An analysis of pension funds in Portugal

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Abstract This paper highlights the role that complementary schemes can play in maintaining levels of return for retirement pensions in Portugal, presenting a detailed analysis of pension funds. The second section briefly considers the overall scope of legislative provisions in regard to the domain. The third section contains a characterisation of the Portuguese pension fund market, within the context of complementary schemes in Europe, and considers the issues associated with pension fund risks. Finally, in the last section some conclusions are drawn.

Keywords: *private pension funds in Portugal; complementary schemes in Europe; pension funds risks*

Introduction

In seeking to safeguard the sustainability of their state social security systems, certain measures are being taken or considered by various European Union (EU) member states. Among these measures, the following are highlighted:

- raising of the age of retirement;
- amendment of the formulae used in calculating pensions;
- the creation of reserve funds.

These measures notwithstanding, the need to maintain the levels of income throughout pensioners' retirement has obliged authorities to focus greater attention on other sources of income which are based on private initiatives.¹

The respective dominance of private and public initiatives has varied not only

historically, but also from country to country. In all of the industrialised countries, it had taken a span of some 50 years, approximately between 1890–1945, to develop collective or semi-collective mechanisms to generate substitution resources for workers who, owing to their age, were obliged to cease performing the occupations which had provided their essential means of subsistence. It was only in the ensuing 20 to 30 years that the present-day social security systems were constructed. However, each system, which is the product of successive stages of development, has involved different forms of financing, reflecting the culture of the country in question, the needs of the respective population and the capacities or needs of the various participants in the system concerned. Out

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of the contrasting, and sometimes convergent, evolutions taking place in each country arose an element of the debate regarding different regimes of financing.

After several decades of satisfactory functioning, above all in those countries in which they had been operating for a longer period and with greater efficiency, the state social security systems began to experience certain financial difficulties provoked by various factors. Prominent amongst the latter are the evolution of the demographic characteristics resulting from the simultaneous increase in the average life expectancy and the decline in the birth-rate, in addition to the growing generosity of the systems themselves. The systems have become the objects of criticism from those observers who argue that such schemes act as restraints to the accumulation of capital and, consequently, to economic growth. Moreover, the critics charge that they create distortions in the labour market.

The above-mentioned criticisms have given rise to the concept of the multi-pillar model of pension finance.² This seeks to redefine and clarify the roles and specific functions to be assigned to each of the potential participants in the provision of financial security to the elderly. The concept envisages the creation of a system which combines state-managed pension plans, which satisfy basic needs, with private, occupational pension plans and with individual savings accounts to assuage the anxieties of the higher-income groups. The former constitute the first pillar while the latter two make up the second and third pillars. In most cases, the amendments introduced with the aim of achieving equilibrium between the roles played by the pillars effectively depend on/involve the strengthening of the role of the private sector.³

This paper highlights the role that the

complementary schemes can play in maintaining levels of return for retirement pensions in Portugal, presenting a detailed analysis of pension funds. In effect, the recognition that the maintenance of a high level of social protection must be based on a multi-pillar system has led, in Portugal as elsewhere, to the creation of conditions for the development of the so-called complementary schemes. The paper briefly considers the overall scope of legislative provisions in regard to the domain, contains a characterisation of the Portuguese pension fund market, within the context of complementary schemes in Europe, and considers the issues associated with pension fund risks. Finally, some conclusions are drawn.

The legislative provisions

New legislation and amendments are intended to keep pace with changes in the country's economic, social and demographic conditions.

The Social Security Act⁴ takes into consideration the role to be played by complementary schemes, encompassing:

- complementary scheme initiatives of a public nature and
- complementary schemes of a private nature.

With regard to the former, the Act is highly succinct, only granting that the state social security system could develop a scheme of complementary benefits from those attributed in the other social security contributory schemes, with the following characteristics:

- defined benefits and voluntary subscription;
- within a capitalisation regime; and
- under conditions to be defined by law.

As far as the latter are concerned, the legal framework is more extensive. The objective is to grant complementary benefits from those guaranteed by the existing obligatory or optional social security schemes. The latter are acknowledged by the Act to be significant instruments of protection and social welfare, enshrined in the notion of shared social responsibilities. The development of private complementary schemes should be stimulated by the state, by means of incentives which are considered appropriate, although they are to be of an optional nature.

The cooperative and social and private initiatives are to be developed through complementary schemes and through measures implemented by these organisations themselves, with the proviso that they contribute to cohesion and social well-being. The initiatives can be:

- collective, when such initiatives are embodied in the establishment of complementary schemes in respect of a pre-determined group, on the basis of a decision taken either by those directly concerned or by a third party; or
- individual, when the initiatives translate into private citizens' adhesion to a complementary scheme.

Complementary occupational schemes are to come within the collective form of the cooperative and social and private initiatives and include workers, whether employees or self-employed, in respect of a company, a group of companies, or any other entity that employs staff, as well as of an occupational or inter-occupational sector.

Lastly, the complementary schemes, whether collective or individual, can be managed by organisations within the cooperative and social and private sector, namely:

- mutual associations;
- insurance companies;
- specialist pension fund management companies; or
- public institutions which are legally empowered to manage such schemes.

Pension funds

Characterisation of the market in Portugal

Pension funds have been in existence in Portugal for little more than ten years. Decree-Law No. 323/85, 6th August, marks the initiation of the legislation of governing the area, establishing the juridical regime of pension funds managed by legally recognised life insurance companies in Portugal and empowering the Instituto de Seguros de Portugal (Insurance Institute of Portugal) to control and supervise such funds. The law consecrated and underpinned the 'inestimable social function of pension funds, conferring upon them a legal regulatory framework which ensures the faithful execution of the activities intended'.

