

**LABOUR MARKET AND SOCIAL POLICY  
OCCASIONAL PAPERS - N°30**

**PRIVATE PENSIONS IN OECD COUNTRIES - FRANCE**

**Emmanuel Reynaud**

**ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT**

**Paris**

**61083**

**Document complet disponible sur OLIS dans son format d'origine**

**Complete document available on OLIS in its original format**

## **DIRECTORATE FOR EDUCATION, EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS**

### **OCCASIONAL PAPERS**

This series is designed to make available to a wider readership selected labour market and social policy studies prepared for use within the OECD. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language -- English or French -- with a summary in the other.

Comment on the series is welcome, and should be sent to the Directorate for Education, Employment, Labour and Social Affairs, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France. Additional, limited copies are available on request.

The opinions expressed and arguments employed here are the responsibility of the author(s) and do not necessarily reflect those of the OECD.

**Applications for permission to reproduce or translate  
all or part of this material should be made to:**

**Head of Publications Service  
OECD  
2, rue André-Pascal  
75775 Paris, CEDEX 16  
France**

**Copyright OECD 1997**

## SUMMARY

This volume is part of a series of monographs on private pensions in OECD countries. Previous titles have considered the situation of Canada, Ireland, New Zealand, the United States, the United Kingdom and Australia.

Private pensions occupy a central role in the French system of retirement provision. In addition to a high degree of institutional fragmentation, the general structure of the French pension system combines two tiers. The first consists of statutory social security plans, set up to cover the whole of the working population, and “special plans”, exempted from participation in the general schemes and almost exclusively covering the public sector. The second tier is made up of supplementary occupational plans, mainly *compulsory* plans federated at the national level. The extensive role of these compulsory occupational plans has left little room for the development of other *voluntary* occupational pension plans.

A number of features make the specificity of the second tier in France. First, membership in occupational plans is, with few exceptions, compulsory for all employees members of the general social security scheme. Second, these compulsory occupational plans are federated under national bodies (AGIRC for higher paid white-collar workers; and ARRCO for other employees), with management shared equally between employers’ and employees’ representatives. Third, these plans are financed on a pure “pay-as-you-go” basis, with adjustment of key parameters of the plan allowing to balance in each year resources available to the scheme and expenses. A system of compensation between the schemes under the two national organisation ensure the quality of the benefit from specific difficulties that individuals funds may be experiencing, while some of the benefits paid are financed by third parties (state and the unemployment insurance plan). Overall, *compulsory* occupational pensions represent a significant proportion of the overall pension, allowing relatively high final salary replacement rates.

The future of the pension system has occupied a central stage in the political debate. Since the 1991 white paper on pension reform, which put forward various scenarios for reforming the general plan, successive governments have taken steps to reform the general scheme and reduce the generosity of pensions. Overall, the long debate on pensions reform has shown that French society remains deeply attached to its own system, with the pay-as-you-go principle not being fundamentally challenged. Fuelled by the wish to increase long-term savings and equity financing of French companies, proposals have been considered to encourage the formation of reserves within existing “pay-as-you-go” schemes and to establish, on an occupational basis, of collective savings funds.

Note: The content of the monograph, translated from the original French version was edited and may not conform in detail with the structure of the original text.

## TABLE OF CONTENTS

SUMMARY .....	3
PRIVATE PENSIONS IN FRANCE .....	7
1. GENERAL STRUCTURE OF THE SYSTEM.....	9
Diversity and fragmentation .....	9
A typical private-sector situation .....	10
2. DEFINITIONS AND GENERAL INFORMATION.....	12
Sources.....	13
Overview.....	15
Importance of special plans .....	15
Compulsory supplementary plans .....	15
Benefits paid .....	16
Differences in contributions and low level of funding .....	16
3. MEMBERSHIP OF COMPULSORY SUPPLEMENTARY PLANS.....	18
Background.....	18
Cadres pension plans .....	18
Non-cadres plans .....	20
Widespread introduction of supplementary pensions .....	21
ARRCO and AGIRC plans .....	22
ARRCO plans.....	22
AGIRC plans.....	23
Differences in contribution rates .....	24
Contribution rates in ARRCO plans .....	25
Contribution rates in the AGIRC scheme.....	26
Other compulsory plans .....	27
Compulsory plans independent of ARRCO and AGIRC.....	27
Plans partially independent of ARRCO and AGIRC .....	29
4. CHARACTERISTICS OF ARRCO AND AGIRC COVERAGE.....	31
Membership conditions .....	31
ARRCO plans.....	31
AGIRC plans.....	31
Eligibility requirements .....	33
ARRCO plans .....	33
Cessation of employment.....	33
Age .....	33

Survivors' entitlements.....	34
AGIRC plans .....	34
Cessation of employment.....	34
Age.....	34
Survivors' entitlements.....	35
Benefits .....	35
Determination of benefit entitlements .....	35
Reconstruction of career before membership .....	35
Retroactive benefit entitlements with rate increases .....	36
Periods of unemployment, early retirement, and incapacity for work .....	37
Calculation of the pension .....	38
Points system .....	38
Points accounting and point value .....	39
Adjustment.....	40
Survivors' pensions.....	40
Social action .....	41
AGIRC schemes.....	41
ARRCO schemes .....	42
Contributions .....	42
ARRCO plans .....	43
Progressive withdrawal of optional arrangements .....	43
Contractual rate and call-up rate.....	44
Division of employer/employee contributions .....	44
AGIRC plans .....	44
Compulsory and optional arrangements .....	45
Guarantees and flat-rate payments.....	45
Contractual rate and call-up rate.....	46
Division of employer/employee contributions .....	47
<b>5. FINANCING AND ADMINISTERING OF THE PLANS.....</b>	<b>48</b>
Balancing the plans.....	48
Balance and yield.....	48
ARRCO as a harmonizing structure .....	51
Compensation between institutions .....	51
Reserves .....	53
Reserves in ARRCO plans.....	53
Reserves in AGIRC plans.....	55
Benefits not financed by the plans.....	57
Administration and management.....	59
<b>6. TAX TREATMENT.....</b>	<b>61</b>
Corporate taxation .....	61
Employee taxation .....	62
Social security charges .....	63
Taxation of pension funds and insurance bodies.....	64
<b>7. SUPPLEMENTARY SCHEME PENSIONS AND OVERALL PENSION.....</b>	<b>65</b>
General scheme pensions.....	65
ARRCO and AGIRC pensions .....	66

Overall pension and replacement rate .....	67
Assessments on the basis of career profiles .....	68
Survey data .....	68
All retirees.....	69
Retired cadres.....	70
8. VOLUNTARY PLANS AND OTHER ARRANGEMENTS.....	72
Company and sector plans .....	72
Organisation.....	73
Company or multi-employer funds .....	73
Internal financing .....	73
Use of insurance bodies .....	74
Benefits .....	75
Funding.....	76
Population covered .....	77
Civil service plans .....	77
PREFON plan .....	78
CREF .....	79
Other arrangements.....	80
Auxiliary and severance payments .....	81
Employee savings plans.....	82
9. STATE REGULATION AND INTERVENTION.....	83
ARRCO and AGIRC plans .....	83
Other plans.....	84
Insurance bodies .....	84
Company and multi-employer plans .....	85
Role of community institutions .....	85
Equality of treatment between men and women .....	85
European insurance market .....	86
10. CONCLUSION .....	87
Reform of the general plan .....	87
Pension, capital, and long-term saving .....	88
Boundary between pay-as-you-go and funding.....	88
Funding: A choice of forms .....	89

## PRIVATE PENSIONS IN FRANCE

Private pension plans in France have developed along highly individual lines. Yet their origins are comparable to those of private pensions in other industrialised countries: the first plans were set up, mainly from the early nineteenth century, for the benefit of state officials and workers, local authority officials, sailors, employees of the railways, mines, gas and electricity companies, financial institutions, and so on. After the Second World War, when the general social security scheme was set up to cover the whole of the working population, many of the plans arising from employers' initiatives became statutory plans called "special plans". These replaced the general scheme for employees participating in them. Special plans differ from the more recent British contracted-out plans in that special plans are exempted from all participation in the general scheme, and are themselves statutory plans. They now give benefits which are substantially greater than those provided under the general scheme, and almost exclusively cover the public sector in the strict sense of the term, that is, public servants and state-owned monopolies.

Alongside these first pension schemes, plans aimed at engineers and cadres<sup>1</sup> had been set up in many companies shortly before the Second World War. These categories were not affiliated to the statutory scheme established in 1930, which covered only those employees whose earnings were below a certain ceiling. After the war, engineers and cadres were integrated into the new general social security scheme; however, under a national collective bargaining agreement with the employers, cadres secured additional cover under their own specific scheme. A special supplementary scheme for engineers and cadres was thus established. It was regulated by an umbrella organisation, the "Association générale des institutions de retraite des cadres" (AGIRC -- general association of cadres pension funds). Initially, only companies belonging to organisations which were signatories of the agreement were involved in this scheme. It gradually spread to include all cadres and equivalent employees, while still managed by employers' and employees' representatives on a national level.

The cadres scheme, as a supplement to the general scheme, paved the way for the development of similar plans for other, "non-cadre"<sup>2</sup> personnel. The low benefits provided by the general scheme represented a strong incentive in this direction; in fact, at the time it offered only 40 per cent of average earnings (up to the contribution ceiling) over the last ten years, and operated according to a contributory principle which led to no benefits being issued for the years prior to its creation in 1945. This led to a spate of initiatives in the 1950s, both at company and sector level, and eventually to the establishment of a federation bringing together the various institutions. Herein lies one of the highly original features of the French system. The plans which arose from the initiative on the part of companies and sectors were brought together on a national and multi-sector level in a single body, the "Association des régimes de retraites complémentaires" (ARRCO -- association of

- 
1. The French term "cadre", for which there is not an equivalent in English, is used in this report to refer to a group covering managerial, leading technical, and other higher-paid white-collar workers.
  2. "Non-cadre" is used in this report to refer to blue-collar workers and lower-paid white-collar workers.

supplementary pension plans), which arranges (general) compensation of resources and expenses among its member institutions.

Eventually, employers' and employees' representatives in France set up actual national social security plans as supplements to the statutory scheme. The state finally intervened, although only to bring the obligations deriving from the collective bargaining agreements into general use by those employers who were not involved in the organisations which had signed the agreements. Some funds which offer their members supplements to the benefits of the general scheme have remained independent of the two large umbrella bodies. Their numbers are falling, however; some have just joined the umbrella bodies, while others are currently discussing this move.

Despite their national, multi-sector, and compulsory nature, the ARRCO and AGIRC plans are managed on an exclusively private basis without government intervention in important decisions. The latter are made on the basis of negotiation between employers' and employees' representatives on a national level.

The extensive role of these plans in providing supplementary cover has left little room for the development of other plans. They guarantee national cover and, combined with the general social security scheme, provide relatively high salary-replacement rates. This is due, in particular, to the fact that they issue benefits which are proportional to salary up to a relatively high ceiling, and offset, as earnings increase, the ceiling effect on benefits in the general scheme. Some voluntary plans, which give benefits over and above compulsory cover, have nonetheless survived. They currently play a marginal role, relating mainly to very high salaries. They may be developed in the future should there be a drop in the benefits provided by the general scheme, but at present there is little room for initiatives to supplement compulsory cover.

One final characteristic which is specific to French supplementary plans is that such plans are very rarely funded. The ARRCO and AGIRC plans in particular do not fund their commitments; they use a pay-as-you-go technique which, as we shall see, is significantly different from that generally used by social security plans.



## 1. GENERAL STRUCTURE OF THE SYSTEM

At first sight, the French pension system appears to be divided into a wide variety of plans. Looking beyond this institutional fragmentation, however, a certain consistency appears, and it is possible to discern a typical situation which applies to almost all private-sector employees.

### **Diversity and fragmentation**

The structure of the French system is marked by, first, the ambition to set up, following the Second World War, a single social security scheme covering the whole population, and second, the failure of this ambition. The desire for a unified system quickly foundered upon the opposition of socio-professional groups who rejected the principle of a single scheme. This resulted in the establishment of the relatively fragmented system we know today.

From the beginning in 1945, the agricultural sector has been excluded from the general scheme intended to cover the whole of the working population. Some older plans, the "special plans", were initially maintained on a provisional basis, before being finalised in 1946. The self-employed refused to enter the general scheme, and specific plans were set up for their benefit in 1948. At the same time, the level of benefits offered by the general scheme left considerable room for the development of supplementary plans, which have been extended to cover all members of the general scheme. Supplementary plans have also been set up for the self-employed.

In general, the French system today presents two faces to the world. There is, on the one hand, a division into three large population groups: employees affiliated to the general scheme or the agricultural scheme (67 per cent), employees participating in special plans (20 per cent), and the self-employed (13 per cent). On the other hand, the majority of the working population has two-tier compulsory cover in the form of a basic scheme and a supplementary scheme. Members of special plans, who mostly come under a single compulsory scheme, constitute the principal exception to this pattern. Moreover, above and beyond this compulsory dimension, employees and the self-employed may benefit from voluntary or optional plans.

This fragmented picture must be placed in context. Some plans, while preserving their autonomy, are in fact aligned with the general scheme. This is the case, for example, of the agricultural employees' scheme, where the regulations have been aligned with those of the general scheme since 1963, and the artisans', tradespeople's, and manufacturers' basic plans, which came into line in 1973. As of 1 January 1990, parity of benefits was obtained for the farmers' scheme, with parity of contributions set to follow. Furthermore, widespread demographic compensation has been instituted among all the basic plans, including special plans. This involves a system of multi-sector cooperation, through which plans that benefit from socio-economic developments, in particular the employees' scheme, help out those plans with a deteriorating demographic structure (farmers, tradespeople, mine workers, and so on). This inter-scheme solidarity, however, is not universal, and plans showing the greatest deficits are balanced by means of taxes.

### *A typical private-sector situation*

Although the system appears complex and fragmented, a typical situation can be outlined which has spread to almost all private-sector employees<sup>3</sup>. The majority are covered by a basic pension provided by the general scheme, with a supplementary pension provided by the ARRCO and AGIRC plans. With regard to the supplementary pension, the ARRCO plans cover all employees, while the AGIRC scheme covers cadres only. In other words, the situation is different for cadres and non-cadres with regard to their compulsory supplementary cover. The former participate in an ARRCO fund for the portion of their salary which is below the ceiling and in an AGIRC fund for the portion above the ceiling; the latter participate in ARRCO for the whole of their salary.

Above and beyond this compulsory dimension, the ARRCO and AGIRC plans offer options which allow improvements in the level of benefits. There is some room for manoeuvre in the choice of contribution rates within a defined range. It is thus possible, within the framework of the compulsory supplementary plans, to increase benefits by fixing, within the company or the sector, a contribution rate above the minimum rate, for all employees or for a particular category. This room to manoeuvre, however, operates almost exclusively on an increase-only basis, and this is where the constraints imposed by the pay-as-you-go method come into play: the AGIRC does not allow any lowering of the rate, and ARRCO applies strongly deterrent conditions. Even these options are being phased out. ARRCO made a decision in 1993: member plans will offer only a single rate from 1 January 1999. AGIRC followed suit in 1994.

Some supplementary plans in the private sector remain independent or partially independent of ARRCO and AGIRC. These involve plans for civil aviation flight crews, and, outside AGIRC only, in savings banks. Plans which formerly fell within these categories joined the two federations some during the 1990s: the Popular Credit Bank Scheme, and the Air France ground staff, the banking sector, social security employees, and agricultural service workers.

Some companies or sectors of industry have also set up plans which provide benefits beyond those of the ARRCO and AGIRC plans. These plans, however, involve a very limited population. In addition, as a result of union initiatives, two optional plans have been set up for public service employees: the PREFON scheme and CREF.

In general, the uniqueness of the French system lies in the two-tier organisation of the compulsory provision. More specifically, it results from the characteristics of the second tier, which supplements the statutory social security scheme. Although it is compulsory, it was drawn up on the basis of agreements reached between employers' and employees' representatives, and continues to be managed by them. The state has only intervened to fill in gaps concerning the population covered. In addition, the benefits paid through this second compulsory tier are financed on a pay-as-you-go basis via a mechanism of financial compensation between member institutions of the two umbrella bodies.

It is this grouping, made up of the member institutions of ARRCO and AGIRC, which constitutes the most original feature of the French system in comparison with the pension plans of other OECD countries. The bulk of this report will therefore concentrate on these plans. The other plans offered by companies to their employees will be described in much less detail. They are comparatively modest in scale, and their methods of organisation and financing are based on systems

---

3. The private sector here includes nationalised companies in the competitive sector: metallurgy, banks, insurance, airlines, and so on.

frequently encountered in industrialised countries: defined-benefit or defined-contribution company plans, insurance contracts, payment of pensions on current income, and so on.

## 2. DEFINITIONS AND GENERAL INFORMATION

As we have seen, the system of retirement provision for workers in France is made up of two tiers. The first tier consists of basic plans or statutory social security plans, the second of supplementary occupational plans. This second category can be further divided into compulsory and voluntary plans.

This two-tier classification, while ideally suited for considering the French system within a framework of international comparative analysis, presents a problem of vocabulary in France. The supplementary element in fact includes plans described as "complémentaire" (supplementary), and, loosely, as "surcomplémentaire" (super-supplementary) or "supplémentaire" (additional). From a national point of view, the system is usually understood as divided into three tiers: basic plans, obligatory supplementary ("complémentaire") plans, and optional super-supplementary ("surcomplémentaire") or additional ("supplémentaire") plans. This breakdown provides an effective illustration of the specific nature of the French system: the compulsory supplementary plans which are federated on a national level have grown to such an extent that they have become characteristic of supplementary plans as a whole, with only poorly defined and little-known super-supplementary plans falling outside their scope. Although the definition of "supplementary" adopted here risks creating some confusion for the French reader, it does allow the national system to be placed within a comparative framework. The difficulty arises from the fact that, unlike what has happened in the other principal industrialised countries, the vast majority of plans established within sectors of industry have become compulsory on a national and multi-sector level. They have thus come to constitute a "virtual" second basic scheme while remaining under the autonomous management of employers' and employees' representatives.

The area we shall concentrate on in this report is the second supplementary tier, set up at the initiative of actors within the occupational sphere. It has been defined on the basis of the exclusion of statutory plans.

The following plans are thus outside the scope of the report: for employees, the general scheme and special plans; for the self-employed, the six statutory plans respectively covering artisans, tradespeople and manufacturers, members of the professions, lawyers, farmers, and the clergy. Plans for the self-employed, with the exception of the clergy scheme, nonetheless have set up, within the framework fixed by law, plans which are described as supplementary. Under the law, in fact, contributions for the financing of plans supplementary to the basic scheme may be fixed by decree at the request of the scheme management committees, and following approval by a majority of the members. Most categories of the self-employed thus decided to obtain supplementary provisions. Classifications are by their very nature arbitrary to a certain extent, particularly where borderline cases are involved, and the statutory nature of these plans led to their being excluded from this report. The scheme for public-sector employees who do not have civil servant status (that is, non-titular) and local authority employees (IRCANTEC) was also omitted, because although it supplements a basic scheme (non-titular public servants participate in the general scheme), it was established by decree and not through collective bargaining.

The scope of the report thus ultimately extends to all supplementary plans covering private-sector employees (including employees of nationalised companies in the competitive sector). The two optional plans for public service employees, the PREFON plan and CREF, have also been included, as they arose from union initiatives and do not fall within a statutory framework. The ARRCO and AGIRC plans will be examined in depth.

The very notion of a "pension" applied to a scheme has a very strict meaning in France. It is clearly dissociated from the notion of "welfare", which refers to all types of occupational welfare plans other than retirement provision. In the current French framework, a pension scheme provides benefits which are strictly linked to the period following the cessation of work (with a possibility of the benefits reverting to surviving dependants). Death-in-service, incapacity for work, and invalidity, like healthcare payments, fall within the scope of "welfare" plans. In addition, a pension scheme in France is currently regarded as paying only pensions, and not lump sums; the French term "retraite" designates both the period following cessation of work and the pension itself. The scope of the report has been defined in accordance with this usage, which has influenced the design of the plans themselves. However, with a view to international comparisons, the various plans which are not associated with pensions in France, but which are likely to be so elsewhere, have been dealt with; these involve welfare plans, termination payments, and company savings plans.

Some further points of vocabulary need to be explained in order to avoid any confusion. There is often a tendency in France to describe as "optional" ("facultatif") plans which are established on the basis of free initiative. This usage will not be adopted here; we shall instead refer to "voluntary" ("volontaire") plans. The notion of "facultatif" will apply only to membership: the option of whether or not to join, the possibility of a choice of membership conditions, and so on. The notion of "volontaire", in contrast, will serve to describe the initiative to establish the scheme.

Funds ("caisses") and schemes ("régimes") are often confused. It is important to differentiate between them, even though they are often closely linked. A scheme is the body of provisions which determine the conditions of pension cover of a given population. A fund is an institution which operates this scheme.

The term "contributors" ("cotisants") is commonly used in France to define members of a scheme, while "beneficiaries" ("bénéficiaires") designates persons receiving a pension. A further distinction is made between beneficiaries of personal entitlements, the actual pensioners themselves, and beneficiaries of derived or survivor's benefits, that is, dependants. The usual terminology regarding beneficiaries will be preserved. Rather than "contributors" ("cotisants"), however, the term "members" ("affiliés") will be used to designate current workers who are covered by a scheme. The term "cotisant" implies that there is a contribution on the part of the person covered by the scheme, which is, in fact, true in the great majority of cases in France. However, some voluntary plans are financed solely by the employers, without any contribution from employees. The broader term "member" is thus preferred, particularly since, for the same reason, it fits in better with a comparative framework.

## Sources

The principal data on pension plans in France are provided by the "Commission des comptes de la sécurité sociale" (Social security accounts committee). It regularly publishes (about once a year) the accounts of all plans within its jurisdiction, that is, statutory plans and plans made

compulsory by law. It also provides information on voluntary supplementary plans. This document, produced with the assistance of the "Division des études économiques et statistiques" (DEES -- Division of economic and statistical studies) at the French Ministry of Social Affairs, currently represents the best source of cumulated data. The report used here dates from July 1992 and deals with the accounts for the year 1990.

For the ARRCO and AGIRC plans, the annual reports (the most recent available being those for 1991) and the regular publications of the two associations (ARRCO's "La retraite complémentaire" -- Supplementary pension -- and AGIRC's "Point cadres") can be added to these data. The data involved are produced as a function of management requirements and are not always well suited to analysing plans. AGIRC, which represents single-scheme funds, has more accurate data than ARRCO, which brings together dozens of plans (47 at the end of 1991).

In addition, the "Service des statistiques, des études économiques et des systèmes d'information" (SESI -- Statistics, economic studies and information systems department) at the Ministry of Social Affairs produces a series of statistics on the benefits and accounts of funds operating compulsory and voluntary supplementary plans. These include, in particular, scarce data relating to occupational and multi-employer plans which are not affiliated to ARRCO and AGIRC. These data, however, must be used with caution, given the methods of collection and processing involved: they come from fragmented information supplied by a few selected funds, and act as an indicator for all funds. Furthermore, they relate only to financial flows, and give no indication of members and beneficiaries.

Data regarding plans financed via contracts signed with insurance companies are extremely vague. The accounts do not enable companies' pension operations to be isolated. Surveys are being carried out by the "Fédération française des sociétés d'assurances" (FFSA -- French insurance companies' federation) and the "Bureau commun des assurances collectives" (BCAC -- joint collective insurance office). These, however, do not have the same scope, and are limited to a consideration of turnover (premiums collected); they give no information on the benefits paid, on members, or on beneficiaries. As for internally financed plans, no cumulation of data is carried out. An assessment of the extent of pension commitments would require systematic consultation of balance sheets and the notes to company accounts; however, the law which obliges companies to assess their commitments and feature them in the balance sheet or as a note, although it is being increasingly complied with, still appears to be ignored in some cases.

Regarding the pensions themselves, given the fragmentation of the French retirement provision into a multitude of plans, it has long been impossible to discover the level of the overall pension received by beneficiaries. This inadequacy led the SESI to consider a sample group of around 20,000 pensioners, roughly representative of the overall retired population. An initial systematic collection of data relating to the pensions paid to them was carried out during the fourth quarter of 1988. This provides highly valuable information on the level of pensions actually received and on the share of the various plans in overall pensions. Some of the data were updated in July 1991, and the data collection was repeated at the beginning of 1993. The results of this second wave were not yet available when this report was written (see Lacroix, 1989, 1991, and 1993).

## **Overview**

The following brief review aims to give a general statistical insight into the retirement provision system and to place supplementary plans in context.

### **Importance of special plans**

One of the characteristic features of retirement provision in France is the importance of special plans. These descendants of the first pension plans now cover 20 per cent of members of statutory plans and pay 18 per cent of pensions (Table 2.1). Considering employees only, it can be seen that almost a quarter come under a special scheme. The largest of these schemes are those of civil servants and military staff, with 2.2 million members, and local authority officials (1.4 million), together representing 85 per cent of members of special plans (Table 2.2). Adding the SNCF (railways) and EDF-GDF (gas and electricity companies) plans, the proportion rises to 93 per cent. Some have a severe demographic imbalance, particularly the SNCF scheme and, to a much greater extent, the mining industry scheme.

The two large plans (civil service and local authorities) use the same method of calculating pensions. The pension is calculated on the basis of the final salary: 2 per cent per year of service applied to the final grade-related salary (average gross salary of the last six months). The number of years' contributions taken into account is limited to 37.5. The replacement rate is thus 75 per cent for a career of thirty-seven and a half years. This rate, however, must be seen in relative terms, as the base for calculating the pension does not include the often considerable bonuses which public service employees receive in addition to their salary. The civil servants' scheme and the rate of 75 per cent of gross final salary have nonetheless become a yardstick for employees' retirement provision in France.

### **Compulsory supplementary plans**

Compulsory supplementary plans cover a considerable number of people (Table 2.3). ARRCO plans, in particular, had 16.7 million members as at June 1990. This figure, however, does not represent the number of individual members, as one person may in fact be a member of several funds at the same time. The data collection method does not allow the exact number of individual members of ARRCO to be determined; ARRCO itself estimated the figure at approximately 14.3 million in 1990. This gives a good illustration of the extent of ARRCO plans: the figure is approximately equivalent to the total number of members of the general scheme and the agricultural employees' scheme (Table 2.1). Of ARRCO scheme members, 2.6 million are also members of the AGIRC scheme.

The non-titular public servants' scheme (IRCANTEC), with more than 1.8 million members at 30 June 1990, covers a highly mixed population. A significant proportion of its members pass through the scheme without remaining in it. Some acquire civil servant status after a relatively short period, and the scheme covers a population group whose membership is highly irregular (replacement employees, auxiliary staff). Another, much smaller, compulsory scheme which is also independent of ARRCO and AGIRC is the flight crew scheme, with almost 18 000 members and around 6 400 beneficiaries (4 900 with direct benefits and 1 500 with derived benefits) at 31 December 1991. The Air France ground staff scheme, which was in the same position up until the end of 1992, joined the two federations on 1 January 1993. This scheme had slightly under 26 000 members and around 15 000 beneficiaries at 31 December 1991.

Plans participating in ARRCO compensation but independent of AGIRC include banking sector plans, the savings bank personnel scheme, and the agricultural services scheme. These plans paid out a total of 8.3 billion francs in benefits in 1990, excluding ARRCO transactions.

### **Benefits paid**

Compulsory plans paid out 684 billion francs in benefits in 1990 (Table 2.4). Almost a third of this comes from the general scheme. Special plans, although they cover a much smaller population group, paid out a similar sum, representing 29 per cent of the total. This is due to the fact that pensions are very high in these plans. Thus, in 1990, the average annual pension was FF93 286 for civil servants, FF83 766 for SNCF pensioners, and FF117 730 for EDF-GDF pensioners, amounting to FF7 770, FF6 980, and FF9 810 per month respectively (Table 2.5). The mining industry scheme is a special case: it pays significantly lower pensions than the other special plans, but, unlike the latter, its members are also covered by the ARRCO and AGIRC plans.

The pensions paid by the basic plans appear very low in comparison. The average annual pension under the general scheme, for example, was FF29 995 in 1990, or FF2 500 per month (Table 2.6). In such conditions, the compulsory supplementary plans play an essential role. The difference between ARRCO and AGIRC is obvious: in 1990, the average annual pension was FF15 158 in ARRCO plans and 49 161 in the AGIRC plans (Table 2.7). From the point of view of the beneficiaries, the difference is all the greater for those who receive an AGIRC pension, as they also receive an ARRCO pension. In general, it can be seen that the juxtaposition of pensions, which results from the spread of supplementary plans, makes an approach based on the overall pension received by beneficiaries essential. In addition, the very low average pension under the non-titular public service employees' scheme is a good indication of the transient nature of the scheme's membership (the average number of years of contribution is currently around 8 years and 4 months for beneficiaries).

Alongside the compulsory plans, the "Fonds spécial d'allocation veillesse" (FSAV -- special old age allowance fund) provides a minimum revenue to persons who are unable to receive benefits from a statutory scheme. The payment of allowances is subject to conditions regarding means, age, nationality, and residence. This fund is financed *pro rata* by all the basic plans as a function of the number of pensions they pay. In 1990 the FSAV paid almost 2.9 billion francs to 89 000 people.

### **Differences in contributions and low level of funding**

The differences in pensions paid reflect, logically enough, corresponding differences in the contributions paid to the plans. The Livre blanc sur les retraites (white paper on pensions -- 1991) assessed contributions for the various socio-professional categories concerned. The "generosity" of the special plans, for example, is reflected in high contribution rates: 38.1 per cent of gross salary for civil servants, 49.1 per cent for EDF-GDF employees, 56.2 per cent for RATP (Paris public transport system) employees, and so on (Table 2.8). Some plans receive additional subsidy from the state. The corresponding contribution rate for private-sector employees who are members of the general scheme and the ARRCO and AGIRC supplementary plans is much lower, standing at 20.4 per cent of gross salary. The self-employed pay significantly lower contributions, averaging 9.4 per cent of taxable income.



In addition, one of the characteristics of the French situation arises from the fact that the majority of supplementary scheme liabilities are not funded. Two figures provide a good illustration of this: supplementary employee pension funds paid out a total of 167.9 billion francs in benefits in 1990, while the investment revenue they received barely came to 9.5 billion francs for the same year, or 5.7 per cent of payments (Table 2.9). We have already noted that the ARRCO and AGIRC plans practice a pay-as-you-go method based on general compensation between funds. However, funds that are not nationally based, whether company or industry-wide, also tend not to fund their liabilities. Investment revenue represents only 15.6 per cent of benefits for the year for banking sector funds, and is practically nil (0.2 per cent) in the case of company funds.

### 3. MEMBERSHIP OF COMPULSORY SUPPLEMENTARY PLANS

Membership in ARRCO and AGIRC plans is compulsory for all employees who are members of the general social security scheme, with few exceptions. These plans thus cover almost all employees in the private sector and the competitive public sector. An analysis in terms of rates of membership, whether in relation to the whole working population or as a function of criteria such as sex, socio-professional category, sector, and so on, which is a key element in understanding supplementary plans in the majority of industrialised countries, is of no use in France. Two aspects, however, merit further consideration: the background to the widespread introduction of supplementary cover, and the current membership conditions, in particular the differences resulting from the optional deals proposed by the ARRCO and AGIRC plans. The principal characteristics of the few compulsory plans which are not attached to the two large federations will then be considered.

#### Background

#### Cadres pension plans

Before the Second World War, the compulsory national insurance scheme actually applied only to employees whose annual income did not exceed a certain ceiling<sup>4</sup>. A 1938 decree, passed at the same time as this threshold was increased, allowed cadres with incomes below this ceiling to be exempted from membership if they were members of a company or industry-wide scheme, although only on condition that the latter guaranteed benefits equivalent to those of the compulsory statutory scheme. This type of scheme thus operated as a substitute for the national insurance scheme. In 1946 this exception provision involved almost 200 000 cadres (Netter, 1977). With the establishment of the general social security scheme, compulsory membership for all employees, whatever their income, called the existence of these substitute plans into question. Cadres objected strongly to this compulsory membership, and demanded that their own specific plans be maintained.

A joint and equal committee comprising cadres' and employers' representatives was set up to define the conditions for maintaining the benefits previously acquired by cadres. During these negotiations the authorities recognised a specific cadres union, with the inclusion in the employees' delegation of the "Confédération générale des cadres" (CGC -- general confederation of cadres) alongside the two large organisations of the period, the "Confédération générale du travail" (CGT) and the "Confédération française des travailleurs chrétiens" (CFTC). At this point the cadres union was recognised as representative. The employers were represented by the "Conseil national du patronat français" (CNPF -- French employers' organisation)<sup>5</sup>. The work of the committee finally led

---

4. Originally, in 1930, this was fixed at FF15 000 per year, and at FF18 000 in cities with more than 200 000 inhabitants, with an increase as a function of number of dependants (Netter, 1965*b*).

5. The other employers' organisation, the "Confédération générale des petites et moyennes entreprises" (CGPME - General confederation of small and medium-sized companies), did not take

to the signing, on 14 March 1947, of a collective bargaining agreement establishing the pension and welfare scheme for cadres, a unique multi-sector scheme under a compensatory and regulatory body, AGIRC, which funds operating the scheme are obliged to join.

As a result of the 1947 agreement, the scheme became obligatory for cadres in member companies of the CNPF. Subsequently, the obligation to join the scheme spread progressively to include all cadres. In 1950 the agreement of 14 March 1947 was brought by law under an extended collective bargaining agreement, which brought all companies in the sectors of industry represented in the CNPF<sup>6</sup> into the scope of application of the agreement. At the same time, sectors not represented in the CNPF requested entry to the scope of the agreement. Finally, in 1972, the law required that the scheme be compulsorily applied to all employees who were members of the general social security scheme. This provision came into force on 1 January 1974. Only a few exceptions persisted; these concerned banks, savings banks, agricultural services, companies or bodies whose supplementary plans were statutory or regulatory in origin (non-titular public service employees, Air France ground staff, air crews), social security bodies, and bodies governed by the Code de la Mutualité (mutual benefit funds regulations, which joined the management personnel scheme as of 1 January 1980).

Compulsory contributions initially covered the portion of salary between the social security ceiling and four times this ceiling, known as bracket "tranche B". Since 1 January 1991, the obligation to contribute also covers the portion of salary between four and eight times the ceiling, known as bracket "tranche C". Cadres are thus now compulsorily covered by the AGIRC scheme for the portion of their salary between the social security ceiling and eight times this ceiling.

The definition of the population group concerned poses a problem. Two large categories of members can be distinguished: those for whom membership is compulsory, and those for whom membership is optional. Both categories are defined by articles of the collective bargaining agreement. Cadres (defined under Article 4) and personnel with equivalent status (such as senior technicians; Article 4 bis) are compulsory members. In general, it is the post occupied and not the level of salary which determines the status of cadre or equivalent. In addition to the posts of engineers and manager as defined in the various sectors of industry, the status of cadre refers to employees in managerial posts, salaried doctors, factory superintendents, and traveling salespeople and representatives with the qualifications and prerogatives of engineers or supervisors. Cadre-equivalent personnel comprise employees, technical staff, and supervisors above a certain rank. In 1947, the unions demanded that membership in the cadres scheme be made compulsory to these categories. The addition of Article 4 bis led to their signing the agreement (Gabellieri, 1986, p. 57).

