

## Effects of the Current Economic Crisis on the Fiscal Variables in EU Countries\*

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**Abstract.** *Our paper aims to capture the effects of the current economic and financial crisis on fiscal variables, the 27 EU Member States, based on macroeconomic developments until 2010 and projected for 2011. Starting from the economic recession, from the increase of unemployment and the relative stability of prices in the EU overall (macroeconomic developments that characterize the current crisis), we analyze the effects of those developments on the public revenues and expenditures, on the conventional deficit and public debt, which are macroeconomic variables that comprise the pentagon of economic macro stabilization.*

**Keywords:** economic recession; unemployment; inflation; budgetary deficit; public debt.

**JEL Code:** E6.

**REL Codes:** 8B, 8E, 8F, 8G, 8K.

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## 1. Introduction

The current crisis might be described as an initial period of economic downturn which generated pressure on unemployment rate. The most sensitive fiscal variable to these macroeconomic disequilibrium is the consolidated total public revenue, which suffered a strong setback. Consolidated total public expenditure could not be adjusted according to these decreases in revenue. The result was the increase in consolidated national government budget deficits, which in turn resulted in significant increases in public debt for EU countries.

In addition to these general trends among EU member states, we can also emphasize that there is *a relative price stability* overall EU and a reduction of the current account deficit, due to the overall reduction of private consumption and, as a consequence, of the imports.

An important factor of stability is keeping inflation under control, which maintains the purchasing power of people in these difficult and uncertain times. There are some states from EU that have even a negative change in consumer prices. Unfortunately, Romania is the worst in this respect, with the highest inflation rate among the EU-27 states.

In a general economic context, the objectives of the economic policy, which compose the economic macro-stabilization pentagon, are the following: obtaining economic growth, price stability, decrease of unemployment rate, sustainability of public finance (sustainable budgetary deficit and public debt), decrease of current account deficit over GDP, even a surplus. Achieving simultaneously these objectives is almost impossible, even in the case of the developed countries. Economic policy decisions might choose between this set of objectives, one of them being priorities, the others being sacrificed.

In the context of the current economic crisis, economic policy objectives might be:

- economic recovery and population protection;
- budget deficits and public debt are instruments used by the state to support priority objectives (see the model of Germany and France). Compliance with the Maastricht nominal criteria, regarding public finance, is not more a short-term objective, but medium and long term.

IMF solution, trying to ensure macroeconomic balances precisely based on the public finances, does not generate any effects of economic growth or reducing unemployment rate, but exactly the opposite. It is also the case for the policies implemented by Romania in 2010.

Our opinion is that our country's fiscal policies implemented in 2010 are subordinated to the lack of necessary funds and access to them, that implied a monopol position on this sector of the IMF.

We believe that the considerable efforts of a big part of population, involved by the austerity policy of the authorities from Bucharest, do not find any justification in reducing, the most probable, the consolidated general government budget deficit by one percentage point (pp) comparing with 2009 (almost a slight reduction in the deficit in 2010 compared to 2009), and this is the case of a scenario of economic decline of only 1.9% (which is unlikely to be achieved), which means that the deficit target is seriously threatened by a possible economic decline more pronounced.

These austerity measures are harsh and inappropriate, and generate an increase of the distance from the moment our country will join the euro area and the real income convergence of Romania to the euro area is already a fairy tale for children.

It is not insignificant the fact that our country is the last in the EU-27 regarding GDP per capita at purchasing power parity, being exceeded by Bulgaria since 2010, according to IMF data.

In this article we propose an analysis of current economic and financial crisis on fiscal variables, in the context of 27 EU Member States, based on macroeconomic developments for 2010 and projections for 2011.

## 2. Economic recovery and population protection

For 2009, all member states, excepting Poland, had negative real GDP growth rate.

Table 1

Real GDP growth rate in 2009

Country	$\Delta\%$ realGDP	Country	$\Delta\%$ realGDP	Country	$\Delta\%$ realGDP
PL	1.2	EA 16	-4.0	BG	-5.9
CY	-0.7	UE 27	-4.1	HU	-6.5
EL	-1.1	NL	-4.5	FI	-6.9
FR	-2.2	DK	-4.5	SI	-7.4
MT	-2.2	SE	-4.6	IE	-7.5
BE	-2.9	UK	-4.6	RO	-8.0
PT	-2.9	IT	-4.7	EE	-13.7
LU	-3.6	CZ	-4.8	LV	-18.0
ES	-3.7	DE	-5.0	LT	-18.1
AT	-3.7	SK	-5.8		

Source: European Commission.

