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# WHAT REFORM FOR THE FRENCH PENSION SYSTEM? THE BIG ISSUES

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**Summary**

The pension reform announced by Mr Emmanuel Macron during the French presidential election campaign was based on certain general principles, often summed up by the commitment that "each euro contributed gives the same entitlements". Since the details of the reform are not yet known, this policy brief aims to contribute to the public debate by presenting the basic principles of a pay-as-you-go system that, regardless of which target system is selected, is well conceived, and to emphasise the points where choices and trade-offs need to be made by the democratic debate. We thus highlight the advantages of revaluating pension entitlements with wage growth, and of setting transparent rules for changing pension formulas according to how the demographic conditions of the country change. The choices to be made are, however, major ones: what overall contribution rate should be chosen? What convergence should be established between the contribution rates of the various pension schemes? How fast should we transition to the new system? How can the solidarity mechanisms be improved? Or indeed what governance should be put in place? ■

- The debate on the choice of the ideal pension system does not come down merely to a choice between annuities, notional accounts, or points, but rather it should be based on general operating principles.
- Revaluation of entitlements built up over a career according to how salaries grow is the only option that makes it possible to guarantee that each euro contributed gives the same entitlement regardless of the time at which it was paid in.
- At any given contribution rate, the financial balance of the system also requires the pension calculation rate for calculating pension as a percentage of salary to be adjusted to accommodate the demographic conditions, including, in particular, average life expectancy per generation.
- The solidarity mechanisms could be designed in such a manner as to reproduce the redistribution of the current system, or indeed as to improve it.

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The reform of the French pension system that was proposed by Mr Emmanuel Macron while he was running for President aims to remodel the current system so as to achieve "a system that is universal, fair, transparent, and reliable" with the aim of "re-establishing trust". The French President confirmed this vision during a speech he made to the *Cour des Comptes* (Court of Audit), rejecting the repeated parametric reforms approach, and calling for a structural reform based on the campaign slogan: "for each euro contributed, the same entitlements for everyone". The French Government confirmed these objectives by appointing Mr Jean-Paul Delevoye as High Commissioner for Pensions Reform, with the brief of preparing implementation of this ambitious reform, with the support of the government departments and agencies.

While the principles have been clearly stated, the exact content of the reform is still not known. In this IPP Policy Brief, we present the big issues of this reform and the choices and trade-offs that will need to be discussed and made by the public debate.

## THE STATE OF THE CURRENT FRENCH PENSION SYSTEML

The French pension system offers high replacement rates in comparison to many other countries, resulting in a high mandatory contribution level. Past reforms have made it possible to reduce significantly the anticipated financial imbalances, induced by population ageing (COR, i.e. the Pensions Advisory Council, 2016). However, the current system still has major deficiencies.

### *Illegibility, complexity, and suspicion of unfairness*

The French pension system is made up of a multitude of mandatory schemes, almost all of which operate on a pay-as-you-go basis, but with different rules for calculating the pensions: the best 25 years for the basic private-sector scheme, the last 6 months for civil servant pay, the entire career for the supplementary schemes in the private sector, etc. **These disparate rules contribute to making entitlements illegible:** only 28% of the working population know how much they are contributing, and only 18% of them know how much pension they will receive (Soulat, 2017). This can also arouse a feeling of injustice, with some people having the impression they are contributing more than others for the same amount of pension. And yet the actual replacement rates at retirement are closer than the differences in rules might suggest (Aubert and Plouhinec, 2017).

### *A shaky financial balance*

Each time the pension system has been reformed, the Government of the day has announced that it would be the last reform, and each time, a further reform has followed, each reform following ever closer on the heels the preceding one: 1993, 2003, 2010, and 2014. All of the balancing "levers" have been applied: raising the contributions, raising the retirement age, and lowering the pension levels.

