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Pension fund's experience investing in infrastructure

Session 1: Long term investing: market practice, regulation and supervision

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IOPS/AIOS International Seminar on Pension Systems

Global pension perspectives: Investment, financial culture for retirement and new generation reforms

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Outline

Section 1
Pension fund's financial regime and the rational behind investing in infrastructure

Section 2
A global focus

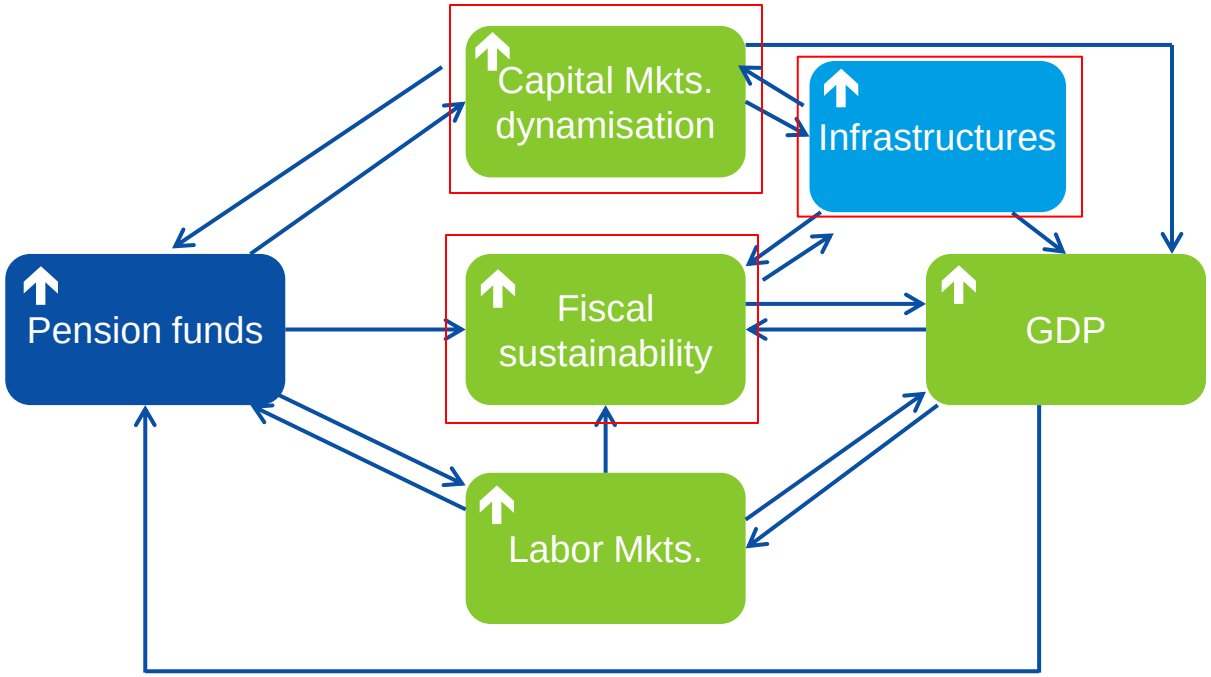
Section 3
A Latin American focus

Section 4
What to take into account?

The rational to invest in infrastructure projects

PF and Infrastructure: the theoretical virtuous circle

Fuente: BBVA Research



- It is possible to see a virtuous circle between pension's goals and other economic policy targets.
- Obviously there are different conditional factors that likely affect the impact of some of theses pieces. For instance:
  - Infrastructure-Growth multipliers
  - Quality of the infrastructure and the specific financial SPV.
  - Efficient frontier.
  - Regulatory institutional aspects

Some reasons:

Pensions: Improve portfolio performance. Increase portfolio size. Better pensions