Former Soviet countries Estonia, Lithuania and Latvia have the highest rates of economic setbacks. Compared to these severe data, Romania is far away, yet our country was among the last seven EU states on the basis of this decline.

Other international developments confirm that this crisis, a financial one at the start, becomes an economic one and is characterized by a decline of GDP for most countries: Norway -1.4%, Switzerland -1.9%, USA -2.6 %, Japan -5.2%, Turkey -4.5% and Croatia -5.8%.

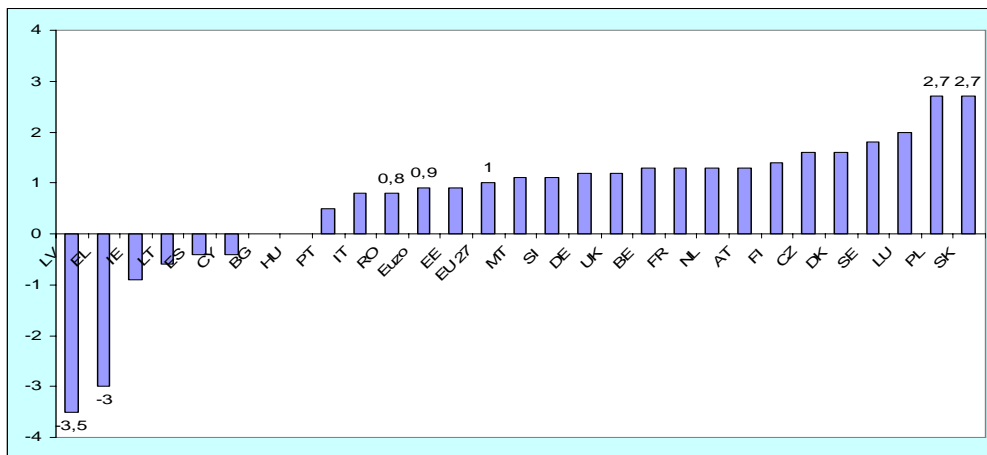
If we look to cumulative results from 2008 and 2009 of economic crisis on real GDP relative variation, we obtain the following data for UE-27:

Table 2

Real GDP growth rate 2009/2007						
Country	2009-2007		Country	2009-2007		
LV	-21.8		UK	-4.0	BE	-1.9
EE	-16.8		DE	-3.8	FR	-1.8
LT	-15.8		LU	-3.6	AT	-1.8
IE	-10.3		EA 16	-3.4	BG	-0.3
FI	-6.0		UE 27	-3.3	MT	-0.1
HU	-5.9		PT	-2.9	SK	0.2
IT	-5.7		ES	-2.8	EL	0.9
DK	-5.6		NL	-2.6	CY	3.0
SE	-4.8		CZ	-2.4	PL	6.3
SI	-4.2		RO	-2.3		

Source: author's calculations.

According to estimates for 2010 of the European Commission (Eurostat data), the EU economy will escape from the period of economic decline, as a whole (EU-27 average). For 2011, the EU-27 is expected a more consistent recovery, GDP will grow, according to forecasts, by 1.7% and for the euro area by 1.5%.



Source: European Commission.

Figure 1. Relative changes of real GDP for 2010

For the EU-27, average value forecast of this indicator is 1%, and for the euro area 0.9%. What is interesting is that for Romania the forecast value indicate a 0.8% increase, but this value is determined without considering the latest decision of wage reductions and tax increases.

Latest IMF prognose for our country considers an estimation of -2%, which in our opinion shows the “efficiency” of the taken measures. In the EU, countries for which the forecast for 2010 implies an economic decline are Latvia (-3.5%), Greece (-3%), Lithuania, Spain, Cyprus and Bulgaria.

Regarding the labor market, although the Community market has proved more resilient to the crisis than expected (largely due to short-term policy measures, reforms of the past and preserve jobs in some Member States) in all 27 EU Member States the unemployment rate increased in 2009 compared to that recorded in 2008, unemployment representing a negative effect of this economic and financial crisis.

