Correctly finger-pointing the Lisbon-process-villains. A re-analysis of the study, recently presented by Jose Manuel Durao Barroso: Centre for European Reform (CER)(2006), "The Lisbon Scoreboard VI. Will Europe's economy rise again?" (Author: Aurore Wanlin). London: Centre for European Reform:
http://www.cer.org.uk/pdf/p_661_lisbon_riseagain_vi_econ.pdf

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Abstract:

The European Union's center-piece of economic policy making is the Lisbon process, which tries to make Europe the most competitive economic region in world economy by 2010. EU-Commission President Jose Manuel Durao Barroso recently presented a Centre for European Reform (CER) study that maintained that Denmark, Sweden and Austria are the best performing Lisbon process countries for 2005 and that Romania, Poland and Malta are the lowest ranked countries in the European Union in the same year. Due to lacking data, practically no serious conclusions can be drawn about Turkey. In the study, presented by the Commission President, some real finger pointing is made, with the "good" performers being called "heroes" and the "bad performers" being called "villains". In the study, Poland was made the *E*uropean *c*hief "*v*illain" (henceforth called, in keeping with this tendency towards abbreviations in the euro-cracy, the **ECV,** for 2005). Our rigorous re-analysis of the data leads us to the conclusion that the **ECV,** i.e. the country characterized by past bad cumulated performance, and having no real prospect of things getting better **is not Poland but Portugal.** It emerges once again that the Lisbon process is in a dire state of affairs.

Introduction and general perspectives on the study

However much the present author welcomes the idea of quantitative Lisbon process comparisons, several very severe methodological deficiencies seem to characterize the recently published CER study.

- Only 2 of the Eurostat structural Lisbon indicators[2] present a complete data series for the period 2004 and 2005, thus any comparisons referring to this period are at least a misnomer. We therefore decided to call the time periods in our re-run "the most recent period (*tn*) and the preceding period (*tn-1*)", with the most recent period sometimes referring to 2005, but sometimes to 2004, or even 2003.

- One of the 14 Lisbon structural indicators, the dispersion of regional employment rates, does not list any data at all for the EU-member countries Cyprus, Denmark, Estonia, Ireland, Latvia, Lithuania, Luxembourg, Malta, and Slovenia over the entire period, and

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[2] Available freely at
http://epp.eurostat.cec.eu.int/portal/page?_pageid=1133,47800773,1133_47802588&_dad=portal&_schema=PORTA L

not just the most recent years. So how do you code the data for these countries? We therefore decided to reduce the number of indicators to 13. An indicator with so many completely missing values severely biases the results.

- It is obvious that the Eurostat data, as they are presented on the Internet, are not qualified for an immediate multivariate ranking or other multivariate analysis. Only the EU or EEA member countries Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom present at least two contiguous data for at least two recent periods for all the 13 indicators, while a varying number of other Eurostat structural indicator countries, which include, to an amazingly varying degree, countries as different as the EU-candidates, the EEA nation Iceland, the EFTA nation Switzerland, on one occasion Canada, sometimes Japan, and several times the United States, had to be relegated from the data matrix to make our comparisons more reliable. Countries that list less than 2 data points for the entire observation period (mostly starting somewhere in the 1990s) had thus to be eliminated from the data matrix.

- What's more, one of the indicators – **comparative price levels –** correlates very positively with the other main Lisbon targets, and yet the Commission, Eurostat and the member countries continue to sanction it as an indicator that should achieve a **low** level to be compatible with the Lisbon process. **High price levels** and **a stable currency** and **highly priced tradables** and **non-tradables** are **significantly** and **very closely associated** (absolute value of the correlation coefficient higher or equal to +- 0.50) **with** a low energy intensity of the economy, a low long-term unemployment rate, a high rate of employment of older workers, a high rate of **gross domestic expenditures on research and development**, a high rate of total employment, a **high GDP per capita** and a **high labor productivity**. A rigorous scientific interpretation of these facts would warrant at least the calculation of two listings of ranks, one considering a high price level as something inherently wrong for the Lisbon process, the other considering a high price level as something structurally inherent in a highly developed economy with highly priced tradable goods and non-tradable goods, and with poorer countries catching up (Balassa/Samuelson's effect).

- Far from presenting state of the art methodology, the CER study simply performs an additive scoreboard calculation of ranks, neglecting other techniques such as the calculation of composite indices that became very popular in the applied social sciences especially with the publication of the UNDP Human Development Reports, let alone principal components or other multivariate techniques, available via the major computer softwares for the social sciences, like the SPSS or the SAS programs. Scoreboard ranks are absolutely inferior to such more novel techniques

In the light of these methodological remarks, we present the following final table of the results of our calculations, based on the UNDP type of methodology. Our Lisbon Index projects the results of 13 component variables onto 13 dimension indicators that each range from 0 to 1, with 1 representing the best value and 0 the worst. The 13 dimension indices are then multiplied by 1/13 and added together for the composite index, ranging from 0 (worst value) to 1 (best value). Norway, Sweden and Denmark are the Lisbon model countries of the most recent period, while Romania, Bulgaria and Poland are indeed the "villains (ECVs)" for *tn*. But are poorer member countries of the Union to be castigated just for their poverty, or rather for their bad performance in recent periods?

Looking at the rates of changes in the index, there is some hope for Latvia, Lithuania and Slovenia, while Estonia, Hungary and Portugal are the laggards.

Summary Table 1: final ranking of the Lisbon process

a) a new composite Lisbon process indicator

final data, ranked by performance in *tn*	UNDP Lisbon Amartya Sen type index, *tn-1*	UNDP Lisbon Amartya Sen type index, *tn*	DYN UNDP Lisbon Amartya Sen type Process)
Norway	0,7186	0,7195	0,0009
Sweden	0,71237	0,71819	0,00582
Denmark	0,69523	0,71371	0,01849
Finland	0,64343	0,65095	0,00752
Luxembourg	0,61563	0,60788	-0,00774
Netherlands	0,60878	0,60203	-0,00675
United Kingdom	0,58703	0,59728	0,01025
Austria	0,59676	0,58867	-0,00808
Ireland	0,54181	0,56345	0,02164
France	0,56137	0,56166	0,00029
Slovenia	0,51586	0,53807	0,0222
Belgium	0,52994	0,53657	0,00663
Germany	0,54388	0,53493	-0,00895
Czech Republic	0,53265	0,53162	-0,00103
Cyprus	0,46456	0,4845	0,01995
Hungary	0,47006	0,456	-0,01406
Latvia	0,41708	0,45366	0,03658
Italy	0,43975	0,4468	0,00705
Spain	0,41572	0,42279	0,00707
Estonia	0,43377	0,4198	-0,01397
Greece	0,40539	0,41245	0,00706
Lithuania	0,38511	0,41036	0,02526
Portugal	0,3998	0,35828	-0,04152
Slovakia	0,35233	0,34704	-0,00529
Romania	0,3239	0,31548	-0,00843
Bulgaria	0,29376	0,30846	0,0147
Poland	0,30952	0,30302	-0,0065

b) the dynamics of the process and the final answer to the question, as to who is a "hero" and who is a "villain (ECV)"

	final rank, according to the UNDP Lisbon Amartya Sen type index, *tn*	final rank, according to the DYN UNDP Lisbon Amartya Sen type Process
Latvia	17	1
Lithuania	22	2
Slovenia	11	3
Ireland	9	4
Cyprus	15	5
Denmark	3	6
Bulgaria	26	7
United Kingdom	7	8
Finland	4	9
Spain	19	10
Greece	21	11
Italy	18	12
Belgium	12	13
Sweden	2	14
Norway	1	15
France	10	16
Czech Republic	14	17
Slovakia	24	18
Poland	27	19
Netherlands	6	20
Luxembourg	5	21
Austria	8	22
Romania	25	23
Germany	13	24
Estonia	20	25
Hungary	16	26