In addition, Article 36 of appendix 1 to the agreement provides for the possible extension of membership to include employees with a hierarchical coefficient lower than that of cadres

---

part in the negotiations. It did, however, comply with the agreement of 1 April 1984, and it has, since that date, been considered as a signatory organisation (Dupeyroux, 1988).

6. A decree of the Conseil d'Etat in 1959 considered that the collective agreements relating to social security protection, in particular the agreement of 14 March 1947, could not be extended. Another procedure was thus implemented. This type of agreement can henceforth be approved by the authorities, and this approval procedure has the same scope as the extensions: it makes the provisions of the agreement obligatory for all employers within its scope of application in the industries concerned (Dupeyroux, 1988).

equivalent<sup>7</sup>. This extension may result from a collective bargaining agreement or from the individual decision of a company; in the latter case, there must be agreement between the employer and the majority of the employees concerned. Although this extension to include employees other than cadres and equivalent is optional, it cannot be cancelled once it has been adopted (except in particular cases of mergers or company takeovers). This extension procedure notably led to all the members of a supervisors' scheme (IRCACIM -- the metal industries' shop managers', foremen's, and equivalent pension institution) joining AGIRC in 1984.

### **Non-cadres plans**

The establishment of the cadres scheme paved the way for the development of supplementary plans for other categories of employees. In the years which followed the 1947 agreement, some sectors of industry and large companies set up plans for non-cadres. Thus, in 1953, the metal industry supervisors' scheme IRCACIM was created. As we have seen, it subsequently joined AGIRC. In addition, the agreement signed at Renault in 1955 played an influential role. One of the clauses of this agreement provided for the rapid creation, as of 1 January 1956, of a pension scheme for Renault employees to replace the existing system known as the "long service reward" (Jassaud, 1956). The establishment of this scheme triggered a proliferation of initiatives and negotiations aimed at giving the same benefits to employees of other companies.

The increase in numbers of supplementary pension funds led employers (CNPf and "Union des industries métallurgiques et minières" -- Union of metallurgical and mining industries) and two union organisations, the CFTC and the "Confédération générale du travail Force Ouvrière" (CGT-FO)<sup>8</sup> to draw up a scheme bringing together non-cadres funds, the "Union nationale des institutions de retraites des salariés" (UNIRS -- National union of employees' pension institutions), set up on 15 May 1957. Its founders were aiming at companies who wished to set up supplementary pension schemes for their manual workers and non-cadre salaried workers. The adoption of this new scheme, drawn up jointly by employers' and employees' representatives, was recommended to such companies in an explicit attempt, in the terms of the declaration of intent, to bring order to the "disorganised development of employees' supplementary pensions" (XXX, 1958, p. 133). This scheme developed rapidly from the first year of its implementation, with more than 500 000 members by the first half of 1958. Unlike the cadres scheme, membership is not compulsory; the UNIRS, however, developed principally as a result of collective bargaining agreements. In the metallurgical industries, for example, it was made compulsory by means of twenty-six regional agreements in the few months following its creation. By the end of 1961, almost three hundred national, regional, and local conventions and agreements provided for compulsory membership of the UNIRS, which at this time covered 56 500 companies, 2 077 000 members, and 432 000 beneficiaries (Genevray, 1962). Although the UNIRS developed particularly within the metallurgical industry, it nonetheless retained its multi-sector character, covering the textile and chemical industries, retail, department store chains, and so on.

A number of other plans also cover non-cadres. Most of these were set up before the UNIRS, some of them multi-sector plans, others associated with a particular sector or, in some cases,

- 
7. Hierarchical coefficient equal to at least 200 in the salary scale, or equivalent posts. This coefficient represents, in most sectors, one of the first supervisory levels.
  8. The third organisation representing the employees concerned, the CGT, joined the founders to participate in the administration of the scheme in 1958.

with a particular company. The noteworthy larger plans include: the "Institution de retraites et de prévoyance des salariés des industries métallurgiques, mécaniques, électriques et connexes" (IRPSIMMEC -- pension and welfare institution for employees in the metallurgical, mechanical, electrical, and associated industries), set up in 1947; the "Association générale des retraites par répartition" (AGRR -- general association of "pay-as-you-go" pensions), 1951; the "Caisse générale interprofessionnelle de retraites pour salariés" (CGIS -- general multi-sector employees' pension fund), 1952; the "Caisse autonome de retraites complémentaires et de prévoyance du transport" (CARCEPT -- transport sector independent supplementary pension and welfare fund), 1954; the "Caisse de retraites interentreprises" (CRI -- multi-employer pension fund), 1956; the "Caisse nationale de retraite des ouvriers du bâtiment et des travaux publics" (CNRO -- national pension fund for construction and public works employees), 1959.

Although the creation of the UNIRS made a considerable contribution to extending supplementary cover to non-cadres, the scheme was less successful with regard to the founders' other objective, the coordination of existing plans. This desire for coordination is closely linked with the fact that the vast majority of plans established had chosen the pay-as-you-go technique as the method of financing benefits. Such a system is extremely fragile if based on a restricted population, whether of employees of a single company or a group of companies, or even of an entire sector; it is vulnerable to changes in the size of the population group concerned.

### **Widespread introduction of supplementary pensions**

The dual goal of extending the benefits of supplementary pensions to employees who were not yet covered and setting up a coordination mechanism between existing plans led to the signing of the agreement of 8 December 1961, between the CNPF on the employers' side and the CFTC and the CGT-FO for the employees (the CGT joined later). It obliges all companies which are members of an organisation belonging to the CNPF to affiliate their salaried employees to a supplementary pension scheme. The approval decree of 27 March 1962 extends this obligation to all companies belonging to an industry which is covered by the CNPF, whether or not they are CNPF members. In addition, the implementation of the agreement of 8 December 1961 is entrusted to an association created on 22 March 1962: the "Association des régimes de retraites complémentaires" (ARRCO -- association of supplementary pension plans). The function of ARRCO is to "ensure the durability of plans and promote appropriate coordination and compensation between them" (Article 6 of the agreement of 8 December 1961). In other words, ARRCO's role consists of harmonizing the regulations of the various member plans and managing a system of financial compensation between the institutions such that members receive equivalent benefits whatever ARRCO funds they have belonged to during their career. ARRCO is thus, unlike AGIRC, not a pension scheme, but rather an association of pension plans; management of each individual scheme is the responsibility of one or more funds. Under the terms of the agreement, companies to which the agreement applies must affiliate their non-cadres to a fund which is a member of ARRCO.

By the end of 1962 ARRCO comprised seventeen plans in the sectors of industry, commerce, and services covered by CNPF, representing a total of more than 6 million members (ARRCO, *25e anniversaire*, 1987). It subsequently expanded steadily, encompassing a growing number of plans. Compulsory membership of a supplementary scheme was finally made universal by the act of 29 December 1972. Under three implementation decrees (dated 15 March, 11 June, and 25 June 1973), the scope of the 1961 agreement was extended to "all activities in which salaried employees are compulsorily subject to old age insurance under the general social security scheme".

Compulsory membership was thus extended to the few sectors which were not yet involved: financial establishments and stock markets; temporary employment agencies; wholesale and retail businesses; employers of domestic employees, concierges, and caretakers of residential buildings; the hotel industry, bars, and tobacco outlets; manufacture of orthopaedic and prosthetic equipment; the entertainment industry. Compulsory membership was also extended to home workers in the sectors falling within the scope of the agreement. Within the framework of this widespread implementation, however, there are some exceptions; these mainly involve members of a supplementary pension scheme set up by legislation or regulation (non-titular public service employees, Air France ground staff, air crews) and those whose supplementary scheme is established by means of a collective bargaining agreement requiring ministerial approval (employees of social security bodies).

ARRCO considerably broadened its scope after the "generalising" act took effect. Between 1972 and 1973 the number of members of ARRCO plans rose by more than 3 million. By the end of 1973 ARRCO covered 35 plans and more than 12 million members (ARRCO, *25e anniversaire*, 1987).

The final important stage in the extension of supplementary cover consists of bringing cadres and supervisors affiliated to AGIRC into the scope of the agreement of 8 December 1961. Following a protocol signed on 6 June 1973, people in these categories were made compulsory members of an ARRCO scheme for the portion of their pay up to the social security ceiling, while preserving their own scheme for the portion of their salary above the ceiling. Some cadres already benefited from such membership on an optional basis. The obligation came into force over a two-year period between 1974 and 1976. By the end of 1976 ARRCO plans had more than 15 million members, while ARRCO covered 41 plans (*ibid.*).

### **ARRCO and AGIRC plans**

ARRCO and AGIRC plans today cover almost all employees in the private sector and the competitive public sector. Membership is compulsory and immediate, even for part-time employees or seasonal workers. In addition, no noteworthy distinctions can be made with regard to the scheme joined, as the benefits offered are equivalent regardless of which institution the employee joins. The AGIRC funds operate a single scheme, and one of ARRCO's functions as a federative body is precisely to harmonize the regulations of its member plans. The only factor which introduces any real difference between employees is the contribution rate corresponding to their membership. Contributions which go beyond compulsory minimum rates allow a proportional improvement in the level of benefits offered by the plans.

### ***ARRCO plans***

As at 31 December 1991 ARRCO was responsible for harmonizing and coordinating 47 plans managed by 112 funds. There are five types of funds: multi-sector, industry-wide, company or multi-employer, overseas departments, and agricultural.

On the whole, multi-sector plans are the largest. The largest single scheme is the UNIRS, which by the end of 1990 had almost 5.3 million members (31 per cent of ARRCO members) and covered more than 764 000 companies (19 per cent of companies). Other large multi-sector plans include the AGRR, with more than 1.1 million members at the end of 1991, and the CGIS (893 000 members). One industry fund, the CNRO, which manages the scheme for workers in

construction and public works, is particularly large, with a million members at the end of 1991. There are no longer any company plans (Citroën had its own scheme until 1992) and very few multi-employer plans; the largest of the latter is managed by the "Caisse de retraite interentreprises spatiales et aéronautiques" (CRISA -- aerospace industry multi-employer pension fund), which at the end of 1991 covered more than 47 000 members and 92 companies.

From the point of view of selecting a fund to join, newly established companies either fall under a collective bargaining agreement or a pensions agreement which designates a fund to which they are obliged to affiliate their employees, or are not subject to such a provision and have three months to join the fund of their choice. Companies which have not become members of a fund by the end of this period are obliged to join the fund designated in ARRCO's industry index for their sector; in the absence of a designated fund, the company joins the UNIRS fund responsible for the department concerned.

Changes of funds may be made only in exceptional circumstances and must fall within a limited number of defined cases: company reorganisations, implementation of collective bargaining agreements or pension agreements, and the merging of compulsory and optional arrangements. The latter point merits further explanation. Since 1 October 1976 companies are obliged, for arrangements offered by ARRCO plans above the compulsory minimum, to subscribe to the same fund to which they are affiliated for this compulsory minimum (if this fund is not authorised to make such arrangements, the company may subscribe to the fund of its choice). Previously, companies had the option of joining different funds for the two types of arrangements.

The fact that companies have been able, for a number of years, to choose different funds for compulsory and optional arrangements has important consequences from a statistical point of view. The provisions introduced in 1976 were not retroactive, so that even today many employees are members of two funds. ARRCO has great difficulty, on the basis of the data produced by member plans, in eliminating double counting and distinguishing the number of individuals. All the sets of statistics relating to members thus relate to a total number of memberships and not to individual members. The difficulties are not so great with regard to beneficiaries; in this case, statistics are available which distinguish between individuals.

As at 31 December 1991 the total for all plans was 17.1 million members (Table 3.1); this figure represents approximately 14.2 million individual members. In general, the total number of members increased slightly between 1981 and 1991; it initially fell somewhat, and then rose towards the end of the period. Given that membership is compulsory, the proportion of women (39.1 per cent in 1981 and 41.1 per cent in 1991) gives a good indication of the proportion of women among employees in France.

The number of beneficiaries rose to almost 7.6 million by the end of 1991 (5.5 million with retirement pensions and 2.1 million with survivor's pensions -- Table 3.2). It increased considerably from 1981 to 1991, by 52 per cent overall, and by 55 per cent for retirement pensions. This phenomenon is due to ever-larger yearly groups of employees reaching retirement age, a result of the expansion in the number of employees after the Second World War.

### *AGIRC plans*

By the end of 1991 AGIRC covered 55 funds. All of these operate the same scheme, and can be sub-divided into four categories: national multi-sector, national industry-wide, regional

multi-sector, and multi-employer, plans. National multi-sector funds are the most numerous (there are 23 of them) and have the most members. There are 19 national industry-wide funds; some of these are among the largest funds in terms of number of members, in particular one of the metallurgical industry funds and the construction and public works fund. At the other extreme, there are only three company funds (BP France group, Esso, Télémécanique).

As a general rule, a company can choose which fund to join, even if industry-wide agreements include an obligation to join a specific fund. The two exceptions to this rule are mining bodies and provincial theatres, which must join designated funds. Changes of funds are possible, although a certain number of restrictive conditions are applied; the company must, in particular, explain its motives to the fund which it wishes to leave, and AGIRC has the right to oppose the transfer.

AGIRC does not face the same statistical difficulties as ARRCO, being able to produce accurate data on the number of members and beneficiaries. As at 31 December 1991 it had 2.7 million members, including more than 2 million men and almost 670 000 women (Table 3.3). The scheme's strongly male bias -- almost three-quarters of members are men -- is an accurate reflection of the respective proportions of men and women in the categories of employees it covers. The appreciable increase in the proportion of women, from 18 per cent to 25 per cent over the period 1981-1991, reflects the fact that, in France during the 1980s the proportion of women grew most rapidly among cadres and intermediate non-manual workers in the private sector, whereas over the same period the increase in the proportion of women in the workforce tended to slow down (Données sociales, 1990, p. 39).

As at December 1991 the number of beneficiaries of AGIRC stood at almost 1.2 million: 822 000 with retirement pensions and 346 000 with survivor's pensions (Table 3.4). Over the period 1981-1991 the increase in the number of beneficiaries was even greater than in the ARRCO plans, reaching 92 per cent overall and 121 per cent for retirement pensions. In addition to the increase in the number of salaried employees since the Second World War, AGIRC has also seen an upward trend in the number of management posts; this trend continued through the 1980s, and was manifested in a sizeable increase in the number of members between 1981 and 1991<sup>9</sup> (Table 3.3).

### **Differences in contribution rates**

The situation with regard to contribution rates is currently undergoing changes. At the beginning of 1993, ARRCO decided to no longer offer optional arrangements and to adopt a single rate midway between the previous minimum and maximum rates. However, arrangements which had already been concluded were not affected; current differences are thus set to continue, although to a lesser extent, due to the increase in the compulsory rate. In the case of AGIRC, an agreement was concluded at the beginning of 1994 to gradually implement the single rate at the maximum level currently in force. The highly unsettled nature of the situation makes understanding difficult. Before discussing the distinct differences in quality of cover between the two schemes, the conditions

---

9. The increase observed over this period is not solely attributable to changes in the socio-professional structure of the working population. In 1984, for example, AGIRC incorporated a supervisors' fund, IRCACIM, which led to an increase of almost 200 000 in the number of members (and a rise of more than 41 000 in the number of beneficiaries).



prevailing at AGIRC, and at ARRCO up to the end of 1992 are described, bearing in mind that they have been amended (cf. Section 4).

At the end of 1992 the compulsory rate for ARRCO plans was 4 per cent of gross salary up to three times the social security ceiling for non-cadres and up to this ceiling for cadres. This rate can be raised to 8 per cent for the portion of salary corresponding to the ceiling, both for cadres and non-cadres. Above this ceiling, cadres no longer contribute to an ARRCO scheme; the contribution rate for non-cadres may be raised to 16 per cent for the portion of salary between the ceiling and three times the ceiling. The minimum of 4 per cent has been in force since 1967; it previously stood at 2.5 per cent.

In the AGIRC scheme, contributions are based on the portion of pay between the social security ceiling and eight times this ceiling. This portion is subdivided into bracket B and bracket C. Bracket B lies between the ceiling and a limit equal to at least four times the ceiling (this limit is set each year). Bracket C lies between the upper limit of bracket B and eight times the ceiling. Since 1984 the minimum rate for bracket B is 12 per cent of gross salary (it previously stood at 8 per cent). Companies have the option of raising this rate to either 14 per cent or 16 per cent (they were previously able to choose any rate above 8 per cent up to 16 per cent). Contributions for bracket C became compulsory from 1 January 1991. The situation regarding rates is variable, depending on whether or not the company previously contributed for cadres in bracket C: overall, the minimum rate is 8 per cent and the maximum rate 16 per cent (companies which contribute at a higher rate are authorised to maintain this rate up to a level of 18 per cent); for new companies, the choice of rate is the same as for bracket B (12 per cent, 14 per cent, or 16 per cent). Because of the change in AGIRC regulations, the differences in rate are greater than one would assume from the regulations currently in force for new companies; when decisions were made to increase rates, established companies were not obliged to increase their rate when it was lower than the new minimum (for a synthesis of the conditions applied in 1992).

Although entitlements depend directly on contributions the rate of contributions vary widely, particularly in the ARRCO plans. The statistical data available to AGIRC and ARRCO in this field do not permit a detailed understanding of the differences in contribution rates. An analysis according to criteria such as sex, socio-professional category, sector, size of company, and so on would require systematic gathering of data on a fund-by-fund basis. However, it is possible, on the basis of the material available, to illustrate some broad trends.

### **Contribution rates in ARRCO plans**

The average contribution rate in bracket 1 in ARRCO plans in 1991 was 5.15 per cent. It had increased slightly over the previous ten years, from 4.90 per cent in 1981. Data on bracket 2 are not available, but 95 per cent of the total payroll subject to contributions falls within bracket 1.

ARRCO has no accurate data for individual sectors. However, it is possible to determine that sectors such as textiles and retail (supermarkets, department stores, small tradespeople) contribute largely at the rate of 4 per cent. This gives an indirect indication of the distribution in terms of sex, as these sectors have a largely female workforce. Among department stores, for example, the Printemps Group, Galeries Lafayette, and Nouvelles Galeries all contribute at the compulsory minimum of 4 per cent for all categories of employees. Large companies usually contribute at the higher rates, although not on a systematic basis. In construction and public works,

for example, while large companies do tend to contribute at high rates for office staff, technical staff, supervisors, and cadres, they tend to contribute at the minimum rate provided for under the collective bargaining agreement (4.85 per cent) for manual workers. Similarly, in the retail trade, supermarkets and department stores generally contribute at the lowest rates. In certain sectors which consist of small companies, national or regional agreements provide for contributions at higher rates, or even at the maximum rate; bakers/confectioners and florists, for example, contribute at the rate of 8 per cent.

ARRCO does not systematically collect data regarding distinctions between job categories. Nonetheless, it can be estimated that the average contribution rate for cadres is higher than that for non-cadres, although this difference has shown a tendency to narrow for some years now. In general, the desire to create loyalty among the most highly qualified employees may be seen in the choice of different rates depending on categories. Large construction and public works companies, for example, as we have just seen, apply a rate just above the minimum to manual workers, while they contribute at the maximum rate for office staff, supervisors, technical staff, and cadres. On the whole, however, recent years have seen a trend towards unifying these rates.

### **Contribution rates in the AGIRC scheme**

The average contribution rate over bracket B was 13.81 per cent in 1991. It had fallen away slightly since 1980, when it stood at 13.90 per cent. This overall rate disguises a certain gap between cadres and equivalent on the one hand and technical staff and supervisors on the other. In 1991 the average rate was 13.85 per cent for the first category and 12.90 per cent for the second; the average rate over bracket C was 13.35 per cent.

AGIRC carried out surveys of contribution rates for all funds in 1976, 1986, and 1990. These surveys make it possible to illustrate some broad traits regarding contributions from bracket B.

In general, most contributions are centred around three rates: 8 per cent (the minimum up to 1981), 12 per cent (the current minimum), and 16 per cent (the maximum). The distribution among these rates differs considerably depending on whether companies or members are considered.

With regard to cadres, in 1990 54 per cent of companies contributed at 12 per cent, while 58 per cent of members contributed at 16 per cent (Table 3.6). This difference illustrates the fact that small companies tend to opt for the minimum rates, whereas larger companies frequently select the maximum rate. Thus only a quarter of companies contribute at 16 per cent, but they employ 58 per cent of the members (Table 3.6). If the size of the company is measured in terms of the numbers of cadres, companies contributing at 16 per cent have an average of 9 cadres, as against 2 in companies contributing at 8 and 12 per cent (Table 3.8). In addition, members contributing at the maximum rate receive higher salaries on average: contributions at 16 per cent represent two-thirds of the total salaries subject to contribution and three-quarters of the contributions paid (Table 3.6). In 1990 the average salary was FF126 000 for cadres contributing at 16 per cent, as against FF94 700 and FF76 000 respectively for those contributing at 8 per cent and 12 per cent (Table 3.8).

The same trend can be seen in the case of technical staff, although the differences are less marked. In 1990, 16 per cent of companies contributed at the maximum rate while employing 30 per cent of members (Table 3.7). The 54 per cent of companies contributing at the rate of 12 per cent accounted for half of the members. The size of the company is once again a decisive factor: companies contributing at 8 per cent average 9 technical staff members, those contributing at 12 per cent 16, and those at 16 per cent 31 (Table 3.9). Again, as with cadres, the average salary is higher

for members contributing at the maximum rate than for those contributing at lower rates: FF30 100 at 16 per cent, as against FF24 500 and FF21 800 respectively at 8 and 12 per cent.

Principal developments since 1976 involving cadres have been a reduction in the number of companies and members contributing at 8 per cent and the raising of the new minimum to 12 per cent (Table 3.10). The proportion of companies and members contributing at 12 per cent has increased as a result of the transfer from the old minimum to the new, while the proportion contributing at 16 per cent has fallen: in 1976 a third of companies and two-thirds of members were contributing at the maximum rate; in 1990 the respective proportions were only 25 per cent and 57 per cent (Table 3.10). With regard to technical staff, there was also a drop in the proportion of members contributing at the maximum rate and an increase in contributions at 12 per cent; this trend was, however, reversed between 1986 and 1990, with a slight increase at 16 per cent and a fall at 12 per cent (Table 3.11).

AGIRC has a central file of companies designed to provide contribution rates for pension calculations. It does not permit any distinction between companies which are active and have members and those which have no members or have ceased activities, but it can give indications as to the broad trends regarding sectors of industry. Some are characterised by a high percentage of companies contributing at the maximum rate. In the insurance sector, for example, 82.8 per cent of companies contribute at 16 per cent. The energy sector also has a high proportion of companies which have opted for the maximum rate, particularly mining (79.2 per cent) and the petroleum-natural gas products sector (58.4 per cent).

### **Other compulsory plans**

Compulsory supplementary cover provided outside ARRCO and AGIRC includes two types of plans: those which are completely independent of the two umbrella bodies, and those which are only partially independent. The population concerned is small, and shrunk during the 1990s. The picture described below refers to 1993.

#### ***Compulsory plans independent of ARRCO and AGIRC***

Three compulsory supplementary plans for employees were independent of the ARRCO and AGIRC federations as of 1993: the schemes for non-titular state and public authority employees, social security employees, and civil aviation flight crews. Under the generalisation act, employees covered by these plans do not have to be members of the ARRCO or AGIRC plans. The first scheme lies outside the scope of this report, as it was established by decree rather than by conventional means. As we shall see, the other two plans themselves lie at the outer limits of the report's scope. A fourth scheme which formerly fell within this category in 1992 -- that for ground staff of Air France -- joined ARRCO and AGIRC on 1 January 1993.

Social security employees have their own scheme managed by the "Caisse de prévoyance du personnel des organismes sociaux et similaires" (CPPOSS -- social and similar bodies' staff welfare fund). This scheme was developed on the basis of collective bargaining; it comes under a national collective bargaining agreement of 12 December 1947, which has the distinctive feature of being subject to the prior approval of the state. Unlike the ARRCO and AGIRC plans, therefore, it is not entirely independent of the public authorities.

The scheme covers all employees of social security bodies, providing benefits calculated as a percentage of final salary. For the portion of salary below the social security ceiling, the pension is integrated with the general scheme pension using the deduction method: it is equal to 2 per cent of final salary per year of membership, less the general scheme pension (with a maximum total of 75 per cent, corresponding to a membership of 37.5 years). For the portion of salary above the ceiling, the rate applied is 1.67 per cent, with a maximum total pension of 70 per cent of final salary.

Financing is provided by contributions from employees and employers. Different rates are applied to the two portions of salary determined on the basis of the social security ceiling. The average rate over both portions was 14.6 per cent in 1990; the distribution between employees' and employers' contributions varies between the two portions, and stands at around one-third to two-thirds overall. There is no funding of commitments, and the scheme has very low reserves, even for a pay-as-you-go scheme: in 1990, they represented only 2.5 months of costs.

The scheme faced serious difficulties during the 1990s. It enjoyed a favourable demographic ratio for a long period, and provided considerable advantages to members, in terms of both the level of pensions paid and the eligibility requirements (since its creation in 1947, it has notably paid full-rate pension at age 60). The demographic ratio deteriorated as the number of beneficiaries rose and the number of members fell. The 1993 situation worried the Cour des comptes (government audit agency), and the future of the plan was considered uncertain: the ratio of members to beneficiaries, which was 2.3 in 1993, could well fall to 1.5 in 2003 and 0.6 in 2018 (*Espace social européen* 25 June 1993, pp. 6 and 7). These difficulties have led representatives to negotiate the scheme's integration into ARRCO and AGIRC. This was done 1 January 1994.

As at 31 December 1990 the scheme had 187 090 members and 74 824 beneficiaries, 64 605 with retirement pensions and 10 219 with survivor's pensions; the average annual retirement pension was FF42 505.

The scheme of the "Caisse de retraites de personnel navigant professionnel de l'aéronautique civil" (CRPNPAC -- professional civil flight crew pension fund) falls under the French civil aviation code. All airline flight crews are members. Strictly speaking, this scheme falls outside the scope of this report, since it is one of the plans which were established by legislation or regulation. It is included with a view to international comparison, as it applies to a population group which, in other OECD countries, is covered by private pension plans.

Benefits accrue according to the principle of a percentage of salary per year of service, but without deducting the general scheme pension. The accrual rate varies from 1.40 per cent to 1.84 per cent of salary per year of work. One of the characteristics of this scheme is the provision of a pension at full rate from age 50. Contributions are divided 60:40 between employers and employees. Even though the scheme is not completely funded, it has relatively large reserves, amounting to a total of 10.1 billion francs as at 31 December 1991, or the equivalent of around ten years' worth of benefits. Income from investments thus constitutes a substantial proportion of the scheme's resources: 39 per cent in 1991.

As at 31 December 1991 the scheme had 17 777 members and 6 383 beneficiaries, 4 870 with retirement pensions and 1 513 with survivor's pensions; the average annual retirement pension was FF 134 890.

## **Plans partially independent of ARRCO and AGIRC**

A few plans in the banking, savings bank, and agricultural services sectors were partially independent of ARRCO and AGIRC in 1993. In savings banks and agricultural services, all the employees of companies covered by the scheme come under an ARRCO fund, while cadres do not depend on the AGIRC scheme. In the banking sector, only non-cadres are members of an ARRCO fund; cadres are members neither of an ARRCO fund nor of an AGIRC fund. These plans straddle, as it were, the two categories of supplementary plans. For cadres they constitute compulsory plans, in that they replace the compulsory provisions applied to these employees; for non-cadres they are voluntary plans, as they give benefits which go beyond the compulsory benefits provided by funds within ARRCO.

In the *banking sector*, several funds operate, with a few variations, a scheme provided for as an appendix to the 1947 collective bargaining agreement relating to banking personnel. There are fifteen of these plans: one fund for each of the thirteen largest banks, one for the other metropolitan banking establishments, and one for the banks in French overseas departments. These funds are grouped in the "Fédération des caisses de retraites bancaires" (FCRB -- federation of banking pension funds), whose function is to centralise all arrangements in the sector which come under ARRCO. These arrangements currently involve only non-cadres and correspond to the minimum rate of 4 per cent.

Each fund is regulated on the basis of bylaws appended to the collective bargaining agreement. Pensions are calculated as a percentage of basic salary, with pensions paid by the general scheme and by the FRCB being deducted. A typical calculation applies the rate of 1.67 per cent per year of membership up to a limit of 42 years, or a maximum of 70 per cent of final salary. Some plans implement more favourable terms, up to a ceiling of 75 per cent.

All the banking plans were faced with severe difficulties during the early 1990s. In most, liabilities were very poorly funded or unfunded; the plans were maturing and the sector also was affected by demographic events. Joint entry into AGIRC and ARRCO was negotiated in 1993, effective 1 January 1994. Popular Banks, which do not fall under the collective bargaining agreement but are voluntarily associated with it, carried out parallel negotiations, and had joined the two large federations the previous year.

At the beginning of 1993 the banking-sector plans had approximately 230 000 members, 52 000 of which were cadres. In 1991 they paid almost 5.9 billion francs in benefits.

*Savings bank personnel* are served by a scheme operated by the "Caisse générale de retraites du personnel des caisses d'épargne" (CGRCE -- savings bank personnel general pension fund). This scheme operates according to principles and regulations similar to those of the banking sector. The major difference is that all personnel are covered by an ARRCO fund at a contribution rate of 4 per cent up to four times the social security ceiling.

This scheme is not faced with the same difficulties as the banking schemes. It has relatively large reserves (4.2 billion francs at the end of 1991), while investment revenue represents a substantial proportion of the benefits paid (57 per cent in 1991).

At the beginning of 1993 the scheme had approximately 34 000 members. In 1991 it paid 372 million francs in benefits.

The *agricultural services sector* scheme is operated by the "Caisse central de prévoyance mutuelle agricole" (CCPMA -- central mutual agricultural welfare fund), which comes under the "Code rural". It covers employees in professional bodies in the agricultural services sector, that is, mutual agricultural funds (caisses de la mutualité agricole), agricultural cooperatives, Crédit Agricole institutions, and the various agricultural unions, groups, and associations. Members contribute to an agricultural fund within ARRCO (CAMARCA) at a rate slightly higher than the compulsory minimum (5 per cent), and the scheme provides additional benefits. These are calculated as a function of basic salary, with pensions paid by the general scheme and the ARRCO fund being deducted. Two rates are used: 1.50 per cent for the portion of salary below the ceiling, and 2 per cent for the portion above the ceiling.

In 1990 the scheme had approximately 240 000 members and 80 000 beneficiaries. In 1991 it paid almost 3.1 billion francs in benefits.

After the integration of the banking sector and of CPPOSS, the agricultural service sector decided to join AGIRC and ARRCO at the beginning of January 1997. By the beginning of 1997 only two private sector institutions provide compulsory complementary provisions outside of these federations: the funds of airline and savings banks staff.

## 4. CHARACTERISTICS OF ARRCO AND AGIRC COVERAGE

### Membership conditions

#### *ARRCO plans*

Companies and establishments covered by the agreement of 8 December 1961, that is, almost all companies in the private sector and the competitive public sector, are obliged to affiliate to an ARRCO fund all holders of a contract of employment, whatever their post and hierarchical level. All categories are involved: manual workers, office and technical staff, cadres and other employees who are members of an AGIRC fund, apprentices, home workers.

Membership takes effect when the employment contract is signed. In practice, as compulsory schooling ends at age 16, it is at this age that the membership obligation commences. Up to 30 June 1973 the minimum membership age was 21 years. When this age condition was dropped, periods of employment prior to reaching the age of 21 were credited free of cost for members calculating entitlements from 1 July 1973. Membership lasts until age 65. The regulations of ARRCO member plans may, however, provide for membership to continue beyond this age. Employees working in France (metropolitan France and overseas departments) are members regardless of their nationality.

Employees must be members from the point at which the employment contract takes effect. In no case may membership be subject to the completion of a probationary period. This regulation is extremely strict, with no exceptions, even in the case of part-time workers or staff employed for a very short period (seasonal workers, for example). This provision dates from 1 July 1973. Prior to this, plans were able to make membership subject to the completion of a probationary period. Up to 30 June 1969 the maximum duration of the probationary period was one year; between 1 July 1969 and 30 June 1973 it was one month.

#### *AGIRC plans*

The AGIRC scheme is compulsory for engineers and cadres (Article 4 of the agreement). These two categories are defined by the classification of the professional sector to which the employees belong (decrees relating to salary structures of the various professions, or collective bargaining agreements). Under the agreement, the scheme shall also apply to the following categories:

- traveling salespeople and representatives with the qualifications and prerogatives of engineers or supervisors;

- employees in managerial posts when they are considered as salaried from the point of view of Social Security;
- salaried doctors;
- supervisors and factory superintendents with university diplomas

In addition to the posts of engineers and manager as defined in the various sectors of industry, the status of cadre refers to employees in managerial posts, salaried doctors, factory superintendents, and traveling salespeople and representatives with the qualifications and prerogatives of engineers or supervisors. Cadre-equivalent personnel comprise employees, technical staff, and supervisors above a certain rank. salaried doctors, factory superintendents, and traveling salespeople and representatives with the qualifications and prerogatives of engineers or supervisors. Cadre-equivalent personnel comprise employees, technical staff, and supervisors above a certain rank.

greater than or equal to 300 (Article 4 bis) are also considered equivalent to the category of cadres for the purposes of membership of the scheme.

In addition to cadre and equivalent-status personnel, the company may request that the scheme be extended to other categories of employees (Article 6 of Appendix I). The categories concerned must have a minimum hierarchical coefficient (equal to at least 200). Some collective bargaining agreements provide for the compulsory implementation of this extension, for example in the chemical industry, publishing, cement manufacture, and supplementary pension institutions. Where there is no such provision, any decision to extend must receive the approval of the majority of the employees concerned. The decision to extend the cadres scheme to a given category is final as far as the company is concerned: once taken, it cannot be revoked. In contrast to cadre-equivalent personnel, distinctions may be made regarding the categories which benefit from the extension procedure: in particular, the contribution rate applied to the categories within a company may vary from that applied to cadre and equivalent-status personnel. A specialist committee, the "Commission des classifications" (classifications committee), was set up within AGIRC to determine the scope of the cadres scheme and the professional categories liable to be covered by it.

The employee must be affiliated to the fund which covers the company on taking up a cadre or equivalent post or on entering a category covered by an extension decision. This applies even in the case of new employees, those undergoing a trial period, and part-time employees. Moreover, no age conditions are imposed, and the employee's membership continues beyond age 65. As with ARRCO plans, all the employees concerned who work in metropolitan France and in the overseas departments must be members regardless of their nationality.