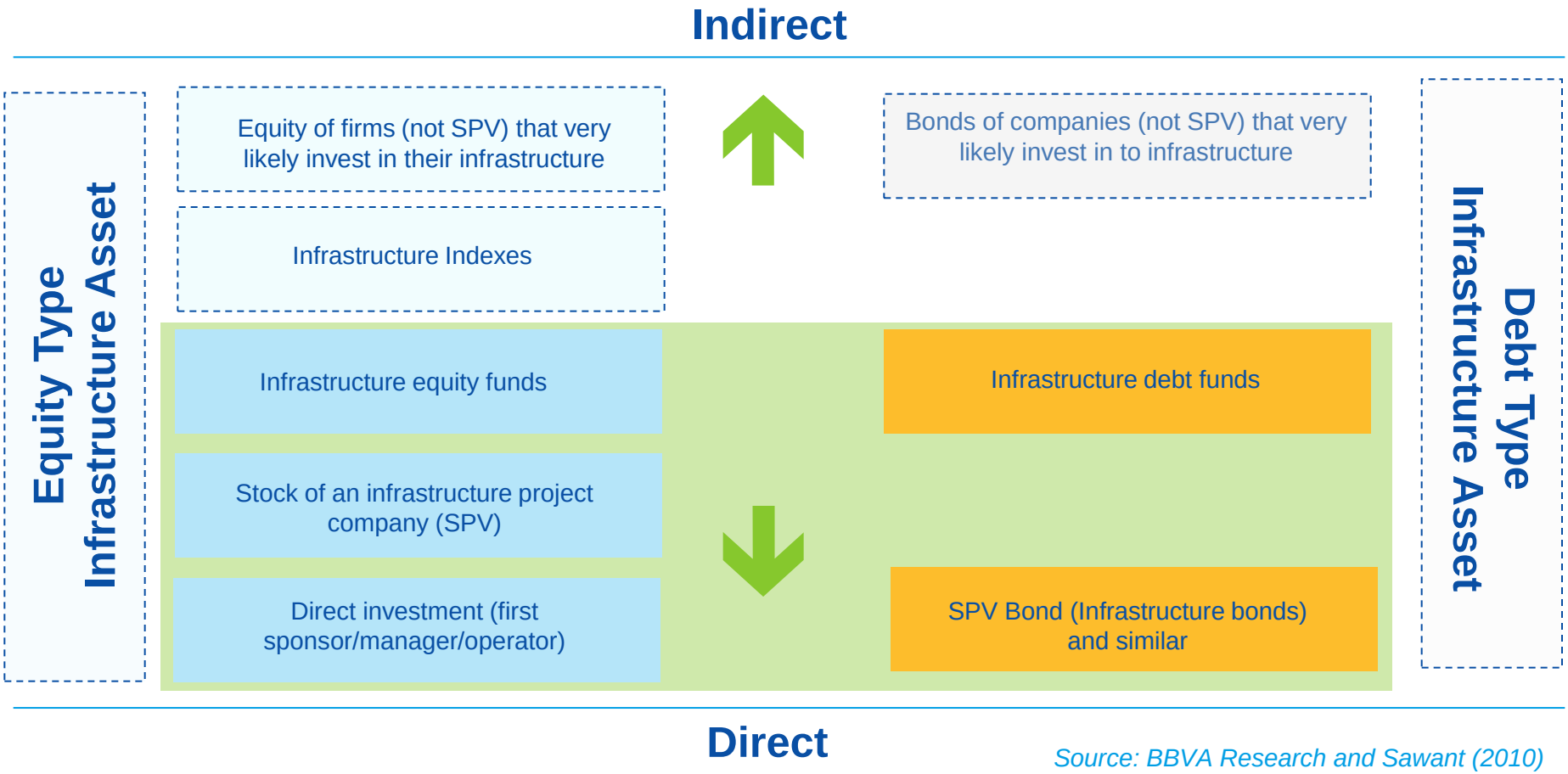
The economy: an economic policy focus. Also a global concern after financial crisis

Infrastructures: a key element for growth and likely key for pensions. It could involves higher/lower risks…

Current trends increasing global interest of pension funds and infrastructure investments

- Financial crisis, public deficits and risks imposed on public pension funds and the consequently increasing importance of private pension fund and its performance.
- Demographic and financial risks (very low return scenario).
- The need for growth and employment from an economic policy perspective.
- Infrastructure gap, specially in emerging economies. Only in LatAm, it is estimated infrastructure needs of US$ 170 billions per year (or 260 billions per year in the next 20 years if we want to match the level in South East Asia). LatAm's pension funds manage around US$ 1 trillion.
- Improve efficient frontiers of portfolios.
- Strengthening ties between pension companies and civil society, specially in the case of some Latin American mandatory private pension funds

Approaches to infrastructure investments



Source: BBVA Research and Sawant (2010)

