oecd, must be more independent from political interests, more competition is needed in the telephonic sector, new technologies are still less developed with respect to the average of the union. Moreover, financial situation is ok now, but the risk of inflation and the potential instability of the pension system could bring some problem in the future. Hence we could find in the future some alternate behaviour of economic freedom, with some positive and some negative year. But shouldn't economic freedom be a quite structural indicator, unwilling to change much year by year?

A possible solution to the trade-off should be not to give much importance to slight change not confirmed over time. If the change is very high, like in the Spanish case, then we should analyze the source of this phenomenon and see whether it's a structural (and so really improving permanently economic freedom) or just due to some provisional shock (and so not worthy of much attention).

## **V . Conclusions and future (possible) developments for the index.**

We soon realized that a year by year updating of the index was necessary but not enough. As we have seen, apart from some exceptional cases, it's very interesting to see the behaviour of economic freedom in the medium-long run, but it can be less interesting (or in the worse of the cases misleading) the observation of short run small changes.

That's one of the reasons that lead us, after the first edition, to include in the index eastern countries, in order to have new material to think to. I believe that there are different ways in order to improve the quality of the index and to maintain a strong interest around this project.

First of all, some collateral research can be done on this topic. Apart from the questions that always arise around this type of indicators (is economic freedom good for growth, which is the correct size of a government...) there is a topic that should be investigated in the context of Europe. We have built, in the last decades, very strong welfare states and the role of governments in the economies had become more and more important. But, once we recognize we should reduce this role in order to give more space to private agents, how can we begin to go in the opposite direction? Up to now the work of Centro Einaudi refrained from giving opinions about the different levels of economic freedom in the different countries, being our aim just to define economic freedom and to find the best way to measure it in the context of the European Union. But in the future, in my point of view, the relationship between different economic systems, different electoral mechanisms, different historical facts and different levels (and growth rates) of economic freedom should be investigated.

Moreover the index should be seen as evolving through time. In these two editions we decided not to modify the indicators in order to make a clear comparison among different years. But European economies are evolving in a very fast way, and, as we considered today important indicators on labour markets and new technologies, maybe we will observe new important issues in the future. We will have to face a tradeoff between just updating the index or changing it a bit year by year, in order to make it more close to reality.

Moreover, of course, the quality of the index can be improved (and in this context every suggestion is very welcome). The quality of the bureaucracy, as an example, enters the index in a marginal way and through a synthetic indicator. But having a good bureaucracy means a lot of things, less time lost by citizen in obtaining documents, less days to start a new

activity and so on. Research on these topics, and a possible way to insert some kind of indicator summarizing these things would mean improvement in the reliability of the overall index.

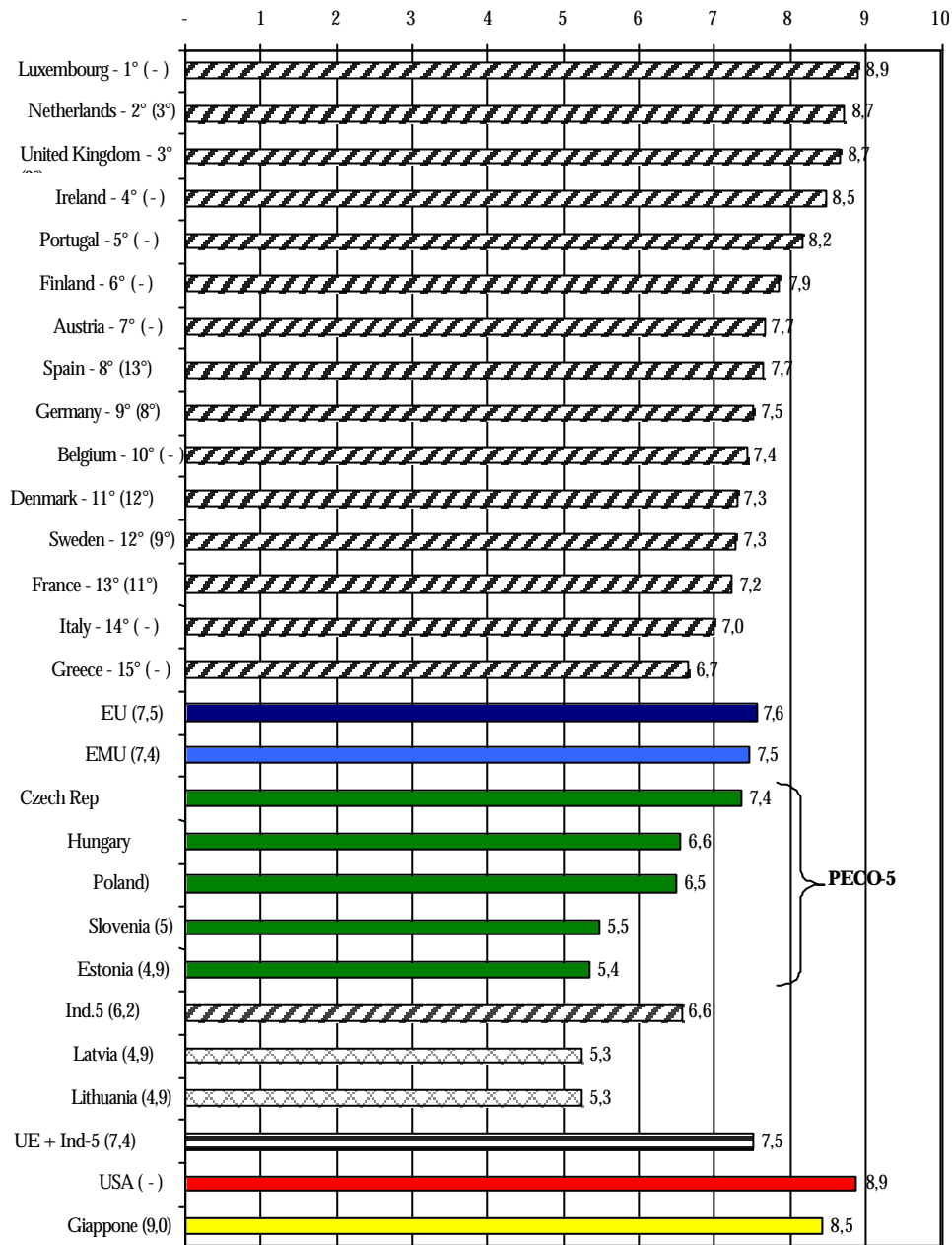
Finally, an analysis of the relationships between this index and the world index constructed by the Fraser Institute would be a good instrument to understand better the possible differences and to make us more sure that the way we are following to measure economic freedom is the right one.

