



**COMPARED REGULATIONS SERIES**

**DESCRIPTION AND ANALYSIS OF THE  
MULTIFUND SYSTEMS IN THE LATIN  
AMERICAN AND EASTERN EUROPEAN PENSION  
SYSTEMS<sup>1</sup>**

Santiago, January 2010

---

<sup>1</sup> Document prepared by the International Federation of Pension Fund Administrators (FIAP).



## Executive Summary

The purpose of this document is to describe the regulations governing the multifunds systems (or multiple portfolios) in the different countries that have adopted pension programs based on individual funding. In Latin America, multifund systems exist in Chile (2002), Mexico (2005) and Peru (2005). Colombia will implement a multifund system in 2011. Among the Eastern European countries, Estonia implemented this system in 2002, Latvia in 2003 and Slovakia in 2005. Hungary started operating this type of system voluntarily as of 2007, but it became mandatory in 2009. Finally, Lithuania implemented a multifund system in 2004.

There is a limit on the number of multifunds authorized in the eight countries analyzed in this document. Among the Latin American countries, Chile and Mexico offer five different investment alternatives, whereas Peru has three authorized funds. In Eastern Europe, all the countries offer three types of portfolios, with the exception of Lithuania.

In all the countries analyzed, the main difference between the authorized portfolios is their variable income investment percentage. In Chile, Peru and Hungary, the most conservative strategy enables investing a percentage of assets in variable income. In the rest of the countries, the most conservative strategy only invests in fixed income instruments.

In 7 countries, the regulations set out default rules and regulations for members who do not choose a fund type on joining the system. In Chile, Hungary, Mexico and Peru, the rules state that members who do not exercise their right to choose will be assigned to a fund according to their age. In Estonia, Lithuania and Latvia, members who do not choose are assigned to the most conservative fund which only invests in fixed income instruments. In Slovakia, on the other hand, the regulations do not stipulate a default fund: workers must necessarily choose a fund type in order to be able to join the pension system.

The available evidence shows that members in Latin America and Eastern Europe have chosen different portfolios. In Chile, Mexico and Peru, most of the accumulated funds and members are in balanced investment strategies. In the Eastern European countries, on the other hand, more aggressive investment strategies are preferred.

The multifund systems in Chile and Peru provide explicit guarantees on the profitability of the funds. In the rest of the countries, there is no mechanism that guarantees a minimum profitability of the pension fund investments performed by the fund managers.

In all the countries, members can transfer their balances between the funds of the same fund manager. Nonetheless, the regulations in all these systems, with the exception of Mexico, limit the number of transfers between funds that members can perform freely and without cost.

Chile is the only country in which members are allowed to assign their resources to two funds within the same fund manager. In the rest of the countries, the savings can be kept in only one of the different funds offered by each fund manager.



### *CHILE*

- Each fund manager offers its members five portfolios (or funds). The funds are denominated A, B, C, D and E. Fund A has the highest proportion invested in variable income (80%) whereas Fund E is authorized to invest a maximum of 5% in this type of assets.
- Members who do not choose a fund type on joining the system are assigned to one of them according to their age. The rules divide members into three age groups. The youngest members are assigned to a fund more intensive in variable income and older members to funds more intensive in fixed income.
- The value of the pension funds in Chile amounted to US\$ 74,313 million as of December, 2008. One third (35%) of total assets were invested in funds with more than 60% variable income (A and B). 21% of assets were invested in the funds with the least variable income (D and E).
- There were 8,372,475 members in December, 2008. 37% of members were in the intermediate fund, C. The riskiest fund (A) concentrated 14% of all members, whereas 2% were in the least risky fund (E).

### *COLOMBIA*

- The multifunds will start functioning in 2011.

### *MEXICO*

- As of March 28, 2008, each pension fund manager is authorized to offer five investment alternatives (SB1, SB2, SB3, SB4 and SB5). The funds differ mainly in their limits on variable income instruments. SB1 can only invest in fixed income instruments whereas SB5 can invest up to 30% in variable income.
- The regulations pre-establish a fund that varies according to age for those members who do not exercise their right to choose the investment fund. The rules divide members into five age groups. Younger members are assigned to funds more intensive in variable income and older members to funds more intensive in fixed income.
- As of December, 2008, the total value of the pension fund assets amounted to US\$ 73,109 million. The highest percentage of assets was invested in SB3 and SB4 (59%).

### *PERU*

- The multifund system was put in place in January, 2005. Each fund manager can offer three types of fund: a capital preservation fund (Type 1), a balanced or mixed fund (Type 2) and a growth fund (Type 3). Fund Type 1 can invest up to 10% in shares, fund Type 2 up to 45% and fund Type 3 up to 80%.
- Members who do not choose a fund type on joining the system are assigned to one of them according to their age. The rules divide members into two age groups. Younger members are assigned to fund Type 2 and members close to retirement age to fund Type 1.
- As of December, 2008, the funds managed by the private pension system amounted to US\$ 16,008 million. The intermediate risk fund (Type 2) concentrated 74% of assets.



- As of December, 2008, there were 4,296,480 members of the private system. Fund Type 2 has the largest number of members, representing 90% of the total.

#### *SLOVAKIA*

- The multifund system was established in 2005. In this system, members can choose between three pension funds: the Conservative fund, the Balanced fund and the Growth fund. The Conservative fund is authorized to invest only in bonds and other risk-free assets. The Balanced fund can invest up to 50% in variable income instruments and the Growth fund can invest up to 80% in variable income instruments.
- The total assets in the individually funded system amounted to US\$ 3,109 million as of December, 2008. 67% of the total assets were invested in the most aggressive fund.
- There were a total of 1,483,026 members. 1,033,137 members, 70% of the total, were in the most aggressive fund.

#### *ESTONIA*

- The multifund system started operating in July, 2002. Each fund manager must mandatorily offer a pension fund invested exclusively in fixed income instruments and can offer another two funds which differ mainly in the percentage of assets invested in fixed and variable income. The Balanced fund can invest up to 25% and the Aggressive fund up to 50% of its assets in variable income instruments.
- Members who do not choose a fund type on joining the pension system are assigned to the most conservative fund.
- As of December, 2008, the pension funds amounted to US\$ 1,034 million.

#### *HUNGARY*

- The multifund system was established in January, 2007. This system was initially voluntary, but as of January, 2009, it became mandatory. Each fund manager is authorized to offer three types of funds: a conservative fund (up to 10% in variable income), a balanced fund (up to 40% in variable income) and a growth fund (up to 100% in variable income).
- Members who do not choose a fund type on joining the pension system are assigned to one of them according to their age. The rules divide members into three age groups. Younger members are assigned to the funds more intensive in variable income and older members to funds more intensive in fixed income.
- As of December, 2008, the portfolio managed by the private system amounted to US\$ 9,657 million. Since the multifund system was voluntary until the end of 2008, approximately 40% of the portfolio was in the hands of fund managers that did not participate in the multifund system and therefore offered their members a sole portfolio. The most aggressive fund had the highest participation rate with 46% of total assets
- There were a total of 2,947,862 members as of December, 2008, of which 53% belonged to the most aggressive fund.



### *LATVIA*

- The multifund system started operating in January, 2003. Each fund manager can offer a maximum of three types of funds: Conservative (can invest only in fixed income assets), Balanced (up to 15% in variable income instruments) and Active (up to 30% in variable income instruments).
- Members who do not choose a fund type on joining the pension system are assigned to the Conservative fund.
- The funds accumulated in the pension system amounted to US\$ 930 million as of December 31, 2008. Almost 80% of total assets were invested in the most aggressive fund.
- There were 1,065,564 members of the private system at the end of 2008. 73% of all members had their savings in the Active fund.

### *LITHUANIA*

- The multifund system started operating in 2004. Each fund manager must mandatorily offer a pension fund that invests its assets exclusively in government bonds. The creation of other funds more intensive in variable income is voluntary and there are no additional regulations governing their investment structure.
- Members who do not choose a fund type on joining the pension system are assigned to the Conservative fund.
- As of December, 2008, total assets amounted to US\$ 5,321 million. 81% of total assets were invested in intermediate risk fund types (between 30% and 70% in shares).
- There were 957,057 members of the private system at the end of 2008. Of that total, 56% had their savings in funds with an intermediate percentage of shares (between 30% and 70% in variable income).



## Table of Contents

<b>I. Introduction</b>	<b>7</b>
<b>II. Regulations governing the multifunds</b>	<b>9</b>
<b>1. Types of funds</b>	<b>9</b>
<b>2. Default options and possibilities of choosing</b>	<b>16</b>
<b>3. Distribution of managed funds and members among funds</b>	<b>20</b>
<b>4. Composition of the investment portfolios</b>	<b>29</b>
<b>5. Profitability of the funds</b>	<b>32</b>
<b>6. Minimum profitability guarantee and safeguarding mechanisms</b>	<b>36</b>
<b>7. Transfers between funds</b>	<b>38</b>
<b>8. Division of balances</b>	<b>40</b>



## I. Introduction

The purpose of this document is to describe the regulations governing the multifund (or multiple portfolio) systems in the different countries that have adopted pension programs based on individual funding. In Latin America, multifund systems exist in Chile (2002), Mexico (2005) and Peru (2005). Colombia will implement a multifund system in 2011. Among the Eastern European countries, Estonia implemented this system in 2002, Latvia in 2003 and Slovakia in 2005. Hungary started operating this type of system voluntarily as of 2007, but it became mandatory as of 2009. Finally, Lithuania implemented a multifund system in 2004.

In this study, a “multifund system” is understood to be one in which members of the individually funded pension systems are allowed to choose different investment options (portfolios) for their pension savings. Such investment options differ in the degree of risk associated to each portfolio.

The primary purpose of creating a multiple portfolio or multifund system is to increase the expected value of the pensions members will receive on retiring. It also seeks to minimize the risk to members who are about to retire. The possibility of investing in a portfolio of financial assets whose risk is associated to the member’s investment horizon enables raising the expected value of the member’s pension, which in turn increases the efficiency with which the pension system achieves its fundamental purpose, namely to provide its members with an income that will adequately replace their income while active.

From a conceptual standpoint, multifunds gain strength by recognizing that members’ profiles affect the optimal composition of the personal portfolio of financial assets. Prior to the creation of the multifunds, all members, regardless of their personal preferences, had to invest their contributions in a sole portfolio type whose composition was at the full discretion of the pension fund managers (within the limits and restrictions imposed by law). With the creation of the multifunds, members can access a wider range of investment alternatives, enabling them to choose a fund better suited to their individual preferences. Thus, the mere possibility of choosing should entail an improvement in each member’s level of wellbeing.