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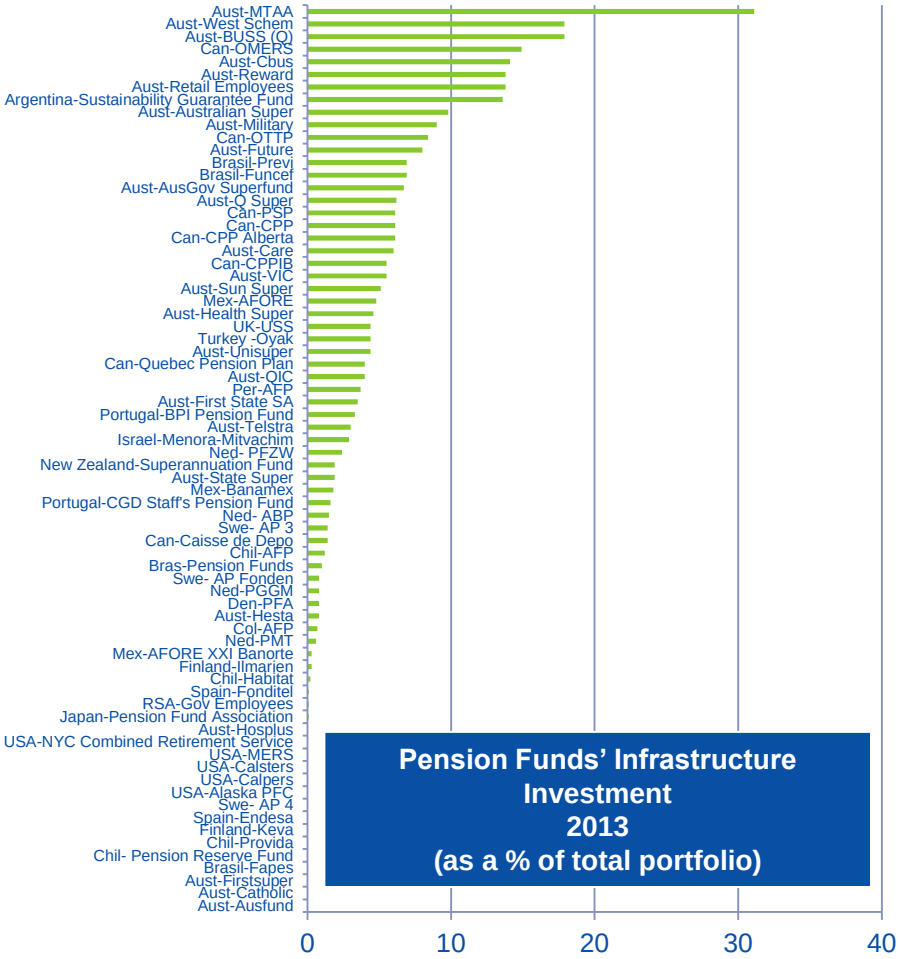
How much are PFs investing in direct infrastructure?



- Sample of 72 pension funds for 21 countries (data 2010 -2013)
- Investing in infrastructure: from 0% to 31% of total PF's Portfolio:
  - Average sample: 4,3% of portfolio
  - **Average of those investing: 5,4% of portfolio**
- Australian and Canadian pesion funds are those investing more in infrastructure:
  - Australian PF average: 7,5% of portfolio
  - **Australian PF currently investing: 8,6% of portfolio**
  - Canadian PF average-sample: 6,6% of portfolio
  - **Canadian PF currently investing: 6,6%**

Source: Inderst (2014), OECD (2014), Tuesta (2013), OECD (2012), Weber and Alfen (2010), Torrance (2008), Future Fund Board (2011), Infrastructure Partnerships Australia (2010), Mcquire (2010),

The Australian approach to infrastructure investment

Key factors contributing to Australia's infrastructure investment and pensions

- Triggered by large-scale infrastructure privatizations in early 90s and the introduction of a compulsory occupational pension system in 1992, good economic/financial performance, demographics, trustee system (transparency).
- Infrastructure continue to a top issue in the political agenda to modernize its infrastructure. Infrastructure Finance Project Group: Working on clearer projects pipeline.
- DC scheme. Despite being a young pension DC system, Australia has 5 pension funds in the Top 100 (US$500 bill.).
- A very open and flexible financial regime.

