

Policy approaches to promote private and occupational old-age provision in Switzerland

Alfonso Sousa-Poza* / Jacob van Dam*
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Dr. Alfonso Sousa-Poza is a lecturer in Economics at the University of St. Gallen, Switzerland, and a Senior Researcher at the Research Institute for Labour Economics and Labour Law, Switzerland.

Address: University of St. Gallen; FAA-HSG; Guisanstrasse 92; CH-9010 St. Gallen; tel: +41 71 224 28 02; fax: +41 71 224 28 07; e-mail: alfonso.sousa-poza@unisg.ch.

** Dr. Jacob van Dam is a Manager at the Tax & Legal Department of PricewaterhouseCoopers, St. Gallen, Switzerland. His work focuses on pensions and social security.

Address: PricewaterhouseCoopers AG; P.O. Box 1644; CH-9001 St. Gallen; tel: +41 71 224 8697; fax: +41 71 224 8115; e-mail: jaap.van.dam@ch.pwcglobal.com

It must be emphasised that the views taken in this paper do not necessarily reflect those of the University of St. Gallen or PricewaterhouseCoopers AG.

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2 Introduction

The Swiss system has received considerable acclaim as being well equipped for the future. That this should be the case is perhaps less a result of good planning, than of prudent and continual adjustments made throughout the past decades. The result of these constant adjustments is a pension system with three pillars, two of which are compulsory and one which is optional. In essence, the Swiss system can be characterised as being highly complex, yet - and this is the attractive characteristic of this system - very flexible. Despite its own problems, the Swiss system has fewer weaknesses than those in other countries. It is interesting to note that Switzerland was the first country that articulated the benefits of a multi-pillar pension system (in 1963) and, in addition, the first and currently only OECD country to introduce a mandatory and fully funded but also privately managed second pillar.¹

There are a number of publications which deal with the Swiss pension system. Perhaps the most comprehensive and up-to-date analysis is that of Queisser and Vittas (2000). Other well-known (although more specific) references include van Dam (2000), Helbling (2000), Hepp (1990), and Zimmermann et. al. (1992). The aim of this study is to describe Switzerland's approach to increase pension savings, including some background information, the description of the most relevant schemes as well as means to increase financial knowledge. Compared to other existing publications, our contributions in this study to the literature on this subject are the following: first, we provide elaborate information on the economic situation of elderly people living in Switzerland, relying on existing literature and, where deficits exist, on microdata from the Swiss Labour Force Survey. Second, we provide the most recent information on the developments in the Swiss pension system. This includes, among other things, information relating to the 11th revision of the public pension scheme as well as the 1st revision of the occupational pension system, which are currently being debated in parliament. Third, we provide a concise yet detailed description of the Swiss pension system, with emphasis being placed on the second and third pillars, i.e., on the occupational and private pension schemes. Fourth, financial education in Switzerland is discussed. As very sparse information on the extent of financial knowledge and financial education exists, we analyse an interesting module of the 1999 Swiss Labour Force Survey which addresses this topic. Finally, and based on this analysis, we evaluate the Swiss system.

¹ For an elaborate discussion on the historical development of the Swiss multi-pillar system, see van Dam (2000), Helbling (2000), and Hepp (1990).

This paper is structured as follows: in section 2, a brief overview of the Swiss three-pillar pension system is provided. Section 3 discusses the financial resources needed and provided in old age. More specifically, this section analyses the financial provision of the public (unfunded) pension scheme and the current economic situation of elderly Swiss. Furthermore, the required funds in old age are discussed. In section 4, the fully funded pension systems are analysed. These are the second and third pillars, the former being the occupational pension scheme and the latter the private savings scheme. For each of these schemes, the characteristics in both the accumulation and withdrawal phases are addressed. In section 5, financial education issues are discussed. The main aim of this section is to provide some initial information on financial education for in Switzerland. This paper concludes with an assessment of the Swiss system.

3 A short overview

The Swiss pension system is composed of three pillars. The *first pillar*, the so-called OASI/DI (German: AHV/IV), is an unfunded compulsory public pillar.² In principle and according to the Swiss Constitution, the OASI/DI should guarantee a minimal standard of living. All residents in Switzerland, including non-working wives, students, people receiving public transfers, the self-employed, and unpaid family workers, are compelled to be insured and contribute to the OASI/DI (i.e., it enjoys near universal coverage). An interesting feature of the OASI/DI is that the maximum pension is only twice the minimum pension, i.e., the dispersion is very low, and, thus, this public pension scheme is highly redistributive. The OASI/DI is financed partially by wage deductions and partially by indirect taxes (taxes on tobacco and spirits, and VAT).

The *second pillar*, the so-called LOB (German: BVG)³, is a compulsory and fully-funded occupational pension scheme. Together with the OASI/DI, this scheme aims at providing an accustomed standard of living (more specifically: 70% of pre-retirement earning). Although compulsory, only workers earning more than the so-called co-ordination deduction⁴ (equal to approximately 40% of average earnings; in the year 2001: SFr. 24,720) are eligible to participate in this scheme.⁵ Coverage is estimated to be about 74% of the labour force (Queisser and Vittas, 2000). Thus, two groups of workers which are not well covered by this scheme are the part-time employed and women.⁶ The institutional structure of the Swiss occupational pension scheme is generally accepted to be highly complex, fragmented, and dynamic. The LOB is financed by wage deductions and by compulsory employer contributions. Since it works on funding principles the asset returns play an important role.

The *third pillar* is a funded private savings scheme. Its objective is to provide individuals who have high lifetime earnings and are accustomed to a high standard of living. Such individuals, due to the redistributive nature of the OASI/DI, cannot maintain their average pre-retirement income without the aid of private savings. Although this pillar plays a relative smaller role in

² OASI/DI stands for the old-age, survivors and disability insurance scheme.

³ LOB is the Law on the Occupational Pensions (BVG).

⁴ The so-called "Koordinationsabzug". This concept will be discussed in detail below (see 4.2.1.3).

⁵ Individuals earning less than the co-ordination deduction have a replacement rate of at least 60% through the OASI/DI.

⁶ The integration of these groups in the second pillar has been a topic of recent public debate (first LOB Revision).

the whole pension scheme, it has gained importance in the past decade (especially due to its attractive tax incentives). In fact, and as will be elaborated below, based on the amount of contributions paid into this pillar, one can expect its future importance to be quite large. This pillar is (at least in comparison to the first and second pillars) not highly regulated, and the diversity in products and services among its providers is extremely large.

4 Resources in old age

The general aim of this section is to answer the questions "What is provided for by the public pension system?", "What finances do elderly Swiss have?", and "What finances do elderly Swiss need?". Thus, three issues are analysed: first, the financial provision of the public unfunded system (OASI/DI) is discussed. Second, the current economic situation of elderly Swiss is depicted. Due to the lack of adequate secondary statistics, we analyse this topic with microdata from the Swiss Labour Force Survey. Third, the required funds for retirement are discussed. Needless to say, this topic depends strongly on individual living standards, and thus a differentiated perspective needs to be taken.

4.1 Provision of public schemes - the OASI/DI

The first pillar (OASI/DI) guarantees a minimal annual income of SFr. 12,060. The current retirement age for men (women) is 65 (62). The retirement age of women will, however, increase gradually to 63 by 2001 and 64 by 2005. The 11th revision of the OASI/DI (which is still being discussed in the Federal Parliament) foresees equal retirement ages for both men and women (i.e., 65). All residents in Switzerland, including non-working wives, students, people receiving public transfers, the self-employed, and unpaid family workers, are compelled to be insured and contribute to the OASI/DI. Thus, the OASI/DI has achieved near universal coverage. The maximum pension is only twice the minimum pension, i.e., the dispersion is very low. The ultimate pension is determined by, first, the years of contributions, and, second, average lifetime earnings. So-called "missing years", i.e., years in which no contribution was made, reduce the entitled pension proportionally.⁷ Thus, incomplete contribution careers also reduce the minimal entitlement. Since nearly all Swiss are, however, compelled to contribute, incomplete contribution careers are very rare (exceptions being Swiss who spent long periods abroad). Average lifetime earnings influence the replacement rate: incomes up to 3 times the minimum pension receive a fixed component of 74% of the minimum pension, and a variable component equal to 26% of pensionable earnings. Contributing individuals earning above 3 times the minimum pension have a fixed component equal to 104% of the minimum pension and a variable component equal to 16% of

⁷ Contributions are compulsory from the age of 17 till 62 (65) for women (men).

pensionable income. Contributions are levied on income or wealth and are checked yearly together with the tax declarations.

Benefits depend on the marital status of an individual with married couples receiving 150% of the pensions for singles. Couples have a special treatment in the 1st pillar. Although the 10th revision of the AHV replaced the pensions for couples with individual pensions, the previous limit of 150% on the level of the combined individual pensions continues to apply to married couples. The maximum (minimum) OASI/DI is about 40% (20%) of average earnings. The average pension benefit (including supplementary payments; see below) in 1998 amounted to SFr. 1,842, which corresponds to approximately 37% of the average wage (Queisser and Vittas, 2000). Indexation of the benefits is based on an average between price and wage inflation and takes place every two years, although the current (11th) revision of the OASI/DI foresees an increase of one year in the periodical adjustment, i.e., an adjustment should then take place every three years. This is a measure to reduce costs and ensure the long-term financial viability of this pillar.

The low minimum pension (which falls below the generally accepted poverty line) is topped up by means-tested supplementary benefits.⁸ These benefits, which are primarily financed by the cantons, are usually paid to pensioners who nearly exclusively rely on the OASI/DI, i.e., made no or few contributions to the second (or third) pillar. Supplementary benefits are calculated in order to reach a minimum 2001 income of SFr. 16,880 for single persons and SFr. 25,320 for couples. The OASI/DI also provides rents for the cases of invalidity and death before reaching the normal retirement age.

