

**A COMPARISON BETWEEN OLD AND NEW  
GRONINGEN GROUP ESTIMATES**

**with special reference to Italy**

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The January 2018 Groningen Group new estimates of the long series of per capita income raise perplexities.

It is not my intention to enter into the technicalities of the estimates. Others are better entitled than me to carry this analysis. There is only one thing that I want to say. It is unacceptable to have two series, one for levels and for for growth rates. Indeed, in the case of the reference country - USA - the two series coincide.

What I will do here is instead to encover the implications of the new estimates with the hope that the identification of problems will encourage additional work.

This aim can be reached by means of two comparative tables, where I have only listed a few core countries, but obviously the approach can be extended to all the countries one is interested in.

The first table compares the 2013 First Update with the 2018 Second Update, using two simple elaborations. First, I have reported the 1990 dollars to 2011 dollars applying the USA rate of inflation to all the countries included in the comparison (the assumption is that the underlying USA series was the same in the two estimates).

Second, I have percentaged the 2018 estimates to the 2013 estimates for benchmark years, putting USA=100.

We all know that the 2013 update was partial and did not embody all the national works available at the time, but the 2018 update seems to have confused matters further.

**First Update 2013 as a % of the Second Update 2018**

	Italy	Germany	France	Spain	UK	Netherlands	USA
1300	64			139	69		
1400	64			139	69	60	
1500	64	63		139	69	60	
1600	64	63		139	69	60	
1650	64	64		139	69	60	100
1700	64	64		139	69	60	100
1750	64	63		139	69	60	100
1800	64	64		139	69	60	100
1820	64		83		69	60	100
1872	64	88	83	144	75	68	100
1911	79	104	99	141	84	92	100
1938	67	87	79	124	84	67	100
1951	72	91	81	77	85	77	100
1973	86	97	94	88	89	96	100
1991	98	100	87	91	92	92	100
2007	112	86	100	117	95	119	100
2011	117	128	105	115	90	113	100

The comparison is not so meaningful for France, because the 2013 estimates were very poor and scattered; the blue figures in the UK column refer to England; the brown figures in the Netherlands column refer to Holland.

The scaling down of all the European countries with reference to USA is apparent, and is due to the new 1872 benchmark calculated by Ward-Devereux, with one striking exception: Spain, which stands out as being vastly revalued. I remind that Spain is not included in the paper Ward-Devereux. I did not have the opportunity to understand from which sources it derives, but it is a retropolation from a 1929 benchmark.

Additional comments can be derived from a second table, which uncovers the relative position of the countries in the previous table with reference to Italy, as it is portrayed in the 2018 estimate.

**Second Update 2018 as a % of Italy=100 (cgdppc)**

	Italy	Germany	France	Spain	UK	Netherlands	USA
1300	100		72	116	49		
1400	100		84	102	68	64	
1500	100	74	90	120	76	89	
1600	100	59	97	143	86	183	
1650	100	67	97	107	71	180	66
1700	100	63	94	120	111	134	96
1750	100	68	89	111	119	144	
1800	100	72		147	166	179	149
1820	100		98		148	117	141
1872	100	181	184	225	265	200	270
1911	100	203	186	164	228	204	290
1938	100	231	187	118	281	187	325
1951	100	154	183	115	241	186	405
1973	100	130	134	76	120	141	186
1991	100	102	94	69	91	99	140
2007	100	115	100	94	106	133	142
2011	100	123	104	90	99	127	141

What emerges is the following:

1. Spain not only is positioned above Italy always until the 1950s, but above Britain or pretty near to it up until the late XIX century, an absurd result. In particular, the 1872 value (more than twice the Italian level, above Germany and France and not distant from USA and UK) appears devoid of any meaning.
2. The «new» series for France and Germany have not to my knowledge been widely known publicly and therefore should be handled with care.
3. What happens in the first half of the XIX century is messy, with huge changes in rankings that are not easily acceptable

4. USA appears already on top by 1800. What is the basis for such an incredibly high ranking?

5. Due to the fact that the most recent decades comparative positions of levels have been fixed up by international statistical offices, the post-World War II series slow down or speed up unrealistically. For example, as a result of the remarkable compression of the Italian levels up until the post World War II years, the performance of Italy from the 1950s onwards is amazingly high, as it can be seen in the following comparison.

6. Due to the fact that the comparative levels of per capita GDP has been calculated by International Statistical Offices for the latest decades, the convergence of historical series in the post World War II era must be achieved, either by compressing or by expanding growth rates.

In the case of Italy, as a result of the compression of Italian levels in the previous period, the performance of Italy from the 1950s onwards is amazingly high, as it can be seen from the following comparisons:

Ratio of levels in 2011 to levels in 1951						
Italy	Germany	France	Spain	UK	Netherlands	USA
8,8	7,06	5,04	6,9	3,64	6,03	3,08

I do realize that the Groningen group insists that growth rates cannot be derived from levels, but I have already contested this above, because it is untenable.

One final comment. The Malanima research on which the Italian series before unification is based referred to the city-state civilization of the Centre-North of the country. Later on, Malanima himself connected this series with the post-unification (1861) series (whatever series, for the sake of this argument which series is irrelevant), that obviously includes the South as well, claiming that at unification the per capita income of the South and of the Centre-North were the same.

As many of you know, I do not believe that this is correct, but allowing this for the sake of the argument, if the two per capita incomes were the same at unification, it remains that the Malanima series for the previous centuries has been built on indicators referring to the Centre-North of the country.

Now, I assume that the new 1872 benchmark built for Italy by Ward and Devereux refers to Italy as a whole and therefore CAN NOT be applied to the Centre-North Malanima series through extrapolation.

At this point, I actually do not think that we can avoid building a separate income per capita series for the South of Italy for the centuries up until unification with a coherent set of instruments that can allow comparison with the Centre-North series. This is an urgent duty for young researchers.

This brings me to my last point. I know very well that there are plenty of problems in the exercise of estimating income per capita for earlier centuries. The solution of these problems might be debated and opinions might differ.

What has to be avoided unless our exercises lose reputation, is to draw comparisons among series that are built with entirely different methods. I remember having said this in Amsterdam when we met in memory of Angus. It seems to me that the situation has not improved much since.