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THE FRENCH PENSION SYSTEM IN THE LONG RUN : BALANCED OR NOT BALANCED ?

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Summary

Financial projections recently conducted by the French Pensions Advisory Council (Conseil d'orientation des retraites, COR) show large deficits in the medium run which should attract the attention of policy-makers. But what about the long-run projections? This IPP Policy Brief discusses these recent projections and stresses a number of implications. The various macro-economic scenarios lead to a wide variety of outcomes concerning the financial equilibrium of the pension system. The median scenario of these projections shows a stabilisation of pension spending as a share of GDP in 2050-60 but this result is highly dependent on the growth rate of the economy. Were growth higher than expected, public pensions would shrink as a share of GDP. On the other hand, were growth lower than expected, then the current system would result in an increasing share of pensions in the national income. This mechanism is the result of the type of pension reforms implemented in France since the mid-1990s: by indexing both pensions and reference wages to inflation, pension liabilities are only reduced if growth is significant. Reforming the French pension system to make its financial equilibrium less dependent on growth could be another objective – in addition to reducing its complexity – of a possible structural reform ■

- The 2012 budget projections of the pension system by the French Pensions Advisory Council show a situation that is still worrying in the short to medium term, but close to stable in the long term.
- This indicates that the reforms already in place should have a significant impact once they have been ramped up to full form.
- However, the results remain sensitive to assumptions of growth and new regulations are needed to reduce that dependence on a growth that remains uncertain.

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The French Pension Advisory Council (COR hereafter) projections are the main benchmark for the assessment of pension reforms in France. The last report was published in December 2012; how does it compare with previous reports? How are we to interpret the new message that announces the quasi-stabilisation of pension spending in the long term?
This IPP Policy Brief compares the new report with the four previous projections, carried out in 2001, 2006, 2007 and 2010. It reiterates how the reforms affected both the results of the projections and subsequent revisions of the demographic and economic hypotheses. It discusses one of the points that remains problematic in the search for a permanent solution to the problem of the financial balance of the pension system, that of the dependence on growth.

The new projections

At the end of 2012, the COR published the results of a new exercise in projection, the fifth since its creation in 2000. The discussions that followed often focused on the size of the financial problems to be managed in the short and medium terms. The deficit announced for 2011 was 14 billion euros, or 0.7 per cent of GDP. In 2020, it will amount to between 20.8 and 24.9 billion euros, or between 0.9 and 1.1 per cent of expected GDP. These figures can be interpreted as new proof that, from one projection to another, the pensions problem gets worse, despite the reforms already implemented.

However, **if we look beyond the medium term, these new projections call for a different reading**. Their range increases as the horizon recedes (Figure 1.D) because the COR chose to diversify significantly the scenarios. The median scenario shows no additional deterioration in the long term, with a deficit that even decreases to 0.6 per cent of GDP in 2060, and a pensions-to-GDP ratio also slightly reduced: to 13.5 per cent of GDP as against 13.8 per cent today. The variations are spread over the median scenario, including even a case in which the system goes into surplus: scenario "a", certainly optimistic, leads to a 0.5 per cent surplus in GDP, the pensions share of which has decreased to 12.4 per cent.

Over the long term, the message is, therefore, far from the catastrophism often associated with pension cost projections. This raises several questions; the first is whether the size of the problem was not overestimated from the start, for example, by overly-pessimistic demographic projections. The answer to this question is simple: from one projections exercise to the next, the demographic hypotheses have changed – we return to this point later – but improvements in the financial perspectives are mainly due to effects of recent reforms. The period of the projections was punctuated by three major reforms to the basic schemes – in 1993, 2003 and 2010 – and by regular changes to the complementary and special schemes (see Box 1). The question to answer first then, is how these reforms have played out. How much uncertainty is there about their efficacy? What issues remain to be addressed?

« […] improvements in the financial perspectives are mainly due to effects of recent reforms »

Box 1: A brief reminder of the French pension reforms

The 1993 pension reform was the first serious reform of the French pension system, which sought to adapt it to the demographic changes expected in the third millennium. The reform concerned the basic plan for private-sector employees, introducing the first tightening of conditions for accessing a full pension, and most importantly, measures intended to reduce the relative growth in the level of pensions: the shift to a calculation based on the past 25 highest salary years, adjusted only in line with prices, instead of the 10 highest salary years adjusted to wage growth. The next two reforms also concerned public sector schemes. The 2003 reform equalised conditions for accessing a full rate pension in the public and private sectors and toughened these conditions in both sectors in line with increasing life expectancy, at least until 2020. The 2010 reform raised by two years the minimum age for entitlement to retirement benefits (from 60 to 62) and the age when the penalty for early retirement ceases (from 65 to 67).

