



## The French pension system: A long-term macroeconomic perspective

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### Abstract

The article provides a long-term macroeconomic perspective of the French pension system since the early 20th century. It starts by reviewing the main stages in the construction of the French pension system and identifying the main characteristics of this system as it stands now. Turning to official projections, it shows that the generosity of the pension system should dramatically decline as a consequence of past reforms. The article then follows by discussing three key issues that dominate the public debate on pensions: the economic impact of demographic changes, the financing of pension benefits, and the relation between retirement, employment and work. The discussion shows that the financing of pensions should not create an impossible burden for the economy, thus mainly highlighting the political dimension of the choices to be made to adapt the pension system to future demographic and economic changes.

**Keywords:** Pension. Retirement. Social security

**JEL:** H55

### Introduction

In January, the French Prime minister unveiled a contentious pension overhaul mainly aimed at raising the legal retirement age from 62 to 64. Over the following three months, this project has prompted vigorous criticism and calls for protests from worker unions and leftist opponents. Some distinctive features characterize this historical movement: the strong unity of Trade Unions - which is rather unique in the French context – and the strength as well as the length of the social movement. Twenty years ago, in 2003, a similar project aimed at raising the retirement age from 60 to 62 had also sparked a very strong opposition among Trade Unions and the population more generally. However, the 2023 social movement is probably to stay as a historical one, because the social conflict clearly turned into a democratic, political and, possibly, institutional crisis.

Fully analysing these issues would require developing a comprehensive political economy of the French pension system. In this paper, the focus is restricted on the most important economic dimensions of this debate. We start by providing a historical background of the French pensions over the past century (sections 1 and 2). In the following section, we briefly identify the key characteristics of the French pension system and provide an analysis of the ongoing trends that are the consequence of past “reforms”. The following sections discuss three key issues that dominate the public debate on pensions: the economic impact of demographic changes, the financing of pension benefits, and the relation between retirement, employment and work. A final section proposes some



concluding remarks that might shed light on the signification of the French social movement in 2023.

## I Early Development of the Retirement System

As in many other developed countries, the present pension system started to develop in France after World War II, with the creation of social security. Pensions for civil servants were established much earlier, in the nineteenth century<sup>1</sup>. Before 1945, there were attempts to set up retirement pension systems for private sector employees, with laws enacted in 1910 and 1930. These arrangements were not successful, largely because the plans were funded and were therefore unable to guarantee benefits in the face of great economic turbulence during the first half of the twentieth century (apRoberts and Concialdi 2009).

In 1945, the government planned to create a universal social security pension plan for all workers, called the *Régime général* or General Plan. However, some categories of workers did not want to join this unified plan. Civil servants and employees of some large public enterprises (the electricity company, EDF; the gas company, GDF; the railroad company, SNCF; etc.) were already covered by occupational plans that were more generous than the new General Plan. They kept their occupational plans and stayed outside the General Plan. These separate occupational plans are called *régimes spéciaux*, or “special plans.” The self-employed also did not want to join the General Plan, which they felt would be dominated by trade unions representing employees at a time where social protection was managed by a board dominated by TUs. The self-employed succeeded in establishing their own pension plans, without joining the General Plan. Higher paid private sector employees (*cadres*) were reluctant to join the new General Plan. Since this Plan was to collect contributions and pay out benefits on wages below a ceiling, these highly skilled employees succeeded in keeping this ceiling rather low. In 1947, when the General Plan began to function, they joined it and at the same time, they established a supplementary occupational plan, through a collective agreement, negotiated by employers’ associations and trade unions throughout the private sector. Supplementary occupational plans came to cover all private sector employees over the following decades.

The French system also provided a means-tested minimum benefit for the elderly that was instituted in 1941. This minimum was reformed and improved in 1956. Throughout the 1950s and the 1960s, the minimum income for the elderly played an important role. Three-fourths of pensioners were receiving it in the late 1950s. Its level increased considerably during the 1970s and the early 1980s a period that witnessed major improvements in the pension system.

### *Major improvements in the 1970s and early 1980s*

A law passed in 1972 made it compulsory for every private sector worker covered by the General Plan to be covered by a supplementary plan. These supplementary plans play an important role in the French pension system since they now pay a very significant

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<sup>1</sup> The main law establishing pension plans for civil servants dates back to 1853.



part - more than one third - of total private sector pension benefits. Unlike supplementary plans in most other countries, French supplementary plans are organized on a pay-as-you-go basis<sup>2</sup>.

In the 1970s, the rules governing entitlement to and calculation of General Plan pensions were made more generous. Advantages were also granted to specific categories of workers (manual laborers) or under specific circumstances (bonuses for women who had reared children). In the mid-1970s, a mechanism of transfers between separate plans was set up to compensate for demographic differences (the ratio of retirees to contributors). This system of transfers was possible because nearly all pension plans are organized on a pay-as-you-go basis.

An important reform took place in 1983. The age for retiring with a full rate basic pension was reduced from 65 to 60. Before this reform, workers could retire at age 60, but in that case, they got only half of the full rate. Since 1983, the General Plan has been organized around two key legal ages. The lowest one (60 in 1983, now 62) is the age at which workers can start claiming their pension. If they have a full career, they get the full rate of 50 percent of the reference wage. If the worker's career is less than full length, the rate of the pension is reduced. The highest one (65 in 1983, now 67) is the retirement age at which every worker can get the full rate, whether they have had a full career or not. In that later case, if the worker's career is less than full, the pension is reduced in proportion to the shortfall in the insurance period, but the pension rate of 50 percent is not reduced. This reform also created a minimum contributory pension (*minimum contributif*) for workers with a full career at low wages.

## 2 “Reforming” pensions: from concertation to confrontation

Over the past 40 years, numerous changes have taken place in the French pension system. Up to now, these changes took the form of so-called “parametric” adjustments that modify the rules for calculating pensions without modifying the logic according to which social rights to pensions are entitled. We very briefly summarize the main changes. A first change was introduced in 1987 concerning the calculation of pensions, with the transition from a ‘wage’ reference to a ‘price’ reference for two central components of pension entitlement calculations: the revaluation of past wages used to calculate the first pension and the indexation of the pension after it has been awarded. This change remained rather unnoticed. However, as it has been documented since then, this de-indexation of pensions is one of the key driver of the decline in the level of pension benefits<sup>3</sup> (COR, 2001).

The consequences of this de-indexation were exacerbated with the 1993 law that increased the period used to calculate the reference wage serving as a basis for the

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<sup>2</sup> For a history of their development, see: apRoberts and Concialdi, 2009 and Lynes, 1985.

