Macroeconomic Stability and Economic Structure
As a result of Brexit, the EU is going to face increasing socio-economic uncertainty. The day after the British referendum result, we have seen sharp falls in European equity markets, particularly of banking shares. In my view, this sharp fall is going to undermine consumer and business confidence and, consequently, and it is very likely to drag down economic growth — this situation is not unique and unusual but we are going to face a turbulent period in financial markets for several months —. Additionally, there is the Syrian refugees’ humanitarian crisis as well as serious social conflicts in many member states. Furthermore the advantage deriving from lower oil price was negated by the abrupt depreciation of the Euro against the U.S. dollar — indeed QE (Quantitative Easing) was a high priority when the exchange rate was about USD 1.5858 in July 2008 straining the socio-economic situation in the Euro area (one may wonder: why does nobody question it?). Now it is of little help to exports because these have already reached the maximum level, while leading to more expensive imports needed to support the domestic economy.

Despite the painful austerity measures, in 2015, general government gross debt (gross public debt as a percentage of the GDP) ratios in the EU-28 remain at a very high level—in Spain, Portugal, Greece is around 100%, Italy has the second highest debt load at 132.7% and in France and Ireland is between 85 and 95 percent. Concerning the volume index of GDP (Gross Domestic Product) per capita, 171% higher than the EU-28 average, 24%, 8%, 45% respectively (see Table D)—it should be noted that these four countries maintained similar figures of GDP per capita from 2004 to 2015—, being Croatia the lowest at 42% lower than the EU-28 average, followed by Latvia, Lithuania, Estonia, Slovakia, Slovenia—. Within this block, in 2015, Luxembourg, Denmark, Finland and Ireland have a GDP per capita higher than the EU-28 average, at 171%, 24%, 8%, 45% respectively (see Table D)—it should be noted that these four countries maintained similar figures of GDP per capita from 2004 to 2015—, being Croatia the lowest at 42% lower than the EU-28 average, followed by Latvia, Lithuania, Estonia, Slovakia, Slovenia and Malta with a GDP per capita at 36%, 26%, 26%, 23%, 17% and 11%, respectively, lower than the EU-28 average. Cyprus’ GDP per capita peaked at 5% higher than the EU-28 average in 2009, dropped at 19% lower than the EU-28 average in 2015 (see Table A).
Member States with less than 6 million inhabitants and GDP per capita below the EU-28 average

Table A
(Year 2015)

<table>
<thead>
<tr>
<th>Member States</th>
<th>Inhabitants</th>
<th>% GDP</th>
<th>% AIC</th>
<th>% GGD</th>
<th>LP (U$)</th>
<th>LP ESA (2010)</th>
<th>AAW (U$)</th>
<th>Hours Worked</th>
<th>Jobless Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>4,225,316</td>
<td>58%</td>
<td>58%</td>
<td>86.7%</td>
<td>NA</td>
<td>110.2%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Cyprus</td>
<td>847,008</td>
<td>81%</td>
<td>90%</td>
<td>108.9%</td>
<td>NA</td>
<td>(a) 105.3%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,313,271</td>
<td>74%</td>
<td>69%</td>
<td>9.7%</td>
<td>$29.3</td>
<td>105.8%</td>
<td>$21,564</td>
<td>1,852.00</td>
<td>6.19%</td>
</tr>
<tr>
<td>Latvia</td>
<td>1,986,096</td>
<td>64%</td>
<td>66%</td>
<td>36.4%</td>
<td>$25.84</td>
<td>114.8%</td>
<td>$20,518</td>
<td>1,903.00</td>
<td>9.88%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2,921,262</td>
<td>74%</td>
<td>82%</td>
<td>42.7%</td>
<td>$29.92</td>
<td>113.6%</td>
<td>NA</td>
<td>1,860.00</td>
<td>NA</td>
</tr>
<tr>
<td>Malta</td>
<td>429,344</td>
<td>89%</td>
<td>81%</td>
<td>63.9%</td>
<td>NA</td>
<td>109.1%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Slovakia</td>
<td>5,403,134</td>
<td>77%</td>
<td>77%</td>
<td>52.9%</td>
<td>$37.38</td>
<td>111.5%</td>
<td>$22,031</td>
<td>1,754.00</td>
<td>11.48%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2,062,874</td>
<td>83%</td>
<td>74%</td>
<td>83.2%</td>
<td>$36.76</td>
<td>104%</td>
<td>$33,085</td>
<td>1,675.00</td>
<td>8.96%</td>
</tr>
</tbody>
</table>