Portugal	23	27

But we have to consider also that the poorer countries of East Central Europe have made enormous strides over recent years to reform their economies and political systems. Fast progress in the 2 Baltic Republics **Latvia** and **Lithuania** as well as in **Slovenia** has to be duly considered, while **Estonia's** and **Hungary's** performance deteriorated considerably over time.

The real villains (ECVs) – past bad cumulated performance, no prospect of things getting better[3]:
Portugal
Romania
Poland

The real heroes – past good cumulated performance, good prospect of things even still getting better in future:

Denmark
Ireland
Finland

We also come to the conclusion that the CER study, compared to our own final results for *tn* above, systematically overstates the performance of Austria, Portugal, Estonia, and Greece, while **Finland**, **Latvia, Spain, Luxembourg,** and **Italy,** are performing much better than expected.

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[3] Combined bad performance of cumulated past policy results, as manifest in the ranking on the final indicator for *tn*, Summary Table 1a (UNDP Lisbon Amartya Sen type index, *tn*), and **changes** to the better or worse, as manifest in the dynamic indicator, presented in Table 1b).

	Villain status (ranging ideally from 1 to 27)
Denmark	4,5
Ireland	6,5
Finland	6,5
Slovenia	7
United Kingdom	7,5
Sweden	8
Norway	8
Latvia	9
Cyprus	10
Lithuania	12
Belgium	12,5
France	13
Netherlands	13
Luxembourg	13
Spain	14,5
Italy	15
Austria	15
Czech Republic	15,5
Greece	16
Bulgaria	16,5
Germany	18,5
Slovakia	21
Hungary	21
Estonia	22,5
Poland	23
Romania	24
Portugal	25

Results of the CER study and our main critique

The European media were recently full with reports about Denmark, Sweden and Austria at the top of the Lisbon process list. Even the Chinese international news agency *Xinhua* reported:

BRUSSELS, March 20 (Xinhuanet) -- Denmark, Sweden and Austria top the list on this year's scorecard to measure European Union (EU) states' efforts to boost competitiveness, according to a think-tank from the region. The result was released on Monday by the Center for European Reform (CER), a privately-funded think-tank which aims to promote new ideas and policies for the EU. Each year, the union issues the 'Lisbon Scorecard', which assesses progress among member states on the so-called Lisbon Agenda. The agenda, set up by the EU, aims to encourage the bloc to become the most competitive economy in the world. The scorecard was presented to European Commission president Jose Manuel Barroso. "Many underlying trends are positive", the CER said in a press release. "Slowly, but steadily, the EU is moving forward in most of the areas covered by the Lisbon agenda." Denmark and Sweden are once again this year's top two on the scoreboard, while Austria has climbed from five to three. Britain and Holland took places four and five respectively, a drop of two places for the Netherlands on the list which comprises the EU-25 in addition to acceding states. The five countries topping the list performed well in innovation, research and development, according to the CER.
 The scorecard identifies "heroes" and "villains" in the area of economic reform, on the basis of a set of indicators based on Eurostat figures, as well as on prospects for further reform. Poland has been earmarked as this year's "villain" by the London-based think-tank because of its poor performance on indicators such as long-term unemployment, but also because of its recent shift of government. Poland's government is led by the conservative Law and Justice party, which has been criticized for its protectionism, its dislike of foreign investment and its encroachment on the independence of the country's central bank. Malta is last on the list, but this is primarily because Eurostat indicators for the Mediterranean island are lacking. France and Germany occupy place eight and ten on the list respectively, with France climbing from its position last year of 11 -- primarily because of improving employment figures. As a whole, the scorecard reveals a "mixed picture" on the EU's progress in meeting its Lisbon goals, the statement said."

The CER Institute's main table is quickly reported:

Table 1: The Lisbon league table: Overall Lisbon performance 2005*

Rank 2005	Rank 2004	Country
1	1	Denmark
2	2	Sweden
3	4	Austria
4	5	United Kingdom
5	3	The Netherlands
6	6	Finland
7	10	Ireland
8	11	France
9	8	Luxembourg
10	9	Germany
11	12	Slovenia
12	7	Czech Republic
13	13	Belgium
14	15	Cyprus
15	14	Hungary
16	18	Estonia
17	20	Greece
18	16	Portugal
19	19	Latvia
20	21	Lithuania
21	23	Spain
22	17	Slovakia
23	24	Italy
24	26	Bulgaria
25	25	Romania
26	22	Poland
27	27	Malta

* Ranking based on average performance in the EU's short-list of structural indicators.

Clearly, the small quoted footnote is utterly insufficient to explain what was done with all these data series, that don't even have data for 2005, or are simply missing, for whatever year! To seriously run a 2004/2005 ranking + shift analysis, as was done in Table 1, one must explain how one handles the following statistical problems

- **Total employment rate.** Data Range 1993 – 2004

- **Total employment rate of older workers.** Data range 1993 – 2004

- **Youth education attainment level – total.** Data range 1994 – 2005, Data for Germany in 2005 missing

- **Gross domestic expenditure on R&D (GERD).** Data Range 1994 – 2005, Only 2 countries report data for 2005, 2004 data missing for Italy, and Portugal, 2003 data complete for EU-25, 2002 data missing for Luxembourg, Greece and Sweden

- **Comparative price levels.** Data Range 1995 – 2004, Lisbon main indicator GDP per capita explains some 70 % of comparative price levels, the relationship is positive, Note: Eurostat suggests that a high indicator value is a sign of a bad performance. But a high GDP per capita is strongly related to high comparative price levels

