The Slow Growth and Sudden Demise of Supplementary Pension Provision in Cyprus

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Abstract

The Cyprus public pension scheme is widely known and commented upon. Less well known is the system of supplementary retirement provision in Cyprus. Since the second world war, however, a relative complex system was built up on the basis of provident funds and occupational pension schemes. As well as being complex, the system was inequitable – public sector employees were considerably better provided for than private sector employees, and some 40 per cent of employees had no supplementary pension or provident fund coverage at all. The financial and economic crisis, which hit Cyprus hard, had particularly dramatic consequences for the various supplementary schemes. Those for employees in the public sector were abolished completely, at least for new entrants. Provident funds and those pension schemes that were funded were victims of the "haircut", since a substantial proportion of their resources were held as deposits with the banks. Whether a system of supplementary provision will be rebuilt and, if so, how it might look, is an open question.

Keywords: pensions, provident finds, crisis, troika, Cyprus

1. Introduction

At least since the publication by the World Bank of its Averting the Old Age Crisis, academics, policymakers and pension practitioners have

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discussed the merits and demerits of reforming retirement benefit systems in ways that would reduce the extent to which they are financed by the state and place greater emphasis on the purchase of annuities out of investment funds to which individuals and their employers have contributed. Attempts to curtail the growth of public expenditure have led to the promotion or expansion of supplementary pension schemes and the tightening of generosity of public, pay-as-you-go schemes.

Cyprus was one of the European countries that were less exposed to such reform pressures. There were three reasons for this. First, it reached modernity as a welfare state at a relatively late stage. Whilst many European countries had built up systems of social protection throughout the twentieth century as their economies became more industrialised and richer, Cyprus was both poorer and more dependent upon selfemployment and employment in micro enterprises. The importance of agriculture, itself, explained much of this (see Clucas, 1952; Yiallouros, 1979). It was not until the start of the 1980s that the current, earningsrelated public pension scheme was put in place, and it required 40 years to reach maturity. Second, by the time economic growth was slowing in most European countries, in Cyprus it was proceeding rapidly. A welfare state was becoming affordable and the expansion of publicly financed social protection schemes was considered a symbol of progress. Thanks to the development of public pension schemes, old people had been helped out of poverty in many European countries. Old-age poverty was still a problem in Cyprus, and the response of many political actors was to make improvements to the existing public pension system in an attempt to reduce its incidence. Third, recognition of the challenges of population ageing came rather late to Cyprus. For geographic and political reasons, the country remained outside the European mainstream. It was not subject to the same impetus to examine the long-term financial implications of demographic change as many other countries that were to its north and west. Indeed, it was not until the late 1990s that concerns started to be expressed about demographic developments, and even then the preoccupation was with maintaining the growth of the labour force rather than with countering a deterioration of the age dependency rate (EC, 2003). It was only once the country was preparing to join the European Union that it came under external pressure to examine its long-term fiscal prospects and the factors that helped determine them.

This paper examines the development of supplementary pension provision in Cyprus. In so far as the authors are aware, it constitutes the first

comprehensive study of the subject carried out to date.¹ Four sections follow. Section two takes an historical perspective. It describes the origins of supplementary pension provision, looking back as far as the time when the UK took over government responsibility for the island, taking account of schemes established in the aftermath of the second world war, and illustrating the substantial growth of provident funds and of pension schemes in the later 1960s. It presents a summary of the coverage of the labour force that had been achieved by the start of the current millennium. Section three focuses on the performance of pension schemes and provident funds over the past decade and a half. It discusses the nature of the benefits the various schemes grant, before concentrating on the way in which assets are invested and the impact this has on the investment returns achieved. Particular attention is paid to the extent to which, when a defined benefit was promised, schemes were funded or provisioned sufficiently to meet their obligations. Section four brings the analysis up to date by showing the impact of the financial crisis on supplementary pension provision. It lists the cutbacks made by governments seeking to achieve fiscal consolidation but also demonstrates the profound, and not necessarily intended, consequences of the Eurozone rescue plan of spring 2013 on pension schemes and provident funds. The last section draws some conclusions and poses some questions about a possible way forward.

2. The development of supplementary pension provision

A public, pay-as-you go pension scheme had been established first in 1957. It was, to a considerable extent, modelled on that of the UK, which was still Cyprus's colonial master, and provided a flat rate benefit.² Initially, it covered only dependent employees, but in 1964 it was extended to the self-employed. A major expansion of the public pension – part of what was by now called the General Social Insurance System (GSIS) – occurred in 1980, when an earnings-related component was added. On maturity, the public pension would provide a net replacement rate of about two thirds for a person on average earnings and with a full contribution record.³

¹ For a complete overview of the development of social insurance in Cyprus, see Yiallouros, 2007).

² This was subject to a full contribution record. For those who did not complete that, the benefit was reduced pro rata. Credit was given for time spent in education and training, military service and for spells of unemployment, sickness, injury or disability.

³ This means the mature GSIS would deliver benefits about equal to the median of pensions in the EC member states, whether these were mono-pillar or two pillar (see ISG, 2009). Of course, these projections do not take account of pension reforms made either in Cyprus or elsewhere in subsequent years. For an overview of some of these reforms, see Casey, 2012.