In the complementary schemes for private sector employees (Arrco and Agirc – point-based schemes), the pursuit of financial stability has been the subject of continuing negotiations. In these schemes, the main guiding principles are the rate of contribution, and the value of service and purchase of retirement points. The ratio of these values determines the return from contribution in the system. One way to reduce the return is to index the value of points-purchase to wages and the value of service to inflation. The main agreements were made with Arrco in 1993, with Agirc in 1994 and 1996, then with Agirc and Arrco together in 2003, 2008 and 2011.

Finally, the special schemes (in public utilities like railway and Metro services) underwent reform in 2007 and the complementary scheme for non-permanent public sector employees (Ircantec) in 2008.

Back to 2001

Figures 1.A to 1.D recapitulate the main results of the projections made by the COR since its establishment, using the pensions-to-GDP ratio as the indicator. The most significant hypotheses in these projections are summarised in Table 1.

We begin by reviewing the diagnosis of 2001. The COR's first projections showed what the pensions share of GDP would have been in the absence of any reform or, more precisely, in a situation of business as usual, in which both the retirement age and the ratio between the average pension and the average net income remained as they were. This is represented in the upper curve in Figure 1.A. From an initial value of 12 per cent of GDP in 2001, the pensions share would have risen to up to 18.5 per cent of GDP by 2040, the date chosen as the final horizon for the projections.

This result arose almost entirely from demographic perspectives, namely (a) a slight downturn in the working-age population, but particularly (b) a marked growth in the number of people aged 60 years or more, due to the combined effects of the increase in life expectancy and the baby-boom generation reaching retirement age. Generally, the expected effect was a growth in the number of retirees by 1.8 points by 2050. But to maintain the status quo in the face of such an increase does not imply a correspondingly high growth in the ratio of retirement pensions to GDP, because of a compensating effect: when the rate of tax on working people is increased, their net revenue is reduced and therefore so is the extent of the increase required to align the quality of life of the two population groups**.**

Table 1: Main hypotheses and economic variations of the successive COR projections

	Scenarios	Birth growth rate	Net migration	Long terme unemployment / Date of stabilisation	Productivity	Législation (for basic schemes only)
2001	Reference	1,8	50000	4,5/2010	1,6	1993 Reform
	Without reform					Statu quo while maintaining the relative quality of life for retirees
2006		1,8	50000	4,5/2015	1,8	1993 and 2003 reforms
2007		1,9	100000	4,5/2015	1,8	1993 and 2003 reforms
2010	a	1,9	100000	4,5/2020	1,8	1993 and 2003 reforms
	b			4,5/2020	1,5	
	c			7/2020	1,5	
2012	a'	1,95	100000	4,5/2030	2	1993, 2003 and 2010 reforms
	a			4,5/2030	1,8	
	b			4,5/2040	1,5	
	c			7/2030	1,3	
	c'			7/2030	1	

Source : COR, reports n° 1,3,4, 8 and 11.

Note : The hypotheses of life expectancy are not reported because they are less variable from one scenario to another. The indexation of the duration of insurance to life expectancy projected by the reforms of 2003 applies only until 2020.

The required increase was no less substantial: 6.5 points of GDP would have been necessary to fund retirement pensions. There would certainly have been a significant problem to deal with, and this first report of the COR showed that the reforms of 1993 were a first step in solving it. This is the "scenario of reference" in the 2001 projections, in which the ratio of retirement payments to GDP rose to 16 per cent in 2040, that is, 2.5 points less than were the status quo to prevail.

The 1993 reform mechanisms

To achieve this result, the 1993 reforms included a measure of great symbolic value: a toughening of access to full retirement benefits from 60 years, for all employees in the private sector, by increasing the required years of contribution from 37.5 to 40. But the financial impact was above all attributable to another measure – the move to a calculation of the pension based on the 25 highest salary years, and the interaction between this policy and one starting from the end of the 1980s, that is, the indexation to price indices of pensions already liquidated and earnings taken into account in the pension's calculation formula.