Table 2: correlations[4] with the comparative price level

Variable and time period	correlation with comparative price level (time matched to either t_n or t_{n-1})
t_n Energy intensity of the economy 2003	-0,833877
t_{n-1} Energy intensity of the economy 2002	-0,818996
t_{n-1} total long-term unemployment	-0,695963
t_n total long-term unemployment	-0,692083
t_{n-1} Business investment 2003	-0,490308
t_n Business investment 2004	-0,466429
t_{n-1} at risk of poverty rate, 2003	-0,24198
t_n at risk of poverty rate, 2003	-0,217173
t_n Youth education attainment level – total 2005	-0,038734
t_{n-1} Youth education attainment level – total 2004	-0,028838
t_n Volume of freight transport 2004	0,1422708
t_{n-1} Volume of freight transport 2003	0,2060467
t_n Total employment rate of older workers 2004	0,4959248
t_{n-1} Total employment rate of older workers 2003	0,534207
t_{n-1} Total greenhouse gas emissions 2002	0,6383112
t_n Total greenhouse gas emissions 2003	0,6582097
t_{n-1} Gross domestic expenditure on R&D (GERD) 2003	0,7295179
t_n Gross domestic expenditure on R&D (GERD) 2004	0,733466
t_n Total employment rate 2004	0,7385644
t_{n-1} Total employment rate 2003	0,7416168
t_n GDP per capita in PPS 2005	0,8099794
t_{n-1} GDP per capita in PPS 2004	0,8125104
t_{n-1} Labor productivity per person employed 2004	0,8672191
t_n Labor productivity per person employed 2005	0,8809136
t_n Comparative price levels 2004	1
t_{n-1} Comparative price levels 2003	1

- One correlation, that between the Lisbon main target GDP per capita in PPS and the comparative price level, is reported in Graph 1 below:

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[4] Calculated from our reduced data matrix, as reported in this publication and in our sources freely available on the Internet

Graph 1: GDP per capita PPS and the comparative price level

GDP per capita PPS and comp price level

$$y = 0,5778x + 36,961$$
$$R^2 = 0,6915$$

(y-axis: comp price level, x-axis: GDP per capita PPS)
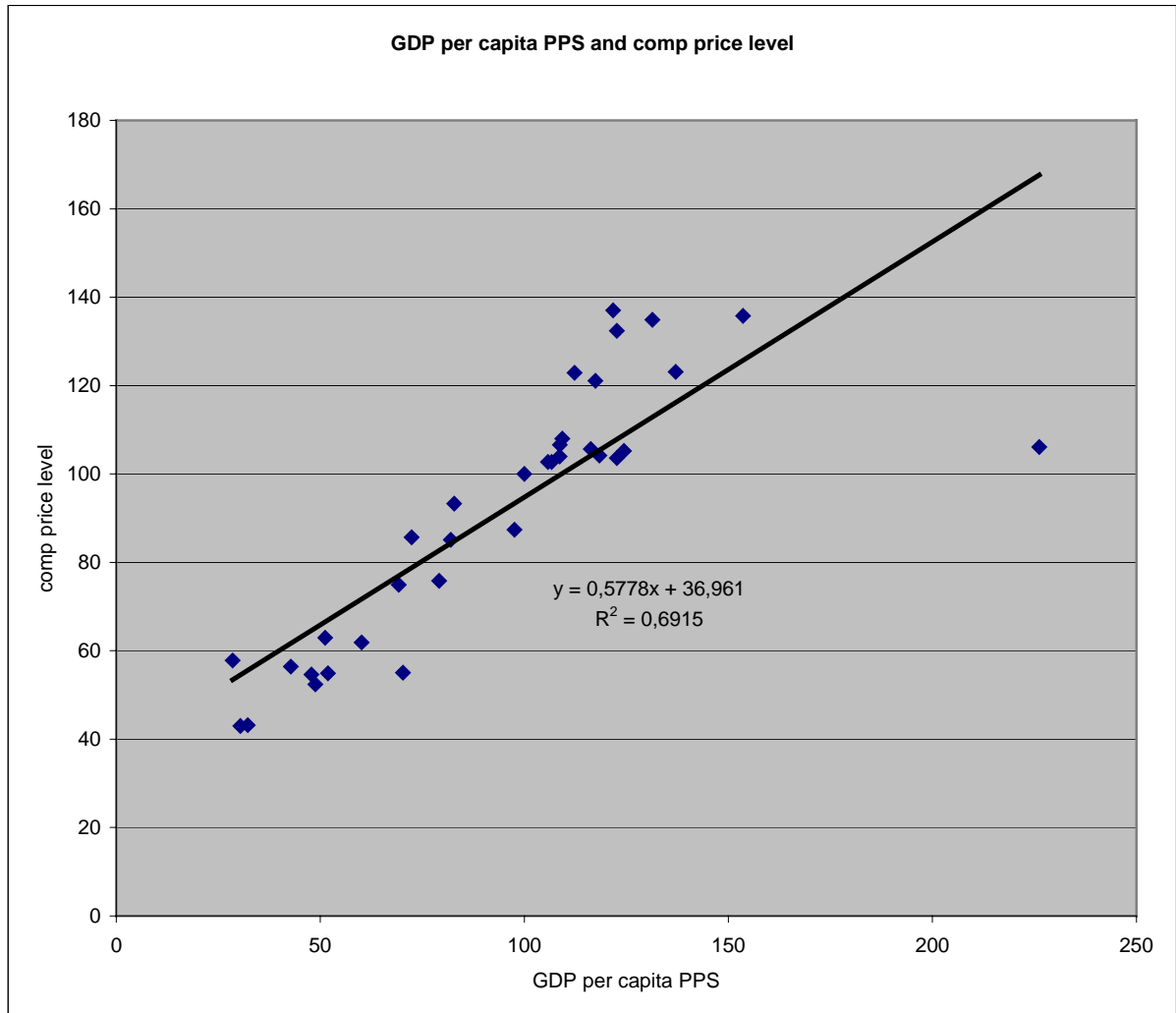
- **Business investment.** Data Range 1993 – 2004

- **At-risk-of-poverty rate after social transfers – total.** Data Range 1995 – 2004, Data 2004 and 2003 missing for several EU-25 countries, complete data for 2003 and 2004 only for Luxembourg; Finland; Norway; Denmark; Austria; France; Bulgaria; Belgium; EU (25 countries); Germany; EU (15 countries); Euro-zone (12 countries); Spain; Greece; Portugal; Ireland; and Slovakia available, Note: Eurostat suggests that a high indicator value is a sign of a bad performance

- **Total long-term unemployment rate.** Data Range: 1993 – 2004, Note: Eurostat suggests that a high indicator value is a sign of a bad performance

- **Dispersion of regional employment rates – total.** Data Range: 1999-2004, Missing values for Denmark, Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta

and Slovenia, for the entire period, Note: Eurostat suggests that a high indicator value is a sign of a bad performance

- **Total greenhouse gas emissions.** Data Range 1993 – 2003 and target, Note: Eurostat suggests that a high indicator value is a sign of a bad performance

- **Energy intensity of the economy.** Data Range 1992 – 2003, Note: Eurostat suggests that a high indicator value is a sign of a bad performance

- **Volume of freight transport.** Data Range 1993 – 2004, 2004 Missing values for Greece (missing since 2000), and Malta, Note: Eurostat suggests that a high indicator value is a sign of a bad performance

12 of the 14 indicators (I leave it to the readers' imagination to calculate the percentages) do **NOT even refer to the years 2004 + 2005 or report - often severe - problems of missing data.**

To seriously say something about the Lisbon performance 2005, and ranks in 2005 and 2004, based on average performance in the EU short list of structural indicators, as the author claims on page 9 of her publication, how did she do that?

