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# Fees in Individual Account Pension Systems

A CROSS-COUNTRY COMPARISON

Waldo Tapia, Juan Yermo



**FEES IN INDIVIDUAL ACCOUNT PENSION SYSTEMS: A CROSS-COUNTRY COMPARISON**

**Waldo Tapia and Juan Yermo**

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## ABSTRACT/RÉSUMÉ

### **Fees in Individual Account Pension Systems: A Cross-Country Comparison**

This paper focuses on the fees that are charged to participants in mandatory, defined contribution pension systems, focusing on the experience of Latin America, Central and Eastern Europe, Australia, and Sweden. In order to compare fees across countries, this paper looks at the evolution of a simple cost measure, the ratio of annual fees to assets under management. The relatively high fee to assets ratios in some Latin American and Central and Eastern European countries can be partly explained by the recent implementation of their private systems. However, system maturity cannot explain all differences observed between countries. The paper argues that the particularly low fees observed in Bolivia and Sweden at the inception of their respective systems stem largely from a decision to force cost competition among providers via a central agency or ‘clearing house’.

*JEL codes:* G23, G32, J32

*Keywords:* pension fund, management fees, charge ratio, reduction in yield, administrative costs

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### **Frais facturés aux particuliers ayant souscrit à un régime de retraite individuel : Comparaison entre plusieurs pays**

Ce document traite principalement des frais administratifs facturés aux particuliers ayant souscrit à un régime de retraite obligatoire à cotisations définies en mettant l’accent sur les pratiques observées en Amérique latine, en Europe centrale et orientale, en Australie et en Suède. Pour pouvoir comparer les coûts d’un pays à l’autre, les auteurs examinent l’évolution d’une mesure simple des frais, à savoir le montant des frais annuels rapporté à celui des actifs gérés. Le niveau relativement élevé des ratios des frais de gestion relevés dans certains pays d’Amérique latine et d’Europe centrale et orientale peut être dû au fait que la mise en place de systèmes privés y est toute récente. Cependant, la maturité des systèmes ne peut expliquer toutes les différences observées entre les pays. Les auteurs affirment que le niveau particulièrement faible des frais facturés en Bolivie et en Suède dès la création de leurs systèmes respectifs est dans une large mesure imputable à la décision prise par ces pays de mettre les prestataires en situation de concurrence par les coûts grâce à la création d’un organisme central ou “chambre de compensation”.

*Codes JEL :* G23, G32, J32

*Mots-clés :* fond de pension, frais de gestion, ratio des frais de gestion, baisse des rendements, frais administratifs

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# FEES IN INDIVIDUAL ACCOUNT PENSION SYSTEMS: A CROSS-COUNTRY COMPARISON

by Waldo Tapia and Juan Yermo<sup>1</sup>

## I. Introduction

The adequacy of retirement income is a central goal of all pension arrangements. In individual account (defined contribution) private pension systems, retirement income depends on accumulated contributions, the investment returns earned by these contributions and the fees that are charged to individuals by the pension providers. Contributions in mandatory private pension systems are usually stipulated in reform legislation. Therefore, accumulating adequate savings requires high returns and low fees.

Pension providers charge fees in mandatory individual account pension systems to cover different kinds of operating costs. There are the costs of marketing the plan to potential participants, collecting contributions, sending contributions to investment fund managers, keeping records of accounts, sending reports to participants, investing the assets and converting account balances to annuities and paying annuities.

This paper focuses on the fees that are charged to individuals in the accumulation stage of mandatory, defined contribution pension systems, focusing on the experience of Latin America, Central and Eastern Europe, Australia, and Sweden. Fees are influenced by many factors in these countries including the size and maturity of the system, market structure, competition, investment strategy and regulations.

In order to compare fees across countries, this paper looks at the evolution of a simple cost measure, the ratio of annual fees to assets under management. Unlike more sophisticated cost measures, such as the charge ratio or the reduction in yield, this is a purely accounting figure that does not involve any projections. As such, it can only be used to compare fee levels across countries if one considers the maturity of the system and the fee structure in place.

The relatively high fee to assets ratios in some Latin American and Central and Eastern European countries can therefore be partly explained by the recent implementation of their private systems. However, system maturity cannot explain all differences observed between countries. For example, the Swedish Premium Pension system had a fee level in 2007 substantially below that of Chilean system, despite the fact that the latter has been in place for a sufficiently long period (twenty-six years) to offset the

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<sup>1</sup> Waldo Tapia is a consultant and Juan Yermo is principal administrator in the Financial Affairs Division of the OECD's Directorate for Financial and Enterprise Affairs. Comments from Roberto Rocha (World Bank) are gratefully acknowledged. The views expressed herein are those of the authors and do not necessarily reflect those of the OECD or the governments of its Member countries. The authors are solely responsible for any errors.

effect of the contribution-based fee structure. The only country where costs have evolved in a similar manner to (but still above) the Swedish benchmark is Bolivia.

The cost advantages of the Swedish and Bolivian systems stem largely from a decision to force cost competition among providers via a central agency or ‘clearing house’. Bolivia went as far as limiting the market to two providers and restricting competition between them. In other countries, marketing and sales agents have been used in the past to encourage members to switch providers, leading to an increase in operational expenses and fees. As members are not very responsive to higher fees, systems that a priori seemed to be highly competitive, with many players, have actually turned out to do rather poorly in terms of fees.

Another factor that may explain differences in fees is the asset allocation and investment regulations in place. Investment in interest bearing assets, such as deposits and bonds, is generally cheaper than investment in equities, while passive investment is cheaper than active investment. The lower fees in Bolivia may therefore also be partly explained by the fact that investments are concentrated in domestic governments bonds. Moreover, in some countries reported fees do not include the management fees paid by pension providers to international mutual fund managers, which reduces the comparability of fee data across countries.

The paper is structured as follows. The next section provides a description of the main types of fees charged in individual account pension systems and the regulations in place, in particular ceilings on fees. Section 3 compares fees across countries in both absolute terms and relative to assets under management. Section 4 gives provides some empirical evidence for the observed differences in fees. The final section concludes.

## **II. Fee structure and regulation**

The structure of charges adopted in the countries under study is fairly complex. The complexity of the charge structure means that, in general, charges are poorly understood by the average pension fund member. For example, survey evidence from Chile and Poland suggests that the majority of the population does not know what fees are paid to pension companies.<sup>2</sup> A recent survey in Poland showed that 63% of contributors declared very limited understanding about contributions fees, and 71% declared limited understanding about management fees. More than 40% of those surveyed did not know that there was a transfer fee for moving one’s account to another provider.

Similarly, knowledge of the new Chilean pension system is far from perfect. A micro-level analysis of retirement saving showed that more than 96% of Chilean members do not know that pension companies receive management fees as a percent of their monthly earnings.<sup>3</sup> Likewise, a recently-developed longitudinal survey of individual respondents showed that fewer than 2% of the respondents know either the fixed or variable commissions in either year and less than one percent of all respondents claim to know both the fixed and variable commissions.<sup>4</sup> The fact that workers and savers know virtually nothing about the costs of investing their funds suggests that there is much work to be done to educate participants about this key aspect of their retirement system.<sup>5</sup>

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<sup>2</sup> Chlon (2000)

<sup>3</sup> Martinez and Sahm (2005)

<sup>4</sup> Universidad de Chile (2004)

<sup>5</sup> Arenas de Mesa at al. (2006)

Fees can be either fixed or variable. Fixed commission is characterized by the fact that the price does not depend neither on the level of salary nor on the fund. One of the advantages of fixed commission is that the price is easy for participants to understand and compare, and, as the amount collected by pension companies increases with the number of contributors. However, this design is considered to be regressive and, consequently, elicits a negative effect on workers with lower incomes, as it is impossible to generate cross subsidies between subscribers with higher income and those with lower income. Examples of this type of fee are found in certain Latin American countries, such as Chile and Uruguay.