Furthermore, the creation of a multifund system enables configuring an enhanced risk-return ratio for members in the time remaining up to retirement age. For example, younger members would probably prefer a portfolio with a higher risk-return ratio so as to increase the expected value of their pensions. Older or already retired members would prefer a minimum risk fund so as to minimize the fluctuations in the value of their pensions.

The implementation of multifunds also has other positive effects on pension system and capital markets, outstanding among which are the following:

- 1) More information. Greater incentives are generated for members to be informed on the performance of their pension funds, thus imposing greater discipline on the fund managers. This implies that fund managers feel obligated to offer their members ever increasing levels of information.
- 2) More participation. The possibility of choosing the portfolio enables more active participation of members in the management of their funds.
- 3) Better assignment of resources. The greater diversification of investments imposed by the multifunds generates greater efficiency in the assignment of financial resources within the economy.



This document describes eight main aspects of the multifund systems: the regulations governing the multifunds in terms of the number of funds that each fund manager is authorized to offer and the investment structure of each one of them; the default option for those members who do not choose a fund type in which to invest their pension savings on joining the pension system; information on the distribution of the managed funds and members in the different investment options; description of the portfolio composition of the different investment strategies; the minimum profitability regulations and the safety mechanisms according to the fund type in each country and the rules and regulations governing the transfer of assets and the distribution of balances between funds.

We are grateful for the information and comments provided by the FIAP member associations as well as the comments and information received from the rest of the countries that are not FIAP members, but were also included in this study. Furthermore, we are grateful the collaboration of Waldo Tapia, Consultant, in the preparation of this document.





## II. Regulations governing the multifunds

In this section the multifund systems in three Latin American countries (Chile, Mexico and Peru) and five Eastern European countries (Slovakia, Estonia, Hungary, Latvia and Lithuania) are described and compared. Annex 1 (see page 44 hereof) provides a summary of such regulations.

### 1. Types of funds

Among the Latin American countries, Chile and Mexico offer five investment alternatives whereas in Peru there are three authorized funds. The Eastern European countries, with the exception of Lithuania, offer three types of pension funds.

Of all the countries included in this report, Chile, Peru and Hungary are the only ones in which the most conservative strategy allows a percentage of the managed funds to be invested in variable income. In the rest of the countries, the most conservative strategy can only invest in fixed income. Mexico and Latvia, on the other hand, are the countries that allow the lowest percentage of variable income in the most aggressive fund.

#### *CHILE*

As of May 2002, the Pension Fund Administrators (AFP) were authorized to offer two types of funds: fund Type 1 (that includes a percentage of fixed and variable income) and which all members of the pension system could join, and fund Type 2 (which only had fixed income) and which only retired members and members who were ten years or less from reaching retirement age could join.

As of August, 2002<sup>2</sup>, the number of pension funds per AFP was increased to five, differing in the percentages of their portfolios invested in variable income instruments. The funds are denominated A (the riskiest one), B (risky), C (intermediate, the continuation of fund Type 1), D (conservative) and E (the most conservative). Fund A has the highest investment in variable income (a maximum of 80%) and fund E is authorized to invest a maximum of 5% in this type of assets (see Table 1). The creation of the four funds of lower relative risk is mandatory for the AFPs. Fund A is voluntary. To date, all existing AFPs offer their members fund A.

Maximum and minimum investment limits in variable income are set out according to the fund type, enabling effective differentiation between them. The purpose of the minimum limits is specifically to ensure that the most aggressive funds are more exposed to variable income than the less aggressive types. It is worth mentioning that there is a joint investment limit in foreign instruments in all 5 fund types (total value of the fund). The investment limits for each fund are detailed in Table 1.

---

<sup>2</sup> Law No. 19.795 of February 28, 2002.

**Table 1**  
**Chile: Investment limits per fund type**  
**(as a percentage of the managed funds)**

Fund Type	Variable Income		Government bonds (maximum limit)	Investment and mutual fund allocations (maximum limit)	Term deposits and bonds issued by financial institutions (maximum limit)	Foreign instruments (overall maximum limit)
	Min.	Max.				
Most conservative (E)	0%	5%	80%	5%	80%	
Conservative (D)	5%	20%	70%	10%	70%	
Intermediate (C)	15%	20%	50%	20%	50%	80%
Risky (B)	25%	60%	40%	30%	40%	
Riskiest (A)	40%	80%	40%	40%	40%	

Source: Superintendency of Pensions, Chile.

#### COLOMBIA

The creation of a multifund system was included in the financial reform bill of law approved by Congress in June, 2009. The project stipulates that the multifund system must be regulated and operative by 2011. The system offers the 8.7 million members the option of choosing between three fund types with different risk profiles.

#### MEXICO

The multifund system was initially regulated in 2004 and became operative in January, 2005. At the outset, each fund manager (or AFORE) was authorized to offer two pension funds (or SIEFOREs): Basic SIEFORE 1 (most conservative or SB1) and Basic SIEFORE 2 (conservative or SB2).

SB1 only invests in domestic and foreign fixed income instruments and authorized international debt securities (bonds issued by governments and companies with a high credit rating). The regulations also require 51% of the fund to be invested in instruments issued by the government or private or corporate instruments with yield linked to inflation. SB2 invests up to 15% of assets in variable income instruments. Initially, this investment was performed through Protected Capital Structured Notes that contain a percentage of shares. As of October, 2007, direct investment in shares began.<sup>3</sup>

As of March 28, 2008, three new funds were introduced: Basic SIEFOREs 3 (balanced, or SB3), 4 (risky, or SB4) and 5 (the riskiest, or SB5), which are voluntary for the AFOREs.<sup>4</sup> In the case of SB3, SB4 and SB5, the limit in variable income instruments is 20%, 25% and 30% respectively (see Table 2).

<sup>3</sup> Investments are made in shares corresponding to countries that are accepted by the International Organization of Securities Commissions (IOSCO) and the European Union.

<sup>4</sup> Although the rules and regulations state that opening SB3, SB4 and SB5 funds is voluntary for each AFORE, they all offer the 5 SIEFOREs.

The new system also authorized the SIEFOREs to invest in three new asset classes: private capital, real estate and infrastructure. The regulations do not set out minimum investment limits in fixed or variable income. The foreign investment limit was set at 20% for all the funds managed by each fund manager.

**Table 2**  
**Mexico: Investment limits per fund type**  
**(maximum investment limits as a percentage of managed funds)**

Type of fund (SIEFORE)	Real estate and infrastructure trust fund	Structured notes	Variable Income	VaR (*)	Foreign instruments (overall limit)
Most conservative (SB1)	0%	0%	0%	0,6%	
Conservative (SB2)	5%	1%	15%	1,0%	
Balanced (SB3)	5%	5%	20%	1,3%	20%
Risky (SB4)	10%	7,5%	25%	1,6%	
Riskiest (SB5)	10%	10%	30%	2,0%	

(\*) Value at Risk.

Source: National Commission for the Retirement Savings System (CONSAR), Mexico.

## PERU

The multifund system was implemented in January, 2005. The new regulations enable fund managers to offer three types of funds: a conservative or capital preservation fund (Type 1), a balanced or mixed fund (Type 2) and a growth fund (Type 3).

The legislation states that the Preservation, or Type 1 fund, can invest up to 10% in share titles and up to 100% in fixed income instruments. The Mixed, or Type 2, fund can invest up to 45% in share titles and up to 75% in fixed income instruments. Finally, the Growth, or Type 3, fund can invest 80% in share titles and up to 70% in fixed income instruments.

Table 3 details the maximum limits as a percentage of each fund. There is a joint operational<sup>5</sup> limit for investment in foreign instruments for the 3 fund types. In December, 2007, the Peruvian Central Reserve Bank (BCR) increased this limit from 15% to 17%; in March, 2008, it increased it to 20% and in October, 2009, it decided to increase it to 22%.<sup>6</sup>

<sup>5</sup> The foreign investments of the AFPs are legally limited to 30%, but the Peruvian Central Reserve Bank sets the operational limit.

<sup>6</sup> For further information see the following communication: <http://www.bcrp.gob.pe/docs/Transparencia/Notas-Informativas/2009/Nota-Informativa-077-2009-BCRP.pdf>

**Table 3**  
**Peru: Investment limits per fund type**  
**(maximum investment limits as a percentage of managed funds)**

Type of fund	Shares	Fixed income	Derivatives	Cash	Foreign instruments (overall limit)
Preservation (Type 1)	10%	100%	10%	40%	
Mixed (Type 2)	45%	75%	10%	30%	22%
Growth (Type 3)	80%	70%	20%	30%	

Source: Superintendency of Banks, Insurance and AFPs (SBS), Peru.

#### SLOVAKIA

The multifund system was established in January, 2005. In this system, members can choose between three different pension funds (Conservative, Balanced and Growth). The Conservative fund is authorized to invest only in bonds and other risk-free assets. The balanced fund can invest up to 50% in variable income instruments.<sup>7</sup> The Growth fund can invest up to 80% in variable income instruments and no minimum investment limits in fixed income instruments are set. The regulations do not set specific limits for investment in foreign instruments (see Table 4).

**Table 4**  
**Slovakia: Investment limits per fund type**  
**(maximum investment limits as a percentage of managed funds)**

Type of Fund	Variable Income	Exposure to foreign currencies	Fixed income	Foreign investment
Conservative	0%	0%	100%	
Balanced	50%	50%	At least 50%	No limits
Growth	80%	80%	No limits	

Source: Association of Pension Funds Management Companies (ADSS), Slovakia.

#### ESTONIA

In July, 2002, the legislation made it mandatory for each fund manager to offer a pension fund that invests assets exclusively in fixed income instruments and deposits (Conservative fund). This legislation also stipulated that each fund manager could manage two additional funds (a Balanced fund and an Aggressive fund), which differ mainly in the percentage of assets invested in variable income. The Balanced fund can invest up to 25% of its assets in variable income instruments, whereas the Aggressive fund can invest up to 50%. The regulations do not set out specific limits for investment in foreign instruments (see Table 5).

<sup>7</sup> The regulations state that at least 50% of total assets must be invested in fixed income instruments.