<u>A first step towards more reliable results: getting the data matrix straight and eliminate indicators and countries with complete data blackouts</u>

Without fundamentally correcting the flawed data matrix, that would emerge from a 1:1 copy of the original Eurostat data, no reliable results can be achieved. Cyprus, Denmark, Estonia, *Iceland*, Ireland, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Croatia, *Japan, Switzerland*, Turkey, *United States* have completely missing data points for all observed years for **regional employment**. What did the CER team do with those data? You find no trace of notice on that problem in the CER publication. Just to quote here from a **<u>standard theory of science</u>** text why one has to insist so much on being able to recalculate the CER data files:

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http://team.bk.tudelft.nl/Publications/2002/Criteria%20for%20scientific%20study%20and%20design.htm

E Methodical accountability and depth

Such accountability, of the way in which (using which method) one will arrive at a result, should make possible that someone else using the same method can (not: will) arrive at a similar outcome.

F Ability to be criticised and to criticize

Ability to be criticised (ability to be refuted) offers others the opportunity to selectively make progress by building upon technical scientific know-how and knowledge (accumulation) obtained through study.
Ability to be criticised can be shown from a readiness and initiative to expose the results in their consecutive phases, to publish them for instance on the internet in a refutable manner, and in this way open them to criticism in all phases of the research even though these phases are unripe. Drawings and arguments must not conceal their weaknesses.

A statistically decent solution would have been to work with the following data matrix, based on 13 indicators, not 14, and to use the imputed statistics[5], where there are missing values for the most recent two years. Our final data matrix, on which we based our own comparisons, and which is available from our materials at our website reference to this publication, is the following:

Table 3: the data for our own final Lisbon process comparison

	tn -1 GDP per capita in PPS 2004	*tn* GDP per capita in PPS 2005	*tn* -1 Labor productivity per person employed 2004	*tn* Labor productivity per person employed 2005	*tn* -1 Total employment rate 2003	*tn* Total employment rate 2004	*tn* -1 Total employment rate of older workers 2003	*tn* Total employment rate of older workers 2004	*tn* -1 Youth education attainment level – total 2004	*tn* Youth education attainment level – total 2005
Austria	122,7	122,2	110,8	111,2	68,9	67,8	30,3	28,8	86,3	85,9
Belgium	118,4	118,1	128,8	128,7	59,6	60,3	28,1	30	82,1	80,3
Bulgaria	30,4	31,8	31,5	32,5	52,5	54,2	30	32,5	76	76,8
Cyprus	82,8	83,8	73,7	74,7	69,2	68,9	50,4	49,9	77,6	80,7
Czech Republic	70,3	73,5	64,4	69	64,7	64,2	42,3	42,7	90,9	90,3
Denmark	121,8	123,9	104,1	106	75,1	75,7	60,2	60,3	74,8	76
Estonia	51,2	54,9	51	54	62,9	63	52,3	52,4	82,3	80,9
EU (15 countries)	108,6	108,2	106,2	105,8	64,3	64,7	41,7	42,5	73,7	74,5
EU (25 countries)	100	100	100	100	62,9	63,3	40,2	41	76,6	77,3
Euro-zone (12 countries)	106,7	106,1	106,1	105,6	62,6	63	37,9	38,6	72,9	73,6
Finland	112,3	112,7	107,9	107,5	67,7	67,6	49,6	50,9	84,6	84,6
France	109,3	109	118,9	119,5	63,3	63,1	36,8	37,3	79,8	82,8
Germany	108,7	108,2	100,3	100,6	65	65	39,9	41,8	*72,5*	*72,8*
Greece	82	83,7	98,2	97,5	58,7	59,4	41,3	39,4	81,9	84
Hungary	60,1	61,9	68,2	70,4	57	56,8	28,9	31,1	83,4	83,3
Ireland	137,1	138,1	129,4	129	65,5	66,3	49	49,5	85,3	86,1
Italy	105,8	103,7	110,5	109,3	56,1	57,6	30,3	30,5	72,9	72,9
Latvia	42,8	46,8	42,7	46	61,8	62,3	44,1	47,9	76,9	81,8
Lithuania	47,8	51	49,6	51,8	61,1	61,2	44,7	47,1	86,1	85,2
Luxembourg	226,2	230,8	148,3	148,7	62,7	61,6	30	30,8	71,1	71,1
Netherlands	124,4	123,6	108	108,4	73,6	73,1	44,3	45,2	74,2	74,7
Norway	153,6	154	133,6	134,5	75,5	75,1	66,9	65,8	95,3	96,3
Poland	48,8	49,8	62,1	63	51,2	51,7	26,9	26,2	89,5	90
Portugal	72,4	71,2	65,9	65,5	68,1	67,8	51,6	50,3	49	48,4
Romania	32,2	32,9	36,4	37,3	57,6	57,7	38,1	36,9	74,8	75,2
Slovakia	51,9	54,2	59,1	61	57,7	57	24,6	26,8	91,3	91,5
Slovenia	79,1	80,9	75,2	77,2	62,6	65,3	23,5	29	89,7	90,6
Spain	97,6	98	99,3	97,2	59,8	61,1	40,7	41,3	61,1	61,3
Sweden	117,4	118,5	106,5	107,8	72,9	72,1	68,6	69,1	86,3	87,8
United Kingdom	116,3	116	106,3	106,6	71,5	71,6	55,4	56,2	76,4	77,1

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[5] Our imputations are marked by **bold and indented letters** in our EXCEL data as well as in the present essay. The data are all freely available from
http://www.gallileus.info/gallileus/members/m_TAUSCH/publications/114434941248/114344964315/