Variable commission may take the form of a percentage of the flow, of either payments or contributions, or of the stock, as a percentage of the amount managed or as a percentage of the cumulative assets turnover. Variable commission on the flow (usually shown as a % of salary) is the most common and is found in most of countries under consideration in this document.<sup>6</sup> It keeps a direct relationship with collection fees and guarantees an even flow of revenue for pension companies. However, the main criticisms of this type of commission are that it generates a lack of incentives for better investments and punishes heavily those members with high levels of contributions (typically higher earners). Additionally, pension companies do not collect revenues from people who do not contribute, but pension companies would still have to bear the cost of administering these people's funds.

Variable commission on stock can be either on the value of the fund or on returns. Variable commission encourages pension companies to maximize assets, both by attracting funds from other providers and, more importantly, by maximizing investment returns. Additionally, it ensures a continuing flow of revenues from non contributors. The main criticism of this type of commission is that it can encourage the search for investment strategies which are profitable in the short term against the ultimate goal of maximizing results in the long term in order to guarantee subscribers an adequate pension. It also generates a potentially problematic flow of revenue for managing companies that must face the usually high initial expenses with the lowest absolute revenue that newly-established funds collect. Commission on the value of the fund is the most widely used in Central and Eastern Europe, whilst commission on return or performance is found in few countries, such as Kazakhstan and Costa Rica.

Additionally, pension companies may also charge exit fees when workers transfer their individual accounts to another pension company. Exit fees may be fixed or operate on a sliding scale with loyalty being rewarded with lower fees on exit.

The structure of charges, and, in particular, the balance between fees on contributions and asset management fees, reflects the relative emphasis placed by policy makers on the differing objectives. In Latin America, mandatory pension systems were introduced when the financial sector was still relatively underdeveloped and there was concern about limited entry and insufficient competition in the market for pensions. This led to a greater emphasis on fees on contributions. In Central and Eastern Europe, concern for entry has been lower, perhaps owing to the presence of established financial services companies in Western Europe with an interest in expanding operations. As a result, there has been a greater reliance on management fees and fees on returns.

### ***Types of fees permitted***

The pension fund industries in Latin American countries are relatively unified in their design. The legal framework on fees includes limits on the types and levels of charges that are levied on pension funds members. Excluding Chile, pension funds were also established relatively recently which means that observations on the cost level are to some extent biased by the impact of the start-up costs.

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<sup>6</sup> Fees on contributions are also known as up-front fees.

The commission structure is regulated in all Latin American countries (see Table 1). Commissions to cover administrative cost (account and asset manager) can be set as a percentage of salary or contribution in most of Latin American countries. However, only part of the fees on contributions constitutes net income for the pension company. A certain fraction of it is transferred to the life insurance companies as a premium for the disability and survivorship insurance used to provide coverage for contributors.

Pension companies in four countries charge fees on contributions exclusively. In Argentina, for instance, pension companies are entitled to charge only a fee on contributions. There is no fee on asset management and the flat fees were eliminated in November 2001. Similarly, in Peru pension companies were initially allowed to charge affiliates a monthly fixed commission, a fee on contributions, and a fee on assets. However, since January 1997, the law allows only the variable commission as a percentage of contributions. In Colombia, on the other side, pension companies are allowed to charge fees on contributions, fees on assets and fixed administrative fee. But, all of the fees currently charged are on contributions; none of the pension companies are charging a fixed fees or fees on assets.

In Chile and Uruguay, most of pension companies charge two-part tariff, which consists of a monthly fixed administrative fee and a fee on contribution. In Chile, at the beginning of the system, pension companies were also authorized to charge a percentage on the balance in the personal account, but this was eliminated in 1988. In Bolivia, on the other side, pension companies are allowed to charge a monthly commission on contribution and an annual commission on assets.

In Mexico, until the end of 2007, pension companies could freely determine their yearly fees, which could be a percentage of contributions, a percentage of assets under management, or both. Beginning in 2008, pension companies may no longer charge account holders a fee on their monthly contributions and may only charge a fee on the individual account balances.

**Table 1: Fee structure in private pension systems**

Country	Fixed commission	Fees on contributions	Fee on assets	Fees on return	Switching/ exit fee	Limit on fees	Death and disability insurance
<b>Latin American countries</b>							
Argentina		X				X	X
Bolivia		X	X			X	
Colombia		X			X	X	X
Chile	X	X			X		X
Costa Rica			X	X			
El Salvador		X				X	X
Mexico			X				
Peru		X					X
Uruguay	X	X					X
<b>Central and Eastern European countries</b>							
Bulgaria		X	X		X	X	
Estonia			X			X	
Hungary		X	X		X	X	
Kazakhstan			X	X		X	
Latvia		X	X				
Poland		X	X		X	X	
Slovak Rep.						X	
<b>Other OECD countries</b>							
Australia	X	X	X		X		
Sweden			X				

The design of the pension systems in Central and Eastern Europe shows certain similarities to those in Latin America. In particular, when preparing the reforms of their pension systems, national authorities looked into experiences of countries that had implemented funded systems with individual choice (in particular Chile), which explains similarities both in the approach to the charge structure and the structure of administrative costs. Fees and commissions have been relatively understudied because mandatory private pension systems are still relatively new. Of the ten or so countries that have implemented mandatory private pension systems, the majority introduced it after 2001.

The asset management fees (a percentage of individual account balances) is the most common and is found in all the countries under consideration in this document. In Estonia, for instance, there are two types of management fees, the unit redemption fee (occasionally charged), which is calculated as a percentage of the net asset value of redeemed units and a management fee, which must be a proportion of the market value of the fund assets and must be defined in the pension fund rules.<sup>7</sup> In Poland, on the other side, the asset management fee is composed of a fixed part (which is charged as a percentage of the fund assets) and a variable part. The level of the variable part depends on the investment performance generated by the fund. The pension company with the highest rate of return may charge the highest variable part of the management fee (according to the limit), while the company whose fund generated the lowest rate of return may not charge the variable part of the fee.

In addition to the asset management fee, pension companies in Bulgaria, Hungary and Slovakia are also allowed to charge a contribution fee as a percentage of salary.<sup>8</sup> In Slovakia, for example, pension companies may charge only fees as a percentage of the total assets and fees on contributions for maintaining personal pension accounts. Pension companies may not charge any other fees (e.g. for switching funds or exit fees).

A third fee is a fee on performance or returns. Examples of this type of fee are found in Latvia and Kazakhstan. Finally, pension companies may charge exit fees when participants transfer their individual accounts to another company. Exit fees may be fixed, or operate on a sliding scale with loyalty being rewarded with lower fees on exit. In Poland, for instance, a transfer fee for switching between pension companies varies from PLN 80 to PLN 160 depending on the length of membership. Members are free to switch funds at any time. Similarly, and switching fees in Bulgaria amount to BGN 20. Estonia, Hungary, Latvia and Kazakhstan do not allow exit fees.<sup>9</sup> In Estonia and Latvia, if participants want to switch pension companies, they can do so once a year without pay any kind of fee.

### ***Limits on fees***

Some countries have established maximum limits on the fees that pension funds can charge to ensure that administrative costs do not reduce the retirement income of participants. The problem with set maximum limits on fees is the risk that governments set the 'wrong' ceiling. Too high a limit would be ineffectual. Too low a ceiling might mean that fund managers could not cover their costs. This will restrict competition and choice. It could even lead to the failure of weaker providers, undermining public confidence in the system. There is also evidence that charge ceilings can become *de facto* charge minima as well. This implies that price competition, beyond meeting the regulatory requirement, might be limited, at least in the short term.

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<sup>7</sup> A third type, the unit issue fee, was abolished in 2007.

<sup>8</sup> Up-front fees were collected in Kazakhstan until 2003 but were then disallowed.