## **Eligibility requirements**

### **ARRCO plans**

#### *Cessation of employment*

ARRCO member scheme regulations vary regarding the cessation of employment. In the majority of plans, eligibility for benefits is subject to cessation of the salaried employment of the member. Some plans require the cessation of all work, whether salaried or not, whereas others require only the cessation of employment in the member company or in the sector covered by the fund.

The possibility of progressive retirement was introduced in 1988. This provision is based on that implemented at the same time by the general social security scheme, in which employees may continue part-time work and receive a fraction of their old-age pension provided they have reached the age of 60, have a total of 150 quarters of insurance contributions, and carry out this employment on an exclusive basis. Employees benefiting from this provision in the general scheme may claim their pension in ARRCO plans. They then receive a fraction of their pension, calculated on the basis of the same rates as in the general scheme:

- 30% when the duration of part-time work amounts to a maximum of 80% and a minimum of 60% of full-time work duration
- 50% when the duration of part time work amounts to less than 60% and at least to 40% of full time work
- 70% when the duration of part-time work is less than 40% of full time work

#### *Age*

The age of eligibility for benefits is 65 years. Entitlements may also be liquidated at an earlier stage with the application of an early retirement factor fixed by the plans' regulations. The majority of plans thus allow early payment with an actuarial reduction from age 60 and, in some cases, from age 55 (or even 50, as in the case of the embassies and consulates scheme). However, the introduction of the right to retire at 60 to the general social security scheme in 1983 led compulsory supplementary plans, both ARRCO and AGIRC schemes, to drop the early retirement factor under certain conditions for pension calculations from age 60 on. Three conditions must be met: age 60 to 65 years; evidence of a contributions history of at least 37.5 years; and receipt of the old-age pension of the general social security scheme. In addition, members with evidence of a contributions history of between 32.5 years and 37.5 years may have their pensions paid early between the ages of 60 and 65. In this case, they are entitled to a more advantageous reduction factor than that provided for under the plans' regulations.

These provisions do not cover all employees who have joined a compulsory supplementary scheme during their career. In fact, only employees in work and unemployed people will benefit from them. Former members, known as "partis", are excluded, whether they have ceased work before claiming their pension, returned to their country of origin, or become self-employed.

The ARRCO and AGIRC supplementary schemes came into line with the general scheme as the result of an agreement that came into effect on 1 April 1983 for a period of seven years. A new agreement covering the same provisions was concluded on 1 September 1990 and is applicable until 31 December 1993. The 1983 agreement introduced a novel system, a fund known as the financial structure, the aim of which is to finance the cost of the provisions implemented. The operation of this fund will be described in Section 5.

### *Survivors' entitlements*

Widows or widowers are entitled to a survivor's pension at 55 years of age, or if he or she is disabled or is responsible for at least two children. This provision was introduced 1 July 1996. Formerly, ARRCO schemes made a distinction between men and women. Women could receive survivors' entitlements from their fiftieth birthday, while ARRCO had no obligatory survivors' entitlements for men. However, individual plans often did make provision for this.

Entitlement to survivors' benefits is subject to no conditions regarding duration of marriage. Divorced former spouses who have not remarried are able to benefit from the same entitlements as widows or widowers. The survivor's pension lapses in all cases in the event of remarriage.

In addition, orphans benefit from survivors' entitlements if they are under 21 years of age at the death of the surviving parent or if they are dependent on the surviving parent at the time of his or her death. The pension is maintained up to age 21 or for as long as the conditions regarding dependent children continue to be met.

### **AGIRC plans**

The AGIRC scheme originally made pension entitlement subject to a minimum duration of membership before age 65 of 10 years of service in a company covered by the scheme. This provision was dropped in 1961 (codicil dated 27 December 1961).

### *Cessation of employment*

Payment of the pension is subject to cessation of the employment through which the employee is a member of the cadres scheme. The employee must also cease accruing benefits under an employees' supplementary scheme, except within the framework of provisions associated with the progressive retirement system. Members are not required to cease paid, unsalaried activity or salaried activity in a company or body not covered by a supplementary scheme (for example, in the public sector). Progressive retirement is allowed under the same conditions as in ARRCO schemes.

### *Age*

The normal retirement age is 65 years. Eligibility for early retirement may be taken up from age 55 on; in this case, an early retirement factor of 0.43 is applied to the entitlements accrued. This factor increases regularly (every quarter), reaching 1.00 at age 65.

The possibility of full-rate eligibility from age 60 has been available since 1983 under the same conditions as for ARRCO schemes. In addition, members showing evidence of a contributions history between 32.5 years and 37.5 years may benefit from a more advantageous early retirement factor than that normally applied by the scheme.

The scheme originally made provision for an increase in entitlements where the pension calculation occurred after age 65. The coefficient applied ranged from 1.05 for retirement at age 66 to 1.25 for calculation at age 70 and above. This provision was dropped on 30 June 1956.

### ***Survivors' entitlements***

Widows and widowers can receive a Survivor's pension at 60 years of age, or if disabled or responsible for two or more children, without age restrictions. A reduced pension also is available at age 55. These provisions were introduced 1 March 1994. Previously AGIRC had different rules for men and women, as did AARCO: eligibility for a survivors pension began at age 65 for men and 50 for women. Survivors' entitlements also have been extended to divorced ex-spouses who have not remarried.

Orphans are entitled to a survivor's pension until they turn 21 years of age.

## **Benefits**

### ***Determination of benefit entitlements***

An unusual feature of ARRCO and AGIRC schemes is that they count as qualifying periods not only periods during which contributions have been paid but also periods of employment which have not led to the payment of contributions. Service prior to compulsory membership is thus liable to produce benefit entitlements without contributions having been paid. An increase in rates above the compulsory minimum may also lead to the granting of retroactive benefit entitlements. Moreover, supplementary schemes provide for periods of unemployment, disability, and military service to be counted as qualifying periods.

### ***Reconstruction of career before membership***

The cadres scheme has, since it came into being, granted benefit entitlements free of charge for periods prior to its creation in 1947 by reconstructing members' careers. For the period 1936-1947, entitlements are granted against evidence of salary received during each year and calculated on the basis of the scheme's usual regulations. For 1939-1945, periods of mobilisation, captivity, deportation, participation in the resistance movement, and requisition by the occupying power can be counted as qualifying periods where they interrupted employment giving entitlement to membership. The benefit entitlements granted correspond to the salary members would have received had they remained in work. For periods prior to 1 January 1936, subject to evidence that posts giving entitlement to membership of the scheme were in fact occupied, years of service are counted as qualifying years according to the salary received during a reference period (the seven

years preceding either cessation of employment or 1 January 1948 if the member was still in work at this date<sup>10</sup>). The length of pensionable career prior to membership, however, is limited to 30 years.

For sectors which came within the scope of application of the scheme after 1947, in addition to career years prior to this date, AGIRC counts the period between 1 April 1947 and the date of entry into the scheme as a qualifying period. The corresponding benefit entitlements are calculated on the basis of the salaries actually paid. Again, the total reconstructed career may not exceed 30 years.

Benefit entitlement calculations for the purposes of reconstructing careers are carried out on the basis of the minimum rate at the time (8 per cent). If the company contributes at a higher rate, this may lead to an increase in benefit entitlements. Where the company is no longer in existence, qualification is implemented automatically on the basis of the minimum rate.

The ARRCO schemes also count periods prior to membership which have not given rise to contributions as qualifying periods. Under the ARRCO regulations, all employment in companies which come under the agreement of 8 December 1961 is counted as pensionable (with benefit entitlements, as in the case of AGIRC, granted for wartime periods). The only restriction is age: the possibility of qualification begins at age 16, and the benefit entitlements granted for employment between age 16 and age 21 are reduced (75 per cent of the bases provided for under the schemes' regulations). This procedure came into effect in 1973. Previously, the minimum age of membership was 21 years, and only employment from this age could be credited. These provisions relate to the general ARRCO regulation; some schemes apply more favourable provisions, for example by considering work by members before age 16 as pensionable service.

These qualifications relate to membership at the compulsory minimum rate. The calculation of benefit entitlements is carried out on the basis of each scheme's individual regulations. Career years completed in companies which contribute at a higher rate may also be credited for the fraction which corresponds to the increase in rate. The schemes' regulations have changed considerably in relation to this point in recent years, reflecting the provisions made in the event of rate increases.

### ***Retroactive benefit entitlements with rate increases***

Since 1984 AGIRC has not granted free benefit entitlements in the event of an increase in rate. Prior to this date the scheme operated in various ways. From 1947 to 1957 the benefit entitlements acquired before the increase were adjusted in full to the rate selected by the company, both for members in work and for former members (whether retired or having left the company). However, restrictions were subsequently introduced. From 1957 to 1980 only benefit entitlements acquired by members in the company itself were adjusted, with a reduction of 30 per cent applied (this rate is less for companies which entered the scope of application of the scheme after 1947 or which took on their first cadres after this date). This reduction rose from 30 per cent to 60 per cent from 1981 to 1983.

Since 2 January 1992, ARRCO schemes no longer credited past service for retired members and members who have left the company when the rate is increased. For members who remain in the company, this provision was dropped as of 1 January 1996. Increases in rates provide partial

---

10. The years of occupation (1940-1944) are not taken into consideration in this seven-year period.

qualification up to this date: 45 per cent for 1993 increases, 30 per cent for those in 1994, and 10 per cent for those in 1995. These regulations came into effect on 2 January 1993.

Since 1976, the general regulations of ARRCO have included specific provisions regarding optional contributions, known as "additional arrangements" ("opérations supplémentaires"). These provisions apply uniformly to all ARRCO schemes. Developments leading up to the current situation were marked by three stages.

Before 1 July 1988 the benefit entitlements granted in the event of an increase in rate depended on the demographic situation of the company or sector concerned. A demographic study, known as a "weighing-up", was carried out to assess the ratio of costs to resources over the fifteen years following the increase in rates and to determine the conditions of the rate increases. The free entitlements granted for past service in the company or sector concerned were subject to reductions if the demographic situation was particularly unfavourable. These reductions applied uniformly to present, former, and retired employees. The demographic assessment also affected the rate of contribution. Whether or not the contribution rate was increased depended on the results obtained; any additional premium was borne entirely by the employer, and could apply over fifteen years. In addition, regardless of the demographic assessment, companies were obliged to pay a contribution to the joint ARRCO reserve.

The conditions which came into effect on 1 July 1988 were far more attractive. Originally planned for three years, they were maintained until 1 January 1992. The contribution paid by companies to the joint reserve and the additional premium in the event of an unfavourable demographic situation were dropped. The demographic study continued to affect only the granting of free benefit entitlements. A distinction was established between working members (present employees in the company or sector) and retired employees and former members. For working members, whose situation was given priority, the benefit entitlements acquired with the company before the increase were credited in full where the average age of the group was less than or equal to 52 years. Where this average age was greater than 52, the percentage credited depended on the result of the demographic study. For retired employees and former members, the percentage credited depended on the resources available after crediting the past service of working members. If the percentage applied to the latter was less than 100 per cent (partial adjustment), no free entitlements were granted to retired employees and former members. If the past service of working members was not fully credited, the demographic study determined the extent of the adjustment.

From 2 January 1992 crediting of past service was completely eliminated for retired employees and former members. During 1992 the conditions of qualification were less favourable for working members. Full adjustment of acquired benefit entitlements was no longer carried out: the percentage credited was fixed at 90 per cent for an increase in the contribution rate of up to 6 per cent and at 50 per cent for an increase between 6 per cent and 8 per cent. In addition, the average age of the group was limited to 49 years (as opposed to the previous figure of 52 years) in order to benefit from these provisions; above this age, additional reductions were applied.

### ***Periods of unemployment, early retirement, and incapacity for work***

Since 1967 the ARRCO and AGIRC schemes have granted entitlements to employees receiving payments for unemployment or early retirement. Membership of the cadres scheme or an ARRCO scheme before termination of the qualifying employment is the sole condition which must be fulfilled in order to benefit from this granting of entitlements. Employees aged 50 or over must also

show evidence of membership of at least five years; no minimum membership condition is imposed on employees aged less than 50. Free entitlements are also granted for periods of short-time paid employment for which the employer paid social security benefits if these periods exceed 60 hours during the calendar year. Only hours above 60 hours are taken into consideration.

The entitlements granted depend on the income received during a reference period (the previous three calendar years in the case of AGIRC, the better of the previous two calendar years in the case of ARRCO). No conditions of duration are applied; all periods during which benefits are received are taken into consideration. It is the receipt of benefits for unemployment or early retirement under a public or contractual plan which gives entitlement to have the relevant periods credited.

Under the ARRCO and AGIRC schemes, periods of incapacity for work due to sickness, maternity, or accident are credited if the member is receiving daily payments from the general social security scheme due to incapacity for work or receiving a disability pension. The entitlements granted are calculated on the same principle as for periods of unemployment and early retirement.

### **Calculation of the pension**

The AGIRC scheme and most ARRCO schemes use a points system. Among members of ARRCO, only three schemes and one fund (the banking-sector fund) calculate pensions according to a different system, that of percentage of final salary. Special provisions are applied to these schemes and this fund to ensure that the principle under which, within ARRCO, equal contributions should produce benefits of an equivalent amount is respected.

#### ***Points system***

Each year members acquire a number of points directly linked to the contributions paid and to the purchase price of the point. Points are accumulated against the member's account until the pension calculation at the end of his career. In the event of a change of company, the points acquired in the new company are added to those already acquired. The change of company does not lead to any loss of entitlements, as the ARRCO and AGIRC schemes provide for immediate vesting and preservation of these: no probationary period is applied, and all contributions generate points which are definitively acquired. The question of transfer of entitlements, a key problem for defined-benefit occupational pension schemes, is resolved by the operating logic of the system. Points accumulate against the members' accounts throughout their career. The only major difference between one company and another relates to the quality of the cover offered, which depends on whether the company contributes at the compulsory minimum rate or at a higher rate. The level of pension depends on the number of points acquired over the member's career and on the value of the point on calculation of the pension. Adjustment of the pension fluctuates along with the value of the point.

AGIRC and ARRCO differ in this respect. The situation is simple as far as AGIRC is concerned: it is a single scheme, thus members continue to belong to the same scheme regardless of the fund to which they are affiliated. Should a member change funds on transfer from one employer to another, his account is transferred from the old fund to the new one. With regard to ARRCO schemes, the situation is slightly more complicated in that an amalgamation of schemes is involved; from the point of view of the beneficiary, however, it amounts to the same thing. ARRCO, as an umbrella body, has the dual role of harmonising and coordinating member schemes so that members

who have acquired entitlements in several schemes are able to claim their pensions under practically the same conditions as if only a single scheme were involved. Members have only to submit a single request to benefit from all their entitlements. In addition, the value of the point in the various schemes, the parameter which enables the points entered in a member's account to be translated into the level of pension, is fixed such that, with equal contributions, the benefits are of an equivalent amount in all schemes.

### ***Points accounting and point value***

Contributions are converted to points every year. The number of points is obtained as follows: the sum of contributions, which depends on the rate of contribution selected, is divided by the purchase price of the point. This parameter, termed the "reference salary", is fixed each year. It is indexed to changes in the median salary of AGIRC members and in the average salary of members of all ARRCO schemes.

: The formula used is as follows: 
$$P(n) = \frac{S(n) \times T}{A(n)}$$

P(n) = number of points acquired in year n

S(n) = salary subject to contributions under year n

T = rate of contribution

A(n) = purchase price of a point in year n.

The formula shows in particular that the number of points acquired is proportional to the contribution rate. In an ARRCO scheme, therefore, the number of points credited to a member's account is twice as great for contributions at 8 per cent than for contributions at the minimum rate of 4 per cent (the same applies to the rates of 16 per cent and 8 per cent in the AGIRC scheme).

In addition, the AGIRC scheme has introduced various provisions, known as guarantees and flat rates (garanties et forfaits), which allow members whose salary is very close to the social security ceiling, or even below it, not to be penalised. Since 1989 cadres and equivalent have benefited in particular from a minimum points guarantee (garantie minimale de points -- GMP). Where the number of points acquired in accordance with normal procedure is lower than a certain floor, this guarantee allows this floor to be reached in return for contributions. In other words, cadres and equivalent are assured of acquiring a minimum number of points each year.

The points acquired annually are added to the member's account. The points granted under free credits (career reconstruction, points granted in the event of an increase in rate, periods of unemployment, early retirement, and incapacity for work) are added to the points acquired in return for contributions. In addition, the AGIRC scheme and some ARRCO schemes provide for increased allowances for children (based either on the number of dependent children or on the number of children born or raised) which can be added to the total of points acquired on pension calculation. Thus, in the AGIRC scheme, for example, a member with at least three children is entitled to the following increases: 10% for three children, 15% for four children, 20% for five children,; 25% for six children, 30% for seven or more children.

Once the total number of points obtained has been worked out, the amount of the pension is calculated by multiplying the points total by the point value. In ARRCO schemes this value is fixed on 1 January and 1 July each year by the boards of management on the basis of information provided

by ARRCO. It is dependent on changes in the average salary subject to contributions. In the AGIRC scheme the board of management fixes the value on 1 July each year, with an option to revise it on the following 1 January.

### ***Adjustment***

Subsequently, the amount of the pension continues to fluctuate according to the point value. The fixing of the point value is a dual process: it first enables calculation of the initial amount of the pension, and then allows regular adjustment of it. Such a system allows indexing of both the entitlements acquired throughout a member's career and the pension itself after cessation of employment.

Overall, in the AGIRC scheme, the increase in the point value was considerably greater than price increases up to 1976. During this period, the point value was fixed on the basis of an equation of equilibrium of the scheme, taking into consideration not the points to be awarded during the year, but the average number of points to be awarded over the next ten years. In 1977 the application of the formula no longer allowed the purchasing power of the point to be maintained, owing in particular to the considerable increase in the scheme's ten-year costs forecasts.

Following the shrunken generations of 1915-1919 due to the First World War, the generations corresponding to the rise in the postwar birth rate began to have an increasing effect on the multi-annual equation of equilibrium of the scheme (the forecasts were based on the tripling of the number of newly retired employees in 1985 in comparison with the period 1980-1984, cf. AGIRC 1984, p. 127). From 1978 the board of management of AGIRC decided to enhance the purchasing power of the point by abandoning the previous formula. However, the purchasing power was not strictly maintained (Table 4.1). Over the same period, the adjustment of the point value was greater in ARRCO schemes: from 1978 to 1991 it was less than the increase in prices on only two occasions and was often considerably greater.

### **Survivors' pensions**

As far as spouses are concerned, the level of survivors' benefit entitlements is the same in the ARRCO and AGIRC schemes. The surviving spouse's pension is calculated on the basis of 60 per cent of the points acquired by the deceased employee. Reductions for early retirement are not taken into consideration in assessing the number of points.

In the case of divorced spouses, the regulations changed at the beginning of the 1980s, and the procedure varies depending on the date of decree of the divorce. Where the divorce occurred before 1 July 1980, surviving spouses who have not remarried benefit from a full survivor's pension; divorced ex-spouses who have not remarried are entitled to a pension calculated on the basis of the entitlements acquired during the marriage to the deceased member. Where the divorce was decreed after 30 June 1980, the survivor's pension is divided. The surviving spouse's pension is reduced by that paid to divorced ex-spouses (whose entitlements, as in the previous case, are always dependent on the duration of the marriage).

For orphans, the rate of reversion varies between the ARRCO and AGIRC schemes. Each orphan's pension is equal to 30 per cent of the entitlements acquired by the deceased member in the



AGIRC scheme, and 50 per cent of entitlements in the ARRCO scheme (again without taking early retirement factors into consideration).

### **Social action**

Alongside the pensions, the ARRCO and AGIRC schemes have also implemented social action plans. Specific reserves are created to this end, and funds have a certain amount of autonomy in the determination and the level of the benefits offered. The situation regarding this point differs between AGIRC and ARRCO.

### ***AGIRC schemes***

Social action in the AGIRC scheme is based on two types of funds: the compulsory social fund (fonds social obligatoire -- FSO) and the free social fund (fonds social libre -- FSL). The two funds are complementary, although based on different approaches. The first is financed by an endowment, the amount of which is determined annually by AGIRC up to a limit of 3 per cent of the previous year's contributions. The costs to the scheme of unemployment points are deducted from this endowment<sup>11</sup>; the rest is distributed among the funds as a *pro rata* of the allowances they have paid out over the previous financial year. The free social fund is financed annually by a levy of 15 per cent on the investment income of the reserves managed by the fund. This percentage has decreased considerably over the last ten years: it stood at 40 per cent in 1982, fell to 30 per cent in 1983 and 1984 and to 20 per cent in 1985, then stabilised at its current level of 15 per cent.

The AGIRC regulations define the broad principles of use of the compulsory social fund. The purpose of the fund is to grant extraordinary financial support on an individual basis to beneficiaries of the scheme; this assistance can be renewed, and both retired employees and their eligible dependents can benefit from it. On the basis of this framework, the funds themselves determine the precise use of the finances and the granting of financial support. In general, the allowances involve assistance to people penalised by the application of the regulations, support for retired employees or surviving spouses in difficulty, contributions to various expenses (sickness, funerals, heating, home improvement grants, moving house, home care), and awarding of education grants.

The free social fund is used above all to give assistance to people who are not covered by the compulsory social fund: working members, whether employed or out of work due to disability or unemployment. It may also be used to finance or subsidise social projects with the agreement of AGIRC. The free social fund may, for example, grant loans (interest-free or at favourable rates), provide guarantees for obtaining loans, award education grants, reimburse a proportion of members' medical fees, pay extraordinary financial support for members in difficulty.

---

11. A proportion of the points granted free of charge for periods of unemployment is financed by the scheme itself, with the rest, as we shall see, financed by the unemployment benefits plan, UNEDIC.

## ***ARRCO schemes***

ARRCO funds have social action funds which are financed by a levy on contributions and/or allotment of investment income generated by the management of their various reserves<sup>12</sup>. ARRCO's financial regulations limit the levy on the investment income from the joint reserve to 13.85 per cent; if the fund does not operate a levy on contributions, it must allot this percentage to its social action fund. In addition, funds are obliged to respect this ceiling of 13.85 per cent for the levy on investment income from their specific technical reserves.

The social action of each fund is the responsibility of its board of management. ARRCO, however, intervenes to coordinate and harmonise the actions of the various funds and to define priorities. In general, social action is directed principally at retired employees, although working members may also benefit from it. It may involve assistance for individuals, or investment operations termed "social projects". Individual measures may take several forms, such as payment of various types of aid, financing of services, or granting of loans. ARRCO has selected two priorities directed at support for aged persons in the home: home help and home improvements. Assistance granted by the funds within the framework of these two priorities leads to an equalisation of the costs by ARRCO. Other individual operations are the sole responsibility of the funds, and involve no compensation mechanism. As far as investment operations are concerned, ARRCO has also defined two priorities for investment operations: building and financing retirement homes for aged persons who are no longer able to live on their own; and financing accommodation and work units for the handicapped with a view to facilitating their social integration. ARRCO has the dual role of coordinating and encouraging the implementation of projects in the two priority areas.

## **Contributions**

The ARRCO and AGIRC schemes organise their contribution systems in different ways, but there are some common characteristics. In both cases contributions are based on portions of gross salary determined on the basis of the social security ceiling. Contribution rates are divided into two tiers: companies are obliged to adhere to a compulsory minimum rate and have the option of choosing a higher rate giving entitlement to a strictly proportional improvement in benefits. However, this room to manoeuvre is currently under review. ARRCO decided at the beginning of 1993 to drop new possibilities for optional arrangements over the next few years, and to offer only a single rate. AGIRC followed suit in early 1994. There were many reasons behind this development. The adoption of a single rate allowed schemes to be sustained. Given the nature of the pay-as-you-go method, the balance of schemes is likely to be threatened if the average contribution rate falls. The fact that new companies tend to contribute at the minimum rate appears to be pushing in this direction. The discontinuation of optional arrangements also reflects the process of European integration. Schemes are better equipped to justify their monopoly in France, which is also a requirement of the pay-as-you-go method, once they provide only for compulsory arrangements which do not fall within the scope of the competitive market.

One of the principal features of ARRCO and AGIRC schemes regarding contributions is the allocation of an additional premium to the rate provided for under the membership contract. This additional premium gives no benefit entitlements. In other words, in order to ensure the balance of

---

12. ARRCO schemes manage four types of reserves: joint reserves, specific technical reserves, social fund reserves, and management reserves (cf. Section 5).

the scheme, contributions are collected at a rate higher than the contractual rate, even though entitlements are calculated on the basis of the latter. The call-up rate is one of the scheme's regulatory parameters; it is defined for each financial year by employers' and employees' representatives.

Above and beyond these main points, the details of the organisation of the contribution system vary between ARRCO schemes and the AGIRC scheme.

## **ARRCO plans**

### *Progressive withdrawal of optional arrangements*

The initial situation, which applied up to 1 January 1993, is based on the distinction between a compulsory tier and an optional tier. In ARRCO terminology these tiers are referred to as "compulsory arrangements" and "additional arrangements" respectively. The rate of contribution for compulsory arrangements is 4 per cent. It has stood at this level since 1 January 1967; it previously stood at 2.5 per cent. This compulsory rate applies to the portion of salary which is equal to the ceiling for cadres (or more specifically members of an AGIRC fund) and equal to the whole salary up to three times the ceiling for other employees. For additional arrangements, the contribution rate may be up to 4 per cent for the portion of salary corresponding to the ceiling and, for non-cadres, up to 12 per cent for the portion of salary between the ceiling and three times the ceiling. The decision to take up additional arrangements must be made either by agreement between employers and the majority of the employees concerned (determined by secret ballot), or by means of a collective bargaining agreement.

As we have seen, up to 1 July 1988 rate increases led to a demographic assessment and, in the event of an unfavourable situation, contributions could be allocated an additional premium fully borne by the employer. Rate reductions are also possible for arrangements of an optional nature, but the procedure is something of a deterrent. The company must pay a sum to preserve entitlements, which is calculated on an actuarial basis by ARRCO. The reduction in rate, moreover, can only come into effect on the basis of an agreement between the employer and a two-thirds majority of members (both working and retired) or by means of a collective bargaining agreement.

Taking all arrangements together, therefore, for all members, the contribution rate may vary between 4 per cent and 8 per cent over the portion of salary equal to the ceiling and, for non-cadres, between 4 per cent and 16 per cent over the portion between the ceiling and three times the ceiling. However, companies which joined at higher rates before the date at which the above limits were introduced (1 October 1976) may continue to contribute above the authorised maximum rates, even for employees hired after this date.

The agreement of February 1993 made profound changes to these provisions, at least with regard to arrangements over the portion of salary corresponding to the ceiling. The provisions applying to non-cadres over the portion of salary between the ceiling and three times the ceiling have not been changed, as the minimum rate above the ceiling is in line with that applied in the AGIRC scheme. Such arrangements above the ceiling, however, are fairly marginal in nature, as arrangements covering the portion of salary corresponding to the ceiling in fact represent the bulk of the activities of ARRCO schemes, covering more than 95 per cent of total payroll. ARRCO is awaiting the decisions of AGIRC before amending the provisions applicable between the ceiling and

three times the ceiling in order that members can be treated in identical fashion over this portion of salary. Only measures relating to the portion of salary up to the ceiling and applicable to all employees, both cadres and non-cadres, will therefore be covered in the following discussion.

The agreement first of all withdrew, from 2 January 1993, the possibility of new subscriptions at a rate higher than 6 per cent. Companies or sectors already contributing at a higher rate will be able to continue to do so, or may choose to return to a rate of 6 per cent under the conditions provided for in the ARRCO regulations. These conditions, as we have seen, are a deterrent.

The compulsory minimum rate will remain at 4 per cent until the end of 1995. It will subsequently be progressively increased by 0.5 per cent per year, reaching 6 per cent by 1 January 1999. From this date, ARRCO schemes will offer only a single rate for new members. The average contribution rate, which stood at 5.15 per cent in 1991, should be around 6.37 per cent when the minimum rate of 6 per cent is in force.

### ***Contractual rate and call-up rate***

ARRCO makes a distinction between the contractual rate, which is the rate used to calculate entitlements, and the call-up rate, which corresponds to the actual rate at which contributions are collected. The call-up rate is fixed each year by employers' and employees' representatives. Until 1970 it stood at 100 per cent, meaning that contributions corresponding to the compulsory minimum rate of 4 per cent were actually collected at 4 per cent. Since 1971 for compulsory arrangements, and since 1987 for additional arrangements, the call-up rate has been greater than 100 per cent (Table 4.2). In other words, an additional premium giving no entitlements is collected to ensure that the scheme is balanced.

The call-up rates relating to compulsory and additional arrangements have been identical since 1990. The rate was fixed at 125 per cent in 1992, with the February 1993 agreement maintaining it at this level until 1995. Contributions at the compulsory minimum rate of 4 per cent are thus currently collected at the rate of 5 per cent, with contributions at the future single rate of 6 per cent being collected at 7.5 per cent.

### ***Division of employer/employee contributions***

The division of contributions between employers and employees varies among the various ARRCO schemes. However, it can generally be broken down on the basis of 60 per cent for employers and 40 per cent for employees.

### **AGIRC plans**

As with ARRCO, AGIRC is in process of eliminating voluntary contributions and will adopt a single rate. Such an agreement was signed in February of 1994. The contribution system nevertheless is different in the two federations. In contrast to ARRCO, AGIRC makes no distinction between compulsory and optional arrangements: expenditure and resources, whether they fall under compulsory or optional arrangements, are considered in overall terms. Another difference is that, once a rate higher than the minimum has been adopted, it can no longer be reduced. The decision to

change the rate itself is made, as in the case of ARRCO schemes, either on the basis of an agreement between the employer and the majority of the employees concerned, or by means of a collective bargaining agreement.

### ***Compulsory and optional arrangements***

Companies had the choice of three rates in 1993: 12 per cent, the compulsory minimum for new companies, 14 per cent, and 16 per cent. Up to 1 January 1984 rates could vary continuously up to a maximum of 16 per cent. Up to 1 January 1981 the compulsory minimum rate was only 8 per cent; companies created before this date were not obliged to adopt the rate of 12 per cent, and were able to maintain a contribution rate below the new minimum. The range of contribution rates applied is thus wider than might be supposed from the provisions currently in force. However, as we have seen, contributions are concentrated mainly around three rates: 8 per cent, 12 per cent, and 16 per cent.

Contributions are based on the portion of pay between the social security ceiling and eight times that ceiling. This portion is itself divided into two portions: bracket B, which lies between the ceiling and an upper limit fixed each year and which is equal to at least four times the ceiling; and bracket C, which lies between the upper limit of bracket B and eight times the ceiling. Contributions over bracket C have been compulsory only since 1 January 1991, and the rate applied may be different from that for bracket B. In 1991 3.7 per cent of members received an annual salary equal to or greater than the ceiling of bracket B (FF551 040).

In 1991 the average contribution rate was 13.81 per cent for bracket B and 13.35 per cent for bracket C. During the negotiations, the views of the trade unions and employers' representatives differed on the single rate. An agreement in February 1994 finally set a single rate at 16 per cent, to be implemented gradually by 2003. Since then, the implementation of the 16 per cent rate was moved up to 1 January 1999. The former were pushing for the adoption of the maximum rate of 16 per cent, while the latter were torn between a wish to sustain the scheme and a desire not to increase costs to companies. In addition, the Fédération française des sociétés d'assurances (French insurance companies' federation), a member of the employers confederation, the CNPF, pushed strongly for a single rate at 14 per cent (Protection sociale informations No. 1, p. 2). The scope left for insurance products and, more generally, for funded pension plans or schemes depended partly on the level of rate chosen. To a certain extent, there was more at stake in the case of AGIRC than in the case of ARRCO, as their members were more likely to buy such products.

### ***Guarantees and flat-rate payments***

Alongside its general contribution system, AGIRC has over the years implemented various systems for guaranteeing entitlements to members earning salaries below or slightly above the ceiling. These measures have gained in importance as the social security ceiling has tended to advance at a considerably faster rate than the average salary of scheme members. In 1980 5.8 per cent of members earned annual salaries below the ceiling; this figure had risen to 15.2 per cent by 1991, 11.0 per cent of whom were cadres, with 32.2 per cent being technical staff and supervisors.

Since 1 January 1989 AGIRC has operated a minimum points guarantee (garantie minimale de points -- GMP) which is compulsory for all members. The GMP enables a minimum number of points to be obtained annually, in return for contributions, which is proportional to the company's

contribution rate on bracket B, ranging from 72 points for a contribution rate of 8 per cent to 144 points for a rate of 16 per cent. Members whose total annual contributions are not sufficient to acquire the minimum number of points must pay additional contributions to bring the number of points up to the minimum level. In other words, employees whose salary lies below the ceiling, and who will therefore not have contributed to the AGIRC scheme during the year, must pay, under the GMP, sufficient contributions to be able to purchase 72 points if the company contributes at the rate of 8 per cent, or 144 points if the company contributes at 16 per cent. These points will then be credited to the employees' accounts in accordance with normal procedure. Contributions paid under the GMP are divided between employer and employee in the same way as normal contributions.

The company may also adopt, on an optional basis, a contributions guarantee clause as follows: either guarantee A, with a contribution rate of 1.76 per cent of the ceiling, or guarantee B, with a rate of 2.65 per cent. In both cases, the contribution rate on bracket B must be at least 12 per cent. The guarantee system comes into operation when the total of contributions collected under normal circumstances is less than the amount which corresponds to the guarantee. For the same rate on bracket B, this guarantee system allows a higher number of points to be obtained than with the GMP. It can be adopted with the agreement of the majority of the employees concerned.

A system of flat-rate contributions is also offered for technical staff and supervisors only. As with the guarantee clause, two levels are possible: flat-rate payment A, equal to a contribution of 1.76 per cent of the ceiling, and flat-rate payment B, equal to a contribution of 2.65 per cent. Unlike the guarantees, which come into operation only when the level of contribution is less than a certain threshold, the flat-rate payments are paid systematically in addition to the contribution calculated on bracket B. Once again, the system must be adopted with the agreement of the majority of employees concerned.

### ***Contractual rate and call-up rate***

Like ARRCO, AGIRC applies a call-up rate for contributions which may differ from the contractual rate. Contributions were collected at 117 per cent in 1993. As AGIRC, unlike ARRCO, makes no distinction in its accounts between compulsory and optional arrangements, the call-up rate is the same regardless of the contractual contribution rate; this has always been the case.

Historically, the call-up rate applied has varied considerably (Table 4.2). During the first few years of its existence, from 1947 to 1951, contributions were collected at 100 per cent. From 1952 to 1965, however, the call-up rate was less than 100 per cent; at its lowest, in 1952, it stood at 78 per cent and, over the period as a whole, a total of 197 per cent of contributions was not collected. In other words, as the rate collected was less than the contractual rate giving benefit entitlements, members benefited from a reduction in the purchase price of their points throughout these years.