Table 3 (cont.): the data for our own final Lisbon process comparison

	tn -1 Youth education attainment level – total 2004	tn Youth education attainment level – total 2005	tn -1 Gross domestic expenditure on R&D (GERD) 2003	tn Gross domestic expenditure on R&D (GERD) 2004	tn -1 Comparative price levels 2003	tn Comparative price levels 2004	tn -1 Business investment 2003	tn Business investment 2004	tn -1 at risk of poverty rate, 2003	tn at risk of poverty rate, 2004
Austria	86,3	85,9	2,19	2,26	105,7	103,6	20,2	19,9	13	13
Belgium	82,1	80,3	1,92	1,93	104	104,2	17,2	17,3	15	15
Bulgaria	76	76,8	0,5	0,51	42,6	43	16,5	17,8	14	15
Cyprus	77,6	80,7	0,35	0,37	96,5	93,3	14,4	15,2	15	*15*
Czech Republic	90,9	90,3	1,26	1,28	55,5	55	22,7	22,6	8	*8*
Denmark	74,8	76	2,59	2,61	138,8	137	17,8	18	12	11
Estonia	82,3	80,9	0,82	0,91	63,2	62,9	25,5	25,2	18	18
EU (15 countries)	73,7	74,5	1,97	1,95	104	104	16,8	17	15	17
EU (25 countries)	76,6	77,3	1,92	1,9	100	100	16,9	17,1	15	16
Euro-zone (12 countries)	72,9	73,6	1,9	1,89	102,9	102,7	17,5	17,7	15	17
Finland	84,6	84,6	3,48	3,51	125,9	122,9	15,3	15,8	11	11
France	79,8	82,8	2,18	2,16	105,8	108	15,6	15,9	12	14
Germany	*72,5*	*72,8*	2,52	2,49	108,7	106,6	16,3	16	15	16
Greece	81,9	84	0,62	0,58	84,5	85,1	21,3	21,1	21	20
Hungary	83,4	83,3	0,95	0,89	59	61,9	18,8	19,3	*10*	*12*
Ireland	85,3	86,1	1,16	1,2	126,6	123,1	19,2	20,9	21	21
Italy	72,9	72,9	1,16	1,14	102,3	102,7	17,8	18,1	*19*	19
Latvia	76,9	81,8	0,38	0,42	55,4	56,4	22,9	25,6	16	16
Lithuania	86,1	85,2	0,68	0,76	54,9	54,6	18,2	18,5	*17*	*15*
Luxembourg	71,1	71,1	1,78	1,75	105,3	106,1	14,9	14,3	10	11
Netherlands	74,2	74,7	1,76	1,77	106,6	105,2	15,7	16,3	*11*	*12*
Norway	95,3	96,3	1,75	1,64	145,2	135,8	14,5	15,2	11	11
Poland	89,5	90	0,56	0,58	53,4	52,4	14,9	14,6	*17*	*17*
Portugal	49	48,4	*0,8*	*0,78*	87,3	85,7	19,4	19,2	19	21
Romania	74,8	75,2	0,4	0,4	41,5	43,2	*18,3*	*18,3*	*18*	*17*
Slovakia	91,3	91,5	0,58	0,53	50,5	54,9	23,1	22,2	21	21
Slovenia	89,7	90,6	1,54	1,61	77,9	75,8	20,5	21,3	*10*	*10*
Spain	61,1	61,3	1,05	1,07	86,6	87,4	23,5	24,5	19	20
Sweden	86,3	87,8	3,98	3,74	124	121,1	12,9	13	*11*	11
United Kingdom	76,4	77,1	1,88	1,79	103,8	105,6	14,3	14,6	*18*	*18*

Table 3 (cont.): the data for our own final Lisbon process comparison

	tn -1 total long-term unemployment, 2003	tn total long-term unemployment, 2004	tn -1 Total greenhouse gas emissions 2002	tn Total greenhouse gas emissions 2003	tn -1 Energy intensity of the economy 2002	tn Energy intensity of the economy 2003	tn -1 Volume of freight transport 2003	tn Volume of freight transport 2004
Austria	1,1	1,3	110,1	116,6	139,87	150,53	117,8	117
Belgium	3,7	4,1	99	100,6	213,62	223,87	95	89,7
Bulgaria	8,9	7,2	45,9	50	1804,3	1756,21	35	38,5
Cyprus	1,1	1,4	145,1	152,8	269,92	278,61	99,5	76,5
Czech Republic	3,8	4,2	74,3	75,7	875,79	889,59	99,5	93,3
Denmark	1,1	1,2	99,1	106,3	123,75	128,19	87,7	86,8
Estonia	4,6	5	44,9	49,2	1153,18	1208,39	158,5	167,9
EU (15 countries)	3,3	3,4	97	98,3	188,42	190,82	100,5	105,3
EU (25 countries)	4,1	4,1	90,7	92	206,51	209,49	99,7	104,7
Euro-zone (12 countries)	3,9	4	99,6	100,7	184,89	188,18	103,6	109,7
Finland	2,3	2,1	109,7	121,5	272,21	280,7	91,4	91,3
France	3,7	3,9	97,5	98,1	186,05	187,64	92,4	92,8

Germany	4,5	5,4		81,3	81,5		158,74	159,5		103,1	107,5
Greece	5,3	5,6		119,6	123,2		257,97	250,12		141	141,7
Hungary	2,4	2,7		66,1	68,1		579,58	581,99		85,4	91,9
Ireland	1,6	1,6		128,6	125,2		166,14	161,74		141	147,5
Italy	4,9	4		108,7	111,6		184,12	192,61		93,4	104,4
Latvia	4,4	4,6		41,9	41,5		750,25	728,83		133,4	129,3
Lithuania	6	5,8		38,5	33,8		1272,73	1204,81		119,1	116,2
Luxembourg	0,9	1,1		84,9	88,5		196,67	201,51		109	104,8
Netherlands	1	1,6		100,2	100,8		201,09	208,74		96	105,5
Norway	0,6	0,8		106,7	109,3		187,68	159,2		124,9	127,9
Poland	11	10,3		65,5	67,9		654,15	663,12		83,1	90,3
Portugal	2,2	3		144,3	136,7		254,68	251,32		114,9	165,9
Romania	4,2	4,5		51,3	53,9		1316,48	1368,46		96,1	100,2
Slovakia	11,4	11,8		72,8	71,8		976,01	937,33		47,6	47,4
Slovenia	3,5	3,2		99,3	98,1		344,63	338,14		87,2	101,1
Spain	3,9	3,5		139,3	140,6		226,25	226,59		137,1	151,4
Sweden	1	1,2		96,1	97,6		224,26	218,63		90,8	89,2
United Kingdom	1,1	1		85,7	86,7		214,5	213,1		84,8	84,3

Getting more reliable results - alternative scoreboards

At this stage, we should introduce into the analysis our classification of the 13 remaining structural Lisbon indicators. The question is: do high values on these indicators constitute an asset or a burden for the Lisbon process? The "official" interpretation is:

at risk of poverty rate	negative indicator
Comparative price levels	negative indicator
Energy intensity of the economy	negative indicator
Total greenhouse gas emissions	negative indicator
total long-term unemployment	negative indicator
Volume of freight transport	negative indicator
Business investment	positive indicator
GDP per capita in PPS	positive indicator
Gross domestic expenditure on R&D (GERD)	positive indicator
Labor productivity per person employed	positive indicator
Total employment rate	positive indicator
Total employment rate of older workers	positive indicator
Youth education attainment level – total	positive indicator

Under these specifications, the EXCEL program yields the following results, all documented in our internationally freely available Internet background materials to this article:

Table 4: Scoreboard ranks, Lisbon process

final EXCEL ranking results[6] - without corrections for comparative price level, 13 structural Lisbon indicators	rank *tn* -1	rank *tn* 1	change to the better or to the worse
Sweden	1	1	0
Norway	2	2	0
Austria	**3**	**3**	**0**
United Kingdom	5	4	1
Czech Republic	7	5	2
Finland	8	6	2
Netherlands	4	7	-3
Slovenia	11	8	3
Luxembourg	6	9	-3
France	9	10	-1
Ireland	12	11	1
Germany	10	12	-2
Belgium	13	13	0
Hungary	14	14	0
Cyprus	17	15	2
Denmark	16	16	0
Lithuania	20	17	3
Estonia	15	18	-3
Latvia	22	19	3
Italy	19	20	-1
Slovakia	18	21	-3
Spain	23	22	1
Greece	25	23	2
Portugal	21	24	-3
Bulgaria	26	25	1
Poland	24	26	-2
Romania	27	27	0
final EXCEL ranking results - with corrections for comparative price level, 13 structural Lisbon indicators	rank *tn* -1	rank *tn* 1	change to the better or to the worse
Norway	1	1	0