<sup>3</sup> The average of the past best annual wages (10 best years at that time) revalued in line with past inflation is inevitably lower than that of the same wages revalued in line with past average wage growth. Moreover, current pensions increase more slowly if they are indexed on prices than if the fruits of growth are fully shared between the active population and retirees.



replacement rate, from the 10 best years to the 25 best years. The 1993 law also planned an increase of the contribution period required for a full pension, raising this period from 37.5 to 40 years between the 1933 and 1943 birth cohorts. Finally, this law also created a public fund (*FSV, Fonds de solidarité vieillesse*) whose objective is to finance, through taxation, certain old age benefits previously financed by contributions paid to the general scheme. This can be seen as the beginning of a structural reform insofar as this change partly modifies the logic of attribution of rights.

Other major reforms took place in 2003, 2010 and 2014. Among the many changes enacted in these reforms, we just mention here the most emblematic measures. The 2003 reform further increased the contribution period required for a full pension. The 2010 reform raised the minimum retirement age from 60 to 62 and that of 2014 again increased the contribution period, raising it to 43 years for the 1970 birth cohort. Concerning special schemes, a law passed in 2008 reduced pension rights, notably by increasing the contribution period needed to get a full pension in the same way that it had been done for private sector employees.

In addition to these reforms of the basic pension schemes, agreements on supplementary pension schemes concluded between the representatives of employers and employees of the private sector did also drastically reduce these supplementary benefits. The impact of these agreements on the level of pensions is quite considerable in the French case. For an average wage, these supplementary pensions represent about 40% of the total pension. In these supplementary schemes, employees acquire points at a fixed "purchase price" and these points are then converted into a pension according to the value of the point fixed at the time of retirement. The system thus mimics a defined contribution funded scheme even though it is financed on a pay-as-you-go basis. The ratio between these two parameters is a key indicator of the generosity of benefits. From the mid-1990s onwards, there has been a persistent gap in the evolution of these two parameters: the purchase price has increased much faster than the average wage, while the value of the point has increased much less quickly. So that the generosity of these schemes declined.

In his programme for the 2017 presidential election, Macron had included a pension reform whose objective was to replace almost all existing basic pension schemes with a points-based system, similar to the existing supplementary pension scheme for private sector employees. This would have transformed the current mostly defined-benefit system into a defined-contribution system. This reform had already been discussed and voted by the Parliament at the beginning of 2020. However, the Government had introduced besides this structural change some "short-term" financial adjustments that would have had the effect of postponing, *de facto*, the retirement age at which workers can get a full pension. Because TUs were strongly opposed to this disguised increase in the legal retirement age, the Government had decided to convene a conference between employers and employees to discuss this issue in April. With the Covid crisis, president Macron decided to suspend this reform that was never discussed again.



In 2022, the newly re-elected president Macron decided to implement a pension reform now mainly focused on raising the legal retirement age and lengthening the contribution period needed for a full pension. The law was adopted by an extraordinary procedure, without any positive vote of the Parliament, in April 2023.

### 3 Current situation and ongoing trends

The improvements described above shaped the French pension system of today. Three main features characterize the current French pension system.

First, pension plans are organized on an occupational basis. As a consequence, the system is fragmented by socio-professional status (making it a “Bismarckian” system in international comparisons). However, there has been a clear trend toward less fragmentation. In 1945, there were more than 200 different basic pension plans whereas there are only about 20 today. The most important scheme is by far the General Plan that gathers the vast majority of workers.

Second, all mandatory plans, including the main supplementary plans, are organized on a pay-as-you-go basis. Funded plans—whether employer provided or individual—play a very marginal role, providing approximately 2 percent of total pension benefits in 2021 (DREES, 2022). Workers do not bear any financial risk.

Finally, the system of compulsory pay-as-you-go plans provides a replacement rate that is among the highest in Europe. For retirees with a full career who were born in 1950, the median replacement rate (first pension benefit received divided by end-of-career wage level) was 73.8 for civil servants and 74.8 percent for private sector employees (Figure 1). These replacement rates were higher for older generations and tend to decline over time, this trend being more pronounced for public employees.

**Figure 1 – Median replacement rate (full-career)**

	Generation 1938	Generation 1950
All sectors	79,2	74,7
Private sector	79,1	74,8
Public sector	80,0	73,8

Source: DREES, 2022

Overall, the standard of living of the French elderly people is today slightly above the average standard of living of the population (+4% in 2019) and the poverty rate among retirees (9.5% in 2019) is below the average poverty rate (14.6%). Even though this poverty rate increased quite rapidly since 2014, where it stood at 7.2%, it remains far below what was observed in 1970 when the poverty rate among retirees was peaking at 35%. The main persistent inequality is to be observed between women and men. In 2020, women receive 37% less in direct pensions than men. When the survivor's pension is taken into account, this gap is reduced to 25%. Considering these average figures, however, the French experience of pension would probably look up to now for most foreign observers as a kind of “success story”.



This picture, however, is rather misleading insofar as it does not capture the transformations of the pension system which have already been initiated and which will continue to produce very significant effects in the years to come, in France as well as in all European countries. In the EU as a whole, the share of public pensions in GDP is still expected to increase in the future, but at a very slow rate, by 1.1 percentage points (p.p.) over the period 2019-2045 (Figure 2). Among the largest European countries, France is an exception insofar as this share should actually decline over the same period (-0.2 p.p.).

These changes are the consequence of two opposite forces. As expected, demographic changes will lead to an increase in pension expenditure. The demographic factor is in fact the main driver of future pension expenditure. Over the period 2019-2045, the contribution of the aging process alone to the public pension-to-GDP ratio is expected to be 5.5 p.p. for the EU and 6.1 for France.

However, other factors will counterbalance this effect to a large extent, reducing the financing needs of public pension systems by 80% (4.4/5.5) in the EU. In the case of France, these factors will totally offset the consequences of ageing. The downsizing of public pension schemes will be achieved in two major ways: a decline in the coverage of the old-age population ratio (the number of benefit recipients as percentage of the pensionable population, i.e. the population at or above the legal retirement age) and a sharp decline in the benefit ratio, i.e. the ratio of average pension expenditure per pensioner to per capita GDP.

Beyond 2045, the share of public pensions in GDP is expected to decrease substantially in France as well as in the other largest countries of the EU, with the exception of Germany. The key driver behind this decline will be the fall in the benefit ratio.

These figures show that, *without any further reform of pension systems (including the law passed in France in 2023)*, the share of public pensions in the GDP will sharply decline in France over the next 50 years. In that respect, France is among the few European countries where this planned decline will be the largest, and this will dramatically change the situation of French pensioners.