2.1 The public sector

The only group to enjoy a different treatment were non-manual, central government, public servants and members of the civilian, uniformed services. Initially, it was only judges and colonial civil servants who were covered by a retirement -pension scheme. This scheme was gradually opened to locally recruited civil servants earning above a designated level. In 1945 a scheme was set up for the remainder of the permanent whitecollar labour force. As in the other UK colonies, the latter scheme took the form of a provident fund that paid out a lump-sum when the contributor left the service, including early exit as a result of illness or death. In 1967, a wholly new civil service pension scheme, the Government Employees Pension Scheme (GEPS), was set up to replace the previous pension scheme and the provident fund. The GEPS was non-contributory, other than for the survivors benefit component, and gave a pension worth two thirds of last salary.⁴ The GEPS retirement age was lower than that of the GSIS - 60 rather than 65, with opportunities to draw an unreduced pension, subject to meeting service conditions, from as early as 55 (or 50 for lower rank members of the police force). The GEPS was an unfunded system, and apart from the member's contribution for survivors benefits, financed from general government revenues

Supplementary pension provision for central government manual ("industrial") workers was first made in 1960, when a provident fund for this group was established (ILO, 1963). In many ways, the fund mirrored that for white-collar civil servants – it was jointly financed by employer and employee contributions and was, effectively, a savings scheme. The value of any member's account was dependent on the performance of the investments the fund made, but, later, a minimum pay-out based on length of service was guaranteed, and for this the employer took responsibility. Members could liquidate their account on the termination of their employment, so not only on retirement, and could take out (interest-bearing) loans to meet certain recognised expenses.

Alongside the central government there exists a plethora of what are termed "broader public sector" (BPS) organisations. The most important of these are the Electricity Authority of Cyprus (EAC), the Cyprus Telecommunications Authority (CyTA), the Cyprus Broadcasting

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⁴ Members of the GEPS are also covered by the GSIS. Until 1980, when the earning-related component of that benefit was introduced, members of the GEPS also contributed to the GSIS and received the flat rate, benefit it paid. Subsequently, the earnings-related part of benefits received from the GSIS has been offset against the GEPS pension, but the employer (the government) pays the employee's earnings-related part of the contribution to GSIS, not the GEPS member.

Corporation (CBC), and the Cyprus Ports Authority (CPA), of which all but the last pre-date independence. Post-independence, many more bodies – now numbering over 60 – were set up covering, inter alia, aspects of agricultural production, of cultural life and also the water and sewerage services. Each of these had its own pension scheme and (sometimes only later) provident fund mainly for blue-collar employees. During the 1980s, there was pressure to bring the benefit provision of BPS organisations into line with that of central government. The pension funds were reestablished on a funded basis; members now paid no contributions except for survivors benefits, and the same retirement ages as in the central government sector were applied. Some, but not all, of the provident funds contained a guaranteed benefit.

At some stage after the second world war, and in some cases possibly even earlier, the six urban municipalities of Cyprus had established their own retirement schemes for white collar workers.⁵ Later, they, too, set up provident funds for their blue-collar staff. The reorganisation of local administration after 1974 resulted in the number of local authorities multiplying dramatically, and each of these has its own, non-contributory, funded pension scheme and/or provident fund. Municipalities are also counted as part of the BPS and, although there was no standard model, the pension and provident funds they operated were broadly similar to those of other organisations in that sector.

2.2 The private sector

With respect to the private sector workforce, supplementary pension coverage was less extensive. Mandatory occupational pension funds were established for the independent professions of lawyers in 1966 and doctors in 1999. The record of provident funds held by the Social Insurance Department of the Ministry of Labour contains one established by a bank as far back as 1922 (Bank of Cyprus) and a number established in the 1940s by other banks then operating in the island. After independence, and a collective agreements with the banking staff union changed terms of the funds so that they would guarantee a minimum pay-out based on length of service, with any costs being met by the employer. In 1993, the bank provident funds were switched into non-contributory pension plans that paid out a defined benefit on retirement, invalidity or death.

Prior to the second world war, there were few private sector companies, other than banks, that employed staff in any number. Pension schemes in

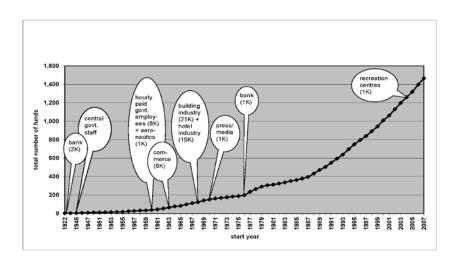
⁵ The history of municipal retirement schemes remains somewhat clouded and the dates of their establishment are difficult to determine.

the mining sector are referred to in historical overviews of social protection, although none appear to be still in existence today. It has been suggested that employers tended to abuse the terms of pension schemes in so far as they sought to terminate employment before rights had been vested. A former union leader wrote "...both pension and gratuity funds were under the absolute control of employers and did not provide a correct and fair coverage to the employees. The labour movement believed that pension funds would serve the interests of employees better than provident funds..... However, the nature and size of enterprises meant that putting pension funds in place and ensuring their continuity was difficultMoreover ... no credible system existed to ensure the solvency and financial sustainability of pension funds and so the uninterrupted payment of benefit (Ioannou, 2002:303).

As the economy modernised and grew, organised labour was reluctant to embrace employer-sponsored pension provision, and favoured instead public provision. It was keen to promote provident funds as an additional benefit. Since these could be established by collective agreement, it could monitor and jointly control them. Following the setting-up of the fund for central government industrial workers in 1960, the number of provident funds started growing. Most, however, did not contain any guaranteed benefit terms. A major breakthrough was achieved in 1968, when a fund for the hotels and tourism industry and a fund for the construction industry were agreed. Although they shared the title "provident" with the schemes that had been established for civil servants, and they functioned in much the same way, the inspiration, at least for the first of the two schemes, was different – the unions and employers were seeking to emulate a structure they had seen operating with success in the hotels industry of the Lebanon (Gialeli, 2011).

No provident fund as large as these two has been created since. Together with the fund for central government industrial workers, they accounted for some 40 per cent of the membership of all provident funds in 2007. The total number of funds, which had reached around 30 by 1960, had grown to 140 by 1970, to nearly 300 by 1980 and to over 1700 by 2010. Nevertheless, of those, fewer than 150 had more than 100 members. Most provident funds are small, and 40 per cent have fewer than ten members.