Appendix 1. General ranking, report 2001 (data up to end1999)

	80	85	90	95	97	98	99
A	7,8	7,9	8,0	7,7	7,7	7,6	7,5
BE	6,6	7,0	7,1	7,4	7,5	7,1	7,3
DK	6,7	7,0	7,3	7,1	7,1	7,2	7,2
FI	7,4	7,9	7,9	7,3	7,7	7,7	7,7
FR	7,0	7,6	7,7	7,5	7,4	7,1	7,1
DE	7,1	7,3	7,6	7,7	7,7	7,4	7,4
GR	6,7	6,0	6,2	6,7	6,9	6,7	6,8
IR	7,6	7,7	8,1	8,5	8,6	8,2	8,3
IT	6,4	6,7	6,8	6,8	6,9	6,9	7,0
L	8,6	9,0	9,1	9,1	9,3	9,4	9,3
NL	6,8	7,6	7,6	8,0	8,6	8,6	8,6
PT	7,1	6,6	7,2	7,5	7,7	8,0	7,9
UK	7,6	8,2	8,3	8,5	8,6	8,6	8,7
SP	7,0	6,7	6,8	7,0	7,1	7,0	7,0
SW	5,8	7,0	7,1	7,0	7,2	7,2	7,3
EU	6,9	7,3	7,4	7,5	7,5	7,4	7,4
E	7,0	7,3	7,4	7,4	7,5	7,3	7,3

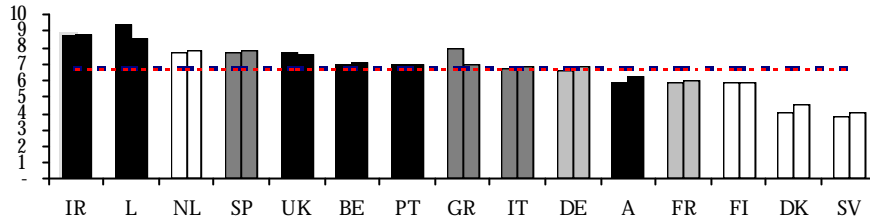
\* E = Euro Area

Appendix 2. General Ranking, report 2002 (data up to end 2000)

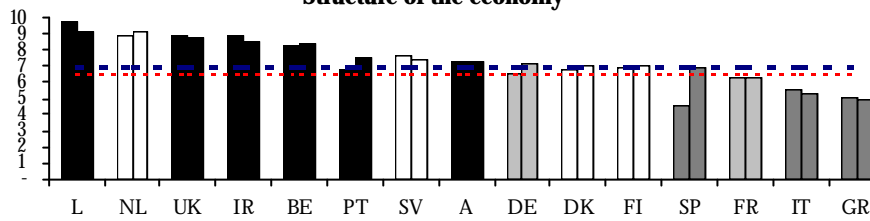


Appendix 3. Regional analysis (blue *nordic countries*, light blue *mediterranean*, green *continental* and purple *top countries*).