<sup>9</sup> As a result of these new regulations, specific entry or switching fee regulations have been abolished. Members are allowed to switch funds provided that they have been with their current fund for at least three months.



Among Latin American countries, only Argentina, Bolivia, Colombia, Costa Rica and El Salvador have established maximum limits on the fees that pension funds can charge (see Table 2). In Bolivia a bidding contract between the regulator and the pension fund administrator stipulates that commissions cannot exceed 1% of salaries. In Colombia, the only restriction imposed by the law is that total commissions, including the premiums charged for disability and survivors' insurance, may not exceed 3% of the salary.

In El Salvador, pension companies may charge a fee of up to 5% of the investment return and not exceeding 1.5% of the member's average contributory salary in the last 12 months for which contributions were made for administering individual accounts that are inactive for more than 1 year (e.g. if members cease any employment and do not contribute) and the balances of which exceed 100 times the minimum wage.<sup>10</sup> Similarly, in Costa Rica commissions charged on investment return must not exceed 8% of returns and commissions charged on contributions must not exceed 4% of total contribution.

Chile, Mexico, Peru and Uruguay do not have limit on fees. In Chile, for instance, there are no legal rules for fees, except that they must be the same for all members and be based on members' salaries. The authorities have not imposed any controls on the level of fees and commissions, relying on competition (and presumably also on the threat of future regulation) for putting a lid on them.

Unlike Latin American countries, mandatory pension systems in Central and Eastern European countries have usually relied on legislative restrictions to keep charges in check. With the exception of Latvia all the countries in this document rely on price caps in some form or the other.<sup>11</sup> In Bulgaria, for instance, the maximum management fee for mandatory pension funds is 1 % of assets, whereas fees on contributions are limited to a maximum of 5%. Similarly, in Estonia, the unit redemption fee can amount to a maximum of 1% and the management fee has a maximum limit of 2%. In Hungary, annual fees for asset management services, excluding trading expenses, have just been reformed and may not exceed 0.9 % in 2007 and 0.8 % in 2008. Maximum contribution fees will be reduced from 6 % in 2007 to 4.5 % in 2008.

Poland has successfully used price caps to lower fees. Prior to 2004, the management fee was subject to an upper limit of 0.6% of individual account balances, whilst contribution fees were not capped. The changes that came into effect in 2004 capped both the management fee (at 0.54%) and the up-front fee (at 7%). Moreover, a series of reductions were legislated to reduce the maximum up-front fee from 7% to 3.5% in 2014. Further limits were placed on the management fee related to the overall size of assets under management. The fixed component of the management fee must be lower than 0.045 % of net assets, while the variable component of the management fee (which depends on investment returns generated) must not exceed 0.005 % of net assets per month.

In Sweden, there are no limits of fees, but fund managers are obliged under the agreement between them and the Premium Pension Authority (PPM), the public clearing house of the system, to offer a rebate on their ordinary fees for retail investors. The rebates are calculated individually, i.e. all rebates received from one fund are reinvested for those participants who have or have had holdings in that fund during the period for which the rebate is given. The rebate model is progressive, which means that the size of a rebate depends on the size of the fund's fee and on PPM's total holdings in the fund; hence, the bigger the capital, the bigger the rebate. Fund managers are invoiced on a quarterly basis, while the distribution of the rebates

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<sup>10</sup> Disability and survivor insurance coverage is not required for members who qualify for old-age benefits but continue contributing and the pension fund administrators (AFPs) may charge a fee up to 1.5% of salary to such members.

<sup>11</sup> In Latvia, the maximum cap on administration fees was recently abolished. Other fees, such as asset management fees, are not regulated, but each management company must publish fee levels in its prospectus. There are no minimum or maximum limits for fees set by law.

earnings to the pension savers is done only once a year. In 2007, the distribution occurred in May, for rebates received for 2006. The premium pension system's discount model therefore fills a central function as a cost-limiting measure. The model is designed in such a way to give participants a reasonable share of the profits from the economies of the scale in investment management, which is a prerequisite if the system is to be considered cost-effective in international comparison in the future.

**Table 2: Limits on fees**

Country	Fees on contributions	Fees on assets	Fees on return	Fixed fee
<b>Latin American countries</b>				
Argentina	1% of salary	-	-	-
Bolivia	0.5% of salary	0% - 0.223%	-	-
Colombia	3% (a)	-	-	-
Chile	No limit	-	-	No limit
Costa Rica	4% of salary	-	8%	-
El Salvador	3% (a) of salary	-	5%	-
Mexico	No limit	No limit	-	-
Peru	No limit	-	-	-
Uruguay	No limit	-	-	No limit
<b>Central and Eastern European countries</b>				
Bulgaria	5% of contributions	1%	-	BGN 20
Estonia	3% (b)	2%	-	-
Hungary	6% of contributions (4.5% in 2008)	0.9% (0.8% in 2008)	-	-
Kazakhstan	-	0.05%	15%	-
Latvia	No limit (c)	No limit	-	-
Poland	7% of contributions (3.5% by 2014)	0.45%	0.05%	-
Slovak Republic	1% of contributions	0.70%	-	-
<b>Other OECD countries</b>				
Australia	If the account balance falls below A\$1000 (US\$ 850), special fee provisions may apply which will limit the fees which can be charged to the individual balance.			No limit
Sweden	-	No limit, but rebates are paid back to members' accounts	-	-

Notes:

(a) It includes the disability and survivors' insurance.

(b) It was abolished in 2007.

(c) Until the end of 2005 fees on contribution were capped at 2.5%

### III. Comparing fee levels

Table 3 below shows the average level of fees in each country in 2007. The actual fees charged by pension providers are reported, classified by type of fee. As fee structures differ across countries it is not possible to compare administrative costs by simply looking at these numbers. It should also be noted that some fees may not be fully reported. For example, international mutual funds in Chile (and other countries) deduct management fees directly from the fund. Such fees are not reported separately by the pension fund administrators (AFPs).

**Table 3: Average administration fee per country, 2007**

Country	Net fee on contributions (% of salary) <sup>12</sup>	Fee on assets (% individual account balances)	Fee return (% over profit)	Fixed fee (US\$)
<b>Latin American countries</b>				
Argentina	1.00%	-	-	-
Bolivia	0.50%	0% - 0.223%	-	-
Colombia	1.58%	-	-	-
Costa Rica	3.28%	-	7.50%	-
Chile	1.71%	-	-	0.43 (monthly)
El Salvador	1.40%	-	-	-
México (a)	1.10 <sup>13</sup>	0.39%	-	-
Peru	1.81%	-	-	-
Uruguay	1.79%	0.02%	-	0.10 (monthly)
<b>Central and Eastern European countries</b>				
Bulgaria	0.25%	1.00%	-	-
Estonia (a)	-	1.54%	-	-
Hungary (a)	0.44%	0.57%	-	-
Latvia (b)	-	1.49%	-	-
Kazakhstan (b)	-	0.05%	15%	-
Poland	0.40%	0.42%	-	-
Slovak Rep.	0.09%	0.85%	-	-
<b>Other OECD countries</b>				
Australia	0%-4.50%	0.70% - 2.53%	-	38 (annual)
Sweden	-	0.42%-1.21% <sup>14</sup>	-	-

Sources: Latin American countries: AIOS, 2007; Poland: Insurance and Pensions Supervisory Authority, 2008 and authors' calculations; Hungary: HFSA, 2007 and authors' calculations; Sweden: Premium Pension Authority, 2007

Notes:

(a) 2005 figures

(b) 2006 figures

Figure 1 shows the aggregate administrative charges per member in 2007 expressed in US dollars. Members in Chile paid over US\$ 180 in administrative charges in 2007. Peru comes next (US\$ 134) followed by Colombia (US\$ 95) and Mexico (US\$ 93). Among Central and Eastern European countries, administrative charges in Hungary, one of the most developed in the region, represented approximately