FIGURE 1 Cumulative number of provident funds (number of members of major funds in 2007



Provident funds in the private sector are all conributory with the employer and employee each putting in, on average, rather over six per cent of wages. Membership is not obligatory – employees in companies or industies where there is a provident fund can chose whether or not to subscribe to it.⁶ Those in uncovered companies or industries that are parties to a collective agreement can chose to join a scheme run by the trade union of which they are member, and if they do, their employer makes appropriate contribution, too.

2.3 The achievement

An attempt to picture supplementary pension coverage at the start of the 2000s revealed the following.

Apart from the self-employed, two groups stood out as without supplementary pension cover. The first was made up of employees in the retail sector – a sector where many outlets are small and family run and the level of unionisation is low. The second was made up of employees in the business and professional services sector – a sector where staff were relatively well paid and expected to make their own provision for old age.

⁶ For example, only about half of employees in the hotels industry are actually members of the industry fund. Seasonal workers in the industry are excluded unless they have already worked for two seasons.

TABLE 1

Coverage of supplementary pension schemes and provident funds—

2003 (000s and %s)

Coverage of the workforce	000s	%s
All contributors to GSIS	310	100
in GEPS	31	10
in BPS (ex. municipalities) occup. schemes (pension and provident		
funds)	8	3
in municipal occup. schemes (pension and provident funds)	3.8	1
in banking sector retirement gratuity schemes (effectively provident		
funds)	7.5	2
in Cyprus Airways occup. schemes (mainly provident funds)	1.6	1
in petroleum sector retirement gratuity scheme	0.5	*
in cent. govt. manual workers provident fund	8	3
other members of a provident fund	92.4	30
employees without any supplementary coverage	124.2	40
in special pension schemes for doctors and lawyers	3	1
self-employed without any supplementary coverage	30	10

Note:* under 0.5%.

Source: authors' assessment based on available records.

3. The performance of the schemes

Although the GEPS and the pension schemes of the BPS are described as defined benefit systems, they all allowed at least part of the benefit to be commutated. In 1990, commutation became obligatory. Members took the equivalent of around five years' worth of pension, thereby, reducing the replacement rate of the annuity to 50 per cent of last earnings. retirement gratuity schemes for bank employees paid out a defined benefit calculated on the basis of salary and service, but paid it out only as a lumpsum. The same applies to the main scheme for Cyprus Airways. This meant they were, effectively, provident funds, with the exception that the banks' schemes were not in fact funded but were constructed on a "book reserve" basis⁷. Both the schemes operated by the banks and the scheme operated by the airline also contained a guaranteed minimum benefit for which the sponsoring employer was liable. The provident fund for government service industrial workers has a similar guaranteed minimum as one of its components.

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⁷ Rather than being backed by a fund containing assets, an estimate of the value of obligations was recorded on the balance sheet of the sponsoring bank as a liability.

The provident funds in the private sector all pay out only lump-sums and never make provision for annuities. This is consistent with their role as severance payment schemes rather than retirement benefit schemes. Only one of the major provident funds – that of the hotels industry – has specifically sought to illustrate what its lump-sum payment could generate as an annuity. According to the fund management, about half of its members aspire to a long-term career in the sector and treat the scheme as one to build up benefits for old age (Gialeli, 2011; hepfund, n. d. Gialeli, 2007)).8

Data from the records of the Social Insurance Department show the way in which retirement is a relatively infrequent reason for which provident fund savings are liquidated. Withdrawals on retirement account for less than a quarter of pay-outs made by provident funds and reach only that level if withdrawals on account of disability are also considered. Nearly three quarters of money withdrawn constitute severance payments.⁹

TABLE 2

Distribution of pay-outs by provident funds - 2007 (%s)

	retirement	invalidity	death	termination of
				employment
Average for all PFs	23 / 21	2 / 2	2/2	73 / 75
Construction industry PF	38 / 29	* / 1	1/1	60 / 68
Hotels industry PF	14 / 6	14 / 16	0 / *	72 / 78
Govt. industrial workers PF	29 / 25	5 / 6	5 / 5	62 / 64

Notes: The first number represents expenditures, the second number represents number of beneficiaries; * under 0.5%.

Source: SID data; own calculations.

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 $^{^8}$ When describing its investment strategy, the fund says "As a pension fund which aims at the payment of significant benefits upon retirement of its members, we consider as paramount concern of the Fund the collection of returns from investments which will exceed the level of the annual inflation by approximately 2-3% , which means that the target return is set at about 6%" (hepfund , n.d, authors' emphasis.) .The CEO, in 2007, wrote "the Provident Funds have the obligation to provide a satisfactory lump sum upon retirement or resignation of the Member from the Fund. The funds must cover together with Social Insurances about the 2/3 of the last salary of the Member" (Gialeli, 2007).

⁹ A difficulty of analysing provident fund performance is that data is made available only many years later than the year to which it refers. Provident funds are required to send statistics to the Social Insurance Department of the Ministry of Labour every year. However, the latest data available refer only to 2009. The authors had special access to data for 2007, and this enabled them to make a more detailed analysis of certain aspects of fund performance. No data is available for years before 1995 other than that contained in special reports (Clucas, 1952; ILO, 1963; Department of Social Insurance, 1978).

Even for the hotels and tourism fund the does not appear to be vastly different. Over 70 per cent of pay-outs are made for severance.

3.1 Asset allocation and investment returns

A remarkable feature of pension and provident funds in Cyprus is their preference to hold their assets in the form of interest-bearing accounts with banks. This tendency is particularly pronounced with respect to provident funds, which have held an average of 60 per cent of their assets in this form. Equities have made up less than 20 per cent of provident funds' portfolios. A third important constituent of provident funds holdings has been loans to members. These have, on average, made up nearly 10 per cent of assets. Of the loans taken out, the major share has gone to finance house purchase, building or renovation.