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[6] The author should remark here that the EXCEL ranking program routines were calculated in the following way: =RANG(B130;B130:B156;1) for negative indicators (like poverty – the case of Austria, position B 165 in the data matrix) and =RANG(I130;I130:I156;0) for positive indicators (like GDP – the case of Austria, position H 165 in the data matrix). The ranking data matrix is contained in the file LISBON_FINAL_RANKING_2006, which is available at the website http://www.gallileus.info/gallileus/members/m_TAUSCH/publications/114344941248/114344964315/

Sweden	2	2	0
Finland	5	3	2
United Kingdom	6	4	2
Austria	3	5	-2
Ireland	9	6	3
Netherlands	4	7	-3
France	10	8	2
Luxembourg	7	9	-2
Germany	8	10	-2
Czech Republic	12	11	1
Slovenia	13	12	1
Belgium	11	13	-2
Denmark	14	14	0
Cyprus	16	15	1
Hungary	15	16	-1
Italy	18	17	1
Estonia	17	18	-1
Latvia	23	19	4
Lithuania	21	20	1
Spain	20	21	-1
Portugal	19	22	-3
Greece	24	23	1
Slovakia	22	24	-2
Poland	25	25	0
Bulgaria	26	26	0
Romania	27	27	0

Although the ranking results of the CER Institute and our own ranking results – without the necessary corrections for the price level variable - closely correlate with each other, the CER study obviously and grossly seems to overestimate the performance of Denmark, Greece, Portugal and Ireland, while it underreports the performance of Italy, Lithuania, Slovenia, and the Czech Republic. On a general level, and compared to the composite indicators, presented below, we however come to the conclusion that the CER study systematically overstates the performance of Austria, Portugal, Estonia, and Greece, while Finland, Latvia, Spain, Luxembourg, and Italy are performing much better than expected.

Towards a UNDP type indicator of the Lisbon process

Our combined measure of the velocity of the Lisbon transformation process, presented here for the first time in the literature, will be of a UNDP-Indicator type, combining the thirteen different dimensions on a uniform scale, ranging from 0 (lowest value) to 1 (highest value). It is based on

For the index $tn-1$

at risk of poverty rate, 2003

Business investment 2003
Comparative price levels 2003
Energy intensity of the economy 2002
GDP per capita in PPS 2004
Gross domestic expenditure on R&D (GERD) 2003
Labor productivity per person employed 2004
Total employment rate 2003
Total employment rate of older workers 2003
Total greenhouse gas emissions 2002
total long-term unemployment 2003
Volume of freight transport 2003
Youth education attainment level – total 2004

for the index *tn*

at risk of poverty rate, 2003
Business investment 2004
Comparative price levels 2004
Energy intensity of the economy 2003
GDP per capita in PPS 2005
Gross domestic expenditure on R&D (GERD) 2004
Labor productivity per person employed 2005
Total employment rate 2004
Total employment rate of older workers 2004
Total greenhouse gas emissions 2003
total long-term unemployment 2004
Volume of freight transport 2004
Youth education attainment level – total 2005

We were calculating each dimension index by the formula:

$$(1) \text{ dimension index} = \frac{\text{Actual value} - \text{minimum value}}{\text{Maximum value} - \text{minimum value}}$$

We were then multiplying the thirteen dimension/component indices by 1/13 and simply added the 13 components [multiplied by 1/13] together

(2) Lisbon process index =

dimension index at risk of poverty rate [properly time-matched]* 1/13
dimension index Business investment [properly time-matched]* 1/13
dimension index Comparative price levels [properly time-matched]* 1/13
dimension index Energy intensity of the economy [properly time-matched]* 1/13
dimension index GDP per capita in PPS [properly time-matched]* 1/13
dimension index Gross domestic expenditure on R&D (GERD) [properly time-matched]* 1/13
dimension index Labor productivity per person employed [properly time-matched]* 1/13
dimension index Total employment rate [properly time-matched]* 1/13
dimension index Total employment rate of older workers [properly time-matched]* 1/13
dimension index Total greenhouse gas emissions [properly time-matched]* 1/13
dimension index total long-term unemployment [properly time-matched]* 1/13
dimension index Volume of freight transport [properly time-matched]* 1/13

dimension index Youth education attainment level – total [properly time-matched]* 1/13

The results are:

Table 5: Heroes and villains (ECVs), UNDP indicator style, still with the untenable assumption that a high comparative price level is detrimental to the Lisbon process goal achievement