Some key elements of the Australian Model

- In the 90s, infrastructure investment outsourced to external fund managers and at the same time development expertise in packaging infrastructures assets listed vehicles.
- Since the early 2000s they took the route to invest in unlisted open-ended infrastructure funds.
- It is sustained that this strategy helped pension funds to save fees with respect to the previous schemes and other private equity-type strategies (Europe, USA).
- Key: government provides predictability with infrastructure planning and good institutional framework. Development of expertise of pension funds and high level of governance.

The Canadian approach to infrastructure investment

Key factors contributing to Canada's infrastructure investment and pensions

- Canada infrastructure is mainly built and maintained with public money so there was not an internal trigger effect from domestic infrastructures.
- The main driver appears to be pension funds individual initiatives to invest in infrastructure as a diversifying strategy beyond the traditional asset class.
- A very mature DB pension plan. Facing some solvency problems as many DB in the world. In spite of this, regulators allow PFs investing in infrastructure for their liability-driven investing to cover long-term liabilities.
- Some pension plans were early investors in infrastructures in the 90s thanks its open-flexible financial regime.

Some key elements of the Canadian Model

- Direct investments from the beginning, gaining in lower fees, diminishing agency issues with fund managers, taking direct control over assets
- Key:
  - (i) strong governance model based on independent and professional boards;
  - (ii) strong and sophisticated internal team (rarely outsource this function);
  - (iii) large-scale projects
- Pension Funds invest 80% in infrastructure allocated outside Canada (Inderst, 2014)

Some lessons and some caveats from both models

- Different triggers: Big Bang privatizations and compulsory DC in Australia. Mature DB and PF eagerness to invest in this assets. Substantial infrastructure investments are possible in different pension systems and different motivations
- Listed or unlisted and/or direct management of the projects
- Domestic infrastructure, international infrastructure
- Infrastructure scale seems to be important for pension funds
- **Institutional framework is clearly key: rule of law, government commitment to reduce uncertainty.**
- **Develop expertise is also relevant.** Build experience
- Risks are always there, inclusive in this high developed economies with their pension fund industries. Some Canadian plans admit that their own estimate of time and other inputs were too optimistic in the outset (Inderst, 2014)
- Performance data are still surprising poor, although some studies report relatively high risk-adjusted returns, low correlations to other asset classes and relatively good downward resilience. But the problem many times is that the sample for analysis is small and the valuation of unlisted infrastructure is based on appraisal which tends to underestimate volatility and correlations with listed instruments and overestimate their diversification potential

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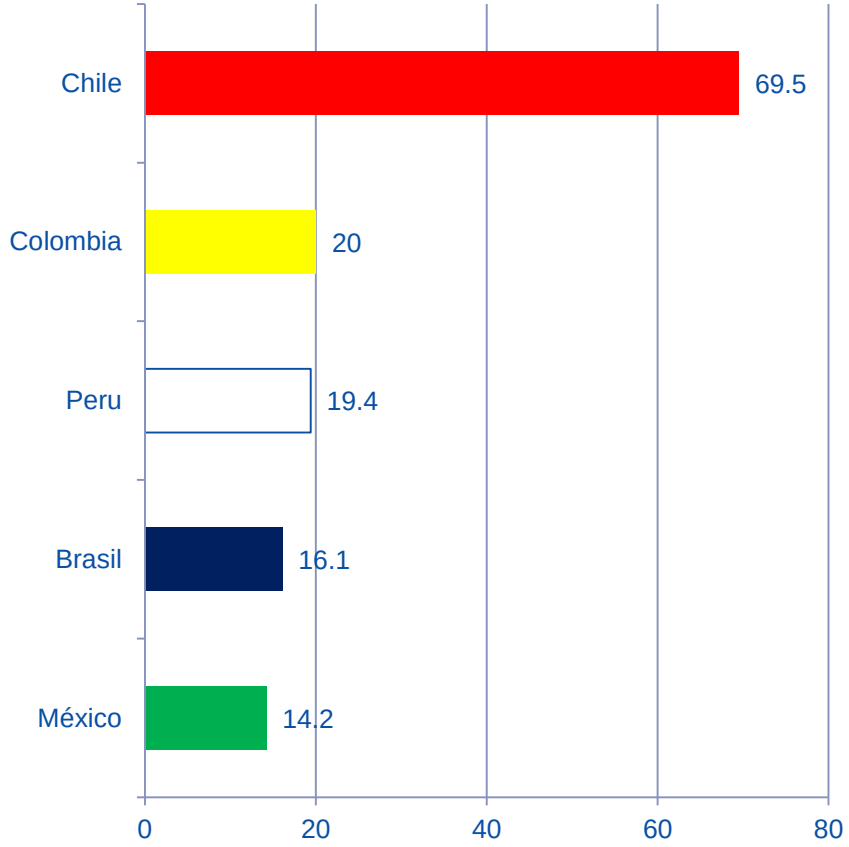
Latin American PF and infrastructure assets

