

#### **COMPARED REGULATIONS SERIES**

# Pension Funds: Investment in Housing and Infrastructure<sup>1</sup>

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#### **I.-** Executive Summary

The purpose of this report is to analyze the investment of the pension funds of the individually funded systems in the housing and infrastructure economic sectors, with attention to investment in related subsectors and industries, such as construction, road infrastructure, airports, ports, power generation and distribution, potable water and sewage works, as well as telecommunications.

This report analyzes the investment in these sectors by the pension funds of Bulgaria, Bolivia, Chile, Colombia, Costa Rica, El Salvador, Spain, Kazakhstan, Mexico, Panama, Peru, Poland, the Dominican Republic, Romania, Ukraine and Uruguay. In each of these countries, we have analyzed the legal framework that regulates and sets the standards for investments in housing and infrastructure, as well as relevant statistics, where available, and information regarding known cases of investment of pension funds in the aforementioned sectors. Comments were received from the Trade Associations<sup>2</sup> of each country included in this study, enabling its correction and improvement. We are grateful for this support.

The long-term investment horizon of the projects involving housing and infrastructure could be considered consistent with the pension funds' objective of providing pensions. Similarly, the volume of assets administrated by the latter positions them as a significant source of financing for the number of investments and projects instituted in the aforementioned sectors.

Notwithstanding the above, it is fundamental to establish a regulatory and institutional framework in the capital market that will place the appropriate financial instruments at the disposal of project developers and projects requiring funding, as well as the pension funds.

The information compiled herein shows that, with the exception of Romania and Ukraine, the regulations in effect in all countries studied for the report entail investment in instruments specifically associated with the housing and/or infrastructure sectors.

The regulatory frameworks analyzed expressly authorize investment by the pension funds in financial instruments, such as bonds, securities, notes or certificates, with mortgage guarantees for financing housing. Furthermore, the Chilean, Colombian and Costa Rican legislations consider instruments derived from the securitization processes of mortgage certificate portfolios as investment alternatives for the pension funds.

Mexico and the Dominican Republic are the countries that most encourage pension fund investment in the housing sector. In Mexico, it is stipulated, among other things, that housing construction should be a preferred investment objective, whereas the regulations in the Dominican Republic consider investment in different instruments specifically associated with the financing of this sector.

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<sup>&</sup>lt;sup>2</sup> This report includes comments by FIAP members thru October, 2011.

The study notes that only the Bulgarian and Spanish regulatory frameworks authorize direct investment in real estate.

Moreover, the same emphasis regarding the incorporation of investment alternatives associated to infrastructure projects within the regulatory framework of the pension funds is not evident.

Peru is the country with the most comprehensive legal framework for promoting such investments, authorizing investment in first issuances of instruments destined to financing the development of new projects, and specifically investment in financial instruments associated to the development of infrastructure projects and concessions. As in the legislation governing investments in the housing sector, Mexico expressly establishes in its legislation that pension fund investments must aim at developing the country's strategic infrastructure and promoting regional development.

Chile and Kazakhstan also provide in their legal systems for the investment of the pension funds in concession bonds and infrastructure.

The pension funds can also invest in the housing and infrastructure sectors through financial instruments such as shares and debt securities, with no particular or specific characteristics, issued by companies involved in these sectors, as well as in related industries. Another form of indirect investment is the placement of financial resources in different types of collective investment mechanisms, such as investment or trust funds, with investment policies and strategies oriented toward investment in or development of real estate or infrastructure projects.

The primary risks associated with investing in housing and infrastructure are the following: (i) solvency risks for instrument issuers, be they companies or corporations developing projects, or financial agencies or banks that act as financial intermediaries, as in the case of securitized instruments or bonds or mortgage certificates; (ii) risk related to the interest rate in the case of fixed income instruments; (iii) market risk, understood to be the intrinsic and specific risk in the analyzed sectors; (iv) liquidity risk, as in the case of financing projects through debt instruments, which are usually long-term.

It was observed that existing regulatory frameworks stipulate that the investment of the pension funds in instruments associated to the analyzed sectors are subject to the existence of guarantees, the most common of them being secured mortgages, probably for the purpose of limiting such risks. In the case of infrastructure projects, instruments issued by state or government agencies are guaranteed by the respective Treasury or include a State guarantee. Similarly, in Chile, Colombia and Kazakhstan, the private issuers of concession or infrastructure bonds include certain state guarantees.

Empirical evidence enables concluding that, in general terms, investing the pension funds of the individually funded systems in housing and infrastructure projects, and in the sectors and industries related to them, leads to disproportionate degrees of development in the different countries analyzed.

It is worth mentioning that, of the seventeen countries examined in this report, only eight provided statistical data related to the investment of pension funds in the housing and infrastructure sectors.

Country	try Percentage of the Pension Fund Invested Pe in Housing		Data Dates
Chile	9.84%	9.72%	December 2010
Colombia	NA	18.70%	December 2010
Costa Rica	NA	2.37%	February 2011
Spain	0.22%	NA	December 2009
Mexico	6.40%	8.60%	February 2011
Peru	NA	11.10%	February 2011
Poland	0.22%	4.31%	December 2010
Uruguay	NA	2.51%	June 2010

Source: FIAP.
NA.: Not Available.

Available data supports the conclusion that Chile, Colombia, Mexico and Peru are the countries in which the pension fund portfolios invest the most in infrastructure, as a percentage of the total assets managed by the pension funds. Similarly, investment in housing accounts for a significant amount of pension fund investment in Chile and Mexico.

Nonetheless, as the report explains, the relative importance of this trend in Chile has declined in the last few years.

On the other hand, it was observed that the electricity subsector concentrates the most investment by pension funds within the infrastructure sector, accounting for up to 60% of total investment in that sector in Chile and Peru.

Spain is the only country where direct investment in real estate is authorized, with available statistical information. From the statistics, it can be seen that this investment represents an average of 0.20% of the assets managed by the pension funds, reaching maximum and minimum levels of 0.26% in 2003 and 0.12% in 2007. The limited investment of Spanish pension fund portfolios in real estate is likely due to the low liquidity of such assets.

With the exception of Chile, Colombia, México and Peru, there is a limited degree of financing by the pension funds in the sectors analyzed, which could be the consequence of deficiencies in the legal or regulatory frameworks governing such investments, weak institutional structures, shallow and underdeveloped stock markets, or the shortage of projects with attractive yield rates.

It was observed that a significant part of pension funds investment in housing and infrastructure is channeled through indirect investment mechanisms, such as securitized instruments, mortgage bonds or certificates that transfer risk from the private issuer to banking or financial agencies, or through trusts, investment funds or collective investment agencies.

Direct investment has basically been concentrated in bonds secured through different mechanisms: direct state guarantees for securities issued by public sector entities; guarantees for projects in the form of minimum guaranteed investment by the State; guarantees for specific instruments issued by international insurance companies, as in the case of Chile and Colombia; or through secured mortgage. As mentioned above, these guarantees are meant to mitigate the risks associated with investment.

Finally, the experiences recorded in the different countries analyzed show that the main benefit afforded to the pension funds through exposure to the housing and infrastructure sectors is principally the term of the instruments and their contribution to investment portfolio diversification.

It seems apparent that the advantages of investing in different subsectors vary from country to country. For example, the Spanish pension funds have prioritized investment in commercial real estate, for the purpose of mitigating the risks associated to appreciation and liquidity. The pension funds in Kazakhstan, on the other hand, consider the residential housing market to be the most attractive segment, since it yields the highest investment returns.

Besides the investment risks described above, experience shows that pension funds are also exposed to political risk, particularly in the case of investments in the infrastructure sector. The principal problems that may arise are risks associated to the alteration or modification of the tariff system, and changes in the manager or administrator of a project appointed by a government agency or entity.

### II.- Regulations - Comparative Analysis

Country	BOLIVIA	BULGARIA	CHILE
Instruments/ Investment Mechanisms	Mortgage Certificates Debt instruments Investment Fund Shares Stocks Securitized Debt	Instruments issued or secured by the government Sharers Shares in companies with specific purposes Mortgage bonds Corporate bonds Shares or equity interest issued by IIC <sup>3</sup> Real estate	Letters of Credit Bonds Convertible bonds Shares Mutual Funds Investment Funds Guaranteed bonds
Type of investment	Direct – Shares and Bonds Indirect – Mortgage certificates, investment funds and securitized bonds	Direct – Real estate, shares. Indirect – IIC	Direct – Shares, Bonds, Guaranteed Bonds Indirect – Letters of Credit, mutual and investment funds
Associated Risks <sup>4</sup>	Issuer, Rate, Market and Liquidity	Issuer, Rate, Market, Liquidity and Appreciation	Issuer, Rate, Market and Liquidity
Guarantees	Mortgage certificates – Mortgage guarantee	No information available	Housing: Mortgage guarantee Infrastructure: (i) Projects: Government Guarantee – IMG <sup>5</sup> (ii) Bonds: Guarantee from international insurers
Potential regulatory amendments	Regulations of Lay No. 065	No information available	Not contemplated

<sup>&</sup>lt;sup>3</sup> Collective Investment Institutions.

<sup>4</sup> Typically, to limit risk, the regulatory frameworks impose a series of limits that control pension fund investment portfolio diversification.

5 MGR: Minimum Guaranteed Returns.

Country	COLOMBIA	COSTA RICA	EL SALVADOR
Investment Instruments/Mechanisms	Securitization Bonds Shares Open collective portfolios Private Capital Funds	Debt instruments Bonds Convertible Bonds Shares Structured securities – Securitization Investment Funds	Securities issued or guaranteed by state companies Negotiable bonds Shares Convertible Bonds Investment funds Securities with mortgage guarantee or pledge (housing financing) Mortgage bonds Securitization notes Securities backed by flows of real estate/infrastructure/development works
Type of investment	Direct – Shares and Bonds Indirect – Mortgage bonds, Private capital funds and collective portfolios	Direct – Shares and Bonds Indirect – Securitization notes and investment funds	Direct – Shares, Bonds, Asset- backed securities, Mortgage bonds, Securities backed by financial flows Indirect – Investment funds and securitizations
Associated Risks Guarantees	Issuer, Rate, Market and Liquidity  Mortgage Bonds - Mortgage guarantee Concessions - Government guarantee: (i) Budgetary contributions (ii) IMG	Issuer, Rate, Market and Liquidity The guarantee system is defined in each structuring.	Issuer, Rate, Market and Liquidity  Mortgages Pledges
Potential regulatory amendments	There are no known projects for modifying the legal framework	There are no known modifications for boosting or encouraging investment in infrastructure and housing	No information available

Country	SPAIN	KAZAKHSTAN	MEXICO
Investment Instruments/Mechanisms	Fixed income instruments Variable income instruments Shares and participation in collective investment agencies. Chattels and immovable-property rights; Mortgage loans	Shares Debt Participation in funds Infrastructure bonds	Securitized instruments <sup>6</sup> Debt instruments Fibras (REITS) structured instruments and Development Capital Certificates (CKD) Variable income instruments Debt instruments with protection
Type of investment	Shares and equity interest in venture capital agencies  Direct –Real estate, immovable-	Direct – Shares, bonds and	against inflation Stock and equity interest certificates Direct - Shares, Debt
	property rights and mortgage loans Indirect – Valid securities issued by companies relate to the housing and infrastructure sector and IIC real estate agencies.	infrastructure bonds Indirect - funds	Indirect - Fibras, CKD, certificates
Associated Risks	Issuer, Rate, Market, Liquidity and Appreciation	Issuer, Market, Issuance volume	Issuer, Rate, Market and Liquidity
Security	There are no government or insurance company guarantees specifically covering the aforementioned direct and indirect investments.	Infrastructure bonds have guarantors and state guarantees	There are no government or state minimum flow guarantees for private issuers; government debt is backed by the Federal Government; unsecured debt issuer: asset backed securities, mortgage-backed bonds; debt backed by future flows
Potential regulatory amendments	There are no modifications to pension fund investments being planned or under way	Improvement of the mechanisms of the State/Private Sector Cooperation Center of Kazakhstan SA"/GCHP Center) and the implementation of the principle of project financing through the creation of special project organizations with a special legal status.	Imminent changes to the rules have not been considered

Country	PANAMA	PERU	POLAND
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<sup>6</sup> All the instruments in the portfolios of the Siefores must be placed on the securities market through a Public Offer.