Let's specify the mechanisms of the reforms. The pension depends on the earnings gained by an individual over the whole period of his or her career, within the limits established by the social security system. The retirement pension is a percentage of n best years of these salaries, after adjustment of their amount to current purchasing power. Until the mid-1980s, this indexation was based on the growth of average wages and the 10 best years were taken into account. The 1993 reforms perpetuated this principle and increased the number of years taken into account from 10 to 25. This process occurred until 2008 and resulted in an inevitable brake on pensions because the average of the highest 25 salary years slightly adjusted is necessarily lower than the average of the 10 best years significantly adjusted.

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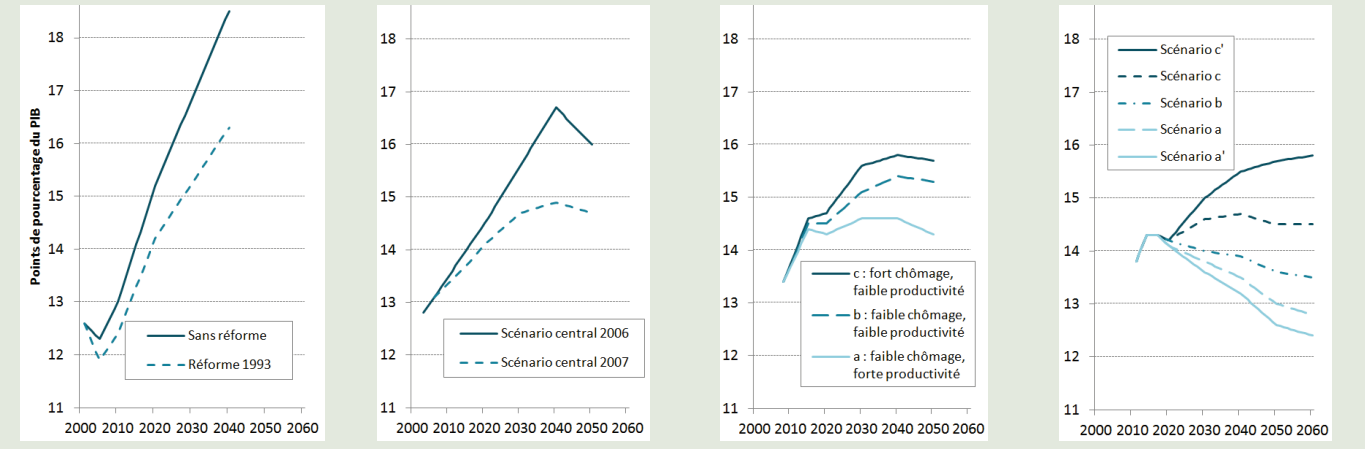
Changing the indexation rule of the pension after liquidation reinforces this effect. Here, we also shift from indexation linked to growth to indexation linked to prices. Once liquidated, pensions stagnate instead of evolving as wages do. The purchasing power of retirees is certainly guaranteed to the end of their retirement in absolute terms, but while that of working people continues to grow, pensions decrease relative to general income levels, which contributes to the decline in the pensions share of GDP.

Figures 1.A to D: The share of pensions in GDP according to successive COR projections



1.A - 2001 Scenarios, « reference » and «without reform» (from bottom to top respectively)

1.B - Main scenarios of 2007 (bottom) and 2006 (top)

1.C - 2010 scenarios: variations a, b and c (from bottom to top)

1.D - 2012 scenarios: variations a', a, b, c and c' (from bottom to top)

Source : Conseil d'orientation des retraites, Report n° 1, 3, 4, 8 and 11. See Table 1 for the hypotheses of these successive projections.

All these effects are clearly very gradual. Strictly speaking, they should not be put in place until the last of the generations that began work before these changes has disappeared, that is, around 2060. The end of the implementation is in practice very flat, but it then is a good 40 years before the greatest benefits are reaped. Indeed, the gap between the two trajectories (without reform and "reference") simulated in 2001 is only very gradual, as shown in Figure 1 A.

Projections 2006-2007: a long term becoming clear but a short term less favourable than expected

The 2001 exercise was followed by two others, close together, in 2006 and 2007. Both pushed the projection horizon to 2050 and incorporated the effects of the 2003 reforms which, unlike those of 1993, sought not to play with the replacement rate but rather with the pensionable age, through continuing and extending to the public sector a toughening of conditions related to years of contribution required to qualify for the full pension from the age of 60.

