Pensions: which Hypotheses for which Lt Projections?

Editorial | www.reforming.it

Differences between IMF and national baseline pensions projections are less serious than what may seem at first reading of a recent IMF paper. Nevertheless, at least two main critical points may deserve caution: GDP growth and aging in the first ten years of the projecting very long horizon. A short comment by Reforming...

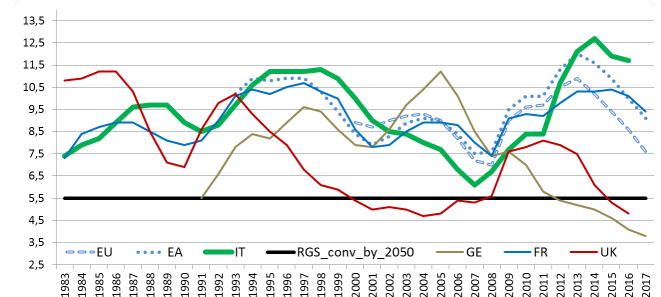A recent paper on Italy by IMF [1] contains a chapter dedicated to public pensions. Basically, it points out that current baseline scenario for medium-long term expenditure projections developed by Italian General Accounting (RGS) could suffer from underestimations.

Critical evaluations of Italian pensions system are not new and normally underline some well know structural aspects, the same briefly described in a previous Reforming Note[2]. What is now rather surprising in IMF paper is the fact that it raises two punctual and very precise criticisms on the hypotheses at the basis of projection exercises. In particular, authors refer to three groups of hypotheses: *1)* on labor market, *2)* on productivity and GDP growth, and *3)* on demography and aging. On all three sides, national baseline projections are commented as too optimistic by far.
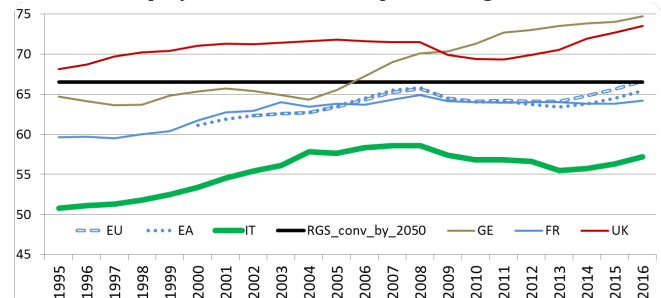
As far as labor market is concerned, the following three graphs show historical trends in unemployment, employment and activity rates for Italy, France, Germany, United Kingdom and EU and AE averages. The thick black horizontal lines represent levels each variable is expected to gradually converge to by 2050, according to RGS baseline projections[3].

1. Unemployment Rates - % Active population

Source: elab. on Eurostat

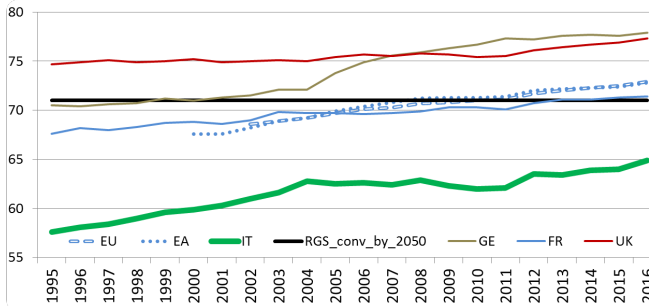2. Employment Rates - % Population aged 15-64

Source: elab. on Eurostat

[1] Andrle M., S. Hebous, A. Kangur, M. Raissi 82018), "*Italy: Toward a growth-Friendly Fiscal Reform*", WP/18/59. See .pdf enclosed to this RN.

[2] See RN "*Sketches of Italian pensions Conundrum*".
[3] See RGS (2017), "*Medium and long term trends of Italian pension, health and social system*".

## 3. Activity Rates - % Population aged 15-64

Source: elab. on Eurostat

Italy activity and employment rates come from a long period of significantly lower values with respect to FR, GE, UK, EU and AE. Nevertheless, on both sides it is possible to recognize a clear recovering trend that, even if weakened / slowed down by the crisis, is still ongoing. Gradually bridging the gap with respect to the hypothesized long-term values appears in the path of progresses Italy has already demonstrated capable of during last couple of decades. Of course, this does not mean that future improvement won't need support by appropriate policies.

A similar argument can be referred to Italian unemployment rate (graph. 1). In this case the tendency toward the long-term level hypothesized by RGS was even clearer before the crisis erupted. Exceptionally high post-crisis rates (specific not only to Italy) have already started reducing. Full reabsorption of the shock needs to be supported by coherent policies - above all in the immediate years - but convergence target by 2050 does not seem disproportionate.