**Table 5**  
***Estonia: Investment limits per fund type***  
***(maximum investment limits as a percentage of managed funds)***

<i>Type of Fund</i>	<i>Variable income</i>	<i>Foreign investment</i>
<i>Conservative</i>	0%	
<i>Balanced</i>	25%	No limits
<i>Aggressive</i>	50%	

*Source:* Information Portal of the Estonian Pensions System (Pensionikeskus), Estonia.

## *HUNGARY*

The multifund system was put in place at the beginning of 2007. This system was initially voluntary for fund managers, but as of January, 2009, its implementation became mandatory.

In the multifund system, each fund manager is authorized to offer three types of fund: a conservative or conventional fund, a balanced or mixed fund and a growth fund. All the funds are authorized for exposure to variable income instruments. Maximum and minimum investment limits in variable income instruments are set out according to the fund type in order to enable effective differentiation between them.

The investment limits allow the Conventional fund to invest up to 10% in variable income, the Balanced fund up to 40% and the Growth fund up to 100%. The Balanced and Growth funds also have minimum investment limits in this type of instruments. The regulations also set out different limits for investment in risk capital notes, derivatives and real estate (see Table 6).

**Table 6**  
***Hungary: Investment limits per fund type***  
***(maximum investment limits as a percentage of managed funds)***

<i>Type of Fund</i>	<i>Variable Income</i>		<i>Risk capital notes</i>	<i>Derivatives</i>	<i>Real estate</i>	<i>Foreign investment</i>
	<i>Min.</i>	<i>Max.</i>				
<i>Conventional</i>	-	10%	0%	0%	0%	
<i>Balanced</i>	10%	40%	3%	0%	10%	No limits
<i>Growth</i>	40%	No limits	5%	5%	20%	

*Source:* Hungarian Financial Supervision Authority (HFSA), Hungary.

## LATVIA

The multifund system started operating in January, 2003. Each fund manager can offer a maximum of three pension funds: Conservative, Balanced and Active. The funds differ mainly in the percentage of fixed and variable income each one of them invests in (see Table 7).

The Conservative strategy can only invest in fixed income assets and is designed for those workers close to retirement. The balanced strategy can invest up to 15% in variable income instruments and at least 51% of all assets must be invested in fixed income instruments. The active strategy must invest up to 30% in variable income instruments and there are no restrictions on investments in fixed income. Pursuant to standing regulations, the pension funds can invest in foreign assets without any limits.<sup>8</sup>

The system's regulations state that each fund manager can offer (not mandatory) at least one investment plan that invests exclusively in fixed income and there is no obligation to offer the other types of funds. Furthermore, each fund manager can offer more than one fund in each category.

**Table 7**  
**Latvia: Investment limits per fund type**  
**(maximum investment limits as a percentage of managed funds)**

<i>Type of Fund</i>	<i>Variable Income</i>	<i>Fixed income</i>	<i>Foreign Investment</i>
<i>Conservative</i>	0%	100%	
<i>Balanced</i>	15%	At least 50%	No limits
<i>Active</i>	30%	No limits	

*Source:* State Social Insurance Agency (VSAA), Latvia.

## LITHUANIA

In 2004 Lithuania implemented a multifund system which workers can join voluntarily. This decision is irrevocable.

In this individually funded system, workers can choose one of the different pension funds that any one of the fund managers offer. The legislation stipulates that each fund manager must necessarily offer a pension fund that invests exclusively in government bonds (Conservative fund). The creation of other funds more intensive in variable income is voluntary. There are no further regulations regarding the number of funds and the investment structure each fund must adhere to. In this context, the pension funds are grouped according to four investment strategies (see Table 8).

<sup>8</sup> No limits on investments made in the Baltic countries and the European Union.



**Table 8**  
***Lithuania: Investment limits per fund type***  
***(maximum investment limits as a percentage of managed funds)***

<i>Type of Fund</i>	<i>Variable income</i>	<i>Foreign investment</i>
<i>Conservative</i>	0%	
<i>Fund with a low percentage of shares</i>	Up to 30%	
<i>Fund with an intermediate percentage of shares</i>	Between 30% and 70%	No limit
<i>Share Fund</i>	Over 70%	

*Source:* Lithuanian Securities Commission (VPK), Lithuania.

## 2. Default options and possibilities of choosing

This section describes the regulations applied to members who do not choose a fund type when joining the pension system.

In Chile, Hungary, Mexico and Peru, members who do not exercise their right to choose are assigned to a fund according to their age. The regulations divide members into different age groups. Younger members are assigned to funds more intensive in variable income and older members are assigned to funds more intensive in fixed income. Peru divides members into two age groups. Chile and Hungary separate members into 3 groups, whereas Mexico divides them into five groups.

In Estonia, Lithuania and Latvia members who do not choose a fund type are assigned to the most conservative fund which only invests in fixed income instruments. In Slovakia a worker must necessarily choose a fund type in order to be able to join the individually funded system.

### CHILE

Members of the pensions system must choose the type of fund they prefer, with the exception of pensioners, male members over 55 and female members over 50. Members on programmed retirement can choose any of the three funds of lower relative risk (C, D and E), whereas older non-pensioned members who are 10 years from the legal retirement age can choose any of the four less risky funds (B, C, D and E).

Members who do not choose a fund when joining the pension system are assigned to a fund according to their age. Younger members are assigned to a fund less intensive in variable income and older members to a fund more intensive in fixed income. These regulations are applicable to both active and retired members. Assignment is according to three age groups: the first group (men and women up to 35) is assigned to Fund B (up to 60% in variable income); the second group (men between 36 and 55 and women between 36 and 50) is assigned to Fund C (up to 40% in variable income), and the third group (men over 56 and women over 51) to Fund D (up to 20% in variable income). No members are assigned to Funds A and E (see Table 9).

**Table 9**  
**Chile: Distribution of members who do not choose a fund type**

Type of Fund	1 <sup>st</sup> age group	2 <sup>nd</sup> age group	3 <sup>rd</sup> age group
	Men up to 35 Women up to 35	Men between 36 and 55 Women between 36 and 50	Men over 56 Women over 51
Most Conservative (E)			
Conservative (D)			
Intermediate (C)			
Risky (B)			
Riskiest (A)			

Notes: A: 80% shares; B: 60% shares; C: 40% shares; D: 20% shares; E: up to 5% in variable income.

Source: Superintendency of Pensions, Chile.



The regulations also establish the gradual assignment of members to the pension funds corresponding to them according to their age, transferring 20% of their balance at the time they move into another age bracket and then 20% per year over a period of four years until all their resources have been fully transferred.

### MEXICO

The regulations pre-establish a fund that varies according to age for those members who do not exercise their right to choose. They divide members into five age groups. Male and female members over 55 are assigned to the most conservative fund, SB1 (which only invests in fixed income instruments); men and women between 46 and 55 are assigned to SB2 (up to 15% in variable income); men and women between 37 and 45 are assigned to the intermediate fund, SB3 (up to 20% in variable income); men and women between 27 and 36 are assigned to SB4 (up to 25% in variable income); and finally, men and women under 27 are assigned to the most aggressive fund, SB5 (up to 30% in variable income) [See Table 10].

Members are automatically switched to more conservative funds as they get older. The law also grants workers the right to switch to a more conservative fund than the one they were automatically assigned to if they wish to do so. However, the regulations do not allow members to choose a more aggressive fund than the one they were assigned to automatically.

**Table 10**  
**Mexico: Distribution of members who do not choose a fund type**

Type of Fund	Members under 27	Members between 27 and 36	Members between 37 and 45	Members between 46 and 55	Members over 55
Most Conservative (SB1)					■
Conservative (SB2)				■	■
Balanced (SB3)			■	■	■
Risky (SB4)		■	■	■	■
Riskiest (SB5)	■	■	■	■	■

Notes: SB1: Only fixed income; SB2: 15% shares; SB3: 20% shares; SB4: 25% shares; SB5: 30% shares.  
Source: National Commission for the Retirement Savings System (CON SAR), Mexico.

### PERU

Members can choose one of the three different fund types when joining the private pension system. Those who do not choose a fund type are assigned to one according to their age. The regulations establish two age groups: male and female members under 60 are assigned to Fund Type 2 (up to 45% in variable income) and male and female members over 60 are assigned to Fund Type 1 (up to 10% in variable income) [See Table 11].

Although the fund type can be freely chosen, male and female members over 60 cannot invest their pension savings in Fund Type 3 (up to 80% in variable income).

**Table 11**

***Peru: Distribution of members who do not choose a fund type***

<i>Type of Fund</i>	<i>Men and women up to 60</i>	<i>Men and women over 60</i>
<i>Preservation (Type 1)</i>		
<i>Mixed (Type 2)</i>		
<i>Growth (Type 3)</i>		

Notes: Type 1: up to 10% in variable income; Type 2: up to 45% en variable income; Type 3: up to 80% en variable income.

Source: Superintendency of Banks, Insurance and AFPs (SBS), Peru.

*SLOVAKIA*

Members must mandatorily choose a fund type in order to be able to join the pension system. If they do not, the Social Security Agency will not register them as participants of the system and returns their contracts to the pension fund manager.

Members of the pension system are free to choose the fund type, except for male and female members over 47 who cannot choose the relatively riskier fund (Growth) and members over 55 who cannot choose the Balanced fund.

*ESTONIA*

Members who do not choose a fund type when joining the system are assigned to the most conservative fund, which only invests in fixed income instruments.

*HUNGARY*

Members of the pension system are free to choose the fund type, with the exception of male and female members over 57 who can only choose the two funds with the lowest relative risk. The rest of the participants are free to choose any of the three funds.

Members who do not choose a fund type when joining the pension system are assigned to a fund according to how far they are from retirement age.

The regulations state that members who are more than 15 years from retirement age are assigned to the Aggressive or Growth fund (men and women under 47); members who are between 5 and 15 years from retirement age are assigned to the Balanced fund (men and women between 47 and 57), and members who are less than 5 years from retirement age are assigned to the Classic or Conservative fund (men and women over 57)<sup>9</sup> [See Table 12].

<sup>9</sup> The legal retirement age is 62 for men and women.

**Table 12**  
***Hungary : Distribution of members who do not choose a fund type***

Type of Fund	Less than 5 years from retirement age	Between 5 and 15 years from retirement age	More than 15 years from retirement age
Classic/Conservative			
Balanced			
Aggressive/Growth			

Notes: Classic/Conservative: up to 10% in variable income; Balanced: up to 40% in variable income; Aggressive/Growth: up to 100% in shares.