These reforms have limited the rise in pensions spending resulting from population ageing, but the resulting long-term balance remains dangerously dependent on demographic changes (falling birth rate, and rising life expectancy) and on economic growth. It is necessary to have growth of at least 1.3% in order to hope to achieve a balance in 2050, and any shortfall relative to that target will give rise either to high deficits or to a very considerable reduction in replacement rates. The causes of this dependence on growth are now well known (Blanchet, 2013; Marino, 2014): with the salaries that are entered in pension calculation accounts being indexed on prices, the replacement rates at the time pensions are calculated and start being drawn are much lower when growth in salaries is high, because the accrued entitlements increase slower than salaries. The same mechanism applies when pensions that are being drawn are indexed on prices: the higher the growth in salaries, the more the relative level of the pensions decreases. **Today, financial balance for the system can be achieved only by chance, if growth is high enough to offset exactly the rise in pension spending related to population ageing.** If it is not, other reforms are necessary: balancing the pension system is never really guaranteed.

### *Deficient redistributive mechanisms*

The French pension system is generally redistributive, i.e. it reduces the inequalities in salaried earnings over the life cycle as a whole. This redistribution is not achieved by the core of the system – the formula for calculating pensions - but rather by "non-contributory" schemes that offer entitlements to people in the event of career accidents (employment, sickness, etc.) or by pension minima (contributory minimum, old age pension minimum, etc.). Conversely, studies on redistribution show that the core of the system actually has an anti-redistributive nature: for example, with the rule of taking the best 25 years and of indexing-linking the salaries of reference on prices, it is the employees who have had the careers that are the most ascendant that receive better pensions relative to their contributions, and conversely, it is the employees who have difficult ends-of-careers who are penalised (Aubert and Bachelet, 2012). It would be possible to obtain a system offering more solidarity at no extra cost if the solidarity mechanisms did not have to compensate for an anti-redistributive core.

These three diagnostic observations enjoy a broad consensus, and have been well documented by the work of the French Pensions Advisory Council (COR) over about the last ten years. What is open to debate is how to remedy this situation. Some think it is possible to ensure that the system can continue durably without changing the architecture and the calculation formulae (these are the advocates of a parametric reform), while others think it is necessary to look again at all of the modes of calculation (these are the advocates of structural reform). While it is quite true to say that it is possible to put parametric reforms in place for remedying some of the above-mentioned defects, the importance of rule legibility and of the feeling of equality would argue in favour of an overall reform that can give legibility to rules that are common for everyone, as desired by a large majority of French people (Masson and Solard, 2017).

## WHAT TARGET PENSION SYSTEM?

The debate on a structural reform was already opened about ten years ago with proposals for a reform on the lines of Swedish-style notional accounts (Bozio and Piketty, 2008), or of a points system (Bichot, 2009), and discussed in a report by the French Pensions Advisory Council (COR, 2010). However, the opposition between the various target systems is to a large extent artificial. It does not take proper account of the main principles that should govern any pay-as-you-go pension system, or of the specific choices that should be made regardless of the system chosen. Before discussing these principles, we are going to recall the principles announced during the French presidential campaign.

### *The principles of the announced reform*

To a large extent, the principles of the reform announced by the French President can be summarised by the following campaign commitment: "We will create a universal pension system in which one euro contributed gives the same entitlements, regardless of when it was paid in, and regardless of the status of the person who paid it in". This phrase implies two major consequences: (i) unifying the rules for calculating pensions, with the same returns or yields for the contributory entitlements, (ii) unifying the solidarity mechanisms, and strictly separating them from the contributory part.
Unification of the formula for calculating pension entitlements is the main proposal of this reform, but it does not necessarily require all of the schemes to be merged, or the contribution rates to be unified. The current reasons for divergence in the returns or yields from the contributory effort lie firstly in different demographic situations that are poorly compensated for between schemes, and in specific entitlements not funded by a higher contributory effort.
The second principle, namely strict separation between contributory and non-contributory, does not necessarily enjoy consensus. It is sometimes objected that with this principle, there would be a risk of making redistribution transparent: transparency on redistribution would reduce support for it. In addition to the fact that that criticism is anti-democratic (the political heads put in place non-transparent redistribution, which would not be accepted by a majority who would prefer less redistribution), that criticism is not supported by any study, political science work suggesting rather that there is a negative correlation between targeting redistribution on the low earners and political support for social policies (Korpi and Palme, 1998), but no positive effect of absence of transparency.

