



# Pension Trends

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## Mexico

### **Mexico strengthens its pension system with a multi-fund model**

- Pension funds have performed dynamically in Mexico
- Most of the activity in retirement savings derives from changes in the legal framework which have broadened the range of investments alternatives to SIEFOREs
- A new multi-fund model for the AFORE Industry was launched in April 2008. Three new SIEFORE were added to the range of investments alternatives available for retirement funds
- So far, the multi-fund scheme has only been operating for three months but some improvements in risk diversification have already been evidenced
- As regards return, it is still too soon to gauge any significant change in long-term savings yields
- A key characteristic of the new multi-fund model is the lifecycle focus of its design. It offers an all-in-one approach to monitor, diversify and reallocate assets in SIEFOREs according to workers' retirement horizon
- The new multi-fund model represents a major step forward for the SAR in Mexico
- In the medium term, it is still possible to strengthen the SIEFOREs' investment regime to the benefit of the affiliates

## Mexico strengthens its pension system with a multi-fund model

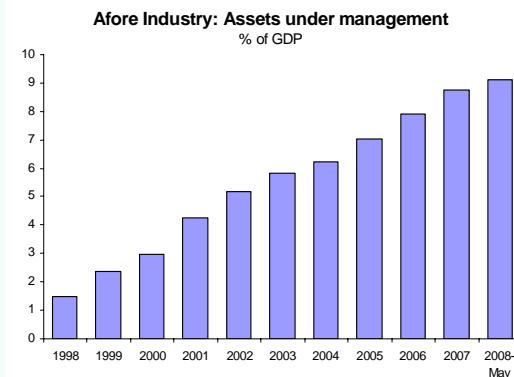
Pension funds have performed dynamically in Mexico. Assets under management of Pension Fund Administrators (Administradoras de Fondos para el Retiro) known as AFOREs have posted average annual growth rates of 22.4% in the last decade, reaching 9.1% of GDP in May 2008 (see chart).

Most of the activity in retirement savings derives from changes in the legal framework which have broadened the range of investment alternatives. The AFORE model, with a single pension fund or SIEFORE (highly concentrated in domestic public debt instruments) with which the pension system was launched in 1997, was replaced in 2004 by a model containing two SIEFOREs: SB1 and SB2. Until recently, SB1 operated with fixed income instruments and SB2 operated with a combination of fixed income and equity securities.

However, a new model for the AFORE industry was launched in April 2008. Three new SIEFOREs were added to the range of investment alternatives available for retirement funds. AFOREs henceforth will have a family of five pension funds to better tailor to affiliates' risk-return profiles within the defined contribution scheme of the Retirement Savings System (Sistema de Ahorro para el Retiro - SAR).

Within the framework of the 2007 reform of the SAR Law approved by Congress and a new investment regime for SIEFOREs approved by the Board of Directors of the National Retirement Savings System Commission (Comisión Nacional del Sistema de Ahorro para el Retiro - Consar), on 31 March 2008, all 18 AFORE split part of their assets from the previous SB2 fund into three new funds: SB3, SB4 and SB5. This operation created a multi-fund family of five SIEFOREs, where all except SB1 were authorized for exposure to equities investments via structured notes and a broad range of stock indexes. Stock market instruments and asset-backed securities were also allowed, but direct investment in stocks remained prohibited. Furthermore, the percentage of resources available for investments overseas was still limited to 20% (See Table 1a).

The new investment regime also allowed the introduction of three new asset classes for SIEFOREs: private capital, real estate and infrastructure. Investments in private capital and infrastructure will be possible via both trusts



and structured notes, but investment in real estate will be possible only via trusts. These new asset classes present a low degree of correlation with current assets on SIEFOREs portfolios and therefore offer an excellent opportunity to reduce risk through asset diversification.

So far, the new multi-fund model has only been operating for three months but some improvements in risk diversification have already been noticed. On a rising scale of diversification from 0 to 10, the diversification index calculated by Consar for SIEFORE SB2, SB3, SB4 and SB5 was 9.4 points on average in June, well above the 6.3 points calculated for SB1 (the most conservative option, as it is not exposed to equity). As well as greater degree of diversification in the system's portfolios, there have already also been gains in risk management measures. For example, value at risk (VaR) in the pension system as a whole was reduced from 0.76% at close in March to 0.73% at close in June.