Source: Hungarian Financial Supervision Authority (HFSA), Hungary.

#### *LATVIA*

Members who do not choose a fund type when joining the pension system are assigned to the conservative strategy which only invests in fixed income instruments.

#### *LITHUANIA*

Members who do not choose a fund type when joining the pension system are assigned to the conservative fund which only invests in government bonds.

### 3. Distribution of managed funds and members among funds

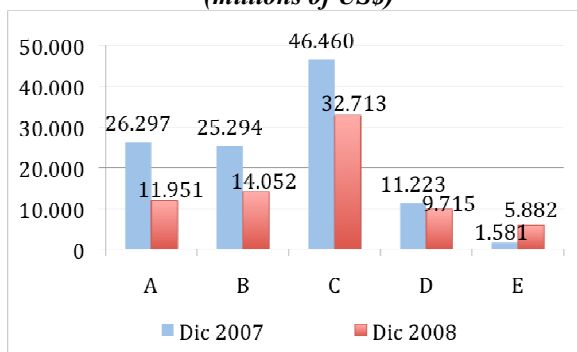
This section shows the distribution of managed funds and members among the different investment options for each country studied (for Chile it was also possible to obtain information on the distribution of members by age group, gender and income level).

In Chile, Mexico and Peru most of the pension fund assets and members are in balanced investment strategies. In Chile, for example, 44% of the pension funds and 37% of members are in fund C. The most aggressive fund (fund A) accounts for only 14% and 16% respectively. In the European Countries, on the contrary, there is greater preference for more aggressive investment strategies. In Slovakia, for example, 67% of assets and 74% of members are in the most aggressive fund.

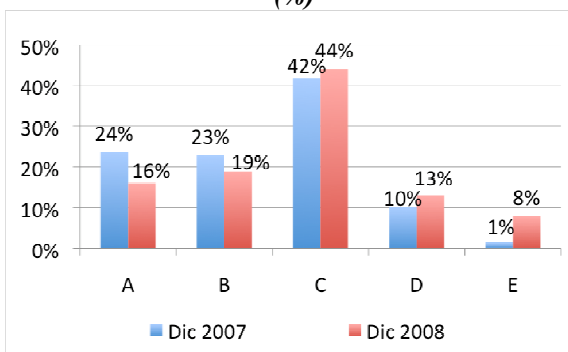
#### CHILE

The value of the pension funds in Chile amounted to US\$ 74,313 million as of December, 2008, a figure equivalent to 53% of the GDP. About one third (35%) of the total assets of the pension funds was invested in the funds with more than 60% in variable income (Types A and B) whereas 21% of the assets were invested in the funds with the least shares (Types D and E). The intermediate fund (C) has the highest participation at 44% (Figures 1 and 2 show the value and distribution of the assets for each one of the pension funds).

**Figure 1**  
**Chile**  
**Value of assets per fund type, 2007-2008**  
**(millions of US\$)**



**Figure 2**  
**Chile**  
**Distribution of assets per fund type, 2007-2008**  
**(%)**



Notes: A: 80% shares; B: 60% shares; C: 40% shares; D: 20% shares; E: up to 5% en variable income.  
Source: Superintendency of Pensions, Chile.

There were 8,372,475 members in December, 2008. Taking into account the members who had chosen a fund and those who had been assigned according to age, it can be seen that in December, 2008, 37% of all members were in the intermediate fund, C. The riskiest fund (A) concentrates 14% of all members and the most conservative fund (E) 2% (See Table 13).

**Table 13**  
**Chile**  
**Distribution of members according to fund type (\*)**  
**(as a percentage of the total number of members)**

Type of Fund	2005	2006	2007	2008
Most conservative (E)	1	1	1	2
Conservative (D)	9	9	8	8
Intermediate (C)	41	39	38	37
Risky (B)	42	41	40	40
Riskiest (A)	8	10	14	14

Notes: A: 80% shares; B: 60% shares; C: 40% shares; D: 20% shares; E: up to 5% en variable income.

(\*) Figures as of December each year.

Source: Superintendency of Pensions, Chile.

Regarding distribution according to age, a significant number of members belong to the fund that is (or was) assigned to them by default (see Table 14). Within the first age group (men and women under 35), 73% contribute to fund B, which is the default option for this group of members. In the second age group, almost two thirds of men and women belong to fund C (the default fund). The remaining third of the members chose funds A and B. In the third age group, only 53% of men and women belong to the fund assigned by default (fund D). 36% chose fund C and nearly 9% chose funds A and B.

**Table 14**  
**Chile: Distribution of members by age group and gender, 2008 (\*)**  
**(as a percentage of the total number of members)**

Type of Fund	1 <sup>st</sup> age group		2 <sup>nd</sup> age group		3 <sup>rd</sup> age group	
	Men up to 35	Women up to 35	Men between 45 and 55	Women between 35 and 50	Men over 55	Women over 50
Most conservative (E)	1	1	2	2	3	3
Conservative (D)	0	0	1	1	53 (**)	53 (**)
Intermediate (C)	3	4	65 (**)	66 (**)	36	36
Risky (B)	73 (**)	73 (**)	20	24	6	7
Riskiest (A)	23	22	11	8	2	2

Notes: A: 80% shares; B: 60% shares; C: 40% shares; D: 20% shares; E: up to 5% in variable income.

(\*) Figures as of December, 2008.

(\*\*) The shaded boxes represent the default option.

Source: Superintendency of pensions, Chile.

Lower income contributors mostly choose funds with intermediate risk. As income levels increase, a higher percentage of contributors choose more aggressive funds. In fact, as of December, 2008, approximately 80% of all contributors with monthly incomes below US\$ 450 chose the intermediate funds B and C. In this same group of contributors, only 12% chose the more aggressive funds and about 7% chose the more conservative funds. In the higher income group of between US\$450 and US\$900, the percentage of contributors in the most aggressive fund increased to 16% for men and 20% for women. The preference for more aggressive funds increases with income. Thus, within the group of contributors with monthly incomes higher than US\$ 1,350, 37% of men and 33% of women contribute to the fund with the highest investment in variable income (see Table 15).

**Table 15**  
**Chile: Distribution of members by income level and gender, 2008 (\*)**  
**(as a percentage of the total number of members)**

Type of Fund	< 450 US\$		450 – 900 US\$		900 – 1,350 US\$		> 1,350 US\$	
	M	W	M	W	M	W	M	W
Most conservative (E)	1	1	2	3	4	5	8	7
Conservative (D)	5	7	4	5	4	6	4	7
Intermediate (C)	37	35	36	29	34	25	26	24
Risky (B)	44	44	42	42	34	34	24	29
Riskiest (A)	12	13	16	20	24	29	37	33

Notes: Fund A: 80% shares; Fund B: 60% shares; Fund C: 40% shares; Fund D: 20% shares; Fund E: up to 5% in variable income.

(\*) Figures as of December, 2008.

Note: M=Men; W=Women.

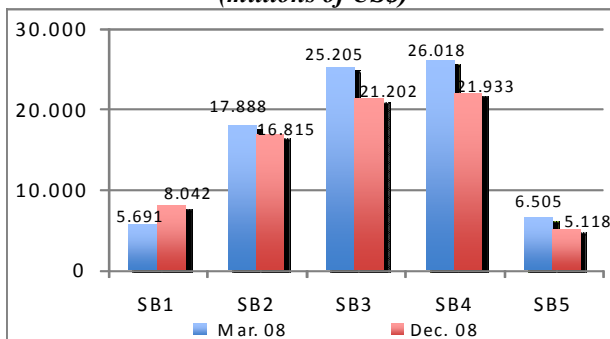
Source: Superintendency of Pensions, Chile.

## MEXICO

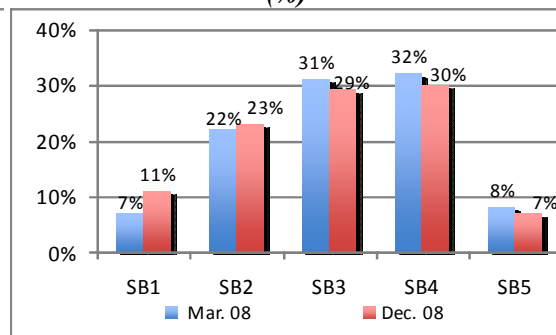
As of December, 2008, the total value of the pension fund assets amounted to US\$ 73,109 million. This figure is 6% of GDP. In Mexico, 35% of all participants in the private pension system are under 30, and 43% are between 35 and 44. In this context, it is not surprising that at the end of 2008 a significant part of total assets was concentrated in SB3 (29%) and SB4 (30%). The fund with no shares, SB1, which represents 11% of the total assets of the system, is made up primarily of the 7% of participants above 56. The fund with the most shares represents 7% of the total assets (see Figures 3 and 4).

As of December 31, 2008, a total of 39 million workers were members of the private pension system. The distribution of members per fund type is not available.

**Figure 3**  
**Mexico**  
**Asset values per fund type,**  
**Mar. 2008-Dec. 2008**  
**(millions of US\$)**



**Figure 4**  
**Mexico**  
**Distribution of assets per fund type,**  
**Mar. 2008-Dec. 2008**  
**(%)**

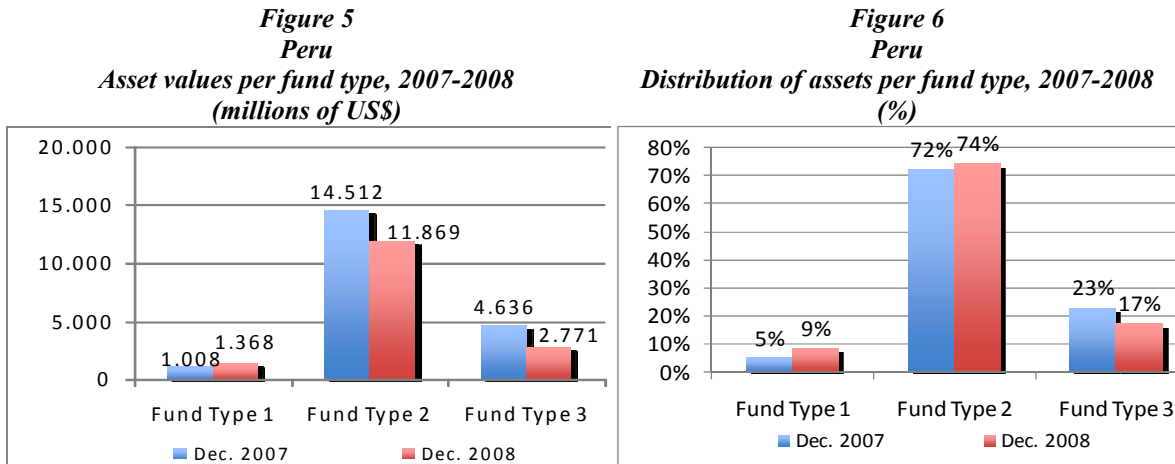


Notes: SB1: only fixed income; SB2: 15% shares; SB3: 20% shares; SB4: 25% shares; SB5: 30% shares.