% GDP = %GDP per capita in PPS (Purchasing Parity Standards) EU-28 = 100
% AIC = %AIC per capita in PPS (Purchasing Parity Standards) EU-28 = 100
% GGD = General Government Gross Debt to GDP ratio
LP (U$) = Labour Productivity per hour worked expressed in US $ (GDP per hour worked expressed in US $)
LP = Labour Productivity per hour worked (ESA-The European System of National and Regional Accounts-2010)
AAW (U$) = Average Annual Wages expressed in US $
Hours Worked = Average Annual Hours Worked
NA = Not Available. It was not able to find any data.
(a) provisional

Source: Own elaboration with information of the OECD, EUROSTAT

Austria, Belgium, Bulgaria, Czech Republic, Greece, Hungary, Portugal, and Sweden are member states with a population between 6 and 17 million inhabitants. Within this block, in 2015, Austria, Belgium and Sweden had a GDP per capita higher than the EU-28 average, placed at 27%, 17% and 23% respectively (see Table D). As in the previous case, it should be noted that these three countries maintained similar figures of GDP per capita from 2004 to 2015. Portugal, Czech Republic, Hungary maintained similar figures of GDP per capita from 2004 to 2015, close to 23%, 17%, 34%, respectively, lower than the EU-28 average. Greece’s GDP per capita dropped from 4% in 2004 to 29% lower than the EU-28 average in 2015. As mentioned previously, although Bulgaria shows the lowest GDP per capita in 2015, at 54% lower than the EU-28 average, it also displayed a steady GDP per capita growth since 2004 (see Table B for detailed and accurate information on these countries). In my view, lasting stability and sharp falls are important data to take in consideration to analyse future situations. I will mention these facts throughout this article several times.
Member States with a population between 6 and 17 million inhabitants and GDP per capita below the EU-28 average

Table B

(Year 2015)

<table>
<thead>
<tr>
<th>Member States</th>
<th>Inhabitants</th>
<th>% GDP</th>
<th>% AIC</th>
<th>% GGD</th>
<th>LP (U$)</th>
<th>LP ESA (2010)</th>
<th>AAW (U$)</th>
<th>Hours Worked</th>
<th>Jobless Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>7,202,198</td>
<td>46%</td>
<td>51%</td>
<td>26.7%</td>
<td>NA</td>
<td>112.9%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>10,419,743</td>
<td>85%</td>
<td>76%</td>
<td>41.1%</td>
<td>$32.87</td>
<td>108.2%</td>
<td>$21,689</td>
<td>1,779.00</td>
<td>5.05%</td>
</tr>
<tr>
<td>Greece</td>
<td>10,846,979</td>
<td>71%</td>
<td>81%</td>
<td>176.9%</td>
<td>$32</td>
<td>(a) 94.9%</td>
<td>$25,211</td>
<td>2,042.00</td>
<td>24.90%</td>
</tr>
<tr>
<td>Hungary</td>
<td>9,855,571</td>
<td>68%</td>
<td>62%</td>
<td>75.3%</td>
<td>$30.78</td>
<td>102.2%</td>
<td>$19,999</td>
<td>1,748.60</td>
<td>6.82%</td>
</tr>
<tr>
<td>Portugal</td>
<td>10,374,822</td>
<td>77%</td>
<td>83%</td>
<td>129%</td>
<td>$31.78</td>
<td>(b) 102.8%</td>
<td>$24,105</td>
<td>1,868.00</td>
<td>12.44%</td>
</tr>
</tbody>
</table>

% GDP = %GDP per capita in PPS (Purchasing Parity Standards) EU-28 = 100
% AIC = %AIC per capita in PPS (Purchasing Parity Standards) EU-28 = 100
% GGD = General Government Gross Debt to GDP ratio
LP (U$) = Labour Productivity per hour worked expressed in US $ (GDP per hour worked expressed in US $)
LP = Labour Productivity per hour worked (ESA-The European System of National and Regional Accounts-2010)
AAW (U$) = Average Annual Wages expressed in US $
Hours Worked = Average Annual Hours Worked
NA = Not Available. It was not able to find any data.
(a) provisional, (b) estimated