As stated above, there is no doubt that the generosity of the French pension system ranks today high by international standards. At a macro-level, the ratio of the average public pension expenditure per old people to the GDP per capita is a rather good proxy for comparing the generosity of pension systems across countries. This macro-indicator shows that France was ranking at the highest place within the European Union in 2019 (Figure 3). The indicator was above 70%, that is some 15 p.p. higher than the European average. However, the ongoing changes that have already been planned by former governments will lead to a sharp decline (approx. 30 p.p.) over the forthcoming decades. In 2070, the generosity of the French pension system will reach the same level as in Germany, just slightly above the European average. To sum it up, the idea that France did not reform its pensions system does not just stand up and a large part of these regressive changes is still to come.

**Figure 2 – Contributions to public pensions spending-to-GDP ratio (% of GDP, pps)**

	<b>EU</b>	<b>Germany</b>	<b>Spain</b>	<b>France</b>	<b>Italy</b>
Gross public pensions as a % of GDP (2019 level)	11.6	10.3	12.3	14.8	15.4
<b>Public pensions as % of GDP - pps changes between 2019 and 2045</b>					
Pensions/GDP	1.1	1.8	0.8	-0.2	1.9
Ageing	5.5	4.3	8.8	6.1	9.4
All other factors	-4.4	-2.5	-8.0	-6.3	-7.5
Of which :					
- Coverage effect	-1.3	-0.8	-1.1	-1.7	-2.6
- Benefit ratio	-2.2	-1.3	-4.2	-3.4	-2.0
- Labour market and residual	-0.8	-0.4	-2.7	-1.2	-2.9
<b>Public pensions as % of GDP - pps changes between 2045 and 2070</b>					
Pensions/GDP	-1.0	0.3	-2.9	-2.0	-3.7
Ageing	1.0	0.6	0.4	1.0	0.1
All other factors	-2.0	-0.2	-3.3	-3.0	-3.8
Of which :					
- Coverage effect	-0.2	-0.1	1.0	-0.3	-0.9
- Benefit ratio	-1.5	0.0	-4.1	-2.5	-2.4
- Labour market and residual	-0.3	-0.1	-0.1	-0.1	-0.6

Source: European Commission, 2021.

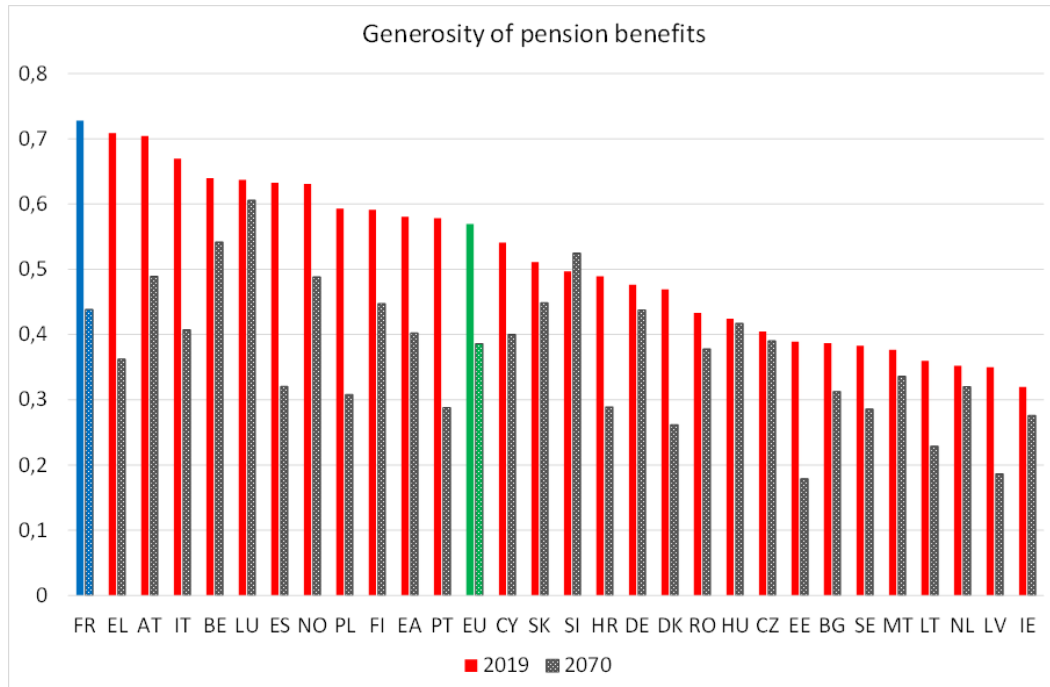
Lecture: between 2019 and 2045, the share of public pension in GDP is expected to decline by 0,2 p.p. in France. The contribution of the ageing will be positive (+ 6,1 p.p.) whereas other factors will more than offset this increase (- 6,3 p.p.).

Note: the sum of the factors (coverage effect, benefit ratio, labour market and residual) does not always strictly equals the total because of rounding.

Long term time series available for France allow us to put the trends that will affect the French pension system over the next decades in a broader historical perspective (Figure 4). In 2021, the generosity of the French pension system stands at its lowest level in 40 years. With the changes already planned up to now - without taking into account the impact of the 2023 Macron law – the generosity of the pension system is expected to further decline over the next decades. In 2040, the indicator should reach the level observed in the late 1960s, at a time where poverty among the elderly population was at a historical high level, with approximately 4 out of 10 retirees being poor<sup>4</sup>.

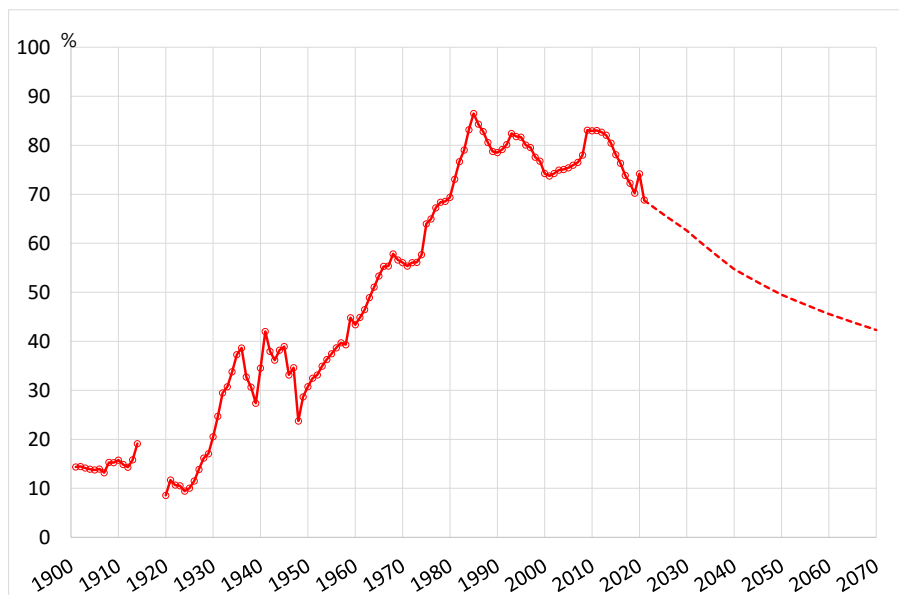
<sup>4</sup> In the long run, changes in the benefit ratio are sensitive to productivity assumptions. However, a low productivity scenario would not substantially change the results. In the baseline scenario of the European commission, the real output growth rate is expected to be 1.3% over 2019-2070. This is indeed a rather low assumption. In a lowest scenario of productivity (1.1%), the benefit ratio in 2040 would be approximately 57% instead of 55%

**Figure 3 – Macro-estimates of the generosity of public pensions in EU member states (public pension per people aged 65+ / GDP per capita)**



Source: European Commission, 2021.