final data	UNDP Lisbon Amartya Sen type index, t_{n-1}	UNDP Lisbon Amartya Sen type index, t_n	DYN (UNDP Lisbon Amartya Sen type Process)	heroes and villains (ECVs), t_n	UNDP Lisbon Amartya Sen type index, t_{n-1}	UNDP Lisbon Amartya Sen type index, t_n	DYN (UNDP Lisbon Amartya Sen type Process)	heroes and villains (ECVs): the dynamic perspective	UNDP Lisbon Amartya Sen type index, t_{n-1}	UNDP Lisbon Amartya Sen type index, t_n	DYN (UNDP Lisbon Amartya Sen type Process)
Austria	0,57844	0,56642	-0,01202	**Sweden**	0,6669	0,66729	0,00039	**Latvia**	0,47338	0,50865	0,03527
Belgium	0,51414	0,51333	-0,00081	**Norway**	0,64168	0,64454	0,00286	**Lithuania**	0,44215	0,4683	0,02615
Bulgaria	0,36906	0,38538	0,01633	**Denmark**	0,6278	0,63679	0,00899	**Slovenia**	0,53879	0,56131	0,02252
Cyprus	0,45988	0,4791	0,01922	Finland	0,59513	0,5971	0,00197	Cyprus	0,45988	0,4791	0,01922
Czech Republic	0,5888	0,5889	0,0001	Czech Republic	0,5888	0,5889	0,0001	Ireland	0,49248	0,50927	0,0168
Denmark	0,6278	0,63679	0,00899	Luxembourg	0,5979	0,58153	-0,01636	Bulgaria	0,36906	0,38538	0,01633
Estonia	0,4785	0,46415	-0,01435	Netherlands	0,58913	0,57716	-0,01197	Denmark	0,6278	0,63679	0,00899
Finland	0,59513	0,5971	0,00197	United Kingdom	0,57153	0,57175	0,00022	Norway	0,64168	0,64454	0,00286
France	0,54289	0,5322	-0,0107	**Austria**	0,57844	0,56642	-0,01202	Finland	0,59513	0,5971	0,00197
Germany	0,5211	0,50776	-0,01334	Slovenia	0,53879	0,56131	0,02252	Greece	0,41852	0,42047	0,00195
Greece	0,41852	0,42047	0,00195	France	0,54289	0,5322	-0,0107	Spain	0,42573	0,42704	0,00131
Hungary	0,52102	0,50199	-0,01903	Belgium	0,51414	0,51333	-0,00081	Sweden	0,6669	0,66729	0,00039
Ireland	0,49248	0,50927	0,0168	Ireland	0,49248	0,50927	0,0168	United Kingdom	0,57153	0,57175	0,00022
Italy	0,42647	0,42602	-0,00046	Latvia	0,47338	0,50865	0,03527	Czech Republic	0,5888	0,5889	0,0001
Latvia	0,47338	0,50865	0,03527	Germany	0,5211	0,50776	-0,01334	Italy	0,42647	0,42602	-0,00046
Lithuania	0,44215	0,4683	0,02615	Hungary	0,52102	0,50199	-0,01903	Belgium	0,51414	0,51333	-0,00081
Luxembourg	0,5979	0,58153	-0,01636	Cyprus	0,45988	0,4791	0,01922	Poland	0,36879	0,36456	-0,00423
Netherlands	0,58913	0,57716	-0,01197	Lithuania	0,44215	0,4683	0,02615	Romania	0,40082	0,39207	-0,00875
Norway	0,64168	0,64454	0,00286	Estonia	0,4785	0,46415	-0,01435	France	0,54289	0,5322	-0,0107
Poland	0,36879	0,36456	-0,00423	Spain	0,42573	0,42704	0,00131	Slovakia	0,41591	0,40449	-0,01142
Portugal	0,40877	0,36532	-0,04345	Italy	0,42647	0,42602	-0,00046	Netherlands	0,58913	0,57716	-0,01197
Romania	0,40082	0,39207	-0,00875	Greece	0,41852	0,42047	0,00195	Austria	0,57844	0,56642	-0,01202
Slovakia	0,41591	0,40449	-0,01142	Slovakia	0,41591	0,40449	-0,01142	Germany	0,5211	0,50776	-0,01334
Slovenia	0,53879	0,56131	0,02252	Romania	0,40082	0,39207	-0,00875	Estonia	0,4785	0,46415	-0,01435
Spain	0,42573	0,42704	0,00131	**Bulgaria**	0,36906	0,38538	0,01633	**Luxembourg**	0,5979	0,58153	-0,01636
Sweden	0,6669	0,66729	0,00039	**Portugal**	0,40877	0,36532	-0,04345	**Hungary**	0,52102	0,50199	-0,01903
United Kingdom	0,57153	0,57175	0,00022	**Poland**	0,36879	0,36456	-0,00423	**Portugal**	0,40877	0,36532	-0,04345

Table 6: Heroes and villains (ECVs), UNDP indicator style, abandoning the untenable assumption that a high comparative price level is detrimental to the Lisbon process goal achievement

final data with the necessary correction for comparative price levels	UNDP Lisbon Amartya Sen type index, $tn\text{-}1$	UNDP Lisbon Amartya Sen type index, tn	DYN (UNDP Lisbon Amartya Sen type Process)		final data, ranked by performance in tn	UNDP Lisbon Amartya Sen type index, $tn\text{-}1$	UNDP Lisbon Amartya Sen type index, tn	DYN (UNDP Lisbon Amartya Sen type Process)		final data, ranked by dynamic performance	UNDP Lisbon Amartya Sen type index, $tn\text{-}1$	UNDP Lisbon Amartya Sen type index, tn	DYN (UNDP Lisbon Amartya Sen type Process)
Austria	0,59676	0,58867	-0,00808		**Norway**	0,7186	0,7195	0,0009		**Latvia**	0,41708	0,45366	0,03658
Belgium	0,52994	0,53657	0,00663		**Sweden**	0,71237	0,71819	0,00582		**Lithua-nia**	0,38511	0,41036	0,02526
Bulgaria	0,29376	0,30846	0,0147		**Denmark**	0,69523	0,71371	0,01849		**Slovenia**	0,51586	0,53807	0,0222
Cyprus	0,46456	0,4845	0,01995		Finland	0,64343	0,65095	0,00752		Ireland	0,54181	0,56345	0,02164
Czech Republic	0,53265	0,53162	-0,00103		Luxembourg	0,61563	0,60788	-0,00774		Cyprus	0,46456	0,4845	0,01995
Denmark	0,69523	0,71371	0,01849		Netherlands	0,60878	0,60203	-0,00675		Denmark	0,69523	0,71371	0,01849
Estonia	0,43377	0,4198	-0,01397		United Kingdom	0,58703	0,59728	0,01025		Bulgaria	0,29376	0,30846	0,0147
Finland	0,64343	0,65095	0,00752		Austria	0,59676	0,58867	-0,00808		United Kingdom	0,58703	0,59728	0,01025
France	0,56137	0,56166	0,00029		Ireland	0,54181	0,56345	0,02164		Finland	0,64343	0,65095	0,00752
Germany	0,54388	0,53493	-0,00895		France	0,56137	0,56166	0,00029		Spain	0,41572	0,42279	0,00707
Greece	0,40539	0,41245	0,00706		Slovenia	0,51586	0,53807	0,0222		Greece	0,40539	0,41245	0,00706
Hungary	0,47006	0,456	-0,01406		Belgium	0,52994	0,53657	0,00663		Italy	0,43975	0,4468	0,00705
Ireland	0,54181	0,56345	0,02164		Germany	0,54388	0,53493	-0,00895		Belgium	0,52994	0,53657	0,00663
Italy	0,43975	0,4468	0,00705		Czech Republic	0,53265	0,53162	-0,00103		Sweden	0,71237	0,71819	0,00582
Latvia	0,41708	0,45366	0,03658		Cyprus	0,46456	0,4845	0,01995		Norway	0,7186	0,7195	0,0009
Lithuania	0,38511	0,41036	0,02526		Hungary	0,47006	0,456	-0,01406		France	0,56137	0,56166	0,00029
Luxembourg	0,61563	0,60788	-0,00774		Latvia	0,41708	0,45366	0,03658		Czech Republic	0,53265	0,53162	-0,00103
Netherlands	0,60878	0,60203	-0,00675		Italy	0,43975	0,4468	0,00705		Slovakia	0,35233	0,34704	-0,00529
Norway	0,7186	0,7195	0,0009		Spain	0,41572	0,42279	0,00707		Poland	0,30952	0,30302	-0,0065
Poland	0,30952	0,30302	-0,0065		Estonia	0,43377	0,4198	-0,01397		Netherlands	0,60878	0,60203	-0,00675
Portugal	0,3998	0,35828	-0,04152		Greece	0,40539	0,41245	0,00706		Luxembourg	0,61563	0,60788	-0,00774
Romania	0,3239	0,31548	-0,00843		Lithuania	0,38511	0,41036	0,02526		Austria	0,59676	0,58867	-0,00808
Slovakia	0,35233	0,34704	-0,00529		Portugal	0,3998	0,35828	-0,04152		Romania	0,3239	0,31548	-0,00843
Slovenia	0,51586	0,53807	0,0222		Slovakia	0,35233	0,34704	-0,00529		Germany	0,54388	0,53493	-0,00895
Spain	0,41572	0,42279	0,00707		**Romania**	0,3239	0,31548	-0,00843		**Estonia**	0,43377	0,4198	-0,01397
Sweden	0,71237	0,71819	0,00582		**Bulgaria**	0,29376	0,30846	0,0147		**Hungary**	0,47006	0,456	-0,01406
United Kingdom	0,58703	0,59728	0,01025		**Poland**	0,30952	0,30302	-0,0065		**Portugal**	0,3998	0,35828	-0,04152