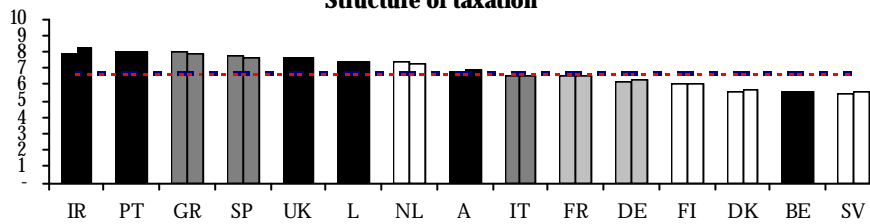
**Size of Government**



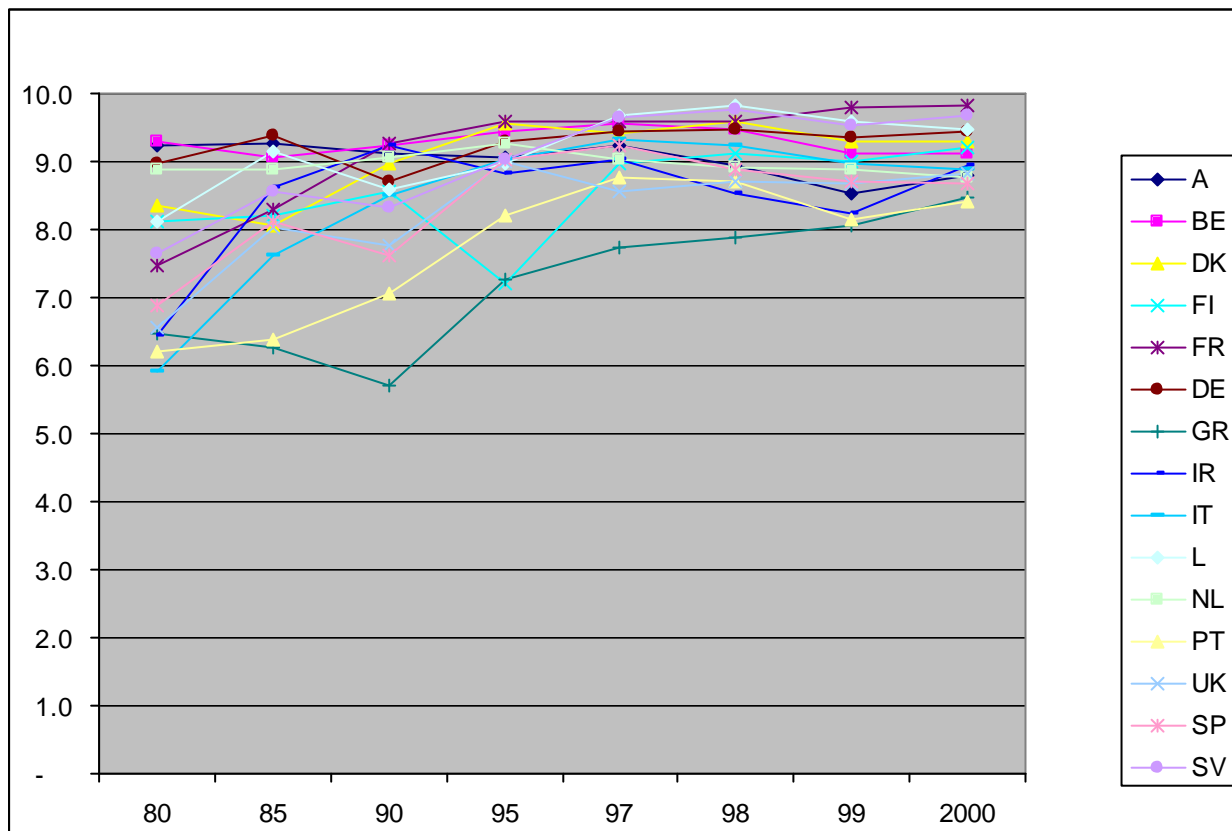
**Structure of the economy**



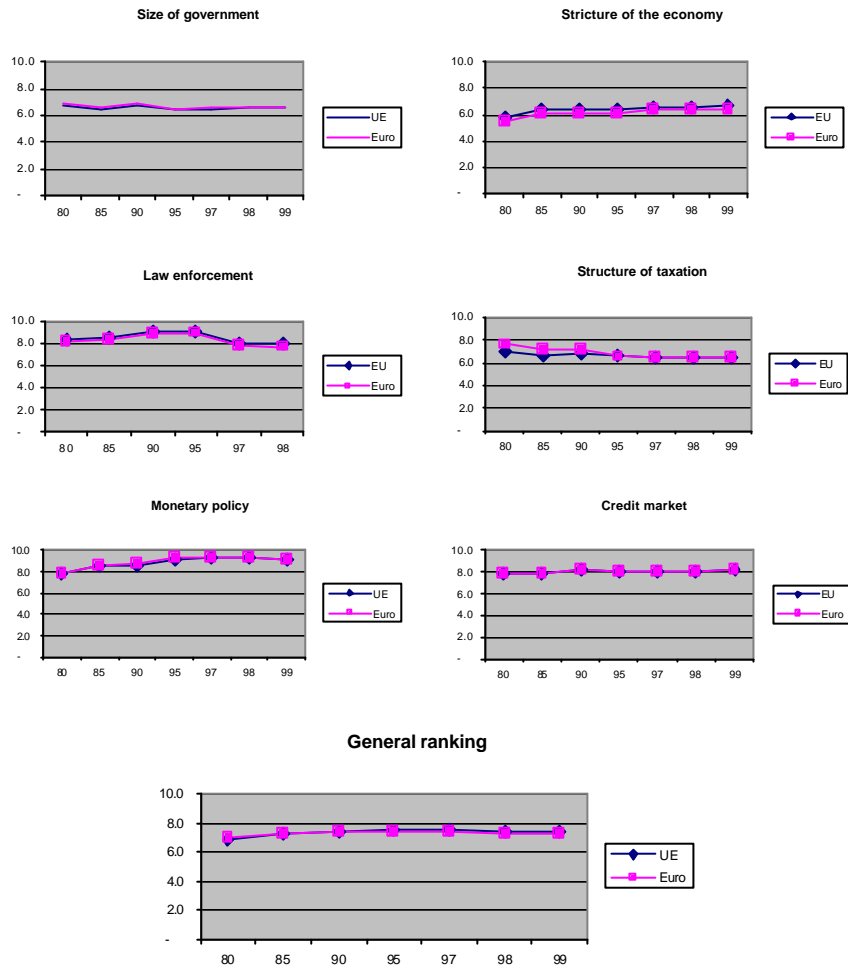
**Structure of taxation**



Appendix 4. Convergence in monetary policies indicator

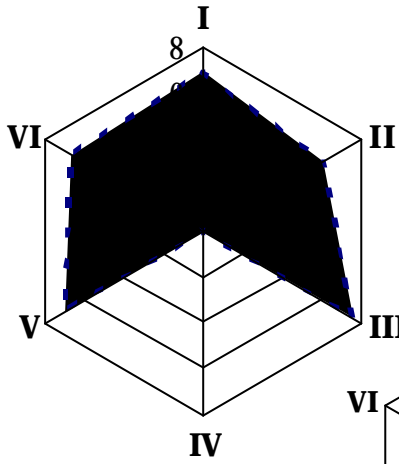