**Figure 4 - Generosity of the French pension system (public pension per people aged 65+ / GDP per capita, %)**



Sources: Author's calculations based on various series.

Benefits: Reimat (2001) up to 1959 - DREES, social protection accounts for the period 1959-2021 - European Commission (2021) for the period 2019-2070.

Population: INSEE for historical data and population projections.





The decline of public pension schemes in France should most directly and significantly affect low-income pensioners. On average, pensions do contribute to 70% to pensioners' incomes and earnings and property incomes make up the remaining 30% of this total income. However, for retirees at the bottom quintile of the income distribution, pensions do account for the bulk of their resources (90%) whereas this share amounts to just over 55% for the highest quintile. The decline of public pension schemes will first and foremost impact the low-income retirees.

#### 4 Demography and pensions

In the pensions debate, one can hardly escape the issue of the “ageing” of the population. The publication in 1994 of the World Bank's report *Averting the Old Age Crisis* widely disseminated the idea of a so-called ‘demographic time bomb’ that was supposed to put unsustainable pressure on pension expenditure. As such, this issue would deserve a full discussion. We concentrate here on some aspects of this demographic issue.

Ageing is not a new phenomenon. The key factors behind demographic changes are the fertility rate, the rise in life expectancy and inward migration. In all EU countries, the most important factor affecting the demographic structure will be the decline in mortality and, consequently, the rise in life expectancy. The ageing process can thus be characterized as ageing “from the top” as it largely results from projected increases in longevity. The share of the elderly population (65 and over) in the total population should consequently increase from 20.4% to 29.6% between 2019 and 2050 in the European Union as a whole (Figure 5). The ageing process will be somewhat slower in France where the share of elderly people will remain below the European average (27.8% in 2050), mainly because of a still high fertility rate.

Since demography is not an exact science, the relevance of the assumptions upon which these projections are based may be questioned. This is notably the case for the most recent mortality assumptions<sup>5</sup>. Over the past decade, a significant – and rather unnoticed - change has taken place in France as in most developed countries. The increase in life expectancy has considerably slow down since 2010; in a majority of EU countries including France, life expectancy actually declined or stagnated between 2010 and 2021. This is in sharp contrast with what has been observed at least since WWII. It is also crucial to note that this phenomenon appeared as early as the mid-2010s and is therefore not the consequence of the Covid-19 crisis.

Notwithstanding these debates on the relevance of demographic assumptions, there is no doubt that the share of the elderly population will increase in the next decades as it did in the past, following a long-term trend. In fact, the ageing of the population is not a new phenomenon. The demographic transition – i.e. the process by which a society shifts from a demographic regime with high mortality rates nearly equalling its high fertility rates to another regime where mortality and fertility rates are lower and still

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<sup>5</sup> Hervé Le Bras : « Les scénarios du Conseil d'orientation des retraites sont irréalistes en matière de mortalité », *Le Monde*, 4 février 2023. Source: European Commission, 2021.



approximately equal – began two centuries ago and will probably come to a standstill in the next few decades, at least in most European countries. It will be somewhat amplified in the coming decade when the last generations of baby-boomers will reach the age of retirement. This long term trend may be illustrated in the case of France.

A key indicator that is frequently used to assess the consequences of the ageing of the population is the old age dependency ratio, which is usually defined as the ratio of the elderly population (people aged 65 and over) to the working age population (people aged 15 to 64). Figure 6 shows the increases in this old age dependency ratio over the past two centuries in France. Increases in the ageing are measured over successive generations, that is approximately a quarter of century. The ageing so measured started around the middle of the 19<sup>th</sup> century and clearly accelerated after WWI: +20% between 1925 and 1950, +23% between 1950 and 1975. It virtually stagnated between 1975 and 2000 as a consequence of the demographic trough associated with WWI. Between 2000 and 2025, it increased sharply, mainly because the numerous generations that were born in the aftermath of WWII started to arrive at the age of retirement. Overall however, between 1975 and 2025, the ageing of the population did not accelerate in comparison with the past 50 preceding years (1925-1975). Official demographic projections show that the ageing of the population will continue at the same pace over the next 25 years and will start to slow down after 2050.

**Figure 5 – Key demographic indicators**

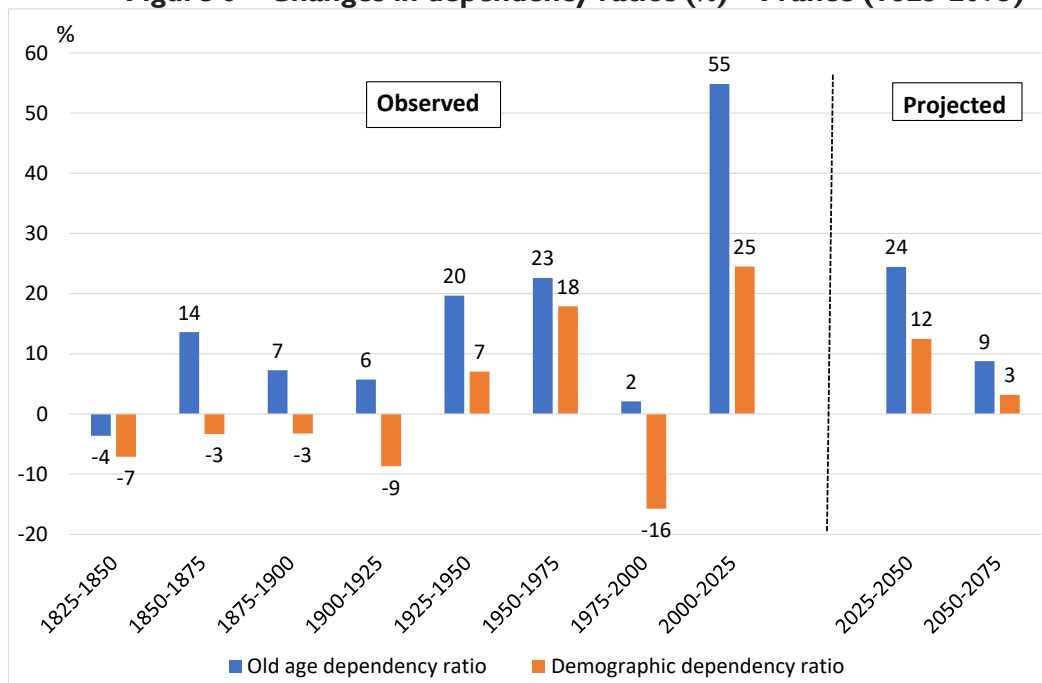
	2019	2050	2070
<b>Total fertility rate</b>			
EU	1,52	1,61	1,65
Germany	1,53	1,63	1,67
Spain	1,27	1,41	1,49
France	1,85	1,84	1,84
Italy	1,31	1,45	1,52
<b>Life expectancy at 65 (Men)</b>			
EU	18,4	21,6	23,5
Germany	18,4	21,5	23,4
Spain	19,9	22,5	24,1
France	20,0	22,6	24,2
Italy	19,6	22,3	23,9
<b>% population 65 and over</b>			
EU	20,4	29,6	30,3
Germany	21,7	28,1	28,4
Spain	19,5	32,7	32,0
France	20,3	27,8	28,7
Italy	23,0	33,7	33,3