The deficient analysis of the links between globalization and socio-economic performance, inherent in the study

For the aims of this study, we also compared the pro-globalist policy conclusions that were presented by the CER Institute without any further politometric evidence presented by them with the results of our own recently concluded analyses of the determinants of the processes of development on a global scale[7]. In order to be able to properly interpret the different results, we already took care of the many different implicit directions of the indicators etc. Significant t-values from our multiple regressions, supporting the **pro-globalist policies of the Commission**, are printed in **blue bold letters**, while results, clearly supporting the *anti-globalization movements,* are printed in *red, bold, and indented letters*.

Considering other important intervening factors, like development levels and human capital formation, the ultraliberal thinking inherent in the **Bolkestein directive** that should lead to a considerable **lowering of price levels** in the formerly **"non-tradable" sectors** of services in Europe would be certainly **compatible** with **some aspects of growth and better employment** (and thus also gender relations), but our three main other indicators of globalization, i.e. high foreign saving, "economic freedom" and high MNC penetration ratios, are still very systemati-

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[7] At the mentioned website
http://www.gallileus.info/gallileus/members/m_TAUSCH/publications/114344941248/114344964315/ we also make available our recent research paper entitled: *"The Lisbon process, re-visited. A reality check of the European social model"*. Paper, prepared for the International Conference *"Economic Relations in the Enlarged EU"*. University of Wroclaw, Poland. May 11, 2006 – May 12, 2006. This paper further develops themes already presented in the publications (Tausch, 2006) and (Tausch 2006, forthcoming) and concentrates rather on the more long-term, structural and UNDP-indicator oriented long-term analysis of the European development crisis. It also presents a politometric analysis of the development success or failure of the more than 300 European regions over the last decade. It also tries to systematically evaluate the relevance of the Balassa/Samuelson type of analysis for the debate on the "services directive" (Bolkestein directive) for the Lisbon process. Analyzing world social, gender, ecological and economic development on the basis of the main 9 predictors, compatible with the majority of the more than 240 published studies on the cross-national determinants of the "human condition" around the globe, we first present results of 32 equations about development performance in 131 countries with available data. We come to the conclusion that while there is some confirmation for the "blue", market paradigm as the best and most viable way of world systems governance concerning economic growth, re-distribution and gender issues, the "red-green" counter-position is confirmed concerning such vital and basic indicators as life expectancy and the human development index. We also show that Europe's crisis is not caused by what the neo-liberals term a "lack of world economic openness" but rather, on the contrary, by the enormous amount of passive globalization that Europe – together with Latin America – experienced over recent years. Our combined measure of the velocity of the globalization process is based on the increases of capital penetration over time, on the increases of economic openness over time, and on the decreases of the comparative price level over time: the United States, Mexico, larger parts of Africa and large sections of West and South Asia escaped from the combined pressures of globalization, while Eastern and Southern Latin America, very large parts of Europe, Russia and China were characterized by a specially high tempo of globalization. The "wider Europe" of the EU-25 is not too distantly away from the social realities of the more advanced Latin American countries. From the viewpoint of world systems theory such tendencies are not a coincidental movement along the historic ups and downs of social indicators, but the very symptom of a much more deep-rooted crisis, which is the beginning of the real re-marginalization and re-peripherization of the European continent. We finally also show the relevance of these assumptions for the analysis of European regional inequality. Established economics teaches us that for economic gaps to be bridged, a process of convergence sets in that was described by Bela Balassa and Paul Samuelson, independently from each other, more than 4 decades ago, and which is called ever since the "Balassa-Samuelson effect". But a reversal of what was once known as the Balassa/Samuelson effect has set in, with falling prices of non-tradables in the highly developed European center countries. Our macro-quantitative calculations show that considering other important intervening factors, like development levels and human capital formation, the ultraliberal thinking inherent in the recent "Bolkestein directive" that should lead to a considerable lowering of price levels in the formerly "non-tradable" sectors of services in Europe would be certainly compatible with some aspects of growth and better employment (and thus also gender relations), but our three main other indicators of globalization, i.e. high foreign saving, "economic freedom" and high MNC penetration ratios, are still very systematically linked with severe deficits in the social sphere, whatever the research design chosen. And in addition, powerful forces of agglomeration propel Europe in the direction of further regional income concentration and inequality, thus blocking the hopes of the poorer segments of the East European new member countries. A process of catching up development seems under these conditions a very remote hope indeed.

cally linked with severe deficits in the social sphere, whatever the research design chosen. And in addition, powerful forces of agglomeration propel Europe in the direction of further regional income concentration and inequality, thus blocking the hopes of the poorer segments of the East European new member countries. A process of catching up development ("Balassa/Samuelson") seems under these conditions a remote hope:

Table 7: the main economic policy conclusions of our study – t-values and direction of significant predictors in multiple regressions

determination of … by (static formulation) – nation states, world system (R^2 in brackets)	by foreign saving	economic freedom	MNC PEN	low international price level	EU-15 membership
human development index (91.14 %)	*-3,61*	*-5,49*	*-1,84*		
freedom from a high infant mortality (81.74 %)	*-5,21*	*-6,64*	*-2,81*		
gender empowerment (80.84 %)	**+1,81**			**+2,06**	
life expectancy (72.82 %)					
freedom from high CO2 emissions (62.09 %)	*-2,86*	*-4,05*	*-2,45*		
economic growth (28.36 %)			**3,94**		
determination of … by (dynamic formulation) – nation states, world system (R^2 in brackets)	by foreign saving	economic freedom	MNC PEN	low international price level	DYN MNC PEN
dyn rank human development index (30.77 %)			*-4,47*	**+2,40**	**+2,23**
economic growth (38.08 %)	*-3,68*		*-4,49*		**+1,95**
determination of … by (dynamic formulation) – Europe's regions (R^2 in brackets)	population density	population size	free from communist past	Downward flexibility of price levels, corr method	industrial employment
economic growth (36.25 %)	6,3	-5,7	**3**		2,9
alleviation of youth unemployment (46.28 %)	3,7	2	**4,3**	**1,8**	

We thus believe that the present study, with all its deficiencies, is perhaps an impetus for the further Lisbon debate in Europe, but the statistical and theoretical details need a much more careful consideration in the future.

Literature and sources:

Data used for the ranking of EU and EEA countries for their Lisbon process performance

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