TABLE 3
Asset allocation of provident funds, 2007 (%s)

	bank deposit s	govt. bonds	equities and corporate bonds	property/rea l-estate	loans to others	loans to member s
Average for all PFs						
Construction industry	23	0	33	40	0	4
PF						
Hotels industry PF	50	3	26	6	2	13
Govt. indust. workers PF	44	21	6	0	0	29

Note:* under 0.5%

Source: SID data; own calculations.

following consultations with the Labour Advisory Board, to lay down "principles and general instructions" with respect to investment by funds, but the ministry at no time took advantage of this entitlement. The only restrictions the law imposed was with respect to investment in the sponsoring employing organization, which was forbidden. Further regulation of funds, and of pension schemes, only occurred when Cyprus incorporated EC Directive 2003/41 into national legislation in 2006. However, the directive was not prescriptive with respect to investment and adopted, rather, the "prudent man" approach. Moreover, it applied only to pension funds, but not to schemes that operated on a book preserve basis, and to provident funds that had more than 100 members. Fewer than 10 per

¹⁰ The 1982 provident fund law contained a provision that allowed the Minister of Finance,

cent of provident funds were covered, even if all the funded pension schemes were. The 2006 legislation was updated in 2012 to bring all provident funds under its scope, although those having fewer than 100 members and assets of less than €4m are treated differently

with regard to investments.

The preference for holding assets in bank deposits applies to pension funds, too, or at least to those in the BPS and state-owned enterprises. The two largest BPS schemes – those of the CyTA and the EAC – held as much as 90 per cent of their assets in bank accounts or as government bonds in 2010.

TABLE 4

Composition of assets of selected BPS pension funds (%)

	СТО	CPA	CSE	CSFA	Gr.Cm	СуВС	СуТА	EAC
	2011	2011	2011	2011	2011	2011	2010	2010
Assests (€m)	47	85	5	2	9	19	583	335
Deposits	77	100	98	100	464	52	76	57
Debentures	6				536	44		6
Govt. bonds							11	19
Corp. bonds	9						3	11
Loans	5							5
Equities						0	4	2
Property/real- estate							6	
Other	2		2					

Notes: CTO = Cy. Tourist Org., CSE = Cy. Stock Exch., CFSA = Cy. State Fair Auth., Gr. Cm = Grain Commission, CPA = Cyprus Ports Authority, CyBC = Cy. Broadcasting Corporation, CyTA = Cy. Telecommunications Authority, EAC = Electricity Authority of Cyprus.

Source: i.e. Muhanna.

The Cyprus Airways provident fund, at least in the last few years, held rather under half of its assets in cash and well over a third in bonds. Only in 2011 did its holding of equities increase from under 10 per cent to nearly twice that level. The book reserve nature of the banks' retirement gratuity schemes meant that they were, to all intents and purposes, self-invested, although the sponsors did hold some of their own shares as part of the provisioning they made. After 2009, both the Bank of Cyprus (BoC) and Cyprus Popular Bank (CPB) switched much of their provision into interest-bearing bank accounts.

TABLE 5

Composition of assets of selected provident funds (%s)

		2011	2010	2009	2008	2007	2006
	bank deposits	44	52	47	35		
Cyprus	shares	19	8	10	8		
Airways	debentures	38	40	40	54		
	other			3	3		
	bank deposits		66	15	11	6	8
	shares		8	55	45	75	73
BoC	debentures		25	28	43	17	17
	other		1	2	1	2	2
	own shares or						
	debentures		6	61	54	74	68
	bank deposits	34	44	14	10	3	
СРВ	shares	60	53	84	88	97	
	debentures	6	4	2	3	1	
	own shares or						
	debentures		42	39	39	27	

Note: Figures refer to end of calendar year.

Source: Annual reports of organisations concerned; own calculations.

The predilection for placing assets in bank savings accounts has two explanations. First, the interest rates that were available were relatively high. This was explained by Cyprus's banks being heavily reliant upon deposits – initially from residents, more recently form outside the country – to finance their lending (IMF, 2009). In addition, the national currency was considered by many to be overvalued and high interest rates were necessary to protect it (Giannellis and Kouretas, 2009). This made any alternative placement relatively unattractive. Even after this, rates were high relative to elsewhere. Last, as major depositors, funds could negotiate attractive interest rates for their placements. (The corollary of the last is that they could also afford to lend to members at rates lower than these member could have achieved had they sought bank loans by themselves.)

10.0 9.0 8.0 7.0 2.0 1.0 0.0 2002 1978 2000 1980 1982 1984 1986 1990 1992 1988 1994 1996 1998

Cyprus

---- Germany

FIGURE 2
Cyprus and German interest rates compared

Source: IMF interest rate statistics.

Second, pension and provident funds had had bad experience with equity investments. At the end of the 1990s, the equity share of portfolios rose as funds were persuaded to invest in a rising domestic stock market. Between 1998 and 1999, the local market index rose almost eight times only to lose two thirds of its value in the next twelve months. Many semigovernment sector pension funds and many provident funds were substantial losers as a result. In addition, in the middle of the 2000s, a major BPS pension scheme – that of the EAC – was defrauded by one of its fund managers who stole more than three per cent of its assets (Cyprus Mail, 2007). This tended to confirm suspicion of any but the most conservative form of investing. Such a stance was criticised by external consultants, who argued that funds could do better if they were more adventurous – one such consultant talked of "EUR 2bln unutilised in Cyprus pension funds" (Financial Mirror, 2007).