The growth registered since then can be described as exponential. As in other countries, pension funds, currently constitute (collectively) one of the largest institutional investors, channelling into productive investment ever-increasing volumes of savings from families and companies and occupying a prominent position in the organisation and functioning of the national and international capital markets.

Legislation

Between 1985 and 1999, several legislative acts came into force. Among these, the following are worthy of mention:

- Decree-Law No. 205/89, 27th June, by which were established the *planos poupança — reforma* (PPR), or retirement savings plan scheme and the *fundos de poupança — reforma* (FPR), or retirement savings funds;
- Decree-Law No. 204/95, 5th August, which introduced the *planos de poupança em ações* (PPA), or savings plans in shares scheme. These are defined as personal savings plans established within the scope of a savings fund formed with shares, the *fundos de poupança em ações* (FPA). The fundamental objectives behind the scheme's creation were to stimulate long-term saving by families, to dynamise the capital market and to offer alternative forms of financing to enterprises.

Briefly, during the period, in addition to the creation of the schemes mentioned above, rules were established to govern pension funds' investment procedures. These were intended to be more appropriate to the contemporary economic environment and to be adjusted to the nature and needs of the pension funds themselves.

Market activity is currently regulated by the provisions of Decree-Law No. 475/99, 9th November. Since 1999, this legislation has provided the backbone for revisions of the juridical regime of the pension funds in Portugal. The fundamental objective is to achieve the consolidation of the funds' role as the privileged vehicle of the private, complementary financing of the costs of covering the social risks associated with retirement.

Nevertheless, this revision constitutes, as mentioned earlier, merely a 'first step on the road'. From a long-term perspective, several issues should be considered, such as the design of the private pension plans,⁵ the financing of

the liabilities of companies and other entities with pension arrangements coming within the second pillar of social protection, the fiscal treatment of the contributions, the returns and the benefits,⁶ or the question of what should happen to the surplus in the event of over-funding resulting from a drastic reduction of the number of participants without acquired rights.

Within this context, the revision clarifies and modifies formal aspects and introduces alterations, not only with a view to 'the reinforcement of the protection of contributors, participants, beneficiaries and also of member-companies', but additionally to 'the qualitative perfecting of the functioning of the pension funds'.

It can be observed from this brief account that over the past 15 years, the legal background has attempted to respond to the needs of the fund-managing institutions in their various functions and to the preoccupations of all those involved in the process. The last decree-law mentioned above endeavours to integrate into a single body a whole series of aspects that previously were dispersed throughout a range of legal documents. However, certain questions remain to be dealt with, as mentioned above.

Concepts

The following presentation of the principal concepts in relation to pension funds in Portugal is based on both Regulation No. 1/97 (2nd Series) of the Commission for Accounting Norms and Decree-Law No. 475/99, 9th November.

Pension plans

Pension plans are programmes which define the conditions under which is constituted the right to receive a pension

for early retirement, old-age retirement, retirement due to incapacity, or in the event of a spouse surviving a deceased retired partner, in accordance with the terms by which these concepts are defined in the respective plan. Pension plans can take on the character of complementary occupational schemes and, in addition, can provide for the possibility of guaranteeing the costs inherent in the payment of pensions. This latter provision depends on its formal, explicit inclusion in the contract conditions. In particular, it refers to those costs due by way of contributions to social security and those arising from a collective contract.

'Members' refers to the members of a collective body whose pension plans are financed by a pension fund.

The participants are individuals for whom, according to their personal and occupational circumstances, are defined the rights encompassed in the pension plan, regardless of whether they contribute to its financing, or not. Participants with acquired rights are those who maintain their right to the benefits contained in the pension plan, in accordance with the rules expressed within the plan, regardless of the maintenance or severance of the initial connection to the member.

The contributors are the individuals who contribute to the fund, or to those collective bodies which pay contributions on behalf of, or in favour of, the participants.

The beneficiaries are those individuals who are entitled to the benefits established in the pension plan, whether they have been participants, or not.

With regard to the type of guarantees established, pension plans can be classified as:

- defined-benefit pension (DBP) plans
 - in which the benefits are

pre-defined and the contributions are calculated in such a way as to guarantee the payment of these benefits;

- defined-contribution pension (DCP) plans — in which the contributions are pre-defined and the benefits are determined according to the sum of the contributions paid in and the respective yields accumulated;
- mixed plans — in which are found a combination of the characteristics of both defined-benefit and defined-contribution plans.

With reference to social security, a DBP plan can be classified as:

- integrated complementary — if the established amounts are complementary to the social security pension, that is, $PP = TP - SSP$ or $PP = \% SSP$, where TP = total pension to be received by the beneficiary, PP = pension attributed by the plan and SSP = social security pension;
- non-integrated complementary — if there is no upper limit of the type $TP = PP + SSP = \% \text{ of the final salary}$;
- independent — if the sums guaranteed do not depend on the social security pension.

With regard to the form of financing, pension plans can be classified as:

- contributory plans — in which the participants pay contributions and
- non-contributory plans — in which the plan is financed solely by the member.

Pension funds

Pension funds are assets which are exclusively devoted to attaining the targets of one or more pension plans.

They can be constituted in one of the following two forms:

- the closed fund — in which there is only one member, or, if there is more than one, a corporate, associative, professional or social connection exists among them. The consent of all of the existing members must be given before new members can be included; and
- the open fund — in which there is no requirement for any connection whatsoever among the different parties adhering to the fund, adhesion to the latter depending solely on the acceptance into it being granted by the fund's managing institution.⁷

The Insurance Institute of Portugal is empowered to authorise the constitution of pension funds.⁸

Fund management institutions

Pension funds can be managed either by specialist enterprises created for this exclusive purpose and which operate under the designation of pension fund management companies, or by insurance companies which are legally authorised to carry out life insurance activities in Portugal.