Source: National Commission for the Retirement Savings System (CONSAR), Mexico.

PERU

As of December, 2008, the portfolio managed by the private pension system amounted to US\$ 16,008 million. This figure was 14% of GDP. Fund Type 2 had the highest membership with almost two thirds of the managed portfolio (74%). Fund Type 3 had 17% and Fund Type 1 9% (see Figures 5 and 6).



Notes: Fund Type 1: 10% shares; Fund Type 2: 45% shares; Fund Type 3: 80% shares.  
Source: Superintendency of Banks, Insurance and AFPs (SBS), Peru.

There were 4,296,480 members of the private pension system as of December, 2008. Fund Type 2 had the most members, accounting for 90% of the total. This concentration is explained mainly by the demographic structure of the members, 50% of them being between 30 and 44. The least aggressive fund (Type 1) kept up a stable participation of approximately 3% since 2006. The most aggressive fund (Type 3), which at the end of 2006 concentrated 1% of all members, increased to 7% at the end of 2008 (see Table 16).

**Table 16**  
**Peru: Distribution of members per fund type (\*)**  
**(as a percentage of the total number of members)**

Type of Fund	2006	2007	2008
Preservation (Type 1)	3	2	3
Mixed (Type 2)	96	91	90
Growth (Type 3)	1	7	7

Notes: Fund Type 1: 10% shares; Fund Type 2: 45% shares; Fund Type 3: 80% shares.

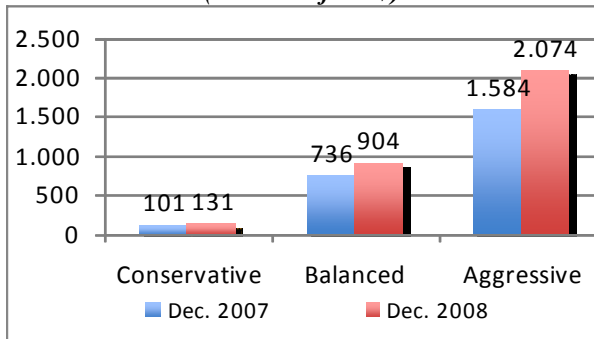
(\*) Figures as of December of each year.

Source: Superintendency of Banks, Insurance and AFPs (SBS), Peru.

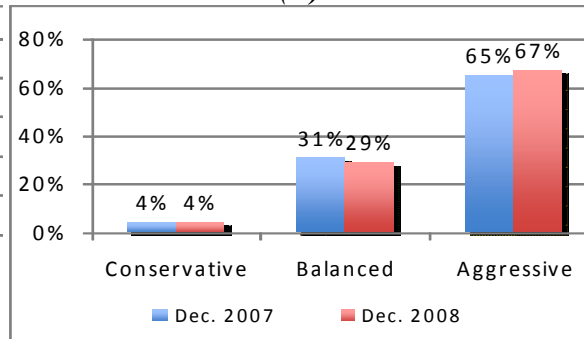
*SLOVAKIA*

The total value of the assets in the individually funded system amounted to US\$ 3,109 million as of December, 2008. This figure is 3% of GDP. About two thirds (67%) of all assets were invested in the Aggressive fund (up to 80% in shares), whereas 4% was invested in the Conservative fund (which only invests in fixed income). The Balanced fund (up to 50% in shares) had 29% participation (see figures 7 and 8).

**Figure 7**  
**Slovakia**  
**Asset values per fund type, 2007-2008**  
**(millions of US\$)**



**Figure 8**  
**Slovakia**  
**Distribution of assets per fund type, 2007-2008**  
**(%)**



Notes: Conservative: only fixed income; Balanced: 50% shares; Growth: up to 80% shares.  
Source: Association of Pension Fund Management Companies (ADSS), Slovakia.

The number of members as of December, 2008 amounted to a total of 1,483,026. The Aggressive fund accounts for 1,033,137 of them, equivalent to 69%. The Balanced fund has 26% of members and the Conservative fund 5% (see Table 17).

**Table 17**  
**Slovakia: Distribution of members per fund type (2008) (\*)**

Type of Fund	Members	%
Conservative	68.677	5
Balanced	381.212	26
Aggressive	1.033.137	69

Notes: Conservative: only fixed income; Balanced: 50% shares; Aggressive: up to 80% shares.

(\*) Figures as of December, 2008.

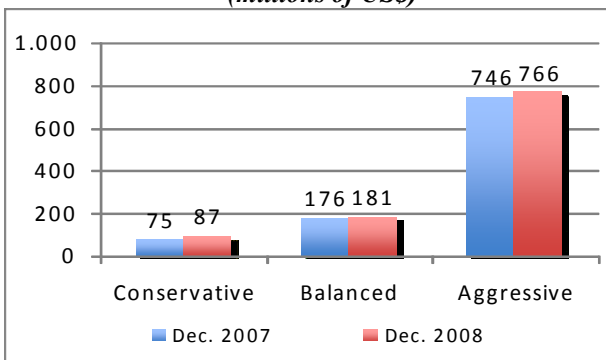
Source: Association of Pension Fund Management Companies (ADSS), Slovakia.



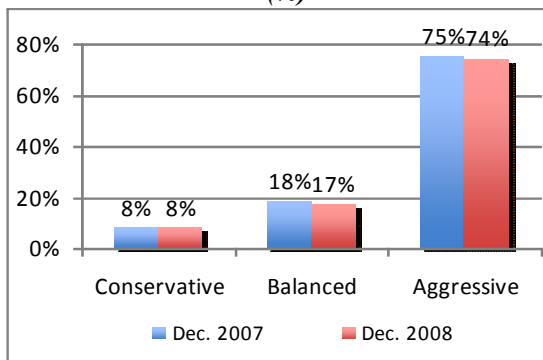
*ESTONIA*

The assets invested in the private pension system in December, 2008 amounted to US\$ 1,034 million, equivalent to 4% of GDP (see Figures 9 and 10). 74% of total assets was invested in the Aggressive Fund (up to 50% in shares) while 8% was invested in the Conservative fund (which only invests in fixed income). There was a participation of 17% in the Balanced fund (up to 25% in shares) [see Figures 9 and 10].

**Figure 9**  
**Estonia**  
*Asset values per fund type, 2007-2008*  
*(millions of US\$)*



**Figure 10**  
**Estonia**  
*Distribution activos por tipo de fondo, 2007-2008*  
*(%)*



Notes: Conservative: Only in fixed income; Balanced: 25% shares; Aggressive: 50% shares.  
 Source: Ministry of Finance, Estonia.

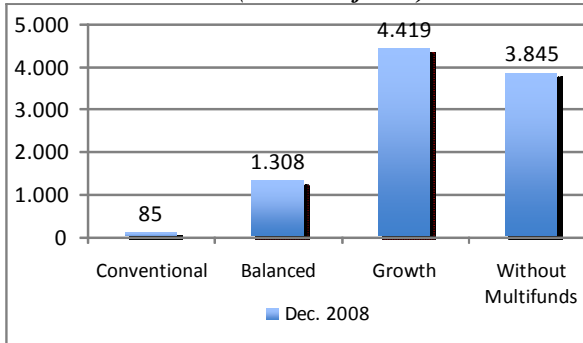
There were a total of 580,000 members in the private pension system as of December 31, 2008. Member distribution per fund type is not available.

*HUNGARY*

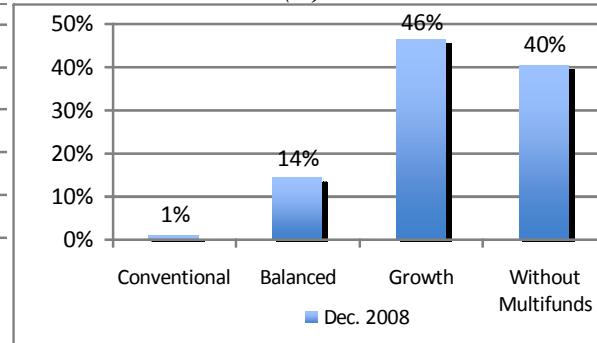
The portfolio managed by the private pension system amounted to US\$ 9,657 million as of December, 2008 (see Figure 13). This figure is approximately 6% of GDP. Given the fact that the multifund system was voluntary until the end of 2008, approximately 40% of the portfolio was in fund managers that did not participate in the multifund system and therefore offered their members a sole portfolio.

The riskiest fund (Growth, which can invest up to 100% in variable income assets) had the highest participation with 46% of total assets. The least risky fund (Conventional, with a maximum of 10% in variable income) represented 1% of total assets, and the intermediate risk fund (Balanced, with up to 40% in variable income) the 14% (see Figures 11 and 12).

**Figure 11**  
**Hungary**  
*Asset values per fund type, 2008*  
*(millions of US\$)*



**Figure 12**  
**Hungary**  
*Distributions of assets per fund, 2008*  
*(%)*



Notes: Conventional: 10% shares; Balanced: 40% shares; Growth: up to 100% shares. “Without Multifunds” includes those pension fund managers that have still not made the multifund system available to their members.

Source: Hungarian Financial Supervision Authority (HFSA), Hungary

The total number of participants in the individually funded system as of December, 2008, was 2,947,862. 61% were members of fund managers that had implemented the multifund system. Most of the participants were members of the most aggressive fund (52%) and a small percentage of the most conservative fund (1%). On the other hand, 39% of members had their savings in fund managers that offered only one fund (see Table 18).

**Table 18**  
**Hungary: Distribution of members per fund type (2008) (\*)**

Type of Fund	Members	%
<i>Funds that have implemented the multifund system</i>		
<i>Conventional</i>	20,053	1
<i>Balanced</i>	232,082	8
<i>Growth</i>	1,553,051	52
<i>Funds that have not implemented the multifund system</i>		
	1,142,412	39

Notes: Conventional: 10% shares; Balanced: 40% shares; Growth: up to 100% shares.