At this stage, it is worthwhile pointing out that the changing demographic composition of the population and the increased life expectancy have had a negative effect on the funding of the OASI/DI. This is a problem, which several other industrialised countries are facing to date.⁹ The increase in the life expectancy has resulted in a substantial increase in the number of years that a pension needs to be paid out. Thus, in the year 2010, on average 5 (8) more years have to be paid for men (women) compared to 1948, i.e., the year when the OASI/DI was introduced. The changing structure of the population, i.e., the relative increase in the number of elderly people and the relative decrease in the number of employed individuals (who, in essence, finance the OASI/DI), has also had a negative effect on the funding of the OASI/DI.

⁸ So-called "Ergänzungsleistungen".

⁹ See, for example, World Bank (1994).

Thus, whereas in 1995 one had, on average, 4.3 contributing individuals per pensioner, this ratio will decline to 2.6 by the year 2025 (see Brechbühl, 2000).

Nevertheless, the OASI/DI is most probably better prepared for the future than comparable unfunded systems in other countries. This is primarily due to the fact that the OASI/DI has relatively low expenditures, and redistribution is high. A further aspect which has assisted the financial situation of the OASI/DI is that, until now, compared to other countries, Switzerland has significant numbers of older employees still taking part in the labour market. One factor contributing to this trend is that the OASI/DI is still relatively strictly tied to fixed age limits. With the current 11th revision of the OASI/DI, however, a certain amount of flexibility regarding an individual's retirement age will be planned. More specifically, individuals will be able to receive an accordingly adjusted pension between the ages of 62 and 65. Individuals with a low income (which still needs to be defined), who would also like to retire early, will not have their pensions reduced as much as wealthier individuals. Furthermore, individuals will be allowed to receive *a part* of their pension earlier.

4.2 Current economic situation of elderly Swiss

In general, the three-pillar system in Switzerland has developed a well-functioning system of old-age provision. Whereas in the past elderly people were primarily affected by poverty, this is not the case anymore (see Höpflinger, 1997; Leu et al., 1997). Absolute poverty in old age has been effectively eliminated. Furthermore, the financial security of elderly individuals will increase in future and it is most probably only a matter of time until retired individuals in Switzerland have above-average incomes. This is primarily a result of the three-pillar set-up in Switzerland, especially the second pillar. The fact that a large proportion of elderly workers in Switzerland (aged between 55 and 65 years) are overemployed, i.e., would like to work less and earn less, does indicate that, in future, elderly Swiss will not face financial difficulties (see Sousa-Poza and Henneberger, 2001). Höpflinger (1997) also comes to a number of interesting conclusions regarding the economic situation of elderly people in Switzerland:

- The risk of poverty for today's pensioners is low because the OASI/DI has been further developed in recent decades. Especially the supplementary benefits have helped considerably in securing a basis of subsistence.
- Nevertheless, Höpflinger (1997) estimates that approximately one-quarter of OASI/DI pensioners can be described as economically weak (and without large income reserves). This is the case among the oldest of the elderly.

- Foreign workers form an economically disadvantaged group in Switzerland (see also de Coulon, 1999). Above-average risk of poverty shortly before or after retirement is that of foreign women and men.
- There is an unequal distribution of wealth among elderly people and this inequality will most likely increase in the future. According to Höpflinger (1997), the risk of a "two-class situation" among elderly individuals could have a relatively negative influence on the social and economic situation of pensioners.

In Switzerland, there is no individual-level data on the funds received from all three pillars. Thus, there has not been to date a very concise analysis of the economic situation of elderly Swiss.¹⁰ In this section we do, however, analyse the economic situation of elderly individuals with data from the Swiss Labour Force Survey. The Swiss Labour Force Survey is a nationwide and representative survey conducted annually by the Swiss Federal Statistical Office. With telephone interviews lasting approximately 20 minutes individuals are questioned on a number of labour-market related topics. The first Swiss Labour Force Survey was conducted in 1991, and the sample size is approximately 16,000 individuals (see Bundesamt für Statistik, 1996). Despite the limitations of this data set associated with income data¹¹, it can be used to answer the following two questions:

- Do elderly Swiss perceive certain economic restrictions?
- How high is the disposable household income of elderly Swiss?

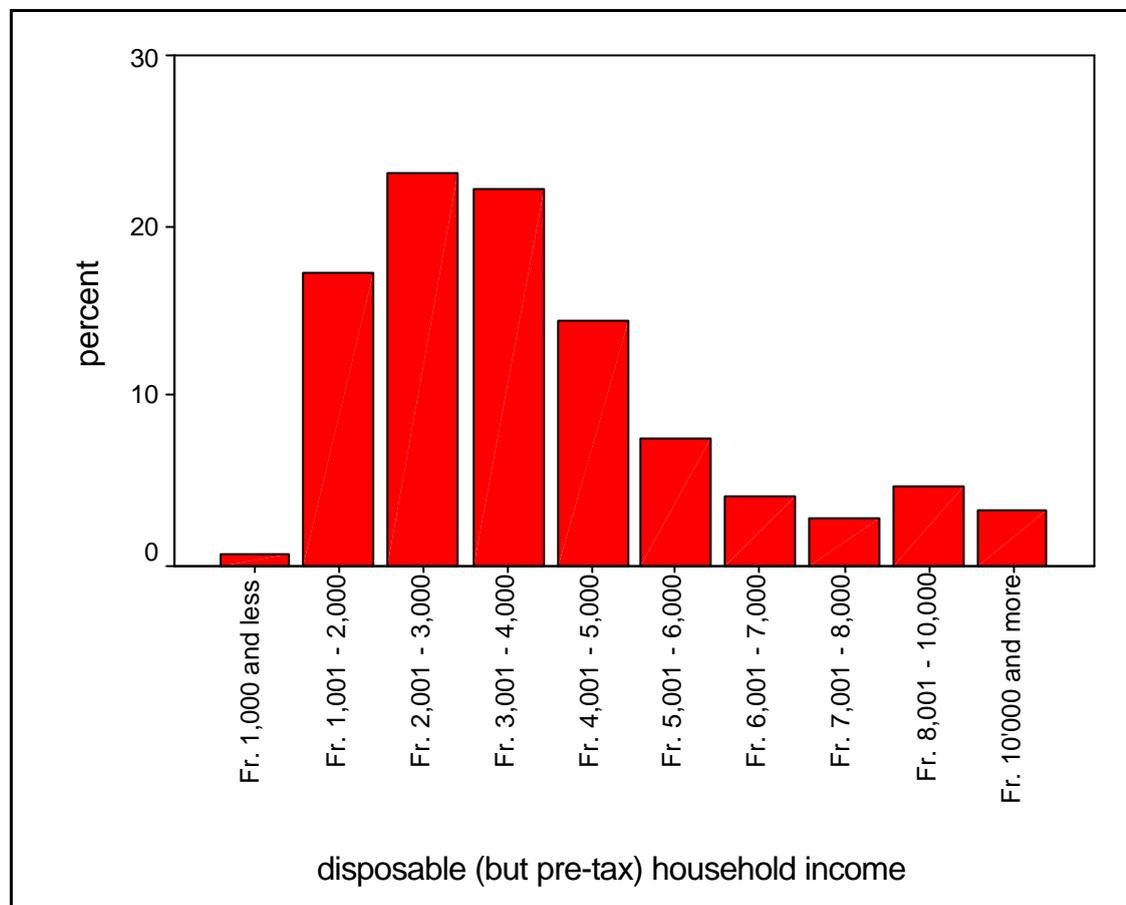
The first question will be answered in the next section. The second question is answered in *figure 1*. As can be seen, about 45% of all respondents have a monthly household income ranging between SFr. 2,000 and SFr. 4,000. A total of 17% have a household income of less than SFr. 2,000 per month. Perhaps the most interesting observation in this figure is that approximately 40% (60%) of all elderly respondents have a household income above SFr. 4,000 (SFr. 3,000) per month. These results indicate that, for a fair share of elderly Swiss, a

¹⁰ The Swiss Federal Statistical Office is currently planning the collection of such data. It will, however, only be available towards the year 2005.

¹¹ There are two main limitations in the context of this study: first, the item nonresponse rate associated with the household income variable is quite high. Although in Sousa-Poza and Henneberger (2000) we show that nonresponses associated with wage variables appear to be randomly distributed, the accuracy (validity) of this data remains unanalysed. A second problem is that the income variable does not distinguish between the different pillars, and it is therefore not possible to determine (on an individual level) the relative importance of the different pillars.

substantial part of their retirement funds comes from savings or payments from the second and (to a lesser extent) third pillars.¹²

figure 1: distribution of disposable (but pre-tax) household income of elderly Swiss (> 65 years)



Note: household income is before tax deductions but after medical aid contributions

Source: own calculations based on the Swiss Labour Force Survey (2000)

Currently, less than 4% of all individuals aged 65 to 79 in Switzerland live in residential and nursing homes. Even in the case of those aged 80 and older, less than a quarter lives in a home or a hospital.¹³ Thus, the largest proportion of elderly Swiss live in private residency. In fact, every fourth household in Switzerland already includes at least one person of pensionable age (see Arend, 1996; Wehrli-Schindler, 1997).

¹² We also suspect that these figures are too prudent, i.e., underestimate the true values. The reason is that there is a substantial proportion of (item) non-respondents and it is often argued that the nonresponse inclination and income level are positively correlated (see Sousa-Poza and Henneberger, 2000).

¹³ It is interesting to note that moving to a home is not determined by health alone, but also by social factors. The most important factors are marital status, income, and the presence of children and grandchildren.

4.3 Required funds for retirement

The main financial expenditures of elderly people are housing costs, food, and medical insurance. In *table 1*, we present the results of the Expenditure Survey of 1992 for all individuals and also for individuals aged 60 and older.¹⁴ Average expenditures of individuals aged 60 and older equalled SFr. 4,510 in 1992.

