4

Spain's Performance in Comparative Perspective

A long-run view of Spain's economic performance cannot be completed without placing it in comparative perspective. In Fig. 4.1, Spain's real GDP per head is presented along estimates for other large Western European countries: Italy, France, the UK, and Germany, plus the USA, the economic leader that represents the technological frontier, all expressed in purchasing power parity-adjusted 2011 dollars to allow for countries' differences in price levels (Fig. 4.1). A caveat is needed about this kind of exercise. Per capita income levels obtained through backward projection of PPP-adjusted GDP levels for a given benchmark year (2011, in this case, or 1990 in Maddison's estimates) with volume indices derived at domestic relative prices from historical national accounts provide a convenient way of comparing of countries' income levels over time, as it is easy to compute and does not alter national growth rates. However, it also presents a huge index number problem that gets bigger as the time span considered widens, rendering comparisons less significant. This is so because this computation procedure implicitly assumes that the basket of goods and services and the structure of relative prices for the benchmark year remain unaltered over time, something definitively misleading as long-run growth is about change in

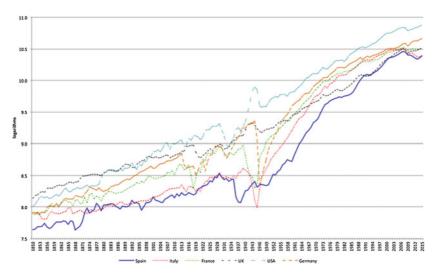


Fig. 4.1 Spain's comparative real per capita GDP (2011 EKS \$) (logs)

relative prices (Prados de la Escosura 2000). As a matter of fact, this type of series only provides an effective comparison between the level of the benchmark year (2011 here) and that of any other year at the former's relative prices.

Several findings emerge from Fig. 4.1. Firstly, Spain's long-term growth appears to be similar to that of Western nations. Secondly, Spain's level of GDP per head is systematically lower than those of other large Western European countries. Lastly, the improvement in Spain's GDP per head did not follow a monotonic pattern, a feature that shares with Italy and Germany, but differs from the steady progress experienced by the UK and the USA and, to less extent, with France.

The first two results would lend support to the view that the roots of most of today's difference in GDP per person between Spain and advanced countries should be searched for in the pre-1850 era. However, the fact that Spain's initial level was lower would suggest—within a neoclassical framework—a potential for growth that would have not been exploited.

A closer look reveals that long-run growth before 1950 was clearly lower in Spain (as in Italy) than in the advanced countries (Table 4.1).

	Spain	Italy	France	UK	USA	Germany
1850–2015	1.7	1.5	1.6	1.4	1.7	1.7
Panel A						
1850-1913	0.9	0.7	1.2	1.2	1.7	1.5
1913-1950	0.3	0.9	1.1	0.9	1.6	0.2
1950-1973	5.3	5.2	3.9	2.4	2.4	4.9
1973-2007	2.6	1.9	1.6	2.2	1.9	1.6
2007-2015	-0.8	-1.6	-0.2	0.2	0.4	1.1
Panel B						
1850-1883	1.3	0.4	1.1	1.4	1.8	1.2
1883-1913	0.6	1.1	1.4	1.0	1.5	1.8
1913–1918	-0.6	-1.0	-7.5	2.1	1.3	-4.0
1918–1929	3.1	2.2	6.1	0.1	1.8	2.8
1929-1939	-3.7	0.7	0.2	1.3	-0.5	2.9
1939–1950	1.7	0.6	0.7	0.9	3.4	-3.0
1950-1960	3.7	5.4	3.6	2.2	1.7	6.9
1960-1973	6.4	5.0	4.2	2.5	3.0	3.4
1973-1992	2.9	2.5	1.7	1.5	1.8	1.8
1992-2007	2.4	1.2	1.4	2.9	2.0	1.3

Table 4.1 Comparative per capita GDP growth, 1850–2015 (%) (average annual logarithmic rates)

Source Spain, see the text; rest of countries, Maddison Project

Sluggish growth over 1883–1913 and not taking advantage of its World War I neutrality to catch up, partly account for it. Furthermore, the progress achieved in the 1920s was outweighed by Spain's short-lived recovery from the depression, brought to a halt by the Civil War (1936–1939), and by a long-lasting and weak post-war reconstruction. In fact, although less destructive than World War II, and despite being Spain non-belligerent in World War II, post-Civil War's recovery in Spain was longer and less intense than in the warring Western European countries after 1945.

Thus, Spain fell behind between 1850 and 1950 (Fig. 4.2). The second half of the nineteenth century and the early twentieth century witnessed sustained per capita GDP growth, while paradoxically the gap with the industrialized countries widened over 1883–1913. Moreover, the gap deepened during the first half of the twentieth century.

The situation reverted from 1950 to 2007. The Golden Age (1950–1973), especially, the period since 1960 (a common feature of countries in the European periphery: Greece, Portugal, Ireland) stands out as years



Fig. 4.2 Spain's relative real per capita GDP (2011 EKS \$) (%)

of outstanding performance and catching up to the advanced nations. Steady, although slower, growth after the transition to democracy years (1974–1984) allowed Spain to keep catching up until 2007. The Great Recession reversed the trend, although it is too soon to determine whether it has opened a new phase of falling behind.