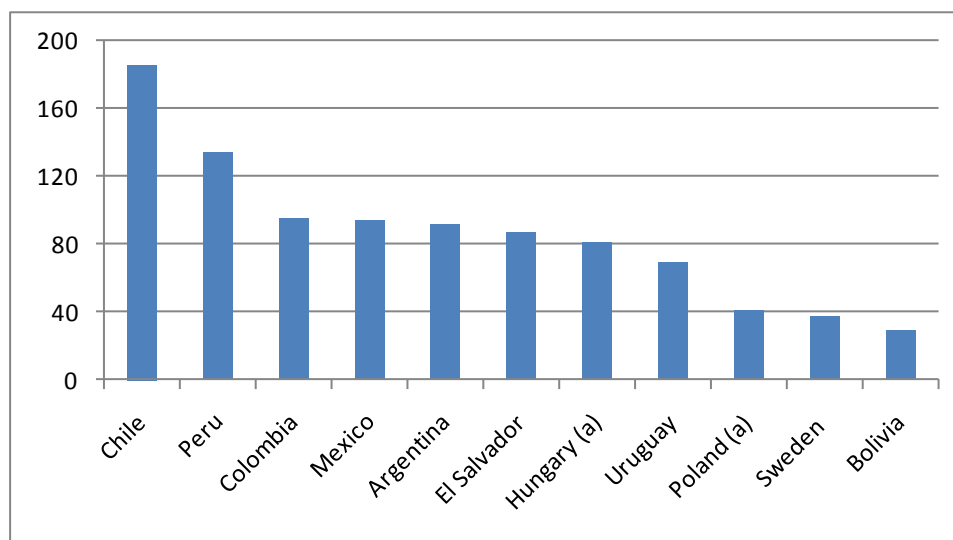
<sup>12</sup> Only part of the total fees on contributions constitutes net income for the pension company (net fee). A certain fraction of it is transferred to the life insurance companies as a premium for the disability and survivorship insurance used to provide coverage for contributors. The data shown excludes insurance premia.

<sup>13</sup> In Mexico, the disability and survivorship insurance premium is paid by the Government.

<sup>14</sup> Investment management fee before the application of discounts negotiated with the PPM. The average investment management fee after rebates amounted to 0.33% of assets under management in 2007. In addition, the PPM charges an administration fee which represented 0.12% of assets in 2007.

US\$ 81. In Poland, on the other side, administrative charges represented less than US\$ 40. The lowest charges per member are observed in Sweden and Bolivia, US\$ 37 and US\$ 29 respectively. In order to be able to draw conclusions about the relative cost of different systems, these figures need to be related to the size of contributions or assets under management.

**Figure 1: Administrative charges per members in US\$, 2007<sup>15</sup>**



Sources: Latin American countries: AIOS, 2007; Poland: Insurance and Pensions Supervisory Authority, 2008 and authors' calculations; Hungary: HFSA, 2007 and authors' calculations, Sweden: Premium Pension Authority, 2007

Notes: (a) 2006 Figures

In order to compare fees across countries, there are two main measures of charges that may be used: the charge ratio and the reduction in yield. The charge ratio measures the impact that any type of administrative charge can have on the final balance (for example after 25 or 40 years) of an individual retirement account compared to the hypothetical balance that could be obtained if no administrative fees were charged at all. The reduction in yield, on the other hand, shows the effect of charges on the rate of return, given a set of assumption about the rate of return, the time profile of contributions and the term of the plan.<sup>16</sup> As discussed by Whitehouse (2001), the use of the charge ratio can provide a misleading picture of the cost of a private pension system when commissions are set as a percentage of the accumulated fund. On the other hand, the charge ratio is a more useful and appropriate measure of the cost-efficiency of those system where commission are charged only on contributions or salaries. It is also important to note that charge ratio calculations require making assumptions about the length of a typical contribution period and that charges remain constant until pensions are withdrawn.

Various papers have looked at both comparative measures of costs across countries.<sup>17</sup> A recent study by the International Organisation of Pension Supervisors (Gómez Hernández and Stewart, 2008) has calculated charge ratios for various countries with DC pension systems, both mandatory and voluntary. They find the highest charge ratios in voluntary pension systems.

<sup>15</sup> For Latin American countries, data shows the annual income for commission by contributor net of the disability and survivorship insurance.

<sup>16</sup> If the gross return assumed were 5% a year and the reduction in yield 1.5%, then the net return would be 3.5% a year.

<sup>17</sup> See for example James et al. (2001), Whitehouse (2001) and Rusconi (2004).

In this paper, we use instead a simple, annual calculation of the reduction in yield measure (annual fees divided by total assets under management). We use this measure as it is the one commonly used in OECD countries to compare the cost of fund management. It is also relatively easy to calculate, as it only requires the summing up of various fees and combining them into one single average figure. This cost measure can only be used to compare countries if one takes the maturity of the system into account.

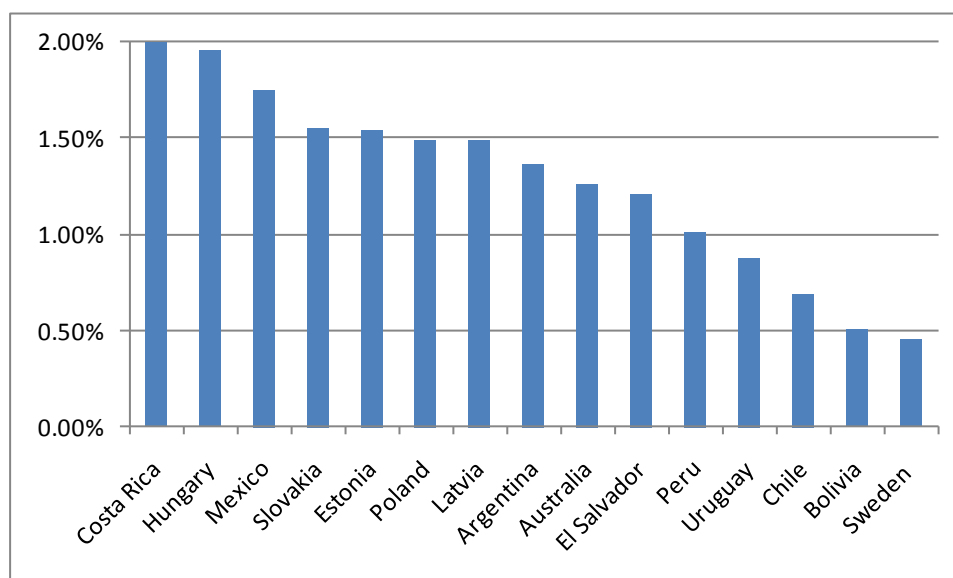
Figure 2 shows the administrative charges in 2007 expressed as a percentage of total assets. The figure shows that Costa Rica had the highest administrative charges of all countries analysed (2.04%). This is due to the high charges on nominal and real returns of assets under management. This kind of fee on returns is one that most affects the final balance on the pension fund. The average fee on nominal returns in 2007 was 7.50%, whereas the average fee on real returns was 15.38%. The lowest fee levels can be observed in Sweden and Bolivia, at less than 0.5% of assets under management.

The highest fees after Costa Rica are observed in Hungary, Mexico and Slovakia with an overall fee between 1.5% and 2.00% of total assets, followed by Estonia, Poland and Latvia where fees represent approximately 1.5%.

Australia is in a mid-position with an average overall fee of 1.26% of total assets. However, fees in the Australian Superannuation system vary greatly according to the fund type. Public sector and corporate funds have the lowest overall fee at around 0.78% and 0.70% respectively. Industry funds are close to the industry average at around 1.13%, whilst retail funds for individual (Retirement Saving Accounts) are the most expensive at around 2.30% of total assets.