Approximately 20% of these expenditures were used for housing and energy. 8.29% of total expenditures were used for rent and 7.11% were spent on interest payments for mortgages and other related costs. In general, elderly Swiss are very satisfied with their housing set-up (Arend and Höpflinger, 1996). Nevertheless, especially single-household pensioners are strongly affected by the high rent costs in Switzerland (see also Baur and Konrad, 1996).

Further important expenditures of elderly individuals are health costs (5.96%) and medical aid insurance (6.31%). The figures presented in *table 1* underestimate these specific costs, since the expenditures related to medical aid have increased dramatically in the past years. At this stage, it should also be pointed out that as of January 1, 1996, each person resident in Switzerland must be enrolled in a health insurance scheme within three months after taking up residency. The compulsory insurance covers general costs primarily in connection with illness, medical prevention, and accident (if not already covered through the employment accident insurance). The new compulsory sickness insurance does not foresee coverage for short-term salary continuation during sickness. Premiums and benefits vary according to insurance contracts and are usually privately paid without contributions from employers.¹⁵

Home care is organised on a local or canton basis with local non-profit associations providing a variety of health-care and other services. The overall cost of care for the frail elderly is uncertain, estimates for the late 1990s place it at around 1.1% of GDP. The Swiss system of institutional care for the frail elderly is financed one-third through a complex system of public support, insurance and assistance and two-thirds by individuals themselves. There is no public long-term care insurance for the elderly per se as in Germany.

¹⁴ So-called "Verbrauchserhebung 1991/1992". The most recent Expenditure Survey was conducted in 1998. At the time of writing, however, the results were not officially available. Apparently, they should be available toward the end of October 2001.

¹⁵ The accident insurance law (UVG) covers occupational accidents and illness and non-occupational accidents for all employed persons. Insured benefits include a daily indemnity (short-term salary continuation at 80 percent of insured salary) as well as coverage of medical and hospital costs (doctor's fees, medication, hospital, and clinic services, etc.), subject to a uniform tariff throughout Switzerland. However, employers usually compensate for the difference up to 100 percent.

Table 1: average expenditures in 1992

<i>category</i>	<i>all households</i>	<i>individuals aged 60 and older</i>
percent of all households	100	29
average number of persons in household	2.40	1.55
average monthly expenditures in SFr.	6,309	4,510
expenditures	percent of total expenditures	
food, drinks, tobacco	12.48	12.90
clothing	4.66	4.48
housing and energy	19.40	20.01
<i>rent</i>	8.73	8.29
<i>interest on mortgages and other related costs</i>	7.60	7.11
<i>other expenditures</i>	3.07	4.61
housing inventory	4.93	5.53
health	3.84	5.96
transport and communication	8.49	7.64
entertainment and education	6.14	5.14
other goods and services	10.10	11.46
taxes	10.18	10.69
insurance	16.91	12.13
<i>OASI/DI</i>	4.47	1.48
<i>LOB</i>	4.25	1.69
<i>medical aid</i>	4.51	6.31
<i>other insurance</i>	3.68	2.65
other expenditures and transfers	2.88	4.06

Source: Bundesamt für Statistik (1994)

As was mentioned above, the supplementary benefits guarantee an annual income of SFr. 16,880 for single and SFr. 25,320 for two-person households (i.e., SFr. 1,407 and SFr. 2,110 per month, respectively). The decomposition of these figures is presented in *table 2*. These expenditures reflect a minimal required income level.

Table 2: required funds according to the supplementary benefits regulation

category	single households (SFr. per month)	two-person households (SFr. per month)
food, drinks, tobacco	500	750
clothing	110	165
housing and energy	65	98
housing inventory	80	120
health	85	127
transport and communication	122	183
entertainment and education	135	202
other goods and services	138	207
other expenditures	172	258
total	1,407	2,110

Source: Handout Pro Senectute

A relevant question is whether the expenditures of elderly individuals actually manage to cover their most important needs. In this context, it is worth noting that provision gaps for care of elderly Swiss are not very large: in a survey conducted in 1992/93 among Swiss-German OASI/DI pensioners, only 1.7% of men and 4.8% of women reported unmet needs. This corresponds to about 30,000 individuals. The largest component of the unmet need for care is *domestic help*, which is not reimbursed by the current social and health insurance system (see Abelin et al., 1998).

In *table 3*, a different approach at analysing met and unmet needs is taken. Using data from the 2000 Swiss Labour Force Survey, the proportion of elderly Swiss facing certain limitations in their daily consumption/expenditure activities is presented. The following results are worth taking note of:

- With regard to the purchases of consumption goods, clothing, and holidays, a relatively large proportion of elderly individuals face financial restrictions (approximately 30%). It is interesting to note that these perceptions do not differ with age. This is most probably due to the fact that, despite higher earning of younger age cohorts, their expectations (i.e., consumption habits) also differ to those of older cohorts. The same result, although to a lesser extent, applies to going out (e.g., to restaurants or the cinema). One must, however, take into consideration that the nonresponse rate among the very old is quite large.
- Pronounced restrictions in the other expenditure categories do not exist. This underlines the above conclusion that the multi-pillar system in Switzerland, and especially the OASI/DI, have managed to eliminate poverty in old age. Nevertheless, the fact that approximately 15% of elderly individuals (especially those aged 85 and

older) reported being slightly or severely restricted with regards to their food expenditures is an observation which should, at the least, raise some questions.

- A total of 5.5% of all elderly individuals face financial restriction with regard to medical and dental expenditures. This is especially the case among old individuals (aged 90 and more), who, on average, have lower incomes than other elderly persons. Considering the fact that, first, medical costs have risen dramatically in the past years, and, second, that dental expenditures are not covering in the compulsory medical aid, this result is not very surprising.

The general picture presented in this section is that, first, the public pension system (OASI/DI) has, to a large extent, succeeded in eliminating poverty in old age. Although household incomes are well below the population average, they are mostly higher than the average OASI/DI pension (including supplementary payments). According to the data from the 2000 Swiss Labour Force Survey, median monthly household income of respondents aged 60 and older lays between SFr. 3,000 and SFr. 4,000. The Swiss Expenditure Survey of 1992 revealed that average expenditures of individuals aged 60 and older was approximately SFr. 4,510 in the corresponding year. This comparison does reveal that expenditures and income are approximately equal and, thus, not much income can (or is) being saved on average. If one furthermore compares these statistics with those presented in *table 3*, then one is inclined to conclude that, although poverty has ceased to exist, above average wealth cannot, on average, be observed. This (with the rise in coverage in the second pillar and the increase in savings in the third pillar) should change in the future.

Table 3: financial restrictions for different expenditure categories

expenditure category	age category	extent of financial restrictions			
		no response	not at all	a little	quite a lot
consumption goods	65-69	4.4	56.8	22.9	15.9
	70-74	7.5	62.0	17.3	13.3
	75-79	8.8	61.9	16.0	13.3
	80-84	11.3	67.1	10.2	11.3
	85-89	18.9	61.5	9.6	9.9
	>90	23.7	51.6	11.3	13.4
	total	9.1	60.7	16.7	13.5
food	65-69	1.2	84.3	11.9	2.6
	70-74	1.7	85.0	10.5	2.8
	75-79	2.8	82.3	11.9	3.0
	80-84	4.1	82.0	11.0	2.9
	85-89	8.4	79.8	9.3	2.5
	>90	13.4	71.0	11.3	4.3
	total	3.2	82.8	11.2	2.8
clothing	65-69	1.7	66.1	24.2	8.0
	70-74	3.0	70.3	20.2	6.5
	75-79	3.8	69.1	19.7	7.4
	80-84	6.1	69.3	16.2	8.4
	85-89	11.2	66.5	16.1	6.2
	>90	16.1	60.2	17.2	6.5
	total	4.5	68.0	20.2	7.4
hobbies / leisure activities	65-69	3.1	74.2	16.8	5.9
	70-74	3.7	76.7	14.6	5.0
	75-79	5.8	76.4	11.9	5.9
	80-84	9.7	74.5	10.6	5.2
	85-89	14.0	71.7	9.9	4.3
	>90	17.7	62.4	12.4	7.5
	total	6.2	74.6	13.6	5.6
holidays / outings	65-69	3.1	59.7	23.4	13.8
	70-74	4.9	62.9	20.8	11.3
	75-79	5.1	65.4	17.9	11.6
	80-84	9.0	64.5	13.6	12.9
	85-89	15.5	62.4	12.4	9.6
	>90	22.0	53.2	12.9	11.8
	total	6.6	62.3	18.9	12.2
inviting guests	65-69	2.1	79.7	13.6	4.6
	70-74	3.3	81.2	11.6	3.9
	75-79	5.3	78.4	13.0	3.2
	80-84	6.6	77.0	11.5	4.8
	85-89	12.7	72.4	10.2	4.7
	>90	16.7	64.0	14.5	4.8
	total	5.2	78.1	12.5	4.2
going out (e.g., restaurant, cinema)	65-69	3.8	67.5	17.9	10.8
	70-74	5.8	70.0	16.6	7.6
	75-79	8.0	69.6	13.7	8.8
	80-84	9.3	71.8	9.7	9.2
	85-89	16.5	67.7	9.9	5.9
	>90	18.8	59.1	11.3	10.8
	total	7.6	68.8	14.6	9.0
medical and dental expenditures	65-69	1.7	78.9	14.6	4.7
	70-74	1.6	80.2	12.4	5.8
	75-79	2.8	80.2	11.7	5.3
	80-84	4.5	78.8	10.2	6.5
	85-89	9.3	74.2	11.5	5.0
	>90	12.4	67.2	12.4	8.1
	total	3.4	78.6	12.5	5.5

Source: own calculations based on the Swiss Labour Force Survey (2000)

5 Fully funded private and occupational pension schemes

5.1 Overview

The aim of this section is to describe the occupational pension schemes as well as the private institutions for old-age savings in Switzerland. These are the second (occupational) and third (private) pillars. In this sub-section we briefly describe the institutional setting (a more elaborate discussion will follow in the subsequent sub-sections) and, more importantly at this stage, the *significance* of these two schemes.