4. GDP growth Rates
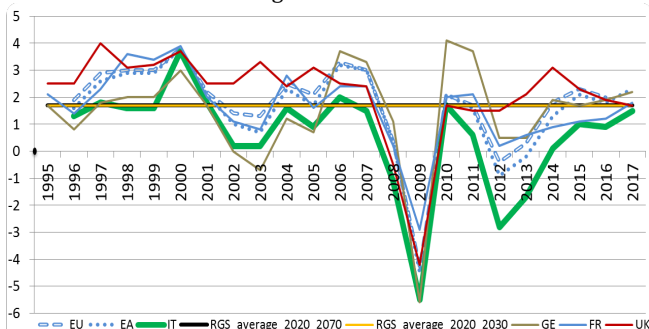
Source: elab. on Eurostat

As far as productivity and GDP are concerned, graphs 4. and 5. show GDP and per-capita GDP growth rates for IT, FR, GE, UK, EU and AE. The two thick black and yellow horizontal lines (almost perfectly overlapped) represent average values the two variables are expected to take respectively over the period 2020:2070 (black line) and over the period 2020:2030 (yellow one).

5. Per-capita GDP growth Rates
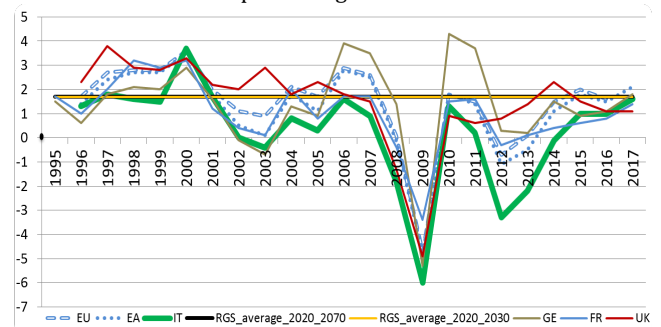
Source: elab. on Eurostat

Both in the medium-long (2030) as well in the very long term (2070), RGS hypothesized values - slightly below 1.7 percent[4]- appear indeed more favorable than Italian economy performances during last twenty years. Nevertheless, this evidence could be weighted with some quantitative and qualitative considerations.

Net of the double dip of the crisis[5], GDP and per-capita GDP grew at an annual pace slightly above respectively 1.5 and 1.2 percent between 1996 and 2007. Just before the first dip, GDP growth rate was 2.0 percent in 2006 and 1.5 in 2007, while in the same years per-capita GDP grew by 1.6 and 0.9 percent. Just before entering the second dip in 2010, GDP grew by 1.7 and per-capita GDP grew by 1.3 percent. By end of 2017, recovering from the second dip has been almost completed, with GDP

[4] Figures derive from interpolations of quinquennial data at page 403 in RGS (2017).
[5] An extraordinary event that, even that can leave enduring structural consequences, cannot be taken as explicative of future potential growth per se.

marking +1.5 and per-capita GDP marking + 1.6 percent.

All in all, though favorable, growth rates in RGS baseline scenario do not seem totally lacking "roots", as one may be tempted to argue after reading some passages of IMF paper ("far above", "very optimistic"). It is necessary to distinguish between medium and long and very long run. On one hand, over the long run (2040, 2050 and beyond) an average annual growth rate close to - but not exceeding - 1.7 percent can be reachable and suitable as central variant of an interval of guesses.
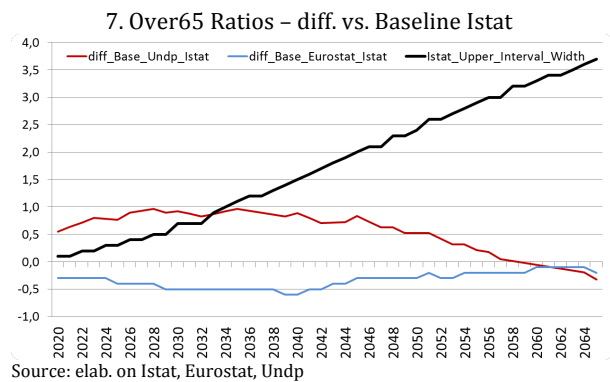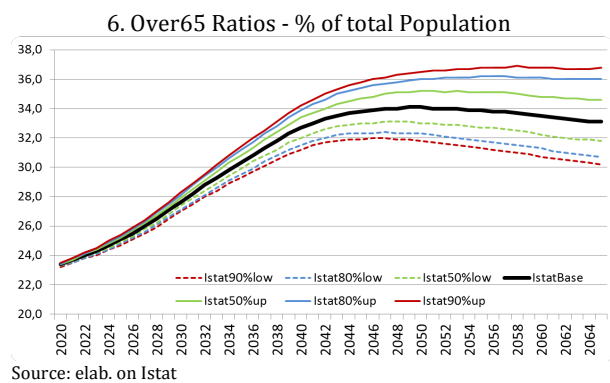
On the other hand, what sounds surely more challenging is to reach immediately that pace of growth and, above all, constantly maintain it over next decade (till 2030), as assumed in RGS baseline scenario as well. This result will need effective and constant support by policy, with clear ideas about growth stimulating choices, and a prompt political scenario of stability and responsibility, as underlined also by ECB President, Mario Draghi, soon after the recent electoral round. It is plausible thinking that what is going to happen in the first years of the projecting horizon will lay the roots for following dynamics.