Source: Own elaboration with information of the OECD, EUROSTAT

United Kingdom, Spain, Romania, Poland, Netherlands, Italy, Germany, and France are member states whose population is above 17 million inhabitants. Within this block, in 2015, the United Kingdom, Netherlands, Germany and France have a GDP per capita higher than the EU-28 average, it is placed at 10%, 29%, 25% and 6%, respectively, higher than the EU-28 average (see Table D)—it should be noted that UK has undergone a significant decline in its GDP per capita from 2004 to 2012, which dropped from 25% in 2004 to 6% in 2011, while Germany shows a steady rise between 2004 and 2015, as it went up from 17% in 2004 to 25% in 2015 (percentages higher than the EU-28 average in both these countries). I also note that the Netherlands showed the maximum raise in 2008, a GDP per capita placed at 39% higher than the EU-28 average, whilst between 2004 and 2015, Poland and Romania showed a steady GDP per capita growth, but always lower than the EU-28 average, from 51 and 66% in 2004 to 31 and 43% respectively in 2015. It is important to point out that Spanish GDP per capita has been falling steadily between 2007 and 2015, from 3% higher than the EU-28 average in 2007 to 8% lower than the EU-28 average in 2015. Italy shows a similar case, as Italian GDP per capita decreased between 2004 and 2015, from 8% higher than the EU-28 average in 2004 to 5% lower than the EU-28 average in 2015 (see Table C). France has a stable GDP per capita in the range of 8 to 6% higher than the EU-28 average in the years 2004 to 2015 (see Table D).
As we know GDP is a measure of a country’s economic activity, and therefore it should not be considered a measure of a country’s well-being. Therefore, if we take the AIC (Actual Individual Consumption) per capita in PPS (Purchasing Power Standard) as a better indicator to describe the material welfare of households, in 2015, in those member states whose population is below six million inhabitants, we can see that Cyprus, Finland, Latvia, and Lithuania record AIC per capita figures higher than their GDP per capita (see Table A and Table D) — especially Cyprus and Lithuania with an AIC per capita 9 and 8 per cent, respectively, more than their per capita GDP —, and, within this block, only Denmark, Finland and Luxembourg show AIC per capita figures higher than the EU-28 average — 14%, 13% and 37% respectively (see Table D).

Within the block of member states with a population between 6 and 17 million inhabitants, Austria, Belgium and Sweden record AIC per capita figures higher than the EU-28 average — 19%, 12% and 11% respectively (see Table D) — and Bulgaria, Greece and Portugal show AIC per capita figures higher than their GDP per capita — especially Greece with an AIC per capita 10 per cent more than its GDP per capita (see Table B).

Among the Member States whose population is above 17 million inhabitants, the United Kingdom, Netherlands, Germany, and France record AIC per capita figures higher than the EU-28 average: 16%, 11%, 24% and 11% respectively (see Table D). Although AIC per capita is usually highly correlated with GDP per capita, Spain and the Netherlands experience AIC per capita figures significantly lower than their GDP per capita, especially the Netherlands with an AIC per capita 11% higher than the EU-28 average and a GDP per capita 29% higher than the EU-28 average, which means an AIC per capita 18% lower than its GDP per capita. Followed by Spain that shows an AIC per capita per capita 12% lower than the EU-28 average and a GDP per capita 8% lower than the EU-28 average, which means an AIC per capita per capita 4% lower than its GDP per capita (see Table C).

Therefore, always in 2015, GDP per capita expressed in PPS ranged from 46% to 271% of the EU-28 and AIC per capita...
capita expressed in PPS ranged from 51% to 137%. **Bulgaria** was the Member State with the lowest GDP per capita, 54% lower than the EU-28 average and the lowest level of AIC per capita, 49% below the EU-28 average — it should be noted that this country showed a steady GDP per capita growth from 65% lower than the EU-28 average in 2004, and its AIC per capita, in 2015, is slightly higher than its GDP per capita — while **Luxembourg** recorded the highest level, 171% above the EU-28 average, as well as the highest level of AIC, 37% higher than the EU-28 average. **Ireland** comes out second with a GDP per capita 45% higher than the EU-28 average followed by the **Netherlands**, **Austria**, **Germany** and **Denmark** with a GDP per capita at 29%, 27%, 25% and 24% respectively. In 2015, Ireland had one of the highest labour productivity per hour worked, 34.1% higher than the EU-28 (2010=100) reference index (around $62.02) and, in the same period, its general government gross debt (gross public debt) as a percentage of GDP was close to 94%, which was 23.6% in 2006. (See Tables B and D for detailed description)