Beyond these two principles, other essential characteristics of the mode of calculation of pensions result from the principle of a contribution giving the same entitlements regardless of the time at which it is paid in. This implies: i) that the entire career is taken into account in equivalent manner in calculating pension entitlements; ii) that the accrued entitlements, regardless of their form (points, euros, salaries entered into pension calculation accounts), have to be revaluated over the career on the basis of the rate of growth of salaries. Otherwise, the accrued entitlements at the end of the career weigh relatively heavier than the accrued entitlements at the beginning of the career, and thus have a greater impact on the amount of pension at the time it is calculated and drawn.
Finally, we should emphasise that, in the campaign commitment by the French President, the ultimate objective of the pensions reform is to "stabilise the game rules, once and for all", and thus to avoid repeated reforms which are perceived as undermining confidence in the system. This implies mechanisms making it possible to guarantee long-term financial balance with the dual demographic and economic constraint, and thus implies explicit adjustment rules.

### *The main principles of a well-conceived pay-as-you-go pension system*

Part of the debate on the ideal target system has been based on opposing a notional accounts system to a points system. This opposition is to a large extent a false debate (cf. box 1), and it is preferable to identify the main principles underlying a well-conceived pension system. We have identified three main principles that should be followed, regardless of the system chosen.
The first principle is the fact that the mode of building up pension entitlements should make it possible to keep the relative value of the contributions (or of the salaries) from the past, and thus should revaluate the contributions with the growth in salaries. Otherwise, it is not possible to guarantee that each euro contributed gives the same entitlement. This also creates reverse redistributions, favouring ascendant careers to the detriment of less dynamic careers, and this contributes to the above-mentioned dependence on growth..

**Principle 1: revaluation of past entitlements (in euros or in points) according to growth in salaries**

There are several different ways of applying this principle. Revaluation by average salaries guarantees strictly maintaining the relative values of the contributions. Revaluation by growth in the wage bill coincides with revaluation by average salaries when the number of workers is stable. However, it makes it possible to incorporate certain demographic changes into the system. Today, this principle is not applied either to the general scheme (revaluation of the salaries entered into

#### BOX 1 – POINTS SYSTEMS VERSUS NOTIONAL ACCOUNTS: AN OPPOSITION THAT SHOULD BE QUALIFIED

The debate between a Notional Defined Contributions (NDC) system and a points system is often reduced to a comparison between the Swedish system and the French Agirc-Arrco points system. However these are two particular cases, and other forms of points pension systems exist (e.g. the German system) which can differ significantly from the systems in place in the French supplementary schemes.

***Systems operating on a pay-as-you-go basis***

It is not infrequent to hear setting up a notional accounts system being considered to be the end of the pay-as-you-go pension system. This can be explained by the fact that pension entitlements are indicated in euros, as they are in pension savings. This can also be explained by the vocabulary of the rules, close to the vocabulary of fully funded systems: the contributions are entered into an «account» and then

revaluated annually by a «return» or «yield» before being converted into a «pension» or «annuity».
In reality, notional accounts, like points systems, operate on a pay-as-you-go basis. In other words, current contributions serve to fund pension entitlements of current retirees or pensioners, and the financial balance constraint is the same regardless of the system being considered. The accounting unit for pension entitlements in notional accounts is the euro, but it would be easy to express such a system in points by making one point equal to one euro.