Instruments/ Investment	SIACAP	Investment instruments for	Bonds
Mechanisms	Mortgage bonds or certificates with	mortgage financing	Shares
	government guarantee.	Bonds, preferential shares, common	Closed investment funds
	Bank mortgage certificates	and other shares destined to	Open investment funds
	Bonds, shares and any other bond or	financing housing and infrastructure	Mortgage bonds
	security	projects.	Road bonds
	Investment companies or trusts	Mutual funds	
		Investment funds	
	Retirement and Pension Funds	Securitized assets	
	State or government backed securities		
	Debt securities, privately negotiated		
	share purchases or securitized		
	instruments		
	Common and preferential shares		
	Investment funds		
Type of investment	Direct – Shares, Bonds	Direct – Shares, bonds, mortgage	Direct – Shares, Bonds, Mortgage
	Indirect – Mortgage certificates,	financing instruments,	and Road Bonds
	Trusts and Investment Funds	Indirect – Mutual Funds,	Indirect – Closed investment funds
		Investment Funds, Securitizations.	(usually mortgage bonds), Open
		,	investment funds.
Associated Risks	Issuer, Rate, Market and Liquidity	Issuer, Rate, Market and Liquidity	Issuer, Rate, Market and Liquidity
Guarantees	No information available	Mortgages	Mortgage Bonds: Guaranteed by
		Pledges	mortgage banks.
			Road Bonds: Issued by
			Gospodarstwa Krajowego Bank,
			property of the government and
			guaranteed by the Treasury.
Potential regulatory	No information available	No information available	No information available
amendments			

Country	DOMINICAN REPUBLIC	ROMANIA	UKRAINE
Investment Instruments/Mechanisms	Mortgage bonds or certificates and other BNV and INVI securities. Bonds or certificates of savings and loan associations	Financial Instruments  Voluntary Pension Funds — Investment Funds	Government securities Shares Bonds
	Debt securities Shares		

	Securities issued by the BNV for developing the secondary mortgage market Funds for developing the housing sector Bonds and securities issued or guaranteed by the state		
Type of investment	Direct - Shares, Debt Indirect - Bonds and certificates, mortgages, development funds	Direct - Shares, Debt Indirect - Investment Funds	Direct: Shares, Bonds
Associated Risks	Issuer, Rate, Market and Liquidity	Issuer, Rate, Market and Liquidity	Issuer, Rate, Market and Liquidity
Security	No information available	Not pertinent	No information available
Potential regulatory amendments	No information available	Not observed	No information available

Country	Uruguay
Instruments/ Investment	Shares
Mechanisms	negotiable Bonds
	Mortgage Credit Notes
	Deposit Certificates
	Trusts
	Investment Funds
Type of investment	Direct – Shares and bonds
	Indirect: Mortgage credit notes, Deposit certificates, Trusts and
	Investment Funds
Associated Risks	Issuer, Rate, Market, Liquidity, Performance or Construction
Guarantees	Special Mortgage Loans – coverage equal or greater than the appraisal value. The banks cannot issue or circulate NCHs for a remaining balance greater than 95% of the coverage asset. If as a result of the full or partial amortization of the mortgage loans, the amount of the NCH surpasses such limit, the agencies must restructure the quantitative ratio In case of liquidation of the issuer, the investors are considered preferential creditors.
Potential regulatory	Modifications of existing regulations have not been considered.
modifications	

#### **III.-** Regulations

#### \* BOLIVIA:

Chapter IV of Law No. 065 of December 10, 2010, eliminates the private pension system and regulates, in general terms, the investment of the funds managed by the Long-Term Social Security Agency, stating that such funds must be exclusively invested in public offer securities or financial instruments, through authorized primary and secondary markets.

The law specifically provides that the resources managed by the Long-Term Public Social Security Agency must prioritize investment in productive entities. It would be feasible to include investments in the infrastructure and housing sectors within the productive entities category.

Nonetheless, as of this date, no Regulatory Decree has yet been enacted for Law No. 065 regarding the investment system applicable to this new Public Agency.

The pension funds in Bolivia are currently operating on the basis of the provisions of the former Pensions Law No. 1732 of November 29, 1996, which reformed the prior public pension system, establishing an individually funded savings system and its regulatory framework, particularly Executive Decree No. 24.469, which authorizes investments, *inter alia*, in the following instruments:

- i. Mortgage certificates issued or guaranteed by banks established in Bolivia;
- ii. Debt securities, including convertible bonds and assets before conversion, issued by corporations established in Bolivia, other than banks, and authorized for public offering by the Superintendency of Securities;
- iii. Shares of Investment Funds established in Bolivia;
- iv. Shares of corporations established in Bolivia;
- v. Debt securities issued as part of a securitization process.

#### **BULGARIA**:

Article No. 176 of the Bulgarian Social Security Code provides that companies managing pension funds can invest the assets of the mandatory complementary pension funds in specific assets including, *inter alia*, the following:

- i. Instruments issued or guaranteed by the Bulgarian government;
- ii. Shares listed in regulated securities markets;
- iii. Shares of duly authorized specific purpose companies;

- iv. Mortgage bonds;
- v. Corporate bonds;
- vi. Shares or holdings issued through collective investment mechanisms;
- vii. Real estate.

Bulgaria is one of the few countries in which the laws governing the individually funded pension system authorize direct investment in real estate.

Notwithstanding the above, the resources of the pension funds can also be invested in the housing and infrastructure sectors, as well as in specific industry subsectors such as construction, road infrastructure, ports, airports, telecommunications, electricity and power through the acquisition of shares and bonds in the companies involved in these sectors and subsectors.

Investment in mortgage bonds is also expressly authorized.

Similarly, should the Bulgarian securities market consider introducing government guaranteed infrastructure bonds, the Bulgarian pension funds could be authorized to invest in them, since they would be considered to be government guaranteed instruments.

Moreover, since investment in collective investment agencies, such as mutual and investment funds, is permitted under the Code, pension funds could be authorized to investment in funds whose investment policies focus on the aforementioned sectors and industries.

#### **\*** *CHILE*:

Article No. 45 of Legal Decree No. 3500 of 1980 describes the instruments considered eligible for investment by the Chilean pension funds, including, *inter alia*:

- i. Letters of credit issued by the Regional and Metropolitan Housing and Urbanization Services;
- ii. Bonds and other certificates of deposit issued by financial institutions;
- iii. Securities guaranteed by financial institutions;
- iv. Letters of credit issued by financial institutions;
- v. Bonds of public and private entities;
- vi. Bonds of public and private entities that are redeemable for shares;

#### vii. Corporate shares;

viii. Investment and mutual fund shares.

Hence, even though the regulatory framework does not explicitly consider investment in housing and infrastructure as an alternative, resources can be invested in said sectors through securities and instruments issued by companies involved in such activities.

Additionally, indirect investment is authorized by allowing the acquisition of a percentage holding in investment funds with a strategy focused on investment in the aforementioned activities.

The existing regulatory system has enabled a significant development of the bonds market destined to financing concessions of infrastructure works, with bonds being issued in the pre-operative stages, or once the project operations have begun, with terms that are usually 20 years or more. This development of the infrastructure bonds market is directly related to the government concessions system. The concessions system had a significant effect in the 1990s, when a suitable legal framework was created for both investors and concessionaire companies, introducing legal modifications aimed at mitigating risks and allowing the state to share part of these risks with the concessionaires, establishing conditions such as the guaranteed minimum income, the assignment of subsidies to certain projects, the incorporation of financial tools, such as exchange insurance, and an income distribution mechanism.

On the other hand, regarding investment in the housing sector, the regulatory framework enabled the development of the mortgage bonds market, which developed significantly between 1980 and 2000, allowing the banks to finance the acquisition of real estate by individuals through the issuing of mid and long-term fixed income instruments.

#### \* COLOMBIA:

Law 1328, promulgated in 2009, gave rise to the Multifunds, which have been operating since September, 2010. As a result, the investment regime for mandatory pension fund resources is currently governed by Decree 2555 of 2010 ("Sole Decree") and its subsequent amendments. The investment of the resources of the voluntary pension funds, on the other hand, are regulated by External Circular 034 de 2008.

The aforementioned investment regimes include, *inter alia*, the following acceptable pension fund investments:

- i. Mortgage bonds and certificates<sup>7</sup> and other credit certificates derived from mortgage portfolio securitization processes;
- ii. Other debt certificates;

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<sup>&</sup>lt;sup>7</sup> Law 546 of 1999.

- iii. Holdings in collective open portfolios without a permanence agreement<sup>8</sup>, whose investment policies consider assets other than securities and/or equity securities. Collective margin and speculative portfolios are excluded;
- iv. Holdings in open collective portfolios, with closed or scaled permanence agreements<sup>8</sup>, whose investment policies consider assets other than securities and/or equity securities as admissible assets. Collective margin and speculative portfolios are excluded;
- v. Securities and/or equity securities;
- vi. Shares with high or medium stock market liquidity, holdings in collective stock market portfolios<sup>8</sup> composed of the aforementioned shares, negotiable certificates of deposit for such shares (ADRs and GDRs) and shares originating in privatization process or through firm capitalization in which the State has an equity interest;
- vii. Shares with low and minimum stock market liquidity or negotiable certificates of deposit for such shares (ADRs and GDRs);
- viii. Holdings in open collective portfolios without permanence agreements<sup>2</sup>, whose investment policies consider securities and/or equity securities as admissible assets. Collective margin and speculative portfolios are excluded;
- ix. Holdings in open collective portfolios with closed or scaled permanence agreements, whose investment policies consider securities and/or equity securities as admissible assets. Collective margin and speculative portfolios are excluded;
- x. Investments in private capital funds (regardless of the nature of the underlying assets)<sup>8</sup>.