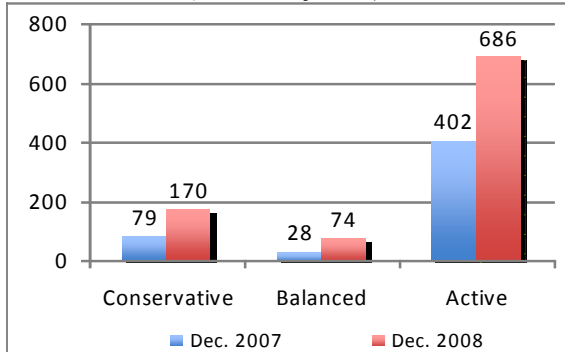
(\*) Figures as of December, 2008.

Source: Hungarian pension Supervision Authority (HFSA), Hungary.

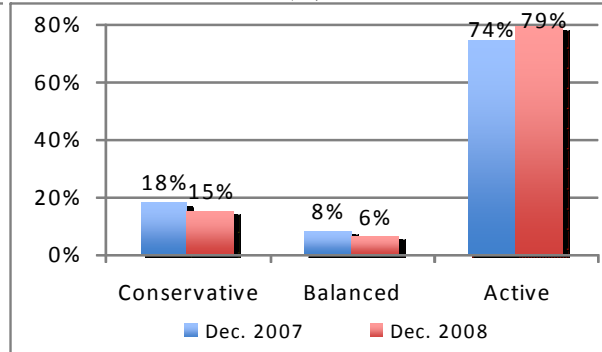
## LATVIA

The assets accumulated in the mandatory pension system as of December, 2008, amounted to US\$ 930 million. The most aggressive fund (Active) had close to 80% of total pension assets whereas the conservative strategy had 15% (see Figures 13 and 14).

**Figure 13**  
**Latvia**  
*Asset values per fund type, 2007-2008*  
*(millions of US\$)*



**Figure 14**  
**Latvia**  
*Distribution of assets per fund type, 2007-2008*  
*(%)*



Notes: Conservative 10% shares; Balanced: 15% shares; Active: 30% shares.  
 Source: State Social Insurance Agency (VSAA), Latvia.

The number of members in the private system was 1,065,564 (December, 2008). 20% of all members as of December, 2008 were concentrated in the Conservative fund, 7% in the Balanced fund and 73% in the Active fund (see Table 19).

**Table 19**  
**Latvia: Distribution of members per investment strategy (\*)**  
**(as a percentage of the total number of members)**

Type of Fund	2006	2007	2008
Conservative	26	19	20
Balanced	8	5	7
Active	66	76	73

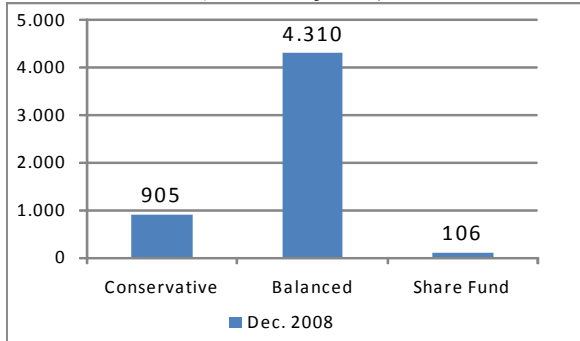
Notes: Conservative: 10% shares; Balanced: 15% shares; Aggressive: 30% shares.  
 (\*) Figures as of December of each year.  
 Source: State Social Insurance Agency (VSAA), Latvia.

## LITHUANIA

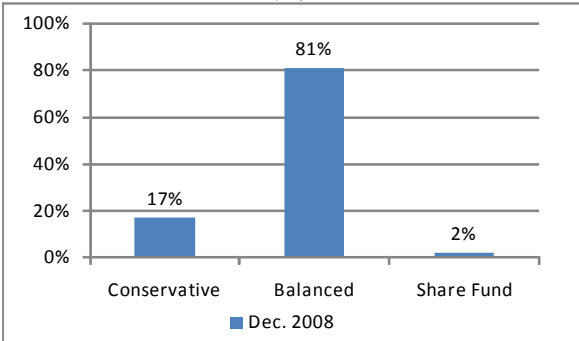
The value of the private pension funds as of December, 2008 was US\$ 5,321 million, equivalent to 13% of GDP.

81% of all assets were invested in the intermediate range funds (between 30% and 70% in shares). The most conservative fund, which only invests in government bonds, represented 17% and the riskiest fund (over 70% in shares) 2% (see Figures 15 and 16).

**Figure 15**  
**Lithuania**  
*Asset values per fund type, 2008*  
*(millions of US\$)*



**Figure 16**  
**Lithuania**  
*Distribution of assets per fund type, 2008*  
*(%)*



Notes: Conservative: only fixed income (government bonds); Balanced: up to 70% in shares; Share Fund: between 70% and 100% in shares.

Source: Lithuanian Securities Commission (VPK), Lithuania.

There were 957,057 members in the private system as of December, 2008. 12% of all members chose the most conservative fund which only invests in government bonds. 26% chose funds with a low percentage in shares (up to 30% variable income) while 56% chose funds with an intermediate percentage in shares (between 30% and 70% in variable income). The fund with the highest share component had 6% of members (see Table 20).

**Table 20**  
**Lithuania: Distribution of members per fund type (\*)**  
**(2008)**

Type of Fund	Number	%
Conservative	114,362	12
Fund with a low percentage of shares	255,519	26
Fund with an intermediate percentage of shares	533,815	56
Share Fund	53,401	6

Notes: Conservative: only fixed income (government bonds); Fund with a low percentage of shares: up to 30% in shares; Fund with an intermediate percentage in shares: up to 70% in shares; Share Fund: between 70% and 100% in shares.

(\*) Figures as of December, 2008.

Source: Lithuanian Securities Commission (VPK), Lithuania.

#### 4. Composition of the investment portfolios

This section describes the composition of the different portfolios (fund types) in Chile, Mexico, and Peru. The information broken down according to fund type is not available for the rest of the countries.

##### CHILE

As of December, 2008, fund A invested 75% of its assets in variable income instruments, followed by fund B (59%), fund C (37%) and fund D (17%). The investment in fixed income was 100% in fund E, 83% in fund D, 66% in fund C, 46% in fund B and 32% in fund A. The investment in foreign instruments fluctuated between 57% in fund A and 2% in fund E (see Table 21).

**Table 21**  
**Chile: Investment portfolios of the Pension Funds, 2008 (\*)**  
**(as a percentage of total assets)**

	<i>Most conservative (E)</i>	<i>Conservative (D)</i>	<i>Intermediate (C)</i>	<i>Risky (B)</i>	<i>Riskiest (A)</i>
Domestic investment	98	88	77	60	43
<i>Variable income</i>	0	9	17	21	23
<i>Fixed income</i>	98	79	62	44	27
Foreign investment	2	12	23	40	57
<i>Variable income</i>	0	8	20	38	53
<i>Fixed income</i>	2	4	3	2	5
Total fixed income	100	83	66	46	32
Total variable income	0	17	37	59	75

Notes: A: 80% shares; B: 60% shares; C: 40% shares; D: 20% shares; E: up to 5% in variable income.

(\*) Figures as of December, 2008.

Source: Superintendency of Pensions, Chile.

##### PERU

As of December, 2008, the portfolio managed by fund Type 1 had allocated 92% of its assets to domestic investments whereas fund Type 2 had allocated 88% and fund Type 3, 86%. With regard to foreign investments, fund Type 3 invested 14% of its assets in these instruments and this percentage drops to 12% and 8% in the case of funds Type 2 and 1, respectively. Fund Type 2 is the one that invests the highest percentage of its portfolio in government instruments (33%) followed by fund Types 1 and 3 with 14% (see Table 22).



**Table 22**  
**Peru: Investment portfolios of the Pension Funds, 2008 (\*)**  
**(as a percentage of total assets)**

	<i>Preservation (Type 1)</i>	<i>Mixed (Type 2)</i>	<i>Growth (Type 3)</i>
Domestic investments	92	88	86
<i>Government</i>	12	30	13
<i>Financial system</i>	46	20	27
<i>Non-financial companies</i>	28	31	42
<i>Investment funds</i>	2	3	2
<i>Securitization companies</i>	4	4	2
Foreign investments	8	12	14
<i>Government</i>	2	3	1
<i>Financial system</i>	4	2	4
<i>Non-financial companies</i>	1	1	1
<i>Investment funds</i>	1	6	8
<i>Securitization companies</i>	0	0	0

Notes: Type 1: up to 10% in variable income; Type 2: up to 45% in variable income; Type 3: up to 80% in variable income.

(\*) Figures as of December 2008.

Source: Superintendency of Banks, Insurance and AFPs (SBS), Peru.

## MEXICO

The most conservative fund, SB1, had 100% of its portfolio invested in fixed income assets as of December, 2008. 19% was invested in domestic private debt instruments, 4% in international private debt and 77% in government debt. On the same date, SB5 had invested 20% of its portfolio in variable income instruments (the highest percentage), followed by SB4 with 17%, SB3 with 12% and SB2 with 8% (see Table 23).

**Table 23**  
**Mexico: Investment Portfolios of the Pension Funds, 2008 (\*)**  
**(as a percentage of total assets)**

	<i>Most conservative (SB1)</i>	<i>Conservative (SB2)</i>	<i>Balanced (SB3)</i>	<i>Risky (SB4)</i>	<i>Riskiest (SB5)</i>
<i>Domestic variable income</i>	0	5	8	11	13
<i>International variable income</i>	0	3	4	6	7
<i>Domestic private debt</i>	19	17	15	15	15
<i>International private debt</i>	4	4	5	5	5
<i>Government bonds</i>	77	71	68	66	61

Notes: SB1: only fixed income; SB2: 15% shares; SB3: 20% shares; SB4: 25% shares; SB5: 30% shares.

(\*) Figures as of December, 2008.

Source: National Commission for the Retirement Savings System (CONSAR), Mexico.

}



*ESTONIA-SLOVAKIA- HUNGARY- LATVIA- LITHUANIA*

The investment portfolio per fund type is not available.

## 5. Profitability of the funds<sup>10</sup>

This section provides information on the real annual profitability of the different portfolios. Please note that the differences in profitability between countries (for “similar” strategies) can be explained by multiple factors such as different portfolio assessment criteria, differences in the performance of the financial markets in each country (since fund managers have to invest a high percentage of their portfolios in the domestic market), differences in regulations that affect the portfolio make up, etc.