### *A different framing*

In a notional accounts system, the contributions are entered into an individual account, indicated in euros, and revaluated every year by a rate of return. Like the way in which the revaluation of salaries entered into pension calculation accounts in the current system, this return enables the accrued entitlements to keep track with the growth of the rest of the economy. In a points system, the contributions are correlated to a purchase value, giving a certain number of validated points every year. There is no explicit revaluation of the points.
All of the accrued entitlements are then converted into a pension or annuity on the basis of a coefficient of conversion in a notional accounts system and on the basis of a payout value in a points system. The payout value for points may be set freely, whereas the coefficient of conversion for notional accounts is set in such a manner as to ensure, on average and at the level of any generation, that the sum of the contributions paid in is equal to the sum of the pensions paid out. It therefore depends explicitly on life expectancy and on the rate of revaluation of the pensions, which is determined jointly (cf. box 2). In the French points systems, the payout value also serves to revaluate the pensions because this parameter determines the amount of pension from the stock as a whole, but this does not necessarily apply (e.g. for the German system).

### *Systems that are close under certain conditions*

Opposing notional accounts to points loses much of its relevance if we accept that certain operating principles (cf. below) are actually more important for obtaining a well-conceived pay-as-you-go system. Under these conditions, a points system or a notional accounts system are actually very close.
The principle aiming to revaluate past entitlements on the basis of salaries growth (principle 1) is translated into notional accounts by applying the rate of return to past contributions. In a points system, index-linking purchase value and payout value to growth in average salary enables this property to be found again. Taking demographic conditions into account (principles 2 and 3) is achieved with the coefficient of conversion in a notional accounts system and with a «demographic corrector» in a points system that adjusts the payout value at the time the pension is calculated and drawn. Examples of these principles being translated into a points system can be found in the German system and in the Belgian reform project.

the pension calculation accounts on the basis of prices), or to the supplementary schemes (purchase value of the point index-linked to salaries, and payout value index-linked to prices).

The second major principle follows from the first. In the current system, the low level of revaluation of past rights has been used to lower the level of the pensions in order to limit the rise in pensions spending related to population ageing. Restoring index-linking to salaries therefore requires the pension calculation coefficient to be adjusted to make it compatible with demographic changes.

**Principe 2 : the pension calculation coefficient should depend on demographic changes.**
Demographic changes acting on the balance of the pension system are of two types: rise in life expectancy and variations in fertility and in migrations. In France, it is life expectancy and the baby-boom generations reaching retirement age that explain the increase in the demographic dependency ratio (i.e. the ratio between the working population and the retired population) up to 2030, and then changes in life expectancy only. In order to take these constraints into account in calculating pensions, it is necessary, at any given contribution rate, to cause the pension calculation rate (the percentage of the salary of reference) to vary according to the anticipated changes in demographics. In a notional accounts system, the change in life expectancy per generation determines the change in pension calculation rate. In a points system, it is possible to go further and to cause the pension calculation rate to vary with the demographic dependency ratio (as in the German and Belgian systems, and as simulated in the French case in Blanchet, Bozio, and Rabaté, 2016). This offers the advantage of making it possible to cope with demographic shocks instantly – including past shocks – but it potentially translates into unequal treatment between generations.

The third principle relates to the choice of the mode of revaluation of the pensions after they have been calculated and have started being drawn, being necessary for that mode of revaluation to be consistent with the mode of the pension calculation coefficient. There is no particular reason why pensions being drawn, i.e. being paid out, should change at the same rate as the pension calculation rate – unlike the payout values of the current points systems of the supplementary pension schemes that serve both for calculation at the time the pension starts being drawn and for revaluation. Conversely, the choice of the mode of revaluation of the pensions (according to prices, to salaries, or to an average of the two) determines the value of the pension calculation rate as a percentage of salary of reference at the time the pension starts being drawn. At any given contribution rate, a total pension bill can be covered throughout the duration of the retirement, but the pension paid out for each period depends on the choices made between the amount of pension at the time it is calculated and starts being drawn, and the revaluation dynamics (cf. box 2). In other words, to offer a pension that is better revaluated over time, it is necessary to offer a pension that is lower at the time it is calculated and starts being drawn.
**Principle 3 : the mode of index-linking pensions that are being drawn, and the amounts of the pensions at the time they are calculated and start being drawn should be determined together**