The specific laws that regulate the investments of the mandatory pension funds in the housing sector are:

- i. The investment regime for the Mandatory Pension Funds contained in Decree 2555 of 2010, Chapter 12, Articles 2.6.12.1.2 to 2.6.12.1.22.
- ii. Law 546 of 1999 specifically addresses housing and sets out the objectives and general criteria the National Government must abide by for regulating a specialized system for its financing, creating savings instruments for such financing, issuing regulations governing taxes and other costs linked to housing construction and planning, as well as other provisions.

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<sup>&</sup>lt;sup>8</sup> Decree 2175 of 2007 or other amending or superseding regulations.

The current regulatory framework allows for investment by the mandatory and voluntary pension funds in the following securities or financial instruments issued by companies involved in the industrial sectors examined in this report:

- i. Mortgage securities;
- ii. Other securities with credit derived from the securitization of the mortgage portfolio;
- iii. Other debt securities issued by companies involved in the housing and infrastructure sectors, such as the real estate, construction or concessions sectors, among others;
- iv. Holdings in open collective portfolios, with or without closed or scaled permanence agreements, whose investment policies can be directed toward the housing or infrastructure sectors;
- v. Shares, regardless of liquidity, issued by companies related to the aforementioned sectors;
- vi. Private capital funds with an investment strategy that can be focused on housing and infrastructure, as well as the real estate, construction or concessions sectors, among others.

#### \* COSTA RICA:

The Investment Regulations of Regulated Entities, issued by the Superintendence of Pensions and approved by the National Council for the Supervision of the Financial System, through Article 6, letter A, of the Minutes of Session 355-2003, held on February 11, 2003 and updated on November 9, 2009, regulates the investment of resources managed by such entities, pursuant to the provisions of Law 7983, which became effective on February 18, 2000.

In the case of issuances in the local securities market, the regulatory framework provides that resources can be invested in instruments that must comply with certain requirements, such as, for example, inscription in the National Securities and Brokerage Register, or issuance through entities supervised by the General Superintendency of Financial Agencies, with specific risk classifications and currency denominations. Some of the possible investment instruments for pensions are given below:

- i. Debt securities issued in series;
- ii. Bonds and obligations that can be converted into common or preferred shares;
- iii. Common or preferential shares in corporations;

- iv. Securities or structured investment instruments resulting from the securitization process;
- v. Stock certificates issued by investment funds.

By virtue of the foregoing, current regulations provide that pension fund resources can be invested in the aforementioned instruments, issued by related companies in the real estate and infrastructure sectors, such as construction, telecommunications, electricity or concessions.

Specifically regarding investment focused on the housing sector, Article 60 of Law 7983, denominated the Workers' Protection Law, provides that the Superintendency must ensure that the pension fund operators invest the resources of the funds in instruments that allow members to directly participate in the income derived from ownership of the factors of production. It also states that the Superintendency must ensure that the portfolio structure is oriented to strengthen financing for working class housing.

The foregoing must not neglect the principle expressed in the same article, which states that the resources of the funds must be invested to the benefit of the contributors, seeking the necessary balance between safety, profitability and liquidity, depending on their purpose, and respecting the limits established by law and the respective regulations.

Similarly, Article No. 61 of this law states that the pension managers must invest at least fifteen percent of the funds deposited in them, pursuant to the Mandatory Regulations on Complementary Pensions, in security certificates with mortgage guarantee or generated through the mortgage securitization process, as long as their performance generates, in the opinion of the managers, an adequate return balanced against the risk associated to the instruments.

The General Superintendency of Financial Agencies has prohibited investment in security certificates issued by entities that are in crisis at the moment of investment.

The National Council for the Supervision of the Financial System will publish, upon consultation with the Housing Mortgage Bank, the requirements that eligible issuances must meet to comply with the provisions of the preceding paragraphs.

#### **EL SALVADOR:**

Article 91 of the Pension Savings System Law, promulgated through Decree No. 927 of the Legislative Assembly of the Republic of El Salvador on December 23, 1996, and its subsequent amendments, states that pension fund resources can be invested in the following instruments, among others:

- i. Securities issued or guaranteed by state agencies and official autonomous institutions;
- ii. Securities issued by the Multi-sector Investment Bank;

- iii. Negotiable bonds valid for more than a year, issued by Salvadoran companies;
- iv. Stocks and bonds that are convertible into shares in Salvadoran companies;
- v. Certificates of participation of Salvadoran Investment Funds;
- vi. Securities issued or guaranteed by Salvadoran Banks;
- vii. Securities issued with mortgage guarantees or pledges on the mortgage portfolio destined to financing housing, including those issued by the Social Housing Fund:
- viii. Financial documents from the insured mortgage system or insured mortgage certificates;
- ix. Publicly offered securities, issued by securitized Salvadoran companies and fiduciary stock certificates;
- x. Other publicly offered instruments;
- xi. Securities backed-up by cash flow from real estate, infrastructure or development works, such as highways, ports and other projects.

Hence, one could say that the Salvadoran regulatory framework explicitly includes investment in housing and infrastructure, and specifically authorizes investment in securities issued with mortgage guarantees or pledges on the mortgage portfolio, destined to the financing of housing, including those issued by the Social Fund for Housing and those backed up by cash flow from real estate, infrastructure or development, such as highways, ports or other public works.

It also contemplates investment in both sectors through shares, bonds and other negotiable instruments issued by Salvadoran agencies involved in these sectors, such as instruments linked to real estate, construction, telecommunications, electricity, concessions and transportation, among others.

Similarly, the regulations in force authorize indirect investment, allowing the acquisition of certificates of participation in Salvadoran investment funds with investment strategies focused on the housing and infrastructure sectors.

#### **❖** *SPAIN*:

Royal Legislative Decree 1/2002, of November 29, which approves the restated text of the Regulations on Pension Funds and Plans and its subsequent amendments, generally defines in its Article 16 the criteria that will govern the investments of the pension funds, specifically recognizing the option of investing in financial assets contracted in regulated markets, bank deposits and credits with mortgage guarantees and real estate.

Moreover, Chapter IV of Title III of Royal Decree 304/2004 of February 20, which approves the Regulations governing Pension Funds and Plans, and its pertinent amendments corresponding to the Pension Funds Investment Regime, particularly Article 70, details the investments appropriate for such funds, including, *inter alia*, the following instruments:

- Securities and fixed and variable income financial instruments negotiated on regulated markets and susceptible to general and impersonal operations within a financial market;
- ii. Structured financial assets;
- iii. Shares and interests in specific group investment institutions;
- iv. Chattels and immovable-property rights;
- v. Mortgage loans corresponding to first mortgages on real estate, credit from the Treasury for Corporate Tax withholdings and collateral loans<sup>9</sup> with appropriate asset security;
- vi. Shares and interests in venture capital entities;
- vii. Other appropriate assets such as securities neither quoted nor subject to general or impersonal operations, unregulated and national venture capital entities, and currency market instruments, provided that they meet certain requirements.

As is the case in Bulgaria, a particular characteristic of the regulations controlling the investments of the pension funds in Spain is that they allow direct investment in real estate, which is not observed in the other legislations analyzed herein.

Similarly, the Spanish regulatory framework allows pension fund resources to be invested in the aforementioned securities and instruments issued by companies involved in the real estate and infrastructure sectors, such as construction, telecommunications, electricity and concessions, among others.

#### \* KAZAKHSTAN

The Law governing the "Pension System in the Republic of Kazakhstan," enacted on June 20, 1997, and its subsequent amendments, constitutes the principal legal framework regulating the activities of the pension funds in that country.

Nonetheless, this Law does not identify the authorized or eligible securities or financial instruments in which the assets of the pension funds can be invested.

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<sup>&</sup>lt;sup>9</sup> Secured loans

Appendix I of Provision 189, issued by the Board of Directors of the Regulatory and Supervisory Agency of the Financial Market and Financial Organizations of the Republic of Kazakhstan enacted on August 5, 2009, which approves the Regulations governing the activities of the agencies managing the investments of pension assets and the individually funded pension funds and their subsequent amendments, lists the financial instruments that are authorized to be acquired by the pension funds, including, among others:

- i. Shares in funds with a minimum international rating of BBBm-<sup>10</sup> or BBBf-<sup>11</sup>, as assigned by Standard & Poor's ("S&P");
- ii. Shares in companies with a rating of no less than BB- for Kazakh companies and BBB- for foreign countries, as assigned by S&P, or a similar rating from another agency;
- iii. Shares in companies included in the first or second official segment of a Kazakhstan securities market;
- iv. Debt instruments with a rating of at least B- or kzB-<sup>12</sup> for Kazakh companies and BBB- for foreign companies, as assigned by S&P, or a similar rating from another agency;
- v. Debt instruments included in the category "un-rated debt" on the official list of a Kazakh securities market;
- vi. Infrastructure bonds of agencies of the Republic of Kazakhstan;
- vii. Participation in mutual funds of the Republic of Kazakhstan.

As can be seen, investment in infrastructure bonds is expressly allowed in the regulatory framework controlling pension fund investment.

Similarly, pension funds in the Republic of Kazakhstan are also authorized to invest in shares and debt instruments of companies involved in the infrastructure and real estate sectors, as well as interests in funds with investment strategies for investing in these sectors.

Regarding investment in infrastructure, the Law on Concessions was enacted in 2006, with a trial implementation phase in 2007 and 2008. During 2008, the law was institutionally reinforced with the creation of the "Center for Private State Cooperation of Kazakhstan SA," (hereinafter, the GCHP Center), with the Ministry of Economic Development and Trade as the sole shareholder.

<sup>&</sup>lt;sup>10</sup> S&P nomenclature corresponding to ratings that measure the stability of the value of a fund, usually associated to funds of a monetary or money market type.

S&P nomenclature corresponding to ratings that measure the credit quality of a fund's portfolio, usually associated to a fixed income fund.

S&P nomenclature corresponding to "Kazakhstan National Scale," associated to financial markets of Kazakhstan.

The aforementioned law stipulates that the concessionaire can receive one or several types of state support:

- i. State guarantee for infrastructure bonds in the concession contracts;
- ii. State guarantee of loans for financing concession projects;
- iii. Provides the concessionaire with exclusive rights to subjects of intellectual property belonging to the State;
- iv. Provides grants in kind<sup>13</sup>, as allowed under the laws of the Republic of Kazakhstan;
- v. Shared financing of investment projects;
- vi. State consumption guarantee for a specific amount of products (jobs or services), when the principal consumer of the products (jobs, services) produced by the concessionaire is the state;
- vii. Compensation for a specific amount of investment expenses of the concessionaire within a time period stipulated in the concession contract and of amounts determined during the validity of the concession contract.