Finally, the figure also shows that administrative charges in Latin American countries are on average lower than Central and Eastern Europe. Excluding Mexico, all Latin America countries shows an overall fee between 0.5% and 1.4% of total assets, whereas in Central and Eastern Europe the administrative charges are over 1.5%.

**Figure 2: Administrative charges as percentage of total assets, 2007<sup>18</sup>**



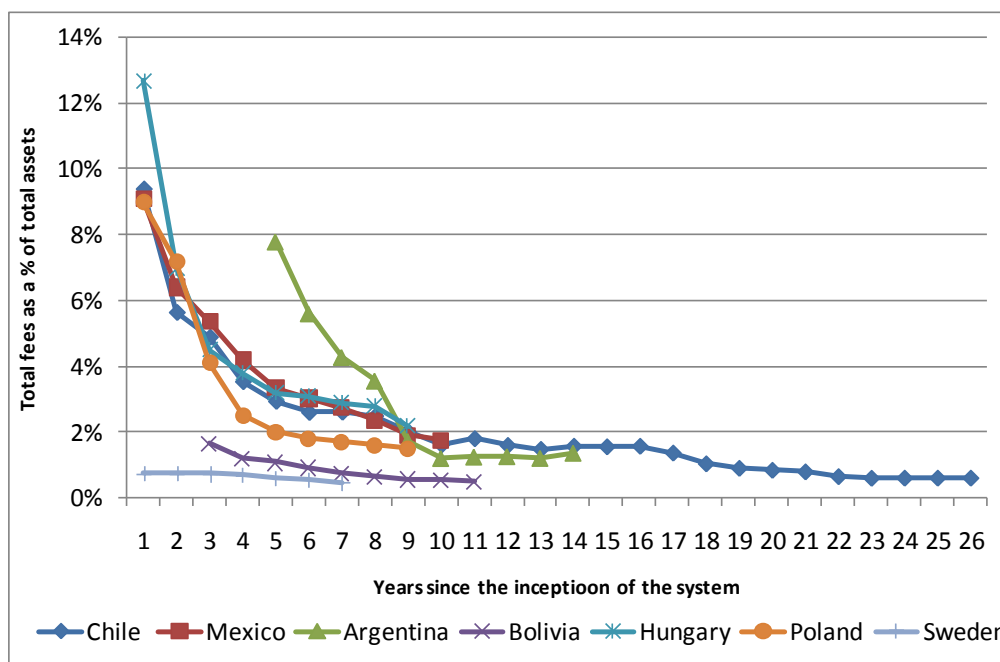
Sources: Latin American countries: AIOS, 2007; Poland: Insurance and Pensions Supervisory Authority, 2007 and authors' calculations; Hungary: HFSA, 2007 and authors' calculations, Sweden: Premium Pension Authority, 2007.

<sup>18</sup> For Latin American countries, data shows the annual income for commission net of the disability and survivorship insurance over total assets.

Notes: Australia, Hungary and Poland - 2006 Figures

Figure 3 shows the evolution of administrative charges expressed as a share of assets for six countries included in the report, since the inception of each system. The international comparison between private pension systems shows that the average total fees expressed as a share of assets have decreased significantly for all the countries. This sharp decrease is typical of young pension systems and reflects the rapid growth of assets relative to contributions.

**Figure 3: Evolution of total fees as a share of total assets since the inception of each system (%)**



Source: - Latin American countries: AIOS, 2007, Poland: Insurance and Pensions Supervisory Authority, 2007, Hungary: Impavido and Rocha, 2006, Sweden: Premium Pension Authority, 2007.

Notes: Data for Argentina and Bolivia is available since the 5th and 3rd year respectively since the inception of the system.

The Bolivian and especially the Swedish systems stand out for having started with much lower costs at inception than the other countries. Even the most mature systems are still to some way from reaching the level of fees of these two countries. At the end of 2007, 26 years since the inception of the system, fees in the Chilean pension system represented around 0.60% of asset under management.<sup>19</sup> In contrast, fees represented 0.45% of asset under management only 7 years after the start of the Swedish premium pension system.<sup>20</sup>

#### IV. Explaining differences in fees

##### *Maturity and size of the system*

The age of the system can be expected to provide some explanation for the variation in fees across countries, especially when fee structures differ. During the early years of a new pension system, countries

<sup>19</sup> Fees of the Chilean pension system are calculated as the income from commissions minus cost of disability and survivorship insurance over total assets. They exclude asset management fees charged by international mutual fund providers. These fees amounted to approximately 0.3% of pension fund assets in 2007, raising the total fees of the Chilean pension fund system to about 0.9% of assets under management.

<sup>20</sup> Including both the PPM fee and the asset management fee.

that charge fees as a percentage of contributions are expected to show higher fee levels when these are calculated as a percentage of assets under management. Moreover, as there are fixed costs when setting up a new pension system and it takes time to develop economies of scale even countries where fees are set as a percentage of assets may experience higher fees in the earlier years of the system. The relatively high fee to assets ratios in some Latin American and Central and Eastern European countries can therefore be partly explained by the recent implementation of their private systems. In Hungary and Mexico, for instance, privately managed pension funds were introduced less than ten years ago, whilst Latvia and Estonia implemented their mandatory private pension system in 2001 and 2002 respectively (see Figure 4).

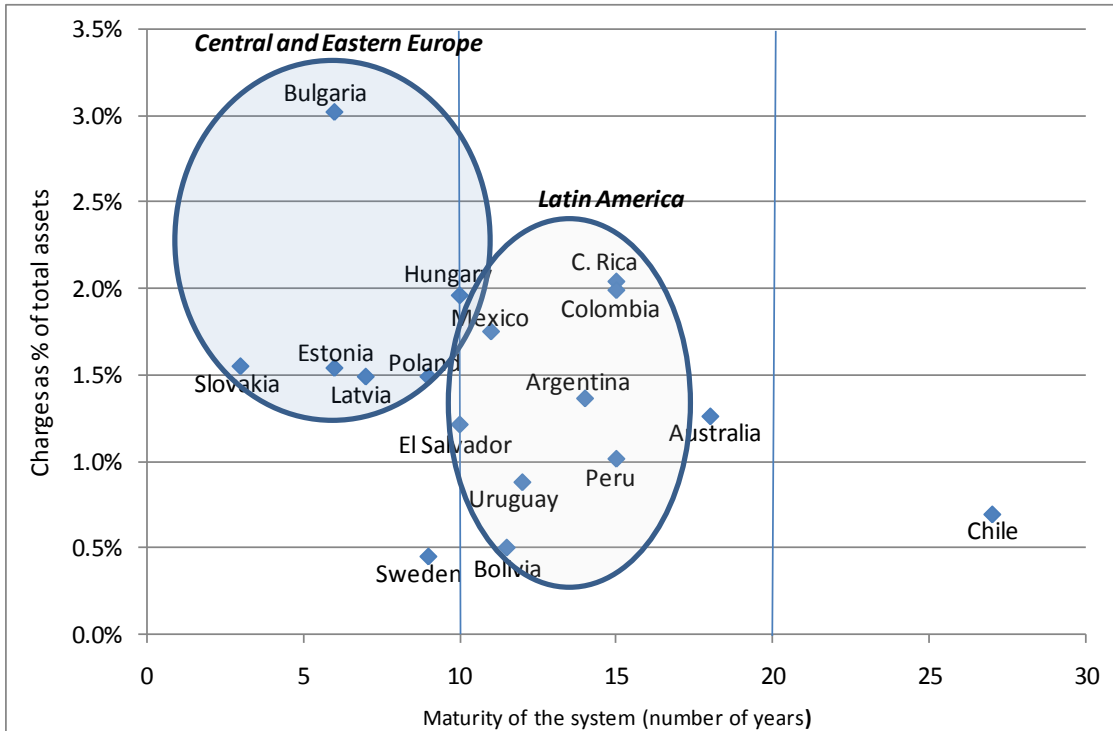
For most systems the overall level of fees and charges is expected to fall as the system grows and matures. For example, the oldest systems in Latin America are relatively cheaper than some of the systems set up in Eastern Europe. The costs in the latter region may therefore be expected to decline in the coming years. While the fee structure, system maturity and set-up costs are important to understanding differences in fee levels, they cannot explain all differences observed between countries. For example, the Swedish Premium Pension system had a fee level in 2007 substantially below that of Chilean system, despite the fact that the latter has been in place for a sufficiently long period to offset the effect of the contribution-based fee structure.<sup>21</sup> Another example is Costa Rica which operates one of the oldest pension fund systems but is also one of the most expensive.