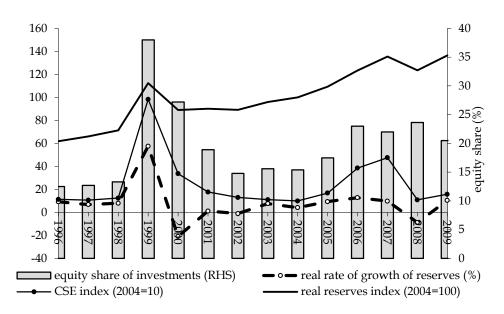


FIGURE 3
Provident fund performance 1997-2009

Source: authors' calculations using SID data and CSE data.

3.2 The problem of underfunding

By virtue of their being defined contribution schemes, the private sector provident funds were always funded to meet their liabilities. The risk of poor investment performance was borne entirely by the members unless the scheme contained a minimum benefit guarantee. Where this was the case, the sponsoring employer had also to take account of additional risks, including that of inflation and, where an annuity was promised, that of longevity. All pension and provident funds that promised certainty with respect to the benefits they had contracted to pay were subject to actuarial evaluation. A regular complaint of the national Audit Office with respect to the municipalities was that these had failed to undertake such a review or that the review that had been undertaken was out of date by many years (Audit Office, 2011). Moreover many of the BPS pension schemes were underfunded. The EAC pension scheme recorded underfunding in the order of 10 per cent or more over most of the last decade. That of the CyBC was underfunded by some forty per cent. At the end of 2010 the funding level of the liabilities of all BPS pension schemes, excluding local authority schemes, was estimated at only 60 percent, and the funding level of local authority schemes as only 23 per cent (ibid; Muhanna, 2011, basic scenario). Cyprus Airways' provident fund has been persistently underfunded, and as the main shareholder of the company, the obligation of meeting pension promises eventually comes back to the government. However, the same applies with respect to the BPS pension schemes, insofar as they, too, are subsidised by central government.

In the private sector, the most egregious under-provisioning was to be found with respect to the retirement gratuity schemes of the major banks. With a brief exception of the middle of the 2000s, the BoC reported provision for between only a half and a third of its liabilities. Only at the end of the decade did the size of the difference decline. The CPB fund was even more deficient. It appears never to have reported making provision for more than fifty per cent of its benefit obligations since the middle of the 2000s. In the later years of the decade, it was making provision for less than 10 per cent of them. Both banks were liable to meet these obligations, but when the banks themselves became insolvent, responsibility was shifted elsewhere – to whoever was responsible for their rescue.

TABLE 6

Assets and underfunding/under-provisioning of selected pension and provident funds

	2011	2010	2009	2008	2007	2006	2005	2004
CyTA	773	763	753	674	708	616		
J	-6%	1%	0%	5%	0%	7%		
EAC	588	580	549	518	501	460	417	394
	-1%	12%	10%	8%	10%	14%	15%	7%
CPA		82	79	76	67		48	
		7%	10%	-9%			30%	
CyBC	93	83	77	72	60	58	69	61
-	29%	38%	41%	43%	53%	53%	45%	48%
Cyprus	37	54	56	52	47	47		70
Airways	9%	4%	3%	11%	19%	19%		5%
BoC		496	444	302	703	591	331	221
		13%	20%	38%	-40%	<i>-</i> 15%	26%	45%
CPB	22	40	57	44	171	143		
	93%	88%	82%	84%	52%	56%		
Alpha	53	48	43	38	33	33	31	
Bank	- 5%	<i>-</i> 15%	-18%	-16%	-21 %	-21 %	-18%	

Note: The first row is assets (€m), the second is the deficit as a % of liabilities. Negative percentages mean a surplus. Figures refer to end of calendar year.

Source: Annual reports of organisations concerned; own calculations.

The GEPS had been calculated as costing the government 2.7 per cent of GDP per annum in 2010 (Simone, 2011). This was approximately half as

much as the GSIS paid out in retirement benefits in the same year. However, as Table 1 showed, GEPS eligible employees constituted only nine per cent of the insured workforce. By 2050, and without any reforms, it was projected that the GEPS would cost nearly five per cent of GDP (ibid; Muhanna, 2011). Because it was unfunded, the GEPS was building up substantial implicit liabilities (nearly €14bn or 80 per cent of GDP, as at end 2010).

4. The impact of the crisis

The sustainability of the Cyprus pension system had been questioned at least since the country had become a member of the European Union. The EC's 2006 Ageing Report labelled the country as one of the member states facing the biggest challenges with respect to pension - projecting an increase in costs of 12.9 percentage points of GDP for the period 2004 to 2050 (EC, 2006). The 2009 Report, although it contained somewhat lower projections, repeated its predecessor's concerns (ibid, 2009). Nevertheless, almost all of the discussion centred on the costs of the GSIS. The country's initial National Strategy Report on Pensions, submitted in 2005, did make reference to the GEPS, to the schemes for the broader public sector and to provident funds, but it was an outlier (Govt. of Cyprus, 2005). Even the study on social protection systems submitted as part of a review of provisions in accession states in 2003 made but the briefest of reference to "occupational schemes" (EC, 2003). It was not until a study by the IMF in 2007 (Hoffmeister et al, 2007) that more explicit reference was made to the cost of the GEPS, and not until 2011 that the Office of the Accountant General commissioned a comprehensive actuarial evaluation of the GEPS and the broader public sector's schemes (Muhanna, 2011.)