#### \* MEXICO:

The Mexican Pension System stipulates that the individual accounts will receive the contributions of the Pension, Old Age and Unemployment at an Advanced Age insurance as well as the contributions to the Housing and Voluntary Contributions subaccounts.

The Housing subaccount receives the contributions paid in by the employer, equivalent to 5% of gross salary, which are managed by the Institute of the National Housing Fund for Workers (INFONAVIT). Hence, the Pension fund managers only take note and inform their members of the movements in such subaccount and the interests that the Institute determines.

This report will focus on analyzing the investment of the resources of the specialized retirement fund investment companies (SIEFORES), which are managed and operated by the pension fund managers (AFORES).

The Law on Retirement Savings Systems, published on May 23, 1996, and subsequent amendments such as the General Provisions on Finance for Retirement Savings Systems, enacted by the National Commission for the Retirement Savings Systems (CONSAR) and published December 31, 2010, regulate SIEFORES investment.

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<sup>&</sup>lt;sup>13</sup> Fixed assets, such as machinery and equipment.

Article 43 of the aforementioned law provides that securities investments be directed predominantly to encourage:

- i. National productive activity;
- ii. Greater generation of employment;
- iii. Housing construction;
- iv. The development of the country's strategic infrastructure; and
- v. Regional development.

From the above it can be inferred that current regulations have made investment in housing and infrastructure a priority

CONSAR Circular 15-27, published on March 10, 2011, established the Investment Regime the SIEFORES must abide by, which allows them to invest in secured instruments, debt instruments, structured instruments and variable income instruments, as well as investment units, including stock certificates and certificates of participation.

Hence, the current regulatory framework allows pension funds resources to be invested in the aforementioned instruments, issued by companies related to the housing and infrastructure sectors, such as real estate, construction, telecommunications, electricity and concessions, among others

#### \* PANAMA:

Law No. 8, enacted by the Legislative Assembly on February 6, 1997, created the Savings and Individually Funded Pension System for Public Servants ("SIACAP"), and mandates in Article 18 that pension fund managers invest resources entrusted to them in the following instruments:

- i. Mortgage bonds or certificates in autonomous official agencies, guaranteed by the State;
- ii. Mortgage certificates from authorized banking institutions;
- iii. Bonds, shares or other securities, or other duly authorized domestic securities generally negotiated on authorized securities markets.

Moreover, article 9 of Executive Decree No. 32, of July 6, 1998, which modified Executive Decree No. 27 of June, 1997, which regulated aforementioned Law No. 8, acknowledges as valid investment alternatives investments in shares or participation in duly licensed investment companies or trusts, professionally managed on the basis of universal diversification principles, and duly listed on formal secondary markets, as the case may be.

Similarly, Accord No. 11-2005 of the National Securities Commission of the Republic of Panama, of August 5, 2005, for which the provisions of Law No. 10 of April 16, 1993 were developed regarding Retirees, Pensioners and other beneficiaries and governing the activities of the Investment Managers of such funds, provides in its Article 27 that

Retirement and Pension Funds can be invested in the following authorized assets, among others:

- i. Securities issued or guaranteed by the state;
- ii. Debt securities issued through registered and listed companies and financial institutions;
- iii. Debt instruments, privately negotiated shares or securitized instruments;
- iv. Common and preferential shares, registered and listed.

Similarly, Article 31 of said Agreement provides that a fund manager may acquire investment funds when it deems that investment in these instruments adds value to its portfolio.

Thus, it can be seen that neither SIACAP nor the Retirement and Pension Funds specifically contemplate or encourage investment in the housing and infrastructure sectors.

The above does not preclude resources being channeled to such sectors through financial instruments such as shares and debt securities issued by companies participating in related industries, as well as participation in trusts, in the case of SIACAP, and investment funds, in the case of Retirement and Pension Funds, whose investment strategies could be directed towards housing, infrastructure or related sectors.

#### **❖** *PERU*;

The Law on the Private Pension Fund Management System, enacted through Executive Decree No. 179-97-EF of December 31, 1997, and its subsequent amendments, provides in Article 25 the investment instruments in which the resources of the pension funds can be invested, mentioning, among others:

- i. Bonds issued by bodies corporate that are part of the financial system or not;
- ii. Investment instruments issued for financing mortgages by banks or financial agencies and their subsidiaries;
- iii. Investment instruments issued for the financing of mortgages by other entities, with or without the guarantee of the "My Housing Fund" (Fondo Mi Vivienda) and other institutions;
- iv. Shares and securities representing rights to deposit shares listed on a stock exchange;
- v. Ownership shares of mutual funds invested in securities and in investment funds;
- vi. Investment instruments representing securitized assets;

- vii. Primary share issuances and/or bearer securities representative of credit rights for financing the development of new projects;
- viii. Financial instruments destined to the development of infrastructure projects, concessions, housing and the exploitation of natural resources, cultivated forests and other sectors that inherently require medium or long-term financing.

On the other hand, Resolution No. 052-98-EF, of February 10, 1998, which approved Chapter VI of the Compendium of Rules and Regulations of the Superintendency of Banking, Insurance and Private Pension Fund Managers, expressly acknowledges in Subchapter IV that the AFPs can invest the resources of the pension funds in shares in investment funds that invest in instruments representative of real estate assets.

Similarly, this Resolution provides, in Subchapter VII, that the AFPs may invest the resources of the managed portfolios to promote private investment in State entities, through acquiring shares in state companies, subject to certain established rules and regulations.

Finally, Subchapter X of the aforementioned regulations, incorporated through Resolution SBS No. 725-2001 and subsequently amended by Resolution SBS N° 643-2004, specifically addresses investment in instruments destined to financing projects, stipulating that the pension funds can invest in instruments issued by issuers who destine such resources to the financing of new projects, infrastructure, concessions, housing, exploitation of natural resources and cultivated forests, or other sectors with characteristics that inherently require medium or long term financing, such as:

- i. Instruments representing rights over bonds or debt securities;
- ii. Preferential shares; and,
- iii. Common or other types of shares.

Similarly, eligibility conditions are established for said instruments, particularly the following:

- i. For projects based on concession contracts or contracts of temporary assignment of usufruct of assets, the investment instruments mentioned in points i and ii, above, must be issued with redemption dates earlier than the maturity date of the concession or assignation contracts;
- ii. Investment instruments must describe procedures for early redemption, and terms addressing procedures should facts or circumstances mandate the suspension of project activity before the estimated, pre-operative dates of maturity or, should concessions or temporary cessation result in the annulment of the respective contracts;

- iii. Preferential shares are referred to as shares that grant preferential participation in dividends at a specified rate, so should these dividends not be distributed under the agreed conditions, the preferential right to the dividends shall be accumulative;
- iv. Only the investment instruments mentioned in points I and II above, with a duration of more than a year, will be allowed to include the right to exchange for common shares of the issuers, executable in favor of the holders;
- v. In the case of common, preferential or other shares, the issuers' bylaws must define share classes and their characteristics; the dividend policies; the applicable procedure for amending their by-laws, prohibiting such amendment without the approval of their shareholders' meetings, should it affect rights and obligations; and, if applicable, preferential rights, rights of exchange or accelerated redemption and sale;
- vi. The investment instruments described in points i and ii above must incorporate rights of sale, executable in favor of the holders, which guarantee at least the recovery of the investment value by the closure date of the third audited financial statement. The aforementioned right of sale must be secured by guarantee, letters of guarantee, chattel or real estate, pledge or first mortgage, trust or other guarantees that allow full execution and satisfaction of such rights; and
- vii. Additionally, investment instrument issuers must present annual, audited financial statements, at least from the fiscal year corresponding to the period of the respective issuance; or they must at least have appointed the companies responsible for reviewing the financial statements of said fiscal year.

At the same time, issuers and projects are subject to specific requirements which state that the issuers of investment instruments destined to financing projects must comply with the following requirements:

- i. Concessions or temporary assignments that arise from bidding or public tender processes and are supervised by some agency in representation of the state;
- ii. The total of investments made or committed to financing projects of no less than USD 10 million, or the equivalent in national legal tender;
- iii. The issuers or their majority shareholders, as the case may be, have agreed to have an acknowledged credit solvency and must therefore attach the risk classification reports of the investment instruments issued in local or foreign markets, or otherwise, two letters of introduction from local or foreign financial institutions;
- iv. The project managers can show that they have a sound reputation within the economic sector connected to the project;
- v. The issuers or their majority shareholders subscribe an agreement not to modify the purpose or line of business of the company without the approval of the meetings of

the holders of the securities in which the resources of the pension funds have been invested, always, and in all circumstances, being subject to the procedures previously established by the parties for dealing with such situations.

The participation of the pension funds in the financing of infrastructure began in October, 2001, with Resolution SBS No. 725-2001. In these regulations, the Superintendency of Banks, Insurance and AFPs authorizes the pension funds to acquire investment instruments (bearer securities representative of credit rights, preferential and common shares) in projects given in concession by the State, with average amounts of not less than USD 50 million or the equivalent in national currency. At a later date, through Resolution SBS No. 643-2004, this amount was reduced to USD 20 million and the pension funds were also authorized to participate in private sector projects in different areas (infrastructure, housing, exploitation of natural resources and such other activities that inherently require medium or long-term financing). Furthermore, in 2006, the range of investment instruments in concession projects in which the pension funds could participate was extended, first including debt securities (through Resolution SBS No. 440-2006, published in March) and secondly, once again reducing the amount committed to the investment to USD 10 million (Resolution SBS No.1152-2006 of September, 2006). All the amendments at the time aimed at generating, promoting and revitalizing investment in different medium and longterm instruments, particularly in infrastructure.

It can thus be assumed that the Peruvian regulatory framework expressly and explicitly considers the alternative of investing pension funds in housing and infrastructure.

The regulations generally address investment in instruments issued for mortgage financing; primary issuances intended to finance the development of new projects and specifically to invest in financial instruments destined to the development of infrastructure projects, concessions, housing, exploitation of natural resources and cultivated forests, or other sectors that inherently require medium or long term financing.

Additionally, indirect investment is authorized by allowing the acquisition of shares in investment funds whose investment strategy is oriented to the real estate sector.

#### \* POLAND:

Chapter 15 of the Law governing the Organization and Operation of Pension Funds, dated August 28, 1997, and its subsequent amendments, regulates the matters concerning the investment of the assets of the pension funds. Specifically, Article No. 141 details the specific instruments authorized for such investment, considering, among others:

- i. Bonds and other debt instruments representative of the issuer's pecuniary obligations, guaranteed or backed by the Treasury or the National Bank of Poland, such as deposits, credits and secured loans, or supported by said institutions;
- ii. Shares of companies listed on regulated securities market, such as rights, certificates, and convertible bonds listed on such markets;

- iii. Investment certificates issued for closed investment funds;
- iv. Open investment fund units or specialized open investment funds;
- v. Bonds and other debt instruments issued by local or regional government entities, or the capital city of Warsaw;
- vi. Bonds and other debt instruments issued by listed companies;
- vii. Mortgage bonds.
- viii. Bonds issued by the Gospodarstwa Krajowego Bank, consistent with the regulations of the Law of October 27, 1994 regarding paid highways and the Domestic Road Fund.