The comparison of costs within groups of countries in the case of Latin America and Central and Eastern Europe shows no visible relationship between maturity of pension systems and their charges. For example, the pension systems in Bolivia and Mexico were both established in 1997, but Mexico has one of the most expensive systems in Latin America and Bolivia one of the cheapest ones. Similarly, charges of pension funds in Slovakia is low compared to the regional level, though it is one of the youngest systems, while in Hungary which has the most mature system in the region, cost are among the highest.

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<sup>21</sup> Unlike the other countries, the Swedish system is based on already operating investment funds that did not have any start-up costs. This may provide a partial explanation for the differences in fees in the early years but not after long time periods as such start up costs would have been amortised.

Figure 4: Comparison between the maturity of the system and fee (as a percentage of total assets)



Since there are important scale economies in pension fund administration and asset management, the size of the pension fund industry may explain differences in fees across countries. The empirical evidence, however, does not seem to support this view. Table 4 shows the assets accumulated in the individual account pension systems of Latin America and Eastern Europe. Countries like Bolivia, El Salvador and Uruguay which have accumulated relatively low volumes of assets also have lower costs.

Table 4: Pension fund assets for the different privately managed pension funds, 2002-2007

Country	Assets (millions US\$)					
	2002	2003	2004	2005	2006	2007
<b><i>Latin American Countries</i></b>						
Argentina	11,650	16,139	18,306	22,565	29,371	30,105
Bolivia	1,144	1,493	1,716	2,060	2,299	2,910
Chile	35,515	49,690	60,799	74,756	88,632	111,037
Colombia	5,472	7,322	11,067	16,015	19,284	25,377
Costa Rica	138	305	476	711	1,020	1,396
El Salvador	1,061	1,572	2,148	2,896	3,352	3,958
Mexico	31,456	35,743	42,524	55,205	66,613	75,995
Peru	4,484	6,311	7,820	9,397	14,260	20,155
Uruguay		34	194	381	639	955
<b><i>Central and Eastern European Countries</i></b>						
Bulgaria (UPF and PPF)		149	296	444	690	1,521
(a)						
Estonia	14	81	213	370	632	n/d
Hungary	2,071	2,976	4,397	6,989	9,338	n/d
Kazakhstan (a)	n/d	2,631	3,073	4,897	7,800	8,569
Latvia	23	47	94	140	243	n/d
Poland (a)	7,628	11,571	17,161	26,659	38,224	52,278

Source: OECD Global Pension Statistics



Notes: (a) Figures for September 2007.

### ***Contribution collection and record-keeping***

Latin America have adopted varying degrees of centralization with respect to contribution collection and record-keeping, with Chile and Peru taking a completely decentralized approach, where employers pass mandatory contributions directly to pension companies who maintain records and communicate with members. In between is Argentina where contribution collection is centralized within AFIP (Administration of Public Income) which collects both public and private contributions. AFIP, however, does not maintain records for the second pillar which are maintained by the pension companies. The examples of the greatest centralization are found in Costa Rica where the central agencies collect contributions and maintain records. Among Central and Easter Europe, most countries use centralized pension contribution collection models whereas only Hungary uses a decentralized model (see Table 5).<sup>22</sup>

In a centralized collection system, there is an agency (public or private), other than the pension company, that is responsible for collecting the contributions and distributing them to the different pension funds companies. In the decentralized systems, on the other hand, each pension company is responsible for the collection and requisition of both contributions and unpaid contributions.

There are several arguments for and against each one of these systems. In the first place, one would expect that central agencies (or ‘clearing houses’) contribute to cost reduction in the mandatory pension system mainly due to the possibility of taking advantage of possible savings in scale and scope, the latter because of the possibility of pooling the collection of pension fund contributions with other social contributions and taxes. Furthermore, in centralized systems it may be easier to control the effectiveness of the collection process, especially if joint collection is undertaken. Finally, centralized systems could be less costly for employers (who have to deal with only one agency for making or receiving payments), and for the pension companies (as they receive better quality sorted information). However, currently available evidence does not demonstrate that highly centralized approaches to managing funded pensions will significantly reduce costs (see Gómez Hernández and Stewart (2008)).

**Table 5: Centralization with respect to contribution collection and record-keeping**

Country	Collection of contributions?	Who collects contributions?	Who keeps records?
<b>Latin American countries</b>			
Argentina	Centralized	Federal Administration of Public Income (AFIP)	Pension companies
Bolivia	Decentralized	Pension companies	Pension companies
Colombia	Centralized	Banks and information operators	Pension companies
Chile	Decentralized	Pension companies	Pension companies
Costa Rica	Centralized	Social Security Institution (CCSS)	Social Security Institution (CCSS)
El Salvador	Decentralized	Pension companies	Pension companies
Mexico	Centralized	Mexican Social Security Institute	Pension companies
Peru	Decentralized	Pension companies	Pension companies
Uruguay	Centralized	Social Security Bank (BPS)	Pension companies
<b>Central and Easter European countries</b>			

<sup>22</sup> In Argentina the collection agency is of a tax nature; in Costa Rica and Uruguay the social security management agency collects, whereas in Mexico and Poland new agencies specialized in contribution collection were created.

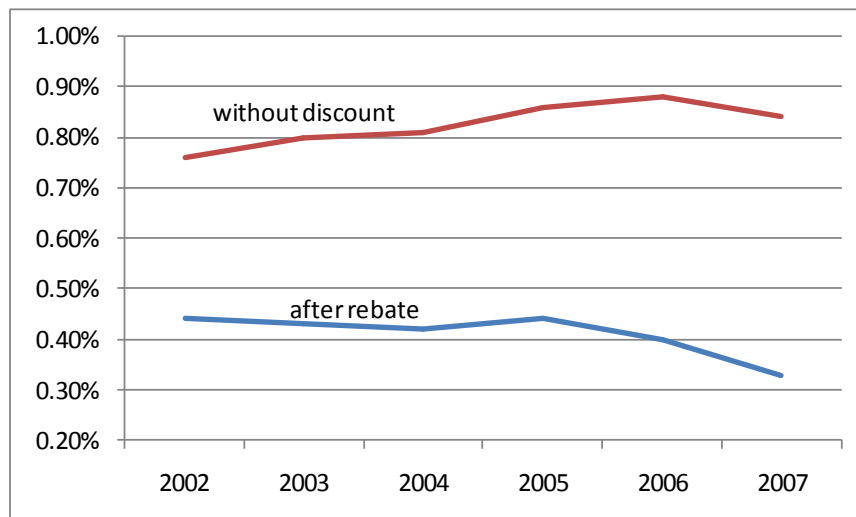
Bulgaria	Centralized	National Revenue Agency (NRA)	Pension companies
Estonia	Centralized	Central Registrar for Securities (CRS)	Central Registrar for Securities (CRS)
Hungary	Decentralized	Pension companies	Pension companies
Kazakhstan	Centralized	State Pension Payment Center (SPPC)	State Pension Payment Center (SPPC)
Latvia	Centralized	State Social Insurance Agency (SSIA).	State Social Insurance Agency (SSIA).
Poland	Centralized	Social Security Institution	Pension companies
Slovakia	Centralized	Social Administration Agency (Socialna Poistovna)	Pension companies
<b>OECD countries</b>			
Australia	Decentralized	Pension companies	Pension companies
Sweden	Centralized	Premium Pension Authority	Premium Pension Authority

An important exception to this statement is where the central clearing house also negotiates fees with providers, as is the case in the Swedish Premium Pension System. The PPM is a public broker which performs net transactions vis-à-vis registered funds. The fund managers have only one customer, the PPM, which keeps the accounts for all individual participants. This limits fund managers' costs to those associated with fund management and makes it easier to monitor the system. Funds compete by offering the best net rate of return. The clearing house manager requires all funds to report returns and costs according to the same principles and makes this information available to all participants. As individual accounts are managed blindly by the PPM, providers also have a much weaker incentive to engage in expensive marketing and sales efforts than is the case in other countries.