To sum up, the liberal regime of the *Restauración* (1875–1923), which provided political stability, but largely failed to offer incentives for accelerated growth; the 1930s and 1940s, with the Civil War and its slow and autarkic recovery; the 'transition to democracy' decade after General Franco's death (1975); and the Great Recession (2008–2013) stand out as those phases responsible for Spain's falling behind Western Europe. Conversely, over 1950–2007, especially during the Golden Age, Spain outperformed the advanced nations improving her relative position.

On the whole, Spain's relative position to Western countries has evolved along a wide U-shape, deteriorating to 1950 (except for the 1870s and 1920s) and recovering thereafter (but for the episodes of the transition to democracy and the Great Recession). Thus, at the beginning of the twentieth-first century, Spanish real GDP per head represented a similar proportion of USA and Germany's income to the one back in

mid-nineteenth century, although had significantly improved with respect to the UK and kept a similar position to that of the 1870s with regard to France. Lastly, compared to Italy, Spain has reached parity, as had been the case in the late nineteenth century and, again, in the 1920s.

A final reminder: the choice of splicing procedure for the modern national accounts can result in far from negligible differences in the relative position of a country over the long run. Moreover, the difference between the resulting series of interpolation and retropolation procedures appears much more dramatic when placed in a long-run perspective, that is, when the spliced national accounts are projected backwards into the nineteenth century with volume indices taken from historical national accounts. This is due to the fact that most countries, including Spain, grew at a slower pace before 1950, so the level of per capita GDP level by mid-twentieth century largely determines its relative position in country rankings in earlier periods.

In order to illustrate this point, I have constructed long-run estimates of real GDP per head for Spain using the retropolated series for 1958–2015 and compared them to the series obtained through interpolation (Fig. 4.3). The retropolation approach is the one conventionally used

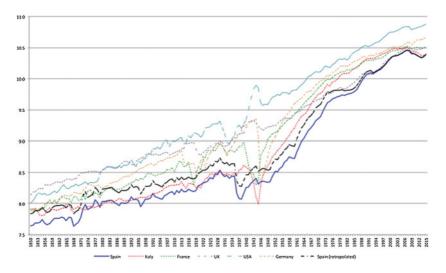


Fig. 4.3 Spain's comparative real per capita GDP with alternative splicing (2011 EKS \$) (logs)

(as discussed in Part II, Chap. 9) and has been employed, for example, in the Penn Table 9.0 (RGDP^{NA} series).⁵ It can be observed that when adopting the retropolated series, Spain overcomes Italy in terms of GDP per head over 1850–1950 (but for the Civil War years), matching France and Germany in the early 1880s.

Moreover, I have computed Spain's position relative to France and the UK (Fig. 4.4). The choice of yardstick countries obeys to the purpose of comparing a country of fast growth and deep structural change in the second half of the twentieth century, such as Spain, with others more mature and in which economic growth proceeded at steadier pace. The reason is that it is fast growth and deep structural transformation what produces the large disparities between new and old benchmark national accounts series for the overlapping year. In most countries, national accounts have been spliced through retropolation. However, in the yardstick countries, the method of splicing national accounts is not a relevant issue because, as their structural transformation was largely completed before the modern national accounts era (post-World War), differences between new and old national accounts estimates are small at the overlapping year.

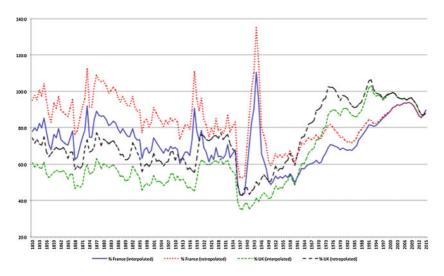


Fig. 4.4 Spain's real per capita GDP relative to France and the UK with alternative splicing (2011 EKS \$)

According to the figures derived from using the retropolation splicing procedure, during the second half of the nineteenth century, real per capita GDP in Spain would have matched that of France in the mid-1850s and, again, between the mid-1870s and mid-1880s. Furthermore, when its retropolated series are considered, Spain would have practically matched British per capita income during the last quarter of the twentieth century with a *sorpasso* in 1974 and, again, at the beginning of the 1990s. These results are in stark contrast with those derived by splicing national accounts through interpolation. Thus, Spanish GDP per head would have represented above four-fifths of the French over 1973–1984 and would have represented less than 90% of the British with a brief takeover during 1990–1993. It can be, then, concluded that whatever the measurement error embodied in the interpolation procedure may be, its results appear far more plausible than those resulting from the conventional retropolation approach.

Notes

- GDP levels in 2011, converted into 'international' dollars using EKS purchasing power parity (PPP) exchange rates (World Bank 2013) http://siteresources.worldbank.org/ICPEXT/Resources/ICP_2011.html, have been projected backwards with per capita GDP volume series that, in the case of Spain, correspond to the new historical estimates with post-1958 hybrid linear interpolation. For the rest of countries, volume series from the Maddison Project (2013), http://www.ggdc.net/maddison/maddison-project/home.htm, completed with data from Conference Board http://www.conference-board.org/data/economydatabase/.
- 2. Alternatively, I have carried out the exercise with the 1990 ICP benchmark estimate favoured by Maddison (and so far, by the Maddison Project) with rather similar results.
- 3. A new assessment of pre-1850 Spain is provided by Álvarez-Nogal and Prados de la Escosura (2013).
- 4. It is worth noting that national accounts series for pre-1970 Italy have been spliced through linear interpolation (Baffigi 2013).
- 5. http://www.rug.nl/ggdc/productivity/pwt/.

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