The fund management institution is responsible for acting in the name of, and in the common interest of, the members, participants, contributors and beneficiaries and, as the fund's administrator and legal representative, can trade stock market securities or real estate, make transactions in bank accounts held in the fund's name and exercise all of the rights and carry out all of those activities directly or indirectly related to the fund's assets.

A fund management institution can manage one or more pension funds, while closed pension funds can be managed by more than one institution.

The supervision of the pension funds and the specialist pension fund management firms falls under the competence of the Insurance Institute of Portugal.

Evolution

There are diverse factors which have determined the evolution of pension funds in Portugal:

- on one hand, in common with what is taking place in many other countries, the prognosis of the difficulties which the public social security system is experiencing, and will experience in the future, in fulfilling the expectations for which it was created;⁹
- on the other hand, the somewhat alarming phenomenon of ever-decreasing levels of saving.¹⁰

Naturally, in addition to the two factors mentioned above, which support the legal framework, there are other, circumstantial aspects which have contributed substantially to the dynamisation of pension funds:

- private pension plans have been in existence for several decades, having been set up by certain enterprises which financed them on a book-reserve basis.¹¹ Therefore, there was a historic precedent;
- it should be noted that contributions made by companies enjoy substantially favourable fiscal treatment,¹² with a particularly attractive situation in the initial phase.¹³

The establishment in 1989 of the retirement savings plans scheme (PPR) and the FPR was an additional measure intended to attenuate the preoccupations mentioned earlier. The

PPA was launched, above all, as a means to achieving the development of the stock market. There was a clear intention to stimulate individual, long-term saving, thereby reinforcing the third pillar of guaranteed retirement income.¹⁴

Fund management institutions and pension funds

In 1993, there were 26 fund-management institutions, of which 11 (42 per cent) were life insurance companies, while the other 15 (58 per cent) were specialist fund managers.

The pension funds themselves, totalled 219 of which 87 (40 per cent) were managed by life insurers and 132 (60 per cent) by specialist fund managers. Between 1987 and 1998, the insurers' supremacy declined, to the benefit of the fund managers, who, in turn, assumed the dominant role in the activity. It is noteworthy that the great majority of the funds, that is, 206 (94 per cent), were closed funds.

Between 1993 and 2000, the number of fund-management institutions, as well as that of funds, remained relatively stable. The great majority of the pension funds continue to be managed by specialist pension fund managers.

Other phenomena to take into consideration are the increase in the number of PPR funds and in the number of open funds.

The total value of the pension funds

Between 1993 and 2000, the value of all pension funds rose from €3,936,967,000 to €13,766,550,000, most of which was under the control of specialist fund managers (see Table 1).

PPR funds and open funds totalled €436,450,000 and €173,833,000 respectively — substantially smaller figures than those observed for the closed pension funds, although growth was

registered throughout the period. The PPA funds had a very small weight in the market in that period.

Participants and beneficiaries

With regard to the participants and beneficiaries, and taking into consideration the relative immaturity of the funds, the beneficiaries only account for slightly more than one-quarter of the participants.

The number of participants remained relatively constant, whereas that of the beneficiaries of the closed funds showed a slight upward trend, which is compatible with the stabilisation of the number of funds set up during the period. Here, the proportion of the beneficiaries among the participants is found to be higher than 50 per cent by 2000.

Contributions and pensions paid out

The average growth rate of contributions between 1995 and 2000 was negative, in the order of 5 per cent, the decrease being sharper among the insurance companies (see Table 2).

If the analysis is restricted to only the closed funds, contributions to these funds registered an annual average decrease of 6 per cent. In contrast, the amount of contributions to PPA funds grew by an annual average of approximately 31 per cent. The average per annum growth in contributions to PPR funds, as well as to open funds excluding PPRs and PPAs, was equally significant.

With reference to pensions paid out, an increase of 157 per cent was recorded during the period 1993–96. Among the various types of pension, the proportion for old age is dominant, closely followed by incapacity, then early retirement.

The year-on-year increasing of total of pension payments made by closed funds between 1995 and 2000 is noteworthy, the average annual increase being

Table 1: Amounts in pension funds by fund-management institution

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total amounts in pension funds	83,878	267,984	538,841	845,083	1,449,626	2,256,537	3,936,967	4,923,749	6,906,406	8,231,896	10,060,399	11,577,827	12,911,158	13,766,550
Amount managed by insurance companies (%)	69,587	122,500	184,361	256,507	405,049	266,193	392,629	478,252	489,271	280,075	368,562	385,685	517,099	532,210
	83	46	34	30	28	12	10	10	7	3	4	3	4	4
Amount managed by specialist fund managers (%)	14,291	145,484	354,481	588,577	1,044,578	1,990,343	3,544,338	4,445,496	6,417,135	7,951,821	9,691,838	11,192,137	12,394,057	13,234,340
	17	54	66	70	72	88	90	90	93	97	96	97	96	96

Unit: thousands of euros

Source: Boletins de Fundos de Pensões, 1988–2000, ISP

Table 2: Contribution inflows by type of fund

	1994	1995	1996	1997	1998	1999	2000	agr (95–00)
Total contributions	955,033	1,797,638	1,161,017	1,081,045	1,136,800	1,189,926	1,364,479	–5%
Closed %	911,518 95%	1,752,142 97%	1,089,759 94%	969,683 90%	1,013,158 89%	1,079,035 91%	1,269,414 93%	–6% –
PPR %	41,420 4%	33,429 2%	59,307 5%	97,824 9%	94,348 8%	73,358 6%	62,718 5%	13% –
PPA %	0 0.0%	619 0.0%	1,267 0.1%	3,222 0.3%	3,701 0.3%	2,082 0.2%	2,368 0.2%	31% –
Open, excluding PPR and PPA %	2,095 0.2%	11,447 0.6%	10,684 0.9%	10,315 1.0%	25,593 2.3%	35,451 3.0%	29,979 2.2%	21% –

