INTERNATIONAL
FEDERATION OF
PENSION FUND
ADMINISTRATORS

OPPORTUNITIES AND CHALLENGES IN THE INVESTMENT OF PENSION FUNDS AND VOLUNTARY PENSION SAVINGS FUNDS

Presentations from the International Seminar "Opportunities and Challenges in the Investment of Pension Funds and Voluntary Pension Savings Funds", organised by FIAP on 19th and 20th May 2016 in Panama.

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PRESENTATION: OPENING SPEECHES

A very good morning to you together with my compliments to your Excellencies, Ministers and Deputy Ministers of State; to the Honourable Mr. Guillermo Arthur, Chairman of FIAP, to the Honourable Mr. Juan Pastor, General Manager of Progreso and Chairman of the Seminar's organizing committee, to the Honourable Mr. Felipe Larraín, a well-known and reputable Doctor in Economics from Harvard University, former Chilean Minister of Finance and Director of the Latin American Centre for Economic and Social Policies, to all national authorities and speakers, to all special guests, to all media representatives and to all ladies and gentlemen in attendance:

I am very pleased to have the opportunity of addressing this event which gathers together more than 140 representatives of companies; all which are engaged in the administration of pension funds and other relevant social security funds in sundry countries worldwide. First and foremost, I must thank the organizers for choosing Panama as the host country for this XIV FIAP International Seminar. Allow me to extend my warmest welcome to our country and I look forward to your stay here will be both useful and enjoyable. While on this, I also hope you can note some of the attractions which Panama has to offer to its foreign visitors.

I am fully aware that the topics chosen for discussion at this event, combined with the quality of the exhibitors, will warrant the success it deserves. Likewise, I hope the conclusions to be discussed and generated from within the selected topics will translate into profitable results for all participants concerned. In saying so, I am chiefly referring to the myriad of savers and workers whose social security funds and associated unemployment benefits are being entrusted onto the relevant companies; all duly committed to a sound management of such funds.

The pension fund market in Panama started to operate in 1993 - when Law # 10 was approved - and which introduced incentives to the setting up of funds aimed at catering for the needs of pensioners and set in place other relevant benefits. In the past 20 years, these funds and their management have been strengthened and now entail over US$ 1,100 million worth of social security and pension funds, plus severance pay benefits and the contributions of the overall System of Savings and Capital Earnings of Public Sector Servants (locally known for its Spanish acronym: SIACAP); all which are managed by two companies subject to the regular and steady supervision of the Stocks Superintendence.

This is a safe market which has grown thanks to the confidence of its account contributors. The exchange of experiences and proposals that you will witness during these two days will most likely entail issues related to alternative investments, the impact of the demographic trend of our countries on the capital markets and pension funds alike plus the stances likely to be analysed and adopted. Needless to say, all such suggestions must be aimed at ensuring all the pension funds are suitably invested, thus preventing them from vanishing into thin air.

The government of President Juan Carlos Varela is committed to both transparency and accountability virtues, chiefly by strengthening the rule of law and legal certainty, respect for human rights and environmental protection alike. It is here where dialogue becomes the main tool for building a sound degree of consensus which, in turn, should guarantee social peace and democratic governance. These are the conditions the private sector needs in order to continue generating economic growth and well-paid jobs both within our country and throughout the overall region.

We have a strong and sound economy showing a steady and stable growth which is six times the average regional growth and which has placed us as leaders in Latin America. This growth is generating a much enhanced capital confidence, which is reflected in the foreign investment influx figure, which enjoyed a 17% growth over the previous year. We are definitely committed to this vision and we have devoted strenuous efforts onto restoring Panama's international image. All this to ensure the private sector and its investments continue to increase in our country so we can meet and exceed our projections of economic growth; at a time most major economies worldwide are confronting troublesome times.

The protection of our international financial centre from organised crime practices is a very important goal for Panama. For this reason, we undertook a series of actions aimed at meeting the highest prevention standards vis-à-vis money laundering and terrorist financing practices. Our drive has recently allowed Panama - in February 2016 - to be no longer listed in the grey records compiled by the International Financial Action Task Force (locally known by its Spanish acronym: FATF). Such fulfilled objective entails also an engagement by which we are currently working nowadays in close consultation with the Organisation for Economic Co-operation and Development (OECD).