4.1 The run-up to the bailout

Steps to reduce the costs of the GSIS had been made in 2009. These included increasing the minimum contribution period and raising contribution rates. As the crisis began to bite and fiscal constraints became more intense, further reforms were made to the GSIS in 2013. The most important of these were the raising of the pension age to 65 (with a reduced pension allowed at 63), the linking of pension age to average life expectancy after 2023, the increasing of the minimum contribution period by 5 years to 15 years, the raising of contribution rates by an additional 1 percentage point and the freezing of benefits at the 2012 level. Reforms were made to the GEPS, too. The Retirement Benefits of State Employees and of Employees of the Broader Public Sector Law of August 2011 raised

the contribution rate for the GEPS from 0.8 per cent to 5.0 per cent and closed it to new members. Equivalent changes were made to the pension schemes for BPS employees (Simone, 2011). Further changes were made in 2012. Starting in 2013, the pensionable age will gradually be raised by two years, pensions for service from this date will be calculated on a careeraverage basis rather than as a fraction of final salary, benefits taken early will be actuarially reduced, and the lump-sum element of the pension will be taxable. In addition, as from 2023, the pension age will be linked to lifeexpectancy. If part of the intention of the reforms was to make pension provision for public and private sector employees rather less unequal, it also had a slightly paradoxical result. New white collar employees in the public and broader public sectors – assuming there were to be any – would now have no supplementary pension coverage; new blue collar employees in these sectors - again subject to the same proviso - would still be able to participate in the relevant provident funds. CyTA established a provident fund for new employees to which it would contribute 10 per cent of salary and the employees five per cent.

It was not only the schemes for the public and broader public sectors that were cut back. The banking sector reached a collective agreement with the bank staff trade union that saw a complete restructuring of the retirement and gratuity plans the banks operated. Henceforth, the level of benefits paid out would depend only on what the contributions made for each individual had earned him of her. Moreover, the schemes ceased to be non-contributory for the employees. The banks, as employers, would put 14 per cent of earnings into the fund, but staff would opt for a contribution between three and 10 per cent themselves.¹¹ The year 2012 saw further intensification of the crisis. Approaches for assistance under Eurozone bailout procedures were made in the middle of that year. By the end of the year, the budgetary situation of the government was so parlous that it was obliged to seek special loans from the reserves of some of the BPS bodies. The donors were the CPA, CyTA and the EAC. Whilst the first of these found monies in its own account, the latter two drew on their pension funds – each contributing €100m. In return, the contributing organisations received three month government debt - three months being the time in which, it was hoped, a Eurozone assistance package could be concluded. It was widely suggested that, without these loans, the government would have been unable to pay the December salaries of its employees (Cyprus News Report, 18-12-12).

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At their 2013 annual general meetings, BoC, Alpha Bank and Co-operative Central Bank employees .decided to dissolve their Funds, withdraw their accrued benefit and set up new provident funds.

In fact, negotiations with the Troika took longer than three months, and the loans from BPS bodies had to be rolled over. The Troika demanded that the government raise the money to bail out the two insolvent banks – the BoC and CPB from domestic sources. Assistance from outside would be only to meet other fiscal requirements. At one stage, the government proposed nationalisation of all pension (and provident) fund resources. On the basis of what was known, this might have raised as much as €4bn – more than two thirds of the €5.8bn from domestic sources that the Troika was seeking. The latter, apparently under pressure from Germany in particular, refused this option. According to a speaker of Chancellor Merkel's party, it was a worse solution than the bail in of all and not only "uninsured" depositors that had already been threatened. Indeed, the speaker said "I don't think this can happen, because [the impact] would be huge for pensioners, for the small people" (ARD, 22-3-13).

4.2 The haircut and its implications

In fact, the settlement that was finally reached did hit pensioners. Deposits in excess of €100,000 held in the BoC and CPB, which by now was in the process of being merged into the BoC, were sequestered. It is unclear whether the Troika realised that Cyprus's pension and provident funds held much of their assets in bank accounts, and so that almost all would suffer the haircut that would be imposed to meet the €5.8bn target. However, in Cyprus itself, the realisation that not only individual savers but also institutions would be affected, led many of the latter to make pleas for special treatment. A complete solution is still being sought, even if the government has expressed sympathy for the plight of provident funds. Once the level of the haircut had been fixed at 47.5 per cent, the minister of finance made clear that special legislation would prevent provident fund members from losing more than 25 per cent of their assets - i.e., up to a further 22.5 per cent of an individual member's account would be preserved. However, members would not be able to access their accounts until they actually ceased their employment, and any top-up to ensure that losses were held to no more than 25 per cent would be paid out only when they reached retirement age (Cyprus Mail, 12-7-13 and 26-5-13).

Further details remain to be worked out. The protection, it seems, applies only to provident funds and would require them, in return, to surrender any shares in the newly constituted BoC they had received in return for the haircut. ¹² Pension funds – including those of the BPS – will not be given

¹² The situation described here is that known to the authors at the time this paper was being completed – end September 2013. At this stage, it was known that all depositors with BoC, including pension and provident funds, would be compensated for the amount lost in the

any special treatment. On this basis, it will be for the employers, as scheme sponsors, to make good any shortfall that arose, much as it is their responsibility to make good any other deficit in their pension funds. Whether this pushes broader public sector bodies to make calls for extra resources to the government at some time in the future is not certain. In the end, this may defeat the purpose of the haircut of pension scheme deposits. Equally, in so far as the bank retirement and gratuity funds have to make payments to staff that the BoC/CPB are making redundant, the bill for this will flow back to the tax-payer. This has been the source of some resentment by people who feel that bank employees, despite being "responsible" for the crisis, are receiving better settlements than many other dismissed workers and that these settlements are being paid for by the wider population (Cyprus Mail, 28-6-13).

4.3 Collateral damage arising

The rise in unemployment that occurred in the years after 2008 and accelerated after 2011 is likely to have had a further impact on provident funds. The number of members satisfying the condition for a severance pay-out – for multi-employer funds such as those of the hotels and construction industries, these are normally made six months after the job has terminated – will have increased substantially. The construction industry fund is likely to have been hit hard in this respect, even if, initially, much of the collapse of employment in the sector that has occurred might have been felt in the first instance by migrant and casual workers who were less likely to have been members of the fund. The hotels and tourism fund is also likely to have been affected. It has recorded a fall in membership of approximately one eight since 2008, although the fall in the number of active members – those actually contributing – might have been higher or lower than this (see hepfund, n.d.).