### CHILE

Since the beginnings of the multifund system in 2002, to December, 2008, the average real annual profitability for all the fund types has been positive. Fund A, the riskiest one, had an average annual profitability of 4.2 % between September 2002 and December 2008. Fund E, the most conservative one, had an average annual profitability of 4.7% in the same period. In a more extended period, fund C, the continuation of the fund existing since the system’s outset, had a real average annual profitability of 8.8% from 1981 to the end of 2008. The average real annual profitability for the different fund types in Chile is shown in Table 24.

**Table 24**  
**Chile: Real annual profitability**  
**(figures in percentages as of December of each year)**

Type of Fund	2003	2004	2005	2006	2007	2008	Annual Average (*)
Most conservative (E)	3.3	5.4	0.9	7.4	1.9	-0.9	4.7
Conservative (D)	8.9	6.9	2.8	11.5	3.3	-9.9	3.4
Intermediate(C)	10.6	8.9	4.6	15.8	5.0	-18.9	8.8
Risky (B)	16.0	10.3	7.3	18.8	7.5	-30.1	3.3
Riskiest (A)	26.9	12.9	10.7	22.3	10.1	-40.3	4.2

Notes: Fund A: 80% in shares; Fund B: 60% in shares; Fund C: 40% in shares; Fund D: 20% in shares; Fund E: up to 5% in variable income.

(\*) The annual average for Fund E includes the period from May 2000 to December 2008 and for fund C the period between June 1981 and December 2008. For funds A, B and D, it includes the period from September 2003 to December 2008.

Source: Superintendency of Pensions, Chile.

### MEXICO

The real annual profitability of the original SIEFOREs (SB1 and SB2) has been positive. The most conservative fund (SB1) which started operating on January 1, 2005, shows an average annual profitability of 2.0% as of December, 2008. In a more extensive period, SB2, the continuation of the fund that has existed since the beginning of the system,

<sup>10</sup> It is important to point out that the investment yield must be viewed in a long term horizon, since benefits will be paid out in the same term. It is mistaken to get caught up in short term assessments since they are influenced by cyclical factors, as occurred in 2008 when the financial crisis in the second six month period affected the valuation of the instruments in which the pension funds invested the workers’ saved resources. The experience shows that negative periods in investment valuation are followed by periods of significant recovery.





shows an average annual profitability of 6.6% between December 1997 and December 2008 (see Table 25).

**Table 25**  
**Mexico: Real annual profitability**  
**(figures in percentages as of December of each year)**

<i>Type of Fund</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>Annual average (*)</i>
<i>Most conservative (SB1)</i>	-	2.6	-0.1	2.0
<i>Conservative (SB2)</i>	8.8	2.4	-4.7	6.6
<i>Balanced (SB3)</i>	-	-	-5.7	-
<i>Risky (SB4)</i>	-	-	-6.0	-
<i>Riskiest (SB5)</i>	-	-	-7.9	-

Notes: SB1: only fixed income; SB2: 15% shares; SB3: 20% shares; SB4: 25% shares; SB5: 30% shares

(\*) The annual SB1 average includes the period between December 2006 and December 2008. The annual SB2 average includes the period between December 1997 and December 2008.

Source: National Commission for the Retirement Savings System (CONSAR), Mexico.

## PERU

All the pension funds record a positive real annual profitability. The Preservation fund (Type 1) had an average annual profitability of 3.5% between December 2005 and December 2008. The Mixed fund (Type 3) which invests the highest percentage of its portfolio in variable income assets, showed a profitability of 14.2% in the same period. The Mixed fund (Type 2), the continuation of the fund existing since the beginning off the system, had an average real annual profitability of 7.5% between December 1992 and December 2008 (see Table 26).

**Table 26**  
**Peru: Real annual profitability**  
**(figures in percentages as of December of each year)**

<i>Type of Fund</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>Annual average(*)</i>
<i>Preservation (Type 1)</i>	16.1	6.4	-10.2	3.5
<i>Mixed (Type 2)</i>	16.8	20.2	-26.7	7.5
<i>Growth (Type 3)</i>	83.4	38.0	-41.7	14.2

Notes: Type 1: up to 10% in variable income; Type 2: up to 45% in variable income; Type 3: up to 80% in variable income. The annual profitability of fund Types 1 and 3 for 2006 is the annual profitability of January, 2007.

(\*) The annual average for fund Types 1 and 3 includes the period between December 2005 and December 2008. The annual average for fund Type 2 includes the period between December 1992 and December 2008.

Source: Superintendency of Banks, Insurance and AFPs (SBS), Peru.

## SLOVAKIA

Table 27 shows the real average annual profitability of the different fund types in Slovakia for 2007 and 2008.

**Table 27**  
**Slovakia: Real annual profitability**  
**(figures in percentages as of December of each year)**

Type of Fund	2007	2008	Annual average (07-08)
Conservative	2.2	-1.3	-0.4
Balanced	1.4	-8.7	-3.8
Growth	1.1	-10.6	-4.9

Notes: Conservative: only fixed income; Balanced: 50% shares; Growth: up to 80% shares.  
Source: Association of Pension Fund Management Companies (ADSS), Slovakia.

## ESTONIA

Table 28 shows the real annual profitability for the different types of funds of the private pension system in Estonia for the period 2003-2008.

**Table 28**  
**Estonia: Real annual profitability**  
**(figures in percentages as of December each year)**

Type of Fund	2003	2004	2005	2006	2007	2008	Annual average (2003-2008)
Conservative	1.5	2.4	-1.4	-4.7	-4.5	-11.3	-3.1
Balanced	5.0	4.9	5.0	-0.1	-2.0	-26.8	-3.1
Aggressive	7.9	8.4	11.6	4.5	0.4	-34.2	-1.7

Notes: Conservative: only fixed income; Balanced: 25% shares; Aggressive: up to 50% shares.  
Source: Information Portal of the Estonian Pensions System (Pensionikeskus), Estonia.

## HUNGARY

Although the Hungarian multifund system started operating in 2007, the Hungarian Financial Supervision Authority drew up an estimation of the average annual profitability of similar portfolios for the period 1999-2008.<sup>11</sup> The results are shown in Table 29.

<sup>11</sup> HFSA, (2009).

**Table 29**  
**Hungary: Real annual profitability**  
**(figures in percentages as of December each year)**

Type of Fund	2008	Annual average (99-08)
<i>Funds that have implemented the multifund system</i>		
Conventional	-9.8	1,2
Balanced	-18.8	0.2
Growth	-30.1	-1.3
<i>Funds that have not implemented the multifund system</i>		
	-20,5	-0.4

Notes: Conventional: 10% shares; Balanced: 40% shares; Growth: up to 100% shares.  
Source: Hungarian Financial Supervision Authority (HFSA), Hungary.

#### LATVIA

Table 30 shows the real average annual profitability for the different types of funds in Latvia for the 2007-2008 period.

**Table 30**  
**Latvia: Real annual profitability**  
**(figures in percentages as of December of each year)**

Type of Strategy	2007	2008	Annual average (07-08)
Conservative	-7.0	-11.5	-9.3
Balanced	-6.4	-18.2	-12.5
Active	-6.4	-26.0	-16.8

Notes: Conservative: 10% shares; Balanced: 15% shares; Active: 30% shares.  
Source: State Social Insurance Agency (VSAA), Latvia.

#### LITHUANIA

Table 31 shows the real average annual profitability of the different fund types in Lithuania for the 2005-2008 period.

**Table 31**  
**Lithuania: Real annual profitability**  
**(figures in percentages as of December of each year )**

Type of Fund	2005	2006	2007	2008	Annual average (05-08)
Conservative	-0.5	-3.6	-4.4	-7.7	-4.1
Fund with a low percentage of shares	4.2	-0.5	-2.6	-22.9	-6.1
Fund with an intermediate percentage of shares	12.1	3.1	-0.8	-35.1	-7.1
Share fund	24.8	14.1	1.9	-52.6	-8.9

Notes: Conservative: only fixed income (government bonds); Fund with an intermediate percentage of shares: up to 70% in shares; Share Fund: between 70% and 100% in shares.  
Source: Lithuanian Securities Commission (VPK), Lithuania.



## 6. Minimum profitability guarantee and safeguarding mechanisms

This section describes the minimum guarantee and safeguarding mechanisms per fund type in each country. The funded systems in Chile and Peru provide explicit guarantees on the profitability of the funds. Chile requires a minimum profitability guarantee for each one of the funds, whereas in Peru the minimum profitability is associated to reference indicators or benchmarks. In the rest of the countries there are no mechanisms that guarantee a minimum profitability of the pension fund investments.

### CHILE

The AFPs guarantee that the funds they manage will generate at least the minimum monthly profitability.

The minimum profitability is calculated on the basis of the real average annual profitability obtained by all the pension funds of the same type in the last 36 months. This cannot be less than the difference between:

- a. The real average annualized profitability of all the funds of the same type over the last 36 months, minus four percentage points for Funds A and B and minus two percentage points for funds C, D and E, and
- b. The real average annualized profitability of all the funds of the same type over the last 36 months, as the case may be, minus the absolute value of fifty percent of such profitability.

In case the real annualized profitability over the last 36 months in any given month is less than the minimum profitability requirement, the minimum profitability safeguarding mechanisms come into effect.

The safeguarding mechanisms mentioned above consist in the following:

- a. *Cash Reserve*: This is an asset equivalent to 1% of each pension fund, paid with the fund manager's resources and invested in quotas of the respective fund.
- b. *Government guarantee*: If the minimum profitability is not achieved after applying the resources of the respective fund's cash reserve and the AFP does not have additional financial resources available to cover the difference, the government makes up such difference and proceeds to close down the fund manager.

### PERU

In 2005, the minimum profitability guarantee for each one of the funds managed by the fund managers was replaced by a new system based on profitability reference indicators, or benchmarks. Each fund manager is responsible for choosing the profitability reference indicators for each one of the instrument categories in which it invests the resources of each one of the managed portfolios, corresponding to the mandatory and voluntary contribution funds.

The Superintendency of Banks, Insurance and AFPs (SBS) calculates the minimum profitability of each fund as the lower percentage, in real terms, resulting from subtracting a fixed and a variable percentage factor from the yield obtained by the profitability reference indicators applicable to each fund. The aforementioned profitability indicators are approved by the SBS at the request of the fund manager.