LatAm – Total AUM

As a Percentage of GDP

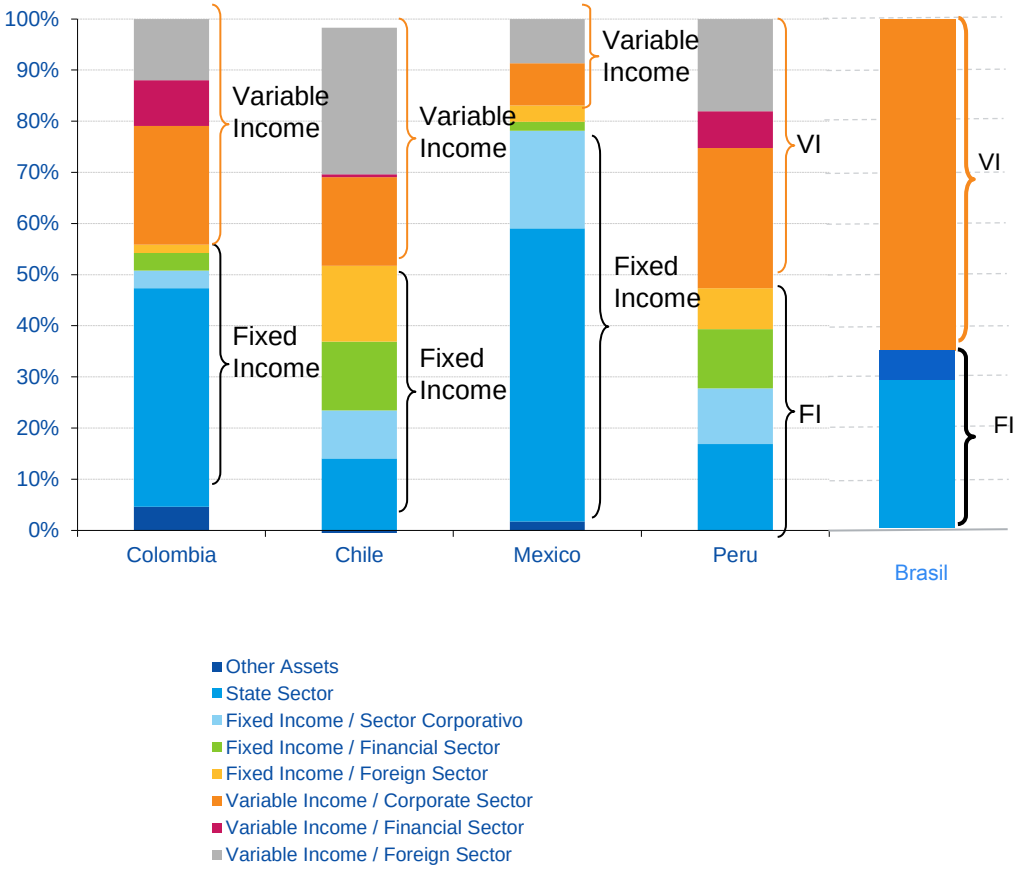
Source: BBVA Research



LatAm - Asset allocation

Percentage

Source: BBVA Research



Latin American PF and infrastructure assets

LatAm: Pension Fund Investment in Infrastructure Allocation – 2014 Estimates

Source: BBVA Research

	TOTAL AUM		Broad Concept PF Infrastructure Investing			Direct PF Infrastructure Investing		
	US$ Billion	% GDP	US$ Billion	% GDP	% Portfolio	US$ Billion	% GDP	% Portfolio
Brazil	480	16,1%	97,0	3,0%	25,0%	4,8	0,1%	2,0%
Colombia	96	20,0%	14,0	3,7%	19,1%	0,9	0,2%	0,7%
Chile	165	69,5%	14,4	4,5%	10,0%	2,3	0,6%	1,1%
Mexico	159	14,2%	16,3	1,4%	10,3%	7,6	0,7%	4,8%
Peru	39	19,4%	4,0	2,0%	10,1%	0,9	0,4%	2,2%
LatAm	**940**	**22,3%**	**146,7**	**3,3%**	**17,4%**	**16,5**	**0,7%**	**2,6%**