Finally, as demography is concerned, IMF uses UNPD projections[6] that entail a more rapid aging compared to RGS that, on its side, uses ISTAT baseline demographic projections.

Graphs 6. describes ISTAT demographic scenarios and in particular people aged 65

[6] See UNDP website: https://esa.un.org/unpd/wpp/.

years or more as percentage of total resident population: the central thick black line is the baseline and around it there are intervals with different levels of statistical confidence (50, 80, 90 percent).

6. Over65 Ratios - % of total Population

Source: elab. on Istat

7. Over65 Ratios – diff. vs. Baseline Istat

Source: elab. on Istat, Eurostat, Undp

Graph 7. compares ISTAT baseline demographic scenario with three alternatives: UNDP baseline (red line), EUROSTAT baseline (light blue), and ISTAT high variant (black line). Comparing ISTAT baseline and high variant scenarios gives a measure of the width of the statistical confidence interval for population dynamics.

Graph 7. tells three clear-cut things: *1)* ISTAT baseline is barely less optimistic (implies more aging) than EUROSTAT baseline; *2)* until 2030 UNDP baseline implies more aging than ISTAT high variant scenario (it falls beyond the upper limit of statistical interval by 0.5 percentage point almost every year); after 2030, UNDP baseline starts converging toward ISTAT baseline albeit at a slow pace.

8. Structural Dependency Ratio – diff. vs. Baseline Istat

Source: elab. on Istat, Eurostat, Undp
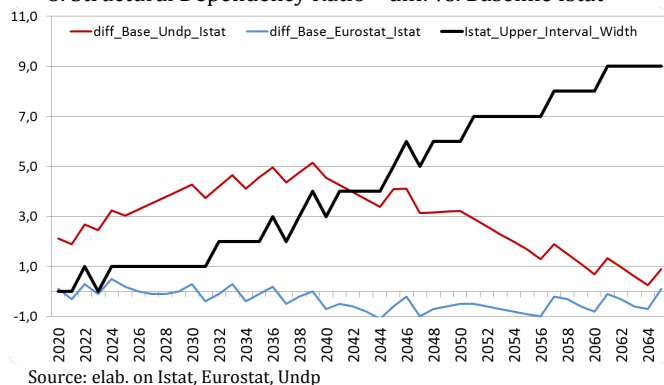
Looking at another demographic indicator – structural dependency ratio in Graph 8.[7] – provides the same evidence and even more clearly. Until 2040, UNDP baseline describes stronger aging tendencies than ISTAT high variant scenario, with annual differences amounting to a couple of percentage points on average, with peaks over 3 p.p.. ISTAT and EUROSTAT baseline scenario remain more or less aligned, particularly in the first part of the projecting horizon. Only after 2040, UNDP scenario starts a gradual convergence toward ISTAT baseline.

Discrepancies in demographic projections - concentrated in the very next future - seem to play a substantial role in explaining different expenditure projections by IMF and RGS. What appears contradictory is that even in the very short run[8] (2020) there is a misalignment between the two baseline scenarios, more than 0.5 p.p. for the incidence of aged 65+ and almost 2 p.p. for the structural dependency ratio.

Nevertheless, also net of this initial misalignment, UNPD baseline overlaps almost perfectly with ISTAT high variant scenario during next decade, until 2030. Is UNPD baseline overestimated or ISTAT baseline underestimated? Surely this point needs to be investigated and clarified in order not to weaken the relevance of projecting exercises for grounding economic policies.

---

[7] People aged 65+ as percentage of those aged 15-64 years. It gives the idea of the proportion between no more active, possibly retired people and active people.

[8] Couple of years is very short time for demographic dynamics.