On the other hand, the Delegation of the Council of Ministers of April 26, 2011, complemented the aforementioned law, since it establishes a maximum percentage of open pension fund assets that can be invested in each type of investment. (Journal of Law 2011 No. 90 Pos. 516).

By virtue of the above, it can be seen that investment in housing is only specifically considered in the incorporation of mortgage bonds as authorized instruments.

Except for investment in road construction, Polish law does not explicitly address infrastructure investment. However, investment in the infrastructure sector can be authorized through infrastructure bonds, provided they are guaranteed by the corresponding government agencies or by institutions recognized under the law.

The pension funds are also authorized to invest in financial instruments issued by companies belonging to the sectors mentioned above, or in similar or related industries. In practice, they invested in shares of real estate developers, which are construction companies listed on the Warsaw Stock Exchange (WGWP).

Additionally, investment through interests in closed or mutual funds whose investment policies are linked to the sectors analyzed, is also allowed.

#### **THE DOMINICAN REPUBLIC:**

The Dominican Social Security System originated in Law No. 87-01, enacted on May 9, 2001, and amended by Law 188-07 of August 9, 2007, Article 97 of which details the financial instruments in which the resources of the pension funds can be invested, including the following:

i. Term deposits and other securities issued by the National Bank of Housing and Production Development ("BNV"), and the Housing Institute ("INVI");

- ii. Mortgage bonds or certificates issued by banking institutions, the National Housing Bank and the Housing Institute, and by regulated and accredited savings and loans associations;
- iii. Debt securities of public and private companies;
- iv. Publicly offered shares;
- v. Securities issued by the National Housing Bank, for the development of a secondary mortgage market;
- vi. Funds for the development of the housing sector.

The above enables concluding that there is an explicit interest in encouraging the investment of the Dominican pension funds in the housing sector, without the same emphasis on investment in the infrastructure sector being observed. Nonetheless, the pension funds can invest in infrastructure through debt titles and shares in companies related to industries linked to this sector, such as construction, telecommunications, energy, electricity and concessions, among others.

On the other hand, resolution 305-10 of August 9, 2010, which amends Resolution 17-02, includes as an investment alternative the securities and/or shares issued and/or guaranteed by the Dominican State, among others.

Consequently, it would be feasible for the pension funds of the Dominican Republic to invest in financial instruments with state guarantee aimed at financing housing and/or infrastructure works.

It is worth mentioning that on July 16, 2011, the Dominican Republic Executive Branch enacted Law 189-11 for the Development of the Mortgage and Trust Market in the Dominican Republic, which is currently being regulated.

#### \* ROMANIA:

Law No. 411/2004 regarding Privately Managed Pension Funds, and subsequent amendments, identifies in its Article 25 the financial instruments authorized for investment by the pension funds, including, among others, instruments or securities traded on regulated and supervised Romanian markets, as well as in other European Economic Community countries. Similarly, investment is authorized in *money market* instruments and debt instruments issued by Romanian governmental agencies or by specific countries.

Similarly, Law No. 204/2006, on Voluntary Pensions provides, in its Article 87, that assets in which the Fund Managers can invest are, as previously mentioned, instruments traded on regulated and supervised Romanian and European Economic Community markets, but it also authorizes investment in shares of investment funds and fixed income government instruments.

Hence, even when housing and infrastructure investment are not explicitly addressed in the Romanian regulatory framework, the pension funds are authorized for investment in instruments issued by agencies that work in these sectors or industries related to them, such as construction, roadways, ports, airports, telecommunications, electricity and power, provided that these instruments are traded on regulated and supervised securities markets.

The voluntary pension funds, on the other hand, can also invest their assets in shares or participation in investment funds whose investment strategies entail investing in the aforementioned sectors and industries.

#### \* <u>UKRAINE</u>;

Article 47 of the Law on Non-State Pension Funds states that pension fund assets must be invested in monetary funds, financial instruments and other assets contemplated in the legislation.

The second paragraph of the aforementioned article specifically stipulates that the assets of the pension funds must consist of the following instruments, among others:

- i. Instruments, securities and profit participation certificates guaranteed by the Ukrainian Council of Ministers, the Council of Ministers for the Autonomous Republic of Crimean or local authorities, as required under the law;
- ii. Shares and bonds of Ukrainian issuers, which, under the regulations governing instruments listed on the securities market, are included in the stock exchange or in the transactional information systems of such markets, registered according to procedures mandated by law.

Thus, even when investment in housing and infrastructure is not specifically addressed in the Ukrainian legal framework, the pension funds are authorized to invest in specific financial instruments of issuers linked to these sectors, provided that the securities are listed on regulated and supervised securities markets.

Similarly, investment in the infrastructure sector can be materialized through infrastructure bonds, provided that they are guaranteed by the pertinent local authorities.

#### **URUGUAY:**

In Article 123 of Law 16.713 of September 3, 1995, in the drafting of Law 18.673 of July 23, 2010, provides that the resources from the pension savings funds can be invested in the following:

i. Securities issued by public or private Uruguayan companies; stock certificates, debt instruments or mixed securities from Uruguayan financial trusts and shares in Uruguayan investment funds. In all cases they must be listed on some formal market, authorized by the Superintendency of Financial Services of the Central

Bank of Uruguay and be classified by agencies enrolled in the Securities Market Registry.

Furthermore, Law No. 18.574 allows the pension funds to invest in Mortgage Credit Notes issued by financial intermediation institutions. Circular No. 2.077 of the Central Bank of Uruguay, dated February 11, 2011, regulates this law, referring, among other matters, to regulations governing mortgage credit notes in aspects such as liquidity, entities, issuers, appraisal, issuance limits, amortization, registration and minimum required information.

The above shows that the legal framework in force allows the investment of the Uruguayan pension savings funds in:

- i. Mortgage Credit Notes and bonds issued by financial intermediation institutions to fund mortgage financing, which will be covered by special mortgage loans granted by such institutions for financing, with mortgage guarantees, the acquisition, construction, renovation or extension of housing units;
- ii. Shares and fixed-interest instruments issued by companies related to the real estate, construction or concession sector:
- iii. Certificates of participation, debt securities or mixed securities issued by Uruguayan financial trusts, whose investment strategies could consider investment in real estate assets or assets related to the construction or concessions sectors.
- iv. Prorated Uruguayan investment funds, whose investment strategies could consider investment in real estate assets or assets related to the construction or concessions sectors.

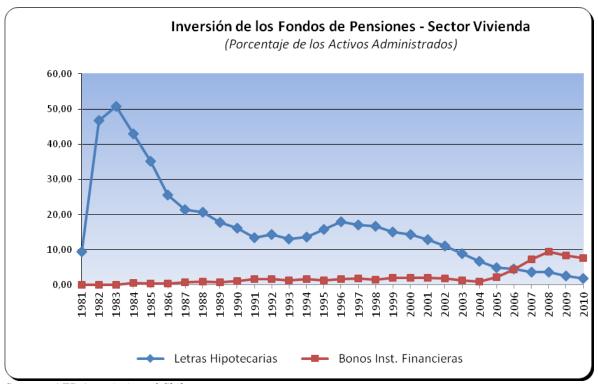
#### v. IV. – <u>Statistical Analysis – Time Series</u>

#### \* BOLIVIA:

To this date, there have been no Bolivian pension fund investments in housing and/or infrastructure. Hence, there are no available statistics.

#### **\*** *CHILE*:

Historically, the investment of the pension funds in the housing sector in Chile has occurred essentially through the acquisition of mortgage bonds, reaching levels of over 50% of the assets managed by the pension funds at the beginning of the 1980s (the beginning of the AFP system), but showing a downward trend over time, reaching percentages of about 2% - 3% in the last few years.



Source: AFP Association of Chile.

This is due, among other factors, to the fact that the capital market has opted for financing investment in housing by means of other instruments - mortgage loans - which constitute debt securities, or bonds issued by banking institutions, instead of financing such investment with mortgage bonds. Investment in bank bonds has increased since 2006, reaching values that fluctuate between 7% and 10% of the portfolios of the pension funds in the last few years.

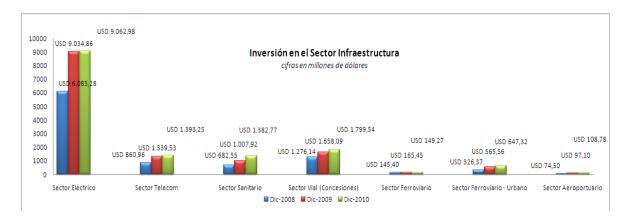
Although the investment of the pension funds in the housing sector grew more than 40% in the 2008-2010 period, its relative participation in the pension fund portfolios has steadily declined.

	Dec-2008	Dec-2009	Dec-2010
Mortgage notes	2,685.38	2,931.79	2,729.75
Bank Bonds <sup>14</sup>	6,964.37	9,900.92	11,327.96
Real Estate Investment Funds	510.06	667.66	555.15
Total <sup>15</sup>	10,159.81	13,500.37	14,612.86
Investment in Housing to Pension Funds Ratio	13.67%	11.44%	9.84%

Source: Superintendency of Pensions. Amounts are expressed in millions of US dollars.

At the same time, investments in infrastructure have been channeled essentially through the acquisition of shares and bonds of the companies linked to each of these sectors.

The evolution of pension fund investments in the infrastructure sector during the 2008-2010 period, was as follows:



Source: Superintendency of Pensions.

The investment of the pension funds in infrastructure has been diversified among several sectors, such as electricity, telecommunications, wastewater treatment plants, roads, airports, railways and urban railways. Most notably during 2008-2010 investments in the power sector concentrated more than 60% of total investment in infrastructure.

<sup>14</sup> This is the sum of the bank bonds and subordinate bonds issued by financial institutions.

<sup>&</sup>lt;sup>15</sup> Securitized instruments have not been considered, since there are no statistics for the assets that are the object of the securitization process.

		Dec-2008			Dec-2009			Dec-2010	
	Stocks	Bonds	Total	Stocks	Bonds	Total	Stocks	Bonds	Total
Electricity Sector	4,123.77	1,961.51	6,085.28	6,280.51	2,754.35	9,034.86	6,089.61	2,973.37	9,062.98
Telecom Sector	718.52	142.44	860.96	972.72	366.81	1,339.53	995.74	397.51	1,393.25
Wastewater treatment Sector	174.79	507.76	682.55	242.48	765.44	1,007.92	267.04	1,115.73	1,382.77
Roads (Concessions)		1,276.14	1,276.14		1,658.09	1,658.09		1,799.54	1,799.54
Railways Sector		145.40	145.40		165.45	165.45		149.27	149.27
Urban Railways Sector		326.37	326.37		565.56	565.56		647.32	647.32
Airport Sector		74.50	74.50		97.10	97.10		108.78	108.78
Total Infrastructure Investment			9,451.20			13,868.51			14,435.13
Infrastructure Related Investment with Pension Funds			12.72%			11.75%			9.72%

Source: Pension Superintendency – Sums expressed in millions of US dollars.