Latin American PF and infrastructure assets

Some financial instrument used by PFs to invest directly in infrastructure

Source: BBVA Research (2015)

Country	Late 1990s	2000s
Chile	Infrastructures bonds: 1998. Investment grade bonds. Up to 24 y. Minimum government revenue guarantee. Political and regulatory risk insured by *monoliners* and the IADB	- Quotes in Infrastructure funds, - Listed bonds - No specific quantitative limits. - Recently there were some discussion about pension companies to invest in unlisted assets. But there is not feasible in current conditions
Colombia	**None**	**Infrastructure bonds- 4G projects**: Since 2012 - O&M-.Minimum 10y. - Minimum government guarantee - Pension companies invest through Private Capital Fund - There are limits depending on the risk profile of the portfolio. Maximum 7%.
Mexico	**None**	**CKDs**: 2008. Trust structured instrument to finance one or more projects. Technical committees to control de project. Participation of experienced operator (Real Estate, PE, Infrastructure) **FIBRAS**: Specialized instrument for acquisitions , construction, infrastructure (similar to REITs) **International investment in infrastructure. REITS** - There are quantitative limits, depending on the risk profile.
Peru	**None**	**CRPI (*Certificados de Avances de Obra*)** - 2009. IIRSA Highways. Debt instrument (15y) issued by investors. -High government guarantee but strict mechanisms of supervisions according to Work Progress Certificate **- Quote in Infrastructure Funds** - No specific quantitative limits. - Recently the Regulator proposed minimum requirements for structured financial instruments