This decision not to collect all contributions reflects the desire, at the time, to retain an approach based on a pay-as-you-go method and not to allow the volume of reserves to grow too rapidly. Total reserves tended to increase extremely rapidly over the scheme's first few years. In fact, in spite of the adoption by AGIRC of a pure pay-as-you-go system, the scheme went through a period of maturing as a result of a certain loss of entitlements on the part of members not requesting them immediately, and because of a progressive improvement in the benefits offered (Amzallag, Campana, Cheron *et al.*, 1986). Full collection of contributions during this period would have led to a build-up of reserves which would have been too large in the eyes of the scheme's managers.

However, in return for the non-collection of a proportion of contributions, the collective bargaining agreement made provision for the call-up rate subsequently to be increased up to a limit of twice the percentages not collected, and up to a maximum of 10 per cent per year.

The call-up rate was then maintained at 100 per cent from 1966 to 1978. Since 1979 the rate has been progressively increased up to the current level of 117 per cent. In total, between 1979 and 1992, 111.4 per cent was collected in additional premiums, as against 197 per cent which had previously not been collected.

The non-collection of a proportion of contributions during the 1950s and 1960s has given rise to a certain number of criticisms. The scheme's managers are reproached, in particular, for not having built up larger reserves which would have provided better conditions for combating the deteriorating economic situation from the mid-1970s on. Two types of arguments are put forward in response to these criticisms. The first is technical in nature, and relates to the purpose of reserves in a pay-as-you-go scheme: reserves are intended to smooth irregularities in expenses and not to combat economic downturns. From this point of view, AGIRC's reserves have been able to, and are still able to, fulfil their function; in addition, nobody in the 1950s and 1960s was in a position to predict such a profound shift in the economic situation.

The second type of argument relates to the use of money which has not been collected. It puts forward the possible financial benefits of leaving sums equal to the proportion of employers' contributions which have not been collected, i.e., an average of two-thirds of the sums concerned, within companies themselves rather than investing them on the financial markets in investments according to the restrictive regulations imposed on pension funds (Amzallag, Campana, Cheron *et al.*, 1986). This illustrates the conflict between the shorter route in the allocation of funds released by a pension scheme, as in the case of the German system of book reserves, and the longer route, via which pension fund reserves finance the capital markets. Adopting a Keynesian approach, which predominated in the 1950s and 1960s, it could be added that the final third of the uncollected contributions, which corresponds to the employees' contributions, could support the economy by sustaining demand.

### ***Division of employer/employee contributions***

The division regulation applied in the AGIRC scheme varies depending on the rate: the first 8 per cent is divided on the basis of 75 per cent for the employer and 25 per cent for the employee, with subsequent percentages divided equally between the two.

## 5. FINANCING AND ADMINISTERING OF THE PLANS

ARRCO and AGIRC schemes are funded according to the pay-as-you-go principle. The method used can be referred to as a "pure" pay-as-you-go model, in contrast with what is usually referred to as pay-as-you-go in English. In the ARRCO and AGIRC schemes, the contributions received during a given period are used to pay benefits over the same period; in other words, the total contributions, calculated in accordance with the regulations fixed by the scheme, are distributed among the beneficiaries as a function of their entitlements. The total amount of contributions to be distributed determines the level of benefits paid. This technique, as is regularly shown in the theoretical literature, allows immediate payment of benefits to people who have never contributed as soon as the scheme comes into effect. It even allows the scheme's first generation of members to benefit from full privileges without having paid contributions in return. The ARRCO and AGIRC schemes have applied this method, as we have seen, in the reconstruction of members' careers. Not distributing contributions immediately involves either the formation of reserves, the use of a proportion of the contributions paid for other purposes, or a reduction in the level of contributions; all of these cases involve a deviation from the principle of distribution in the strict sense of the term.

In general, benefit entitlements are acquired without the amount of benefits itself being fixed in advance. The schemes' regulations establish an accrual method, and entitlements are then credited to the member's account; the level of pension is determined only when the pension is claimed and as a function of the available resources. Scheme managers adjust certain parameters to balance the transfer between working members and retired employees; the principal parameters are the purchase price of a point ("reference salary"), point value, call-up rate, and rate of levy on contributions. As we shall see, all these parameters can be grouped in the notion of a scheme's yield.

As far as financing is concerned, three other points merit consideration. The first two fall within the logic of pay-as-you-go. They involve the compensation of costs applied between the various member institutions, and reserves accumulated by the schemes. The third point relates to the fact that a proportion of benefits is not financed by the schemes themselves. In addition, an essential aspect of the schemes' financing and regulation is the joint nature of their management: all important decisions are made in committees composed jointly and equally of employers' and employees' representatives.

### **Balancing the plans**

#### *Balance and yield*

In general, a pay-as-you-go scheme is balanced by ensuring equality each year between the resources available to the scheme and the scheme's expenses, that is, equality between the annual contributions net of deductions and the annual benefits. The latter are the product of the total number



of points to be paid out over the year multiplied by the point value. The point value can thus be fixed each year as follows:

$$\text{point value} = \frac{\text{net contributions}}{\text{total number of points to be paid out}}$$

The point value is a key variable. It allows the amount of the pension to be determined on liquidation, as well as the level of its annual adjustment. Taking the AGIRC scheme as an example, the point value was defined in accordance with this principle up to 1977, taking not the total number of points to be paid out for the year, but the average points to be paid out over the next ten years (cf. AGIRC, 1984). In 1977 it was not possible to adjust the point value to the price index using the formula, particularly because of the effect of the large groups of the postwar years on the ten-year cost forecast. From 1978 AGIRC decided to enhance the purchasing power of the point by fixing its value at a level higher than that obtained using the usual formula.

In addition to the point value, scheme managers may adjust two other parameters to balance the schemes: the purchase price of the point, and the call-up rate of contributions. The goal is to divide the cost of balancing the scheme between working members and retired employees. Reducing the value of the point puts pressure on retirees, while increasing it (via the purchase price and/or the call-up rate) puts pressure on working members.

The choices are made on the basis of the notion of a scheme's yield. The yield of a scheme for a given year expresses the ratio of the value of the pension point to its purchase price. In other words, the amount of the pension it is possible to acquire with the contributions paid can be assessed on the basis of the yield. A yield of 12 per cent, for example, means that a point purchased at FF1 will give entitlement to an annual pension of FF0.12.

The yield defined on the basis of the point value and its purchase price alone is the gross yield. The actual yield is obtained by including the other factors involved. The point value does not take into consideration all the entitlements acquired; additional, associated benefits (in particular survivors' entitlements and increased allowances for children) must be added to the retirement pensions expressed in the point value. These additional benefits can be calculated on an actuarial basis as a percentage of direct entitlements. However, the actual purchase price of the point must include the additional premium which corresponds to the actual call-up rate and the levies on contributions (there are two types of levies: those for financing administration of the scheme and those going toward social action). The actual yield of a scheme is thus obtained using the following formula:

$$\frac{V}{A} = \frac{1 + k}{Ta - p}$$

V = point value

A = point purchase price

k = additional benefits

Ta = call-up rate

p = levy for administration fees and social action

Amzallag, Campana, Cheron *et. al.* (1986) calculated the yields of AGIRC and UNIRS, the largest of the ARRCO schemes, for 1984. For AGIRC, gross yield was 12.45 per cent, actual yield 13.58 per cent. For UNIRS, gross yield was 12.21 per cent, actual yield 11.82 per cent. These differences illustrate the extent to which a scheme's actual yield can vary from its gross yield.

The notion of yield may give rise to confusion. It does not express the total amount of pension members are likely to receive in return for contributions. This amount has a temporal dimension, concerning the length of career and the duration of payment of contributions, whereas yield is an instantaneous indicator: it brings together, for a given year, the point value and the point purchase price. Originally, the notion of yield was principally used to compare the benefits paid by schemes with different regulations; subsequently, it was through this notion that the future prospects of the schemes were examined. ARRCO has thus, for more than 25 years, made its forecasts on the basis of the calculation of the balancing yield of all member schemes. The latest results obtained lead to predictions of a smaller "demographic shock" for the period 2010-2015 than that faced by schemes in the 1980s, when the large numbers of employees who entered the workforce after the Second World War reached retirement age<sup>13</sup>. Current demographic changes should, according to ARRCO predictions, lead to an increase in costs to schemes of around 10 per cent between 1990 and 2020, that is, a great deal less than previous increases (cf. ARRCO, 1991, for an explanation of the method used and the results obtained).

By using a simple notion of yield which includes only the point value, the point purchase price, and the call-up rate of contributions, it can be shown, through the example of AGIRC, how the balance of the scheme was managed in response to the socioeconomic changes of the 1980s. The progressive reduction in yield was achieved by dividing the cost between working members and retired employees: an adjustment of the point value below the price index and an increase in the purchase cost of the point which was greater than the median salary increase of cadres (Table 5.1). The management of the decrease in yield of the UNIRS scheme over the same period (Table 5.2) can be cited by way of comparison.

Financing conditions differ considerably between ARRCO and AGIRC schemes. The latter covers a specific professional category, and the contributions it receives are based on a differential salary. These two characteristics have had contrasting effects on the scheme in recent years. The fact of covering a specific population, principally cadres, has had a favourable effect on its financing, as this population has increased more rapidly than the workforce as a whole. At the same time, the fact that contributions are based on a portion of salary which is fixed as a function of the social security ceiling has had a negative impact. This ceiling has for several years been increasing more rapidly than cadres salaries, further limiting the advance of the differential salary, that is, the earnings basis of the scheme.

In general, the parameters of the schemes are fixed by joint bodies, comprising equal numbers of employers' and employees' representatives. In the case of AGIRC, the point value is fixed on 1 July each year by the management board, with the option to revise it on the following 1 January. The other balancing variables are fixed annually. The case with regard to ARRCO is slightly more

---

13. The demographic prospects of retirement schemes are not directly dependent on changes in the general demographic picture, but on changes in the demography of the population covered by the scheme. The relevant population in the case of ARRCO schemes consists of employees in the private sector and the competitive public sector; in the case of the AGIRC scheme, the population comprises management personnel and equivalent.

complicated, in that ARRCO is not a scheme but rather an umbrella body of schemes which plays a harmonizing role.

### **ARRCO as a harmonizing structure**

One of the essential purposes of ARRCO is to harmonize the benefits paid by a group of schemes with varying regulations. The current principle consists not of reviewing the variety of regulations but of ensuring that, for equal contributions, beneficiaries in all schemes receive equivalent benefits. The notion of equivalence is based on the overall value of benefits, taking into consideration their various elements, including not only the amount of entitlements but also conditions of age of eligibility, any increased allowances applied, provisions relating to survivors' benefits, and so on. Equivalence signifies that, while the constituent elements of the benefits may vary from one scheme to another, the overall value of benefits must be largely the same for all schemes.

In order to implement this principle, the board of management of ARRCO fixes a reference yield each year to which schemes must align their own yields. This reference yield is calculated on the basis of hypothetical demographic and economic changes. It is also a function of the contribution call-up rates, which are themselves defined by ARRCO. Having originally been fixed at 16 per cent, the rate fell to 15.5 per cent in 1968, and reached 15 per cent in 1974. It then dropped again from 1983. This ARRCO reference yield must not be directly compared with the AGIRC yield, as it is not calculated in the same way; it takes additional benefits (survivors' benefits, and so on) into consideration which represent 20 per cent of the total burden as an actuarial proportion.

ARRCO schemes are obliged to align their own yields to the reference yield. They do, however, have some scope for manoeuvre: the yield of a scheme may lie between 98 per cent and 104 per cent of the reference yield. Penalties are imposed on schemes which fail to comply with these limits. The intervention of ARRCO has thus allowed originally widely varying yields to be brought close together (Graph 1). In 1962 the yields applied at the outer limits of the range differed by 17.5 per cent, while the maximum yield was almost three times the minimum yield. The difference was reduced considerably during the 1960s; in 1991 it stood at only 1.10 per cent.

### **Compensation between institutions**

The financing mechanism of ARRCO and AGIRC schemes depends on the durability of the group of contributors. In general, the viability of the system involves two essential conditions: the compulsory nature of membership and national cover. Compulsory membership ensures that the insured population, and hence the flow of contributions to be distributed among beneficiaries, is replenished. National cover frees schemes from being subject to demographic changes in limited occupational groups. In terms of institutional organisation, the durability of the group of contributors on a global level requires that a mechanism of solidarity operate between the various institutions, that is, between the funds which comprise AGIRC and member schemes of ARRCO. This solidarity frees members from being subject to demographic changes specific to the fund of which they are members, regardless of whether the fund is a company, industry-wide, multi-sector or regional fund. In other words, the quality of benefits is not threatened by any economic difficulties which the company, industry, or region covered by the fund may be experiencing. Even if the company goes out of existence, or if the sector undergoes a considerable reduction in the size of its workforce, the

member's pension will not bear the consequences. This solidarity is achieved by means of a system of compensation between the various member institutions of the two large associations.

The situation is simpler for AGIRC than for ARRCO. As the AGIRC scheme is a single scheme, all the funds apply the same parameters and the same regulations. The yield is thus identical for each fund. The ratio of contributions paid in to benefits paid out, however, varies greatly between funds. A general system of compensation of expenses is applied in order to eliminate this disparity. This system aims to create in each fund the financial situation which would prevail if the ratio of contributions and benefits was equal to that of the scheme as a whole in all funds. The operation is carried out in two stages. A compensation coefficient is calculated for each fund on the basis of the ratio of its contributions and of its annual benefits to those of the scheme. It corresponds to the relative size of the fund within the scheme. This coefficient is used to calculate the proportion of the scheme's reserves which is due to each fund. If the reserves actually held at year-end are greater than the proportion calculated, the fund pays the difference toward compensation; if the contrary is the case, the fund is paid the difference. Thus in 1991, for example, 30 funds paid compensation, and 19 received it<sup>14</sup>; more than 7.1 billion francs were transferred. Once compensation has been carried out, the financial situation of each fund duplicates the financial situation of the AGIRC scheme as a whole.

Although the overall objective within ARRCO is the same, the implementation is different, as the compensation mechanism must take into consideration the diversity of the schemes involved. In addition, compensation for compulsory arrangements (contributions at the minimum rate) and compensation for additional arrangements (contributions above the minimum) are carried out separately, although using the same method (cf. Joudrier, 1993, pp. 7-8 for a detailed presentation of the compensation mechanism).

In general, compensation within ARRCO is planned as a balancing of costs, aimed at eliminating differences in demographic structure between schemes. Its objective is to "create within each institution the situation which would prevail if its demographic structure was identical to that of all the institutions" (ARRCO regulations, volume I, article 14). This means that the amount transferred in compensation must be such that, after compensation, the scheme's costs ratio is equal to that of ARRCO as a whole. In other words, compensation is designed to achieve equality as follows:

$$\frac{\text{total benefits of the scheme} + \text{equalising transfers}}{\text{total net contributions of scheme}} = \frac{\text{sum of equalised ARRCO benefits}}{\text{sum of net ARRCO contributions}}$$

Note that in order to eliminate the effects of differences in regulations between schemes, the amount of benefits for which compensation is paid is calculated assuming that all schemes apply the reference yield fixed by ARRCO. The amount of benefits taken into consideration in compensation thus does not systematically correspond to the amount of benefits actually paid; this difference is borne by, or benefits, the system itself accordingly. Thus, for example, a scheme applying a yield which is greater than the reference yield (within the authorised limit of 104 per cent) bears these

---

14. AGIRC consists of 55 funds; however, seven funds have come together to form an association, particularly for the purposes of compensation operations, which explains the total of 49 funds obtained here.

uncompensated costs, which must be covered by its own reserves. This mechanism reflects the harmonization approach implemented by ARRCO.

In 1991, as far as compulsory arrangements are concerned, 24 schemes paid money towards compensation and 22 schemes received money; more than 9.3 billion francs were transferred. With regard to additional arrangements, 21 schemes paid compensation and 18 received it; more than 1.7 billion francs were transferred.

Solidarity among ARRCO schemes is also expressed in the formation of a joint reserve, which is financed by the surpluses available after compensation transfers. Since 1980 for compulsory arrangements, and since 1981 for additional arrangements, all surpluses have been paid into the joint reserve. Previously, schemes kept a portion of surpluses; in the case of compulsory arrangements, for example, they kept 10 per cent and paid in only 90 per cent. This joint reserve has the dual function of protecting schemes from the vagaries of the economic situation and helping meet cash requirements. Its use falls generally within the logic of reserves by schemes operating with the pay-as-you-go method.

## **Reserves**

Pay-as-you-go schemes have reserves inasmuch as they do not immediately distribute all contributions paid in. These reserves are financed by any surpluses realised and by investment income. In general, the ARRCO and AGIRC schemes form three types of reserves. The first type is based on the technique of pay-as-you-go itself, which involves having funds available to pay benefits and ensure regular benefit increases. These reserves, which are strictly linked with pension operations, and are termed "technical reserves" by ARRCO and "security and stability reserves" by AGIRC, fulfil three functions in all (Amzallag, Campana, Cheron *et. al.*, 1986): a cash function, to cope with discrepancies between the payment of benefits and the collection of contributions; an economic function, to maintain regular benefits in spite of the vagaries of the economic situation; and a regulating function, to absorb momentary differences between forecast changes in the workforce and actual changes. In order to fulfil this triple function, Amzallag, Campana, Cheron *et. al.*, consider that schemes must have reserves amounting at least to the equivalent of three quarters' worth of contributions. The two other types of reserves are intended for schemes' social action operations and administration.

## **Reserves in ARRCO plans**

Within ARRCO, because of the autonomy enjoyed by member schemes, schemes' specific reserves are differentiated from the joint ARRCO reserve. As a result, distinction is made among four types of reserves: the joint reserve, specific technical reserves, administrative reserves, and social fund reserves. Each type is formed for a specific use, and no compensation is possible between types. The reserves are separately controlled: the joint reserve belongs to ARRCO, while the three other types are exclusive to each scheme. In spite of this, ARRCO entrusts management of the joint reserve to the schemes, with the reserve being divided among the schemes as a *pro rata* of their volume of operations. They may either manage it directly or make use of a third party (such as an insurance company, a bank, or the "Caisse Nationale de Prévoyance", the state insurance scheme); in the latter case, management of the reserve is governed by an agreement in compliance with a standard agreement approved by the board of management of ARRCO. As at 31 December 1991, 36 schemes,

representing 75 per cent of reserves and 54 per cent of investments, carried out direct management; 11 schemes, accounting for 25 per cent of reserves and 46 per cent of investments, went through a third party (ARRCO, *Compte rendu de la gestion financière de l'exercice 1991 -- 1991 Financial management report -- November 1992*).

The joint reserve and the specific technical reserves are both technical reserves, which means that they are associated with actual pension arrangements themselves. The joint reserve has the dual role of maintaining regular payment of benefits and helping provide cash for the schemes. It is financed, as we have seen, by any surpluses arising after compensation and by a proportion of the income from investment. A further proportion of the investment income is used to form a contingency reserve. The schemes themselves benefit: 13.85 per cent of the investment income finances the schemes' social fund reserves, and 2.90 per cent finances the administrative reserves. The majority of the specific technical reserves were formed before the schemes joined ARRCO. They were also financed by a percentage of surpluses after compensation, amounting to 10 per cent up to 1979 for compulsory arrangements. Today, most specific technical reserves are financed only by their investment income. Their existence allows schemes to meet the excess costs which arise as a result of applying a yield greater than the ARRCO reference yield. Under ARRCO regulations, these reserves must be used to meet cash requirements before any recourse to the joint reserve.

The social fund and administrative reserves are the two other components of the specific reserves. The various social action measures implemented by the schemes are financed from the social fund. The administrative reserves allow funds to be released for the operation of the schemes. These two types of reserves are principally financed by levies on contributions and by investment income. The rate of levy on contributions is not fixed directly by ARRCO; however, it is used in the calculation of the scheme's yield and thus has an effect on the difference between this yield and the ARRCO reference yield. It constitutes one of the parameters which scheme managers can adjust to balance the scheme. For example, when a drop in yield is implemented, it is possible to boost the point value by reducing the rate of levy on contributions. The investment income is generated by the administrative and social fund reserves and by the technical reserves.

In 1991 the total reserves of ARRCO schemes amounted to almost 110 billion francs (Table 5.3). The technical reserves make up the majority of this total, amounting to more than 93 billion francs, or slightly more than one year's worth of benefits paid by the schemes (1.05 years). The administrative reserves, at almost 10 billion francs, represent around two years of operation, and the social fund reserves, at 7 billion francs, approximately four years. The year 1991 saw a significant G (Table 5.4). This progression is, in particular, the result of an improvement of the ratio of benefits paid to the contributions allocated to finance them, which has enabled a surplus to be realised, whereas in 1990, for example, a balance levy was necessary (ARRCO, *Compte rendu de la gestion financière de l'exercice 1991 -- 1991 Financial management report -- November 1992*).

As regards investments, supplementary schemes are subject to the general rules enacted by the Code de la Sécurité sociale (social security code -- Article R 31.11). Under these rules, state securities or state-guaranteed securities and equivalent must represent at least 50 per cent of the assets invested. ARRCO has, in addition, set up its own more restrictive regulations for technical reserves (administrative and social fund reserves come under the social security code). For all technical reserves, 10 per cent of the sums likely to be invested must comprise cash or short-term investments which can easily be liquidated within one year. Above this threshold, available cash must be invested in easily transferable securities. Specific provision is also made for ARRCO reserves alone. Assets likely to be invested on a permanent basis from these reserves must comply with the following limits:

at least 68 per cent of assets in the form of bonds or equivalent securities (with a maximum of 5 per cent in convertible bonds); a maximum of 12 per cent in loans, loans to local authorities, and housing loans to members (up to a limit of 8 per cent); a maximum of 20 per cent in property investments and in shares (with a maximum of 5 per cent in securities not quoted on the official stock exchange listing).

These limits are based on a classification of investments as a function of the speed at which they can be liquidated and the financial risks associated with them. The three categories correspond respectively to the following characteristics: rapidly realisable securities with no considerable financial risks; investments which cannot be immediately liquidated, or which can be liquidated only at financial risk; and investments which are not subject to a forward interest calculation. This typology and the thresholds defined for each category illustrate the conservative nature of the financial management practised by the ARRCO schemes and the ensuing need for readily available funds.

Cumulated data relating to investments from the schemes' specific reserves are not available. However, the distribution of assets relating to ARRCO reserves is known. Only part of the funds is allotted to investments termed "permanent", with the remainder being used for cash requirements. In 1991, 28.7 billion francs were placed outside the scope of cash use, or almost 45 per cent of the total reserves. Investments in bonds represent three-quarters of assets (Table 5.5 and Graph 2). Public-sector loans and bonds comprise the majority of these securities (52.9 per cent of assets). Among the shares held, foreign securities not quoted in France represent a negligible proportion (0.5 per cent of assets). A distribution in accordance with the three categories of the ARRCO regulation regarding investments shows that the thresholds defined are a long way from being reached (Table 5.6).

In 1991 these investments generated almost 3 billion francs of income (FF2 877.7 million), giving a yield net of tax of 9.91 per cent. Alongside this, the investment income from funds set aside for cash requirements (FF34.5 billion as at 31 December 1991) stood at FF1 141.2 million, or an annual yield net of tax of 3.67 per cent (this yield corresponds approximately to an investment of four months out of twelve) (ARRCO, 1991 Financial management report, November 1992). It should be noted in relation to this point that, since 1 September 1987, supplementary schemes no longer have access to the money markets and thus no longer benefit from automatic current account payments. This reform led institutions, in both ARRCO and AGIRC, to modify their financial activities in order to optimise management of cash by using the various short-term investment tools.

As regards the growth of ARRCO reserves, in recent years the structure of their assets has undergone profound changes (Table 5.7). The proportion of funds allocated to cash requirements has regularly increased, thus reducing the proportion of reserves available for "permanent" investments.

### **Reserves in AGIRC plans**

AGIRC makes a distinction between four types of reserves: compulsory reserves, reserves for the compulsory social fund, reserves for the free social fund, and management fund reserves. The first two types are classed together as "compulsory fund reserves" and are managed in the same way.

Compulsory reserves, like the ARRCO technical reserves, are associated with actual pension arrangements themselves. They are divided between a security reserve and a stability reserve. The former is aimed at enabling funds to pay benefits in all eventualities, during each

financial year. It is equal to 25 per cent (one quarter's worth) of the year's benefits. The latter is aimed at reducing the effect on point value of annual variations in the scheme's resources and expenses. The total of compulsory reserves must be equal to at least 75 per cent (three quarters' worth) of the annual benefits. These reserves are financed by the scheme's annual surpluses and by a proportion of the investment income generated by the compulsory funds (85 per cent of their investment income is paid to the stability reserve, and 15 per cent to the free social fund). They are entrusted to the funds, which assume responsibility for their management; the division of the reserves among the various funds is carried out according to the compensation coefficient which reflects the relative size of each fund within the scheme. The compulsory reserves are the only reserves which are taken into consideration in the compensation mechanism.

The compulsory social fund is used to pay assistance on an individual basis to beneficiaries of the scheme and their surviving or divorced spouses. It also contributes to the financing of the pension points issued free of charge for periods of unemployment. It is financed by an annual levy equal to 3 per cent of contractual contributions, from which the cost of the unemployment points which it finances is deducted; the actual amount allocated to the fund is thus lower than 3 per cent (for 1991, for example, it was 2.1 per cent of the contractual contributions for 1990). Its reserves are provided exclusively by the accumulated surpluses, although they do not receive the investment income generated by the fund itself. These reserves are managed, along with the compulsory reserves, within the framework of the "compulsory fund reserves".

The free social fund provides financing for assistance to working members and social projects. The only endowment it receives comes from a percentage of the investment income generated by the compulsory fund reserves, which, as we have seen, currently stands at 15 per cent. It was reduced significantly during the 1980s: between 1982 and 1986 it fell in stages from 40 per cent to its current level. The fund's reserves comprise its accumulated surpluses, including investment income. The funds have greater freedom in their management than do the compulsory fund reserves.

The administration fund is financed principally by a levy on contributions equal to 4.5 per cent of contractual contributions which, in view of the call-up rate of contributions applied by AGIRC (117 per cent), represents an actual levy of 3.84 per cent (Chesneau, 1991). The overall amount is divided between the funds according to a formula which takes into consideration not only the amount of contributions paid but also the numbers of members, beneficiaries, and member companies. Each fund pays back 4 per cent of its administration endowment to AGIRC for AGIRC's administrative costs (which represent 0.18 per cent of contractual contributions overall). On the whole, the administration fund reserves have the same features as the free social fund reserves.

In 1991 AGIRC's reserves totalled 58.7 billion francs (Table 5.8), 45.6 billion francs of which comprised reserves associated with actual pension arrangements, that is, the security and stability reserves. This amount represented slightly more than one year's worth of benefits paid by the scheme (102 per cent). The reserves of the compulsory social fund (1.9 billion francs) represented more than three years' worth of outgoings, those of the free social fund (6.3 billion francs) nine-and-a-half years' worth, and those of the administration fund (4.9 billion francs) more than two-and-a-half years' worth. AGIRC's reserves have increased regularly in recent years (Table 5.9).

As far as investments are concerned, AGIRC, like ARRCO, has enacted its own regulations which go beyond the provisions of the Code de la Sécurité Sociale. These regulations apply exclusively to compulsory fund investments. In addition to the obligation to comply with the threshold of at least 50 per cent of investments in state-guaranteed securities, the following provisions



must be applied to the compulsory funds: loans must not exceed a maximum duration of ten years; property investments must not exceed 25 per cent of the total; individual loans and short-term investments together must not exceed 25 per cent of all investments; a single security, a single property, or loans granted to a single borrower must not represent more than 10 per cent of all investments. In addition, without the prior approval of AGIRC, investments must not provide a fund with a greater than 30 per cent representation in the capital of a commercial company. The last provision also applies to the free social fund and the administration fund (AGIRC, 1984).

These limits are, in general, broadly respected. In 1990, 57.6 per cent of compulsory fund investments were in state-guaranteed securities, while property represented only 2.7 per cent and loans and short-term investments 10.4 per cent (Chesneau, 1991). In general, only a proportion of the compulsory fund reserves is allotted to investments, the remainder being available for cash requirements. In 1991 these investments totalled 26.8 billion francs, or 56.4 per cent of compulsory fund reserves (Table 5.10). Fixed assets, principally in property, and loans represent a very small proportion of assets invested; securities are the principal form of investment. These largely consist of French bonds (50.9 per cent) and open-end fund (SICAV) and investment trusts (25.6 per cent) (Table 5.11 and Graph 3).

The investment income of the compulsory funds, arising from investments and cash management, amounted to almost 3.5 billion francs in total in 1991, or a yield of 8.13 per cent. On the whole, the total of funds invested as a proportion of assets has fallen in recent years, although it remains significantly greater than the proportion of funds allotted to cash requirements (Table 5.12).

### **Benefits not financed by the plans**

A substantial proportion of the benefits paid by ARRCO and AGIRC schemes is not financed by the schemes themselves. This concerns principally the cost of lowering the age of entitlement to full benefits to 60 years of age, and the issuing of entitlements for periods not worked (unemployment or early retirement). On the whole, around 20 per cent of benefits paid by the schemes are financed by third parties (18.3 per cent in the case of AGIRC, 20.7 per cent in the case of ARRCO in 1991) (Table 5.13).

Some of this external finance comes from the unemployment insurance plan, UNEDIC (Union nationale interprofessionnelle pour l'emploi dans l'industrie et le commerce), which bears the cost of the points issued at the compulsory rate for periods of paid unemployment, and from the state, which finances apprentices' contributions and crediting of periods of early retirement at the compulsory rate. In 1991, 781 million francs of AGIRC benefits and 4.6 billion francs of ARRCO benefits were financed in this way, or 1.4 per cent and 4.3 per cent respectively of the total benefits paid during the year. This method of financing currently poses a problem for schemes, in that the state has tended for a number of years not to honour all its commitments; its cumulative debt with ARRCO, for example, was assessed at around 465 million francs as at 31 December 1991, and its debts owed to AGIRC in 1992 amounted to 210 million francs (ARRCO, Rapport d'activité 1991 -- 1991 Annual Report and Point cadres, No. 176, December 1992).

The bulk of third-party financing, however, comes from an institution which was created to finance the reduction in retirement age in ARRCO and AGIRC schemes, the Association pour la gestion de la structure financière (ASF -- association for the management of capital structure). This association was set up in April 1983 for an initial period of seven years; on expiration of this period in

1990, its life was extended until 31 December 1993 (for a detailed description of the ASF and of the debates to which its creation led, cf. Ruellan, 1983).

When the retirement entitlement age was lowered to 60 in the general social security scheme in 1983, the ARRCO and AGIRC schemes dropped the early retirement factors for members aged between 60 and 65 who have liquidated their pension in the general scheme and have a contribution history of 37.5 years. They also adjusted the factors for members with between 32.5 and 37.5 years of contributions. The cost of this alignment with the general scheme is financed by the ASF.

The logic behind the creation of the ASF was to transfer to the ARRCO and AGIRC schemes a proportion of the funds that had, until then, been allotted to an early retirement plan which was particularly favourable to employees: the income guarantee ("garantie de ressources"). This provided employees between the ages of 60 and 65 years who had been made redundant, or who had resigned, with an income equal to 70 per cent of their final gross salary, which more often than not involved a sum greater than the pension paid from age 65 (in addition, the five years spent under the income guarantee plan were credited in the pension schemes, free of charge in the case of the general scheme, or at the cost of a UNEDIC contribution in the case of the ARRCO and AGIRC schemes). It was financed jointly by the unemployment insurance scheme, UNEDIC, and by the state. From 1 April 1993, with the introduction of retirement at age 60, the income guarantee, along with other employment allowances, ceased to be paid to beneficiaries aged more than 60 years able to claim their pension at full rate in the general scheme. However, the entitlements acquired had to be honoured, and payment of the income guarantee was extended to the end of 1993.

The decision to withdraw the income guarantee and lower the retirement age at the same time meant that pension schemes took the place of an unemployment payment plan. The method for achieving this involved transferring the funds allotted to this plan to the ASF, and making the ASF responsible for financing outstanding allowances and for bearing the cost of withdrawing the early retirement factors from the ARRCO and AGIRC schemes.

The ASF, which is jointly administered by employees' and employers' representatives, is financed by the two types of funds set aside for funding the income guarantee: contributions levied on earnings by UNEDIC, and a state subsidy. For the initial seven years, the state subsidy was fixed at 10 billion francs per year (at 1983 values), and the contributions at 2 per cent of gross salary up to four times the social security ceiling<sup>15</sup>. In 1990 the agreement extending the life of the ASF to the end of 1993 changed this ratio considerably. The state subsidy was significantly reduced to 3.75 billion francs for the period from 1 April 1990 to 31 December 1993, or a billion francs per year. At the same time, contributions fell from 2 per cent to 1.8 per cent over the portion of salary below the ceiling, and were maintained at 2 per cent between the ceiling and four times the ceiling. This withdrawal on the part of the state reflects the fact that the proportion of income guarantees to be financed declined considerably over this period.

Costs borne by the ASF can be divided into two main types: the income guarantee allowances and the cost of the corresponding supplementary pension points; and the costs to the ARRCO and AGIRC schemes of withdrawing early retirement factors. Over the first seven years of its existence, the ASF received a total of 254.8 billion francs, 81.7 billion in state subsidy and 173.1 billion from UNEDIC, while paying out 241.2 billion francs in benefits: 161.5 billion under the

---

15. Unemployment contributions are divided 40/60 between employee and employer.

income guarantee, and 79.7 billion towards pensions in the ARRCO and AGIRC schemes. In 1991 the ASF paid 9.3 billion francs in benefits to AGIRC and 17.3 billion to ARRCO, or 16.9 per cent and 16.3 per cent respectively of all benefits paid during the year (Table 5.13).

The existence of the ASF, and the agreement relating to eligibility for benefits at full rate at age 60 expired on 31 December 1993. A new three-year agreement was concluded at the end of 1993, to remain in force until 31 December 1996. A double source of financing was maintained: State subsidies and shared employer/employee contributions. Therefore, full pension rights at age 60 in ARRCO and AGIRC plans were assumed until the end of 1996 because of external financing. However, this means that a substantial proportion of the resources of the ARRCO and AGIRC schemes already passes through a third party, UNEDIC, which faces serious financial difficulties. In fact, the unemployment insurance scheme is responsible both for collecting and administering ASF funds, and, faced with the rise in the numbers of unemployed, it has an increasing tendency not to honour its commitments to ARRCO and AGIRC schemes: the sums owed to the latter by the ASF, for example, may reach 27 billion francs by the end of 1993 (*Les Echos*, 31 December 1993; 1 January 1994).

### **Administration and management**

The principle of joint management applies to all levels of the ARRCO and AGIRC schemes: power is shared equally between the employers' and employees' representatives, with chairmanship alternating between the two sides. This principle is associated with the origin of schemes which arose from agreements between employers' and union organisations. The law also guarantees that the funds and the bodies of the Federation are to be jointly administered by employers and employees or their representatives on an equal basis (Art L.922-1 and L.922-4).