Even though the investments of the pension funds in infrastructure grew substantially in the period analyzed, its proportional representation in the overall funds portfolio decreased in the same period.

In the particular case of investment in road infrastructure, investment has been concentrated in concession bonds, also called infrastructure bonds; however, the last issuance of such instruments occurred in 2006.

#### \* COLOMBIA:

Working Document Number 11/36, drawn up by BBVA Research, states that the pension funds in Colombia have financed infrastructure projects though investment in bonds and shares of companies in this sector. In the second half of 2011, this investment amounted to USD 9.591 million, or 18.7% of all pension funds and 3.5% of the GDP.

In particular, it can be seen that the sector with the largest rise in pension fund participation has been electrical power, which represents about 84% of such investment. Thus, the

pension funds comprise a substantial ownership interest in companies in this sector, such as ISA, Ecopetrol and Isagen, with respective percentages of 17.5%, 4.2% and 11.6%. <sup>16</sup>

Investments have been channeled mainly through the acquisition of shares, representing 80% of pension funds investment in infrastructure. Another mechanism that has recently become more important is private capital funds ("PCF"). Currently, pension funds include investment in 35 PCFs, of which the following are mostly related to the energy sector: PCF Interbolsa Energético, PCF CPVAL and PCF Tribeca Fund I.

Other areas of the infrastructure sector, such as road development, communications and water, show relatively minor participation in the portfolios of the pension funds, equivalent to only 1.7%. However, this amount is 14.5% of the debt bond placement of local companies in 2010 and 30% of private investment in transportation and communications.

Regarding the investment of Colombian pension funds in the housing sector, in February, 2011, the construction trade association submitted to the pension funds, capital funds, real estate agents and insurance companies a proposal to invest in housing, considering the high demand for housing in the country, which is expected to continue growing in the next few years. The trade association emphasized that the construction and real estate sectors are safe media for channeling the liquidity of the resources of the institutional funds, and that the sector presents a medium term investment alternative with predictable income flow and profitability inherent in the price of real estate sales.

#### **♦** Costa Rica:

Pension fund investments in infrastructure in Costa Rica have been fundamentally oriented toward the electrical power sector. Such investment has materialized for the most part through securitization trusts<sup>17</sup>, whereas investment in the housing sector has materialized through specific securitization notes<sup>18</sup>.

In February 2011, investment in trusts reached an amount equivalent to USD 67.46 million, representing 2.37% of the total resources managed by the Costa Rican pension system.

#### **SPAIN:**

The percentage of Spanish pension funds invested in real estate have remained relatively stable for the period of 2001-2009, while fluctuating between 0.20% and 0/25%, except during 2006 and 2007, which showed significant decline.

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Llanes, María Claudia. "Desarrollo de los fondos de pensiones y la inversión en proyectos de infraestructura" (Development of the pension funds and investment in infrastructure projects). Draft. May 2011

Trusts whose purpose is to build up a portfolio by acquiring securitization notes or securitized instruments.

<sup>&</sup>lt;sup>18</sup> Investment in specific securitization notes or securitized instruments.

Year	Real Estate Investment to Pension Funds Ratio (%)
2001	0.238
2002	0.246
2003	0.255
2004	0.233
2005	0.213
2006	0.144
2007	0.123
2008	0.228
2009	0.216

Source: OCDE.



Source: OCDE.

#### \* MEXICO:

# i.- Evolution of the Total Amount of Financing by the Siefores of the Infrastructure and Housing sectors.

Investment by the Siefores in the sectors analyzed grew steadily between 2008 and 2011. A comparative analysis between both sectors shows that investment in infrastructure was

substantially higher than investment in the housing sector, with debt instruments being the mechanism preferred by the Mexican pension funds for materializing such investment.

It is worth mentioning that between October 2009 and February 2011, investment in the infrastructure sector through structured instruments experienced an increase of 325%.

	Dec-2008				Dec-2009			
	Infrastructure (debt instr.) <sup>19</sup>	Infrastructure (Structured instr.)	Housing (debt instr. <sup>20</sup>	Total	Infrastructure (debt instr.)	Infrastructure (structured instr.)	Housing (Debt instr.)	Total
January					3,669	152	2,046	5,868
February					3,426	130	1,865	5,420
March					3,727	153	1,981	5,861
April	4,791		2,799	7,590	3,984	161	2,017	6,162
May	4,870		2,805	7,675	4,163	161	2,108	6,432
June	4,747		2,855	7,602	4,147	160	2,193	6,500
July	4,937	166	2,927	8,030	4,369	164	2,287	6,819
August	4,950	180	2,992	8,123	4,454	166	2,267	6,887
September	4,805	169	2,902	7,876	4,458	171	2,337	6,965
October	4,005	145	2,250	6,400	4,617	647	2,438	7,702
November	3,713	132	2,022	5,867	4,761	710	2,663	8,133
December	3,699	146	2,129	5,974	4,771	1,029	2,813	8,614

Source: Amafore, based on data from the National Commission for the Retirement Savings System (CONSAR). Figures expressed in millions of US dollars at the exchange rate of each year.

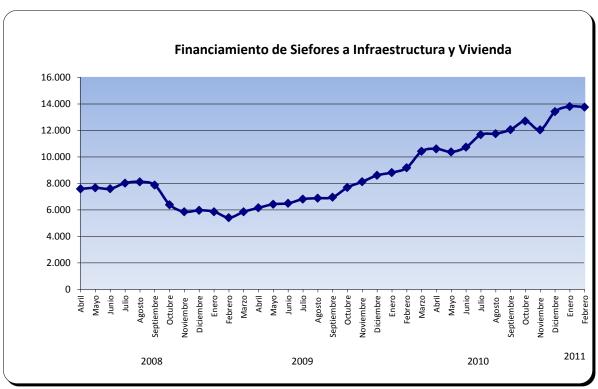
Structured instruments are essentially investment funds or Certificates of Capital Development (CKD) that guarantee no returns. Their profitability is based on the performance of the project. CKDs are specifically trust securities destined to financing one or more projects, under two types of such instruments, one destined for private capital which, in turn, invests in projects, and the other destined directly to projects, fundamentally infrastructure projects.

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<sup>&</sup>lt;sup>19</sup> Includes investment in shopping centers, telecommunications, transport, State and Municipal debt issuance and CFE and Pemex debt issuance.

<sup>&</sup>lt;sup>20</sup> Includes issuances of Infonativ, Fovissste and Mortgage Bonds.

	Dec-2010			Dec-2011				
	Infrastructure (debt instr.) <sup>8</sup>	Infrastructure (structured instr.)	Housing (debt instr.) 9	Total	Infrastructure (debt instr.)	Infrastructure (structured instr.)	Housing (debt instr.)	Total
January	4,889	1,051	2,873	8,823	7,175	2,727	3,912	13,814
February	5,192	1,069	2,924	9,185	7,113	2,747	3,907	13,768
March	5,835	1,202	3,388	10,425				
April	5,988	1,237	3,390	10,615				
May	5,962	1,220	3,201	10,384				
June	6,165	1,251	3,333	10,749				
July	6,603	1,336	3,742	11,682				
August	6,355	1,839	3,566	11,760				
September	6,508	1,880	3,678	12,066				
October	6,602	2,225	3,884	12,711				
November	6,197	2,098	3,755	12,051				
December	6,866	2,663	3,897	13,427				

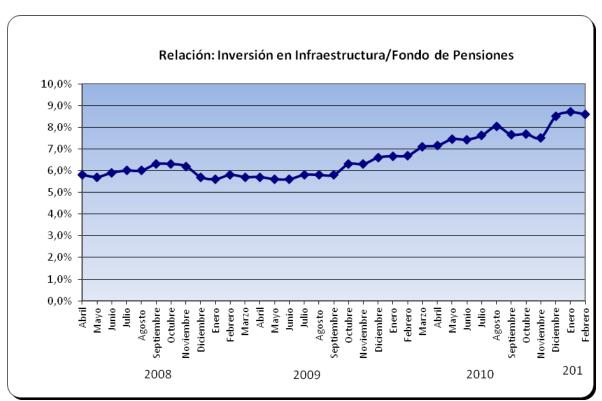


# ii. - Ratio: investment in infrastructure / pension funds

The investment of the Siefores in the infrastructure sector for the period of January/2008 – February/2008 evidenced an increase in both absolute amounts and percentages of the pension funds.

In the years 2008-2009, investment in infrastructure was less than 6% of the value of the pension fund assets, whereas in February of 2011, such percentages exceeded 8.5%.

Ratio: Investment in Infrastructure / Pension Funds						
	2008	2009	2010	2011		
January		5.6%	6.7%	8.7%		
February		5.8%	6.7%	8.6%		
March		5.7%	7.1%			
April	5.8%	5.7%	7.2%			
May	5.7%	5.6%	7.5%			
June	5.9%	5.6%	7.4%			
July	6.0%	5.8%	7.6%			
August	6.0%	5.8%	8.0%			
September	6.3%	5.8%	7.7%			
October	6.3%	6.3%	7.7%			
November	6.2%	6.3%	7.5%			
December	5.7%	6.6%	8.5%			



Source: Amafore, based on data from the National Commission for the Retirement Savings System (CONSAR). Figures expressed in millions of US dollars at the exchange rate of each year.

# iii.- Ratio: investment in housing / pension funds

The relative investment of the Siefores in the housing sector remained stable for 2008 – 2011, at around 3% of the value of the pension funds. The lowest relative participation in this sector was in May, 2009, in the amount of 2,7%, and its highest level was reached in July, 2010, at 3.6% of the overall value of the Mexican pension funds.

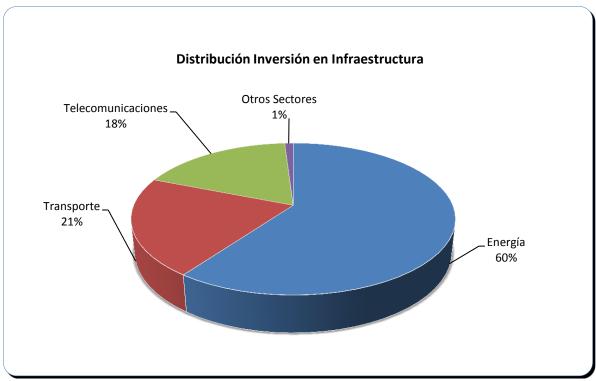
Ratio: Investment in Infrastructure / Pension Funds						
	2008	2009	2010	2011		
January		3.0%	3.2%	3.4%		
February		3.0%	3.1%	3.4%		
March		2.9%	3.4%			
April	3.4%	2.8%	3.4%			
May	3.3%	2.7%	3.3%			
June	3.5%	2.8%	3.3%			
July	3.4%	2.9%	3.6%			
August	3.5%	2.8%	3.5%			
September	3.7%	2.9%	3.4%			
October	3.4%	2.9%	3.4%			
November	3.3%	3.1%	3.4%			
December	3.1%	3.2%	3.5%			

Source: Amafore, based on data from the National Commission for the Retirement Savings System (CONSAR). Figures expressed in millions of US dollars at the exchange rate of each year.