In my view, labour productivity per hour worked figures expressed as a percentage (**ESA – The European System of National and Regional Accounts – 2010**) may cause misleading information; for example, in 2015, Estonia, Lithuania, and Slovakia had a labour productivity per hour worked at 5.8%, 13.6% and 11.3%, respectively, higher than the EU-28 (2010=100) reference index, while their GDP per hour worked values expressed in US dollars were $29.13, $29.92 and $37.38 respectively. I think it is important to mention that the general government gross debt as a percentage of GDP of these three countries was 9.7%, 42.7% and 52.9% respectively (see Table A for detailed description).

Luxembourg recorded the highest GDP per hour worked expressed in US dollars, at $81.23, while in percentage its labour productivity per hour worked was 2% higher than the EU-28 (2010=100) reference index. Netherlands comes second with a GDP per hour worked expressed in US dollars, at $61.32, while in percentage its labour productivity per hour worked was 3.6% higher than the EU-28 (2010=100) reference index, followed by France, Germany, Denmark and Sweden, with a GDP per hour worked at $60.61, $59.22, $58.92, and $54.74, respectively, and none of these countries, however, scored a labour productivity per hour worked EU-28 (2010=100) reference index above 5.5%—again, it is important to make note of the general government gross debt as a percentage of GDP of these six countries, which was 21.4%, 65.1%, 95.8%, 71.2%, 40.2% and 43.4% respectively (see Table D for detailed description).

Curiously, Latvia recorded the highest labour productivity per hour worked, 14.8% higher than the EU-28 (2010=100) reference index but the lowest GDP per hour worked expressed in US dollars, at $25.84 (see Table A). Greece and Portugal had one of the lowest GDP per hour worked expressed in US dollars, at $32 and $31.78 respectively, and a general government gross debt as a percentage of GDP of 176.9% and 129% respectively — first and third biggest gross public debt — (see Table B). Spain and Italy have also low GDP per hour worked expressed in US dollars, at $47.82 and $46.99, respectively, and a general government gross debt as a percentage of GDP of 99.2% and 132.7% (see Table C), the second largest gross public debt, respectively. About Spain’s general government gross debt as a percentage of GDP, it is very important to note its meteoric rise throughout these years of strict austerity measures, as it was at 35.5% in 2007.

Consequently, labour productivity per hour worked measures the percentage change in productivity regarding the reference period; therefore, this index is useful to check out changes in labour productivity in a country but not to compare it against those of other countries. GDP per hour worked expressed in monetary units is a measure of a country’s labour productivity and it is useful to compare it against those of other countries.

While it is true that eleven member states recorded a level of GDP per capita above the EU-28 average in 2015 (see Table D for detailed and accurate description), I think it is important to mention that seven of them—Denmark, Finland, Ireland, Luxembourg, Austria, Belgium and Sweden—have less than 17 million inhabitants, as well as special socio-economic characteristics. All these countries, except Belgium, have a general government gross debt lower than 100% of the GDP, in particular Luxembourg with a general government gross debt placed at 21.4% of the GDP. These countries record a GDP per hour worked greater than $50, in particular Luxembourg with a GDP per
hour worked at $81.23. Additionally, although AIC per capita is usually highly correlated with GDP per capita, Ireland and Luxembourg experience AIC per capita figures significantly lower than their GDP per capita — AIC per capita 5% lower than the EU-28 average and GDP per capita at 45% higher than the EU-28 average, AIC per capita 37% higher than the EU-28 average and GDP per capita at 171% higher than the EU-28 average, respectively. Only four of these eleven member states with a GDP per capita above the EU-28 average — United Kingdom, Netherlands, Germany and France — have more than 17 million inhabitants — and, as I mentioned before, the United Kingdom suffered a significant decline from 2004 to 2015, while Germany showed a steady rise in the same period. So some questions may arise: Could that have influenced the outcome of Brexit referendum? And, could we say, honestly, that EU is going in the right direction, when only four member states with more than 17 million inhabitants recorded a GDP per capita above the EU-28 average?