Table 3

**The rise of the unemployment rate 2009 / 2008**

State	Change	State	Change	State	Change
DE	0.2	SI	1.5	HU	2.2
LU	0.5	FR	1.7	CZ	2.3
NL	0.6	CY	1.7	SK	2.5
BE	0.9	EL	1.8	DK	2.7
MT	1	FI	1.8	IE	5.6
AT	1	EU-27	1.9	ES	6.7
IT	1.1	EU zone	1.9	LT	7.9
PL	1.1	PT	1.9	EE	8.3
RO	1.1	UK	2	LV	9.6
BG	1.2	SE	2.1		

**Source:** Braşoveanu, Obreja (2009).

According to estimated values, in 2010 and 2011 the unemployment rate is:

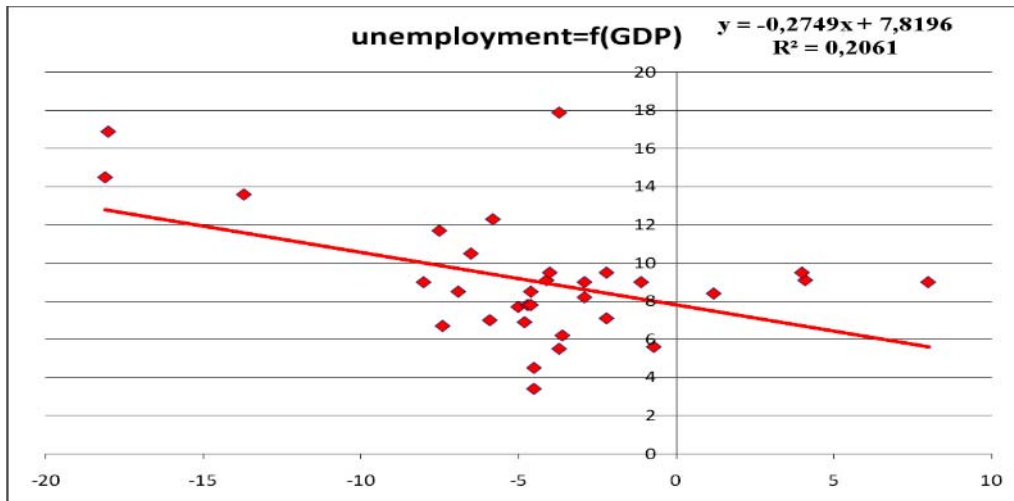
Table 4

**Unemployment rate for 2010 and forecast for 2011**

State	2010	2011	change
European Union (27 countries)	9.8	9.7	-0.1
Euro area (16 countries)	10.3	10.4	0.1
Belgium	8.8	9	0.2
Bulgaria	7.9	7.3	-0.6
Czech Republic	8.3	8	-0.3
Denmark	6.9	6.5	-0.4
Germany	7.8	7.8	0
Estonia	15.8	14.6	-1.2
Ireland	13.8	13.4	-0.4
Greece	11.8	13.2	1.4
Spain	19.7	19.8	0.1
France	10.2	10.1	-0.1
Italy	8.8	8.8	0
Cyprus	6.7	7	0.3
Latvia	20.6	18.8	-1.8
Lithuania	16.7	16.3	-0.4
Luxembourg	6.1	6.4	0.3
Hungary	10.8	10.1	-0.7
Malta	7.3	7.2	-0.1
Netherlands	4.9	5.2	0.3
Austria	5.1	5.4	0.3
Poland	9.2	9.4	0.2
Portugal	9.9	9.9	0
Romania	8.5	7.9	-0.6
Slovenia	7	7.3	0.3
Slovakia	14.1	13.3	-0.8
Finland	9.5	9.2	-0.3
Sweden	9.2	8.8	-0.4
United Kingdom	7.8	7.4	0.2

Source: European Commission.

It is expected that this imbalance will be stabilized for 2011, with the economic recovery process. If we consider the expected change in unemployment in 2011/2010, 14 of its values are negative, three are zero and the remaining 10 are positive but small. Greece is the exception to these trends, Eurostat data for this country anticipating a large increase in unemployment, even in 2011, 1.4, which would lead to an unemployment rate of 13.2%.



Source: Authors' Calculations.