# **♦** *PERU*:

The information published by the Superintendency of Banks, Insurance and AFPs at the end of February, 2011, shows that the pension funds invested approximately USD 3.5 billion in infrastructure, equivalent to 11.1% of the total portfolio. These investments concentrated mainly in energy (60%) and to a lesser extent in transportation (21%) and telecommunications (18%).



Source: Superintendence of Banking, Insurance and AFPs (SBS), Peru, as of February, 2011.

73% of the current investment portfolio in infrastructure, approximately USD 2.5 billion, was channeled through the purchase of corporate shares and bonds of companies involved in this sector, through existing investment funds (through primary private offering of proportional ownership interest):

- i. AC Capitales Investment Fund in Infrastructure, Public Services and Natural Resources: finances projects in any stage of development through capital support. As of this date, the value of investments is about USD 55 million, with the AFPs as the sole supporters. The fund is involved in important projects, including three transmission lines, the central railroad, the Jorge Chávez airport, air cargo terminals and diesel and bio-fuel terminals.
- ii. Larraín Vial Latin American Energy Investment: oriented to assets related to the Latin American energy sector (mainly Chile, Peru and Colombia). In Peru, the fund has invested in the Termochilca natural gas power station.
- iii. Sigma Infrastructure Investment Fund: invests mainly in greenfield projects with capital support.
- iv. *Infrastructure investment fund:* in September, 2009, the management of the fund was awarded to a consortium comprising Brookfield Asset Management and AC Capitales SAFI. It has currently committed about USD 440 million (USD 200 million from the AFPs, USD 100 million from Brookfield, USD 100 million from Cofide and USD 40 million from CAF) and even though no

investments have been made yet, some potentially profitable infrastructure projects have already been identified.

The remaining 27% has been invested directly, with emphasis on issuance of corporate bonds for projects in the telecommunications and power sectors, as well as other debt instruments for highway projects.

### \* POLAND:

Polish pension funds have not been authorized to invest directly in real estate assets, and therefore channel their resources through the acquisition of instruments issued by construction companies or else invest in investment funds whose investment policies are oriented to the real estate sector.

The information provided by the Polish Financial Supervisory Authority (KNF) states that, at the end of 2010, the investments of the Polish pension funds in mortgage bonds issued by mortgage banks, with the corresponding guarantees, reached approximately USD 178 million, equivalent to 0.22% of their assets.

On the other hand, investment in so-called "motorway bonds," which are bonds issued by BGK - Bank Gospodarstwa Krajowego and the Domestic Economy Bank - related to the construction of roadway infrastructure in Poland, amounted to USD 3.43 billon at the end of 2010, representing 4.23% of the resources of the pension funds.

Additionally, the end of 2010 saw investments of USD 62 million in "income bonds", which are associated to the bonds issued by municipal institutions for financing investments in local infrastructure, such as water treatment plants. This amount is the equivalent of 0.08% of total investments.

Finally, in December of 2009, investments in construction companies reached USD 1.13 billon, whereas investment in the construction industry was approximately USD 1.29 billion, jointly representing 3.90% of the investments of the pension funds.

### **♦** *URUGUAY*:

# i. Total Amount<sup>21</sup>

- Infrastructure projects in which the pension funds participated: USD 165 million
- Projects linked to housing construction housing construction: still none.

# ii. Type of Project

#### > Infrastructure:

- Financing construction of the Montevideo International Airport (which has now been built and is fully operative): USD 87 million. The flow of payment to investors comes from the revenue of the airport's operator, which has an administrative concession for the next 20 years.
- Financing the construction of highways and main avenues: USD 38 million. There has already been an improvement in highways. Flow payment depends on the operator's revenue from the tolls charged.
- Financing of several municipal infrastructure works: USD 40 million. The financing of municipalities is not connected to any particular type of investment. In this case, payment is guaranteed by the central government.

Between 1996 and 2009, the local stock exchange issued approximately USD 100 million in securities per year (0.5% of GDP, on average) including shares, negotiable obligations, trusts and other securities. The total issuance for this period amounted to USD 1,450 million, of which USD 700 million were issued after the economic and financial crisis that culminated in 2002.

Similarly, the issuances related to the industrial sector<sup>22</sup> (33% de USD 700 million), indirect infrastructure investment<sup>23</sup> (26% of the subtotal corresponding to the agroindustrial sector) and direct infrastructure<sup>24</sup> (24% of the aforementioned subtotal), stand out among the issuances between January 3003 and June 2010.

The amount of circulating fixed-income securities<sup>25</sup>, according to information published by the Central Bank, increased from USD 302 million in December, 2003, to USD 519 million in December, 2009 (1.6% of GDP), representing an annualized increase of 9.5%. In the same period, pension fund investment in public or private Uruguayan companies and in

<sup>21</sup> Source: Afinidad AFAP, based on information from the Central Bank of Uruguay (BCU)

Issuances related to the agroindustrial sector are: FF Fondo Lechero II, Fanapel, FF Fondo Arrocero, Compañía Forestal Oriental S.A., Conaprole, FF New Zealand Farming Systems Uruguay and Establecimientos Colonia.

Issuances related to indirect infrastructure are: UTE, FF Fondo de Inversión Departamental I and FF Nuevo CASMU.

<sup>&</sup>lt;sup>24</sup> Issuances related to direct infrastructure are: Puerta del Sur S.A. (Airport) and Corporación Vial del Uruguay (Carreteras), Fondo de Transporte Colectivo Montevideo, Cerro Free Port y Grinor S.A. (Ampliación Bvar Batlle y Ordóñez).

These are negotiable obligations, finance trusts, other securities, negotiable obligations with suspended quotation and other securities with suspended quotation.

securities or interests in Uruguayan investment funds saw an increase from USD 13 million to USD 294 million.

Similarly, the report on circulating securities as of June 30, 2010, states that there are US\$ 334 million corresponding to negotiable obligations, the most notable being: *Puerta del Sur S.A.*, International Airport of Carrasco - USD 87 million; *UTE*, state energy enterprise - USD 77 million, and *Corporación Vial del Uruguay S.A.*, a national highways concessionaire - USD 35 million.

There has also been investment equivalent to USD 178 million in financial trusts, most notably: *Departmental Investment Fund* ("Fondo de Inversión Departamental"); Municipal Investment Fund ("Fondo de Inversión Municipal") - USD 41 million; *Cerro Free Port*, port investment - USD 16 million; Fund for Financing Collective Urban Transport ("Fondo Financiamiento del Transporte Colectivo Urbano") - USD 9 million; *Trust for Extending the Battle and Ordóñez Boulevard* ("Fideicomiso de Ampliación de Bvar. Batlle y Ordóñez"), urban road works - USD 7 million; and *UTE* - USD 5 million<sup>26</sup>.

At the end of June, 2010, the pension funds' portfolios included investments of USD 326 million, comprising negotiable obligations and financial trusts representing 64% of the total circulation of fixed interest securities in which the pension funds can invest.

Negotiable obligations and trusts associated to infrastructure, in a wide sense, amounted to a total of USD 313 million. Applying the ratio of generic participation to the circulating fixed-income securities of the pension funds to this amount would give an investment of US\$ 200 million associated to infrastructure in the portfolios of the funds. Under a stricter interpretation, excluding some issuances in which the resources raised were not destined solely to investment in infrastructure, the value of the portfolio associated to infrastructure would amount to approximately US\$ 145 million, equivalent to 2.51% of the assets managed by the Uruguayan pension funds.

# ❖ <u>BULGARIA -EL SALVADOR - KAZAKHSTAN - PANAMA - DOMINICAN REPUBLIC -</u> ROMANIA - UKRAINE:

There are no relevant statistics available to date regarding pension fund investment in housing and infrastructure for these countries.

<sup>&</sup>lt;sup>26</sup> This report also discusses USD 328 million invested in the Financial Trust and Social Portfolio I of the National Housing Agency (ANV). This portfolio includes high-risk credits that the BHU transferred to the ANV during its institutional restructuring. As of this date, there have been no issuances associated to this fund for investment by the AFPs, so they have been excluded from this analysis.

# V.- Investment Impact Analysis

# a.- Comments on the advantages and disadvantages associated to housing and infrastructure investment

**COLOMBIA** – The advantages associated to investing in infrastructure, for the pension funds, are the access to attractive long-term investments in accordance with the pension objective; stable flows covered against inflation and revenue generated by the diversification derived from the low correlation of infrastructure investments with financial assets.

On the other hand, the benefits generated by the real estate funds are derived from a greater degree of diversification, due to the lower budgets of projects and a larger number of prospects for such investments, the concentration of investments in assets associated to the development of commercial activities, which facilitates their appreciation and liquidation, and the prospects for additional revenues arising from the appreciation of such assets.

The risks associated to the aforementioned investments are summarized below:



COSTA RICA – The benefits are associated to the diversification, yield and term of the instruments, whereas the most significant disadvantage is that no project has been securitized in colons.

**SPAIN** – Investment in housing and infrastructure is one of the potential and suitable investment options for the pension funds, and is subject to the corresponding limits of risk diversification.

In the case of Spain, 60% of equity is in the individual system (third pillar), with the possibility of transferring to another fund at the request of the investor within a period of seven days, due to which investment in low liquidity assets is not very recommendable.

**KAZAKHSTAN** – The primary housing market is the most attractive segment within the real estate sector, given that investment in real estate projects that are in the construction stage enables projecting future market value increases. This trend can be seen in the example of housing already built and delivered, associated to the exploitation of large construction works in the cities of Astaná and Almaty (RK). From the beginning of the construction of the new capital of the Republic of Kazakhstan, investment in its development has reached KZT 1 trillion 50 billion - approximately USD 660 million.

Currently, only two AFPs have the experience for investing in real estate as allowed under the law of the Republic of Kazakhstan, through the Real Estate Investment Fund denominated "Great Wall SA":

- Individually Funded Pension Funds "Kazajmys SA" (city of Karagandá, Republic of Kazakhstan) 9.86% ownership;
- "República Individually Funded Pension Fund" (city of Almaty, Republic of Kazakhstan) 9.77% ownership.

The long-term investments of the pension funds are oriented to sectors such as infrastructure, which includes a state guarantee, and in particularl for infrastructure bonds included in concession contracts. Similarly, state guarantee of loans related to the financing of concession projects also enables increasing the list of financial instruments available to the pension funds.

Similarly, it is important to point out that in both cases there are risks of insolvency or bankruptcy of the issuer, or the use of resources for purposes other than those stipulated. However, these risks are not necessarily inherent to infrastructure bond issuers in particular, and they are also seen in other sectors where they are mitigated by the existence of state guarantees.