Policies of the schemes are negotiated by representatives appointed by the employers' and union organisations. In the case of the ARRCO schemes, the CNPF, CGPME, and UPA (Conseil national du patronat français, Confédération générale des petites et moyennes entreprises and Union professionnelle artisanale) are involved on the employers' side, with the five labour unions on the employees' side (CFDT, CFTC, CFE-CGC, CGT, and CGT-FO -- Confédération française démocratique du travail, Confédération française des travailleurs chrétiens, Confédération française de l'encadrement, Confédération générale du travail, and Confédération générale du travail-Force ouvrière). In the case of AGIRC, the two sides are made up of the signatory organisations of the collective bargaining agreement of 14 March 1947 and its codicils, that is, on the one hand, the CNPF and CGPME and, on the other hand, the following union organisations representing management personnel and equivalent: the Confédération française de l'encadrement (CGC), the Union des cadres et ingénieurs of the CGT-Force Ouvrière (UCI), the Union confédérale des ingénieurs et cadres of the CFDT (UCC-CFDT), the Union générale des ingénieurs, cadres et assimilés of the CFTC (UGICA), and the Union des ingénieurs, cadres et techniciens of the CGT (UGICT).

The interpretation and the practical terms of implementation of the agreements signed nationally are the responsibility of a body which operates both for the AGIRC scheme and for the ARRCO schemes: the joint committee. In the case of AGIRC, this comprises twenty members: ten representatives of the CNPF and CGPME and two representatives from each union organisation. In the case of ARRCO, the committee also comprises twenty members, although only the CNPF is represented on the employers' side. The decisions taken by these joint committees, known as "resolutions", are subject to the approval of the signatory organisations of the national agreements. In

addition, in the case of AGIRC, the joint committee fixes two essential parameters of the scheme each year: the point purchase price and the collection percentage of contributions. It also fixes the upper limit of bracket B of salary (equal to at least four times the social security ceiling).

The composition and method of appointment of the board of management of AGIRC and ARRCO differ slightly. In the case of AGIRC, the board has thirty members, ten of whom are appointed by the signatory organisations (five by the CNPF and CGPME and five by the cadres organisations), with the remaining twenty being elected by the fund administrators (ten by the employers and ten by the cadres). In the case of ARRCO, the board of management comprises forty members, twenty appointed by employees' organisations (four per organisation) and twenty by the CNPF. At least half of the board members from within each electing group must be selected from among the administrators of member schemes of ARRCO. These boards of management have extensive powers. They monitor the implementation of statutes and regulations, and may amend them if necessary. They also appoint a chief executive officer. In the case of AGIRC, the board of management fixes the point value; in the case of ARRCO, the board determines the reference yield with which member schemes must align themselves. In both associations the board of management also defines priorities regarding social action measures. The boards of management are assisted by consultative committees: an administrative committee, a technical committee, and a social fund committee in the case of AGIRC; and a technical committee, a social action coordination committee, an investment advice committee, and a data processing advice committee in the case of ARRCO.

The basic institutions, the funds to which employees are actually affiliated and which pay out benefits, are also managed on the basis of equal representation. Each fund has its own statutes and regulations, which must be compatible with those of the association of which the fund is a member (AGIRC or ARRCO), and must be approved by the ministry of social affairs. In most cases, the statutes and regulations must be adopted by a general meeting comprising equal numbers of representatives of employers and employees (both working and retired). The same procedure applies to changes in statutes and regulations.

The board of management, which is also jointly representative, is elected, depending on the institution's regulations, either directly by employees (working and retired) or through the employees' delegates to the general meeting. The role of this board is defined by the statutes. In general, it defines the investment policy and the social action programme, makes decisions regarding the utilisation of social funds, appoints a chief executive officer, fixes the management budget, and so on. In addition, within ARRCO, the board of management of a scheme intervenes to fix the scheme's yield as a function of the ARRCO reference yield. Also within ARRCO, each institution must have a monitoring committee with between six and ten members elected by the general meeting. The members of this committee must belong to the signatory organisations of the founding agreement of ARRCO (the CNPF and the five representative confederations). The committee's function is to check the institution's accounts with the assistance of a chartered accountant or an auditor.

## 6. TAX TREATMENT

In general, the same taxation is applied to the ARRCO and AGIRC schemes as to the statutory social security scheme. Contributions are tax-exempt, while benefits are liable to taxation. As far as investments are concerned, the funds benefit from favourable provisions; this aspect, however, plays only a minor role in that the schemes do not fund their pension obligations in advance. On a broader level, the fiscal dimension which we shall consider here applies to all pension schemes, whether compulsory or voluntary, although the limits of deductibility come into effect only with regard to the latter. Two voluntary schemes, the two optional schemes which cover public service employees, benefit from particular advantages, giving eligibility to total deductibility of contributions from personal income tax. This fiscal expenditure, which some would like to see extended to other schemes, can be seen as the financial contribution of the state, as employer, to schemes in which the contributions come solely from employees. The other voluntary schemes are subject to ceilings of deductibility which, while they are likely to be a disincentive, nonetheless leave these schemes scope for development.

### Corporate taxation

The general principle is that contributions to a pension scheme are considered as personnel expenses and, as such, are deductible from taxes on companies under the same conditions as wages and salaries (Article 39-1 of the Code général des impôts -- general tax code). They must therefore correspond to actual work, and not be excessive. Deductibility is subject to two conditions: the pension under the scheme must not have the effect of raising the overall pension to an excessive level in comparison with the salary received in the company, and the scheme must result from an official decision and must apply in accordance with the statutes, either to all personnel or to an objectively defined category. In fact, these regulations come into effect only for voluntary schemes, and are intended to fix limits on payments made by companies to employees or former employees within the framework of such schemes.

As regards advance funding of defined-benefit schemes, the pension provisions included on the company balance sheet are not deductible; only payments made to a third party responsible for the payment of benefits are deductible, on the express condition that the company definitively make over the sums paid.

This point merits a brief review. Current regulations date from the finance act of 1985, and illustrate the state's response to practices which were becoming more widespread among companies. Between 1983 and early 1985 some large groups began to assess their pension liabilities and make provision for them on the balance sheet; in doing this, they were complying with the 4th European directive of 25 July 1978, although they tended to do it for the purposes of tax exemption<sup>16</sup>

---

16. In general, administrative policy was previously opposed to deduction for pension costs. However, this policy was reviewed by a decree of the Conseil d'Etat dated 2 February 1983, which allowed the

(Brugirard, 1991). The state's initial reaction was purely and simply to forbid posting of provisions for pensions. However, as this was incompatible with the European directives, the state had to allow companies the option of making provision for their pension liabilities on their balance sheets, while obliging them to include an assessment in the notes to financial statements (Act of 11 July 1985 amending Article 9 of the Code du commerce -- code of commercial law). At the same time, Article 86 of the 1985 finance act specifies that provisions for pension costs are not deductible; as this measure is retroactive, companies have had to reinstate previously constituted provisions into their taxable income.

In short, current tax regulations encourage companies to have recourse to a third-party body -- such as a pension fund, mutual insurance fund, or insurance company -- to which they fully transfer ownership of the reserves constituted. Making provision for liabilities on the balance sheet is neutral as regarding taxation, although the benefits paid by the company are still deductible when they are actually paid.

### **Employee taxation**

As regards contributions, the general principle provides for deductibility of income tax under certain conditions and up to a limit fixed in relation to the social security ceiling (Article 83-2 of the Code général des impôts). These measures apply to all contributions or premiums paid to supplementary pension and welfare bodies of which the employee is a member on a compulsory basis. Since 1990 contributions by employee and employer, both to social security funds under old-age insurance and to supplementary pension and welfare bodies, are deductible where they do not exceed 19 per cent of eight times the annual social security ceiling; above this threshold, contributions or premiums are reinstated as taxable income. These provisions are more restrictive than those previously in force; before 1990 the exemption limit was 19 per cent of twelve times the social security ceiling.

Once again, this limit concerns only voluntary schemes. Contributions to ARRCO and AGIRC schemes, like those assigned to the statutory social security scheme, remain outside the scope of this taxation.

For the year 1993, with the social security ceiling standing at FF149 820, the exemption limit is fixed at FF227 726.40. The scope left to voluntary schemes corresponds to the difference between this sum and the total contributions paid to the basic scheme, to compulsory supplementary schemes, and to the compulsory welfare scheme<sup>17</sup>; its extent is thus dependent on whether the employee is affiliated to the ARRCO and AGIRC schemes at the minimum or maximum rates. Regardless of this, however, it is certainly far from being insignificant: G. Briens (1990) assesses it at FF128 490.54 for the year 1990 in the case of a cadre paid FF320 360 and contributing to the compulsory supplementary schemes at the maximum rate. If this same cadre contributes to the

---

deduction of provisions formed by a company with a view to financing the pensions it was committed to paying.

17. As well as their compulsory supplementary pension scheme, cadres have a welfare scheme which is also compulsory, and which provides death-in-service benefits. This scheme, paid for exclusively by employers, is financed by a contribution equal to 1.5 per cent of the portion of salary up to the social security ceiling.

ARRCO and AGIRC schemes at the minimum rate, his contributions to a scheme above and beyond the compulsory schemes are deductible up to a limit of FF143 640.64.

Deductibility, moreover, is subject to a certain number of restrictive conditions defined by the administration fiscale (tax authorities) in application of Article 83-2. This article makes deductibility subject to the compulsory nature of the employee's membership. Broadly speaking, in order to become eligible for deductibility, a scheme must meet the following requirements: membership must be compulsory (if it is optional, contributions are considered as additional income and are taxed as such); the scheme must apply to an objectively defined category of personnel; it must require a financial contribution from employers (which may represent all contributions); it must offer a pension, excluding all payments of capital, which is payable at normal retirement age at the earliest; and it must apply a uniform contribution rate to all employees belonging to a single category.

Insurance companies have developed a strategy which enables members to avoid application of Article 83-2. This is done by offering defined-benefits schemes which comply with the deductibility conditions for companies provided for in Article 39, but under which employees receive a pension only if still working in the company upon retirement. As the benefit offered is uncertain in nature, the contribution paid by the employer cannot be considered as an element of pay and thus does not fall within the scope of Article 83-2. This reasoning is incontrovertible from the point of view of tax law; however, it may seem rather paradoxical with regard to the social role of pension schemes. In any case, the practice runs completely counter to the tendencies which have emerged since the mid-1970s in most industrialised countries, whereby entitlements are preserved by law after a certain length of membership in a scheme.

With regard to the benefits paid, all pensions, whether they originate from public or private, compulsory or voluntary schemes, are treated in the same way. They are liable to direct taxation after an allowance of 10 per cent (limited to a ceiling of FF30 200 in 1992 for the individual taxpayer). In addition, like all income, pensions have been subject since 1991 to a new tax deducted at source, the general social contribution ("contribution sociale généralisée" -- CSG). In 1991 and 1992 this stood at a rate of 1.1 per cent; it is set to increase in 1993.

### **Social security charges**

The general principle of social security charges consists of excluding from the basis of social security contributions specific to each employee the employers' contributions which are used to finance supplementary pension and welfare benefits for a proportion not exceeding 85 per cent of the social security ceiling (Articles L. 242-1 and D. 242-1 of the Code de la Sécurité sociale). Employees' contributions are not covered by these provisions, as they have no effect on net salary, whereas social contributions are based on gross salary.

Although this exemption limit is lower than the previous limit, it still does not, in practice, concern the ARRCO and AGIRC supplementary schemes. It stood at FF127 347 in 1993. The scope for voluntary schemes corresponds to the difference between this ceiling and the contributions paid by the employer under compulsory supplementary schemes and to the compulsory welfare scheme (contributions to the basic scheme are not taken into consideration here). Taking the same example as before, it ranges from FF79 720.06 to FF87 924.10 in 1990 for a cadre receiving an annual salary of FF320 360 (Briens, 1990).

It should also be noted that the bodies responsible for collecting contributions do not all accept the logic of tax law put forward by insurance companies, which more or less gives exemption to contributions used to finance defined-benefits schemes which do not guarantee preservation of entitlements. This rationale is currently being challenged by several bodies.

In addition, a contribution for sickness, maternity, disability, and death insurance is deducted from the pensions paid, at the rate of 2.4 per cent for supplementary schemes, both compulsory and voluntary, and 1.4 per cent on basic scheme pensions.

### **Taxation of pension funds and insurance bodies**

Insurance companies are generally subject to the common law of commercial companies, whereas pension or welfare funds and mutual insurance funds, as non-profit-making bodies, benefit from a more favourable tax status. They are exempt from VAT and business tax (a local French tax on operating businesses), and specific measures are applied to them regarding corporate tax.

As regards corporate income tax (33.1/3 per cent in 1993), pension funds and mutual benefit funds receive a two-fold tax relief. On the one hand, the tax applies exclusively to income from real estate, profits from agriculture or forestry, and certain securities income (gain on sales of securities, in particular, is free from any taxation). On the other hand, while this taxable income is subject, as a general rule, to a reduced rate of 24 per cent, certain securities income is taxed at a rate of 10 per cent, in particular income from bonds and interest produced by liquid assets (operations on the money or mortgage markets and bank deposits). Pension funds may, in addition, deduct the tax credit attached to French companies' dividends from the corporate tax for which they are liable.



## 7. SUPPLEMENTARY SCHEME PENSIONS AND OVERALL PENSION

The level of benefits paid by the ARRCO and AGIRC schemes is characterised by two principal features of the schemes which have already been described. First, the schemes continue to credit periods prior to compulsory membership; they thus pay pensions which correspond to the total length of career of the beneficiary regardless of the actual contribution period. Second, a change of employment leads to no loss of entitlements; the accumulation of points in an individual account is not affected by occupational mobility. ARRCO and AGIRC pensions thus represent a significant proportion of the overall pension, and the schemes play an essential role in supplementing the basic scheme. They allow relatively high final salary replacement rates and, for highly paid employees, offset the ceiling effect of benefits in the general scheme. In general, the compulsory supplementary schemes and the basic scheme in France together form a complete system in terms of benefits.

### General scheme pensions

The old-age section of the general social security scheme almost exclusively pays benefits which correspond to contributory entitlements. The proportion of non-contributory benefits has fallen regularly since the scheme was established in 1945. Unlike the ARRCO and AGIRC schemes, the general scheme did not credit periods prior to membership when it was set up; however, it did pay means-tested non-contributory benefits. These now represent only a tiny proportion of the benefits paid by the scheme: in 1991, of the 238.6 billion francs paid out, 238.2 billion comprised contributory benefits (CNAV, 1993).

In the general scheme, the full-rate pension is equal to 50 per cent of the indexed average salary during the best 14 years of earnings as of 1997. This will be increased to the best 25 years of earnings by the year 2008. The salary taken into consideration is the maximum gross salary which is used as a basis for calculating contributions; for 1992 the average value of the ceiling over the year was FF144 120 (FF12 010 per month). The full rate of pension currently corresponds to a period of membership of 37.5 years (150 quarters); in other words, the rate of annual contribution is 1.33 per cent (50%/37.5). The period of 150 quarters is the maximum period taken into consideration in calculating the pension. The full-rate pension formula is thus as follows:

$$\text{pension} = \text{base salary} \times 50 \% \times \frac{\text{number of quarters} = (150 \text{ or less})}{150}$$

Entitlement to the full 50 per cent pension rate occurs at age 65, but until the end of 1993, all members with 37.5 years of service in the combined statutory regimes could receive a full pension at age 60. A July 1993 reform, implemented 1 January 1994, changed these provisions. Required years of service will be gradually increased from 37.5 years to 40 years (150 quarters to 160 quarters), by three months per year, to obtain the full pension rate before 65 years of age. Full implementation will occur by 2003. At age 65, all beneficiaries are entitled to the 50 per cent rate, adjusted by their years of service

up to a maximum of 150 quarters. Those who take a pension between the age of 60 and age 65 who have not completed the required years of service (40 years by 2003) will receive a reduction.

A 1993 reform also modified the indexing of pensions and of the reference salary. The rule in both cases had been to make adjustments by changes in average salaries. The reform, implemented for a period of five years (from the beginning of 1994 to the end of 1998), proposed indexing by price changes.

Adjustments to general pensions, like adjustments to salaries taken into consideration in calculating the reference salary, have always been lower than the increase in salaries over the ten years preceding the 1993 reform, except in 1983 (Table 7.1). Adjustments exceeded the price index in three years out of ten. The overall adjustment was 50.7 per cent between 1983 and 1992, whereas the increase in prices was 53.9 per cent (Commission des comptes de la sécurité sociale, 1992).

Along with pensions from retirement pensions, the general scheme pays pensions from survivors' pensions. Since January 1995 a surviving spouse may receive a survivor's pension equal to 54 per cent of the pension the deceased member received or would have received. (It was 52 per cent previously.) Payment is subject to conditions of age, duration of marriage, and resources. The survivor must be at least 55 years of age. The duration of marriage prior to death must, in principle, be at least two years, while remarriage does not lead to loss of survivors' entitlements. The survivor's personal finances must be less than the annual amount of the national minimum salary (salaire minimum interprofessionnel de croissance -- SMIC); however, neither income arising from the calculation of the communal estate nor that derived from donations received from the deceased spouse (donation *inter vivos*, legacy) is counted as personal finances. In other words, the survivor's pension tends to be granted to spouses not having personal income prior to the spouse's death, regardless of their actual means afterwards.

At the end of 1991, the average monthly pension from retirement pensions paid by the general scheme was FF2 875 per month, with that from survivor's pensions being FF1 630 (Table 7.2).

### **ARRCO and AGIRC pensions**

The average pension paid to retirees in 1991 amounted to FF15 610 in ARRCO, and FF51 764 in AGIRC, or FF1 300 and FF4 315 per month respectively (Table 7.3). Survivors' pensions for the same year averaged FF9 737 in ARRCO and FF28 774 in AGIRC (FF810 and FF2 400 per month).

ARRCO's method for collecting data from its member schemes does not permit detailed examination. It can nonetheless be seen that the disparities hidden behind the average value of benefits paid are limited by the fact that contributions to ARRCO, upon which benefits are directly dependent, principally apply to a relatively restricted portion of salary (up to the social security ceiling).

AGIRC's statistical system, in contrast, provides information which sheds light on some significant disparities. These disparities arise from the logic of the scheme itself. On the one hand, contributions apply to a portion of salary significantly greater than that used in ARRCO schemes, ranging from the ceiling to eight times the ceiling since 1 January 1991, and from the ceiling to four times the ceiling prior to this (unless otherwise specified, the data used here concern only pensions

from bracket B, that is, the portion between the ceiling and four times the ceiling). On the other hand, scheme membership is subject to belonging to the category of cadres or an equivalent category, and may thus come into effect at varying moments in an employee's career.

Benefits differ for the two large professional categories: cadres, and technical staff and supervisors. The former received, in 1991, an average annual pension of FF64 692, while the latter received only FF19 672, which amounted to FF5 390 and FF1 640 per month respectively (Table 7.4). The other important difference is sex-related: the average pension for men is almost two and a half times greater than that for women. This disparity between the sexes exists within both professional categories, but is more marked among cadres, where the average monthly pension in 1991 was FF72 493 for men and FF27 682 for women, or FF6 040 and FF2 320 per month (Table 7.4). In addition, only 17 per cent of beneficiaries of retirement pensions are women, with this percentage being the same with regard to both cadres and technical staff and supervisors.

The breakdown of retirees according to the amount of pension received shows that there is an extremely broad spread among cadres, particularly for men (Table 7.5). In 1991 almost half of the male cadres received an annual pension of less than FF44 000, while for more than 20 per cent the annual pension was over FF110 000. The spread is much smaller among female cadres, with most being concentrated in the lowest categories of pensions: 82 per cent have an annual pension of less than FF44 000. Very few technical staff and supervisors receive annual pensions of more than FF44 000 (Table 7.6).

The method of internal data collection, organised for management purposes rather than analysis, does not allow any examination beyond this highly general view of the benefits paid by the ARRCO and AGIRC schemes. Surveys carried out over recent years, however, have allowed benefits to be placed in the context of the overall pension received by retirees, and enabled the actual replacement rates to be determined.

### **Overall pension and replacement rate**

In general terms, the replacement rate obtained using the calculation method of the civil servants scheme, or 75 per cent of the gross final salary for a full career, is used as a yardstick in France. This rate has become something of a myth, as public service employees themselves do not actually receive it; final salary in their case means exclusive of bonuses, which frequently represent a considerable proportion of their pay. The rate of 75 per cent nonetheless remains a target to aim for as far as private-sector employees are concerned, at least for the unions. ARRCO has shown that the agreement of February 1993, which leads to the progressive adoption of a single contribution rate at 6 per cent, allows significant progress in approaching this rate using the example of an employee currently earning FF8 000 gross per month: at a constant salary, this employee's overall pension will represent 66 per cent of salary with the current minimum rate of 4 per cent, and 74 per cent of salary on the basis of a rate of 6 per cent (Extraits de documentation 93-95).

Going beyond this simple illustration, assessments have been carried out on the basis of various career profiles in order to determine the replacement rates likely to be obtained by the combined pensions of the general scheme and the ARRCO and AGIRC supplementary schemes. This type of approach gives results which are often far removed from reality in the case of voluntary supplementary arrangements, particularly where they involve loss of entitlements due to a change of employer. In the case of ARRCO schemes, in view of compulsory membership, crediting of periods

prior to membership, and the reduced effect of occupational mobility, it is possible, using this method, to obtain a close approximation of the schemes' potential regarding benefits. The situation is different in the case of AGIRC, as membership may come into effect at varying moments in an employee's career.

### **Assessments on the basis of career profiles**

ARRCO estimates that, for a typical career with minimum contributions at 4 per cent, 40 years of employment, and a moderate progression of salary (below the social security ceiling), an employee will obtain from member schemes between 15 per cent and 20 per cent of his or her gross final salary. The overall replacement rate, including the general scheme pension, is between 65 per cent and 70 per cent of gross final salary, and between 75 per cent and 83 per cent of net final salary (Seize questions sur votre retraite -- "Sixteen questions on your retirement" -- 1992 ed.).

Three estimates were also made on the basis of different career profiles, taking a contribution rate (5 per cent) which is close to the current average rate. For a career involving normal progression and a final net monthly salary of FF9 000, the replacement rate for the overall pension is 80 per cent. For a career with slow progression and a final net salary of FF8 500, it is 85 per cent. Finally, for a profile with a large increase at career end (final net salary of FF17 000), it is 70 per cent.

Amzallag, Campana, Cheron *et al.* (1986) have drawn up several graphs which allow the replacement rates corresponding to a large number of possible profiles to be assessed as a function of starting and final salaries. These graphs were completed on the basis of the following assumptions: a full career (37.5 years); a pension equal to 50 per cent of the average salary of the ten best years in the general scheme; contribution rates to the supplementary schemes which are close to the average rates observed (5 per cent for ARRCO schemes, 14 per cent for the AGIRC scheme); an ARRCO yield of 13.28 per cent and an AGIRC yield of 13.22 per cent; and an increase in salary which is greater at the start of the career than at career end.

By way of example, the gross replacement rate (gross pension/gross salary) for non-cadres who began their careers at a salary of 0.6 times the ceiling and ended it level with the ceiling is 71 per cent; if these employees end their careers at 1.2 times the ceiling, it is 62 per cent. For employees who have been cadres throughout their careers, having started level with the ceiling and ended at 2.5 times the ceiling, the gross replacement rate is 57 per cent. For employees who have become cadres after 20 years and who remain managers for 17.5 years, a career start at 0.6 times the ceiling and a career end at twice the ceiling gives a replacement rate of almost 54 per cent.

These assessments give a useful indication of the relative level of benefits the schemes are likely to provide and of their operating logic. However, they are based on a choice of typical careers and various assumptions which do not always match reality, and they cannot take the place of survey data.

### **Survey data**

Two surveys provide data on the pensions received and the replacement rates obtained. The first was carried out by the Service des statistiques, des études et des systèmes d'information (SESI) of the Ministry of Social Affairs, while the second was carried out by AGIRC. The two surveys do

not cover the same population groups: the SESI sample was generally representative of the overall population of retirees, whereas the AGIRC sample is made up only of beneficiaries of the scheme (in this case newly retired cadres). The two surveys were carried out at approximately the same time, and currently represent the best sources of information on the level of overall pensions, their structure, and the replacement rates obtained.

### *All retirees*

The SESI formed a sample of around 20 000 retirees, the "cross-scheme sample of retirees" (Lacroix, 1989). Four generations are represented (1906, 1912, 1918, and 1922), and the population selected is approximately representative of the overall population of retirees. In cooperation with the INSEE (Institut national de la statistique et des études économiques -- national institute of statistics and economic studies) and the old-age insurance bodies, the SESI, during the final quarter of 1988, questioned all the pension funds regarding the nature and amount of benefits paid. The information obtained enabled an accurate reconstruction of the amount of the overall pension of each individual in the sample. In order to determine replacement rates, the cross-scheme sample of retirees was supplemented by two files managed by the INSEE: the annual reporting of wages by an employer (déclaration annuelle des salaires -- DADS) file, which covers all employees in the private and semi-public sectors, and the pay file of public service employees (Lacroix, 1991).

The data from the SESI survey are used to assess the level of the various pensions and to determine their relative proportion in the overall pension. The data show that the ARRCO and AGIRC supplementary schemes play widely varying roles depending on the level of salary. The distinction between cadres and non-cadres, in particular, is very clear (Tables 7.7 and 7.8). For non-cadres who have only been members of the general scheme and an ARRCO scheme, the supplementary pension represents a total of 28 per cent of their overall pension, and where they have had a full career (at least 37.5 years of contributions to the general scheme) it represents nearly a third. For cadres, it accounts for more than 63 per cent where the period of membership of AGIRC was 15 years and over, and for 44 per cent where the career as a cadre was less than 15 years. As these figures illustrate, supplementary schemes tend to increase in importance further up the hierarchical scale.

The survey also shows the considerable differences between men and women. Women represent the majority of employees who do not have a total of 37.5 years of insurance. However, even if we consider only employees who have had a full career, women receive pensions significantly lower than those received by men (Tables 7.9 and 7.10). This is particularly true at the two extremes: among employees who have never been members of the cadres' scheme, and among those who have been members for fifteen years or more. This disparity between the sexes is principally due to supplementary schemes, whose pensions are considerably greater for men; pensions for men and women under the general scheme are much closer together.

An examination of replacement rates gives a good illustration of the increasing role of supplementary schemes with higher salaries and the disparity between the sexes (Tables 7.11 and 7.12). For reasons of homogeneity and access to information, this examination covers only retirees from the youngest generation of the sample (1922), who were members of a single basic scheme (the general scheme) and completed a full career. For low-level salaries, the general scheme pension accounts for most of the replacement of final salary; its method of calculation, as a percentage of average salary of the ten best years, may even give a replacement rate greater than 100 per cent for

careers in which salary has fallen. For high-level salaries, it is the supplementary schemes which predominate, with AGIRC playing a major role for the highest salaries. For the highest category of salary, for example FF16 000 and above, the pension paid by the cadres scheme represents almost half of an overall pension which reaches two-thirds of net final salary (Table 7.11). It also appears that, for the same level of career-end salary, the replacement rates are significantly lower for women than for men, and that supplementary pensions play a more extensive role in the case of the latter (Table 7.12).

In general, the ARRCO and AGIRC supplementary schemes combined with the general scheme seem successfully to fulfil the objective of bringing private-sector employees into line with state employees. At an equal career-end salary, the replacement rates in the private sector and civil service are very similar; between FF8 500 and FF17 500, they are almost identical, and, although above this level they are higher in the case of civil servants, this is because there are proportionally more very high salaries in the private sector (Table 7.13).

### ***Retired cadres***

The AGIRC survey was carried out using retired members of the scheme who claim their pension during the first quarter of 1989 (Del Medico, 1991, and AGIRC, L'enquête "retraite vérité": quelle retraite pour un cadre? -- The "truth about pensions" survey: which pension for cadres?). The population group selected comprises beneficiaries who were cadres in the private sector at the end of their career (whether working, unemployed, or on sick leave<sup>18</sup>) and whose last employment was full-time with a single employer. A representative sample of 5 823 people was selected, which duplicates, in particular, the distribution between the sexes. The data collected were updated to 1990 franc values. The results supplement the results of the SESI survey and provide information on a more limited population group.

The average monthly pension of newly retired cadres was FF13 727 in 1990 (Table 7.14). Of this, 62 per cent represents the share of supplementary schemes, almost exclusively the ARRCO and AGIRC schemes, which pay 60.5 per cent of the overall pension. More than two-thirds of the sample (67.4 per cent) receive pensions only from the general scheme and from ARRCO and AGIRC schemes. This population group, which both represents the majority and is more homogeneous, enables the respective proportions of the principal schemes to be more clearly defined (Table 7.15). In this case, supplementary schemes provide 63 per cent of the overall pension, with ARRCO schemes accounting for 22 per cent and the AGIRC scheme for 41 per cent. The gross replacement rate stands at 66 per cent; in other words, the beneficiaries receive two-thirds of their gross final salary.

The very clear difference between men and women is evident once again, concerning both the overall pension amount and how it breaks down (Table 7.16). The average pension of women cadres is 30 per cent less than that of men. This difference is principally due to the AGIRC scheme, in which men's pensions are an average of 2.3 times greater than women's.

---

18. The situation prior to the claim of pensions was as follows: only 39.8 per cent were working (38.6 per cent of men and 45.7 per cent of women), 56.7 per cent were unemployed or in early retirement (58.0 per cent and 30.3 per cent), and 3.5 per cent were on sick leave (3.4 per cent and 4 per cent).

The survey shows the extent to which replacement rates fall regularly as the level of final career salary increases (Table 7.17). Between the first and second portion the drop is relatively sharp, from 82 per cent to 73 per cent; this is due, in particular, to the fact that the limit of the first portion is scarcely higher than the ceiling of the general scheme (FF10 920 on average in 1990). The replacement rate then falls progressively, almost imperceptibly. As regards the breakdown of retirees according to their final salary, this is characterised by a relative concentration in the first portions, and then by an extremely wide spread: half of the beneficiaries fall within the portions which correspond to salaries which are equal to or greater than FF18 000, and in 10 per cent of cases the previous salary was FF34 000 or more.

The survey also provides information on a limited population for whom very little data is available: beneficiaries of non-compulsory supplementary schemes. In the first quarter of 1989, 6.6 per cent of newly retired cadres received a company pension; this amounted to FF2 790 per month, representing almost 16 per cent of the overall pension (Table 7.18). The average overall pension for this population group is significantly higher than that of the whole group of people surveyed, standing at FF17 767 per month compared with FF13 727. The replacement rate obtained is itself high for the corresponding level of salary, at 73 per cent of gross final salary, a rate very close to that offered by the civil servants' scheme.

## **8. VOLUNTARY PLANS AND OTHER ARRANGEMENTS**

The available data on voluntary supplementary initiatives in France are scarce and fragmented. The fact that almost all the supplementary plans set up by companies or sectors have joined together to form two large national multi-sector associations has left little room for the establishment of new voluntary schemes.

A certain number of company or multi-employer schemes exist in the private sector and the competitive public sector. These fall principally within two categories: older large-company schemes which were maintained after their members were integrated into the ARRCO and AGIRC schemes; and schemes or arrangements intended exclusively for senior executives and directors which have developed in addition to the compulsory sector. Civil service employees are also covered by two optional schemes.

In general, various systems found in other industrialised countries are also found in France, such as company or multi-employer schemes, with features such as defined benefits or defined contributions, funded or unfunded, internal financing or financing via an institution separate from the company, with or without recourse to an insurance body, and so on. The only unusual feature of the situation in France is the fact that, unlike countries such as the United States, Germany, or the United Kingdom, initiatives have developed without legislative intervention; no regulations have arisen, for example, covering aspects as important as preservation of entitlements or indexing of pensions. This should probably be seen as a consequence of the marginal role played up to this point by voluntary systems. Whatever the reason, the current legal regulation centres far more around tax law than around labour or social security legislation.

Other fairly extensive plans -- welfare schemes, termination payments, and employee savings schemes -- do not fall within the field of retirement provision in France. However, they provide types of benefits which in some countries are considered as falling within the scope of pension schemes, such as insurance against death in service, tax-free lump sums, and profit-related or non-profit-related company savings plans.

### **Company and sector plans**

As is the case in comparable countries, most large French companies set up pension schemes during the 1950s. These are often called "top-up" schemes, as they were designed to provide benefits to improve on -- or top up -- those of the compulsory schemes. Their objective was to obtain for company employees overall cover equivalent to that enjoyed by civil servants. With the development of compulsory schemes, such company schemes lost their *raison d'être*, particularly as many large companies opted to contribute at the maximum rates to ARRCO and AGIRC schemes. In addition, most of these schemes did not fund their liabilities and were increasingly faced with seriously rising costs. Many schemes thus closed from the 1970s on; that is, new employees were not affiliated to them, and they continued to operate only for employees who were already members.



Large companies, however, did maintain plans for senior executives and directors. Also, small and medium-sized companies set up, principally from the early 1980s onwards, schemes for senior executives and directors.

## **Organisation**

Three methods of organisation currently coexist: company or multi-employer funds, internally financed schemes, and contracts with insurance bodies.

### ***Company or multi-employer funds***

A little over one hundred funds are still in existence, although two-thirds of these are closed. Most are company funds, mainly within the chemical, metallurgical, and petroleum industries; the following companies, for example, have one or more funds and are among those companies which pay out the largest amounts in benefits: Rhône-Poulenc, Air Liquide, Solvay, Sacilor, Usinor, Pechiney, Peugeot, Elf-Aquitaine, Esso-SAF, Mobil Oil, and BP France. Air France, whose ground staff joined the ARRCO and AGIRC schemes on 1 January 1993, maintains its own fund (CRAF) to pay benefits over and above those of the compulsory supplementary funds.

In addition, there are a few industry-wide funds or funds related to specific worker categories, the largest of which, CREPPSA (Caisse de retraite et de prévoyance du personnel des sociétés d'assurances), covers all titular personnel of insurance companies. Smaller funds cover, in particular, lawyers and solicitors (CREPA), clerks and bailiffs' employees (CARCO) and private care establishments (CRESF). A multi-sector fund covers senior executives (IPRICAS). This category includes the fifteen banking sector funds, the savings bank personnel fund (CGRCE) and the fund for the services sector for agriculture (CCPMA) which were mentioned previously.

All these funds, like the funds affiliated to ARRCO and AGIRC, are covered by the Code de la sécurité sociale (the CCPMA is covered by the Code rural), which means that they are managed on the basis of joint representation: their board of management must be made up of at least 50 per cent employees' representatives.

### ***Internal financing***

The practice of direct financing by the employer is not restricted in France; the law merely obliges the company to include an assessment of its liabilities in the notes to the financial statements (Act of 11 July 1985). It appears that companies, having initially paid little regard to this provision, are now increasingly complying with it, particularly as a result of the globalisation of companies and obligations regarding accountancy matters imposed by the British and Americans. Companies also have the option of book reserving pension commitments, although this practice is neutral from a tax point of view.