As was mentioned above, the *second pillar* is the compulsory, funded, occupational pension scheme. The federal law regulating this pillar (Federal Law on the Occupational Old-age Survivors' and Disability Benefit Plan, LOB) was approved by the Federal Parliament in 1982, and came into force in 1985. The second pillar is highly fragmented, consisting in 1998 of about 10,400 institutions. Nevertheless, concentration is high with the 100 largest funds covering about 70% of all affiliates. These funds are governed by a strict legal framework, which requires pension funds to be separate legal entities. They are also characterised by independent fund governance based on joint administration with equal representation, asset segregation, internal controls and safe custody, and appointment of independent auditors and pension experts (Queisser and Vittas, 2000). Furthermore, funds face quite strict asset allocation legislation (see van Dam, 2000, pp. 47-51).

One could argue that the second pillar is, in terms of its (future) role in the financing of pensions, the most important of the three pillars. Currently, approximately 75% of the labour force is covered by the second pillar. Around 350,000 individuals received old age pensions in 1997, which corresponds to about 30% of retired individuals (Queisser and Vittas, 2000). Thus, the second pillar does not have universal coverage yet. This, however, will change in the future. In *table 4*, the evolution of contributions and benefits are depicted. As can be seen, benefits have nearly doubled in the past decade (rising from 2.8% of GDP in 1990 to 4.8% of GDP in 1999). Contributions remained relatively constant (at approximately 6.5% of GDP). The second pillar plays a vital role in maintaining an acceptable standard of living during retirement. More specifically, its objective is, together with the first pillar, to guarantee an income of 70% of pre-retirement income, with an upper ceiling of (pre-tax) SFr. 74,160 per year. This corresponds to roughly 60% of pre-retirement disposable income.

Table 4: benefits and contributions in the second pillar

	benefits		contributions	
	SFr. billions	% of GDP	SFr. billions	% of GDP
1990	8.74	2.8	20.86	6.6
1992	10.83	3.2	23.45	6.8
1994	13.02	3.6	23.14	6.5
1995	14.14	3.9	24.13	6.6
1996	15.35	4.2	24.71	6.8
1997	16.20	4.4	24.20	6.5
1998	17.44	4.6	26.41	6.9
1999	18.50 ^a	4.8	24.20 ^a	6.2

Source: Queisser and Vittas (2000) and Bundesamt für Sozialversicherungen (2001)

^a estimate

The *third pillar* is the voluntary savings scheme. An important point is that this third pillar is not highly regulated (at least in comparison to the second pillar). As will become evident below, this also implies that characterising the products and services of this sector is, due to the observed diversity, difficult. Entitlement to coverage applies, in essence, to all individuals covered in the second pillar, and also self-employed individuals. It consists of two parts: the *3a pillar* covers so-called "tied individual retirement savings", which profit from tax incentives. The *3b pillar* covers other personal savings such as life insurance, investments, bank accounts, or property ownership. The third pillar is run by insurance companies and banks. Although this pillar currently plays a relatively minor role, its importance (at least in comparison to the OASI/DI) will increase in future. This is primarily due to the fact that, first, the unfunded OASI/DI will progressively finance a smaller portion of future pensions, and, second, tax incentives associated with this pillar are financially very attractive. Third, there is currently some political pressure to extend entitlement to participation in the third pillar to non-employed individuals. This would considerably enhance the attractiveness and importance of this pillar. Perhaps the main function of the third pillar at the moment is to guarantee above-average income earners a retirement plan which corresponds to their current incomes, i.e., assures that a constant standard of living can be maintained.¹⁶ Table 5 depicts the number of contracts and the accumulated savings in the third pillar.

Table 5: capital and number of contracts in the third pillar (life insurance companies)

	1998		1999	
	capital in Mill. SFr.	no. of contracts	capital in Mill. SFr.	no. of contracts
capital investments	225,895	3,142,497	234,153	3,185,408

¹⁶ Especially high income earners, due to the redistributive nature of the OASI/DI, have lower relative benefits.

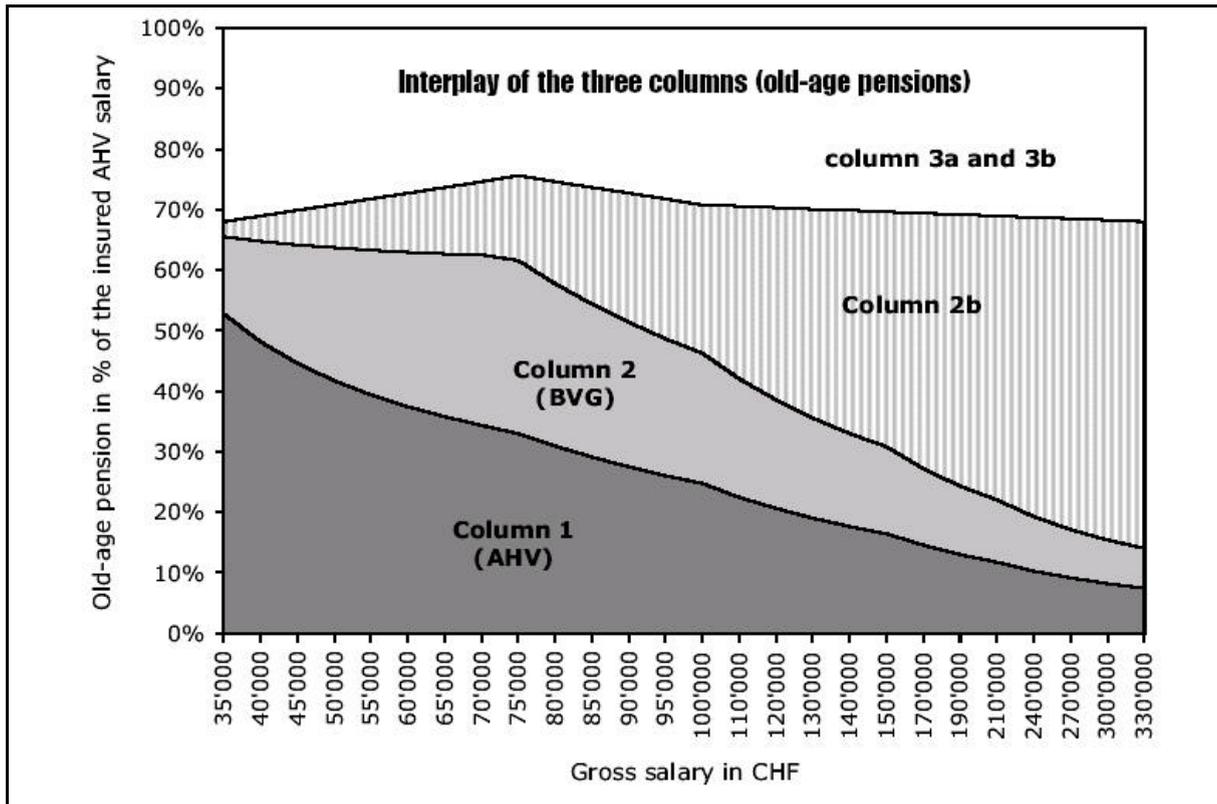
pillar 3a	64,502		72,694	
pillar 3b	141,805		161,459	
insurance	1,503	171,584	1,662	186,668
pillar 3a	200		229	
pillar 3b	1,228		1,433	
Total	227,398	3,314,081	235,815	3,372,076

Source: Swiss Insurance Association (2001)

Thus, one can conclude by saying that the fully funded and compulsory occupational pension scheme (second pillar) is an essential component of the Swiss pension system, and its primary objective is (together with the OASI/DI) to maintain the standard of living that was reached before retirement. The third pillar plays a similar role although primarily for above-average earners. The relationship between the three pillars is depicted in *figure 2*. As can be well seen in this figure, the relative importance of the OASI/DI declines with higher incomes. The strong redistributive effect is also evident. The benefits from the LOB compensate the diminishing relative contributions of the first pillar.¹⁷ The aim is to achieve a coverage of approximately 70% of pre-retirement earnings (insured OASI/DI earnings). The potential importance of the third pillar is also evident from this figure: a constant earnings level can only be achieved with the aid of private savings. Needless to say, this is a strong incentive for personal savings, a definite strength of the Swiss system.

¹⁷ In *figure 2*, the column 2 refers to the compulsory part of the second pillar, whereas the column 2b refers to the voluntary part (in German: "Überobligatorium").

Figure 2: the relationship between the three pillars



Source: Libera (2001)

Taxation in the second and third pillar is organised according to a simple principle: first, all contributions (within certain bounds) are tax-deductible and, second, all payments are taxed as income. Savings outside the second and 3a pillars are subject to wealth tax ("Vermögenssteuer") and income tax ("Einkommenssteuer"). In the latter case, the Swiss have introduced quite a unique system in order to assure that interests earned on savings are properly declared: 35% of all interests earned are automatically deducted and can only be reclaimed if the corresponding savings are declared.¹⁸

¹⁸ This is the so-called "withholding tax".