Despite these reforms, the 2006 projection did not appear to result in a situation much more favourable than that of 2001 (Figure 1.B). The comparison of these two sets of projections was nevertheless difficult because there were several reasons for the gaps: different regulatory and demo-economic assumptions, but also differences of coverage and development in projection tools. Evaluation of the pure effects of the reforms is today even more difficult, even if the orders of magnitude can be provided (see Box 2).

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The 2007 experiment, however, showed results considerably more favourable, this time for a reason easily identified. This revision was a "light" exercise, aimed at supplying the 2008 meeting with data, and whose only innovation was to take into account Insee's new demographic projections with the rise in the birth rate from 1.8 to 1.9 children per woman, and the hypothesis of an increased rate of net migration, from 50,000 to 100,000 per annum. In the preceding decade, migration flows oscillated between the two extremes, and since then, the projection has been based on the upper rather than the lower limit of the cycle, while keeping the value of 50,000 as a variant.

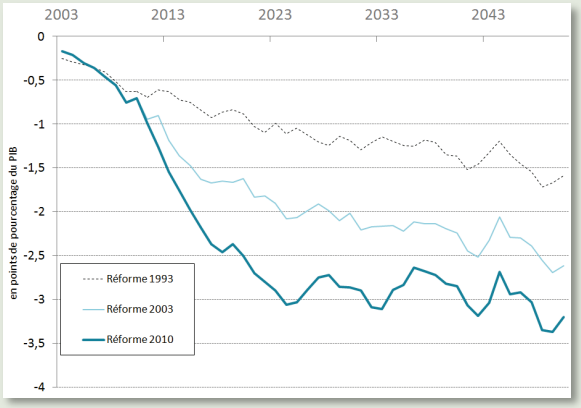
These modifications to the demographic assumptions resulted in not only a quantitative but also a qualitative change to the message: with these new figures, the size of the working-age population did not shrink but rather stabilised. Obviously, this does not represent the end of the ageing of the population, or of the problem of pension costs, since, as indicated above, previous diagnoses mostly depended on the growth of the number of retirees and only secondly on a decrease in the number of people working. Nevertheless, this revision pulled the projections in a more positive direction.

Box 2: Evaluating the pure effect of the reforms

he projections carried out by the COR do not allow an evaluation of the pure effects of the reforms in the given demo-economic field and environment. That is a complex exercise, done through the synthesis of detailed projections carried out by different retirement schemes, using their own tools. Their weight limits the study of variants, and they do not have, therefore, variants consistent with reconstituting the trends in retirement costs in the absence of all or part of the reforms already implemented, which would be the best way to evaluate their real impact.

To achieve this would require tools simultaneously light enough to allow the building of quick variants without the costs of co-ordination between retirement organisations and precise enough to take into account the complex effects of numerous variables that affect reforms. One model of this type is the Insee microsimulation model "Destiny". As an illustration, Figure 2 below evaluates the relative impact of successive reforms on the total pensions expressed in GDP points, according to Blanchet and Le Minez (2012).

Figure 2 : Cumulative impact of reforms on the pensions-to-GDP ratio



Source : Modèle Destinie, Blanchet et Le Minez, 2012

This evaluation was conducted using a small sample and is affected by a certain instability but nevertheless gives an idea of orders of magnitude. According to this exercise, the 2003 reforms would have reduced the pensions total by around 1.5 GDP points over the long term: there is only a limited effect from the only real novelties of this reform, which were the move from 37.5 to 40 years in order to access a full pension and the move from 10 to the 25 highest salary years to calculate the salary of reference. The effects of the transition to indexation to prices are assumed to play upstream, as this shift had begun before the reforms. To these 1.5 points, the 2003 reforms added a new reduction of one point and the same for those of 2010. We note that the latter had more significant effects in the medium term than the long term. The reason is that it acts mostly on the minimum age of departure, but the impact of this measure gradually reduces as and when it affects generations which even without this reform would spontaneously retire later and later, because of the effects of the two previous reforms.

This optimistic revision was even more remarkable given that the starting point for 2007 was slightly higher than predicted in 2001, growing from 12 to 13 points of GDP, partly because of the correction to the field, but above all because of the economic changes in the meantime, which were much less favourable than predicted in 2001.