Notwithstanding these debates on the relevance of demographic assumptions, there is no doubt that the share of the elderly population will increase in the next decades as it did in the past, following a long-term trend. In fact, the aging of the population is not a new phenomenon. The demographic transition – i.e. the process by which a society shifts from a demographic regime with high mortality rates nearly equalling its high

fertility rates to another regime where mortality and fertility rates are lower and still approximately equal – began two centuries ago and will probably come to a standstill in the next few decades, at least in most European countries. It will be somewhat amplified in the coming decade when the last generations of baby-boomers will reach the age of retirement. This long term trend may be illustrated in the case of France.

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**Figure 6 – Changes in dependency ratios (%) – France (1825-2075)**



Source: Human mortality database (historical data), INSEE (population projections). Author's calculations.

Lecture: Between 1950 and 1975, the old age dependency ratio (elderly population/working age population) increased by 23%. Definitions of dependency ratios: Old age: (60+/20-59) – Demographic: ((0-19 & 60+)/20-59)



Three main conclusions can be drawn from the above comments. First, the bulk of the so-called ageing is mostly behind us, at least in the developed countries. Second, the ageing will not accelerate in the coming 25 years. It will continue within the same pace as observed over the past century and will very probably come to a standstill, the more so if the recent changes observed in mortality should be confirmed in the future. Consequently, the ageing cannot explain the overwhelming catastrophic discourse over pensions that we have observed since the 1980s.

What is at stake is the fact that collective - and most often - public pension schemes that were put in place after WWII started to become mature at the turn of the 1980s and were thus able to distribute adequate pensions to cover the needs of the elderly. And this is precisely at that time that growing alarms were raised on the consequences of ageing on the “sustainability” of public pension schemes. In sum, the novelty lies in the existence of adequate public pensions, not in the ageing of the population. Following this line of reasoning, the process of “reforms” was not primarily intended to cope with the ageing of the population; it had to do with the mere existence of pension schemes. This is first and foremost a political choice since, as we will now see, demographic changes do not dramatically change the economic burden that fall on the workers and the labour force more generally.

## 5 The economic consequences of demographic changes

The old-age dependency ratio measures the consequences of the ageing on the financing of pensions. However, this ratio largely overestimates the true economic burden that will fall on workers in the future. There are two reasons for this. First, the increasing proportion of old people in the population is caused in part by the decreasing proportion of children. Because, at any point of time, the employed population hands over part of their resources to the population not in the working age, whether young or old, the *demographic dependency ratio*, i.e. the ratio of the nonworking-age population to the working-age population, gives a more accurate view of the economic consequences of future demographic changes.

Second, part of the working-age population is not in employment. With the structural changes observed in the labour market over the past 30 years, employment has become a crucial issue for financing social expenditure. Therefore, from an economic point of view, we should be ultimately interested in the variations of the *economic dependency ratio*, i.e. the ratio of people out of work (whether inactive or unemployed) to people in work. It is this ratio that gives the best idea of the future economic burden that will fall on those in work because of future demographic and economic changes.

Figure 7 shows that there are very large discrepancies in the variations of these dependency ratios over the next decades. The increase in the economic dependency ratio will remain far below the increase in the old-age dependency ratio over the period 2019-2045, and all dependency ratios will virtually stagnate between 2045 and 2070 in the largest countries of the EU as well as in the EU more globally. From an economic point of view, the pressure of the dependent population on workers will not be higher

in the next 30 years than in the near past. As it has been documented (Concialdi, 1997; Math, 2014), this result holds in any case since the overall cost (public and private) of children is very similar to the average full cost, for the society, of the elderly.

**Figure 7 – Increases in dependency ratios (% change over each period)**

	Old age	Demographic	Economic
<b>2019-2045</b>			
European Union	58	30	10
Germany	44	30	21
Spain	91	45	0
France	46	19	4
Italy	68	39	1
<b>2045-2070</b>			
European Union	8	7	3
Germany	5	6	4
Spain	2	2	1
France	7	3	1
Italy	0	1	-6

Source: European Commission (2021).

Definitions of ratios: Old age: (65+/20-64) – Demographic: ((0-19 & 65+)/20-64) – Economic: (total inactive population/employment)

The cost of these demographic changes may be expressed as the productivity gains that would be necessary to finance the ageing of the population. As it is measured by the European Commission, this global public cost of ageing (or demographic changes) includes pensions, health care, long-term care and education expenditure. Figure 8 shows that, over the period 2019-2045, annual productivity gains necessary to finance all public transfers that go to the whole economically dependent population should be 0,12% a year in the European Union and somewhat less (0,05%) in France. These figures may be compared with projected increases in annual labour productivity of 1.5% and 1.1%, respectively for the EU and France, over the same period. For the vast majority of countries within the EU, the ageing of the population would absorb less than 10% of expected productivity gains over the next 25 years. Over the period 2045-2070, the global public cost of ageing will be null and even negative in most European countries.

**Figure 8 – Public cost\* of dependent population**

	2019-2045		2045-2070	
	Global public cost of ageing	Expected labour productivity	Global public cost of ageing	Expected labour productivity
European Union	0,12	1,48	-0,02	1,69
Germany	0,15	1,34	0,02	1,54
Spain	0,10	1,32	-0,12	1,65
France	0,05	1,08	-0,10	1,54
Italy	0,19	0,96	-0,20	1,64

Source: European Commission (2021). Author's calculations.

Note: \* Annual productivity gains necessary to finance dependent population (pensions, health care, long-term care and education expenditure)



In other words, future demographic and economic changes will not increase dramatically the economic burden on workers and one can reasonably assume that it is possible to share future productivity gains among all categories of the population, whether employed or not, without any dramatic consequence on the growth of the purchasing power of net wages. The tiny increase in public transfers necessary to finance the whole dependent population (old and young inactive people, plus the unemployed) would still allow for a substantial increase in real net wages.