5.2 The second pillar - occupational pension scheme

5.2.1 Regulation in accumulation phase

5.2.1.1 Target groups

In general, all salaried workers with a regular income of more than the co-ordination deduction of SFr. 24,720 (as of January 2001) and who are older than 24 years are entitled to coverage in the LOB. Foreigners can be opted out, if proved that working in Switzerland is temporary and/or occupational pensions in the country of origin are sufficient. Furthermore, low-income workers (up to SFr. 24,720) are not required to (and usually do not) participate in the second pillar. This latter point has been the topic of much public debate in recent months. The reason is that, in Switzerland (as in other countries), women are primarily employed part-time and therefore they are the most likely to earn less than the co-ordination deduction. Women are therefore relatively poorly covered in the second pillar. Self-employed workers can join the pension plans of their personnel.

5.2.1.2 Government approach and incentives

According to the Swiss federal constitution (see Art. 111-113), participation in the second pillar is compulsory. Each employer has to establish a pension fund or, alternatively, join an existing pension fund. The pension fund must, however, be a legally separated (i.e., from the funding firm) juridical body. This can be a foundation or trust, a co-operative society, or a public entity (if the employer is a public authority). Together with the yearly control of the payments for the OASI/DI scheme (first pillar), the OASI/DI compensation offices and their local branches have to check, first, if the employing firm is affiliated to a pension scheme for the second pillar and, second, if all persons and incomes are properly reported. This also has to be checked by the auditors of the pension fund (see also van Dam, 2000).

Participation in the occupational pension scheme is compulsory for all employers and therefore government incentives are redundant. Nevertheless, attractive tax regulations exist. Individual (as opposed to corporate) taxation of the first, second, and third pillars are all according to the same principle: all contributions are tax-deductible, all benefits (in form of a rent or as capital payments) are taxed. Pension funds, on the other hand, are free of almost all taxes (most notably income and wealth tax; see Art. 80 and 81 LOB). Only real estate and asset transactions are taxed, but at reduced rates. Since 1986, the tax authorities have developed a set of criteria to decide if a Swiss occupational pension scheme can be granted tax exemptions or not. These are:¹⁹

- exclusivity of the goal of the institution: the sole objective of the scheme being the accumulation of old-age savings (as well as survivors' and disability insurance)
- collective approach: no individual solutions are allowed, i.e., so called "à la carte-plans" for owners/directors are not accepted
- well documented: all regulations of the pension scheme must be well documented
- appropriate contributions and benefits: contributions and benefits must be in line with objective criteria such as age, position within the firm, and earnings
- equal treatment: all employees in same positions must be treated in the same way
- insurance coverage: the schemes may not restrict their activities to savings and capital accumulation; an insurance component is also necessary²⁰
- Swiss-related: in general, affiliates of the fund must reside in Switzerland and be employed by a firm in Switzerland

Contributions to occupational pension funds have to yield a guaranteed interest rate, which is determined by the Swiss Federal Government. Since 1985 this has been 4 % p.a. for the so-called "Obligatorium", i.e., the compulsory part of the second pillar.²¹

The lack of transparency in the Swiss system has often been criticised (see Widmer and van Dam, 2000). Part of the first Revision of the LOB is devoted to the introduction of new legislation relating to the need to inform insured employees as well as pensioners. More specifically, the revision foresees the introduction of compulsory information each year on the

¹⁹ Art. 50 of the Federal Law on Direct Federal Taxes as well as the supplementary legislation number 1 and 1a (1986).

²⁰ Besides guaranteeing an old-age pension, the LOB also ensures employees against the risks of disability and death before reaching retirement age.

²¹ Art. 15 LOB.

amount of actual individual capital savings and insured benefits, the organisation and the financial situation of a fund, as well as the availability of yearly actuarial and auditing reports.

5.2.1.3 Contributions

It is a legal requirement that pension funds of private employers be fully funded. Only pension funds of public institutions are allowed to be *underfunded*, but only when there is a state guarantee.

According to law, employers and employees have to finance the old-age scheme together. The total employer's share has to be at least 50% of total contributions (Art. 66 LOB). In practise, employers pay on average almost two-thirds (1997: 63%) of total contributions. This higher share paid by employers may be explained by the additional contributions made for pension plans of upper management as well as for defined-benefit plans.

Contributions to the LOB are primarily determined by "co-ordinated earnings". Co-ordinated earnings are defined as that *part* of an individual's earnings above SFr. 24,720 and below SFr. 74,160. This range corresponds to the income between the maximum public pension (OASI/DI) and 3 times that level or, alternatively, to about 40 and 120 percent of average earnings. LOB contributions are levied on co-ordinated earnings. Thus, no contributions are levied on the first SFr. 24,720 of one's salary (this is the so-called "co-ordination deduction"). In other words, *compulsory* contributions to the second pillar are *applied* to a maximum income of SFr. 49,440 (i.e., SFr. 74,160 - 24,720), which corresponds to an actual income of SFr. 74,160. Voluntary contributions can be levied on earnings above the upper limit. These voluntary contributions play an important role in achieving the objectives of the LOB, i.e., assuring a pension (together with the OASI/DI) of 70% of pre-retirement earnings. In *figure 2* presented above, the role of the co-ordination income can be clearly seen: the relative importance of the compulsory LOB declines rapidly as annual incomes rise above SFr. 74,160.

The second important component which determines contributions is the contribution rate (i.e., wage deduction rate). This rate increases with age (Art. 16 LOB). Minimum applicable rates are presented in *table 6*.²² A point worth noting in this context is that, since contribution rates

²² These rates are determined by law and are not automatically adjusted to inflation or rising average income.

increase (in the Swiss case quite dramatically) with age, this does have a negative effect on early retirement.

An important aspect of the LOB is that widow's and disability pensions are also covered by the occupational scheme. The minimum widow's pension is 60% of the old-age or full disability pension. Children of retired, disabled or deceased insured individuals receive a rent of 20% of the old-age or the full disability pension. The minimum benefits of the disability benefits are 7.2% of the savings capital available at the beginning of the insured person's pension eligibility as well as the credits for the years missing before the age of 63 in the case of women and 65 in the case of men, without interest, based on the insured wages at the time the disability occurred.

Table 6: LOB contribution rates according to age

age-group		contribution rate as percentage of co-ordinated income
Men	women	
25-34	25-31	7
35-44	32-41	10
45-54	42-51	15
55-65	52-62	18

Source: Art. 16 LOB

Total contribution revenues in the second pillar amounted in 1999 to SFr. 24.2 billion (see *table 4* above).

5.2.1.4 Non-discrimination regulation

Participation in the pension scheme is compulsory for all employees and therefore the possibility to discriminate is small. In addition, the board of trustees (which is responsible for the administration of the fund) is composed of an equal number of representatives of employers and employees. Perhaps the only discriminatory aspect of this system is related to gender: at the moment there are still different retirement ages for men (65) and women (63) and, thus, the compulsory minimum contribution rate is lower for women than for men. Currently, the 11th revision of the OASI/DI law is being discussed in parliament. One important aspect of this revision is the increase in women's retirement age to 65 by the year 2009. This increase will automatically also apply to the second pillar.

5.2.1.5 Providers

According to the LOB, the employer has to establish a legally separate (i.e., from the funding firm) pension fund based in Switzerland or to join one by affiliation contract. Registration in a public register is necessary for all funds that want to adhere to the minimum regulations of the LOB.²³ In 1998, about 25% of all pension funds were registered, more than 60% of pension institutions had no affiliates and were not registered, and an additional 10% of institutions (about 1,200 funds) had affiliates but were not registered. The non-registered funds covered about 8 percent of affiliates and operate as schemes for senior staff (see Queisser and Vittas, 2000).

Thus, two major types of pension funds can be distinguished:

- Pension funds, organised by employers themselves
- Pooled foundations, established and administered by life insurance companies, banks, pension consulting firms, or employers' associations. Especially smaller companies join such pooled-pension foundations to avoid the considerable amount of administrative work involved in setting-up their own independent foundation. In such pooling arrangements, the individual occupational funds keep their own statutes, regulations on contributions and benefits as well as their investment committee. In addition, a joint foundation board is established, which is composed of representatives of the affiliated funds and the managing life insurance company or bank. This board is responsible for cash flow and account management, benefit administration, and the investment of assets according to the provisions of the law. Additional investment restrictions may be imposed by the foundation board, which must be accepted by the affiliated funds. The individual funds are administratively and actuarially separated, but in most cases, their assets are invested jointly. If an affiliated company or pension fund defaults, the pooled foundation is not liable. Instead, the respective fund is assessed individually and, if applicable, supported with resources from the Guarantee Fund (which will be discussed below).

Table 7 shows that the total number of pension funds in Switzerland at the end of 1998 was equal to 10,409 with a total of 3,1 million insured individuals. About 200,000 persons have a supplementary scheme in one of the about 7,600 non-registered pension schemes. Nevertheless, the majority of these funds have no regulations (except those of the trust

²³ Supervision of these pension funds is discussed in section 4.2.1.7.

statutes) and actually serves as tax-free finance-funds (non-committed funds, employer-paid contribution reserves) for the regulated pension schemes. Due to a concentration process, the total number of funds has diminished significantly in the past decade (in 1987 there were approximately 15,000 funds). The main reason for this concentration process is that the management of such funds has become very complex and that this management can be more effective and efficient in larger organisations.

Table 7: number of providers

	all pension funds		registered pension funds		not registered pension funds	
	no. of funds	insured persons	no. of funds	insured persons	No. of funds	insured persons
private funds	10,253	2,580,594	2,691	2,402,028	7,562	178,566
public funds	156	559,082	132	549,749	24	9,333
total	10,409	3,139,676	2,823	2,951,777	7,586	187,899

Source: Bundesamt für Statistik (2001)

5.2.1.6 Regulation of permitted financial products within this scheme

One of the items that have been discussed long before the LOB came into force, were the flexibility regulations of the Swiss second pillar, as for example portability and the right to adjust amount or discontinue contributions. Full portability or the so-called vesting of pension savings was regulated by the Federal Law on Vesting in the LOB ("Freizügigkeitsgesetz") of 1995. Before that time, many pension funds only paid that part of the old-age savings that was contributed by the employee. This was often referred to as the "golden chains", which, in practise, resulted in lower mobility in many parts of the labour market. Another aspect of flexibility is the individual choice of asset strategy within the fund, comparable to the 401K-Plans in the USA. Some larger pension funds offer this possibility for upper management. Many tax authorities are not willing to tolerate these constructions since they often contradict the basics of planned pension schemes for a collective.