This is a very important year for Panama as a logistical, financial and air connectivity centre serving the region and the world alike. Indeed, this coming 26 June we will witness a historic event, when we will be inaugurating the expansion of the Panama Canal. This event will become a significant milestone between "what it was" and "what it will become" when considering the way our overall region does economically interacts with other regions worldwide. Due to this key feature, your presence here is important because you will have the opportunity to see how our country and its people are strenuously contributing day after day to the national development and favourably boosting the overall international maritime trade.

I reiterate our warmest welcome to Panama and wish you a pleasant stay and a productive seminar.

Without further ado, I hereby declare officially opened the XIV FIAP International Seminar.

Thank you very much.

Álvaro Alemán
Presidential Minister of the Republic of Panama

PRESENTATION: OPENING SPEECHES

Dear Sr. Álvaro Alemán, Presidential Minister of the Republic of Panama and dear all Chairmen of the pension funds' associations in Panama, El Salvador, Honduras and Costa Rica:

Please allow my first words to be a heartfelt "Thank you" for all your efforts put into the setting up of this seminar, with such a splendid attendance and for the first class speakers you have invited to join this event; all which augurs a remarkable success in its impending deliberations.

I also wish to thank all the collaborators, sponsors and, particularly, all the exhibitors which have joined us on this occasion.

During this seminar, we wish to continue with the momentum we have gained with our partners in the recent past, and aimed at strongly regaining the central objective all AFP associations; that is to work towards an improvement of pensions payable to our workers. Doubtless this has been and will continue to be the key feature of our endeavours.

The foregoing does not mean we have neglected our goal in the past; in fact quite the opposite. A brief review of our previous studies, surveys and seminars shows we have been focused on accurately developing this key function.

However, if we see how the world and its associated turmoils have evolved, we think it has become more necessary than ever before to further disseminate and explain our goal. This assertion is very valid vis-à-vis the external factors that conspire and are likely to undermine our aim of obtaining good pension levels and standards.

How could not the recent worldwide demographic changes conspire against a good pension?

Between the 60s to the present day, the figures issued by the Organization for Economic Co-operation and Development (OECD) are showing most men and women approaching their retirement age as increasing their life expectancy by 34% and 39 % respectively.

Since the pension systems based on individual capitalization began, the life expectancies have increased. In the case of Chile, from the eighties to the present day, life expectancy for women at retirement age has increased by 32% (from 22 to 29 years), and by 46% for men (from 13 to 19 years altogether). All this has been addressed with no parametric changes whatsoever, i.e. without introducing adjustments in the contribution rate or the retirement age; which is why we have had to fund retirement periods which are much longer that hitherto.

How could not the recent downward changes in the interest rates conspire against a good pension? In the eighties, interest rates were on the region of 5.5%; during the next decade they dropped to 3.5%; whereas nowadays they do not exceed 0.2%. All such changes have had an impact both during the funds' accumulation stage and on the decreasing trend of our savings; whenever such are bound to turn into pensions payable. We must remember that each decreasing percentage point on the interest rate entails a pension reduction of 20%.

Profitability, which in Latin America has historically been high and in some cases has peaked at 10%, will not be repeated in future. Thus this key factor is also compelling us to think on how to tackle this inherent challenge.

Certainly, we cannot be held responsible for this state of affairs; it is simply beyond our reach. Likewise, sailors are not responsible for the storms or changes experienced in the wind direction, they must keep sailing and take their boat onto a safe harbour. That said, we cannot remain indifferent to these turbulences that are threatening the prospects of securing a good pension. Therefore, when confronted by them, we are left with two alternatives: either remain indifferent or look for the best ways and means of redoubling our efforts; all this while also identifying the most appropriate mechanisms for counteracting the effects brought to bear by such turbulences.

This is what we have been doing and what we intend to do while attending this seminar. And how are we going to do it? Firstly, by stressing yet again the need for automatic indexation mechanisms to be applied on sundry and suitable parameters. These indexation mechanisms are all aimed at sidestepping the political difficulties which lay ahead, and which are preventing us from adjusting these parameters to the worldwide scope of such perceivable demographic changes.

We will also continue to look into the surveys focused on alternative assets, which we have been doing for quite some time. You may recall the seminar held last year in Montevideo, Uruguay. On that occasion we perused the surveys on alternative assets, mainly because there is no question about it: these are instruments which offer higher returns vis-a-vis other more traditional assets; and are operating in markets that are less regulated and lacking more liquidity status. Thus long-term investors are usually offered a liquidity premium. Alternative assets entail a greater diversification of our investments, provide a better visibility status and cater for a better impact on the real economy. These are instruments that are counter-cyclical and, therefore, do contribute to our portfolios when the overall economy is performing differently.