**MEXICO** – In Mexico it is estimated that the resources of the individual accounts system will be about 30% of GDP in 2020. These resources will be an important factor in the financing of the current infrastructure and housing deficits in the country.

URUGUAY – The most important benefits of the investments made to date are their impact on the economy as a whole. Infrastructure works are a dynamic element in the economy and fundamental to the country's economic development. Among the disadvantages are some risks related to project construction and the loss of concessions for the operator, in the case of both highways and airports.

#### b.- Significant experiences: Principal lessons derived from these investments.

**BOLIVIA** – As of this date, no instruments have been developed that would allow the AFPs to invest specifically in infrastructure and/or housing.

The most similar to the above have been investments in bonds issued by several cement producing companies, financed through the securities market, for increasing productive capacity, financing working capital or refinancing liabilities.

However, there are no statistics available that would enable a detailed study of the destination of the resources received by such companies.

**COSTA RICA** – The system is currently in the maturity phase of the initial projects, all managed and administrated by government agencies. The country has not yet experienced the expiry of an issuance of this kind.

Thus, it is not currently possible to identify significant lessons learnt from such investment.

On the other hand, the judicial safety of the trusts is noteworthy, especially when the manager or administrator is a private company engaged by the state. There is some concern that the agency charged with revising tariffs might modify them, which would evidently skew the project and the related analysis. Another consideration is that the project manager could be changed due to a political decision, which could prove to be a significant risk.

**SPAIN** – Data only exists concerning the percentage of direct investment of Spanish pension funds in real estate, which is insignificant, due to which investments in this sector have had very little effect on the profitability of the pension funds.

**KAZAKHSTAN** - The bankruptcy of the «Doszhan Temir Zholy» company, which operated the Shar–Usr-Kamenogorsk railway project, had a very negative impact on the willingness of the AFPs in Kazakhstan to invest in infrastructure bonds. Nonetheless, with the existence of guarantees, these instruments become attractive to institutional investors, since they provide the possibility of accessing long-term instruments with a significant degree of safety, which are currently scarce in the Kazakhstan market. It is important to mention that a joint declaration by the Government, the National Bank and AFN of the Republic of Kazakhstan stated that pension fund resources will be invested in infrastructure projects with state guarantees and subsidized rates.

**MEXICO** – In Mexico, experience has shown that infrastructure and housing project financing requires a long-term horizon to allow for maturity and asset profitability. Hence, these assets are ideally suitable for pension fund investment portfolios, which have a long-term investment horizon.

The flows associated to these types of assets provide a component for buffering inflationary pressure.

Infrastructure investments are particularly considered to be an appropriate asset for pension fund investments worldwide, since they are long-term investments with competitive yields in such investment horizons.

It is important to mention that the investment profile of the pension funds allows them to withstand the volatility associated to projects with a long-term horizon, for the purpose of increasing yield in this time horizon.

**URUGUAY** – The pension funds have been key stakeholders in financing investments in infrastructure to date. The government has announced considerable joint investment in infrastructure with private parties in the next few years, in areas such as hospitals, prisons, deepwater ports, railways and highways, among others. The pension funds are expected to provide financing for these projects, and the most significant contribution of pension funds to infrastructure development should materialize in the next few years.

As of now, there have been no mortgage issuances by financial institutions, despite provisions in the law regulating mortgage credit notes. Hopefully this market will develop in the coming years, and a significant part of the financing is expected to come from the pension funds.

# c.- Financial Impact: Commentary on new investment and diversification opportunities this investment provides

**COSTA RICA** – The investment analyzed has promoted better investment portfolio diversification. It has also worsened the exchange risk, since issuances are denominated in dollars and the market does not provide coverage options to buffer the fluctuations of this currency<sup>27</sup>.

**MEXICO** – For the Mexican pension funds, investment in infrastructure and housing projects contributes to the optimal assignment of assets in their long-term portfolios and the design of the investment profile of the funds.

Maximum profitability determines where and in what proportion to invest pension fund resources. Investment in productive projects is only one of the various options fund managers have for diversifying investments.

**URUGUAY** – It has been observed that the yield rate for the pension funds in infrastructure investments is greater than in other investment alternatives and involves assets whose investment horizon matches those of the pension funds. Nonetheless, some degree of additional portfolio diversification is desirable.

d.- Social Impact: Description of the consequences of the relationship of the pension funds with their members and the community, the general impact these projects have had on daily lives of members and the wellbeing of individuals in general.

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<sup>&</sup>lt;sup>27</sup> Source: Popular Pensiones, Costa Rica.

CHILE – The growth of the concessions industry has been fundamental to the development of the country's infrastructure. The development of the concessions program has enabled Chile to take the lead among Latin American and Caribbean countries in terms of infrastructure investment, obtaining a score of 79.3 points out of a maximum of 100, according to a study carried out by the Economist Intelligence Unit.

In the opinion of the Association of Public Infrastructure Works Concessionaires ("Concesionarios de Obras de Infraestructura Pública", A.G (Copsa AG)), investment in infrastructure has contributed to considerable growth in the country's productivity, promoting regional integration within the country as well as Chile's integration with the rest of the world, generating a positive impact on the standard of living of Chileans and of the country as a whole.

**COLOMBIA** - The social impact of the investment of the pension funds in infrastructure is due to the existence of better infrastructure works and the positive impact on the economy in terms of competitiveness and trade.

COSTA RICA – It is not currently possible to determine the effect of this type of investment, since investments in infrastructure have been channeled mainly to electrical projects. On the other hand, housing projects have been financed by commercial banks, with mortgage securitization, and the interest rate in the housing sector has not been impacted by this type of investment by the pension funds.

**KAZAKHSTAN** – In 2005, before the specific concessions law existed, two concession contracts were subscribed for the construction of the Shar - Usr-Kamenogorsk railway line and the exploitation of the passenger terminal of the Aktau International Airport.

Both projects yielded significant benefits for the population. The railroad project, for example, considerably reduced travel time compared to the existing line which passes through the territory of the Russian Federation. It also eliminated duplicate customs inspections. The financing source was the share capital of the project operator, the company "Doszhan Temir Zholy," as well as a bond valued at KZT 30 billion - approximately USD 200 million.

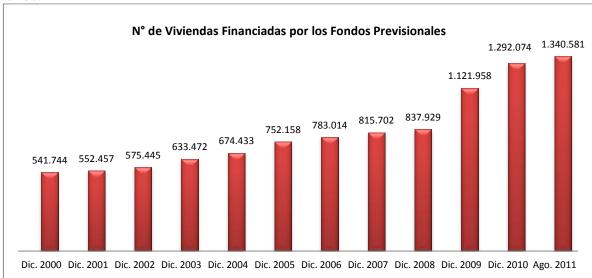
**MEXICO** – From a financial standpoint, the Mexican pension funds are of the opinion that increasing the sources of financing in a competitive environment increases the possibility of improving the quality of projects and reducing their costs, thereby reducing fiscal pressure and facilitating the use of resources for other social ends.

**URUGUAY** – The few investments in infrastructure projects have had a notable effect in improving some of the principal highways and avenues in the country and the construction of Uruguay's main airport. Montevideo now has a first-rate international airport, which improves the country's image in the eyes of those arriving in the country. There have been no investments in the housing sector as yet

#### e.- Relevant Indicators:

# (i) Number of housing units built

CHILE – As stated above, investment in the sector has materialized mainly through bank bonds, also known as mortgage loans or mortgage notes. The Superintendency of Banks and Financial Institutions has provided information showing that, in August 2011, more than 1,300,000 housing units had been financed through the investment of the pension funds.<sup>28</sup>



Source; Superintendency of Banks and Financial Institutions (SBIF), Chile.

Drawn up by: AFP Association of Chile.<sup>29</sup>

**COSTA RICA -** Housing had already been constructed and a credit securitization process was carried out.

**MEXICO** – By the end of February 2011, the Mexican Siefores had invested an amount of about US\$ 4,000 million in the housing sector, equivalent to more than 150,000 housing units, through authorized financial instruments.

(ii) Identifying services financed by the pension funds in highways, airports, ports, telecommunications, electricity and other related sectors, that contribute to promoting greater integration of the individually funded system with its members.

**CHILE** – Statistics provided by the Association of Public Infrastructure Works Concessionaires A.G (Copsa AG), show that the concessions system facilitated investments of USD 12.5 billion between 1993 and 2011, destined to 61 projects, the most important

The number of housing units financed with pension funds in this graph is equal to the total number of transactions involving Unendorsable Mortgage Loans, Endorsable Mortgage Loans and Letters of Credit.

<sup>&</sup>lt;sup>28</sup> Includes investments by pension funds and life insurance companies.

being 29 highways and roadways, 7 urban highways, 11 airports, 3 prisons, 4 public buildings and 1 hospital, among others.

Public bond issuance by concessionaire companies amounted to the equivalent of USD 4.784 million between 1998 and 2007, of which more than 80% were acquired by the pension funds and insurance companies.

**COSTA RICA** – Only electricity projects were financed.

**KAZAKHSTAN** – There is no information available regarding projects not involving state interests.

On the other hand, the concession contracts with the participation of GCHP Center subscribed to date are the following:

- 1. Electrical sector concession contracts:
  - i. Construction and operation of a gas-fired power plant in the city of Kandygash, in the Region of Aktubinsk;
  - ii. Construction and exploitation of the inter-regional power transmission line «Kazakhstan North Aktubinsk Region».
- 2. Concession and exploitation contracts in the transport sector:
  - i. Electrification of the «Makat-Kandygash» railway line;
  - ii. Construction and operation of a new «Shar-Ust –Kamenogorsk Station» railway line:
  - iii. Construction and exploitation of the passenger air terminal of the Aktau International Airport;
  - iv. Construction and exploitation of the «Eralievo- Kuryk» railway line.

Construction of the following works has terminated:

- i. Construction and exploitation of the inter-regional «Kazakhstan North Aktubinsk Region» power transmission line;
- ii. Construction and exploitation of the passenger air terminal of the Aktau International Airport;
- iii. Construction and exploitation of a new «Shar-Ust –Kamenogorsk Station» railway line.

It is important to point out that even though the concession contracts subscribed to date are exclusively in the transport and energy sectors, the Kazakh legislation allows the private sector to invest in practically all areas of the infrastructure sector.

Similarly, as previously mentioned, the pension funds of the Republic of Kazakhstan have financed the project for the construction and exploitation of the new "Shar-Ust Kamenogorsk Station" railway line for the amount of KZT 30 billion, approximately USD 200 million.

**MEXICO** – The Siefores of Mexico have invested USD 1.4 billion in the financing of highways, entailing the construction and maintenance of over 1,400 kilometers of roadways infrastructure.

Furthermore, resources close to USD 4,000 million have been invested through structured instruments for financing the operation of the western highways network and forestry projects.

Funds for financing work capital for small and mid-sized companies and the construction and development of commercial and industrial real estate have been constituted through the CDKs, as well as the development of infrastructure projects such as water treatment plants, highways and hospitals, among others.