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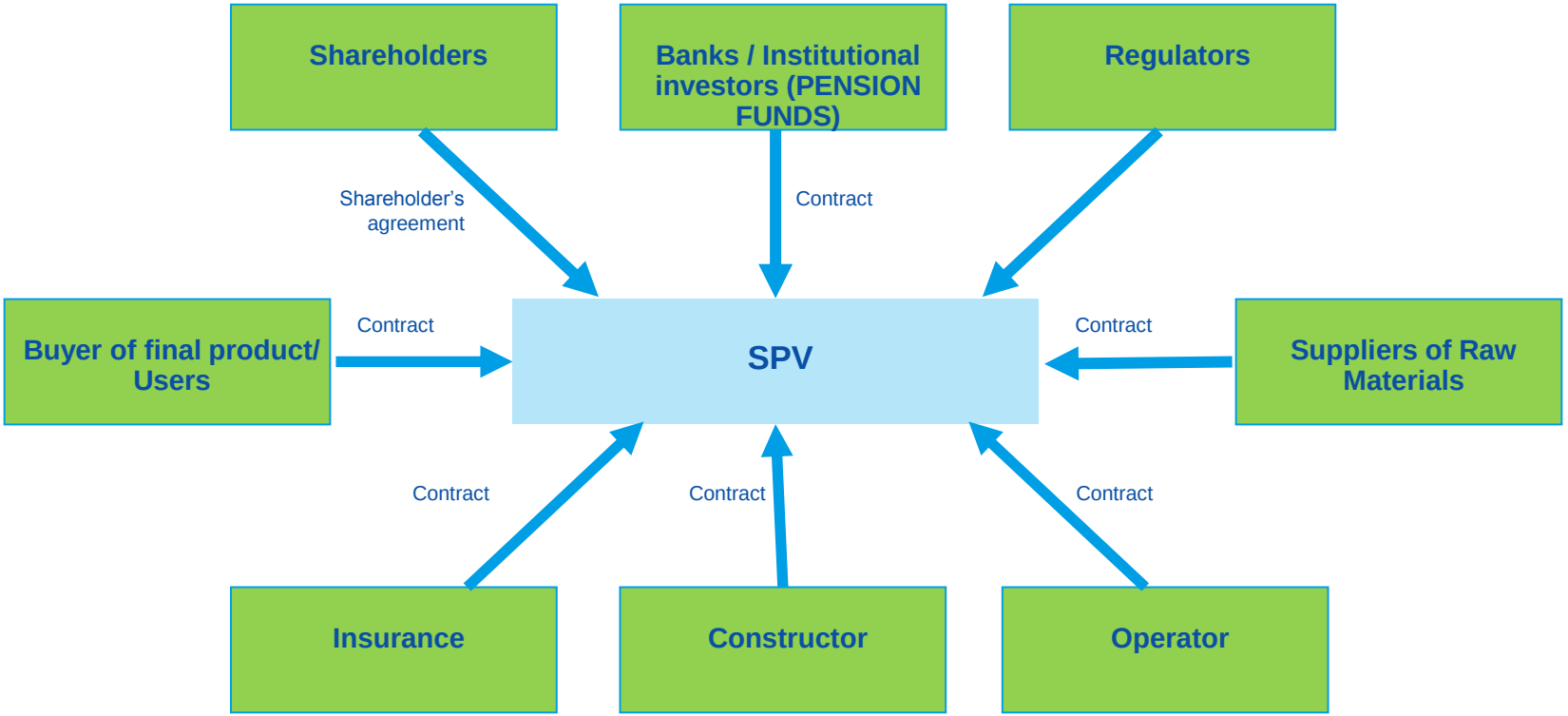
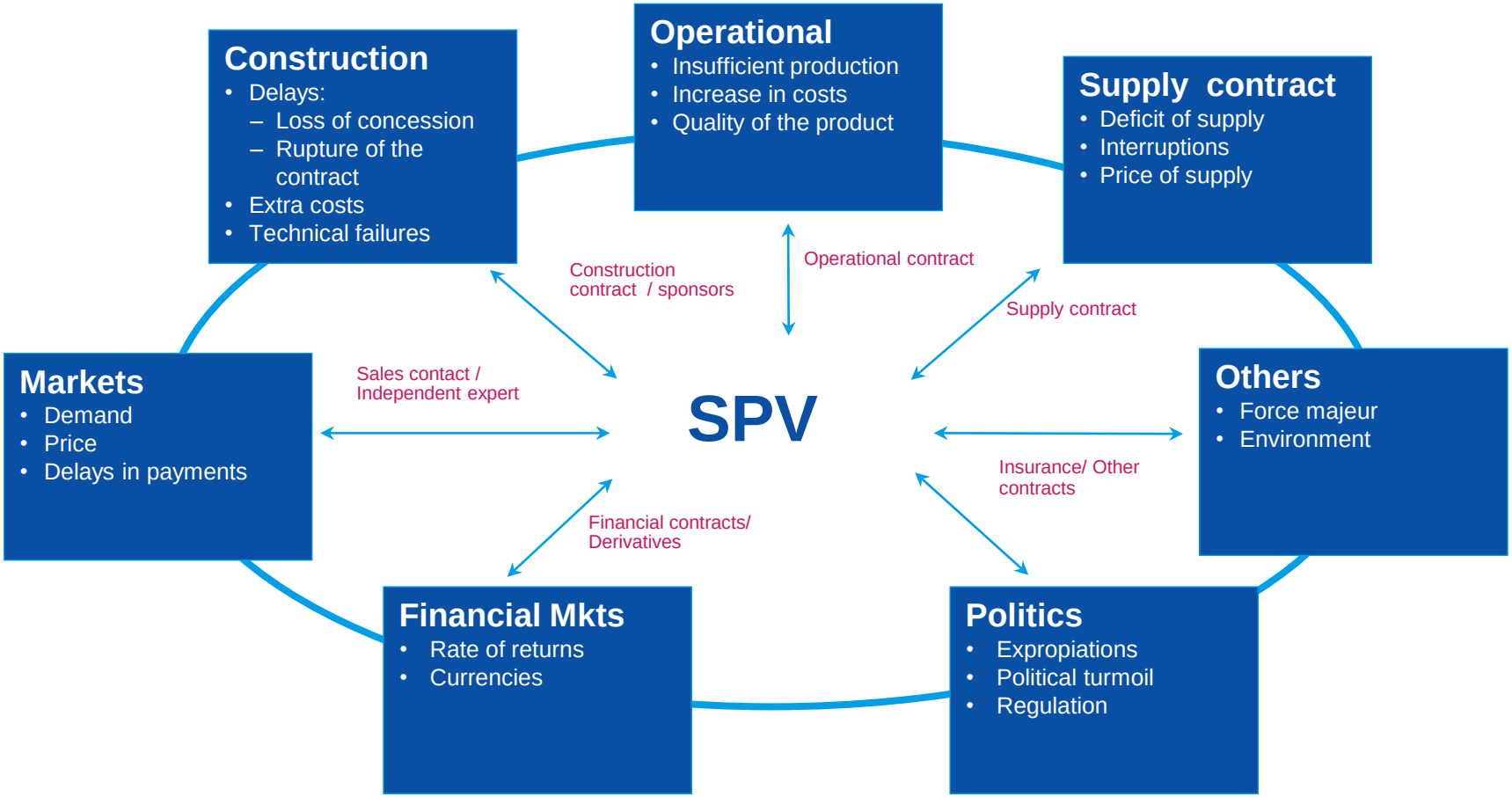
Invest on infrastructures: many factors to take into account