These figures illustrate the fact that the main issue is not an economic one concerning the level of transfers from workers to "non-workers": it mainly concerns the organization of these transfers and, in particular, the respective shares of public and private transfers needed to support the whole economically dependent population. In the modern developed countries, transfers to pensioners mostly take the form of compulsory contributions, whereas the overwhelming majority of transfers that go to young people occur within the family and take the form of private outlays. This is an essentially qualitative difference in the way economic resources are allocated and raises a political question.

## 6 Financing pensions

One argument that is often put forward to reduce the cost of public pensions is that public debt has reached unbearable levels. In that line of reasoning, reducing the cost of pensions would therefore be "necessary" to restore sound public finances. The argument has been raised again by the Macron's government to justify its 2023 "reform".

This argument deliberately confuses State debt with that of other public administrations, namely social security administrations, which manage pension schemes, and local authorities. In France, as in all other European countries, public debt is essentially due to the State's debt. The State debt represents more than 80% of the total public debt, while the debt of the social security administrations represents only 10% of this total debt, even though social security expenditure represents almost half of total public expenditure. Moreover, government debt is not the result of a constant increase in public spending. In the past decades, government spending has tended to fall, while government revenues have fallen much faster, leading to higher deficits and higher debt<sup>6</sup>. Cutting public pension expenditure will therefore not change the huge public debt accumulated by the State.

At the European level, the issue of public deficits and debts is also monitored through the Stability and Growth Pact (SGP) that was established in 1997. The SGP is a set of rules designed to enforce the deficit and debt limits established by the Maastricht Treaty that was signed in 1992 and to ensure that countries in the European Union pursue sound public finances and coordinate their fiscal policies.

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<sup>6</sup> Between 1985 and 2021, State expenditure fell from 26.7% to 24.5% of GDP (-2.2 p.p.) while State revenue decreased from 24.4% to 18.7% of GDP (- 5.7 p.p.).



In 2005, however, EU member States gave a clear sign that some public deficits were, so to say, better than others, especially when it comes to financing pensions. The first reform of the SGP that took place in 2005 added new "flexibility clauses" to the one that already existed in the original Pact (the existence of a severe recession). These new clauses allowed the 3% threshold to be exceeded without triggering the excessive deficit procedure insofar as a country can prove that its deficit is linked to the implementation of reforms that are costly in the short term but that are considered to carry beneficial effects in the medium and long run. Notably, the transition from a pay-as-you-go pension system to a funded system is explicitly part of these alleged beneficial reforms that allow the member States to disregard these costs from the public deficit.

However, the alleged benefits of a transition to funded schemes are far from obvious. As it has been documented by many studies such as the ones published by the International Monetary Fund or the World Bank (Barr, 2000; Orszag and Stiglitz, 2001; ), the shift towards privatized pensions would not necessarily decrease the overall cost of pensions. On the contrary, it would imply transition costs, increased administrative costs and greater fiscal subsidies that would globally increase the cost of pensions for workers. On the whole, there are hardly any sound economic reasons to shift from a publicly financed pension system to a privately managed one.

#### *Wages and profits: a key issue*

At the macroeconomic level, the financing of pensions also raises the question of the distribution of value added between wages and profits. Since social contributions that are levied on wages still massively contribute to financing pensions in France, any change in the labour share directly affect social accounts.

In that respect, there is no doubt that the profit share is now at a historically high level. In 2021, the profit share for non-financial corporations peaked at over 34% (34.3%) of value added (Figure 9). In fact, since the late 1980s, the profit share has been consistently high by historical standard. Following the financial crisis of 2008, the profit share fell. However, this cyclical decline was quickly offset in the following years.

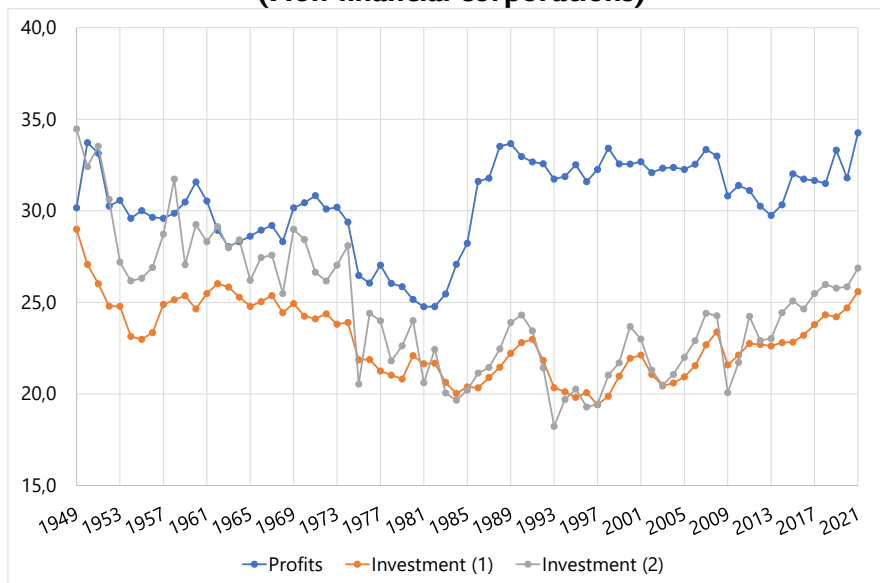
As Michel Husson's work has highlighted (Husson, 2010), one of the major features of the last thirty years is the persistence of a significant gap between the profit share and the rate of investment. Consequently, a significant proportion of profits is not reinvested, thus mainly fuelling financial speculation. This gap narrowed over the past ten years, but it still remains at a high level.

The increase in the profit share and the related decline in the labour share originate in two main factors. The first one is the quasi-stagnation of real wages over the past four decades. As documented by the national statistical office, the slight increase in the real average wage since 1978 essentially compensates for the gradual and steadily increase in the qualification of the workforce. The second factor lies in the dramatic decline of employers' social contributions.

Since 1993, exemptions of employers' social contributions have been massively granted to enterprises. This process accelerated in 2019 with the former Macron's government, so that the employers' contribution to financing social security has now reached a low

historical level that has never been observed since the early 1960s (Figure 10). State's taxes compensate for a large part (approximately 90%) of these exemptions. However, this translates in an increasing burden of taxes for workers - and citizens more generally - that do pay more and more for declining benefits.