## *The balance of the pension system*

The conjunction of the three above-mentioned principles makes it possible to set up a system proposing all of the levers necessary for achieving long-term financial balance for the pension system. By setting the variation in the accrued entitlements on the growth in salaries, the first principle restores the relationship between growth rate and pensions level, automatically adjusting the level of spending to the macroeconomic conditions. The second principle makes it possible to cope with demographic shocks by incorporating changes in the demographic dependency ratio into the pensions calculation. We should note that revaluation of the entitlements on growth in the wagebill rather than on average salary in principle 1 also makes it possible to incorporate fertility shocks or migration shocks. The third and last principle makes it possible to control the volumes of pensions paid out regardless of the index-linking rule chosen by the legislator.

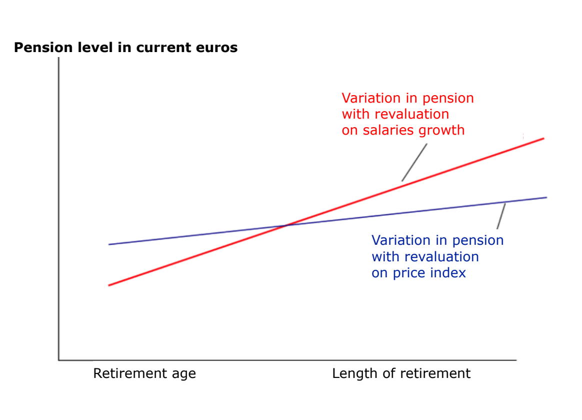
However, it should be emphasised that while these various adjustment mechanisms do bring the system closer to long-term equilibrium, they do not guarantee the system is balanced instantly (Valdes-Prieto, 2000). The choice of the rule for index-linking pensions after they start being drawn is at the core of the choices relating to the capacity of the system to become balanced rapidly. Index-linking pensions on salaries growth offers the advantage of guaranteeing financial balance without specific adjustment mechanisms. The problem is that this choice of index-linking requires replacement rates at the time at which the pensions are calculated and start being drawn that are lower than currently in order to offset the more dynamic growth in pensions during retirement (cf. box 2). Conversely, index-linking on prices guarantees greater stability in the variation in pensions, but does not necessarily guarantee financial balance. The calculation coefficient has to incorporate by anticipation the future growth in salaries, which is, by definition, unknown.

## BOX 2 – IMPLICATIONS OF THE RULES FOR REVALUATING PENSIONS AFTER THEY HAVE BEEN CALCULATED AND HAVE STARTED TO BE DRAWN

During their careers, workers build up entitlements that are revaluated every year. At the end of the career, the mode of calculation transforms the accrued entitlements into a pension. If the total value of the pension is given by the mode of calculation that is applicable, it is necessary to agree on a rule that transposes that total value into monthly payments received by the pensioner.
These rules define how pensions are increased every year. They also determine the initial amounts of the pensions in order to guarantee that the total value of the accrued entitlements at the time the pension is calculated and starts being drawn is equal to the sum total of the payments made during the retirement. Thus, a high-growth index-linking rule is associated with a low initial pension level.

**Figure 1** shows two index-linking rules often used: index-linking on prices and index-linking on average salaries. The growth in salaries is, in this example, assumed to be higher than the variation in prices (positive growth), which implies a steeper slope for index-linking on salaries. But, in order to guarantee that the sum of the payments made over the entire retirement is the same regardless of the index-linking rule chosen, it is necessary to make the initial pension levels different. A low pension level thus compensates for rapid growth in the case of index-linking on salaries.

***Figure 1 - Pension Revaluation Rules***




The graph shows that the variation in pensions that is more dynamic with indexing on salaries growth than with indexing on prices results in a lower level of pension at the time at which the pension is calculated and starts being drawn.