The precise extent of this method of financing cannot currently be assessed owing to a lack of statistical data, but it is probably widely practised. B. Brugirard (1991), for example, noted the total pension and termination payments liabilities from the balance sheets of some large French companies and found the sums involved to be considerable: 14 billion francs in the case of Elf-Aquitaine, 9 billion at Pechiney, 7 billion at Saint-Gobain, and 5 billion at Compagnie générale

d'électricité (CGE). Liabilities which are not funded in advance, including termination payments, are shown to represent, excluding the banking sector scheme, at least 400 billion francs, or an average of 10 per cent of companies' shareholders' equity.

### *Use of insurance bodies*

Three types of bodies may be involved here: thrift institutions, mutual benefit funds, and insurance companies. The majority of arrangements are currently provided by insurance companies. However, the latter's accounts, as fixed by the Code des assurances (insurance code) do not make it possible to isolate figures relating to company pension activities. The relevant figures are included in the overall category "group life insurance", but this category does not relate only to contracts with companies; it also covers contracts entered into by associations formed to enable members to benefit from group insurance policy conditions. Arrangements which are specifically pension-related fall within the sub-category "annuities", within which it is impossible to isolate activities involving companies. However, it can be estimated that contracts with companies represent the majority, as the available data also indicate that individuals rarely subscribe to annuities, favouring instead deferred lump sums. In 1991 "annuity" arrangements within group life insurance led to the payment of 18.9 billion francs in premiums.

Additional information is provided by surveys carried out with insurance companies. The Bureau commun d'assurances collectives (BCAC -- joint group insurance office), for example, assesses company pension activities at 9.8 billion francs in 1991, including contracts relating to termination payments (around a quarter of the premiums paid); the Fédération française des sociétés d'assurances (French insurance companies' federation) assesses the figure at 11 billion francs for the same year, including contracts entered into on an individual basis.

In spite of the inaccuracies regarding the actual amounts involved, the data indicate that activities in this field are not expanding. Companies, including some which were specifically set up several years ago to exploit this particular market, have occasionally even had difficulty in maintaining turnover. Contracts are often single-premium contracts entered into by companies that have appointed outside bodies to guarantee their liabilities, which are funded to varying degrees. Rhône-Poulenc, for example, paid a single premium of approximately 3 billion francs in 1988, which, according to the BCAC survey, represented almost a third of the company's pension turnover earmarked for pension activities for the year (10.1 billion francs).

The major advantage to companies of using an insurance body is that payments can be deducted from taxable income, which is not the case where the company forms internal reserves. The contract must, however, stipulate that the company has definitively made over the sums paid and no longer has them at its disposal.

The term "insurance body" ("organisme assureur"), used to describe this method of financing, may give rise to confusion. In fact, the contracts involved are not insurance contracts in the strictest sense, but financial management contracts: collective funds -- segregated or otherwise, depending on the contract -- are financed by premiums and investment income, and debited to the amount of benefits. The insurer makes no commitment regarding benefits, which are paid only up to the limit of funds available.

## Benefits

Most company schemes are defined-benefit schemes. The vast majority of schemes managed by a fund outside the company, and all those which are financed internally, fall within this category. As regards schemes based on a contract with an insurance company, it would appear that interest in defined-contribution schemes developed only a few years ago.

Defined-benefit schemes are either differential or additive in nature. In differential schemes, the commitment consists of combining the benefits of the various member schemes and guaranteeing an overall pension equal to a percentage of final salary or of a reference salary. In additive schemes, the commitment does not take the compulsory schemes into consideration; it concerns only the amount of the pension to be added to the benefits they provide, regardless of their level. Differential schemes, more commonly referred to as top-up ("chapeau") schemes, have historically been the most widespread. In company or multi-employer schemes, for example, the typical plan awards between 1.8 per cent and 2 per cent of final salary per year of service, with deduction of the general scheme pension and those of the ARRCO and AGIRC schemes. For a full career of 37.5 years in the scheme, the overall pension thus represents between 67.5 per cent and 75 per cent of final salary, which is comparable to the 75 per cent provided by the civil service scheme. Some schemes also offer different vesting rates for different portions of salary. In additive schemes, the plan may promise 5 per cent, 10 per cent, or an even higher percentage of final salary. This type of scheme is currently showing a tendency to expand at the expense of differential schemes.

Indexing of pensions currently being paid is rare. Similarly, the entitlements of employees changing companies are seldom preserved: in most schemes, only employees who are present within the company at the time of retirement receive benefits. In some funds, employees are vested in preserved entitlements after ten or fifteen years. Note that company funds are of long standing, and that a fund set up today would probably be obliged to guarantee preservation of entitlements to obtain the approval of the Ministry of Social Affairs. In addition, scheme regulations often provide for benefits to be reduced in the event of a decline in the scheme's resources (as in the case of the banking sector funds, for example).

Schemes which use an insurance company are strongly influenced by fiscal considerations, and in particular by articles 39 and 83 of the Code général des impôts. These two articles have had such an effect on the development of the products offered by insurers that they have come to be used to describe these plans: in current insurance jargon, defined-benefit schemes have become "article 39s", while defined-contribution schemes are known as "article 83s". The scope of the two articles, however, is entirely different: Article 39 provides for the deduction of personnel costs from the net profit of companies, while Article 83 defines the conditions under which social security contributions can be deducted from direct taxes. In practice, companies use Article 39 to ensure that contributions paid to insurers avoid the ceiling fixed by Article 83 for the exemption of contributions (see Barthélémy, 1991). The reasoning behind this is that, in a defined-benefit scheme, the employer's contribution is not intended for a specific member but for a whole category; as it cannot be personalised, it does not fall within the logic of social security contributions, and thus the scope of application of Article 83. The argument is that the contribution cannot be considered as an element of members' pay in that the vested benefits and the benefits offered are uncertain in nature.

The importance of tax law in the technical structuring of schemes thus rules out any possibility of preserving entitlements. The justification for the deductibility of contributions means

that receipt of the promised benefits is subject to members being employed in the company at the time of cessation of employment.

In general, the "article 39" plans offered by insurance companies relate mainly to directors and senior executives. In small companies this often involves the salaried entrepreneur and one or two colleagues (one of the conditions of deductibility of contributions is that the scheme must apply to an objectively defined category of employees, and not to a single employee).

As for the plans known as "article 83s", the deductibility threshold applied allows them considerable scope, standing at FF128 490.54 for 1990 for a cadre earning FF320 360 and contributing at the maximum rate to compulsory supplementary schemes (the figure is FF143 640.64 if contributions to the ARRCO and AGIRC schemes are paid at the minimum rate). Even considering the fact that this ceiling applies both to pension contributions and welfare contributions (cover against death in service, incapacity for work, and disability, and repayment of healthcare expenses), defined-contribution schemes do have room for development on a fiscal level.

Few data are available regarding the benefits actually paid. Company and multi-employer funds paid around 3 billion francs in annual benefits in 1991, taking into account only funds wholly independent of ARRCO and AGIRC; this figure rises to 12 billion francs if benefits paid by funds for the banking sector, savings bank personnel, and agricultural services sector are added. Lack of data makes it impossible to estimate the amount of pensions paid directly by employers. The surveys published do not give any indication of benefits from contracts entered into with insurance companies; this figure, however, is probably considerably lower than the amount of premiums collected, doubtless around a few hundred million francs.

## **Funding**

Most schemes are financed solely by employers. Defined-benefit contracts of the "article 39" type involve no contribution from employees; under the Code des assurances, in fact, financial contribution on the part of the employee gives entitlement to an indefeasible benefit, so that contributions from employees would lead to a loss of tax deductibility.

Few company or multi-employer funds are advance-funded. Most companies pay benefits from current resources. They finance funds to the amount of commitments due, so that the funds are merely institutions through which funds pass, with no reserves being accumulated. Paradoxically, the scheme which covers insurance company personnel itself has little in the way of advance funding: its reserves represent only four to five years' worth of benefits. Similarly, in the banking sector, most funds have only a few years' worth of reserves, or even, in some cases, only a few months' worth. Very few schemes have genuine advance funding. Among those few, some have opted for advance funding since they were established; others owe their current advance funding to a reduction in commitments, either when membership of the ARRCO and AGIRC schemes became compulsory (when the few years of reserves which were available at that time became sufficient to cover the reduced commitments), or when the benefits of compulsory schemes improved enough to make implementation of the differential guarantee unnecessary for most members.

Accurate data relating to reserves are not available. Overall, the reserves of company and multi-employer funds were apparently around 15 to 16 billion francs at the end of 1991 for funds wholly independent of ARRCO and AGIRC, including funds which recently entered this category (such as, the popular credit banks and Air France funds). Funds for the banking, savings bank, and

agricultural services sector have reserves of around 26 billion francs. The total reserves of all funds were thus between 41 and 42 billion francs in 1991.

In the case of defined-benefit schemes leading to insurance contracts, total advance funding of commitments is, by dint of the schemes' design, not carried out systematically. The actual level of advance funding cannot be assessed.

On the whole, company schemes provide limited protection for members. The law is vague on this point, and may lead to varying interpretations. Commitments are not always clear or well defined, and the situation has not been improved by the spate of restructuring and merger-takeovers in recent years, which has led to transfers of commitments between companies and a dilution of responsibilities.

### **Population covered**

No accurate data are available regarding the cover provided by company and multi-employer schemes. On the basis of a report by the Inspection générale des affaires sociales (general social affairs inspectorate), Amzallag, Campana, Cheron, *et. al.* (1986) estimated the population at less than 5 per cent of that of the ARRCO schemes, or less than 790 000 members, during the mid-1980s. This figure is without doubt lower now, as many of these schemes closed to new members several years ago.

The most accurate data regarding beneficiaries are provided by the 1989 AGIRC survey of newly retired cadres (see Section 7). This survey covers all new retirees who were cadres at the end of their careers and whose final employment was full time with a single employer. Within this limited population, only 6.6 per cent receive a company pension. However, among the categories drawn up on the basis of the type of pension received, this category receives the highest overall pension with the highest replacement rate.

On the whole, the few available data regarding members and beneficiaries of company schemes convey an image of schemes paying a high overall pension at a high replacement rate to a limited population earning high salaries.

### **Civil service plans**

Two voluntary schemes are specifically aimed at civil service employees, one operated by the Caisse nationale de prévoyance de la fonction publique (national civil service welfare fund -- PREFON), the other being the Complément retraite de la fonction publique (civil service pension supplement -- CREF). The first was set up at the initiative of civil service unions, while the second has its origins in the "mutual insurance association" movement. Membership of both is optional, and contributions are made solely by employees. However, the employer, in this case the state, contributes to the financing of the schemes by granting tax benefits which are unique in France for this type of scheme: members have the option of deducting all their contributions from their taxable income, including payments for the purchase of years prior to membership.

The existence of these schemes, along with the justification of the tax benefits granted to them, is based on the fact that, in the special civil service schemes, the pension is calculated on the basis of the grade-related salary without taking into account bonuses, which can represent a

significant proportion of the overall salary. In fact, many civil service employees have quite some way to go before reaching the final salary replacement rate of 75 per cent for a full career.

### **PREFON plan**

PREFON is a non-profit-making association established by civil service unions (CFDT, CFTC, CGC, and CGT-FO) and a grouping of senior civil servants (the Comité de liaison des hauts fonctionnaires -- senior civil servants' liaison committee). It set up a supplementary pension scheme governed by the Code des assurances (Article 441-1) on 1 June 1967. This scheme is under the joint supervision of the Ministry of Economics and Finance and the Civil Service Ministry.

Membership is on an optional and individual basis. The scheme is aimed at all officials of the state, local authorities, and public establishments, covering all civil and armed forces personnel (employees, auxiliaries, and monthly paid, contractual, temporary, and trainee manual workers). Former state employees and members' spouses may also join. Membership is open to approximately 5 million people, taking into account only employees working in the civil service; this figure rises considerably if spouses and former state employees are added.

All of the scheme's commitments are fully funded. Its financial management is the responsibility of a consortium of four insurance companies: CNP, UAP, GAN, and AGF. A financial committee, divided equally between representatives of PREFON and representatives of the insurance companies, provides advice on investments. It is obliged to meet at least once every two months, and may meet more often if necessary.

Contributions come exclusively from employees. Members can choose from eleven categories of contributions and may change category each year. They also may suspend or definitively cease payments without penalty. Membership incentives are offered to employees aged under 30 years. In addition, members are entitled to purchase each year prior to membership, from age 16 onwards, by paying an additional contribution which is fully deductible from taxable income. The ratio of the lowest category of contributions to the highest is 1:18; in 1993 the annual contributions corresponding to these two extremes stood at FF836 and FF15 048.

Under the scheme's operating logic and regulations, entitlements are immediately vested and a change of employer has no effect on membership; even members leaving the civil service are able to continue to benefit from the scheme under strictly identical conditions.

In this fairly sophisticated defined-contribution scheme, contributions are converted into points which are credited to an individual account. Withdrawals may be made only in the form of pensions. The pension, as in the ARRCO and AGIRC schemes, is equal to the product of the number of points acquired times the point value. The latter is a function of the portfolio managed by the consortium of insurance companies. This points system allows pensions to be adjusted each year.

Under the provisions of the scheme, benefits revert automatically to orphans at the rate of 60 per cent of the points acquired. The scheme also offers two options of reversion to spouse, cohabitant, or other designated person at the rate of 60 per cent: reversion in the event of death before pension calculation, and reversion after claiming the pension. A reduction in the member's entitlements is applied in the latter case. The reversion conditions and the reduction coefficients are applied regardless of sex; in the case of a reversion after claiming the pension, the level of reduction

of entitlements is a function of the age difference between the member and the designated beneficiary.

At the end of 1992 the PREFON scheme had 110 000 members and 37 000 beneficiaries. As of the third quarter of 1992, the average quarterly pension paid by the scheme was FF2 720, or FF910 per month and FF10 900 per year. This average masks considerable disparities, given the optional nature of the scheme and the various options it offers. The scheme's reserves amounted to 10.5 billion francs as at 31 December 1992. The majority are invested in bonds. As at 31 December 1989, for example, the portfolio comprised 85.4 per cent bonds (almost exclusively French bonds) and only 6.7 per cent shares.

## **CREF**

CREF was set up at the initiative of a town clerks and primary school teachers' union, the Syndicat des secrétaires de mairie instituteurs (SMI). In 1949 this body set up an independent mutual pension fund within the framework of the Code de la mutualité managed by a federative body, the Union nationale des mutuelles retraite des secrétaires de mairie instituteurs. This association was expanded in 1954 to cover all primary school teachers, and then to include all state education employees. It was joined in 1985 by the PTT (post and telecommunications) mutual benefit fund and, in 1987, by the civil service mutual benefit fund. It was then that the association adopted its current name, the Union des mutuelles retraite des instituteurs et des fonctionnaires de l'éducation nationale et de la fonction publique (UNMRIFEN/FP), and called its scheme the CREF.

Membership is open to all members of civil service mutual insurance funds which have signed an agreement to distribute it. In addition to the state education system, 23 civil service sectors, corresponding to the same number of mutual insurance funds, are currently covered. The principal sectors which do not distribute CREF are local government, the public hospital service, customs, and civil defence. Employees in sectors within which CREF is distributed may become members by joining the mutual benefit fund which covers it. Members' spouses or cohabitants, moreover, have the option of joining regardless of their professional status. The population group involved amounts to a total of approximately 3 million employees, rising to a considerably higher figure if spouses are included.

In accordance with the principles which govern mutual insurance funds, management functions are carried out by participating members. All members are considered as such, and have the right to vote at the annual general meeting which oversees management of the mutual benefit fund, appoints the board of management, and makes decisions on changes in statutes. The board of management is made up of participating members and honorary members; the former, however, must make up at least two-thirds of the numbers. The general organisation is based on the departmental mutual insurance funds; these funds are affiliated to UNMRIFEN/FP, which is responsible for their financial, technical, and administrative management.

CREF is also a mixed scheme, using both the technique of pay-as-you-go and that of funding. It is made up of two funds, one based on pay-as-you-go, the other on funding; two-thirds of the benefits are paid by the former and one-third by the latter.

Members must make a commitment to contribute to the scheme for at least ten years. As in the PREFON scheme, contributions are from employees only, with eight contribution options offered; within these options, the amount contributed is a function of the planned period of contribution, that

is, of the difference between the age of commencement selected by the member (between 55 and 70) and the member's age on joining. Transfer to a higher option is then possible, subject to a commitment to contribute further for at least ten years; members may then purchase the back contributions corresponding to the new option. Transfer to a lower option is possible at any time, and payments may be suspended for a short time in case of difficulty. In addition, members aged under 35 years benefit from reduced contributions for the first two years. At the beginning of 1993, for a contribution period of ten years, the annual contribution corresponding to the lowest option was FF2 537, while that corresponding to the highest option was FF22 186; for a contribution period of thirty years the respective figures were FF692 and FF6 073.

As with the PREFON scheme, a change of employment has no effect on membership; in particular, members who leave the civil service continue to be affiliated to the scheme under the same conditions. The only restriction regarding preservation of entitlements relates not to employment but to the commitment made by the member to contribute to the scheme for at least ten years.

The level of benefits is fixed for each option depending on the age of cessation of employment. At the beginning of 1993, for example, in the case of retirement at age 60, the lowest option led to the payment of an annual pension of FF2 820, and the highest option a pension of FF24 700. These pensions are indexed to civil service salaries. The scheme provides for full reversion of entitlements in the event of death before pension calculation; on pension calculation, members may choose a pension without reversion, or one of three reversion options in favour of spouse or cohabitant (60, 80, or 100 per cent). The reduction coefficients applied to a pension giving entitlement to survivors' benefits depend solely on the age difference between the member and the beneficiary.

In general, the contribution scales which determine the amount of corresponding benefits apply for one year. They must be approved by a ministerial decree.

At the end of 1992, CREF had 223 000 members and 40 000 beneficiaries. The average annual pension paid in 1992 was FF9 908, or FF826 per month.

The scheme's reserves amounted to more than 10.5 billion francs as at 31 December 1992. The majority are invested in bonds (56.8 per cent), although property also represents a significant proportion of assets (28.4 per cent). As with the PREFON scheme, shares play only a minor role (7.9 per cent).

### **Other arrangements**

In France, the notion of "pension" applied to a scheme or plan is meant in the strict sense of the term, signifying the pension paid during the period following cessation of employment. In particular, it is dissociated from the notions of "welfare" and "termination payments". Benefits such as death insurance or a lump sum, for example, which in some countries may be provided by a pension scheme, fall within the scope of separate plans. Another feature of the French system is that savings plans which have no explicit link with pensions have developed within companies.



## **Auxiliary and severance payments**

Auxiliary schemes cover incapacity, disability, death, and repayment of health care expenses. In France these areas are not covered by pension schemes; however, under the agreement of 14 March 1947, which established the cadres' pension scheme, employers must finance welfare benefits for cadres and equivalent employees. The corresponding contribution, which is paid solely by employers, is 1.50 per cent of the portion of salary up to the social security ceiling. It is primarily intended for financing benefits in case of death. Employers who have not subscribed to such insurance are obliged, in the event of death, to pay to beneficiaries a lump sum equal to three times the annual social security ceiling, or FF449 460 in 1993.

In fact, companies tend to provide cadres with benefits in excess of this compulsory death insurance, and to extend this type of benefit to cover non-cadres. Contracts may be offered by three types of bodies: thrift institutions (joint representative institutions which, like pension institutions, come under the Code de la sécurité sociale), mutual societies, and insurance companies. Mutual societies are strongly represented in the repayment of medical fees; in the other areas, insurance companies account for the majority of the business of thrift institutions, while mutual societies play only a marginal role. Very little is available in the way of statistical information on auxiliary benefits in general, and the little that is available is not considered reliable.

Companies are obliged to pay termination payments on employees' retirement. This provision was introduced by the national multi-sector agreement on conversion to monthly salaries (Article 6), which became law under the Act of 19 January 1978. The minimum payments imposed by the act apply to employees who have at least ten years of service in the company; payments vary according to length of service from half of one month's salary for ten years to two months' salary for thirty years or more. Sector-based collective bargaining agreements, company agreements, or individual employment contract provisions may also offer payments above the minimum level. In many cases, therefore, termination payments for ten years of service vary between one and two months' salary for non-cadres and between one and three months' salary for cadres, and those for twenty years of service vary between two and four months' salary for non-cadres and between seven and eleven months' salary for cadres. The overall average lump-sum termination payment can be estimated at between two and six months' worth of final salary (Brugirard, 1991).

Moreover, since 1987 (Act of 30 July 1987), specific provisions have been applied if the employment contract is terminated by the employer and not by the employee. Where the employee is able to benefit from a full-rate pension, the departure is considered as "retirement", in which case the payments due cannot be less than the redundancy payments fixed by the agreement of 10 December 1977 (Article 5). The minimum is thus as follows: from two years of service on, payments are equal to one-tenth of monthly salary per year for the first ten years and one-sixth for subsequent years. Where the employee is unable to benefit from a full-rate pension, the breach of the employment contract is considered as a redundancy, and the corresponding payments must therefore be made. The contractual provisions regarding this are generally more favourable than those which relate to actual termination payments. Where the decision to leave lies with employee, termination payments are exempted from income tax up to a limit of FF20 000, and are wholly included in the basis for assessment of social security contributions. If the employee's departure is the employer's decision, tax exemption is extended to the amount of the statutory or contractual payment, and the lump sum paid is exempted from social security charges. Estimates of the total amount of companies' commitments regarding termination payments have ranged from 1.5 times the annual total payroll, or 337 billion francs in 1990 (Brugirard, 1991), to one-third of the total payroll (Bondy, 1991). In

general, companies do not fund these liabilities in advance. Combined with pension liabilities (defined-benefit schemes), they constitute what is increasingly referred to as companies' "social liabilities". Deferred liabilities, including both termination payments and defined-benefit schemes which are funded in advance are currently estimated at around 100 billion francs; liabilities with no advance funding are estimated at more than 400 billion francs. The latter figure rises to 1 000 billion if, as recommended by the Association of Chartered Accountants, all pension schemes which are not compensated on a national level, such as those in the banking sector and special public company schemes, are included (Brugirard, 1991).

### **Employee savings plans**

While there are few advance-funded schemes, long-term savings plans known as employee savings schemes have been developed within French companies. These schemes, which are now widespread, are based on three systems: mandatory profit-sharing ("participation"), voluntary profit-sharing ("intéressement"), and company savings plans. Mandatory profit-sharing is compulsory in companies with more than fifty employees. Voluntary profit-sharing is optional, and can be set up in any company by means of a collective bargaining agreement. Company savings plans can be established within any company on the company's initiative or via an agreement with employees; voluntary payments by employees, sums distributed under mandatory profit-sharing, voluntary profit-sharing bonuses, and contributions from employers can be paid into the plan under extremely favourable tax conditions. The majority of these funds are invested in shares in corporate mutual funds (fonds communs de placement d'entreprise -- FCPE), that is, joint investment funds with supervisory boards in which employees' representatives constitute three-quarters of the members if more than 10 per cent of the fund's assets are invested in the company, and half of the members if this is not the case. The assets of FCPEs may be made up either solely of transferable securities issued by the company or of various transferable securities which may or may not include company securities. The banks are involved in these systems to a considerable extent. Funds arising from mandatory profit-sharing may also be invested in the company in fixed-term (frozen) paid accounts or in company shares (the latter system is rarely used).

Employee savings invested in FCPEs were assessed at around 90 billion francs at the end of 1992, to which must be added the funds invested in fixed-term accounts within companies, which probably amount to several tens of billions of francs. These are long-term savings plans: the sums arising from mandatory profit-sharing and those placed in company savings plans are frozen for a minimum of five years, and the tax exemption of the income generated by investments is maintained as long as the investments are reinvested in the plan. These savings, however, are not allocated to any fixed purpose; they may or may not be made with a view to financial preparation for retirement.

## **9. STATE REGULATION AND INTERVENTION**

All pension funds, whether or not they are affiliated to the two large associations (ARRCO and AGIRC), fall within the same legal framework. They are governed by the Code de la Sécurité sociale. However, the legislative provisions, the supervisory procedures, and, more generally, the practices applied vary significantly. In addition, as far as state intervention is concerned, it is currently no longer possible to consider only the national level. This dimension is not specific to France but applies to the whole of the European Union. Indeed, these institutions have been playing an increasing role in the structuring of the law in Member States.

### **ARRCO and AGIRC plans**

The special feature that distinguishes ARRCO and AGIRC schemes from other jointly managed institutions is that they operate compulsory supplementary schemes on a national level. The legal framework which covers these schemes, and in particular compulsory membership, is structured in several tiers. The collective bargaining and other agreements concluded by the employers' and employees' organisations apply automatically to companies which are members of the signatory organisations. The provisions of these agreements may then be extended by an interministerial decree to cover all companies within the industries represented by the signatories. Finally, a new interministerial decree may extend the provisions to cover employers and employees who are not included in the scope of the agreements. In other words, the basic decisions relating to the schemes are taken by means of agreements concluded between the social partners, while the state, having given its support, extends the obligation to apply these decisions to all employers who are not affiliated to the signatory organisations.

This somewhat complex structure allows the strictly "collective bargaining" nature of the schemes to be combined with their national compulsory membership. The system has run smoothly so far, and the decisions taken by employers' and employees' representatives in the framework of the supplementary schemes have in fact had legislative weight (for a legal analysis of the method, see Langlois, 1991).

The compulsory element itself explicitly concerns membership of jointly managed institutions, which are called supplementary pension institutions and which cover risk-pooling across all industrial branches (Article L. 921-1). The framework within which this compensation is organised is not determined by law, and involves the two umbrella bodies, ARRCO and AGIRC, which are themselves jointly managed institutions governed by the Code de la sécurité sociale.

The federated funds are supervised on two levels, by the umbrella body and the ministry responsible. Most of the supervisory functions, however, are carried out on the first level. The supervisory role of the state, which is in this case the responsibility of the Ministry of Social Affairs, consists of granting institutions operating authorisation and approving changes to statutes and

regulations. The ministry may also withdraw authorisation. Up to now, this system of supervision, which is largely based on self-regulating, appears to be functioning successfully.

### **Other plans**

As far as schemes outside ARRCO and AGIRC are concerned, a distinction should be made between those which make use of an insurance body and those which are based on a pension fund. Internally financed schemes, with or without the constitution of book reserves, give rise to no specific intervention on the part of the state, except in relation to tax provisions.

### **Insurance bodies**

Three types of insurance bodies may be involved: thrift institutions, mutual insurance funds, and insurance companies. The first two come under the supervision of the Ministry of Social Affairs, while insurance companies come under the Ministry of Finance. The role of the ministries is currently limited mainly to granting operating authorisation; the supervision itself is then carried out by independent committees, which have considerable powers, particularly the ability to withdraw authorisation. There are two of these committees, one covering thrift institutions and mutual insurance funds, the other covering insurance companies. They were created in accordance with supervisory procedures instituted by two acts dated 31 December 1989.

The first committee covers, in addition to mutual society funds, all pension or thrift institutions not subject to risk-pooling across industries (Article L. 951-1 of the Code de la Sécurité sociale), that is, all jointly managed institutions not affiliated to ARRCO and AGIRC. Both thrift institutions which act as insurance bodies and company pension funds are thus covered. This committee, which was set up in April 1991, has the status of an independent jurisdictional body. It is made up of five members appointed for a period of six years by a joint decree of the Ministry of Social Affairs and the Ministry of Agriculture. In particular, the committee's task is to ensure that the institutions involved are capable of fulfilling their contractual commitments to members and that they show the prescribed safety margin. The members of the supervisory body of the Ministry of Social Affairs, the General Inspectorate of Social Affairs (Inspection générale des affaires sociales -- IGAS), are made available to the committee to carry out this task. It has extensive investigative powers: supervision can be carried out in its own premises and *in situ*; it can request all the information necessary to carry out its task; auditors are released from confidentiality of business matters in dealings with it; and it may request from auditors any information regarding the institution's activity. It may decide on sanctions up to total or partial withdrawal of approval.

The insurance supervisory committee is similarly structured. It was created by another act of 31 December 1989 and set up during the first quarter of 1990. It is also made up of five members appointed for a period of six years. However, it has at its disposal a hundred officials, thirty of whom are inspectors. This allows it to carry out permanent monitoring of companies rather than merely limited inspections. In particular, it has the power to withdraw approvals granted by the Ministry of Finance.

## **Company and multi-employer plans**

Company and multi-employer funds, like the other jointly managed institutions not affiliated to ARRCO and AGIRC, come under the supervision of both the Ministry of Social Affairs and a supervisory committee. The difference in their case is that most of them do not fund commitments in advance. Monitoring is thus limited to only a few matters. As with all other such institutions, operating authorisation is granted by the Ministry of Social Affairs. In fact, almost all funds were created several years ago; this legal form is now hardly used at all as a basis for the creation of new schemes. In 1994 the creation of new institutions was no longer authorised by the legislature, except in rare cases. The law distinguished between two types of funds: those whose benefits are determined and guaranteed by the company, and those whose benefits can be revised when the institution's resources do not allow them to be maintained. In the former case, funds must submit a technical inventory every five years certifying that their financial situation enables them to guarantee their commitments. Where it appears that this is not the case, the ministry may order the employer to provide the necessary guarantees, and may decide to withdraw the employer's operating authorisation if this is not accomplished within three months. In the case of funds whose benefits may be revised, the employer is obliged only to submit, every five years, a statement of the resources which will be used to pay the benefits issued. Most schemes operate in accordance with this second principle, and the ministry's capacity for intervention is extremely limited or non-existent. In 1994, all company and multi-employer plans called "additional pension plans", were required to fund all liabilities after August 10th of the year.

## **Role of community institutions**

Community institutions, principally the Commission and the Court of Justice, are playing an expanding role in the development of national provisions relating to pension schemes. Up to now, they have intervened in particular with regard to two areas -- equality of treatment between men and women and the organisation of the European life insurance market -- with varying effects on French schemes.

## **Equality of treatment between men and women**

On 24 July 1986 the Council of the European Communities issued a directive on equality of treatment between men and women in occupational social security schemes. This directive became law in France under the act of 10 July 1989. It has had no effect on French supplementary schemes, particularly since the act reiterated the exemptions provided for under the directive with regard to the fixing of retirement age and the conditions of entitlement to survivors' pensions.

In general, French supplementary schemes do not distinguish between the sexes with regard to conditions of membership (either directly or indirectly by excluding part-time workers), conditions of vesting and eligibility for benefits, and the method of calculating pensions. The only aspect where inequality clearly exists in most schemes is entitlement to survivors' benefits. The directive does not impose the principle of equality in this particular area; however, a judgement of the Court of Justice in Luxembourg, known as the Barber judgement (1990), had an effect on this point. The Barber case led to a review of the principal areas of discrimination between the sexes in the supplementary schemes.

In France, the differentiation between men and women in the age of eligibility of surviving spouses used to be widely practised, particularly in ARRCO and AGIRC schemes, where the age of eligibility for a survivor's pension was 50 years for widows and, as a general rule, 65 years for widowers. Similarly, the banking sector and insurance company schemes imposed no age conditions for widows, although the age of eligibility for widowers was 60 years and 65 years respectively. Moreover, insurance companies permitted men to retire 5 years earlier than the standard age, while women could retire 10 years earlier. On the other hand, the two optional civil service schemes, CREF and the PREFON scheme, make no distinction by sex as far as a survivor's pension is concerned. Since the Barber case, the rules have changed: those of AGIRC in 1994, and those of ARRCO in 1996.

### **European insurance market**

The development of a European life insurance market contributed to the far-reaching clarification under way in the French supplementary provision system. Thrift institutions came within the scope of application of the European directives relating to insurance in 1992. This led to reformulation of the rules relating to these institutions.

A change occurred in 1993. The provision of all types of benefits -- compulsory pensions which supplement the basic public scheme; voluntary supplemental plans; and vocabulary auxiliary benefits such as survivor, disability, or health care -- could not all be done by the same institution. The intent was to avoid cross-subsidies among different benefits and beneficiaries. Therefore, the three categories of institutions were legislated, each of which would provide one class of benefits.

A primary change which affected organisations with joint employee and employer management occurred in 1993. They were no longer authorised to administer thrift operations and complementary pension arrangements for which compulsory membership was required but where some benefits were not required by law (Act of 27 January 1993). Accordingly, a distinction was made between two types of institutions: thrift institutions, equivalent to insurance companies, which provide voluntary supplementary benefits which are funded; retirement pension institutions which provide benefits under the legal obligations imposed by the Social Security Code, without full advance-funding being required.

The process aimed at establishing the right to provide services throughout the Community is not unrelated to what is currently referred to in France as the boundary between pay-as-you-go and funding. The threat posed by liberalisation of the market, particularly to the monopoly enjoyed by funds affiliated to ARRCO and AGIRC, has contributed to the decision to withdraw rate options within ARRCO, and is a strong indication that AGIRC is set to follow.

## 10. CONCLUSION

Compulsory supplementary schemes play an essential role in the French pension system. They constitute, as it were, an additional basic scheme managed on a national level by employers' and employees' representatives. In general, combined with the general social security scheme, they provide high replacement rates, especially as since their creation they have issued entitlements for periods of employment prior to membership and paid pensions which correspond to full careers. The facts that overall pensions are high and that for more than ten years it has been possible to pay them without reductions from age 60 has been extensively exploited by employers to shed older employees at earlier ages. In addition, the non-collection of a proportion of AGIRC contributions during the 1950s and early 1960s has allowed large sums to be preserved in companies, and has enabled improvements to be made in the level of net salaries; which, in turn, allowed resources to be set aside for investment and helped sustain demand.

Since the early 1980s, in France as in other industrialised countries, the future of the pension system has regularly occupied centre stage as a subject for public debate. The majority of proposed reforms relate to the general scheme. In particular, a white paper was published in 1991 at the initiative of Prime Minister Michel Rocard, which summarised the current situation, examined the system's prospects for development, and, on the assumption that changes were necessary, put forward various scenarios for debate. This was part of the general aim of adjusting rather than overhauling the system. The analysis advanced in the white paper is broadly based on the notion of equity, both between generations and within the same generation, as clearly indicated in the subtitle: "Guaranteeing in equity the pensions of tomorrow".

### **Reform of the general plan**

As far as changes in the general scheme are concerned, the white paper proposed three measures: progressive extension of the contribution period giving entitlement to a full pension from 37.5 years to 41 or even 42 years; calculation of the pension on the basis of the average salary of the 25 best years rather than the 10 best years; and adjustment of pensions as a function of changes in prices rather than in salaries.

These measures were not implemented by the Rocard government, nor by the Socialist governments which succeeded it. Just before the March 1993 general election, however, the Bérégovoy government obtained the agreement of the National Assembly to set up a "solidarity fund" intended to take over the benefits traditionally financed by the state (minimum old-age allowance, benefits associated with numbers of children, periods of national service) along with the old-age contributions of unemployed people. This step, which consists of separating responsibilities for financing, corresponds to a long-standing claim on the part of the social partners regarding costs considered to be "undue" because they were borne by the general scheme when they should have been the responsibility of the state.