Unit: thousands of euros

Source: Boletins de Fundos de Pensões, 1995–2000, ISP

approximately 19 per cent. Once more, the greatest proportion is accounted for by old-age pensions, followed by incapacity, then early retirement. In closed funds alone, the proportion of the total pension payments, as well as of single premiums, in the total of the pension funds is in the region of 5–6 per cent.

Characterisation of the funds, according to scales of amounts under management

About 50 per cent of the pension funds contained managed funds lower than €2.5m although this percentage tended to decrease. Nevertheless, in terms of the global total, this does not represent more than 1 per cent of the total of funds under management.

Characterisation of the funds, according to the number of members

The phenomenon of concentration is equally visible in the distribution of pension funds by members. In the period 1995–2000, approximately three-quarters of the funds had only one member, yet this corresponds to more than three-quarters of the global total of funds under management and 25 per cent of the global number of members.

Characterisation of the funds according to the number of participants

The biased structure is maintained, although less pronounced, in the distribution of pension funds according to the number of participants. In concrete terms, 50 per cent of the funds have up to 250 participants, indicating that they are of a small dimension. However, when this distribution is considered taking into account the global total, we find that the first three classes represent a much smaller proportion, in terms of amounts under management. The same picture emerges from the analysis when we consider the distribution with reference to the global number of participants.

This phenomenon of concentration is similar to that observed in the USA and the UK, where the pension plan system is prevalent among large companies, or in companies in which trade unions have a strong representation.

Characterisation of the funds according to sector of activity

Another important aspect to take into account is the distribution of members of closed and open pension funds by sector of activity. The majority of members are

found to belong to the financial sector (approximately 50 per cent), while 25 per cent are engaged in manufacturing industries. If this reflects the same historic proportion, it provides evidence of the weak role played by the current social security system in offering stimulation to set up pension funds, given the particularly high net substitution rate of approximately 80 per cent. This is in marked contrast with what happens in other countries in which pension funds have been granted a margin to encourage their growth.

Characterisation of the pension funds according to type of pension plan

In the Portuguese pension fund market, the dominance of DBPs is still in evidence, despite their declining trend, with a total representation of 77 per cent in 2000.

A bisection of the DBPs into plans that are complementary to the social security scheme and those that are independent of the public system reveals that the pension funds were divided almost equally between the two types in 1995 and 1996, but the independent ones registered an increasing trend. In relation to complementary plans, the proportion of integrated is about four times greater than that of the non-integrated type.

The number of funds that finance contributory plans is small.¹⁵ This is also the case with regard to open funds which include PPRs and PPAs, although we observe that the proportion of the latter remained stable during the period analysed.

In terms of amounts under management, the non-integrated funds have even less significance, due to the fact that the average contribution from employing companies to this type of plan is relatively small. The majority of the participants hold DBPs and within these,

the proportion of independent plans is always higher than that of the complementary plans.

This section of our analysis leads to the conclusion that there remains ample scope for an expanded presence in the provision of retirement income.

Investments

As in other countries, pension funds in Portugal have assumed a powerful position as one of the major sources of institutional investment and as protagonists of the process of long-term capital formation, in view of the time-lag before the liquidation of future pensions.¹⁶ Indeed, the composition of their asset portfolios reflects this fact, in spite of the obligation to abide by the rules on portfolio composition stipulated by the law.

In 2000, pension fund assets amounted to €13,766,453,000, signifying an increase in the region of 15 per cent in relation to the total invested in 1995. Assets held in Portuguese currency experienced a substantially smaller increase, compared to that observed for foreign currency assets. The average annual rates of growth were 14 per cent and 37 per cent, respectively. In 2000, assets held in foreign currencies represented 9 per cent of the total of pension fund assets.

Within the assets held in Portuguese currency, there is no doubt that investment fund participation units, together with shares/participated securities were the components which registered truly notable growth. This should not seem strange, in the light of the adjustments of ceilings in the investment portfolio of every fund, in addition to the rules on prudent diversification to keep in line with the macro-economic context.

The pension funds' asset portfolio composition reflects the above-mentioned

ceilings and rules. Within the assets held in Portuguese currency, government securities accounted for the largest proportion, although this preponderance was steadily diminishing.

It is valid to conclude that the aspects that stand out, with regard to the pension funds' asset portfolio compositions, are the large proportions held in shares and in foreign currency assets.¹⁷

The reinforcement of investment in the capital markets, in shares and bonds, has determined that the pension funds are, increasingly, major institutional investors, helping drive the direct financing of the economy. Their investments accounted for about 6 per cent of the stock capitalisation of the Lisbon Stock Exchange (BVL), until 1998, and Euronext Lisbon, since 1999.

Pension funds' rates of return

Evaluation of the performance of the pension funds entails the analysis of their rates of return. However, such information is not divulged by the pension funds and is not in the public domain. The sole source of information of such a nature is the PIPS Survey¹⁸ of William Mercer which endeavours to compare pension funds' performance with the market.

The median rate of return in 2000 was 1.2 per cent, signifying a decline of 92 per cent in relation to 1997. The distribution of the rate of return presented a higher concentration than that observed in 1997, suffering a significant dislocation to the left, to the extent that the minimum rate of return registered in 2000 was negative, at -4.8 per cent.