The regulations for each pension plan must be developed by the board of trustees (employer and employees have equal representation on this board) together with an accredited pension actuary. The actuary has to control and confirm that regulations are financially sound and compatible with Swiss law. The regulations must also be approved by the supervising authority and the tax authorities. Company pension plans are free to set the terms and

conditions for those benefits exceeding the legal minimum, i.e., the compulsory benefits / contributions.

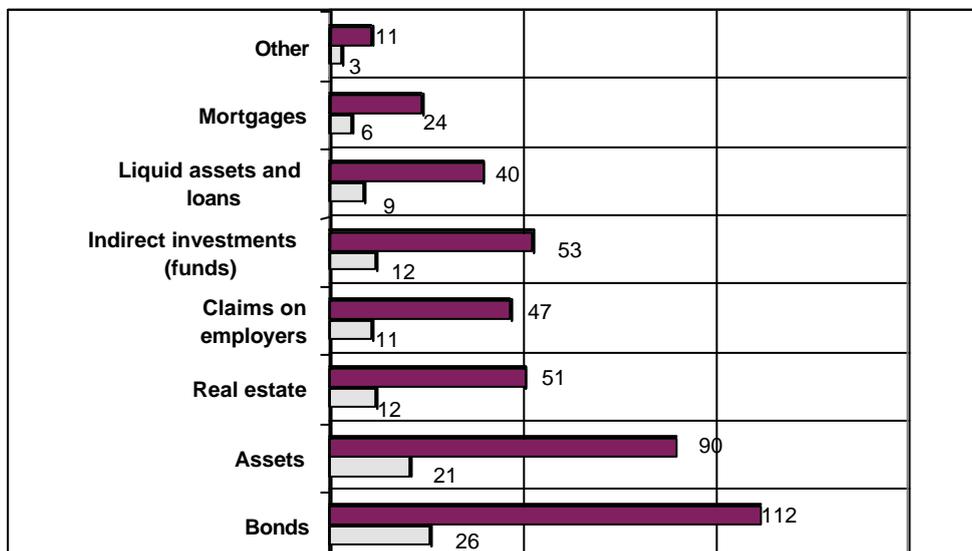
According to the LOB, invalidity and death must be insured against. The minimum requirements are dealt with in chapter 3 of the LOB law.

Contrary to the Anglo-Saxon countries which have much more liberal regulations for asset management, Switzerland has a system of investment regulations that is quite strict. Aside from the requirement that funds be fully funded, they also face restrictive asset-allocation regulations, primarily requiring them to invest in low-risk and domestic asset categories. The amount of investments that can be made in (both domestic and foreign) stocks are clearly defined.

This system has been criticised by financial professionals. After long discussions in the federal LOB commission (in spring of 2000) these restrictions were slightly relaxed, although they remain (at least in an international comparison) very restrictive (see also van Dam, 2000, pp. 43-51; Davis, 1995; Jaeger, 1994).

Asset allocation of Swiss pension funds in 1998 are depicted in *figure 3*. As can be seen, (low-risk) bonds, real estate, and claims on employers make up approximately 50% of actual investments. It must, however, be mentioned that, in the past decade, the amount of investments in assets (shares) has increased by more than 60%. Compared to 1996, the proportion of investments in shares has increased by 5% (see van Dam, 2000, p. 47).

Figure 3: asset allocation of Swiss pension funds in 1998



Note: light-shaded columns depict the percent of all investments; dark-shaded columns depict investments in billion SFr.

Source: Bundesamt für Statistik (2001)

5.2.1.7 Vesting Periods

Since 1995, as the Federal Law on Vesting came into force, one of the biggest problems of the 2nd pillar was solved. When changing employment, the beneficiary has the right (and, since 1.1.2001, the duty) to transfer the retirement capital from the old pension fund to the fund of the new employer. In defined contribution plans, the transfer value is equal to the old-age contributions made by and on behalf of the affiliate plus accrued interest of at least four percent annually. In defined benefit plans, the value is calculated by accepted actuarial rules.

5.2.1.8 Security

The second pillar has a system of checks and balances which are quite effective in assuring a high level of security.²⁴ In particular, the following characteristics deserve to be mentioned:

- On the board of trustees, equal representation of employers and employees guarantees non-discriminatory practises, and assures that funds are allocated safely.
- Private auditors and actuaries are compulsory for all pension schemes with compulsory benefits.
- Public authorities and tax authorities supervise funds. Regional funds are controlled by canton authorities, whereas nation-wide funds are controlled by the federal government.
- A Guarantee/Insolvency Fund²⁵, which is a public foundation according to the LOB and fully funded by contributions of all of the pension funds with regulations. The Guarantee Fund "bails out" insolvent funds.²⁶
- As was mentioned in the previous section, investment strategies are quite conservative, which, on the one hand, guarantees that invested funds are not at risk. On the other hand, these restrictive measures may inhibit an acceptable rate of return on investments.

²⁴ See van Dam (2000) for an elaborate discussion of all aspects of risks, security, supervision and insolvencies in the Swiss system.

²⁵ In German: "Sicherheitsfonds BVG"

²⁶ See van Dam (2000), Smalhout (1997), and van Dam and Schmid (1995) for a detailed discussion of this fund.

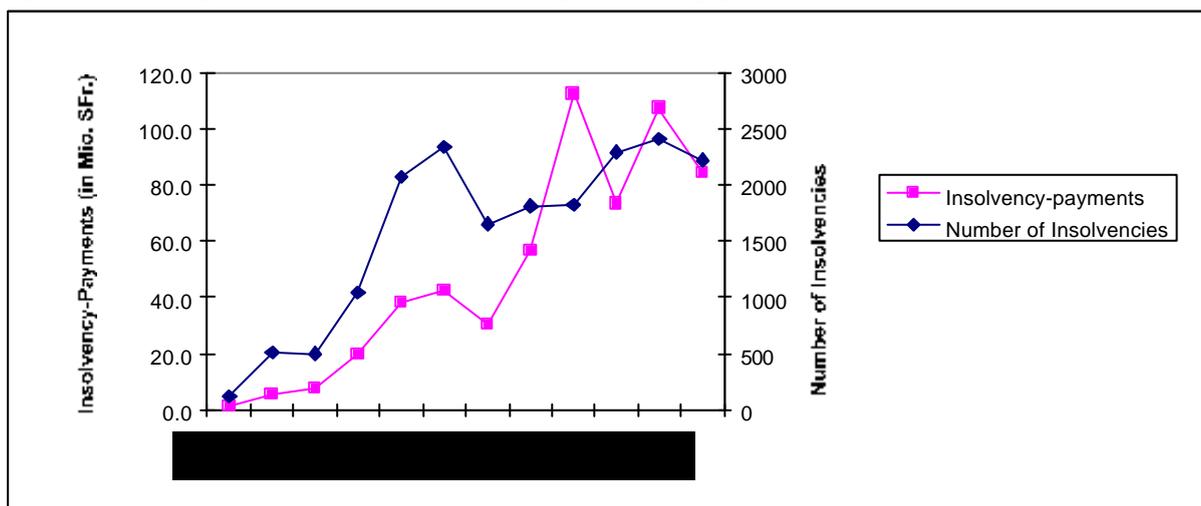
- Withdrawing funds before retirement age is regulated and is quite restrictive (see section 4.2.2.1 below).

The *supervision is fragmented*, first, because of large differences in supervisory practices, especially between the canton and national level and, second, because of differing legal and organisational settings between the Federal Office of Social Insurance for funds covering employees of national or international companies and the Ministry of Finance for certain federal pension funds for civil servants (e.g., postal services and the federal railways). Life insurance companies, which manage pension funds under collective insurance contracts, fall under the supervision of the Federal Office for Private Insurance.

Despite the restrictive regulations regarding asset allocation and despite the growing awareness of the regulations on funding and security among fund managers, van Dam (2000) and van Dam and Schmid (1995) show that both the number of insolvencies as well as the insolvency payments have grown continuously in the past decade (see *figure 4*).^{27,28}

It should be noted that the high number of insolvencies is caused by the bankruptcies of many small firms that were affiliated with pooled pension institutions. However, the mass of insolvency payments is caused by a very small number of firm-owned pension funds.

Figure 4: number of insolvencies and total amount of insolvency payments



Source: Van Dam (2000) and update.

²⁷ Naturally, the severe recession of the 1990s played a major role in this context. Van Dam (2000), however, argues that moral-hazard problems associated with the Guarantee Fund and supervision aspects have also influenced the number of insolvencies.

²⁸ See also Scherer and Zimmermann (1997) and Zimmermann (1995).

5.2.2 Regulation in withdrawal phase

5.2.2.1 Withdrawal phase

According to the Swiss federal constitution as well as the LOB, the official retirement age for men is 65 and for women 63 (as of January 2001). The latest revision of the OASI/DI foresees an increase of women's retirement age to 65 as of 2009.²⁹ In practice, however, (and contrary to recommendations made by international organisations like the OECD and World Bank) a growing number of firms and pension funds allow their personnel to leave before the age of 63/65. This can be seen in *table 8*. As was mentioned above, early withdrawal is often associated with high opportunity costs since contribution rates are age-dependent. Thus, employers pay considerably more as retirement age approaches.