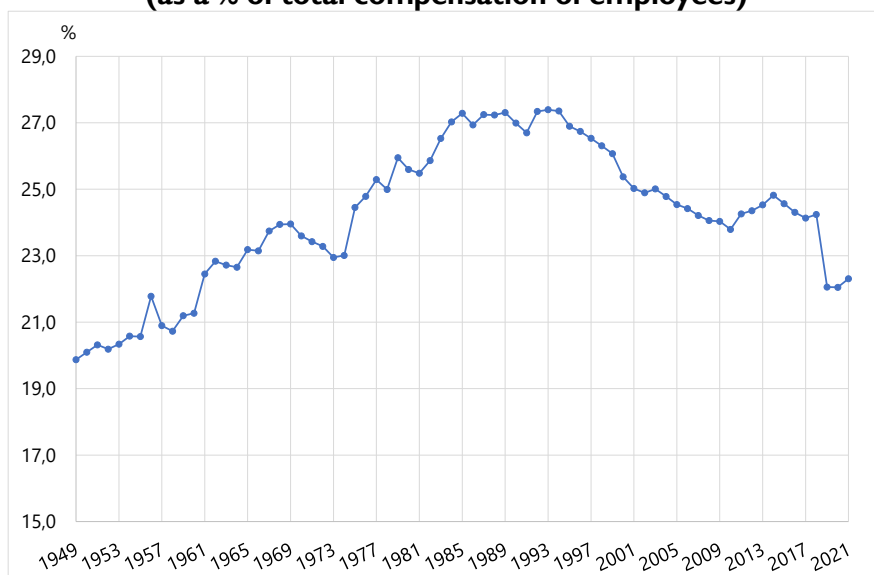
**Figure 9 – Profits and investment (as a % of value added)  
(Non-financial corporations)**



Source: INSEE, national accounts. Author's calculations.

Profit share: gross operating surplus – Investment (1): gross fixed capital formation – Investment (2): Investment (1) less changes in stocks.

**Figure 10 – Share of employers' social contributions  
(as a % of total compensation of employees)**



Source: INSEE, national accounts. Non-financial corporations





We thus come to a similar conclusion than the one made above concerning the State's accounts. Since the share of pensions in GDP will remain stable over the next few decades and will even tend to decrease in the medium or long term, the financing needs do not come from an excessive growth in expenditure. This is first and foremost the consequence of a drying up of the revenue which finances pensions.

## 7 Retirement, (un)employment and work

Until 2003, the debate on pensions was mainly focused on the issue of pension financing. With the 2003 law that increased the contribution period needed to get a full pension, the issue of employment and working conditions became more and more debated. These issues were exacerbated when the 2010 law increased the legal retirement age from 60 to 62. With no surprise, the 2023 law that increases both parameters (the legal retirement age and the contribution period) raised heated debates and strong criticisms from the TUs.

### *Retirement and labour market*

A first debate concerns the consequences of these changes on unemployment, in particular for younger generations. Even though the French government steadily repeats today that the unemployment rate is at a lowest historical level, the situation of the labour market remains very much deteriorated. By the end of 2022, there were 2.2 million "full-time" unemployed, that is people who did not work at least 1 hour in the week according to the very restrictive ILO definition of unemployment. In addition, there were 1.3 million people in underemployment and 1.9 million people classified as "inactive" who were in the unemployment "halo" (looking for or wanting a job). Overall, 5.4 million people - around one quarter of the labour force - were "constrained in their labour supply", to quote the national statistical office INSEE. This is quite far from full employment.

The consequence is that the transition from employment to retirement is far from being a direct one for all the workers. For people aged 60 to 69 who had retired in 2012, 67% went directly from employment to retirement<sup>7</sup> (INSEE, 2013). The remaining third was either unemployed or out of the labour market for medical reasons (invalidity, disability). In 2020, 43% of workers who retired in the General Plan were not in employment (CNAV, 2022).

The massive imbalances that still characterise the French labour market may probably explain the strong opposition of TU to a further increase in the retirement age. In such a context, one may fear that this measure will spur the inequalities on the labour market. Indeed, that is what has been observed after 2010 when the retirement age has been increased from 60 to 62.

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<sup>7</sup> 80% of public sector employees went directly from employment to retirement, compared with 59% of private sector employees and 69% of self-employed.



After 2010, there has been a spectacular rise (32%) in the participation rate of 55-64 year-olds between 2010 and 2018, with an equivalent rise (31%) in the employment rate, but also a sharp increase in the unemployment rate (almost 20%), particularly for people aged 60 and over, whose unemployment rate is now higher than that of 55-59 year-olds, whereas this had never been the case before. Over the same period (2010-2018), both the participation rate and the employment rate of the population under 55 stagnated or slightly decreased.

As a result, while the total population aged 15-54 declined by around 0.43 million between 2010 and 2018, the number of jobs held by this age group fell by roughly the same amount (Figure 11). This is in stark contrast to the population aged 55-64, which increased in volume due to ageing (+0.23 million), but with a much higher growth in the number of jobs held (+1.11 million).

Two faces of inequality are thus emerging: first among older workers, between those who can remain in employment and those who cannot, and second between older and younger workers, the latter having more and more difficulties in accessing employment.

**Figure 11 - Population and employment of the working age population (15-64)  
Absolute changes over the period 2010-2018**

(millions)	Population	Employment
Population aged 15 to 64	-0,20	+0,65
15-54 years old	-0,43	-0,46
55-64 years old	+0,23	+1,11

Source : INSEE, Labour Force Survey

The increase in the contribution period needed to get a full pension also raises the issue of the adequacy of pension legislation to the functioning of the labour market. The key indicator here is the proportion of workers who have had a “full career”, that is the proportion of workers who retired without any penalty nor any discount on the full rate of pensions because of uncomplete contribution periods. Data are available for successive generations up to the one who was born in 1950. For the generation 1950, the overall proportion of full careers is slightly above 60%. This figure is higher for men (69%) than for women (54%). The gap between women and men declined over time because of the increased participation of women in the labour market. It might be that the proportion of women with a full career will still increase in the future. However, this is doubtful for men. For male cohorts who were born after WWII, the proportion of workers with a full career remained stable and started slightly declining.

Employees born in 1950 did retire with a contributing period that was, on average, two years less than the period needed to get a full pension, which was 41.5 years for this generation (DREES, 2022). The dilemma is that the youngest generations are not expected to stay longer on the labour market (DARES, 1998) whereas the contribution period will still increase up to 43 years. There is thus a growing gap to come between the parameters of the pension system and the objective opportunities that workers may have on the labour market.



### *Working conditions and the issue of arduous work*

Another important debate concerns the unequal consequences of a uniform increase in the retirement age. Because of strong differences in life expectancy across social groups, such a measure penalises more heavily the low-skilled workers. This is especially the case in France, which is, along with Finland, one of the countries where health inequalities are the greatest. For men, the life expectancy at age 30 of high-skilled workers (*cadres*) is six years higher than that of blue-collar workers (Blanpain, 2016).