The median annualised rate of return registered over a five-year period was 8.7 per cent, which is a decline of 31 per cent relative to the comparable figure in 1997.

Considering the real median rate of return, the decrease was even steeper between 1997 and 2000, that is, -112 per cent, falling from 12.2 per cent to -1.5 per cent.

In comparative terms, in 2000, the Portuguese State's Social Security Trust Fund (FEFSS), which is managed by the IGFCSS,^{19,20} achieved an effective rate of return of 4.11 per cent, net of taxes and costs, a figure well above that obtained by three-quarters of the private pension funds (with a real rate of return lower than -0.6 per cent). It is worth mentioning that the Trust Fund's return was achieved with only a minimum exposure to shares. Despite the fact that one single year is insufficient to draw meaningful conclusions, the unsatisfactory performance of the pension funds should be borne in mind. Unfortunately, even when longer periods are considered, the comparisons are not often favourable to the private pension funds. Possibly, such factors as market timing, excessive portfolio-rotation, problems arising with intermediaries and regulatory difficulties could help to explain the above-mentioned result, as has been put forward in other markets (see, for example, Davis).²¹

Complementary retirement pension schemes and the single market

So far, there is no truly Community-wide legal framework governing complementary schemes, and in particular, the occupational, second-pillar schemes of all the EU member states. This has led the EU Commission, within the scope of its functions, to propose 'reforms which would enable such schemes to benefit from the freedoms of the Single Market and from the new prospects made possible by the advent of the euro, with

the goal of reinforcing their security and efficiency, in addition to their participation in the development of the European capital markets'.²²

While there may have been a weakening at the start of the 1990s of the resistance on the part both of the then-European Community and of the member states' national authorities to initiate community-wide legislation in the area of retirement provision (evidence of which was both the decision to eliminate remaining barriers to the free movement of goods, services, labour and capital throughout the EC by the end of 1992 and the decision to proceed to a full monetary union by the end of the decade), it is clear that the elimination of obstacles with regard to the movement of labour and capital has still to be fully achieved. For this to happen, the process of elimination will need to be accompanied by a number of relevant, systemic amendments.²³

In fact, retirement provision is one area which can create obstacles to free movement throughout the EU. Limitations could exist at various levels, for example in the:

- right of transfer of pension rights between companies and between countries;
- right of pensioners to receive their benefits in their country of residence, regardless of where such rights were acquired;
- currency denominated in pension contracts;
- investment and structure of the pension funds' and insurance companies' portfolios.

Furthermore, fiscal incentives or disincentives might exist which could influence the choices of individuals, companies and pension funds in relation to the denomination, nature and

transferability of pension schemes.

With regard to the question of the pension funds' freedom of action in their management of assets, a draft directive addressing the issue, in addition to the investment of the funds of institutions dedicated to the delivery of pension plan promises,²⁴ was put forward for discussion by the Commission in October 1991. In specific relation to pension rights transfers, work started on drawing up a draft directive, also towards the end of 1991. However, tax regulations, accounting procedures, pension rights acquisition and the structuring of the transfer of these rights from one company to another all continued to impose obstructions to the movement of labour, both within and between member states.²² Consequently, labour and capital both continue to find themselves the prisoners of local or national occupational pension schemes.²⁵

In reality, even the above-mentioned attempt by the Commission to achieve the completion of an internal market in the domain of pension funds did not meet with success and was withdrawn in late-1994, being substituted by a communication.²⁶ At least by this means, the discussion of the earlier draft was maintained, although in altered form.²⁷

The Commission's communication of December 1994 terminated by drawing the same conclusions as those reached by the work on the withdrawn draft directive, but with alterations necessitated by the fact that it was now merely a communication and, therefore, a unilateral rather than a negotiated document.

More recently, in the Framework for Action in the field of Financial Services, unveiled by the Commission on 28th October, 1998,²⁸ the notion of proposing reforms that would permit complementary schemes to benefit from

the freedoms of the Single Market and the introduction of the euro once again received a boost.

As is stated in the communication, 'Towards a Single Market for Complementary Retirement Pension Schemes',²⁹ published in May 1999: 'the rules governing investment should not place unnecessary obstacles before pension funds' investment strategies, which any fund manager authorised by the EU should be free to pursue in managing assets'. On the other hand, 'complementary pension-scheme service providers should be free to offer their services in all member states'. Moreover, 'protection of beneficiaries must continue to be the corner-stone of the regulation and control of retirement-pension institutions, so that all of the measures envisaged serve to assure future retirees that they will indeed receive their pensions, in accordance with the stipulations'. This communication presents all of the findings which were the outcome of the consultation process of the Green Paper enquiring into complementary retirement pension schemes in the Single Market, which had been set up by the Commission in June 1997.³⁰ Within this context, and despite differences of opinion,³¹ it was possible to draw up a 'wide-ranging accord on the necessity to initiate the process to establish a communitarian framework'. The accord is based on the following three principles:

- the prudential regulation of pension funds;
- the elimination of all obstacles to occupational mobility; and
- the coordination of the schemes of the member states.

In 2000, the Commission presented a directive on institutions for occupational retirement provision which aimed to

create a prudential framework to ensure a high level of protection for the rights of future pensioners, as well as ensuring that institutions enjoyed sufficient freedom to develop an effective investment policy. This initiative received the political agreement of the Council in 2002.

Risks to pension funds

It is fundamental to elaborate on the types of risks which may be confronted by a pension fund, in view of the immense influence which pensions bring to bear on the lives of individuals.