The SBS sets out certain profitability guarantees corresponding to each fund, including among them the legal cash reserve. The cash reserve is an asset equivalent to 1% of the value of each pension fund that fund managers are obligated to set aside. In case the minimum profitability is not achieved, such guarantees are used for compensating the affected fund. If they do not suffice, the fund manager must pay in its own resources until the minimum profitability is reached, within the term established by the Superintendency for such purposes.

*ESTONIA-SLOVAKIA- HUNGARY- LATVIA*

There is no mechanism that guarantees the minimum profitability of the pension fund investments performed by the fund managers.



## 7. Transfers between funds

This section summarizes the restrictions faced by members for transferring their balances between the funds of the same fund manager. With the exception of Mexico, the regulations of all the systems limit the number of transfers between funds that members can perform freely and without cost.

### *CHILE*

Members can transfer their balances between the funds of the same AFP cost-free not more than twice per calendar year, regardless of whether they are mandatory or voluntary contributions. In case funds are transferred more than twice in one calendar year, the AFP can charge a fixed exit commission to the member's expense, which cannot be deducted from the pension fund.

### *MEXICO*

Workers have the sole option of transferring to a SIEFORE for an older age group without any kind of restrictions or associated costs.

### *PERU*

Workers can transfer the balances of their mandatory and voluntary savings between the three funds every three months freely and without any cost.

### *SLOVAKIA*

Members can transfer their balances between the funds of the same fund manager only once per calendar year, without any kind of restriction or associated cost. In case they transfer more than once per calendar year, the fund manager can charge a commission of 16 Euros (approx. US\$ 23<sup>12</sup>).

### *ESTONIA*

Members can transfer their balances between the funds of the same fund manager only once per calendar year, without any kind of restriction or associated cost. There is no transfer limit for voluntary funds

### *HUNGARY*

Members can transfer the balances of their mandatory contributions between the funds of the same fund manager every six months freely and without any cost.

---

<sup>12</sup> Exchange rate used for the conversion: 1 US\$ = 0,6977 Euros  
(Source: <http://www.oanda.com/lang/es/currency/converter/>)



*LATVIA*

Members can transfer their balances freely between the funds of the same fund manager not more than twice per calendar year.



## 8. Division of balances

Chile is the only country that allows members to assign their resources to up to two funds within the same fund manager. In the rest of the countries, savings can only be kept in one of the different funds offered by each fund manager.

### *CHILE*

The AFPs and members can subscribe contracts for assigning an account's resources to up to two different funds. Furthermore, they can agree, by means of a contract, future transfers of balances in members' accounts between fund types. The purpose of this flexibility is to achieve greater satisfaction of each member's risk-return preferences, taking their individual characteristics into account. In the case of voluntary contributions, there are no kinds of age restrictions or restrictions for pensioners when choosing a fund type. Other financial agencies (insurance companies; mutual funds; banks) can also manage voluntary pension funds.

### *MEXICO*

The retirement savings balances of mandatory and voluntary contributions can only be kept in one of the fund managers or SIEFORES.

The resources originating in voluntary contributions can be invested in SIEFORES specializing in voluntary savings that fund managers have for such purposes. The AFOREs are obligated to create SIEFORES specializing in voluntary savings only when they have accumulated a certain amount of resources in this type of savings.

### *PERU*

The balances of mandatory contributions can only be kept in one of the three existing funds, whereas the balances of voluntary contributions can be kept in funds other than those mentioned. With the authorization of the Superintendency of Banks, Insurance and AFPs, each fund manager can decide on the kind of portfolio to offer for managing the voluntary contributions.

### *SLOVAKIA*

The balances of mandatory contributions can only be kept in one of the three existing funds.

### *ESTONIA*

The balances of mandatory contributions can only be kept in one of the three existing funds, whereas the balances of voluntary contributions can be kept in funds other than those mentioned.





*HUNGARY*

The balances of mandatory contributions can only be kept in one of the three existing funds.

*LATVIA*

The balances of mandatory contributions can only be kept in one of the three existing strategies.

*LITHUANIA*

The balances of mandatory contributions can only be kept in one of the four existing funds.



## References

Hungarian Financial Supervisory Authority: “HFSA Annual Report, 2008” (2008).

Available on Internet: [http://www.pszaf.hu/en/left\\_menu/pszafen\\_publication/pszafen\\_reports](http://www.pszaf.hu/en/left_menu/pszafen_publication/pszafen_reports)

Hungarian Financial Supervisory Authority: “Investment performance of the Hungarian Private and Voluntary Pension Funds” (2009).

Available on Internet:

[http://www.pszaf.hu/data/cms1552616/Investment\\_performance\\_of\\_Pension\\_Funds\\_2008.pdf](http://www.pszaf.hu/data/cms1552616/Investment_performance_of_Pension_Funds_2008.pdf)

The Association of Pension Funds Management Companies: “Weekly Report”.

Available on Internet: <http://www.adss.sk/en/Default.aspx?CatID=60>

Allianz: “Central and Eastern European Pensions 2007 – systems and markets” (2007). Available on Internet:

<http://publications.allianzgi.com/en/PensionResearch/Pages/PensionStudiesandPapers.aspx>

Latvian Financial and Capital Market Commission: “Operation of the Private Pension Funds”.

Available on Internet: <http://www.fktk.lv/en/statistics/latest/>

CONSAR: “Estadísticas del SAR”. (SAR Statistics) Available on Internet:

[http://www.consar.gob.mx/principal/estadisticas\\_sar.shtml](http://www.consar.gob.mx/principal/estadisticas_sar.shtml)

The Estonian Central Depository for Securities: “Statistics”. Available on Internet:

<http://www.pensionikeskus.ee/?id=631>

FIAP: “Multifunds: The Cases of Chile, Mexico and Peru”.

Available on Internet:

[http://www.fiap.cl/prontus\\_fiap/site/artic/20080125/asocfile/20080125111633/multifundseng.pdf](http://www.fiap.cl/prontus_fiap/site/artic/20080125/asocfile/20080125111633/multifundseng.pdf)

Ministry of Social Security and Labor, Lithuania: “Pension Funds Statistics”.

Available on Internet: <http://www.pensijusistema.lt/index.php?-932191720>



OECD, ISSA, IOPS: “Complementary and Private Pensions Throughout the World 2008” (2009).

Rozinka, E., W. Tapia: “Survey of Investment Choice by Pension Fund Members”, OECD Working Paper on Insurance And Private Pensions N° 7 (2007). Available on Internet: <http://www.oecd.org/dataoecd/39/1/37977416.pdf>

SBS Peru: “Estadísticas del Sistema Privado de Pensiones” (Statistics of the Private Pension System) Available on Internet: <http://www.sbs.gob.pe/PortalSBS/Estadistica/index.htm>

SBS Peru: “Law N° 27.988” (2003).

SBS Peru: “Resolution N° 275-2005” (2005).

SBS Peru: “Multiple Circular N° 18151-2006” (2006).

Chilean Superintendency of Pension Fund Administrators: “El Sistema Chileno de Pensiones” (The Chilean Pension System) (2007). Available on Internet: <http://www.safp.cl/573/article-3721.html>

Chilean Superintendency of Pension Fund Administrators: “Updated text of Executive Decree No. 3.500” (2007).

Chilean Superintendency of Pension Fund Administrators: “Press Release” (July 31, 2007). Available on Internet: [http://www.safp.cl/p4\\_comunicados/site/asocfile/ASOCFILE0120070810101606.pdf](http://www.safp.cl/p4_comunicados/site/asocfile/ASOCFILE0120070810101606.pdf).

Chilean Superintendency of Pension Fund Administrators: “Press Release” (December 30, 2008). Available on Internet: [http://www.safp.cl/573/articles-5931\\_recurso\\_1.pdf](http://www.safp.cl/573/articles-5931_recurso_1.pdf)

Tapia, W., J.Yermo: “Implications of Behavioral Economics for Mandatory Individual Account Pension Systems”, OECD Working Paper on Insurance and Private Pensions N° 11 (2007). Available on Internet: <http://www.oecd.org/dataoecd/5/22/39368306.pdf>

**Annex 1: Comparison of Multifund Systems**

	Chile	Mexico	Peru	Slovakia	Estonia	Hungary	Latvia	Lithuania
Implementation of the individually funded pension system	1981	1997	1993	2005	2002	1998	2001	2004
Implementation of the Multifund system	2002	2005	2005	2005	2002	2007	2003	2004
No. of investment options	5	5	3	3	3	3	3	4
Maximum variable income limit in the most aggressive fund	80%	30%	80%	80%	50%	No limits	30%	No limits
Maximum variable income limit in the most conservative fund	0%	0%	10%	0%	0%	10%	0%	0%
Value of the pension funds - MMUSD (Dec. 2008)	74,313	73,109	16,008	3,109	1,034	9,657	930	5,321
Total No. of members (Dec. 2008)	8,372,475	39,063,973	4,296,480	1,483,026	580,000	2,947,862	1,065,564	957,057
Default option	Members are assigned to a fund according to their age	Members are assigned to a fund according to their age	Members are assigned to a fund according to their age	There are no regulations	Most conservative fund	Members are assigned to a fund according to their age	Most conservative fund	Most conservative fund
% of assets (managed funds) in the balanced strategy	44% in Fund C (up to 40% in variable income)	29% in SB3 (up to 15% in variable income)	74% in Fund Type 2 (up to 45% in variable income)	29% in the Balanced fund (up to 50% in variable income)	17% in the Balanced fund (up to 25% in variable income)	14% in the Balanced fund (up to 40% in variable income)	6% in the Balanced fund (up to 15% in variable income)	81% in the Balanced fund (up to 70% in variable income)
% of members in the balanced strategy	37% in Fund C (up to 40% in variable income)	n.a.	90% in Fund Type 2 (up to 45% in variable income)	26% in the Balanced fund (up to 50% in variable income)	n.a.	8% in the Balanced fund (up to 40% in variable income)	7% in the Balanced fund (up to 15% in variable income)	82% in the Balanced fund (up to 70% in variable income)
Minimum profitability guarantee	A different minimum profitability guarantee according to fund type is required	There is none	Associated to profitability reference indicators or benchmarks	There is none	There is none	There is none	There is none	There is none
Transfers between funds (maximum No. of transfers per year)	2	No limits	4 (once every 3 months)	1	1	2 (once every 6 months)	2	n.a.
No. of funds a member can choose	2	1	1	1	1	1	1	1

n.a.: Not available.  
Source: FIAP.