As regards return, it is still too soon to gauge any significant change in the multi-fund model's long-term savings yields. Average net return in the SAR declined from 8.9% in April to 6.0% in June, due largely to short-run asset writedowns at global level.<sup>1</sup> However, the reallocation of assets in SIEFORE's portfolios in the last few months shows that there is a positive prospect of being able to obtain higher returns from now onwards as pension funds diversify assets and are able to tap more investment opportunities abroad. For example, between April and June, the SIEFOREs' foreign asset investments as a percentage of total assets increased from 6.0% to 6.5% in fixed income instruments and remained flat at 7.2% in equity indexes and notes.

Considering that the limit on exposure to foreign securities is 20%, there is still plenty of scope for the AFOREs to boost their potential returns from these investments. Some AFOREs appear to already recognize this and are positioning themselves strategically with this in mind, albeit cautiously because of the recent turmoil in global financial markets. For example, in June, the number of AFOREs posting a higher-than-industry-average percentage of investment abroad was 9 both in the case of debt instruments in SB1 and SB5, while in equities trough SB5, 6 AFOREs invested more than the industry average

<sup>1</sup> Net return takes into account gross return in the last 36 months less the current fee on the balance. The reform in the SAR Law removed the fee on the flow of contributions and now AFOREs may only charge fees on the balance of assets under management.

**Table 1a: Investment regime in Afore's multi-funds**

| New asset classes and maximum exposure to variable securities |                                             |                     |                        |                                          |
|---------------------------------------------------------------|---------------------------------------------|---------------------|------------------------|------------------------------------------|
|                                                               | Real estate and<br>Infrastructure<br>trusts | Structured<br>Notes | Variable<br>Securities | Risk<br>measure<br>VaR as %<br>of assets |
| Siefore                                                       | % of assets                                 | % of assets         | % of assets            |                                          |
| SB1                                                           | 0.0                                         | 0.0                 | 0.0                    | 0.6                                      |
| SB2                                                           | 5.0                                         | 1.0                 | 15.0                   | 1.0                                      |
| SB3                                                           | 5.0                                         | 5.0                 | 20.0                   | 1.3                                      |
| SB4                                                           | 10.0                                        | 7.5                 | 25.0                   | 1.6                                      |
| SB5                                                           | 10.0                                        | 10.0                | 30.0                   | 2.0                                      |

\*/ A maximum of 20% of investments overseas is allowed for all Siefore  
Source: BBVA Bancomer with data of Consar

abroad (SB5 is the most aggressive fund due to its higher exposure to equities).

Furthermore, once the new asset classes permitted under the new investment regime are fully incorporated in the SIEFOREs' portfolios there should be additional gains in potential returns. In accordance with Consar estimates (2007), a 10% increase in real estate and infrastructure investments could push the SIEFOREs' efficient investment frontier upwards and increase the return per unit of risk by as much as 150 basis points.

It's worth to mention that a key characteristic of the new multi-fund model in Mexico is the life-cycle focus of its design. The division of the SB2 fund and reallocation of part of its resources and individual accounts among the new SIEFOREs at the end of March was based on the age of each SAR affiliate: the youngest affiliates (under 26) were allocated to the most aggressive SIEFORE (SB5), and the oldest were allocated to the most conservative SIEFOREs. Accordingly, for example, people older than 56 were allocated to SB1. Based on this initial allocation, employees will now be automatically switched to the most conservative funds as they grow older, although the Law also enables employees to switch to a more conservative fund than the one automatically allocated if they wish so (See Table 1b).

The aforementioned design offers major advantages for the SAR in Mexico. For a start, funds focusing on life-cycle provide an integrated solution to affiliates by facilitating supervision as well as diversification and rebalancing of the assets in the SIEFOREs in line with the affiliate's retirement horizon. For example, the AFOREs now send each affiliate a simplified account statement which breaks down only those investments corresponding to their age group and Consar's Internet portal presents the portfolios and returns offered by each AFORE for every age group and every SIEFORE.

At the same time, the multi-fund scheme based on a specific investment regime for each SIEFORE presently makes the AFOREs better-placed to stand out and improve results in terms of risk-return. Under the new life-cycle focus, these alternatives better align the investment strategies to each affiliate's interests.

**Table 1b: Age groups in Afore's multi-funds**  
Initial life-cycle allocation of retirement accounts

| Siefore | Age group<br>Years | Number of<br>accounts<br>Millions | Assets under<br>management<br>Billions of pesos |
|---------|--------------------|-----------------------------------|-------------------------------------------------|
| SB1     | Older than 56      | 3.11                              | 65.5                                            |
| SB2     | 46 to 55           | 4.66                              | 188.9                                           |
| SB3     | 37 to 45           | 7.38                              | 265.0                                           |
| SB4     | 27 to 36           | 13.59                             | 274.0                                           |
| SB5     | Younger than 26    | 10.10                             | 62.3                                            |

Source: BBVA Bancomer with data of Consar

## Conclusions

The multi-fund model with its life-cycle focus represents a major step forward for the SAR in Mexico. Hereinafter, as the competition in each SIEFORE is consolidated via the new net return indicator and their investment regime continues to become more flexible, there are likely to be greater possibilities for affiliates to obtain higher pensions.