Although similar in nature, the repercussions of the risks for participants and beneficiaries depend on the particular scheme or plan concerned. In terms of the distribution of risks among the members and the fund's promoting company, when the latter exists,³² DBPs and DCPs differ entirely from each other.

Investment risk

Pension funds are confronted by various types of risk. One of the most important is made up of the financial risks which collectively constitute investment risk. This stems from the behaviour of a given market sector, asset or investment strategy over time.

Investment risk is customarily defined in terms of the volatility of the asset's value and/or the volatility of the returns. Due to the fact that this volatility has specific, associated causes, the risks of interest rates, exchange rates, concentration and inflation can be identified in a disaggregated form.³³

Interest rates lead to two different forms of investment risk (or to be specific, of interest rate risk: one form is associated with price volatility arising solely from interest rate variations; the

other concerns the risk of reinvestment, which is attached to the volatility of the return, based on the reinvestment of the financial flows generated by a determined asset).

Exchange rate risks arise when an investor holds assets expressed in foreign currency. Variations in the value of this currency in relation to the investor's currency will affect the return on the investment, hence the exchange rate risk. To the extent to which overseas investments are increasingly made by pension fund managers, it would be wise to take this inherent risk into account.

Concentration risk arises in the case of excessive exposure to a particular asset, sector, type of asset or macro-economic factor. Modern investment theory, of course, suggests that this should not constitute a problem, since rigorous attention to diversification, as recommended, should eliminate all such exposure. However, pension funds cannot be totally immune from such a risk. Among the factors which might contribute, the following can be highlighted:

- excessive exposure of the fund to the member company (due to over-confidence in its contributions) to the detriment of the returns generated by the investments;
- excessive exposure of the fund to the member company when a DCP that is directly linked to the latter invests in the member-company's shares, or in assets used by the member company in its operations;
- excessive exposure to the local economy by means of investments which constitute economic objectives; and
- an absence of monitoring of the mix of effective assets in the full portfolio, or non-international exposure to

economic factors resulting from complex or sophisticated investment strategies or vehicles which are not well-understood.³⁴

The risk of inflation occurs from variations in expectations as far as inflation is concerned. A number of different problems can affect DBP and DCP funds as a result. With regard to DBPs two particular difficulties can be distinguished: first, unanticipated variations in the nominal interest rates, with repercussions on the value of the majority of the funds' financial and real assets, as well as their liabilities; secondly, variations in salaries in response to inflation, bringing effects to the dimensions of the funds' liabilities, to which plans based on end-of-career salaries are bound.³⁵ Such a situation creates pressures to raise the contributions and/or improve the performance of the investments. With regard to DCPs, the imposition of inflation is felt fundamentally through the potential erosion of purchasing power brought to bear on the beneficiaries' collection of assets. As with DBPs, this situation suggests that it is necessary either to increase the contributions, or to achieve improved investment performance to compensate for the effects of inflation.

Surplus risk

Those responsible for managing funds should be concerned over the risk caused by exposure to any factors which provoke variations in their surpluses over the duration; this is termed surplus risk. Pension funds must deal with crossed exposures originating in the interaction between, on one hand, the risks faced by the member company (which affect the company's capacity to finance the fund) and on the other, the risks to which pension funds are subject (which affect

the extent to which the fund places trust in the company's financial footing); this is known as company/plan risk.

Surplus risk is a phenomenon which affects DBP funds. Since the latter are financial organisations, they are sensitive to the interaction between the assets and the liabilities, that is, if the liabilities increase more rapidly than the assets, then the surplus (or the deficit) will decrease (or increase). To be precise, surplus risk arises from disproportionate variations in the relative values of assets and liabilities. Two factors determine this risk's behaviour. The first is the relative sensitivities of the assets and liabilities to the interest rates, while the second is the market risk of the assets. The management of the volatility of the surpluses and projected surpluses is a vital element of the decision-taking process.³⁶ It is possible that pension funds with large surpluses run greater risks to obtain higher returns. Funds with deficits could consider it too great a risk to adopt strategies aiming for high returns. In effect, they might not be capable of supporting the risk of short-term adverse consequences which would only aggravate the existing deficit.

Company plan risk

The joint-company plan or company fund risk results from the interaction to which the pension plan is exposed between the company and the plan/fund. The member company, besides contributing to the fund's series of assets, plays a fundamental role in determining the future benefits, as well as in other characteristics of the plan which have an effect on the plan's financial health. Simultaneously, the fund's investment performance has an impact on contribution requirements. This signifies that the correlation between the company's cash-flow and the set of

pension-plan assets is of importance to the financial well-being of the latter.

If the correlation is positive, which is to say, if the fund's assets and the profits of the member company are sensitive to the same economic factors, then an advantageous environment for the plan's investment performance represents an equally favourable situation for the company, as consequently, it is not required to make large contributions. However, if the plans requires the company to increase its contributions to compensate for a weak investment performance, it would be obvious that the company had also registered a weak performance and may well be incapable of responding to the requirement.

Other risks

There are those who consider that a risk factor also exists in the form of the incomprehension and/or the lack of awareness of investment theory and technology, which is termed ignorance risk.³⁷ Yet another type of risk, which is not negligible, is political risk. Originating in the problems stemming from the principal-agent question, as well as in conflicts of interest, both of which occur in any complex organisation, political risk can, assume a variety of forms; it may:

- result from the pressure to make investments with economic objectives;
- take the form of salary rises for civil servants which do not appear on the balance-sheet and which overload the plan's assets; find a form in the juggling of accounting figures;
- arise from undue influences in the process of selecting a fund-manager;
- arise from the investment restrictions, particularly those involving lists of securities in which the plan is permitted to invest;

— also take the form of excessive pressure to increase investment returns to reduce the member company's contributions.