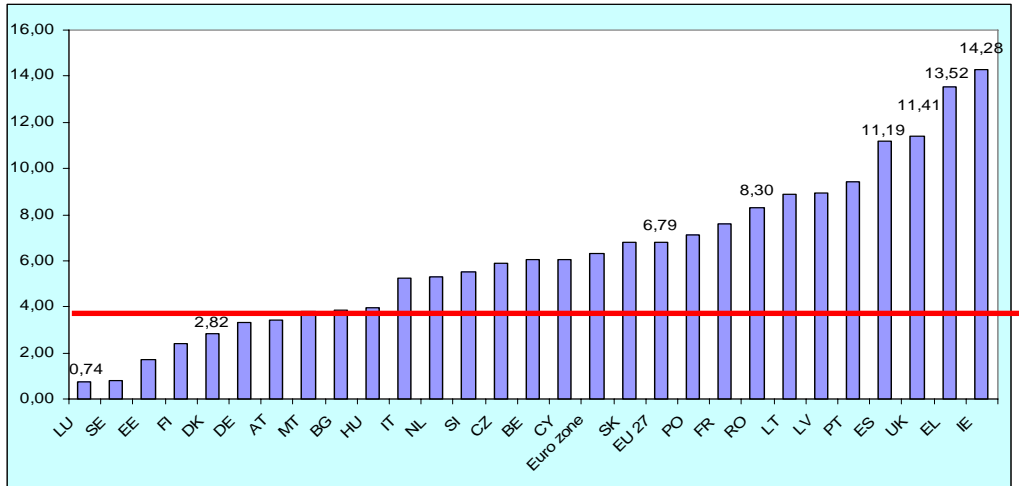
**Figure 2.** *Correlation between unemployment rate and economic growth*

In Figure 2 we analyzed the linear correlation between unemployment and economic growth. The correlation is negative and the coefficient of dependent variable is -0.275. Based on  $R^2$  signification we can say that 20.61% on the unemployment evolution is due to the evolution of real GDP growth rate.

In particular, labor market conditions will remain unfavorable, the unemployment rate is somewhere around 10% in the EU, even higher by about 0.5 percentage points in the euro area (according forecasts).

### 3. Budgetary deficit and public debts

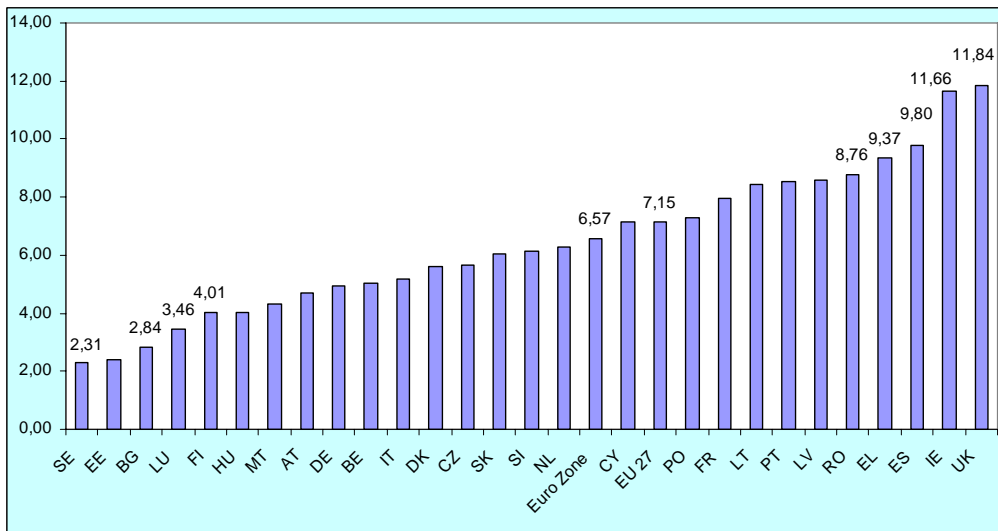
Public finance was also negatively affected by the current crisis. The public deficit tripled in 2009 for EU/27 area, reaching 6.79% of GDP from 2.25% in 2008. This damage was caused, in part, by operation of automatic stabilizers and discretionary measures taken to support the economy, but also reflects a stronger than usual fall in revenue in response to economic downturn.



Source: European Commission.

Figure 3. Public deficit (% GDP) in 2009

Forecasts are more pessimistic for 2010, deficits continuing to grow to around 7.15%.