# Appendix 5.

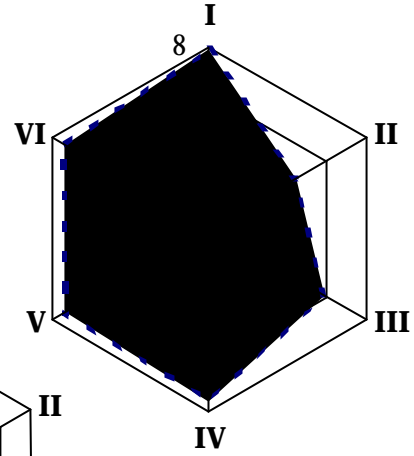


Appendix 6. Performance of countries that will probably join the European Union

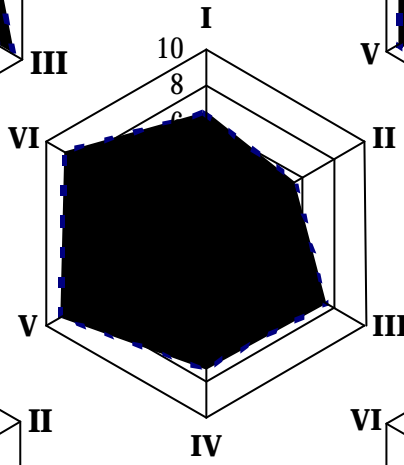
**Estonia**



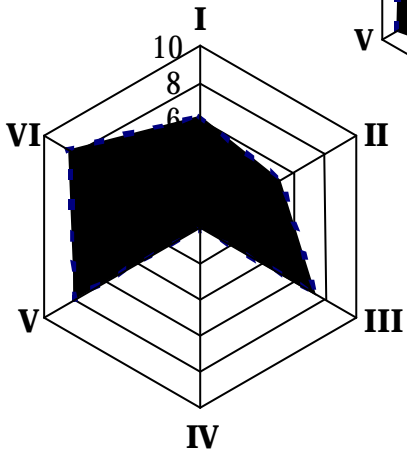
**Poland**



**Czech Rep.**



**Slovenia**



**Hungary**