Table 8: retirement age in pension funds

	fix retirement age		flexible retirement age	
	no. of funds	insured persons	no. of funds	insured persons
Women				
under 62 year	61	10,797	31	10,262
62 years	3,367	866,904	2,057	783,345
over 62 years	261	225,142	216	221,597
Men				
under 65 year	232	220,139	187	213,851
65 years	3,456	1,701,662	2,129	1,516,925
over 65 years	3	427	3	427

Source: Bundesamt für Statistik (2000)

There are only three legal reasons to withdraw pension savings as a one-time capital payment *before* retirement age³⁰:

- if an individual decided to become self-employed,
- if one is leaving Switzerland definitively before retirement³¹,

²⁹ This 11th revision of the OASI/DI is, however, still being debated in the Federal Parliament and therefore the proposed changes are not definite yet. Especially with regard to the increase in women's retirement age a fair share of opposition exists.

³⁰ See Art. 5 of the Federal Law on Vesting in Occupational Old-Age, Survivors' and Disability Benefit Plan.

³¹ Although, according to the Treaties on Social Security between Switzerland and the European Union (EU), this reason will become obsolete. These treaties still have to be ratified by EU member states.

- when the invested amount is very small (less than a one-year contribution).

5.2.2.2 *Design of annuities*

At the time of retirement, most of the beneficiaries can choose between a one-time capital payment (if foreseen in the regulations of the pension fund) or a pension (annuity). Since the beginning of 1995, the beneficiary has the option of using pension savings before retirement in order to purchase or build self-occupied real estate³², or to pay back mortgages on this real estate.

The design of the annuities differs among defined-benefit schemes, defined-contribution schemes, or a combination of both.³³ However, all rents are, in general, to be paid out in monthly instalments. The pensions for survivors and disabled individuals must also be adjusted every three years for inflation.

In defined-benefit schemes the old-age pension depends solely on the insured income. The insured income is usually the pre-retirement income or some form of average income.

In defined-contribution schemes, the old-age pension is 7.2% of the savings capital available at the beginning of the insured person's pension eligibility. This percentage is the so-called "minimum conversion rate", based on actuarial principles (see Art. 14 LOB). Due to over-ageing (increasing life-expectancy), a step-by-step reduction of the conversion rate to 6.8% in the year 2016 is being discussed as part of the first LOB revision (currently being debated in the Federal Parliament).

³² This reason can also be used to pawn the assets held in this scheme.

³³ Described in the third chapter of LOB, that deals with insurance benefits.

5.3 The third pillar - private pension scheme

5.3.1 Target groups

The third pillar is based on voluntary savings and currently plays a relatively small part in the pension system. It consists of two parts: (i) the “tied individual retirement savings” (or “qualified fiscally privileged pension schemes”), which benefit from tax incentives; and (ii) “other personal savings” in the form of life insurance, investments, bank accounts, or property ownership. Tax incentives are provided to self-employed workers and to workers covered by occupational plans, though the limits for the self-employed are much higher. Tied individual retirement savings are subject to regulatory constraints. They are operated by insurance companies and authorised banking foundations.

The primary goal of the third pillar is to provide additional income for retirement. Especially for higher-income groups, participation in the third pillar is necessary in order to ensure that (together with the OASI/DI and the LOB) at least 70% of pre-retirement earning can be achieved at retirement (see *figure 2* above). As was mentioned above, the third pillar is composed of a 3a and a 3b pillar, the former covering all tied savings (withdrawal as of age 60) and the latter covering personal savings which can be used at any time. The 3b pillar does not have any tax incentives. We will concentrate on the 3a pillar, since this scheme is primarily related to pensions.

The target group of this scheme are all salaried and self-employed individuals who are covered in the second pillar, i.e., earn more than the “co-ordination deduction”. Individuals not covered by the second pillar may, to a certain extent, also participate in this scheme. Thus, in essence, the same target group as in the second pillar can be covered here. Note, once again, that the third pillar is voluntary.

At the end of 1999, approximately 1,6 million private pension contracts with one of the 72 authorised banks or insurance companies existed. About one third of these contracts were signed by women. An interesting observation is that only approximately 30% of all contracts belong to individuals aged between 50 and 65.

Furthermore, (and as one could expect) younger individuals (aged between 25 and 49) have a higher preference for savings contracts with an insurance component. A further statistic worth

mentioning is that almost one quarter (23 %) of all these third-pillar contracts were signed by individuals who do not belong to a regular pension fund (i.e., self-employed individuals and low-income groups). This shows the social relevance of this pillar as a complement to the official first and second pillars (Sommer, 2001, p. 145).

5.3.2 Government approach and incentives

The main attraction of the 3a pillar is the favourable tax treatment it receives. This is also the main government incentive to promote savings in this scheme. More specifically, contributions (up to certain ceilings) can be completely deducted from taxable income (see *table 9*). Furthermore, returns on investments are not taxed (although the accrued benefits are taxed at withdrawal).

Table 9: maximum annual deduction in the 3a pillar(1989-2001)

year	normal deduction in SFr.	self-employed persons (without LOB)
		20% of earned income, but a maximum (in SFr.) of
1989	4,320	21,600
1990	4,608	23,040
1991	4,608	23,040
1992	5,184	25,920
1993	5,414	27,072
1994	5,414	27,072
1995	5,587	27,936
1996	5,587	27,936
1997	5,731	28,656
1998	5,731	28,656
1999	5,789	28,944
2000	5,789	28,944
2001	5,933	29,664

Source: Libera (2001)

5.3.3 Contributions

Contributions to the 3a pillar are restricted to 8% of the (second pillar's) "co-ordination deduction", which, in 2001, equalled SFr. 24,720, i.e., a maximum of SFr. 5,933 per year may be invested in the 3a pillar. Working individuals not covered by the second pillar (i.e., self-employed individuals and low-income groups) may contribute up to 20% of their earnings,

although not more than 40% of the co- ordination deduction (in 2001 this maximum was equal to SFr. 29,664³⁴).

5.3.4 Providers

Providers of the tied savings schemes that benefit from tax incentives (pillar 3a) are insurance companies (at the end of 1999 a total of 31) and authorised banking foundations that operate in Switzerland (at the end of 1999 a total of 41). The five largest providers are depicted in *table 10*.

Table 10: the five largest providers in the third pillar

	gross premiums in 1997 (mill. SFr.)	gross premiums in 1999 (mill. SFr.)
Rentenanstalt/Swiss Life	12,774	
Winterthur Leben	6,446	
Zürich Leben	4,836	
Bâloise Leben	2,321	
Patria Leben	1,707	
total	28,800	31,391

Source: PricewaterhouseCoopers (1998)

Supervision is done by the Independent Banking Commission (for the banks) and the Federal Office for Private Insurance (for insurance firms).

5.3.5 Regulation of permitted financial products within this scheme

The third pillar is regulated by the LOB legislation as well as a special ordinance (OOB 3)³⁵. Art. 83 LOB states that employees and self-employed individuals can deduct contributions for other retirement savings (i.e., other than for the second pillar), as long as these savings are exclusively used for occupational pensions. All further details are regulated in the Ordinance on the Allowable Fiscal Deductions of Contributions to Recognised Pension Plans.

Since invalidity and death can also be assured in the third pillar (see also section 4.3.7 below), these options are attractive for the self-employed

³⁴ This amount is often referred to as the "big deduction".

³⁵ "Verordnung über die steuerliche Abzugsberechtigung für Beiträge an anerkannte Vorsorgeformen (BVV 3)", of 1985.

The banking and insurance industries are, to a large extent, self-regulated, i.e., industry-wide regulations and supervision apply. This is also the case with regard to portfolio regulations.

Flexibility in the third pillar is very high. Contributions can be adjusted at any time or discontinued. Furthermore, assets in the third pillar can be transferred to the second pillar or to other institutions in the third pillar. Only with regard to withdrawal do certain age limits apply (usually older than 60). Individual portfolio choice is also very large. In essence, all portfolios (funds) offered by banks or insurance firms can be chosen.

5.3.6 *Security*

As all pension and savings schemes for the pillar 3a are operated by banks and insurance companies, supervision is done by the Independent Banking Commission (for the banks) and the Federal Office for Private Insurance (for insurance firms). As in other countries (for example, Australia, Great Britain, and New Zealand), the tendency towards all-finance has also led to broad discussions on the co-ordination of security and supervision in the finance industry in Switzerland (banking, insurance firms, stock markets, brokerage, etc.).³⁶ No insolvencies of the providing institutions have been known. For the worst case, the industry has created an own guarantee fund.

The supervision of the firm-related financial aspects are predominantly regulated by the industry itself. As in the banking and insurance industry in general, up to a certain level, accounts are guaranteed by a guarantee fund, regulated by federal law and funded by the industry itself.

Early withdrawal is similarly regulated as in the second pillar, i.e., funds can be withdrawn before maturity if an individual uses the funds in order to buy self-occupied real estate.

³⁶ See Expertengruppe Finanzaufsicht (2000).

5.3.7 Regulation in withdrawal phase

Funds invested in the 3a pillar have to be exclusively and irrevocably used for providing for one's old age, premature death, or disability. The characteristics of such "linked provision measures" such as, for example, linked life-insurance policies, are tax deductibility of the premiums, restrictions with regard to the designation of beneficiaries (i.e., form and freedom of the disposal of entitlements and benefits), and taxation of the full benefits. These funds can therefore also be withdrawn only for the specific reasons mentioned above. An exception to this rule is the use of these assets as collateral for mortgages. Non-linked provision measures (pillar 3b) such as non-linked life-insurance policies are not subject to any particular restrictions.

5.3.8 Design of products

The insurance needs of a family can be quite different from those of an individual. Consequently, the voluntary coverage purchased in connection with the third pillar has to be considered in addition to the benefits offered by the first pillar (old-age, survivors, and disability insurance programs) and the second pillar (work-related coverage or social insurance). In addition, not only do individual needs vary greatly, they also change over time in parallel with family and career developments. Consequently there is no all-in-one solution for everybody. Furthermore, the diversity of offered products and services is very large and differ also among the providers.