Source: BBVA Research

More to take into account: risks and coverage



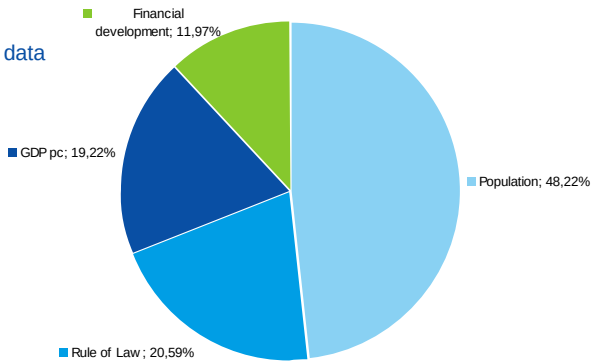
Source: BBVA Research

The importance of the institutional framework

Determinants of infrastructure investment (PPP)- Panel Data/Tobin effects

As a % of GDP

Source: BBVA Research (2012) with IMF and World Bank data



Model-Output

Source: BBVA Research (2012) with IMF and World Bank data

TotalInvestmentCommitments	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
z2StocksTradedTotalValueof	**440,3382**	**134,3063**	**3,28**	**0,001**	**177,1027**	**703,5736**
MoneyandQuasiMoneyM2as	5,718168	6,957225	0,82	0,411	-7,917743	19,35408
OfficialDevelopmentAssistance	0,2432372	0,1269655	1,92	0,055	-0,0056106	0,492085
ReservesImportsofGoodsandSe	5,291242	47,08033	0,11	0,911	-86,9845	97,56698
Totaldebtserviceofexports	2,419444	10,24259	0,24	0,813	-17,65566	22,49454
Generalgovernmentnetlendingb	-24,1156	22,78077	-1,06	0,29	-68,7651	20,5339
z2logPopulation	**1773,164**	**258,1173**	**6,87**	**0**	**1267,263**	**2279,064**
z2GDPperCapita2000US	**706,7458**	**200,3026**	**3,53**	**0**	**314,16**	**1099,332**
RL_EST	**757,1392**	**354,4137**	**2,14**	**0,033**	**62,5011**	**1451,777**
_cons	65,52024	496,6049	0,13	0,895	-907,8074	1038,848

Future trends in infrastructure investing

- An scenario of diminishing interest rates as a consequence of global monetary policies, financial conditions, new regulatory developments (Basel III, Solvency II, others). This makes necessary for PF to look for alternatives that improve portfolio returns.

- Longevity risk will affect future pensions. Likely need to count on more alternative investing.

- LatAm has an important infrastructure gap that governments cannot finance alone. US$ 1 trillion dollars in AUM (and more in the future) could be very tempting for politicians (something for being alert).

- But, LatAm is in the beginning of its learning curve. Rule of Law, institutional factors and government commitment to reduce uncertainty are key.

- How governments will facilitate the overall regulatory and procedural framework to have good projects?

- Overall, project infrastructure investing is a good alternative for increasing pension fund's financial exposure; however, this needs to go hand in hand with its trustee role, the commitment to provide adequate pensions, and a well designed long term financial strategy.

Thank you

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