The law of 22 July 1993, proposed by the Balladur government, confirmed the creation of a solidarity fund from 1 January 1994, with a budget of 65 billion francs. In addition, the law effected the reform of the general scheme on the basis of the measures proposed in the white paper. Three changes were introduced. First, the years of service required to get the full pension rate before 65 years of age increased from 37.5 years to 40 years by three months each year as of 1 January 1994. Next, the period of earnings on which pensions are calculated was increased from the best 10 to the best 25 years by one year each year, starting as of 1 January 1994. Finally, the indexing of pensions and earnings histories was changed for a period of five years: the practice of price indexing, in force since 1987, was officially implemented through the end of 1998.

On the whole, the long debate on pensions has shown that French society is deeply attached to its own system, in spite of the anxieties expressed regarding its future. This attachment to a two-tier system of basic schemes and compulsory supplementary schemes was expressed in the white paper, and reaffirmed by all the political and social authorities. Overall, both tiers are financed according to the general principle of distribution. This method of financing itself is not being fundamentally challenged, even by the insurance companies, who are the most outspoken advocates of the expansion of advance-funded schemes. Overturning the whole system would, in any case, be technically very difficult, as noted by the white paper and recognised by all the players involved.

### **Pension, capital, and long-term saving**

At the same time, the debate has progressed on an economic level, fuelled in particular by the known lack of shareholders' equity held by French companies and the wish to increase long-term saving. This aspect is tentatively referred to in the white paper, which devotes little more than a page to it. The expansion of long-term saving is presented as a "supporting economic measure" aimed at consolidating pension schemes using the pay-as-you-go method, the logic being that long-term saving is capable of relaunching growth and thus creating a favourable environment for pay-as-you-go schemes. Two possible moves are proposed: the establishment, on an occupational basis, of collective savings funds; and the formation of reserves within pay-as-you-go schemes. This second option, about which the authors of the white paper expressed a certain scepticism, featured little in the debate; the first option, however, was well to the fore, principally at the instigation of the Fédération française des sociétés d'assurances (FFSA -- French insurance companies' federation). In general, the debate developed along two lines covering current developments. The first relates to what is referred to in France as the boundary between pay-as-you-go and funding. The second concerns the debate regarding the possible forms of funding.

### **Boundary between pay-as-you-go and funding**

The notion of a boundary between the two methods of financing relates to the optional arrangements operated by the ARRCO and AGIRC schemes. The extent of the latter in fact determines the scope left for advance-funded schemes. The social partners, as those responsible for the management of the schemes, generally agreed on the need to withdraw arrangements above and beyond compulsory ones and establish a limit on the extent of pay-as-you-go provision. The difficulty resided in fixing the level of the single rate. The question was rendered all the more complex by the fact that the actor most heavily involved in the promotion of advance-funded schemes, the insurance companies' industry body FFSA, was a party to the negotiations by dint of its involvement in the main employers' organisation, the Conseil national du patronat français (CNPF).



While tensions could be detected within the CNPF, the unions were unanimous in their wish to fix the boundary between the two systems of financing at as high a level as possible, which would mean making the current maximum rate the compulsory single rate.

ARRCO concluded an agreement in February 1993. This provided for the withdrawal of optional arrangements and a single rate of contribution of 6 per cent, halfway between the two previous limits of 4 per cent and 8 per cent. Negotiations were far more difficult as far as the cadres' scheme is concerned. Cadres are one of the population groups most likely to be involved in advance-funded schemes. AGIRC had to decide whether compulsory contributions would be fixed at the maximum of 16 per cent or at the average rate of 14 per cent. From a technical point of view, the long-term equilibrium of the scheme was best served by a rate of 16 per cent. This maximum rate was advocated by the unions, the schemes' technical managers, and some employers, but was strongly opposed by some employers. Insurance companies, for example, were categorically against it, for reasons which relate largely to commercial considerations, while employers contributing at the lowest rates opposed any increases in social security taxes. The wish to ensure the stability of the scheme prevailed among employers, and an agreement was reached from February 1994 to gradually increase the compulsory rate of contributions to the maximum rate of 16 per cent.

There were three powerful arguments for the adoption of a single rate within AGIRC. First, the long-term viability of the scheme was threatened by the fact that the average rate of contribution was falling, as the majority of new companies chose the compulsory minimum rate. In addition, European integration led to increased possibilities for providing services throughout the area. From this point of view, maintaining optional arrangements above and beyond compulsory arrangements risked challenges to the national monopoly of funds operating the cadres' scheme. Finally, the definition of the domain covered by pay-as-you-go schemes removed uncertainties opened the possibility of an expansion of advance-funded schemes.

### **Funding: A choice of forms**

Alongside the question of the definition of the boundary between distribution and capitalisation, that of the possible forms of capitalisation also arises. A major split has appeared between supporters of the British model of pension funds external to companies and those in favour of the German model of book reserves on company balance sheets. The first option is principally favoured by insurance companies, the second by large companies.

A growing number of players have felt for some time that advance-funded pension schemes are the preferred method of expanding long-term saving in France and making up for the inadequacy of the capital held by companies. Insurance companies have instigated the debate and fuelled it at regular intervals. From the very beginning, the debate came up against French society's strong reservations regarding funding ("capitalisation"), which is associated with an inability to guarantee over time the value of the sums invested. It moved on as other players came to realise that advance funding of pension commitments involves two distinct systems which are practised in neighbouring countries: the British system of pension funds and the German approach of book reserves. In other words, an advance-funding model which supplies the financial markets is set against a model which allows companies to make resources directly available. There is a natural split here between insurance companies, whose involvement depends on the investment of funds in the financial markets, and companies, particularly large companies, who have seen the advantages for their

long-term funding requirements of a system which consists of forming tax-exempt provisions for pensions.

This conflict led to a compromise during 1992. The Association française des entreprises privées (AFEP -- French association of private companies), which brings together the top 66 French privately owned groups, drew up a plan in agreement with the FFSA, which provides for a choice between (1) an internal scheme with deductible provisions and (2) pension funds managed outside the company. AFEP does not hide its preference for the first solution, which it envisages, along the lines of the German model, with a guarantee system against defaults on the part of companies (*Les Echos*, 26 Oct. 1992). The main employers' organisation, the CNPF, is divided between the two systems, and has not yet made a decision (CNPF, *La Revue des entreprises*, Feb. 1993). The argument in favour of expansion of the financial market via the establishment of advance-funded schemes was well received by financial institutions. In particular, several reports have expressed the view that the expansion of pension funds is necessary for the expansion of the Paris stock market; the extent of British and American pension funds on the London and New York markets is the yardstick here. The process of privatisation also favours the creation of new schemes which can mobilise funds to enter the Paris market. The banks, in contrast, held back from the debate, preferring to follow in the wake of the insurance companies. However a bitter dispute occurred between banks and insurance companies. The difference of opinion concerned the conditions of withdrawals from the schemes: the insurance companies insisted that it should be exclusively in life annuities, while the banks want to leave an option between the payment of an annuity and withdrawal of a lump sum.

Successive governments, from socialist to center-right, were very cautious about the subject and divergences among different ministries occurred frequently. The major disagreement between insurance companies and large firms replicates the positions of the Ministry of the Economy and Finance, which was sensitive to the arguments of the insurance companies and industry, which favours the German system. In addition, the Ministry of Industry and then, the Ministry of Labour and Social Affairs, repeatedly supported the expansion of company savings plan linked explicitly to retirement, for example, by extending the period of investment accumulation from five to ten years. The plans were finally shelved.

The debate surrounding long-term saving and the inadequacy of capital of French companies has not yet been resolved as of the end of 1996. Several facts, however, suggest that such decisions might be made soon. Given government prudence, the centre-right majority in Parliament has been very active. Four private laws were proposed during 1993 and 1994, one in the Senate and three in the National Assembly. One relating to retirement saving was adopted by the Finance Commission of the National Assembly in May 1994, and was adopted at the first reading by the National Assembly in November 1996. The President, J. Chirac, who was elected in May 1995, is in favour of introducing funded pensions. In addition, the pressure exercised by concerned parties, particularly insurance companies, is strong and the reduction in the rate of return in compulsory schemes favours the introduction of new arrangements.

Debate continues about the characteristics of new arrangements that might be introduced. They should be characterised by the extent of the insurance companies' involvement and the French culture of pay-as-you-go. Within this framework, several options are possible. Since the first quarter of 1993, a joint institution has offered a system inspired by the PREFON scheme for civil service employees. This new scheme is based on defined contributions with conversion of the contributions into points and adjustment of the level of pensions according to changes in the scheme's parameters, particularly the profitability of investments. But it is not clear that employers will manage to establish

a system of book reserves with re-insurance of liabilities. As things stand, however, it is unlikely that development of pension funds along genuinely British lines will occur, that is, company funds operating defined-benefit schemes and principally investing their assets in shares. The corresponding legal form does exist in the shape of corporate joint funds, but this has generated no interest in recent years. Most of the existing funds are closed, and the recent debate has not led to the creation of any new ones.

On a more global level, given the quality and extent of compulsory supplementary cover in France, the important question arises as to the actual scope left for voluntary schemes. Apart from high salaries and careers involving rapid promotion, the latter appear currently to have little scope for expansion. The decline in yield of compulsory schemes is likely to increase this in the future. However, the role which might be played by new advance-funded pensions in the French retirement system and its interaction with existing arrangements remains an open question.

## BIBLIOGRAPHY

- AGIRC (1984). Administrer une caisse de cadres... Paris: AGIRC.
- AMZALLAG, Jacques, Denis CAMPANA, Florence CHARON *et. al.* (1986). La retraite en France. Paris: Institut des actuaires français.
- ARRCO (1991). Les prévisions de l'ARRCO: Exposé de la méthode et derniers résultats obtenus. Les Cahiers de l'ARRCO, April.
- ARRCO (1992). Guide pratique de la retraite complémentaire. Edition 1992. Paris: ARRCO.
- BARTHÉLÉMY, Jacques (1991). "Fidélité et régime de retraite à prestations définies", Droit social 5, May, pp. 409-412.
- BONDY, Alain de (1991). "Le passif social: un élément incontournable", La Tribune de l'assurance, pp. 60-64.
- BRIENS, Gilles (1990). L'entreprise et le droit de la protection sociale complémentaire. Paris: Litec.
- BRUGIRARD, Brigitte (1991). "Passif social des entreprises ou l'iceberg des engagements différés", Risques 5, pp. 133-146.
- CHESNEAU, Luc (1991). Gestion financière et comptable AGIRC. Paris: AGIRC.
- CNAV (1993). Recueil statistique 1991. Paris: Caisse nationale d'assurance vieillesse.
- COMMISSION DES COMPTES DE LA SÉCURITÉ SOCIALE (1992). Les comptes de la sécurité sociale. Résultats 1991, prévisions 1992. Rapport juillet 1992.
- DEL MEDICO, Karine (1991). Enquête retraite vérité. AGIRC/Institut de statistiques de l'Université de Paris (University of Paris statistics institute), rapport de stage, May -August 1991.
- DUPEYROUX, Jean-Jacques (1988). Droit de la sécurité sociale (onzième édition). Paris: Dalloz.
- GABELLIERI, Bruno (1986). "Le régime de retraite des cadres voit le jour", Bulletin d'information de l'AGIRC 148, August, pp. 54-57.
- GENEVRAY, Jacques (1962). "L'Union nationale des institutions de retraites des salariés", Droit social 7/8, July-August, pp. 419-426.
- JAUSSAUD, R. (1956). "L'accord Renault du 15 septembre 1955", Droit social 1, January, pp. 16-24.

- JOUDRIER, Jean-Pierre (1993). La solidarité dans les régimes vieillesse. Les cahiers de l'ARRCO (supplement to "La retraite complémentaire" No. 106, January/February/March).
- LACROIX, Jacqueline (1989). "Les retraités: premiers résultats de l'échantillon inter-régimes de retraités", Informations rapides 148, SESI, ministère de la Solidarité, de la Santé et de la Protection sociale, 1 Dec. 1989.
- LACROIX, Jacqueline (1991). "Les retraites remplacent 80% du salaire", Informations rapides 1, ministère des Affaires sociales et de la Solidarité, May 1991.
- LACROIX, Jacqueline (1993). "Eventail des retraites: logiques distinctes pour salariés et indépendants", pp. 530-535, in Données sociales, 1993 edition. Paris: INSEE.
- LANGLOIS, Philippe (1992). "Droit public et droit sociale en matière de négociation collective: l'ordonnancement du droit public remis en cause par la négociation collective interprofessionnelle", Droit sociale 1, January, pp 5-10.
- Livre blanc sur les retraites: garantir dans l'équité les retraites de demain (1991). Paris: Documentation Française.
- NETTER, Francis (1965a). "Les retraites en France au cours de la période 1895-1945", Droit social 7/8, July-August, pp. 448-455.
- NETTER, Francis (1965b). "Les retraites en France au cours de la période 1895-1945 (fin)", Droit social 9/10, Sep.-Oct., pp. 514-526.
- NETTER Francis (1977). "Histoire des retraites complémentaires de salariés", Droit social 1, January, pp. 58-63.
- RUELLAN, Rolande (1983). "La retraite à 60 ans dans les régimes complémentaires" Droit social 7/8, July-August, pp. 494-508.
- XXX (1958). "L'union nationale des institutions de retraites des salariés: régime de retraites complémentaires des salariés", Revue française du travail 3, July-September, pp. 133-141.

## GLOSSARY

<b>Member</b>	Individuals who are contributing to a scheme.
<b>Beneficiary</b>	Benefit recipient.
<b>Cadres</b>	Highly qualified workers, with either university degree, technical skills, wider management responsibilities, or a long work experience in a higher staff position.
<b>Compensation</b>	Risk-adjustment mechanism operating between concerned institutions. Between ARRCO and AGIRC the practice has as a goal to transfer funds between institutions to equalise the charges of the individual organisations.
<b>Contractual contributions</b>	Contributions based on a contract rate which generates entitlements.
<b>Derived benefits</b>	The benefit paid to a spouse or next-of-kin following the death of a pensioner after retirement.
<b>Direct benefits</b>	Entitlement due from an individual's own pension payments.
<b>Parity</b>	Corresponds to a way of management in which employers and employees are equally represented.
<b>Ceiling</b>	Wage ceiling defined for the maximum contribution to be paid.
<b>Point (retirement)</b>	Accounting unit used to estimate the actuarial value of a pension. Actuarial rate corresponding to the value of the benefit acquired for a one-franc contribution. In a "point" system, it is equal to the value of one-point to the purchase price of the point.
<b>Defined contribution scheme</b>	Pension scheme where only contributions are fixed, and benefits therefore depend solely on resources.
<b>Defined benefit scheme</b>	Pension scheme where the benefits are defined in advance by the sponsor, independently of the contributions and assets returns.
<b>Pension scheme</b>	Contract setting out the rights and obligations of members and

sponsors in an occupational pension scheme.

**General scheme**

Basic public insurance scheme covering all employees, including retail and trade but excluding those enrolled in special schemes. The general scheme includes four different schemes: sickness, occupational injury, pensions and child allowances.

<b>Special schemes</b>	Specific schemes which are relating to the general scheme for certain categories of workers, pertaining mainly to the public sector. These special schemes are on average more generous.
<b>Salary differential</b>	Wage differential used to compute the AGIRC contributions; the lower limit is equal to the Social “Security wage ceiling, up to a limit of eight times the value of the ceiling.
<b>Contractual rate:</b>	Wage rate used to calculate contributions generating entitlement benefits.
<b>Call-up rate:</b>	Actual rate at which contributions are collected. The call-up rate includes the contractual rate as well as a sur-premium which does not by itself generate additional entitlement.
<b>Bracket B (Tranche B)</b>	In the AGIRC scheme the share of the salary comprised between the social security wage ceiling and the upper limit equal to four times the ceiling. The upper limit of Bracket B is fixed each year.
<b>Bracket C (Tranche C:)</b>	In the AGIRC scheme, the share of the salary comprised between the ceiling of Bracket B and eight times the wage ceiling of social security.



**Table 2.1 Members of statutory schemes and number of pensions paid (1 July 1990)**

Schemes	Members		Pensions	
	Total	%	Number	%
<b>Employees</b>				
General scheme	13 724 032	64.03	7 316 862	47.13
Agricultural employees' scheme	621 812	2.90	1 740 875	11.21
Special schemes	4 297 518	20.05	2 855 452	18.39
<b>Total employees</b>	<b>18 643 362</b>	<b>86.99</b>	<b>11 913 189</b>	<b>76.74</b>
<b>Self-employed</b>				
Artisans	541 822	2.53	578 944	3.73
Tradespeople and manufacturers	653 417	3.05	836 122	5.39
Professional occupations	367 128	1.71	114 836	0.74
Farmers	1 196 300	5.58	2 012 782	12.96
Clergy	30 194	0.14	69 057	0.44
<b>Total self-employed</b>	<b>2 788 861</b>	<b>13.01</b>	<b>3 611 741</b>	<b>23.26</b>
<b>Total</b>	<b>21 432 223</b>	<b>100.00</b>	<b>15 524 930</b>	<b>100.00</b>

Source: Compensation committee and decrees fixing the amount of contributions to FSAV.

**Table 2.2 Members of special schemes and number of pensions paid (1 July 1990)**

Schemes	Members		Pensions	
	Total	%	Number	%
Civil servants and armed forces personnel	2 224 976	51.77	1 311 117	45.92
State manual workers	93 124	2.17	106 205	3.72
Local authorities	1 424 707	33.15	380 066	13.31
Mines	44 985	1.05	411 465	14.41
SNCF (national railways)	205 000	4.77	349 700	12.25
RATP (Paris public transport)	39 018	0.91	39 949	1.40
Etablissement national des invalides de la marine (National establishment of disabled ex-seamen)	51 704	1.20	87 721	3.07
EDF-GDF (gas and electric utilities)	158 207	3.68	125 113	4.38
Notaire's clerks (real-estate lawyers' clerks)	39 245	0.91	31 445	1.10
Banque de France	16 552	0.39	12 671	0.44
<b>Total</b>	<b>4 297 518</b>	<b>100.00</b>	<b>2 855 452</b>	<b>100.00</b>

Source: Compensation committee and decrees fixing the amount of contributions to FSAV.

**Table 2.3 Members and beneficiaries of the principal compulsory supplementary schemes (1990)**

Schemes	Members	Beneficiaries	
		Retirement Pensions	Survivor's Pensions
ARRCO	16 675	5 303	1 986
AGIRC	2 634	767	336
Non-titular civil servants	1 850	879	169
Social security bodies	187	65	10

Source: Direction de la sécurité sociale (DEES - social security head office).

**Table 2.4 Benefits paid by the compulsory schemes (1990)**

Schemes	Benefits	
	FF millions	%
<b>Employees</b>		
General scheme	223 964	32.8
Agricultural employees	22 263	3.3
Special schemes	198 115	29.0
ARRCO	96 668	14.1
AGIRC	49 371	7.2
Other supplementary schemes	11 586	1.7
<b>Self-employed</b>		
Artisans	11 269	1.6
Tradespeople and manufacturers	15 172	2.2
Professional occupations	8 635	1.3
Barristers	356	0.0
Farmers	42 294	6.2
Clergy	1 279	0.2
<b>Special old-age benefit fund</b>	2 867	0.4
<b>Total</b>	<b>683 839</b>	<b>100.0</b>

Source: Direction de la sécurité sociale (DEES - social security head office).

**Table 2.5 Average annual pension in retirement pensions paid  
by the principal special schemes (1990)**

<b>Schemes</b>	<b>Annual pension FF</b>
Civil servants	93 286
Armed forces personnel	72 038
Local authorities	65 370
Mines	32 379
SNCF (national railways)	83 766
RATP (Paris public transport)	97 321
Etablissement national des invalides de la marine (National establishment of disabled ex-seamen)	60 619
EDF-GDF (gas and electric utilities)	117 730
Banque de France	130 239

*Source: Direction de la sécurité sociale (DEES - social security head office).*

**Table 2.6 Average annual pension in retirement pensions paid  
by the basic schemes (1990)**

<b>Schemes</b>	<b>Annual pension FF</b>
General scheme	29 995
Agricultural employees	13 440
Artisans	18 794
Tradespeople and manufacturers	17 315
Professional occupations	21 487
Barristers	54 800
Farmers	17 315
Clergy	17 300

*Source: Direction de la sécurité sociale (DEES - social security head office).*

**Table 2.7 Average annual pension paid by the compulsory supplementary schemes (1990)**

<b>Schemes</b>	<b>Annual pensions FF</b>
ARRCO	15 158
AGIRC	49 161
Non-titular civil servants	3 850
Social security agencies	42 505

Sources: Direction de la sécurité sociale (DEES - social security head office), ARRCO and AGIRC.

**Table 2.8 Contribution rates by scheme (1989)**

<b>Schemes</b>	<b>%</b>
<b>Employees</b>	
General scheme + compulsory supplementary scheme	20.4
Agricultural employees + compulsory supplementary	22.4
<b>Special schemes:</b>	
Civil servants	38.1
State manual workers *	18.3
Local authorities	21.8
Mines *	14.4
SNCF (national railways)*	35.2
RATP (Paris public transport)	56.2
Navy *	25.0
EDF-GDF (gas and electric utilities)	49.1
Solicitors' clerks	26.1
Banque de France	42.5
<b>Total employees</b>	<b>23.4</b>
<b>Self-employed</b>	
Artisans	11.3
Tradespeople and manufacturers	9.1
Professional occupations	8.7
Farmers *	8.7
Clergy	13.4
<b>Total self-employed</b>	<b>9.4</b>
<b>Total</b>	<b>21.6</b>

\* Schemes benefiting additionally from a State net loss compensating subsidy.

Note: The contribution rate represents the ratio of contributions from salaries and employers to the gross income disregarding the ceiling for employees and the taxable income for non-account workers.

Source: Livre blanc sur les retraites (white paper on pensions) (1991).

**Table 2.9 Income from investment and benefits  
paid by employees' supplementary pension funds (1990)**

<b>Funds</b>	<b>Investment Income</b>	<b>Benefits</b>	<b>Investment as a proportion of benefits</b>
	<b>FF millions</b>	<b>FF millions</b>	<b>%</b>
ARRCO	3 867	97 588	4.0
AGIRC	2 167	50 088	4.3
IRCANTEC	143	4 097	3.5
CPPOSS	85	3 026	2.8
Flight crew	716	927	77.2
Air France ground staff	294	739	39.8
Banking sector	898	5 760	15.6
Savings sector	212	342	62.0
Service sector for agriculture	916	2 879	31.8
Multi employer funds	186	746	24.9
Company funds	4	1 661	0.2
<b>Total</b>	<b>9 488</b>	<b>167 853</b>	<b>5.7</b>

*Source: Direction de la sécurité sociale (DEES - social security head office).*

**Table 3.1 Members of ARRCO schemes by gender  
(1981-1991)**

**as at 31 Dec.**

Year	Men		Women		Overall Total	
	Total	%	Total	%	Total	%
1981	10 050 764	60.9	6 442 960	39.1	16 493 724	100.0
1982	9 972 865	60.8	6 441 086	39.2	16 413 951	100.0
1983	9 924 428	60.5	6 482 799	39.5	16 407 227	100.0
1984	9 386 187	59.3	6 436 488	40.7	15 822 675	100.0
1985	9 133 429	58.9	6 375 271	41.1	15 508 700	100.0
1986	9 087 316	59.3	6 236 775	40.7	15 324 091	100.0
1987	9 161 921	59.4	6 266 911	40.6	15 428 832	100.0
1988	9 312 469	59.2	6 417 475	40.8	15 729 944	100.0
1989	9 452 064	59.1	6 547 490	40.9	15 999 554	100.0
1990	10 004 842	59.3	6 870 086	40.7	16 874 928	100.0
1991	10 090 179	58.9	7 029 197	41.1	17 119 376	100.0

Note: Figures do not refer to individual members as one person may be counted twice.

Source: ARRCO.

**Table 3.2 Beneficiaries of AARCO schemes by type of  
entitlements (1981 - 1991)**

**as at 31**

Year	Retirement Pensions	Survivor's pension		Total
		Spouses	Orphans	
1981	3 568 830	1 379 965	13 145	4 961 940
1982	3 659 000	1 440 000	14 000	5 113 000
1983	3 741 000	1 485 000	14 000	5 240 000
1984	3 932 000	1 609 000	13 000	5 554 000
1985	4 242 000	1 736 000	14 000	5 992 000
1986	4 502 000	1 842 000	15 000	6 359 000
1987	4 764 000	1 823 000	13 000	6 600 000
1988	4 953 000	1 874 000	13 000	6 840 000
1989	5 047 000	1 887 000	12 000	6 946 000
1990	5 303 000	1 974 000	12 000	7 289 000
1991	5 522 000	2 020 000	12 000	7 554 000

Source: ARRCO.

**Table 3.3. Members of the AGIRC scheme by gender (1981 - 1991)  
as at 31 Dec.**

Year	Men		Women		Overall total	
	Total	%	Total	%	Total	%
1981	1 585 679	81.7	354 714	18.3	1 940 393	100.0
1982	1 601 933	81.1	372 772	18.9	1 974 705	100.0
1983	1 606 561	80.3	394 030	19.7	2 000 591	100.0
1984	1 784 175	79.7	453 945	20.3	2 238 120	100.0
1985	1 792 994	79.0	475 266	21.0	2 268 260	100.0
1986	1 794 020	78.4	495 555	21.6	2 289 575	100.0
1987	1 810 809	77.7	521 089	22.3	2 331 898	100.0
1988	1 853 648	77.0	554 026	23.0	2 407 674	100.0
1989	1 913 641	76.3	594 339	23.7	2 507 980	100.0
1990	1 993 520	75.7	640 610	24.3	2 634 130	100.0
1991	2 040 870	75.3	669 543	24.7	2 710 413	100.0

Source: AGIRC.

**Table 3.4 Beneficiaries of the AGIRC scheme by  
type of entitlements (1981 - 1991)  
as at 31 Dec.**

Year	Retirement pensions	Survivor's pension		Total
		Spouses	Orphans	
1981	372 363	235 306	1 359	609 028
1982	377 379	243 636	1 435	622 450
1983	394 763	250 655	1 388	646 806
1984	456 009	277 433	1 473	734 915
1985	503 104	285 974	1 471	790 549
1986	556 980	298 496	1 457	856 933
1987	610 062	308 169	1 455	919 686
1988	661 309	317 799	1 445	980 553
1989	712 857	326 849	1 434	1 041 140
1990	766 887	334 937	1 425	1 103 249
1991	822 066	344 250	1 392	1 167 708

Source: AGIRC.

**Table 3.5 Rates of contribution to ARRCO and AGIRC plans (1992)**

	Compulsory		Maximum rate	
	B1	B2	B1	B2
<b>ARRCO</b>				
Non-cadres	4	4	8	16
Cadres	4	--	8	--
<b>AGIRC</b>	<b>BB</b>	<b>BC</b>	<b>BB</b>	<b>BC</b>
Creation of company:				
At present	12	12	16	16
Before 1/1/91	12	8	12	16*
Before 1/1/81	8	8	16	16*

\*Companies contributing at the rate of 18% as at 31/12/87 may maintain this rate.

B1 = social security ceiling; B2 = 1x to 2x ceiling.

BB = ceiling to 4x ceiling or greater; BC = limit of BB to 8x ceiling.

**Table 3.6 AGIRC: breakdown of companies members payroll and contributions by contribution rate for Bracket B - cadres (1990)**

Rate	Companies %	Members %	Payroll %	Contribution %
8	17.3	10.8	9.4	5.2
8 to 12	0.5	0.6	0.5	0.4
12	54.4	27.0	19.0	15.9
12 to 16	2.6	4.1	4.1	3.8
16	25.2	57.6	67.0	74.6

Source: AGIRC contribution rates survey 1990.



**Tableau 3.7 AGIRC: breakdown of companies members payroll and by contribution rate for Bracket B - technical staff (1990)**

<b>Rate</b>	<b>Companies %</b>	<b>Members %</b>	<b>Payroll %</b>	<b>Contribution %</b>
8	21.9	11.6	11.4	7.0
8 to 12	4.8	4.3	3.6	2.8
12	54.5	50.8	44.7	41.3
12 to 16	2.4	3.2	3.7	3.8
16	16.3	30.1	36.6	45.1

*Source: AGIRC contribution rates survey 1990.*

**Table 3.8 AGIRC: Average number of members per company and average differential salary\* by contribution rate for Bracket B - cadres (1990)**

<b>Rate</b>	<b>Number of members per company</b>	<b>Average differential salary (FF)</b>
8	2	94 719
12	2	76 086
16	9	126 059
<b>Total</b>	<b>4</b>	<b>108 419</b>

\*The average differential salary is the fraction of salary above the social security ceiling (the basis of assessment of contributions).

*Source: AGIRC contribution rates survey 1990.*

**Table 3.9 AGIRC: Average number of members per company and average differential salary\* by contribution rate for Bracket B - technical staff (1990)**

Rate	Number of members per company	Average differential salary (FF)
8	9	24 564
12	16	21 820
16	31	30 159
<b>Total</b>	<b>17</b>	<b>24 825</b>

\* The average differential salary is the fraction of salary above the social security ceiling (the basis of assessment of contributions).

Source: AGIRC contribution rates survey 1990.

**Table 3.10 AGIRC: Change in breakdown of companies and members by contribution rate for Bracket B - cadres (1976-1986-1990)**

Rate	Companies			Members		
	1976	1986	1990	1976	1986	1990
8	54.6	29.6	17.3	22.6	14.5	10.8
12	6.1	35.6	54.4	4.6	18.3	27.0
16	32.9	32.0	25.2	66.7	62.8	57.6
Others	6.3	2.9	3.1	6.1	4.4	4.6

Source: AGIRC contribution rates survey 1990.

**Table 3.11 AGIRC: Change in breakdown of companies and members by contribution rate by contribution rate for Bracket B - technical staff (1976-1986-1990)**

Rate %	Companies			Members		
	1976	1986	1990	1976	1986	1990
8	36.9	24.5	21.9	11.6	10.2	11.6
12	35.0	51.4	51.4	36.2	55.1	50.8
16	21.4	17.4	16.3	43.9	27.7	30.1
Others	6.7	6.7	7.2	8.3	7.0	7.5

Source: AGIRC contribution rates survey 1990.

**Table 4.1 Adjustment of point value in AGIRC and ARRCO schemes and changes in prices (1978 - 1991)**

Year	Average increase in AGIRC point	Average increase in ARRCO point	Changes in prices
			%
1978	8.8	10.0	9.1
1979	9.3	11.7	10.8
1980	11.3	14.9	13.6
1981	13.2	14.9	13.4
1982	11.2	13.4	11.8
1983	8.0	8.6	9.6
1984	7.0	7.5	7.4
1985	5.0	6.3	5.8
1986	3.4	4.4	2.7
1987	2.4	3.1	3.1
1988	2.7	2.8	2.7
1989	3.0	2.8	3.6
1990	3.0	4.1	3.4
1991	4.1	3.7	3.2

Sources: AGIRC and ARRCO.

**Table 4.2 Contribution call-up rates applied in AGIRC and ARRCO schemes (1947-1993)**

%

Year	AGIRC	ARRCO	
		Compulsory	Additional
1947	100		
1948	100		
1949	100		
1950	100		
1951	100		
1952	78		
1953	80		
1954	80		
1955	85		
1956	85		
1957	85		
1958	85		
1959	85		
1960	85		
1961	90		
1962	90	100	
1963	90	100	
1964	90	100	
1965	95	100	
1966	100	100	
1967	100	100	
1968	100	100	
1969	100	100	
1970	100	100	
1971	100	102.5	
1972	100	105	
1973	100	107.5	
1974	100	110	
1975	100	110	
1976	100	110	100
1977	100	110	100
1978	100	110	100
1979	103	110	100
1980	103	110	100
1981	103	110	100
1982	103	110	100
1983	103	115	100
1984	103	115	100
1985	103	115	100
1986	106	115	100
1987	110	117.5	105
1988	110	120	108
1989	113.4	120	112
1990	117	120	120
1991	117	123	123
1992	117	125	125
1993	117	125	125

Sources: AGIRC and ARRCO.

**Table 5.1 Changes in yield - AGIRC scheme (1980-1992)**

Year	Point value		Point purchase price		Call-up rate	Actual point		Yield	
	FF	Change %	FF	Change %		FF	Change %	%	Change %
1980	1.1880		9.42		103.0	9.70		12.24	
1981	1.3450	13.2	10.60	12.5	103.0	10.92	12.5	12.32	0.6
1982	1.4950	11.2	11.78	11.1	103.0	12.13	11.1	12.32	0.0
1983	1.6150	8.0	13.07	11.0	103.0	13.46	11.0	12.00	-2.6
1984	1.7280	7.0	13.88	6.2	103.0	14.30	6.2	12.09	0.8
1985	1.8145	5.0	14.82	6.8	103.0	15.26	6.8	11.89	-1.7
1986	1.8760	3.4	15.60	5.3	106.0	16.54	8.3	11.34	-4.6
1987	1.9210	2.4	16.02	2.7	110.0	17.62	6.6	10.90	-3.9
1988	1.9730	2.7	16.68	4.1	110.0	18.35	4.1	10.75	-1.4
1989	2.0320	3.0	17.41	4.4	113.4	19.74	7.6	10.29	-4.3
1990	2.0930	3.0	18.21	4.6	117.0	21.31	7.9	9.82	-4.6
1991	2.1790	4.1	18.80	3.2	117.0	22.00	3.2	9.91	0.8
1992	2.2420	2.9	19.23	2.3	117.0	22.50	2.3	9.96	0.6

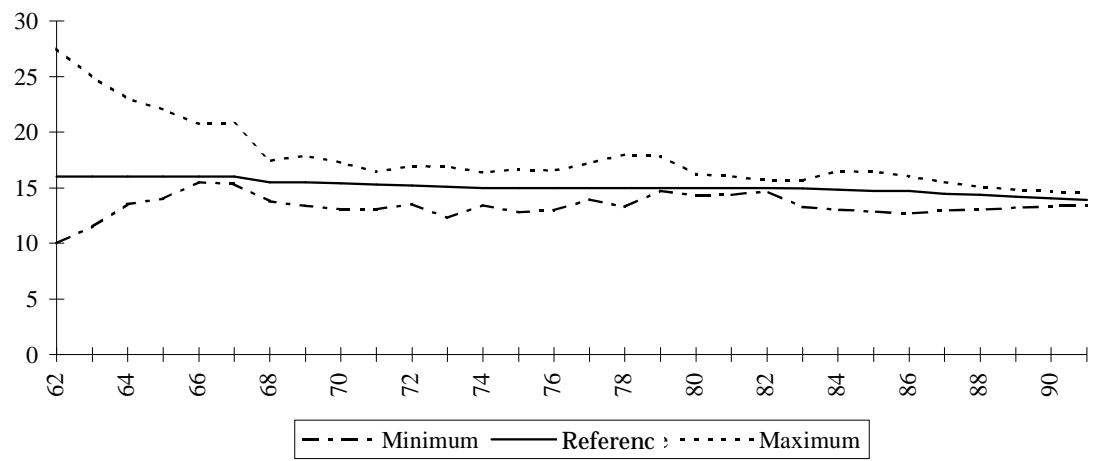
Source: AGIRC.

