Many countries of the developed world are witnessing a significant demographic shift: the aging of their respective populations. While the “Baby-Boom” was considered one of the most important demographic phenomenons of the twentieth-century, the aging of that very generation could be the greatest demographic shift of the twenty-first century. Compounded by the fact that birthrates of these countries have, for the most part, decreased, the aging of the population has presented these nations with a need to evaluate the sustainability of their public pension systems—many of which having been designed under the assumptions of an implicit social contract in which subsequent and larger generations would support the older generations.

France is no exception to this anomaly. Despite the fact that the French welfare state has been fought for and protected longer than its current republic has been in existence, the aging of the baby-boom generation, dubbed the “papy-boom” in France, is challenging the foundations on which the system was established. The developed world has been warned for decades of the strain that the papy-boom will place on their economies and of the restructuring that must take place in order to avert unprecedented levels of public deficit. Furthermore, the financial crisis of 2008 has amplified the necessity of reform—not in some distant future, but now.

But, what are the viable options for reform? In the face of an aging population and an economic recession, the social contract essential to the current welfare state juxtaposes increasingly conflicting economic and social expectations. And, perhaps more

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1 “Papy” being the French familial term for “grandfather,” and slang for “old man”
importantly, this conflict polarizes two fairness issues: On the one hand, there is the entitlement of the baby-boomers who have contributed to the unfunded, “pay-as-you-go,” system to have their contributions redistributed to them when they reach retirement. On the other hand, there is the expectation of significant intergenerational transfers of income, from the young to the old, without the future generations having ever been consulted when the contract was established.\(^2\) It is in the context of these conflicting social and economic expectations, of the contesting fairness issues, and of French demographics that this thesis will examine four options for public pension reform. In considering four different models of reform, it is the purpose of the thesis to identify a policy of reform that best reconciles the discordant, and oft controversial, issues at hand.

The starting point for the analysis will involve the policy for pension reform that was most recently proposed in the French National Assembly. The proposal, known as le projet de loi des retraites, involves three measures aimed at eliminating the public deficit due to old-age pensions by 2018. Rather than consisting of a restructuring of the unfunded, “pay-as-you-go” nature of public pensions, the elements of the proposed reform involve only the manipulation of certain endogenous variables, such as the retirement age, contributions, and benefits.\(^3\) However, current trends in Europe and recent scholarship on the subject suggest that perhaps it is the unfunded aspect of public pensions that is to blame for the current public deficit. Thus, an essential task of the thesis will be to explore the arguments against unfunded pension schemes.


\(^3\) Chastand, Jean-Baptiste. Les Retraites: Ce que Prévoit le Projet de Loi. Le Monde (lemonde.fr) 7 September 2010.
It is in consideration of the arguments against unfunded pension schemes that the first two reform options will be evaluated. The first reform option to be examined is that which is currently being debated in France. The current proposal involves no reform of the unfunded component of pension schemes. The second reform option to be considered also maintains an unfunded pension scheme, however, this reform involves linking benefits to contributions. The third and fourth models of reform differ from the first two in that they constitute a break with unfunded pension schemes.

With the exception of the specifics of the recent French reform proposal, the reforms to be examined in this thesis have been drawn from literature on pension reform. It should be stated, however, that each of the models for reform involve only the economic aspect of public pensions. Nevertheless, it is not only the economics but also the viability of these reforms that this thesis seeks to determine. In order to sufficiently evaluate the advantages or disadvantages of each model, it is necessary to consider the social and political aspects of the French people and government. For example, policy reform is a slow process in France, given the complexities of its bureaucracy and the political influence of workers’ unions. What effect might this have on the execution of pension reform today? And, while it might be true that the unfunded pension scheme is a cause of the public deficit, would a privately funded pension scheme be socially acceptable in France, given the cultural disinclination towards market-based assets? It is not much of an exaggeration to say that the French are averse to change.4 In this social and political context, at what point does economic necessity outweigh social and cultural expectations? In short, although one policy for pension reform might be more

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economically advantageous than the others, it is necessary to evaluate the validity of the policy in light of French social and political characteristics.

Scholarship on pension reform is vast, spanning decades of research. First, it should be noted that the four models to be evaluated in this thesis are generic and do not correlate to any specific era of scholarship, nor to any specific country or region. Rather, they are four generalizations of the types of reform within the scope of literature on the subject. Second, while scholarly work on pension reform is extensive, it also tends to be general; most of the literature on pension reform is theoretical and does not necessarily apply the models of reform to any specific country. Third, analyses of public pensions in specific countries tend to consider policies that are already established. Lastly, the literature on pension reform tends to evaluate only the economics associated with such reform, not the social and political barriers or effects. Lastly, there is not much new literature on pension reform since the financial crisis of 2008, yet the current economic recession will most likely influence to a great extent whatever reform does take place.