The collapse of the local stock market in the last two years is likely to have a profound effect on the returns of any provident or pension fund that is exposed to the sector. The hotels and tourism fund, although it was one of the provident funds which had a relatively high share of its assets in equities, was less badly hit than might have been expected. This was because some 40 per cent of its equity holdings were not in shares listed on

haircut with shares in the bank. By contrast, pension and provident funds that had deposits in CPB had only been assured that 52.5 per cent of their deposits were secured and that, over and above this, they, with all other CPB depositors, would share in 18 percent of the equities in the new BoC. The guarantee for provident funds had not yet been declared as available with respect to assets deposited with CPB, although the government had promised that steps will be taken to insure these would be covered, too.

the domestic market but rather those listed on markets elsewhere in the world. The fund also claimed to have been relatively sheltered from the haircut. Only about half of its bank deposits were with the BoC or CPB (IPE, 2013). Whether any of the issuers of domestic corporate bonds, which made up 10 per cent of the fund's assets, will default as the economy deteriorates further was not discussed.¹³

The bank provident funds of BoC and CPB, which were heavily self-invested, were major losers from the collapse of the stock market. So, too, were any funds that invested in shares in one or both of these two banks. The shares of both banks had, in the past, accounted for well over half of the Cyprus stock exchange's total capitalisation. The fact that the latter bank ceased to exist, and that shares in the former ceased to be traded and were declared of null worth, must have generated substantial collateral damage to pension or provident funds outside the banking sector.

Funds exposed to the local property market are also likely to have suffered damage. With the economy contracting, commercial real estate values are also falling – by over one fifth in the year mid-2011 to mid-2012 (Cyprus Property News). The consequences for the construction industry provident fund, which had some 40 per cent of its assets tied up in this way, are likely to have been particularly severe. Last, it remains to be seen whether the value of loans to members, which make up nearly 10 per cent of provident fund assets, will not have to be written down. The circumstances in which they were taken out were likely to have been very different from those prevailing in the years after 2010. Many loans were tied to residential property, the value of which is also falling. Moreover, it is likely that many of the fund members who took out loans will have subsequently lost their jobs, and they might well default on re-payments.

5. Conclusions

The history of supplementary retirement provision in Cyprus is, indeed, one of slow growth and rather sudden decline. By the start of the millennium, a system had been established that might well have developed into one little different from that of many other European countries. Admittedly, there were still profound differences in the level of benefit it accorded to those whom it covered, and there were still

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 $^{^{13}}$ In fact, it seems the hotels fund did suffer a further damage. When Hellenic Bank was recapitalised in October 2013, in part by the conversion of subordinated loans into shares, the hotels fund lost some €13m. The EAC lost €9m. Total losses to pension funds and provident funds holding subordinated loans to Hellenic Bank were put at €61m (Katimerini, 13-10-13).

substantial parts of the workforce that it did not cover at all, but the same can be said for many other European countries, too – pre-2004 member states as much as those joining the European Union with and after Cyprus.

Until the onset of the global financial and economic crisis, it was not unrealistic to hypothesise that Cyprus's provident fund system might develop further and be transformed into a system that paid out only on retirement, disability or death. It was, of course, also reasonable to hypothesise that, as a corollary, there would need to be a better integration of supplementary schemes with the GSIS. One reason for this might have been the need to ensure that contribution rates - at least across the board did not increase too much. A second reason was that there was scope for levelling-down as well as for levelling-up of provision.¹⁴ The schemes for at least some public sector employees, as well as being fiscally unsustainable, were also socially unsustainable. Whether supplementary provision should be made mandatory, or whether - as had been legislated for in New Zealand and subsequently in the UK - reliance be placed on auto-enrolment - was also a subject fit for discussion. Equally, some had begun to ask how the assets of any, more extensive funded scheme might be allocated and, in part because the country was small, whether a substantial share of these assets would not have to be invested abroad.

With hindsight, it is easy to suggest that the supplementary pension system, together with the public pension system, had been built up too fast and provided too much, and that therefore it was unsustainable. If that was the case, the development of the (supplementary) pension system did no more than reflect the development of the wider economy of Cyprus. Moreover, if that economy proved itself to be unsustainable, it was not surprising that many of the institutions that had been developed on its back, and that were supported by it, were also unsustainable. The particular way and speed in which the supplementary pension system in Cyprus collapsed was, to some extent, a consequence of features that were rather specific to it, but the collapse, itself, was scarcely avoidable.

5.1 What is the way forward?

Although this paper has spent some considerable space describing how the system of supplementary pension provision in Cyprus collapsed, there is scope for a brief discussion of what the way forward might, or should, be. After all, as a member of the EU, Cyprus subscribes to the broad principle

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¹⁴ It should be noted that, for both these reasons, when the earnings-related component of the GSIS was introduced, the legislation also mandated a reduction of contributions to provident funds and a reduction of benefits payable under defined benefit pension schemes.

of promoting adequacy, sustainability and equity in retirement-income systems, whilst it has made specific commitments under each of these headings in the Letters of Intent and Memoranda of Understandings with the IMF and the European Commission that it has signed since April 2013.

The case for retrenchment of publicly-financed provision had been made by the European Commission and the IMF before the financial crisis reached its most acute stage. The Letter of Intent from the government of Cyprus to the IMF confirmed that it would "continue [its] reforms of the general insurance pension scheme (GSIS) and the public sector occupational pension scheme (GEPS) to enhance their intra- and intergenerational fairness and to ensure their financial viability." These reforms would "encompass an adequate combination of benefit reduction [and] statutory retirement age increases" (IMF, 2013). Although the Commission has deemed the reforms already made to the GSIS to be adequate to ensure its fiscal sustainability until 2060 (Cyprus Mail, 27-9-13), its social sustainability is less clear. Pension benefits will, in general, be lower. Given that the only way these reductions can be mitigated is if people make their own retirement savings outside the GSIS scheme, an eventual reestablishment of supplementary pension schemes seems inevitable.