The lower fees achieved in the Swedish system are driven to a large extent by the rebates negotiated by the PPM. The fund managers' fees for 2007 amounted to approximately SEK 2.4 billion. Of these, approximately SEK 1.5 billion will be repaid to the pension savers in the form of discounts during 2008. In percentage terms, this was equivalent to a decrease of the management fee for 2007 from 0.84% to 0.33%, i.e. a discount of 0.48 percentage points. Figure 5 shows the average fees in percentage terms, before and after the application of discounts.

**Figure 5: Average fees before and after the application of discounts**

(as a percentage of total assets)



Source: PPM

### ***Asset allocation and investment regulation***

Asset allocation also has an impact in determining the relative charge comparison. Investment in interest bearing assets, such as deposits and bonds, is generally cheaper than investment in equities, while passive investment is cheaper than active investment. The cost of domestic and foreign investment may also differ. One possible explanation for the low costs in countries like Bolivia and Uruguay may be the conservative asset allocation of pension funds in these countries (Bolivian pension funds invest more than 90% in domestic treasury bonds).

In addition to differences in investment costs, collective investment instruments used by pension funds in many countries charge fees on assets under management that may not be reported as pension fund fees and were therefore not included in the earlier section. For example, in Chile pension fund investment in foreign equities is largely channelled via foreign mutual funds whose fees are deducted directly from their assets and not shown separately in the pension fund accounts.

Asset allocations show a wide dispersion among countries analysed in the study. This difference in assets allocation can be partly justified by the investment regulation in each country. Latin American countries have tended to establish a strict quantitative limit approach to regulate the composition of portfolios. El Salvador and Uruguay, for instance, have not yet authorized the investment of assets abroad, whilst Chile and Colombia allow pension funds to invest up to 40% in foreign instruments. Similarly, allocation into equities has been strictly limited in countries as Mexico and Uruguay, whereas others, as Chile, have raised the limit on equity holding up to 80%. Currently, Uruguay has one of the most restrictive investment regimes, while Chile, Peru and Colombia have the most liberal regulations.

Similarly, most Central and Eastern European countries limit equity exposure. In Poland, for instance, the limit is 40%, while in Estonia and Kazakhstan pension funds are allowed to invest up to 50% of their assets in equities. Foreign securities, on the other hand, are limited to 15% in Bulgaria and 5% in Poland,

whereas in Estonia and Latvia there is no maximum limit for such investments. In general, there is no maximum limit for fixed income instruments. Latvia, for instance, is the only country to limit investments in government bonds (35%). Kazakhstan, on the contrary, imposes a minimum limit in securities issues by the central government (at least 15%).

**Table 5: Investment limits by main asset classes in Latin American and Central and Eastern European countries**

Country	Government securities	Equities	Foreign securities
<b>Latin American countries</b>			
Argentina	50%	50%	10%
Bolivia	None	20 %-40 %	10 %-50 %
Chile	40 %-80 %	0 %-80 %	40%
Colombia	50%	40%	40%
Costa Rica	70%	70% (a)	25%
El Salvador	No limit	(b)	0%
Mexico	No limit	0%-30%	20%
Peru	30%	10 % - 80%	10.5%
Uruguay	60%	0%	0%
<b>Central and Eastern European countries</b>			
Bulgaria	No limit (c)	20%	15%
Estonia	No limit	0%-50%	No limit
Hungary	No limit	No limit	30% (d)
Latvia	35%	0%-30%	No limit
Kazakhstan	Not less 15%	5%-50%	10%-40%
Poland	No limit	40%	5%
Slovak Republic	No limit	0%-80%	70%

Notes:

(a) The Superintendence of Pensions has issued regulations prohibiting certain types of investments carrying high risk.

(b) Pension fund assets must not be invested in shares issued by other AFPs, insurance and mutual fund companies, investment fund management companies, rating agencies, stock exchanges, stockbrokers and custodians.

(c) The requirement that at least 50 % of fund assets must be invested in securities issued or guaranteed by the government was lifted in 2006

(d) Investment in non-OECD countries shall not exceed 20%.

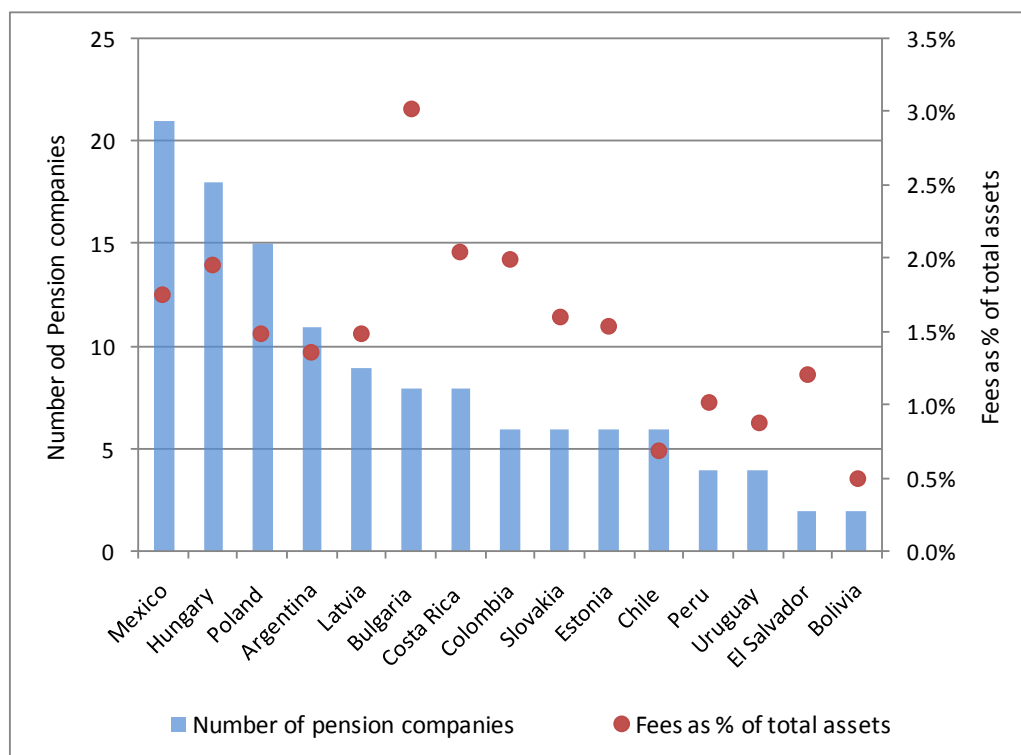
### ***Competition among pension providers***

While competition is normally expected to bring down costs, individual account pension markets behave in a counterintuitive manner. Marketing and sales agents have been used in the past to encourage members to switch providers, leading to an increase in operational expenses and fees. As members are not very responsive to higher fees, systems that a priori seemed to be highly competitive, with many players, have actually turned out to do rather poorly in terms of fees.