**Table 5.2. Changes in Yield - UNIS scheme (1980-1992)**

Year	Point value		Point purchase price		Call-up rate	Actual point		Yield	
	FF	Change %	FF	Change %		FF	Change %	%	Change %
1980	1.1640		9.62		110.0	10.58		11.00	
1981	1.3480	15.8	10.83	12.6	110.0	11.91	12.6	11.32	2.9
1982	1.5180	12.6	12.23	12.9	110.0	13.45	12.9	11.28	-0.3
1983	1.6280	7.2	13.46	10.1	115.0	15.48	15.1	10.52	-6.8
1984	1.7540	7.7	14.36	6.7	115.0	16.51	6.7	10.62	1.0
1985	1.8560	5.8	15.44	7.5	115.0	17.76	7.5	10.45	-1.6
1986	1.9380	4.4	16.17	4.7	115.0	18.60	4.7	10.42	-0.3
1987	2.0220	4.3	16.86	4.3	117.5	19.81	6.5	10.21	-2.1
1988	2.0705	2.4	17.58	4.3	120.0	21.10	6.5	9.81	-3.8
1989	2.1130	2.1	18.41	4.7	120.0	22.09	4.7	9.56	-2.5
1990	2.2070	4.4	19.31	4.9	120.0	23.17	4.9	9.52	-0.4
1991	2.2880	3.7	20.17	4.5	123.0	24.81	7.1	9.22	-3.2
1992	2.3690	3.5	20.97	3.9	125.0	26.21	5.6	9.04	-2.0

Source: AGIRC.

Graph 1. Changes in yield - ARRCO schemes (1962-1991)



**Table 5.3 Reserves in ARRCO schemes as at 31 December 1991**

	<b>FF millions</b>
<b>AARCO reserves</b>	
Joint reserves	62 483
Contingency reserves	1 769
<b>Total</b>	<b>64 252</b>
<b>Specific scheme reserves</b>	
Specific technical reserves	29 041
Administrative reserves	9 694
Social fund reserves	<b>6 996</b>
<b>Total</b>	<b>45 731</b>
<b>Total reserves</b>	<b>109 983</b>

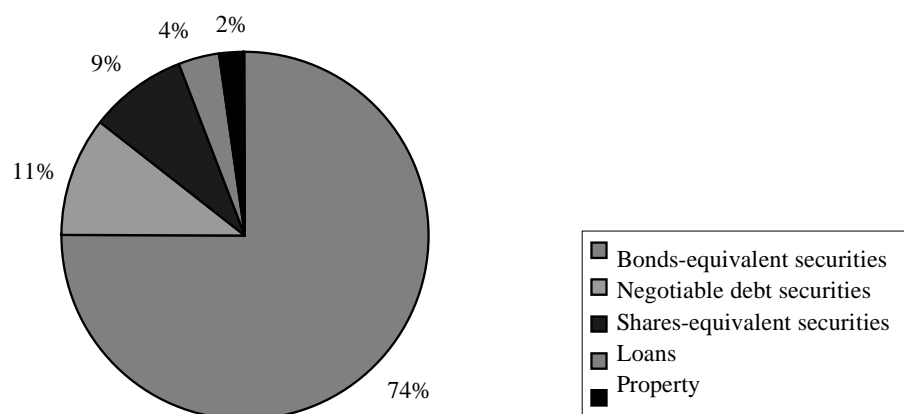
Source: ARRCO.

**Table 5.4 Changes in reserves - ARRCO schemes (1987-1991)**

<b>Year</b>	<b>ARRCO reserves</b>		<b>Schemes' specific reserves</b>		<b>Total reserves</b>	
	<b>MF</b>	<b>Change %</b>	<b>MF</b>	<b>Change %</b>	<b>MF</b>	<b>Change %</b>
1987	55 808		38 567		94 375	
1988	57 512	3.05	40 292	4.47	97 807	3.64
1989	58 303	1.38	41 288	2.47	99 592	1.83
1990	60 035	2.97	43 114	4.42	103 152	3.57
1991	64 252	7.02	45 731	6.07	109 990	6.63

Source: ARRCO.

Graph 2. Structure of ARRCO as at 31 December 1991



**Table 5.5 Breakdown of ARRCO investments as at 31 December 1991**

<b>Assets</b>	<b>FF million</b>	<b>%</b>
Bonds and equivalent securities	21 502	74.9
Negotiable debt securities	3 078	10.7
Shares and equivalent securities	2 448	8.5
Loans	1 074	3.7
Property	612	2.1
<b>Total</b>	<b>28 714</b>	<b>100.0</b>

Source: ARRCO.



**Table 5.6. Breakdown of ARRCO investment by categories of ARRCO regulations as at 31 December 1991**

Categories	Investment %	ARRCO limits
Securities which can be without major financial risks	86.11	68% at least
Loans	3.61	12 % maximum
	3.43	8 % maximum
Variable income securities and property	10.28	20 % maximum
Total	100.00	

Source: ARRCO.

**Table 5.7 Changes in ARRCO reserves and their listing in assets (1981-1991)**

Year	Funds set aside for cash requirements		Assets outside cash use reserves		Reserves MF
	MF	% of reserves	MF	% of	
1981	7 691	26.1	21 778	73.9	29 469
1982	9 271	28.0	23 867	72.0	33 138
1983	11 096	29.7	26 291	70.3	37 387
1984	15 655	36.4	27 412	63.6	43 067
1985	17 297	34.4	33 014	65.6	50 311
1986	22 120	39.7	33 635	60.3	55 755
1987	23 514	42.1	32 294	57.9	55 808
1988	26 085	45.4	31 427	54.6	57 512
1989	29 148	50.0	29 155	50.0	58 303
1990	30 917	51.5	29 118	48.5	60 035
1991	34 499	53.7	29 753	46.3	64 252

Source: ARRCO.

**Table 5.8 Reserves in the AGIRC scheme as at 31 December 1991**

	<b>FF millions</b>
<b>Compulsory reserves</b>	
Security reserves	13 772
Stability reserves	31 858
<b>Total</b>	<b>45 630</b>
Compulsory social fund reserves	1 862
Free social fund reserves	6 347
Administration fund reserves	4 881
<b>Total reserves</b>	<b>58 720</b>

**Table 5.9 Changes in reserves - AGIRC scheme (1985-1991)**

Year	Security and compensating reserves		Other reserves		Total reserves	
	MF	Change %	MF	Change %	MF	Change %
1985	23 747		7 756		31 503	
1986	26 420	11.26	8 509	9.71	34 929	10.88
1987	28 512	7.92	9 157	7.62	37 669	7.84
1988	32 243	*	10 091	10.20	42 334	*
1989	37 319	15.74	11 022	9.23	48 341	14.19
1990	41 295	10.65	11 970	8.60	53 265	10.19
1991	45 630	10.50	13 090	9.36	58 720	10.24

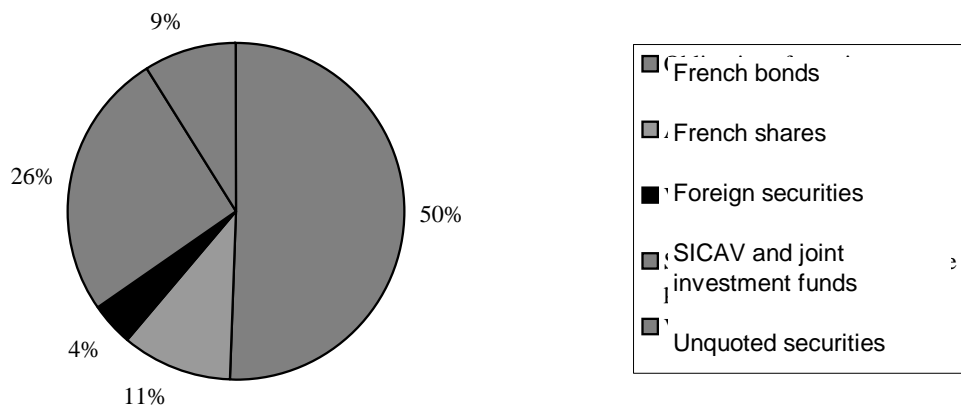
\*Not indicative because of inclusion of Bracket C  
Source: AGIRC.

**Table 5.10 Composition of assets of AGIRC  
as at 31 December 1991**

<b>Assets</b>	<b>FF million</b>	<b>%</b>
<b>Permanent investments</b>		
Share portfolio	24 825.2	52.3
Loans	1 238.6	2.6
Fixed Assets	740.2	1.6
<b>Total</b>	<b>26 804.0</b>	<b>56.4</b>
<b>Current assets</b>	<b>20 687.2</b>	<b>43.6</b>
<b>Total</b>	<b>47 491.2</b>	<b>100.0</b>

Source: AGIRC.

**Graph 3. Composition of portfolio of AGIRC compulsory funds  
as at 31 December 1991**



**Table 5.11 Breakdown of portfolio of AGIRC compulsory funds as at 31 December 1991**

<b>Securities</b>	<b>%</b>
French bonds	50.5
French shares	10.5
Foreign securities	4.3
SICAV and investment trusts	25.6
Unquoted securities	9.0
<b>Total</b>	<b>100.0</b>

*Source: AGIRC.*

**Table 5.12 Changes in reserves of AGIRC compulsory funds and their assets (1985 - 1991)**

<b>Year</b>	<b>Permanent investments</b>		<b>Current assets</b>		<b>Reserves MF</b>
	<b>MF</b>	<b>% of reserves</b>	<b>MF</b>	<b>% of</b>	
1985	15 340	62.4	9 231	37.6	24 572
1986	16 312	59.7	11 001	40.3	27 313
1987	17 142	58.0	12 422	42.0	29 563
1988	20 077	60.0	13 365	40.0	33 442
1989	22 247	59.1	15 373	40.9	37 619
1990	23 831	55.6	19 060	44.4	42 891
1991	26 804	56.4	20 687	43.6	47 491

*Source: AGIRC.*

**Table 5.13 Benefits from AGIRC and ARRCO schemes  
by method of financing (1991)**

Benefits	AGIRC		ARRCO	
	MF	%	MF	%
<b>In-house financing</b>				
Financing by the scheme	44 713	81.1	84 085	79.3
Specific financing*	342	0.6		
<b>Total</b>	<b>45 055</b>	<b>81.7</b>	<b>84 085</b>	<b>79.3</b>
<b>Third-party financing</b>				
ASF	9 325	16.9	17 322	16.3
UNEDIC and State	781	1.4	4 578	4.3
<b>Total</b>	<b>10 106</b>	<b>18.3</b>	<b>21 900</b>	<b>20.7</b>
<b>Total benefits</b>	<b>55 161</b>	<b>100.0</b>	<b>105 985</b>	<b>100.0</b>

\*AGIRC compulsory social fund

Sources: AGIRC and ARRCO.

**Table 7.1 Adjustment of general scheme pensions  
(1983-1992)**

Year	Changes in annual average			
	Pensions %	Price %	Gross %	Net salaries %
1983	10.4	9.6	9.5	8.5
1984	5.3	7.4	7.6	5.9
1985	5.8	5.8	7.0	6.8
1986	3.2	2.7	5.3	4.6
1987	2.6	3.1	4.0	3.1
1988	3.7	2.7	4.2	3.6
1989	2.7	3.6	4.3	3.0
1990	3.3	3.4	5.2	5.2
1991	2.8	3.2	4.7	4.6
1992	2.3	2.8*	4.2*	3.3*

Source: Direction de la sécurité sociale (DEES - social security head office).

**Table 7.2 Average monthly pensions paid by the general scheme  
as at 31 December 1991**

**FF**

<b>Pensions</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
Retirement pensions	3 123	2 458	2 785
Survivor's pensions	1 029	1 637	1 630
<b>Total</b>	<b>3 117</b>	<b>2 306</b>	<b>2 664</b>

*Source: Caisse nationale d'assurance vieillesse.*

**Table 7.3 Average monthly pensions paid  
by ARRCO and AGIRC schemes (1991)**

**FF**

<b>Schemes</b>	<b>Pension retirement pensions</b>	<b>Survivor's pensions</b>	<b>Total</b>
ARRCO	1 301	811	1 169
AGIRC	4 314	2 398	3 742

*Sources: ARRCO and AGIRC.*

**Table 7.4 Average AGIRC monthly pension from retirement pensions by category and gender (1991)**

FF

<b>Professional category</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
Cadres	6 041	2 322	5 391
Technical staff	1 756	1 082	1 639
<b>Total</b>	<b>4 769</b>	<b>1 953</b>	<b>4 314</b>

Source: AGIRC.

**Table 7.5 Breakdown of retired cadres as a function of annual pension (1991)**

%

<b>Pension</b>	<b>Men</b>		<b>Women</b>		<b>Total</b>	
		<b>cumulative</b>		<b>cumulative</b>		<b>cumulative</b>
less than FF21 950F	28.8	28.8	59.8	59.8	33.9	33.9
FF21 950 to FF43 900	19.7	48.5	21.9	81.7	20.1	54.0
FF43 900 to FF109 750	30.7	79.2	15.1	96.8	28.1	82.1
FF109 750 to FF219	16.1	95.3	2.9	99.7	13.9	96.0
FF219 500 or more	4.7	100.0	0.3	100.0	4.0	100.0

Note: Pensions include Bracket C pensions (up to eight times the ceiling).

Source: AGIRC.

**Table 7. 6 Breakdown of retired AGIRC technical staff as a function of annual pension**

%

Pension	Men		Women		Total	
		cumulative		cumulative		cumulative
Less than FF21 950	65.7	65.7	85.6	85.6	69.9	69.9
FF21 950 to FF43 900	27.0	92.7	13.2	98.8	24.1	94.0
FF43 900 to FF109 750	7.2	99.9	1.2	100.0	5.9	99.9
FF109 750 to FF219	0.1	100.0	0.0	100.0	0.1	100.0
FF219 500 or more	0.0	100.0	0.0	100.0	0.0	100.0

Source: AGIRC.

**Table 7.7 Average monthly pensions by scheme (1988)**

Pension	Membership of general scheme plus...					
	ARRCO		ARRCO and AGIRC -15 years		ARRCO and AGIRC +15 years	
	FF	%	FF	%	FF	%
Basic scheme	2 815	71.6	4 170	55.8	4 834	36.3
ARRCO	1 114	28.4	2 115	28.3	2 635	19.8
AGIRC			1 185	15.9	5 866	44.0
Total	3 929	100.0	7 470	100.0	13 335	100.0

Source: SESI cross-scheme sample of retired persons 1988.

Scope: Employees who have been members only of the general scheme and of ARRCO and AGIRC.



**Table 7.8 Average monthly pensions of employees with full career by scheme (1988)**

Pension	Membership of general scheme plus...					
	ARRCO		ARRCO and AGIRC - 15 years		ARRCO and AGIRC + 15 years	
	FF	%	FF	%	FF	%
Basic scheme	3 989	68.5	4 789	55.8	4 976	36.5
ARRCO	1 836	31.5	2 523	29.4	2 740	20.1
AGIRC			1 263	14.7	5 933	43.5
Total	5 825	100.0	8 575	100.0	13 649	100.0

Source: SESI cross-scheme sample of retired persons 1988.

Scope: Employees who have been members only of the general scheme and of ARRCO and AGIRC schemes with 37.5 years or more of contributions to the general scheme.

**Table 7.9 Average monthly pensions of male employees with full career by scheme (1988)**

Pension	Membership of general scheme plus...					
	ARRCO		ARRCO and AGIRC -15 years		ARRCO and AGIRC + 5 years	
	FF	%	FF	%	FF	%
Basic scheme	4 367	66.5	4 824	55.0	5 016	35.4
ARRCO	2 198	33.5	2 634	30.0	2 773	19.6
AGIRC			1 309	14.9	6 379	45.0
Total	6 565	100.0	8 767	100.0	14 168	100.0

Source: SESI cross-scheme sample of retired persons 1988.

Scope: Employees who have been members only of the general scheme and of ARRCO and AGIRC schemes with 37.5 years or more of contributions to the general scheme.

**Table 7.10 Average monthly pensions of female employees with full career by scheme (1988)**

Pension	Membership of general scheme plus...					
	ARRCO		ARRCO and AGIRC -15 years		ARRCO and AGIRC +15 years	
	FF	%	FF	%	FF	%
Basic scheme	3 480	72.1	4 669	59.0	4 671	48.3
ARRCO	1 349	27.9	2 145	27.1	2 486	25.7
AGIRC			1 102	13.9	2 512	26.0
Total	4 829	100.0	7 916	100.0	9 669	100.0

Source: SESI cross-scheme sample of retired persons 1988.

Scope: Employees who have been members only of the general scheme and of the ARRCO and AGIRC schemes with 37.5 years or more of contributions to the general scheme.

**Table 7.11 Net replacement rate of final salary by pension as a function of scheme for employees with full career (1988)**

Net final salary						%
	Basic scheme	ARRCO	AGIRC	Others	Total	
Less than FF5 000	76	26	0	0	102	
FF5 000 to FF6 000	69	24	0	0	94	
FF6 000 to FF8 000	60	26	0	0	88	
FF8 000 to FF10 000	50	27	3	0	80	
FF10 000 to FF12 000 F	42	28	10	0	80	
FF12 000 to FF16 000	34	23	17	1	75	
	20	13	32	0	66	

Note: Net replacement rates are shown here i.e. pension and salary are net of social security contributions.

Source: SESI Cross-scheme sample of retired persons 1988.

Scope: Employees born in 1922 who have been members of the same basic scheme (the general scheme) for their entire career and who have a total of 37.5 years of contributions or more.

**Table 7.12 Net replacement rate of final salary by pension for employees with full career (1988)**

Net final salary	Men			Women		
	Basic	Supplement	Total	Basic	Supplement	Total
Less than FF5 000	86	27	113	72	23	95
FF5 000 to FF6 000	75	27	102	60	19	79
FF6 000 to FF8 000	63	30	93	57	22	79
FF8 000 to FF10 000	52	32	84	49	26	75
FF10 000 to FF12 000	43	40	83	41	33	74
FF12 000 to FF16 000	34	43	77	34	35	69
FF16 000 or more	20	46	66			

Note: Net replacement rates are shown here i.e. pension and salary are net of social security contributions.

Source: SESI cross-scheme sample of retired persons 1988.

Scope: Employees born in 1922 who have been members of the same basic scheme (the general scheme) for their entire career and who have a total of 37.5 years of contributions or more.

**Table 7.13 Net replacement rate of final salary in the private sector and civil service (1991)**

Net final salary	Private sector	Civil service
FF6 500 to FF8 500	86	89
FF8 500 to FF11 000	80	80
FF11 000 to FF13 000	79	78
FF13 000 to FF17 500	75	76
FF17 500 or more	65	72

Note: Net replacement rates are shown here

i.e. pension and salary are net of social security contributions.

Source: SESI cross-scheme sample of retired persons 1988 July 1991 update.

Scope: Employees born in 1922 who have been members of the same statutory scheme for their entire career and who have a total of 37.5 years of contributions or more.

**Table 7.14 Average annual pension of newly-retired cadres (1990)**

Scheme	Monthly	
	FF	%
<b>Basic schemes</b>	<b>5 189</b>	<b>37.8</b>
of which general schemes	4 858	35.4
<b>Supplementary schemes</b>	<b>8 538</b>	<b>62.2</b>
of which ARRCO	2 838	20.7
of which AGIRC	5 463	39.8
Others	237	1.7
<b>Total</b>	<b>13 727</b>	<b>100.0</b>

Source: AGIRC "retraite vérité" survey.

Scope: Cadres who claim their pension during the first half of 1989 and whose final employment was on a full-time basis in the private sector.

**Table 7.15 Overall pension of newly-retired cadres receiving only general scheme and AGIRC and ARRCO scheme pensions (1990)**

Scheme	Monthly pension		Gross Replacement %
	FF	%	
General scheme	5 035	37.1	24.5
ARRCO	2 986	22.0	14.5
AGIRC	5 555	40.9	27
<b>Total</b>	<b>13 577</b>	<b>100.0</b>	<b>66</b>

Source: AGIRC "retraite vérité" survey.

Scope: Cadres who claim their pension during the first half of 1989 and whose final employment was on a full-time basis in the private sector.

**Table 7.16 Amount and structure of overall pension of newly-retired cadres (1990)**

Scheme	Monthly pension			Structure of monthly pension		
	Men FF	Women FF	Total FF	Men %	Women %	Total %
General scheme	5 109	4 711	5 035	35.5	46.9	37.1
ARRCO	3 056	2 680	2 986	21.3	26.7	22.0
AGIRC	6 214	2 658	5 555	43.2	26.4	40.9
Total	14 378	10 049	13 577	100.0	100.0	100.0

Source: AGIRC "retraite vérité" survey.

Scope: Cadres who claim their pension during the first half of 1989 whose final employment was on a full-time basis in the private sector and who receive pensions only from the general scheme ARRCO and AGIRC.

**Table 7.17 Gross replacement rate of overall pension of newly-retired cadres as a function of final salary (1990)**

Portion of gross monthly	Gross Replacement %	Retired persons		
		%	cumul %	Number
Less than FF12 000	82	9.8	9.8	572
FF12 000 to less than FF14 000	73	13.5	23.4	789
FF14 000 to less than FF16 000	71	13.5	36.9	786
FF16 000 to less than FF18 000	69	13.1	50.0	764
FF18 000 to less than FF20 000	68	9.9	59.9	578
FF20 000 to less than FF22 000	65	7.5	67.4	438
FF22 000 to less than FF25 000	65	8.3	75.8	485
FF25 000 to less than FF29 000	63	8.0	83.8	465
FF29 000 to less than FF34 000	62	6.2	90.0	362
FF34 000 or more	58	10.0	100.0	584
Total	66	100.0	100.0	5 823

Source: AGIRC "retraite vérité" survey.

Scope: Cadres who claim their pension during the first half of 1989 and whose final employment was on a full-time basis in the private sector.

**Table 7.18 Overall pension of new-retired cadres receiving a pension from a company scheme (1990)**

Scheme	Monthly pension		Gross Replacement %
	FF	%	
General scheme	4 837	27.2	20
ARRCO	2 841	16.0	12
AGIRC	6 876	38.7	28
Company scheme	2 790	15.7	11
Others	424	2.4	2
<b>Total</b>	<b>17 767</b>	<b>100.0</b>	<b>73</b>

*Source: AGIRC "retraite vérité" survey.*

Scope: Cadres who claim their pension during the first half of 1989 whose final employment was on a full-time basis in the private sector and who receive a pension from a company scheme.

## LABOUR MARKET AND SOCIAL POLICY OCCASIONAL PAPERS

(Some papers can be accessed through internet: <http://www.oecd.org/els/papers/papers.htm>  
Paper copies can be obtained free of charge)

- No. 1 *AN ECONOMIC FRAMEWORK FOR THE EVALUATION OF CHILD CARE POLICY* (1990)  
(Donald Verry)
- No. 1 *UN CADRE ECONOMIQUE POUR L'EVALUATION DES POLITIQUES DE GARDE  
D'ENFANT* (1990) (Donald Verry)
- No. 2 *HEALTH AND PENSION REFORM IN JAPAN* (1990)
- No. 3 *WRONGFUL TERMINATION LITIGATION IN THE UNITED STATES AND ITS EFFECT  
ON THE EMPLOYMENT RELATIONSHIP* (1990) (Susan R. Mendelsohn)
- No. 5 *WAGE DIFFERENTIALS, ENTRY AND THE JOB GENERATION PROCESS IN GERMANY*  
(1990) (Tito Boeri)
- No. 6 *EQUAL PAY FOR WORK OF COMPARABLE WORTH: The Experience of Industrialised  
Countries* (1991)
- No. 6 *SALAIRE ÉGAL POUR UN TRAVAIL DE VALEUR COMPARABLE : L'expérience des pays  
industrialisés* (1991)
- No. 9 *FROM LABOUR SHORTAGE TO LABOUR SHEDDING: Labour Markets in Central and  
Eastern Europe* (1992) (Tito Boeri and Mark Keese)
- No. 10 *PROJECTING THE OCCUPATIONAL STRUCTURE OF EMPLOYMENT IN OECD  
COUNTRIES* (1993) (Gerald Hughes)
- No. 11 *PREVENTING AND RESOLVING INDUSTRIAL CONFLICT: Final Report* (1993)
- No. 11 *PREVENTION ET REGLEMENT DES CONFLITS DU TRAVAIL: Rapport Final* (1993)
- No. 12 *BREADWINNERS OR CHILD REARERS: THE DILEMMA FOR LONE MOTHERS* (1993)
- No. 13 *THE OECD-EUROSTAT COMPENDIUM OF SOURCES OF EARNINGS STATISTICS*  
(1994)
- No. 15 *ACTIVE LABOUR MARKET POLICY AND UNEMPLOYMENT: A FRAMEWORK FOR THE  
ANALYSIS OF CRUCIAL DESIGN FEATURES* (1994) (Lars Calmfors)
- No. 17 *SOCIAL EXPENDITURE STATISTICS OF OECD MEMBERS COUNTRIES, Provisional  
Version* (1996)

- No. 18 *ENHANCING THE EFFECTIVENESS OF ACTIVE LABOUR MARKET POLICIES: EVIDENCE FROM PROGRAMME EVALUATIONS IN OECD COUNTRIES* (1996) (Robert G. Fay)
- No. 19 *NET PUBLIC SOCIAL EXPENDITURE* (1996) (Willem Adema, Marcel Einerhand, Bengt Eklind, Jrger Lotz and Mark Pearson)
- No. 20 *OCCUPATIONAL CLASSIFICATION (ISCO-88): CONCEPTS, METHODS, RELIABILITY, VALIDITY AND CROSS-NATIONAL COMPARABILITY* (1997) (Peter Elias)
- No. 21 *PRIVATE PENSIONS IN OECD COUNTRIES - THE UNITED KINGDOM* (1997) (E. Philip Davis)
- No. 21 *LES RGIMES DE RETRAITE PRIVS DANS LES PAYS DE L'OCDE - LE ROYAUME-UNI* (1997) (E. Philip Davis)
- No. 22 *THE DEFINITION OF PART-TIME WORK FOR THE PURPOSE OF INTERNATIONAL COMPARISONS* (1997) (Alois van Bastelaer, Eurostat; Georges Lematre, OECD; Pascal Marianna, OECD)
- No. 22 *La DFINITION DU TRAVAIL  TEMPS PARTIEL  DES FINS DE COMPARAISON INTERNATIONALE* (1997) (Alois van Bastelaer, Eurostat ; Georges Lematre, OCDE ; Pascal Marianna, OCDE)
- No. 23 *PRIVATE PENSIONS IN OECD COUNTRIES - AUSTRALIA* (1997) (Hazel Bateman and John Piggott)
- No. 24 *TRENDS IN SECRETARIAL OCCUPATIONS IN SELECTED OECD COUNTRIES (1980-95)* (Hilary Steedman)



*Mailing List for Labour Market and Social Policy Occasional Papers*

Please include the following name on the mailing list:  
(write in capitals)

**Name** -----  
---

**Organisation** -----  
-----  
-----  
---

**Address** -----  
-----  
-----  
-----  
-----

**Country** -----  
---

This form should be returned to:

Labour Market and Social Policy Occasional Papers  
Directorate for Education, Employment, Labour and Social Affairs  
OECD, 2, rue André-Pascal, 75775 PARIS CEDEX 16, FRANCE

## A SELECTION OF OECD PUBLICATIONS ALSO AVAILABLE

### **"OECD SOCIAL POLICY STUDIES" SERIES**

- No. 3 *LIVING CONDITIONS IN OECD COUNTRIES: A Compendium of Social Indicators* (1986)  
(81 85 04 1)ISBN 92-64-12734-8, 166 pp.
- No. 5 *REFORMING PUBLIC PENSIONS* (1988)  
(81 88 04 1)ISBN 92-64-13123-X, 250 pp.
- No. 6 *THE FUTURE OF SOCIAL PROTECTION* (1988)  
(81 88 03 1)ISBN 92-64-13152-3, 64 pp.
- No. 7 *HEALTH CARE SYSTEMS IN TRANSITION: The Search for Efficiency* (1990)  
(81 89 05 1)ISBN 92-64-13310-0, 206 pp.
- No. 8 *LONE PARENT FAMILIES: The Economic Challenge* (1990)  
(81 89 04 1)ISBN 92-64-13303-8, 284 pp.
- No. 9 *PRIVATE PENSIONS AND PUBLIC POLICY* (1992)  
(81 92 06 1)ISBN 92-64-13790-4, 160 pp.
- No. 10 *PRIVATE PENSIONS IN OECD COUNTRIES: The United-States* (1993)  
(81 93 01 1)ISBN 92-64-13802-1, 85 pp.
- No. 11 *PRIVATE PENSIONS IN OECD COUNTRIES: New-Zealand* (1993)  
(81 93 02 1)ISBN 92-64-13803-X, 85 pp.
- No. 12 *NEW ORIENTATIONS FOR SOCIAL POLICY*  
(81 94 02 1)ISBN 92-64-14056-5, 129 pp.
- No. 13 *PRIVATE PENSIONS IN OECD COUNTRIES: Ireland* (1994)  
(81 94 04 1)ISBN 92-64-14077-8, 96 pp.
- No. 14 *CARING FOR FRAIL ELDERLY PEOPLE: New Directions in Care* (1994)  
(81 94 06 2)ISBN 92-64-14160-X, 140 pp.
- No. 15 *PRIVATE PENSIONS IN OECD COUNTRIES: Canada* (1995)  
(81 95 02 1)ISBN 92-64-14333-5, 62 pp.
- No. 16 *THE TRANSITION FROM WORK TO RETIREMENT* (1995)  
(81 95 08 1)ISBN 92-64-14555-9, 133 pp.
- No. 17 *THE LABOUR MARKET AND OLDER WORKERS* (1995)  
(81 95 10 1) ISBN 92-64-14585-0, 320 pp.

- No. 18 *INCOME DISTRIBUTION IN OECD COUNTRIES* (1995)  
(81 95 06 1) ISBN 92-64-14577-X, 164 pp.
- No. 19 *CARING FOR FRAIL ELDERLY PEOPLE* (1996)  
(81 96 06 1) ISBN 92-64-14892-2, 320 pp.
- No. 20 *AGEING IN OECD COUNTRIES: A CRITICAL POLICY CHALLENGE* (1996)  
(81 96 10 1) ISBN 92-64-15318-7, 111 pp.
- No. 21 *FAMILY, MARKET AND COMMUNITY: EQUITY AND EFFICIENCY IN SOCIAL POLICY* (1997) (81 97 04 1 P) ISBN 92-64-15557-0, 231 pp.

### **EMPLOYMENT**

#### *FLEXIBLE WORKING TIME*

*Collective Bargaining and Government Intervention*

(81 95 01 1) ISBN 92-64-13416-3

#### *LABOUR MARKET POLICIES FOR THE 1990s* (1990)

(81 90 01 1) ISBN 92-64-13363-1, 130 pp.

#### *ENTERPRISING WOMEN* (1990)

(81 90 02 1) ISBN 92-64-13436-5, 112 pp.

#### *EVALUATING LABOUR MARKET AND SOCIAL PROGRAMMES:*

*The State of a Complex Art* (1991)

(81 91 01 1) ISBN 92-64-13537-5, 200 pp.

#### *NEW DIRECTIONS IN WORK ORGANISATION:*

*The Industrial Relations Response* (1992)

(81 92 01 1) ISBN 92-64-13667-3, 266 pp.

#### *THE OECD JOBS STUDY: Facts, Analysis, Strategies* (1995)

(81 94 07 1) ISBN 92-64-14145-6, 50 pp.

#### *THE OECD JOBS STUDY: Evidence and Explanations* (1994) (2 volumes)

(03 94 04 1) ISBN 92-64-14241-X, 498 pp.

#### *WOMEN AND STRUCTURAL CHANGE: New Perspectives* (1994)

(81.94.05 1) ISBN 92-64-14111-1, 199 pp.

#### *THE OECD JOBS STUDY: Implementing The Strategy* (1995)

(03 95 06 1) ISBN 92-64-14469-2, 32 pp.

#### *HOUSEHOLD PRODUCTION IN OECD COUNTRIES:*

*Data Sources and Measurement Methods* (1995)

(81 95 09 1) ISBN 92-64-14564-8

*OECD EMPLOYMENT OUTLOOK* July 1997 (published annually)  
(81 96 08 1)ISBN 92-64-14900-7, 212 pp.

*THE OECD JOBS STRATEGY: ENHANCING THE EFFECTIVENESS OF ACTIVE  
LABOUR MARKET POLICIES*, July 1996  
(81 96 07 1)ISBN 92-64-14908-2, 52 pp.

### **DEMOGRAPHY**

TRENDS IN INTERNATIONAL MIGRATION: CONTINUOUS REPORTING SYSTEM ON  
MIGRATION (SOPEMI) (1995)  
(81 95 04 1) ISBN 92-64-14463-3, 244 pp.

### **HEALTH CARE POLICY STUDIES**

- No. 1 *U.S. HEALTH CARE AT THE CROSS-ROADS* (1992)  
(11 92 03 1)ISBN 92-64-13780-7, 80 pp.
- No. 2 *THE REFORM OF HEALTH CARE SYSTEMS:  
A Comparative Analysis of Seven OECD Countries* (1992)  
(81 92 01 1)ISBN 92-64-13791-2, 210 pp.
- No. 3 *OECD HEALTH SYSTEMS:Facts and Trends, 1960-1991* (1993)  
(81 93 05 1)ISBN 92-64-13800-5, Volume I, 277 pp. Volume II, 193 pp.
- No. 4 *HEALTH: QUALITY AND CHOICE* (1994)  
(81 94 01 1) ISBN 92-64-142213-4, 124 pp.
- No. 5 *THE REFORM OF HEALTH CARE SYSTEMS: A REVIEW OF SEVENTEEN  
OECD COUNTRIES* (1994)  
(81 94 10 1)ISBN 92-64-14250-9, 340 pp.
- No. 6 *INTERNAL MARKETS IN THE MAKING: HEALTH SYSTEMS IN CANADA,  
ICELAND AND UNITED KINGDOM* (1995)  
(81 95 03 1)ISBN 92-64-14339-4
- No. 7 *NEW ORIENTATIONS IN HEALTH CARE POLICIES:  
IMPROVING COST CONTROL AND EFFECTIVENESS* (1995)
- No. 8 *HEALTH CARE REFORM: THE WILL TO CHANGE* (1996)  
(81 96 02 1)ISBN 92-64-14662-8

### ***OECD HEALTH DATA*** (1997)

available in English or French on diskettes (Windows 3.11) or CD-ROM (Windows 95/NT or 3.11).

*Prices charged at the OECD Bookshop.*  
**THE OECD CATALOGUE OF PUBLICATIONS** and supplements will be sent  
*free of charge on request addressed either to OECD Publications Service,*  
*2, rue André-Pascal, 75775 PARIS CEDEX 16*  
*or to the OECD Distributor in your country.*