The choice between these two modes of index-linking constitutes a central choice in any pension system. By definition, index-linking on salaries guarantees that pensioner standard of living is maintained compared with worker standard of living. While the growth in prices is less than the growth in salaries, index-linking on salaries nevertheless implies pensions that are lower when they start being drawn, which can constitute a major earnings shock on retiring. It also increases the inequalities related to life expectancy: pensioners who live for shorter do not benefit from the advantage of the future increase in pensions, and are thus disadvantaged compared with those who live longer.

How then is it possible to maintain the replacement rates at the time at which pensions are calculated and start being drawn similar to those of today, without losing sight of the objective of long-term balance? The Swedes have opted for a rule for index-linking pensions on salaries growth minus anticipated growth (1.6% in their case), with an adjustment or correction rule if the long-term financial balance of the system deviates from equilibrium. The disadvantage of such a rule is that it leads to revaluations of the pensions that can be less than inflation levels, posing obvious problems for having such rules accepted. **Another option could be to guarantee index-linking on prices with a pessimistic anticipation of future growth, and to propose index-linking that is more dynamic than index-linking on prices if, and only if actual growth** is clearly greater than anticipated growth. This would offer the advantage of showing a firm guarantee on index-linking on prices, which would have to be funded by using a reserve fund whose objective would then be redefined to aim to smooth out economic climate shocks.
What would the retirement age then be with such mechanisms for balancing the pension system?
The first point is that **there is no longer a single reference to "one retirement age"**, modification of which makes it possible to balance the system. It is the scale as a whole (combination of replacement

rate at each age for each individual) that plays this part. The principle of balancing the system leads to offering each generation the same replacement rate at a slightly higher age, as life expectancy goes up, in a manner similar to increasing the age boundaries or the required length of pension insurance. In these systems, there nevertheless remains a useful role to be played by a minimum retirement age, aiming to avoid certain people retiring too early with a pension that is too low, i.e. less than the social/welfare minima.

## THE OTHER MAJOR CHOICES

### *What contribution rates?*

In a points system or in a notional accounts system, the choice of contribution rate becomes central. It is a political choice, on the share of national income to be devoted to covering pensions, and, unlike what is sometimes purported, the contribution rate is not fixed over time, and may be increased. But this freedom of choice on the contribution rate is asymmetric. It is not possible to lower the contribution rate without endangering the financial balance: this is the constraint with pay-as-you-go funding.
In the current system, there are major differences in contribution rates between the systems. As recalled above, **unifying the rules does not require the contribution rates to be unified,** but it nevertheless remains that certain differences are difficult to justify and could be converged, more or less gradually.

One example is the convergence in the public sector between the rate applied to basic pay and the rate applied to bonuses. The actual contribution rate applied to pay (with the employer's contribution) is greater than the one applied to bonuses. The convergence can be achieved by increasing the contribution rate on bonuses, and by lowering, in parallel, the contribution rate on basic pay, with the budget remaining constant for the public finances. A civil servant who receives an average amount of bonuses will not see any difference with this change, while a civil servant who enjoys higher-than-average bonus rates will see his or her pension entitlements increase in parallel with an increase in contributions (and a reduction in bonuses net of contributions), and a civil servant who has a lower-than-average bonus rate will see his or her net pay increase, resulting from a reduction in contributions (and in pension entitlements on his or her pay). Such a change would take place without any extra cost for the public purse and without any redistribution of total remuneration between civil service grades. The other options mooted in the debate (adding bonuses to the basis for calculating civil service pensions) are costly for the public finances and lead to high redistributions from civil servants who do not receive much in bonuses (teachers) towards grades who receive large amounts in bonuses (senior civil servants and *"ouvriers de l'Etat"* – who are public sector workers enjoying a special status even though they are not strictly speaking civil servants).

The question of the pace at which the contribution rates should converge remains to be defined, and is part of the broader issue of how to go from the old system to the new one.