There is also a significant amount of literature on aging populations and the impact this has on society and the economy. Within this literature there is much debate over intergenerational transfers of income and the extent of the burden, if any, that this places on the younger generations. An advantage of literature on population aging is that it is often country-specific and is a rich source of data.


6 Bongaarts, John. Population Aging and the Rising Cost of Public Pensions; Calot, Gerard and Jean-Paul Sardon. Les Facteurs du vieillissement demographique; Chesnais, Jean-Claude. L'évolution demographique des principaux regimes de retraite en France depuis 1950; Jackson, P.M. Economics of an Aging Population; Prioux, France and Jonathan Mandelbaum. Recent Demographic Developments in
The research design of this thesis can be divided into three components. The first component is that of exploring the history of French public pensions. Understanding the history of French pensions is essential to this study, for it will illuminate the circumstances in which previous reform has been realized, and it will also give some understanding as to the political process of reform and also to the social expectations and how they correspond to reform. The second component of research is to study public pensions in France as they are today, and the factors that make the current system unsustainable. The final component of research involves applying the four models of reform to the French economy.  

The first model is that which is already being considered in France, which, for the purposes of this thesis, will be referred to as the parametric reform of unfunded pension schemes. This reform concerns the key variables of the pay-as-you-go public pensions program. The beauty of such reform is the simplicity with which the variables can be written as a function of a few parameters and thus be manipulated in ways to formulate feasible predictions of the future impact of such reform, given changes in the variables. The variables in this policy examination are: the number of beneficiaries, the number of workers, the average wage rate, the average pension, and the contribution rate. The thesis will rely on the use of comparative statics to examine the potential impact of this reform on the French economy.

The second option for reform that will be evaluated is an ‘actuarially fair’ unfunded program, in which the primary strategy is to link benefits directly to

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7 The typology of pension reform used in the thesis is drawn from the work of Richard Disney.
contributions. Comparative statics will also be used to evaluate the potential outcome of this policy, using the same variables as in parametric reform. Actuarially fair reform would allow for public pensions to become relatively sustainable. However, the social costs of this reform are unclear, and the linking of benefits to contributions seems to imply a restriction of income distribution not just between generations but also within generations\(^9\)—perhaps conflicting with the promise of the French welfare state.

The remaining models imply a structural reform of the entire pension system. For example, the third policy to be examined is ‘clean break’ privatization. The implications of this type of reform are straightforward: workers are provided with a private pensions option and incentives to contribute to their private pension scheme. However, this reform also requires that no further contributions be given to the existing unfunded program. This model is drastic, and it is unlikely that such a reform would ever pass in France. Nonetheless, its effect on the French economy will still be examined, in order to provide some comparison and contrast to the other models.

Lastly, a policy that has gained increasing support in various countries is that of partial privatization. This type of reform not only maintains an unfunded component in the pension system, but it also allows alternative options for individuals to join funded schemes. In theory, what is most important about partial privatization is that it reduces the costs of transfers of income between generations. The model for this reform will be based on the private pensions that already exist in France and also on the partially privatized pension systems of other countries, such as the United States.

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If there is one theme consistent throughout the literature on population aging and public pensions, it is that reform is necessary. The baby-boomers have only just begun to reach the age of retirement, yet its effects are already visible. In 2007, French public debt due to old-age pensions equaled 10.2 billion euros. This number is projected to have increased to 34 billion euros by the end of 2010; old-age pensions representing about 11.3 per cent of public debt (compared to 1.9 per cent in 2005 and 4.6 per cent in 2007.)\textsuperscript{10} Moreover, it is projected that within the next 40 years, over 35 per cent of the French population will be above the age of 60—a threefold increase from the current representation.\textsuperscript{11} The aging of the population poses a curious threat to France’s economic stability and also to the fairness issues of entitlement and of the intergenerational social contract. It is imperative that France take the appropriate measures to alleviate its public deficit and to reach intergenerational-dependency equilibrium.

\textsuperscript{10} Commission des comptes de la securite sociale, June 2010 Report.
\textsuperscript{11} Institut national d’etudes demographiques.
Sources

- Commission des comptes de la securite sociale.
- Institut national d’études demographiques.