Accordingly, the experience of other pension funds in Latin America may indicate the way forward in making the SIEFOREs' investment framework more flexible. The increased exposure to non-governmental instruments and foreign instruments could offer interesting opportunities for Mexico (see Table 2 below). After all, while SIEFOREs' asset diversification is increasing, the weighting of government securities is nevertheless still well above the regional average (36.8%). For example, in June 2008, the weighting of government assets in the SIEFOREs' portfolio was 62.5%.

An additional asset diversification in SIEFORE portfolios through a more flexible investment regime should reduce even more investments risks. Some specific measures which in the medium term might be adopted to strengthen the multi-fund model investment regime are as follows: a) incorporating equity indices of emerging economies with high growth potential as investment vehicles (currently only developed economies' indices are allowed, except for those of Mexico), b) promote the use of mutual funds specialized by region and sector under a system in which the AFOREs operate as an FoF (fund of funds), and c) incorporate commodities as a new asset class. For more information in regard to these measures and others proposed to strengthen the pension system in Mexico, see Albo et al. (2008).

### Latin America: Asset-allocation in pension funds under a defined-contribution scheme

As of the end of December 2007

| Country       | TOTAL<br>(Million<br>USD) | Gov.<br>Debt | Financial<br>Institutions | Non-<br>financial<br>Institutions | Stock and<br>equity<br>indexes | Mutual<br>funds | Foreign<br>investments | Other      |
|---------------|---------------------------|--------------|---------------------------|-----------------------------------|--------------------------------|-----------------|------------------------|------------|
|               |                           |              |                           |                                   |                                |                 |                        |            |
| Argentina     | 30,105                    | 54.9         | 2.4                       | 1.5                               | 15.0                           | 14.6            | 8.4                    | 3.2        |
| Bolivia       | 2,910                     | 72.4         | 14.6                      | 8.5                               | 0.0                            | 1.0             | 2.2                    | 1.2        |
| Chile         | 111,037                   | 7.8          | 30.3                      | 8.0                               | 14.5                           | 3.7             | 35.6                   | 0.1        |
| Colombia      | 24,643                    | 44.1         | 7.7                       | 10.1                              | 22.3                           | 0.4             | 12.0                   | 3.4        |
| Costa Rica    | 1,396                     | 60.3         | 14.5                      | 3.4                               | 0.4                            | 5.4             | 13.4                   | 2.8        |
| El Salvador   | 3,958                     | 78.7         | 16.4                      | 5.0                               | 0.0                            |                 |                        |            |
| <b>Mexico</b> | <b>75,995</b>             | <b>69.3</b>  | <b>6.2</b>                | <b>10.9</b>                       | <b>3.8</b>                     |                 | <b>9.8</b>             |            |
| Peru          | 20,155                    | 20.6         | 8.0                       | 10.3                              | 41.2                           | 1.3             | 13.2                   | 5.4        |
| Dominican R * | 955                       | 19.1         | 80.2                      | 0.7                               |                                |                 |                        |            |
| Uruguay       | 3,392                     | 57.8         | 38.6                      | 1.6                               | 0.1                            |                 |                        | 1.9        |
| <b>Total</b>  | <b>274,547</b>            | <b>36.8</b>  | <b>16.7</b>               | <b>8.3</b>                        | <b>13.6</b>                    | <b>3.3</b>      | <b>20.1</b>            | <b>1.1</b> |

Source: International Association of Pension Fund Regulators (AIOS by its Spanish initials)

## References

Consar (2007), “El Sistema de Ahorro para el Retiro”, Presentation by Dr. Moisés Schwartz, to the Mexican Congressional Social Security Committee, November.

Albo, A., González, F., Hernández, O., Herrera, C., Muñoz, A. (2008) “Toward the Strengthening of Pension Systems in Mexico: Vision and Reform Proposals” BBVA’s Departments of Economic Research & Pensions and Insurance, March. This study is available at: [http://serviciodeestudios.bbva.com/TLBB/fbin/ITEND\\_080610\\_publicacionespensiones\\_05\\_tcm268-166818.pdf](http://serviciodeestudios.bbva.com/TLBB/fbin/ITEND_080610_publicacionespensiones_05_tcm268-166818.pdf)