Member states with the highest rates of GDP per capita in 2015—Luxembourg, Ireland, Netherlands, Austria, Germany and Denmark—have, in the same period, a general government gross debt to GDP ratio placed at 21.4%, 93.8%, 65.1%, 86.2%, 71.2%, 40.2%, respectively. I think it is important to bear in mind the case of Ireland, which had a general government gross debt to GDP ratio placed at 23.6% in 2006.

Just as with GDP per capita, in 2015, there is a large disparity between countries about general government gross debt to GDP ratio, ranged from 9.7% to 176%. Estonia —member since 2004 with a population of 1,313,271 people — was the state with the lowest level of this ratio, at 9.7%. It showed a GDP per capita 26% lower than the EU-28 average and AIC per capita 31% lower than the EU-28 average (see Table A). Greece — member since 1981 with a population of 10,846,979 people— recorded the highest level, of 176.9%, showing a GDP per capita 29% lower than the EU-28 average and AIC per capita 19% lower than the EU-28 average (see Table B), followed by Italy, Portugal, Cyprus, Belgium, Spain and France with a general government gross debt to GDP ratio at 132.7%, 129%, 108.9%, 106%, 99.2% and 95.8% respectively. There are twelve member states with general government gross debt in excess of 80% of GDP — Belgium, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Austria, Portugal, Slovenia, and United Kingdom— and five within the range of 60 and 80% of GDP — Germany, Hungary, Malta, Netherlands, Finland. (See Tables A, B, C and D for detailed description)

Member States with a GDP per capita above the EU-28 average

Table D

(Year 2015)
As can we see on Table D, Germany is the member state of the European Union with less average yearly hours worked, it has the lowest unemployment rate and its labour productivity per hour worked is among the highest. It is important to highlight that in all these Member States, except United Kingdom, the average hourly labour cost is above €30 (EU-28 average hourly labour cost at €25), with the highest value corresponding to Denmark at €41.3, followed by Belgium at €39.1 (see Table E). The above considerations clearly indicate that these member states are not basing their productivity and competitiveness on low wages, as intended to do in other countries of the European Union, but by using other parameters suitable in more advanced socio-economic societies, such as product differentiation, brand image…, etc.

Curiously, Greece has the highest average hours worked per year in the EU-28, at 2,042 hours, its average hourly labour cost is among the lowest in the EU-28, at €14.5, GDP per hour worked (labour productivity per hour worked) at US $32, average annual wages at US $25,211 and unemployment rate of 24.90%. Spain is the country with the second highest unemployment rate remaining at around 22.06%, reaching its peak in 2013, at 26.9%. The average hours worked per year is 1,691.30, GDP per hour worked at US $47.82, average hourly labour cost is €21.12 and its average annual wages at US $36,325. (See Tables B, C, and E for detailed description)
Average Hourly Labour Costs in the EU Member States

Table E

Denmark, Belgium, Sweden and Luxembourg are the member states with higher average hourly labour costs at € 41.1, € 39.1, € 37.4 and € 36.2 respectively. Bulgaria is the member state with the lowest average hourly labour cost at € 4.1 followed by Romania at € 5, Lithuania at € 6.8, Latvia at € 7.1, Hungary at € 7.5, Poland at € 8.6, Croatia at € 9.6, Czech Republic at € 9.9, Slovakia at € 10, and Estonia at € 10.3 (see Table E for detailed information). As we can see in the previous tables, member states with lower average hourly labour costs also have lower GDP per hour worked and average annual wages, and vice versa.

I hope this article helps to cast some light on the critical socio-economic situation in Europe and its possible future framework. There is great heterogeneity in all macroeconomic indices as well as conflicting interests among member states – the last EU summit without Britain, held in Bratislava, was evidence of this. The European Union can succeed as a block only if it is able to find a common way forward, in other words, making that socio-economic measures and ethics go hand in hand.

References


Note: This article gives the views of the author, and not the position of the Euro Crisis in the Press blog nor of the London School of Economics.
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