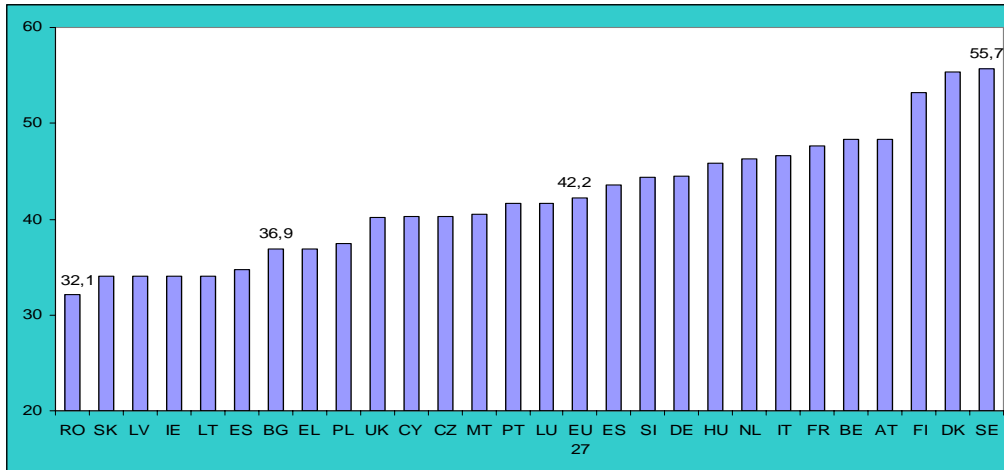
Source: European Commission.

Figure 4. Public deficit (% GDP) in 2010

In 2011, deficit is expected to decline in the EU-27 slightly below 7% of GDP, as the economy recover and temporary measures are no longer applied.



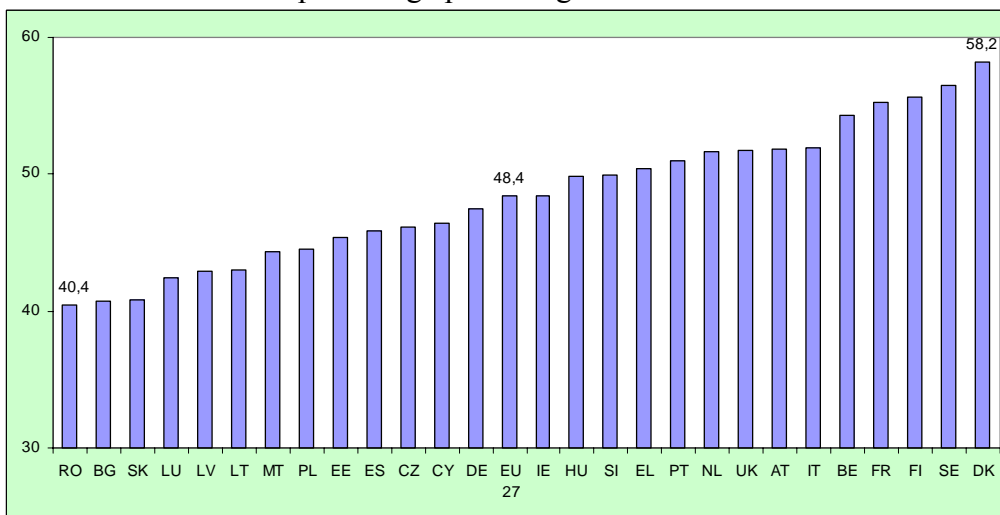
The Romania's critical situation is due to an inability to increase the budgetary revenues and to reduce public spending. Our country has the lowest share in GDP of the EU, for both revenues and spending.



Source: European Commission.

Figure 5. Public revenues on GDP in UE for 2009

Comparing to the EU-27 average, in our country public revenues are more than 10 percentage points lower, while the Nordic countries have public revenues more than 23 percentage points higher.



Source: European Commission.

Figure 6. Public spending on GDP in UE for 2009

Comparing to the EU-27 average, public spending in Romania is 8 p.p. below and comparing to Denmark with about 18 p.p. below. And even sadder is that these costs are very small in relation to actual funding needs of Romania (infrastructure, education, health, scientific research, environmental protection).