Admittedly, the climate under which such proposals might be discussed is rather grim. There is a profound distrust of financial service institutions. This has manifested itself in capital flight and a tendency of residents to withdraw as much as they can from savings accounts – there being a widespread feeling that keeping money under the bed is safer than keeping it in a bank. It has also manifested itself in lack of confidence in provident funds themselves. Whilst it is difficult to quote figures, there are suggestions that members of over 400 provident funds have sought their dissolution and the opportunity to take out the monies that are on their accounts.¹⁵

Nevertheless, those contemplating how a system of supplementary retirement provision might be rebuilt need to think about the following four questions.

First, what is the basic design of the supplementary system to be? Almost inevitably it will be one built upon defined contribution principles and, almost equally inevitably, one built upon individual accounts. That it will

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¹⁵ Such responses are not unusual, even if the direction of contagion is sometimes different. For example, the nationalisation and sequestration of mandatory individual savings accounts in Hungary at the start of 2011 resulted in a fear that bank accounts, too, might no longer be safe and, in turn, led to suggestions that individual depositors were transferring their money abroad (Eddy, 2012).

be defined contribution is because no employer will be prepared to take on the obligations associated with defining a benefit, and no government will feel in the position to offer any guarantees. That it will be based on individual accounts is suggested by the way in which most supplementary schemes were organised in the past, even if many of them were the product of collective agreements. What is more, even those pension and retirement gratuity schemes that had a sponsoring employer and were defined benefit have been switched back into schemes that look like provident funds – i.e., they are defined benefit and involve individual accounts.¹⁶

One possible advantage of moving to a defined-contribution-based system is that, by keeping contributors aware of the state of their accounts, irresponsible investment practices might be avoided. It is certainly the case that many members of funded defined benefit schemes in Cyprus were poorly served. Had the members of the banks' retirement and gratuity schemes been aware of the extent to which their plans were under-provisioned, they might not have tolerated it. When banks have been poorly managed, it is often the tax-payer who is called upon to repair the damage. The same arguments for state assistance can be made when pension plans fail. Cyprus might have signed up to the European Directive regulating the activities and supervision of occupational retirement schemes. However, the Directive, which was a mixture of exhortation and prescription, did little to protect the members of even those few schemes it did cover. Thus, a second question is: what sort of oversight structure needs to be established to inspire confidence amongst those to whom any new supplementary retirement benefit system is directed? Moreover, it is well-known that pension systems built around individual accounts tend to be costly - charges consume a substantial proportion of money invested.¹⁷ Cyprus's provident funds, with simple portfolios, were relatively efficient. Thus, a further task for any regulatory body would have to be one of ensuring that charges were kept as low as possible to maximise the benefits to savers.

Third, once it is accepted that any new system will be based upon funding, a further question arises – namely, how should the contributions paid into

¹⁶ Whether any future savings vehicle should permit withdrawals in cases other than death or retirement is a somewhat open question. It has been suggested that an aversion to participate in pension-like savings plans is that money saved cannot be withdrawn – i.e., that savings are very illiquid. On this basis, it has been proposed that allowing limited withdrawals under specified circumstances might encourage more people to join a voluntary pension scheme (see Beshears et al, 2012).

¹⁷ A charge of one per cent of assets under management (and assuming that there were no other costs) reduces savings by 22 per cent over 25 years.

it be invested? The 2009 actuarial review of the GSIS recommended that, in future, the surplus of income over expenditure that was a feature of the scheme should no longer flow to a notional fund into which the government paid interest. Rather, that surplus should be actively invested (MoLSI, 2011). The IMF review of the Cyprus's pension system repeated this suggestion (IMF, 20011). Other commentators have argued that the principle of more active investing be extended to all second pillar pension schemes and provident funds (Mannaris, 2012). The proposal that pension fund assets be used to rebuild the economy is not alien to Cyprus. One of the reasons why contributions under the public pension had been set higher than would have been required for a pure pay-as-you-go scheme had been to generate resources to meet the cost of reconstruction arising from the events of 1974. Subsequently, there have been proposals for pension fund assets, including those of the notional GSIS fund, to be used to improve "the infrastructure" or, more recently, to be deployed to help develop the hydro-carbon resources discovered off the coast. implications of such proposals, and the possible negative outcomes for pensioners, of retirement funds being charged to invest in this way, have yet to be fully thought through - either with respect to Cyprus or more widely (EIB, 2010).

Last, policymakers will have to recognise that defined contribution, individual account-based systems do not promote equity. This is not only because they do not provide any credits for periods of non-employment, it is also because they are proportional. The only version of equity they respect is "actuarial equity". Women, in particular, are disadvantaged by them (Casey and Whiteside, 2011). The extent to which retirement-income savings systems generate inequality is increased if participation in them is voluntary and if contributions or investment gains are tax-privileged. Higher-earning individuals are more likely to save through them because they can afford to do so, and they benefit disproportionally from the tax reliefs that are available. Even when supplementary schemes are quasimandatory, there is evidence that those who are lower paid are more likely to opt out – if only because they are less able to afford to contribute (Eversheds, 2013). Policymakers will have to ask whether the system they are seeking to construct one that is socially sustainable.

Ensuring some degree of social sustainability might have fiscal consequences. Policymakers in Cyprus need to take this into account and to start engaging in an effort to improve people's understanding of what the implications of societal ageing really are. The fact that, in the wake of the crisis, they have an economy and a society to rebuild should not mean that they can put this educational task to one side. Indeed, if much of Cyprus has to be restructured, and if people living there have to start

thinking about other ways in which economic and social life are organised, now might be as good a moment as any other to initiate a process of debate about retirement ages and retirement incomes and how the latter best be financed.

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