The following list shows the most common and well-known forms of *life insurance*:

- *Cash value life insurance*: life insurance (ordinary, variable, fund or index-linked)
- *Risk insurance* (survivorship annuities, disability or sickness income insurance)
- *Annuities and similar plans* (immediate or deferred payment, payable to one or more insured persons)

6 Financial education literacy in Switzerland - preliminary evidence

A relevant question in the context of this study is the extent to which individuals, who are covered by the Swiss pension system, are "financially literate". Especially with the current debate of increasing competition among insurers, i.e., liberalising the pensions system (see, for example, Sommer and Gerber, 2001), knowing whether or not the average Swiss is capable of understanding the options and the underlying mechanisms at work in the Swiss pension system is important. Despite its relevance, very little is known about this topic.

In order to fill this gap, we analyse data from the 1999 Swiss Labour Force Survey. In the 1999 take, a special supplementary survey on education in Switzerland was conducted. We use this survey in order to answer the following two questions:

- What proportion of the Swiss population has taken a course relating to financial issues in the past 12 months (i.e., in 1998/1999)?
- How do the socio-economic characteristics of these individuals differ?

Naturally, these question cannot reveal the *actual* financial knowledge of an average Swiss, yet we do believe that it provides us with a rough and initial estimate.³⁷ Especially if one considers the complexity of the Swiss pension system and also the complexity of modern finance, then it can be assumed that course-related training is required in order to obtain financial literacy.

With the aid of the 1999 Swiss Labour Force Survey it is possible to identify individuals who, in the past 12 months, visited finance-related courses. We identified a total of 19 course types which were primarily related to financial education. More specifically, these courses can be divided into "insurance courses" and "general finance courses". In *table 11*, a listing of the courses considered here is presented. The insurance courses primarily cover aspects related to old-age pensions. In fact, there is also one course which explicitly provides information on this topic.³⁸ The general finance courses cover such issues as banking products, finance, and accounting. Several of these courses will also deal with insurance products and thus with old-age pensions. Nevertheless, the insurance courses are primarily those in which we are interested.

³⁷ We are not aware of any other surveys which gather information on the financial knowledge of individuals in Switzerland.

Table 11: insurance and finance courses

<i>insurance courses</i>	<i>general finance courses</i>
old-age provision course	finance sector course
social insurance course	banking course 1
pension funds course	banking course 2
social security systems course	banking specialist course
general insurance course	stock market course
insurance systems course	internal banking course
insurance economics course	finance and accounting
	banking seminar
	finance course 1
	finance course 2
	bank products course
	Swiss financial sector course

The results are presented in *table 12*. The first important point to take note of is that course participation is low: only 0.28% of all individuals aged 20 to 65 attended an insurance course, and only 0.39% visited a general finance course. This corresponds to 12,282 and 17,112 individuals, respectively. We also note that, in the insurance courses, participation does not differ between males and females or between younger and older individuals. Primarily individuals with a "medium" education (in essence an apprenticeship) attend such courses. Participation of the general finance courses is most common among elder, well-educated males.

³⁸ According to the user regulations of the Swiss Labour Force Survey, no results based on less than 10 observations may (for data protection reasons) be presented. Thus, it is not possible to reveal the number of persons which took part in selected individual courses.

Table 12: course participation in 1999

	insurance courses		general finance courses	
	no. of individuals	% of individuals aged 20 to 65	no. of individuals	% of individuals aged 20 to 65
total	12,282	0.28	17,112	0.39
male	5,822		11,524	
female	6,460		5,587	
high education	3,069		10,427	
medium education	8,893		5,490	
low education	-		-	
younger than 40	6,134		9,271	
older then 40	6,148		7,841	

Source: own calculations based on data from the 1999 Swiss Labour Force Survey

The main conclusion of this analysis is that a very small fraction of the population has received some formal education on old-age pension systems or another similar topic such as financial education. Special (vocational) education programs in the field of "retirement income planing" are indeed very uncommon. In fact, with one exception³⁹, we are unaware of programs for the public at large (i.e., not considering internal programs of insurance firms, university courses and the like⁴⁰) which cover this topic. It is, however, worth noting that a limited number of (most notably large) companies offer some form of "corporate development plan for elderly workers" (Brosziewski et al., 1997). These plans include preparatory courses supporting transition from active professional life to retirement for employed persons of pensionable age. They offer concrete help in legal, financial, and health related matters. In most companies, however, no systematic guidelines for a policy on ageing are offered.

Considering the complexity of the Swiss social security system, these results most probably imply that, in general, Swiss individuals are poorly informed. Although a fair share of individuals obtain their information on the social security system from private consultants, the mere fact that only 10,368 insurance experts responsible for consulting customers existed at

³⁹ We surveyed the largest vocational training institution in Switzerland, namely the Migros Klubschule, and only in one of its several branches was a course on social insurance being offered.

⁴⁰ Some high schools (so-called "Kantonsschule") offer courses in economics which also cover aspects of the Swiss social security system.

the beginning of 2000⁴¹, does indicate that the overwhelming majority of Swiss either inform themselves, or are uninformed. An interesting result, which illustrates this information deficit, is that, according to the National Study on Poverty, up to one-third of all those entitled to claim supplementary benefit do not do so partly due to their lack of information (Höflinger, 1997).

⁴¹ Source: Swiss Insurance Association (2001). These experts are individuals who consult customers on an individual basis, and usually at the client's home (they are the so-called "Beschäftigte im Aussendienst").

7 Assessment

Most experts (both national and international) agree that the Swiss pension system is, compared to those of other countries, in good shape. In fact, in a recent survey conducted in January 2001 among 37 experts, 95% was convinced that the Swiss three-pillar concept has done very well and should continue to form the basis of the Swiss system. Furthermore, 97% of these experts stated that the Swiss system fared well compared to those of other countries (see Sommer and Gerber, 2001). There are a number of reasons why the Swiss system receives such acclaim (see Queisser and Vittas, 2000):

- The *unfunded public pension scheme* (OASI/DI) provides *modest benefits* of approximately 30 to 35% of average earnings. These relatively low benefits ensure that social security deductions from wages are also low.
- The *unfunded public pension scheme* (OASI/DI) is *highly redistributive* with the maximum public pension limited to twice the minimum. This redistributive nature also assures that the funding of the public unfunded system is not in as a precarious situation as in other countries.
- Old age has ceased to be a high risk factor for poverty. At least in the transition period, i.e., shortly after introducing the second pillar, *supplementary benefits* associated with the OASI/DI contributed substantially to this achievement.
- The *funded occupational pension system* (LOB) is *compulsory*, extensively funded, and privately managed.
- *Contribution rates* for the *funded occupational pension system* (LOB) *increase with the age* of the worker. The advantage of this set-up is that wage deductions are relatively lower for younger families. There are, however, also disadvantages of this set-up which will be discussed below.
- The *co-ordination between the first and second pillars*, i.e., between the compulsory funded and unfunded systems works very well, and the two pillars effectively guarantee a retirement income of approximately 70% of pre-retirement income. This rule applies to the majority of individuals. Only above-average earners do not meet this objective. Low-income earners are thereby not required to "oversave" (see also Vittas, 1997).
- An important characteristic of the Swiss pension system is that the compulsory first and second pillars *together* only guarantee a retirement income of approximately 70% of pre-retirement income. Thus, benefits arising from compulsory contributions are perhaps sufficient to maintain a "decent" standard of living, but they do not

necessarily guarantee pre-retirement standards of living. *This stimulates private savings.*

- A unique aspect of the first two pillars is that they *both insure against disability*, i.e., responsibility is shared equally between the public and private pillars.

Despite these attractive features of the Swiss system, there are a few *disadvantages* worth mentioning:

- Demographic changes (as in other countries) are having a negative effect on the *financing of the unfunded public pension scheme (OASI/DI)*. The increase in life expectancies, for example, has resulted in a substantial increase in the number of years that a pension must be paid out. Thus, in the year 2010, on average five more years must be paid out for men, and eight more years for women, compared to 1948 (the year when the OASI/DI was first introduced). The changing structure of the population is resulting in an increase in the number of elderly people relative to the rest of the population, and relative to the active labour force (who, in essence, finance the OASI/DI). This has also had a negative effect on the OASI/DI's funding. For example, while there were on average 4.3 contributing individuals per pensioner in 1995, this ratio will decline to 2.6 by the year 2025. Although the OASI/DI as a whole is in relatively sound financial shape compared to similar systems in other industrialised countries, these figures have prompted the Swiss government to propose a revision of federal OASI/DI legislation in order to adequately assure the future funding of the system.
- The performance of public pension funds is not high. This is partly due to the *restrictive investment regulations* in the LOB and, perhaps, also partly due to the general (conservative) investment practises of Swiss firms.⁴²
- One severe limitation of the LOB is that it *does not cover individuals earning less than the co-ordination deduction*. This implies that part-time employed individuals (most notably women) and low-income earners do not receive the benefits from the second pillar.
- There is *no competition* in the current occupational pension scheme. Certain proponents argue that benefits could improve if workers were allowed more freedom in their choice of insurer (e.g., Sommer and Gerber, 2001).
- The Swiss system is *very complex*. One potential disadvantage of this complexity is that an average person has difficulties in fully understanding it. Considering the fact

⁴² It is, for example, interesting to note that a number of pension funds do not even exploit the strict investment regulations of the LOB to its fullest. See, for example, Schmid et al. (1996).

that only a very small portion of the Swiss population has had some formal education on this (or a related) topic, one must assume that the potential benefits of the system (especially in the second and third pillars, but also with certain aspects of the first pillar such as supplementary benefits) are not being fully exploited.

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