In these circumstances, public debt to GDP will continue to grow during 2010-2011, continuing the increase from the period 2009 to 2008:

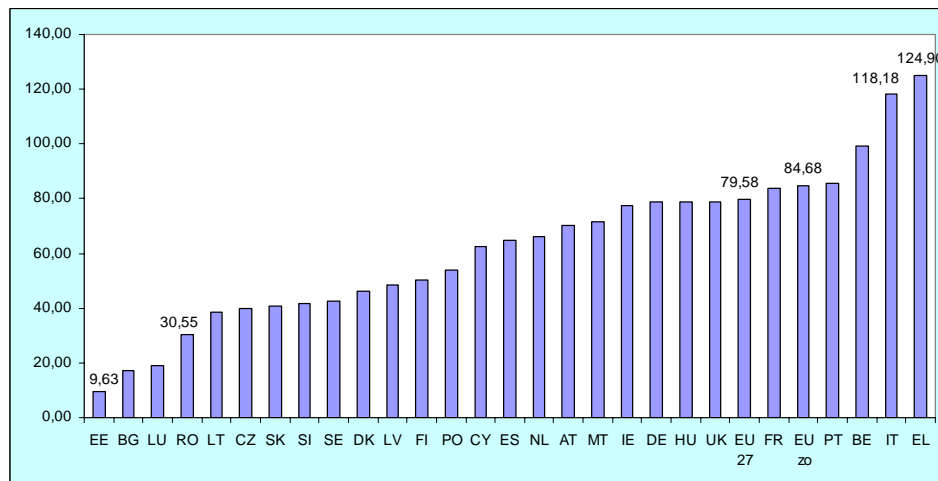
Table 6

Increase of public debt to GDP ratio in 2009 compared to 2008					
Country	$\Delta(\text{Debt}/\text{PIB})$	Country	$\Delta(\text{Debt}/\text{PIB})$	Country	$\Delta(\text{Debt}/\text{PIB})$
DK	0.2	AT	6.5	PT	11.1
BG	1	CZ	6.5	UE 27	11.5
LU	1.5	SK	6.9	SI	12.6
NL	1.6	DE	7.2	EL	13.4
EE	2.8	FI	7.2	LV	13.7
SE	4.1	BE	7.4	LT	14.3
PL	4.5	RO	8.2	ES	14.6
MT	4.7	FR	8.7	UK	16.6
CY	4.8	IT	8.8	IE	21.7
HU	6.2	Euro Zone	8.9		

Source: European Commission.

We observe that our country has a public debt to GDP that grew by 8.2 percentage points, more than three percentage points comparing with EU 27 average and over 12 p.p. comparing with Ireland.

For 2010, there are forecasted the following values for share in GDP of public debt:



Source: European Commission.

Figure 7. Public debt in UE for 2010

Romania is among the latest countries in a hierarchy of public debt (the last four of the EU-27). For 2011 our country is expected to reach a value of 35.87%. For Romania, the debt over GDP ratio is not a problem, but the growth of public debt, the use of these loans and the level of public debt sustainability are seriously problems.

#### **4. Conclusions**

In the context of the current crisis, European economic perspectives are uncertain and subject to some considerable risks. The recovery process is dependent on Member States' strategic measures and their effectiveness.

From this perspective we believe that our country will have serious problems in 2011 regarding economic recovery, managing inflation, unemployment, public deficit and public debt. We believe that the current fiscal policy measures increase the risk of aggravating the crisis and uncertainty about macroeconomic developments in our country.

As far as we are concerned, the solutions for the economic and financial crisis should be directed to:

- stimulating economic growth through government spending, in the context of drastic decrease of private demand;
- increase of budget revenues in GDP (by reducing tax evasion, underground economy, by increasing the absorption of EU funds, by increasing collection of resources through a higher tax for those with above-average income and wealth);
- allocation of spending for priorities of sustainable development (infrastructure, education, health, scientific research, social welfare, environmental protection).

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### Abbreviations and symbols:

EU-27 = European Union after 1 January 2007, with 27 Member States

**Member States EU-27:** AT = Austria, BE = Belgium, BG = Bulgaria, CY = Cyprus, CZ = Czech Republic, DE = Germany, DK = Denmark, EE = Estonia, EL = Greece, ES = Spain, FI = Finland, FR = France, HU = Hungary, IE = Ireland, IT = Italy, LT = Lithuania, LU = Luxembourg, LV = Latvia, MT = Malta, NL = Netherlands, PL = Poland, PT = Portugal, RO = Romania, SE = Sweden, SI = Slovenia, SK = Slovakia, UK = United Kingdom

Euro Zone (EA 16) = BE, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, SI, SK, FI, MT, CY.