### *What transition?*

The mode of transition from the old to the new system is a key point in whether or not the reform succeeds. There are two extreme options: an immediate transition and a gradual transition affecting only the new arrivals in the system.
A slow transition, with the new system being put in place gradually, makes it possible to smooth the changes made. Conversely, for a very long period (equal to the length of career of each of the new arrivals on the labour market), it maintains the complexity and illegibility of the preceding system: for example, Italy chose to apply the 1995 reform only to new arrivals on the labour market. **A slow transition scenario proved to be totally ineffective because the advantages of the reform were put back to a horizon so distant that the Italians had to put a new reform in place in 2011.**
The option of going for an immediate transition offers the advantage of enabling the benefits of the reform to be apparent very quickly, but it requires the switch-over to be prepared well. In such a scenario, it is necessary to determine the accrued entitlements (in points or in euros) at the time of the reform on the basis of the past careers of the workers. The subsequent contributions increases these entitlements as soon as the new system is put in place. A person who has paid into the old system for a major part of his or her career will thus have a pension close to the one he or she would have received without the reform. Progressively, the rules for building up entitlements will become the rules of the new system. **An immediate transition to the new rules for calculating entitlements is thus compatible with a gentle transition.**
The technical difficulty of this fast scenario lies in calculating the accrued entitlements. Various ways of proceeding are possible: i) calculate the accrued entitlements on the basis of past contributions (but it is necessary to know the actual contributions); ii) calculate the accrued entitlements on the basis of the current contribution rate applied to the series of past salaries; iii) estimate the pensions in the old system and convert them into points/euros in the individual accounts. Poland has chosen the latter option, while the Swedish notional accounts have been initialised using option ii), with a transition over 16 years.

### *What solidarity?*

Separating the contributory entitlements from the non-contributory entitlements does not require all of the solidarity mechanisms to be discontinued. Solidarity in the new system can however change in three basic dimensions: (i) standardisation of the mechanisms in the various schemes; (ii) transposition of the mechanisms to the new system; and (iii) modification of certain existing mechanisms in order to achieve better targeting. We should emphasise that these changes, in particular points (i) and (iii), are quite possible to achieve through a parametric reform of the current system.

While maintaining contribution rates specific to certain schemes can be justified for the contributory part of the unified scheme, it is difficult to consider maintaining specificities in the solidarity mechanisms, whenever they are funded by the general budget. Standardising the solidarity schemes is the corollary of the objective of horizontal fairness over the contributory part. One immediate difficulty is how to transpose the existing mechanisms into the new system. **It is possible to build equivalents to all of the mechanisms in a points system or in notional accounts,** but some differences can exist. By way of illustration, let us consider the example of periods assimilated into the general pension scheme and that take the form of additional quarters (3-month periods) for calculating the length of pension insurance (for periods of maternity and childcare, sickness, unemployment, etc). The mechanism may be transposed by directly adding entitlements to the individual account for such periods, on the basis of the last earnings or of the corresponding replacement earnings. This offers a dual advantage of being transparent and of making any application of these mechanisms "effective" i.e. making it generate new entitlements, which is not the case in the current system (some additional quarters can be "ineffective" if the person has already contributed for a sufficient period).

However, this can induce redistributive effects between beneficiaries of such mechanisms, in particular at constant spending. Such choices exist for all of the mechanisms.

Rather than trying to reproduce the current mechanisms as closely as possible, **this reform can also be an opportunity to rethink the architectures of the solidarity mechanisms.** Certain mechanisms, whose effectiveness is debatable, could be changed (surviving spouse pensions) or discontinued (extra benefits for being a parent of three children). Others could be created, e.g. for better taking account of inequalities in life expectancy (cf. box 3). An important question is how the new system makes it possible to guarantee contributory entitlements for people who have not paid in much in contributions during their careers and who would be eligible for the State minimum old age pension. A mechanism making it possible to guarantee extra pension for those who have contributed for substantial parts of their careers, like the current contributory minimum, could be devised as a supplementary scheme to the State minimum old age pension, or to an individual minimum pension.