The projections of that year envisaged an unemployment rate of 4.5 per cent from 2010 onwards, for two reasons: it showed that the pension problem arises even with optimistic assumptions about employment and it did not seem too speculative at the end of a period during which unemployment fell. But the bursting of the internet bubble and the return to a lower rate of growth invalidated the hypothesis. The projections of 2006 and 2007 took note, without giving up entirely on a return to full employment, instead simply pushing it forward to 2015.

The 2010 and 2012 exercises: projections in times of crisis

The sequence of events again disappointed optimistic expectations. The effects of the 2007 subprime mortgage crisis were felt throughout the global economy in 2008. By destabilising public finances, it precipitated the need for new reforms, which had to be based on updated projections. Like the reforms of 2007, those that were produced at the beginning of 2010 were in simplified form, without demographic variations but proposing three scenarios for the exit from the crisis, labelled a, b and c. These scenarios combined two hypotheses about unemployment in the long term (4.5 per cent in scenario a and 7 per cent in scenarios b and c); and two hypotheses of annual growth in productivity after removing the effects of the crisis: 1.8 per cent in scenarios a and b, and 1.5 per cent in scenario c.

This update brought out, above all, the effects of the crisis in the short and medium terms. Some transitory bumps in the pensions-to-GDP ratio appear in Figure 1.C. At first, pension costs continue their pre-crisis momentum. The resulting bump is therefore a denominator effect, a decrease in GDP. In the longer term, everything depends on the way in which we exit the crisis. If we end up returning to the rates of unemployment and growth envisaged before the crisis, then the long-term result is unchanged. The lasting effect of the crisis is at most a reduction in the level of GDP, if the lost years of growth were caught up, but this weaker GDP would end up being associated with pensions that are also weaker. The pensions-to-GDP ratio is only lastingly affected if the crisis marks the beginning of an era of weaker growth, as is assumed for the period for scenarios b and c. The comparison of scenarios a and b give an accurate measure of this sensitivity to the hypothesis of growth, since both also rest on the same assumption about unemployment. A reduction of 0.3 points in the rate of growth translates into an increase of one point in the ratio of pensions to GDP.

That dependence reappears in the 2012 projections. They integrate the effects of the 2010 reforms, which above all, sought to influence the retirement age by directly touching the age of entitlement, raised from 60 to 62 years. In order to take into account the effects of this third serious reform, the COR returned to a projection exercise described as "heavy", mobilising most pension schemes, in an even broader range of macroeconomic scenarios, this time with a hypothesis of an annual increase in the rate of productivity of between one and two per cent. Assumptions about long-term unemployment stayed the same at 4.5 per cent and 7 per cent, the idea of an indefinite continuation of mass unemployment being difficult to entertain. Still, the horizon for a fall in unemployment is pushed even further back, with stabilisation occurring only in 2030 and 2040.

The results of these new projections are those we mentioned in our introduction, and are shown in Figure 1.D. Three of the five scenarios forecast a renewed decrease in the pensions proportion of GDP, but the gap between the scenarios at either end is significant. Between the most pessimistic scenario (assuming annual growth of one per cent) and the most optimistic (growth at two per cent), the pensions share of GDP in 2060 varies between 12.4 and 15.8 per cent. The message there is therefore that we would be not far from an equilibrium if we believe in the average between those two scenarios, but with a very significant margin of doubt. Where does this strong sensitivity to assumptions about growth come from and can we make the perspectives of the system less sensitive to macroeconomic vagaries?

Explaining the sensitivity to growth assumptions

The dependence of the assumptions on growth is explained in part by the way in which the 1993 reform sought to reduce the continuing growth of pensions. As indicated, it was mainly based on prices indexation mechanisms. These mechanisms do not stop pensions from growing parallel to wages over the long term, but the gap between pension and wages is all the more important as the growth rate is rapid.

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The order of magnitude of this effect can be explained briefly as follows: consider that the average pensioner at time t is about 75 years old. The purchasing power of his current pension was established at the time of its liquidation, 10 to 15 years earlier, on the basis of the purchasing power he had during the best 25 years of his career, being on average 12.5 years earlier still. In total, at time t, the average pensioner's purchasing power is fixed at date t-25. It is this anchorage that guarantees the steady parallel growth of retirement benefits and wages, but this link is in fact elastic: the more rapid the growth, the bigger the difference between purchasing power at t and t-25. Hence the link between pension and wage is more tenuous with rapid growth. A 25-year gap between the trends of retirement pensions and wages implies variations of plus or minus 25 per cent in the pensions-to-wages ratio for each growth point. Around a reference situation in which pensions represent 13 per cent of GDP, such a spread in the average retirement benefit leads to a spread in the pensions mass of 13/4=3.25 points of GDP, which is almost exactly the result obtained by the COR.