As can be seen in Figure 5, there appears to be a relation between costs and the number of providers. Countries where the number of providers is very limited, i.e. Bolivia with only 2 providers, are relatively cheaper, whilst some of those allowing multiple providers are more expensive, i.e. Mexico and Hungary with 21 and 18 respectively. However, there are some countries which do not follow this trend. El Salvador, with only two providers is more expensive than other countries in the region with multiple

providers. Also, Argentina with the second highest number of providers in Latin America, i.e. 11, is relatively less expensive than Costa Rica and Colombia, with 8 and 6 pension companies.

**Figure 5: Comparison between the number of pension companies and fee (as a percentage of total assets), 2007**

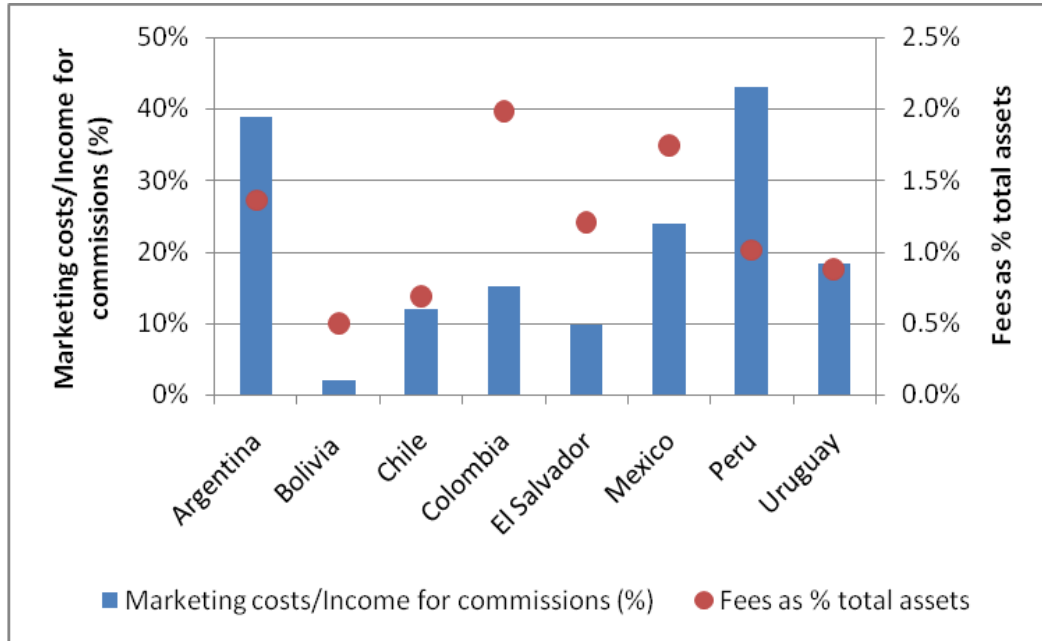


Sources: Latin American countries: AIOS, 2007; Poland: Insurance and Pensions Supervisory Authority, 2008 and authors' calculations; Hungary: HFSA, 2007 and authors' calculations, Sweden: Premium Pension Authority, 2007

The link between low costs and concentrated pension industries could be symptomatic of government's efforts to control marketing and sales expenses and fees via limitations in switching between pension providers.<sup>23</sup> However, even countries that restrict switching, like Hungary and Poland, have both high marketing expenses and fees. Within Latin American countries, marketing expenses and fees appear to be linked, as countries like Bolivia and Chile have achieved low levels of both. However, as shown in Figure 6, marketing expenses in countries like Colombia and El Salvador are relatively high (as a percentage of fees paid by members to pension providers), while fees are amongst the lowest in the region.

<sup>23</sup> Various countries (e.g. Chile, Colombia, Costa Rica, Hungary, Estonia, Mexico and Poland) limit switching to once or twice a year. In Mexico, more frequent switching is permitted as long as the member moves to a provider whose funds offer a higher net (after fees) return.

**Figure 6: Comparison between marketing costs and fees (2007)**



Source: AIOS (2007)

The most effective ways to control marketing expenses are those undertaken in Sweden and Bolivia. As described above, in Sweden marketing expenses are kept low because the PPM effectively “blinds” the individual accounts to pension providers. The system in Bolivia was also deliberately set up to be low cost. Because of the small size of the country, the Bolivian authorities decided to authorize only two pension companies. The regulation established that for a time period five years the individual capitalization accounts would be managed exclusively by two private pension companies, which were selected through an international bidding process for the lowest service fee. The idea behind this decision was to reduce set-up costs and limit the need for marketing, keeping charges low.<sup>24</sup> With just 500,000 pension members, contributing around US\$320 million a year, having only two pension companies allows them to take advantage of (limited) economies of scale. Additionally, charges in Bolivia are also low due to limited investment options, with around 90% of total assets invested in treasury bonds.

## V. Concluding remarks

The results of the analysis of fees in mandatory individual account pension systems shows that the structure of fees adopted in the countries under study is fairly complex. Fees are influenced by many factors, including the size and maturity of the system, market structure, competition, investment strategy and regulations. Additionally, the existing legal framework in Latin America and Central and Eastern Europe establishes maximum limits on the fees that pension funds can charge to ensure that administrative costs do not reduce the retirement income of participants.

<sup>24</sup> Since January 2000, participants have been permitted to switch pension company if they have made 12 contributions, changed jobs, or moved, or if fees or insurance premiums are increased. Members cannot choose to transfer to another AFP searching for better return.

The structure of charges and, in particular, the balance between fees on contributions and asset management fees, reflects the relative emphasis placed by policy makers on the differing objectives. In Latin America, mandatory pension systems were introduced when the financial sector was still relatively underdeveloped and there was concern about limited entry and insufficient competition in the market for pensions. This led to a greater emphasis on fees on contributions. In Central and Eastern Europe, on the other hand, there has been less concern over entry, thus there has been a greater reliance on management fees and fees on returns.

In order to compare fees across countries, we have looked at the evolution of a simple cost measure, the ratio of annual fees to assets under management. Unlike more sophisticated cost measures, such as the charge ratio or the reduction in yield, this is a purely accounting figure that does not involve any projections. As such, it can only be used to compare fee levels across countries if one considers the maturity of the system and the fee structure.

The relatively high fee to assets ratios in some Latin American and Central and Eastern European countries can therefore be partly explained by the recent implementation of their private systems. However, system maturity cannot explain all differences observed between countries. For example, the Swedish Premium Pension system had a fee level in 2007 substantially below that of Chilean system, despite the fact that the latter has been in place for a sufficiently long period (twenty-six years) to offset the effect of the contribution-based fee structure. The only country that has shown an evolution of cost similar to (but still above) the Swedish benchmark is Bolivia.

The cost advantages of the Swedish and Bolivian systems stem largely from a decision to force cost competition among providers via a central agency or 'clearing house'. In Sweden, the clearing house (the PPM) negotiates management fees directly with providers. Furthermore, providers have no information on individual accounts, reducing incentives for costly sales campaigns. In Bolivia, pension provision was auctioned through an open, international bidding process which explicitly aimed at keeping costs low.

In other countries, marketing and sales agents have been used in the past to encourage members to switch providers, leading to an increase in operational expenses and fees. As members are not very responsive to higher fees, systems that a priori seemed to be highly competitive, with many players, have actually turned out to do rather poorly in terms of fees.

Another factor that may explain differences in fees is the asset allocation and investment regulations in place. Investment in interest bearing assets, such as deposits and bonds, is generally cheaper than investment in equities, while passive investment is cheaper than active investment. The lower fees in Bolivia may therefore also be partly explained by the fact that investments are concentrated in domestic governments bonds. Moreover, in some countries reported fees do not include the management fees paid by pension providers to international mutual fund managers, which reduces the comparability of fee data across countries.

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