These inequalities are also very significant for healthy life expectancy (HLE), which is of greater interest to future retirees, and which may also have an impact on the ability to hold a job at older ages. At the age of 50, the healthy life expectancy (HLE) of male blue-collar workers is 13.7 years, whereas it is 22.8 years for men in the most highly skilled occupations. A similar difference is observed for women, whose HLE at the same age is about one year higher than that of men for the same social categories (Cambois *et al.*, 2008).

This issue relates, more generally, to the recognition of arduous work. On this subject, again, social inequalities are very strong. According to a report carried out in 2003 (Struillou, 2003), manual workers and low-skilled employees account for 70% of employees subject to at least three hardship factors, and they represent the overwhelming part (90%) of employees with six hardship factors. The deterioration of working conditions over the past 30 years has also been heavily documented, so that it has become a very sensitive issue within the French context (Coutrot & Prez, 2022; Gaudart & Volkoff, 2022).

Following the 2003 law, the Government invited employers and employees to negotiate on this issue. The interprofessional negotiations on the definition and recognition of arduous work, which began only in February 2005, very quickly came up against the employers' desire to restrict the compensation system by retaining high exposure thresholds and a purely individual and medical approach to this issue, thus neglecting the proven effects on health of arduous work. The government finally and very lately followed the long-standing position of the employers' organisation (*Medef, Mouvement des entreprises de France*) on this issue and the measures taken in the French law of 2010 did not ultimately concern the recognition of arduous work, but rather the medical recognition of disability (Jolivet, 2016).

In 2014, the socio-democrat government elected in 2012 took a first step towards the recognition of arduous work by introducing a personal account (C3P), in which employees could cumulate points in case of heavy exposure to risks of irreversible pathologies. A list of ten factors was drawn up and the system came into force at the beginning of 2015 for some of these factors. However, the actual implementation of this account has met with fierce opposition from employers' representatives. The government which emerged from the 2017 elections finally gave in to this pressure by deleting four of the ten items initially planned as soon as it came to power.



When the TUs started to demonstrate strongly against the 2023 law and, above all, against the increase in the retirement age, the Government announced that the issues of arduous work and working conditions more generally could be set at the agenda in the very near future. Given the decisions that the first Macron's government had very quickly taken in 2017, this is no surprise that this discourse did not succeed in attracting any credibility among TUs and the public opinion more generally.

## 8 The political economy of pensions: some tentative remarks

At the risk of oversimplification, we could summarise the main argument of the article in the following way. First, there is no such a demographic argument to justify, from an economic point of view, any decline in the generosity and coverage of pension benefits. There is no doubt that the ageing of population would require increasing the share of the GDP that is received by the elderly population. However, the overall cost of the whole dependent population will not dramatically increase. The choice is therefore between public and collective financing, on the one hand, and private individual financing on the other. This is a fundamentally political choice upon which no economic rationale can reasonably prevail. Second, the recurrent needs for financing pensions that are put forward to justify an ever-ending decline of pension systems are to a large extent the consequence of what we might call the “de-financing” of pensions. Since pensions are massively financed in France with social contributions, the fall in the labour share has dried up the financing of pensions, and this process has been exacerbated by a constant and dramatic decrease in the share of employers' social contributions levied on wages, so that the burden of financing pensions falls more and more on taxes that are massively paid by workers and citizens more generally.

In broad lines, however, the French situation would not very much differ from the ones observed in most developed countries. How can we therefore analyse the massive demonstrations that took place in early 2023? Many observers point to the timing of the reform that took place after the Covid crisis and at a time where growing inflation is quickly eroding the wages of workers. Besides this conjunctural explanation, we propose to conclude some remarks that point to probably more structural factors.

A first set of remarks lies in the way pensions are financed in France. One of the key features of the French pension system is that pensions are quite fully financed on a PAYG basis. In such a system, the nature of social rights to pension acquired by workers is explicitly political and is thus openly debated through socio-political institutions. This is not so the case in funded schemes where pension rights do mainly originate in property rights, the regulation of which operates through market forces in a much more blur way. It is therefore not surprising that in a fully pay-as-you-go system, tensions and conflicts are more visible than in other systems where funding is more important. Moreover, in the French system, pensions are massively financed by social contributions and this explains why the attachment to the pension system is much stronger than with tax financing. Social contributions are not just one means of financing among others. It is first and foremost a political principle that legitimises the existence of a pension right.



And this legitimacy is much stronger when the entitlement to pensions is based on social contributions than with a general tax.

A second set of remarks concerns the nature of the adjustments that the government wanted to introduce in the pension system. By raising both the legal retirement age and the number of years needed to get a full pension, these adjustments have targeted a real and very concrete parameter, namely the working time. This is in contrast with adjustments that change the value of benefits on nominal terms. It is much more difficult for workers to capture the long-term consequences of nominal adjustments than the consequences of real ones, even though both changes are usually implemented gradually. The de-indexation of pensions is a good example of such nominal adjustments. As we have seen, this adjustment has had a very strong impact on the level of pensions in France. However, it did not prompt a strong opposition from TUs and workers. This is in sharp contrast with adjustments in working time. Workers do know that, at the end, working two years more would be equivalent to halving their present paid holidays. No matter the fact that it would be so in around ten years. And this might well partly explain the strong and long-lasting opposition to Macron's law in 2023.

It is true, however, that this distinction between nominal and real adjustments only makes sense in the short or medium term. In the long run the distinction tends to vanish since the cumulation of nominal (short term) adjustments does indeed produce structural effects that are at least as much important than real ones. This is the third line of explanation. With the liberalization of market forces over the past 30-40 years, workers have had to support more and more unbearable pressures on wages, as well on employment and working conditions more generally. Following Polanyi's analysis (1944), we may hypothesise that this movement has now reached a limit. If this is the case, the French social movement of 2023 can be interpreted as a response ("a protective countermovement") by all groups in society against the impossible pressures of a self-regulating market system.

What will be the outcome of this situation remains an opened question. Analysing long term trends of the French social protection system, we hypothesized that the regressive changes that had been implemented in the 1980s and 1990s could be analysed as the consequence of a "democratic deficit" (Concialdi, 1999). This hypothesis probably gained credibility over the past two decades. In the 2023 demonstrations, trade unions and workers were not only critical of the content of the law, but also of the government's authoritarian method of enforcing measures to which workers and public opinion were massively opposed. However, the protective countermovement can sometimes create a dangerous political-economic stalemate.

As Fred Block recalls in his introduction of Polanyi's work, Polanyi's analysis of the rise of fascism in Europe acknowledges that "when neither movement was able to impose its solution to the crisis, tensions increased until fascism gained the strength to seize power and break with both *laissez faire* and democracy". Beyond the pension issue, we may guess that this is probably one of the questions that will dominate the French socio-political debate over the years to come.



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