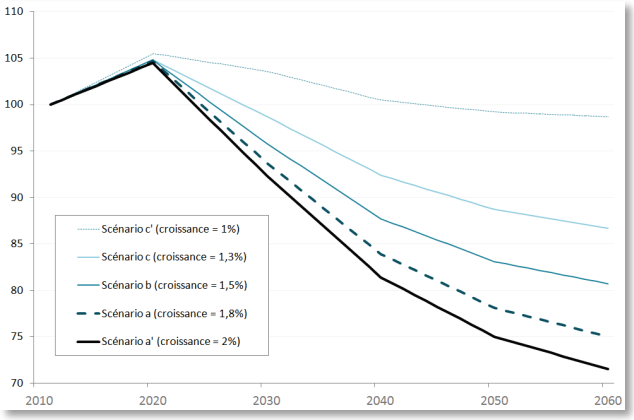
However, this is not the only mechanism. In the complementary schemes, the extent of the decoupling of pensions and economic growth is based on assumptions about the indexation of the value of purchase and service of retirement points. The only scenarios mentioned here are those in which those values are both indexed to prices, which in the long term stabilises the pension-to-wages ratio; but there are variants called "diminishing returns" in which the indexing of the purchase value to wages and the service value to prices leads to a continuing brake on pensions. This results in a more optimistic message about the financial balance of pension schemes, but obviously a much less positive one for the level of pensions.

The assumptions about indexation also play an important role in the projection of the cost of the minimum old-age pension, serviced by the Fonds de Solidarité Vieillesse (FSV, Old-Age Solidarity Fund). The COR assumed that it is indexed to prices. That has been the practice in recent times and the law does not predict any more than such indexation. **This also contributes to the optimistic financial projections**: in scenario b, the FSV passes from a deficit equal to 0.2 points of GDP to a surplus in the long term of 0.4 points, which is also due to the decrease in unemployment, because the FSV is responsible for the contributions made by the unemployed to old-age insurance. This hypothesis of the indexation of the minimum old-age pension to prices obviously raises questions, and the COR presents them as conventional. If the object of the minimum old-age pension is to protect seniors from poverty, and if we maintain a relative definition of poverty, then it is indexation to the average standard of living that ought to prevail.

« If the object of the minimum old-age pension is to protect seniors from poverty, and if we maintain a relative definition of poverty, then it is indexation to the average standard of living that ought to prevail »

The relationship between growth and the relative level of pensions as a result of all these assumptions is outlined in Figure 3. In a situation of rapid growth, the average pension in 2060 will have lost almost 30 per cent of its value compared with wages at the same time. On the other hand, scenario c, with growth at one per cent, would bring us back to the status quo for the relative purchasing power of pensioners. And regardless of the scenario, we see an initial phase of improvement in the ratio of pensions to net wages, corresponding to the transition period in which pensioners continue to follow their pre-crisis trend, while the working-age population is subject to unemployment and a brake on wages. The improvement is around five per cent on the 2020 horizon.

Figure 3 : perspectives of the ratio of pensions to net average/average net salary (base 100 at 2011)



Source : COR 2012

Summary and questions

The effects of growth on prospects for pensions can be summarised as follows. A conjunctural slow-down plays to the advantage of pensioners. If it is only temporary, then its effects progressively disappear. If it is the start of a sustained phase of lower growth, then the pensions also end up decreasing, but because of the indexation rule, they decline more slowly than the standard of living of the working-age population. The return to equilibrium comes, then, through sufficiently dynamic growth and only solves the pension problem thanks to a marked step back in pensioners' relative purchasing power.

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These results obviously raise questions. Is it normal to have to rely to such an extent on growth? Can we allow a counter-cyclical behaviour in retired people's relative purchasing power? Instead of having highly sensitive relative standards of living for pensioners and pension costs, would it not be better to fix benchmarks for one and or the other and provide balancing mechanisms that would prevent too much divergence from these targets?

And can this be done in the context of existing systems, or must we implement a comprehensive overhaul of the system, including consideration of fair indexation of the minimum retirement benefit? It is not certain that the 2013 meeting will be able to come up with answers to all these questions, but it will be a step in the right direction if it can begin to share out the task of doing so.

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