The management of this type of risk is no simple matter, although education, the dissemination of all available information and thorough monitoring can all play important roles in alleviating the risk.

Risk management only makes sense if all of the exposures to risk are identified and quantified. Risk exposure evaluations can be carried out by means of various instruments, such as audits, value-at-risk (VAR) and stress testing.³⁴

The control of risks depends to a large degree on the investment strategies adopted by the pension funds, which depend, in turn, on various factors, namely, the extent of the integration of the pension plan's management with that of the sponsoring company and on the pension plan's liabilities and on the risk-return binomial.

The experience in other countries in which pension funds have a significant presence lends evidence that, besides the question of the risks with which they must contend, the effects of the pension funds on the capital markets must also be considered.^{21,38} The effects go beyond the question related to the search for securities, touching on such other aspects as the stimulus to financial innovation, the influence on market structure, the development of the markets themselves and the effects on long-term saving. There are even those who identify palpably ominous effects in the difficulties experienced by the banking sector, in the increasing volatility and in the excess of transactions.³⁹ The influence of these effects on the management of companies in which investments are made is also notorious.

When the value of the pension funds'

effective performance is observed, the results cannot honestly be described as satisfactory, that is to say, the performance of the private funds has not been comparatively better than that of their public counterparts, or even that of other funds or benchmarks. The blame for under-performance has been apportioned to causes such as market timing, the excessive rotation of the portfolio and even problems to do with the principal-agent relationship and regulation.

Conclusion

An exhaustive examination of the characteristics of the pension funds in Portugal permits us to draw several conclusions.

First, it is evident that throughout their existence, legislative activity has been substantial, not only in terms of the establishment of individual savings schemes, combined with private company schemes to complement social security as initially intended, but also of the progressive adaptation and adjustment of the legislation to the needs of pension fund management and to the economic environment. This is very frequently reflected in amendments of the standing rules governing the composition of pension fund investment portfolios.

The evolution of pension funds in Portugal has proceeded on the basis of such determining factors as the less favourable situation of the public social security system and reduced levels of personal saving, which have been associated for several decades with the existence of private savings plans, as well as with the substantially favourable fiscal treatment afforded to contributions made by companies.

With regard to the fund management institutions, specialist pension fund management companies predominate in

the market over life insurance companies. Analysis of the pension funds by type reveals that more than 75 per cent are closed funds. More than half of all pension funds are managed by specialist fund managers, the great majority of these being closed funds. The number of beneficiaries corresponds to approximately 25 per cent of the total number of participants registered in the pension funds taken as a whole, and to almost 50 per cent of the closed-fund participants. This reflects the relative immaturity of the funds.

Between 1995 and 1998, the total of contributions decreased at an average rate of 14 per cent per year, owing to a sharp fall in contributions to closed funds. This was partly offset by the substantial rise during the same period in contributions to PPR and PPA funds, as well as to open funds excluding PPRs and PPAs.

The amount paid out for pensions increased significantly, with old-age pensions accounting for the largest proportion of this increase.

More than half of the pension funds managed amounts not exceeding €2.5m, which, when considered globally, constitutes only 1 per cent of the total amount under management. This reveals the extent to which there was an overwhelming concentration of that total amount in a very small number of funds. The phenomenon of concentration is also evident when the distribution of closed pension funds is analysed by number of members. Approximately three-quarters of the funds had only one member, which corresponds to more than three-quarters of the global total amount of funds under management.

In terms of the number of participants, the distribution of the pension funds continued to reveal some bias, given that half of the funds comprised up to 250 participants, which corresponds to a

minute percentage (approximately 1 per cent) of the amount under management.

The majority of the members come from the financial sector or are in the manufacturing industries.

DBPs are clearly the more common form of pension plan.⁴⁰ Only about one-half of them were complementary to social security, which signifies that much remains to be done before the pension funds fully perform their intended second-pillar role. The potential for integration should be realised. The funds' third-pillar role could also be reinforced, as long as the proportion of PPR and PPA funds is correspondingly reduced.

Analysis of the structure of the pension funds' assets shows that approximately 50 per cent of the latter were composed of government securities and bonds/commercial paper, although a noteworthy growth can be observed in participation units, as well as of shares/participated securities. This development is consistent with the possibilities created by the legislative amendments.⁴¹ In addition, it provides an explanation for the decreased median rates of return on these investments.

The pension funds have now established themselves as powerful institutional investors.

With regard to the EU, there is still a long way to go before an internal pension fund market is finally established.

References

- 1 Cf. COM(97)283, Supplementary Pensions in the Single Market — A Green Paper, European Commission.
- 2 The triple-pillar theory, originating in Switzerland, shares out welfare and complementary responsibilities among the functions of the state, the enterprise and the private individual for obtaining a substitution income to cover retirement. The theory characterises the majority of the social security systems of the industrialised countries, although most of them display a great bias in favour of one of the three pillars, which is usually the state pillar. Effectively, besides the latter, other pillars exist, in a less