### *What governance?*

Putting in place a unified system necessarily induces changes in the way the pension system as a whole is run. Running each scheme autonomously should give way to co-ordinated running of the system as a whole. Insofar as certain parameters, such as contribution rate, may remain specific to each scheme, unifying the running does not, in theory, need to imply having a single scheme. This unification of the governance can be organised in different ways (Bozio and Dormont, 2015). It can be done under the aegis of Parliament – the mandatory nature of the contributions and the overall impact of the pensions policies justifies having the system run by the representatives of the country as a whole. Another option would be, on the contrary, to extend the role of the social partners, modelled on how the supplementary pension schemes are run, with the unified scheme being run jointly, while possibly preserving entities specific to each of the schemes. Regardless of the organizational mode that is chosen, it should be stressed that there is an essential distinction between political governance and operational running of the system. Political governance relates to the essential social choices, some of which have been highlighted in this brief: the choice of contribution rate, the trade-off between pension level at the time it starts being drawn and revaluation dynamics, the sharing of the risk between the working population and the retired population, and the importance and the targeting of solidarity mechanisms. The responses to these choices should emerge from the democratic debate. **The use of automatic adjustment rules does not therefore mean the end of political governance.**

Conversely, refusing running rules (rules for index-linking accrued entitlements, rules for changing conditions for drawing pensions, and rules for revaluation) endangers guaranteed coverage of people's entitlements, and does not enable the system to be run in the long term. It is the rules that make a points system or a notional accounts system resemble a system having defined benefits, whose long-term balance is secured.

## CONCLUSIONS AND PROSPECTS

The aim of this brief is to present the issues of the debate on how to put in place a structural reform of the French pension system, while clearly distinguishing between the items that are specific to any well-conceived pay-as-you-go pension system, and those that can be the subject of varied choices, depending on the political directions or economic choices that are followed.

It remains to be emphasised that all of the choices that are mentioned above should undergo precise analysis, with simulation of the indicated variants, and expert assessment of the possible options. This work for preparing the reform is considerable. We can but hope that the various stakeholders involved – government departments and agencies, pension schemes, social partners, and researchers – have enough time and resources to conduct this thinking in order to make it possible to have quality in the democratic debate and success in the implementation of the reform that is chosen.

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## BOX 3 - HOW SHOULD THE PENSION SYSTEM COMPENSATE FOR LIFE EXPECTANCY INEQUALITIES?

One criticism of notional accounts that is often heard is that they make retirement pensions dependent on the average life expectancy of a generation, without taking account of the life expectancy inequalities within that generation. But such redistribution from those who live for shorter to those who live longer is a component part of any pension insurance system. It is explicit with notional accounts, but it exists implicitly in the constraint for balance of any pension system.
However, we might wish to adjust it or correct it: in view of the positive relationship between amount of pension and life expectancy (Bommier et al., 2005), pooling the ageing risk results in redistribution from the poorest to the richest. This question of equality is coupled with a problem of balance of the system, because pensions that are relatively higher will need to be paid out for relatively longer. The important role the current system gives to the length of the period for which contributions are paid in could make it possible to compensate for these redistributions, because the people who started working earlier can retire earlier on full pension. But this is true only on the assumption that there is a negative correlation between length of contribution period and life expectancy, which is not clearly shown by statistical studies. On the contrary, a recent study shows that the mechanism for retiring early after a long career enables people who live a relatively long time to retire early, with pensions that are relatively high, contrary to the initial objective of that mechanism (COR, 2018). It is thus not really guaranteed that the current system compensates for life expectancy inequalities.

Conversely, it is theoretically possible for life expectancy inequalities to be taken into account directly in a system of the notional accounts type through a decreasing-scale conversion coefficient depending on the accrued entitlements. The lower the accrued entitlements, the higher the conversion coefficient, and vice versa. In addition to the normative question of whether or not we wish to compensate for all of the life expectancy inequalities correlated to pension entitlements, the main difficulty lies in measuring such differential life expectancy accurately depending on all of the contribution flows, requiring use of administrative data combining information on career paths and mortality.

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