- substantial form, which are the so-called second and third pillars, which correspond to the action taken by companies and the voluntary efforts of private individuals, respectively. Recently, a fourth pillar has been conjectured, which relates to the optional reabsorption of members of the retired population into the labour market. This would contribute to alleviating the financial burden.
- 3 Cf., for example, the World Bank Policy Research Report (1994) 'Averting the Old Age Crisis, Policies to Protect the Old and Promote Growth', Oxford University Press, Oxford.
 - 4 Law No. 17/2000, 8th August.
 - 5 Specifically the possible obligation to consecrate acquired rights into these pension plans.
 - 6 For which it will be necessary to consider a definition of the concept of qualified pension plans.
 - 7 Open funds can be constituted on the initiative of any institution authorised to manage pension funds. The global net value of the fund is divided into whole or partial participation units, which can be represented by certificates.
 - 8 Cf. Article 11, Chapter III of Decree-Law No. 475/99.
 - 9 As has been highlighted by various studies, at the root of these difficulties is the decline in the conditions of equilibrium which are necessary for the logic of PAYG on which the Portuguese social security system is based, above all, linked to demographic and economic factors.
 - 10 The relationship between social security and savings has been amply discussed (Cf. Garcia, M. T. M. (2001) 'Reforma e Fundos de Pensões — Comportamento de Investimento e Gestão do Risco das Sociedades Gestoras de Fundos de Penões', PhD thesis, ISEG/UTL, September).
 - 11 Associated above all with large commercial/industrial groups from before the Portuguese Revolution of 1974. The plans were integrated into the strategy to retain executives as virtual captives. In addition, most of the pension funds are found in the banking sector and they finance plans which are independent of the social security system.
 - 12 They are entitled to present double the amount of their contributions as tax-deductible expenses.
 - 13 Thus, it is easy to understand why there has been such a dramatic rise in the number of fund management institutions, not only insurers, but also — and essentially — pension-fund managers. The years 1987 and 1988, as can be observed, highlight this growth.
 - 14 They were effectively created as alternative savings investment instruments to the traditional bank term deposit account.
 - 15 This explains why the information provided to participants and beneficiaries is so scant, as was revealed in the responses to a questionnaire distributed to the Association of Pension Fund Managers (AEGFP) (Cf. Garcia ref. 10 above).
 - 16 This was also one of the objectives behind the creation of conditions for their expansion and development.
 - 17 The former are viewed as an important component, both as an appropriate instrument with which to guard against inflation and as a source of growth in the fund's value, while the latter enjoy advantages of diversification of systematic risk.
 - 18 Pension Investment Performance Service.
 - 19 Instituto de Gestão de Fundos de Capitalização da Segurança Social.
 - 20 Silva, C. M. P. (2001) 'A Questão das Pensões: Capitalização, Gestão Pública e Gestão Privada', in Seminar of the Department of Management, ISEG.
 - 21 Davis, E. P. (1995) 'Pension Funds, Retirement-Income Security and Capital Markets: An International Perspective', Clarendon Press, Oxford.
 - 22 Commission of the European Community (1999) 'Towards a Single Market for Complementary Retirement Pension Schemes, Findings of the consultation on the Green Paper: "Complementary Retirement Pension Schemes in the Single Market"', Communication of the Commission, COM (1999) 134 final.
 - 23 Cf. Mortensen, J. (1992) 'The Future of Pensions in the European Community', Brasseys, UK.
 - 24 See Commission of the European Communities (1991) 'Proposal for a Council Directive relating to the Freedom of Management and Investment of Funds held by Institutions for Retirement Provision', presented by the Commission, COM 301 final — SYN 363 Brussels, 12th November, or Mortensen, *Ibid.*
 - 25 These and other issues were discussed at the conference held by the CEPS (Centre for European Policy Studies) under the title: 'Planning for Retirement in Europe'. In fact, according to Mortensen (1991), the conference constituted a unique opportunity for a thorough, wide-ranging review of the implications for retirement provisions of ageing populations, the liberalisation of the movement of capital and the burgeoning monetary liberalisation taking place in the then-EC.
 - 26 (94/C 360/08.)
 - 27 COM (93) 237 final — SYN 36.
 - 28 COM (1998) 625.
 - 29 COM (1999) 134 final.
 - 30 COM (1997) 283.
 - 31 For example, in relation to the rules governing investment.
 - 32 In the case of personal pension plans, promoting companies are not involved, only fund-managing organisations.
 - 33 Merely to mention the most common.
 - 34 Cf. Logue, D. E. and Rader, J. S. (1998) 'Managing Pension Plans A Comprehensive Guide to Improving Plan Performance', Harvard Business School Press, Cambridge, MA, ch. 9.
 - 35 For example, if salaries rise due to a rise in inflation, the dimension of the liabilities in pensions based on end-of-career salaries will also increase, everything else remaining constant, even if the pension benefits are fixed after the retirement commences.
 - 36 Ezra, D. D. (1991) 'Asset Allocation by Surplus

- Optimisation', *Financial Analysts Journal*, January–February, pp. 51–57, analyses the allocation of assets resulting from the optimisation of the surplus. See also Ambachtsheer, K. P. and Ezra, D. D. (1998) 'Pension Fund Excellence — Creating Value for Stakeholders', Wiley Frontiers in Finance, Wiley, Chichester.
- 37 Ignorance risk includes the lack of knowledge as to how derivatives contracts and investment strategies function. The best way to reduce this type of risk is to raise awareness and train well those responsible for fund management.
- 38 Blake, D. (1992) 'Modelling Pension Fund Investment Behaviour', Routledge, London. Blake, D. (1995) 'Pension Schemes and Pension Funds in the United Kingdom', Clarendon Press, Oxford.
- 39 Also known as short-termism, or churning. The latter is the procedure resulting from the excessive trading of assets in the portfolio in an attempt to generate increased short-term performance. The problem is that this implies substantial transaction costs, which reduces the fund's net return to below the amount which would have been gained if the transactions had not taken place. Moreover, the practice causes excessive volatility in share prices.
- 40 This is also the case in those countries in which pension funds have a more prominent presence, in spite of the downward trend (Cf. Garcia, ref. 10 above).
- 41 In addition, consistent with the theoretical outcome of the asset allocation decision (Cf. Garcia, ref. 10 above).