Another tool we could use in tackling the turbulences I mentioned earlier is the voluntary pension savings. It is clear that the source of pensions’ funding cannot rely any longer only on the mandatory pension savings scheme. The voluntary pension savings approach is applied everywhere in the developed world as a source of pensions’ funding, both individually and collectively. Experience shows that, if we are to ensure this approach becomes widespread, it is crucial to develop the collective voluntary pensions’ savings.

For a number of reasons, the magnitude of voluntary pensions' savings in Latin America are unsatisfactory. There is no doubt the income levels explain part of this phenomenon; but also the lack of commitment and suitable incentive regulations bear some weight on the outcome. We have learnt about successful experiences applied in other countries in terms of automatic enrolment, matching and other approaches. However, we still have not managed to incorporate such within our legislation with a view to improving voluntary pension savings.

Furthermore, we will arrange for an in-depth study on financial integration as a mechanism for improving profitability and, ultimately, the pensions payable to our workers. Some of our countries have looked into this and have made some headway towards developing their own capital markets, but based on a very local perspective. Further to the point, they lack the relevant market size and the number of participants; nor they have the sufficient financial depth and/or enough assets under management - which could have allowed them to run a sound/efficient market of their own.

Therefore, these countries are not competitive in terms of products, liquidity or costs. If we want a capital market in place which is closer to and more attractive to entrepreneurs and investors alike, as well as suitably adapted to the needs of the region, with economies of scale and attractive costs; then we must move towards a regional integration whereby our pension funds must play an active involvement in it.

The foregoing is the reason why we have secure a significant move forward in removing the obstacles prevailing within the Pacific Alliance, so as to its member countries can invest pension funds within this economic block. These hindrances are perfectly removable and, to secure our move forward, we are trying to identify them in full.

It is true that whenever it comes to investments' diversification, the key factor is that this is as broadly-based as possible and not focused on one region only. However, when removing these obstacles, we will allow investment to flow into a region that has many advantages, where well-known companies are based; and where the regulatory and institutional framework governing them is already in place.

Furthermore, when it comes to corporate governance, we will look into everything related to good practices; since these are essential for the proper functioning of companies and markets alike. Companies that adopt these practices usually manage to have reduced costs and it becomes easier to them to obtain better financing sources; thus allowing them to gain value in the marketplace. The pension funds contribution is to give more market value to these companies; chiefly by allowing them to have better financial sources; and have also significantly contributed to improving good practices in corporate governance amid a myriad of companies. This aim is achieved by means of regulatory issues such as the use of privileged information, control awards, related party transactions and conflicts of interest.

A survey undertaken by the Catholic University of Chile points out the key fact, whereby any company in which the AFP entities have invested their funds is assumed to have better corporate governance; with its market value perception being 14% higher than another company with no AFP investments.

We will also consider the socially responsible investments, an approach which prevents non-financial risks likely to affect the profitability of the pension funds. As pension fund managers, we are required to observe/safeguard the funds' profitability and security as the sole investment criterion. It follows we must bear in mind, at all times, these criteria so as to avoid being caught out in future and thus avoid a negative effect on our investments' profitability.

During this seminar we will discuss the issue of social security education, mainly because all our work would be fruitless if it is not supplemented by a deep-rooted conviction adopted by our will-be pensioners. In previous seminars we noticed how difficult is to lecture/educate on social security issues when those we are aiming to educate show no interest. Therefore, it is twice more difficult to convince our will-be pensioners of the need for much enhanced savings' security culture and to be clearly and fully aware on how to finance their old age period.

Although we have a common diagnosis of the causes that hinder achieving a better pension, we also have a common diagnosis on possible solutions aimed at overcoming this state of affairs. Nowadays the initiatives for addressing these issues are, more often than not, completely contradictory and their net effects are a widespread worsening of the overall scenario.

I cannot avoid mentioning the recent cases of Peru and El Salvador. In Peru – and against a background of a recent and fiercely contested election campaign – a Law was enacted under which it is allowed, inter alia, the withdrawal (in a single lump sum) of up to 95.5% of the social security savings deposited by all workers throughout their working lifetime. It makes no sense at all to have saved during their full working life if, at the moment they are about to begin enjoying their pensioners' status - and the corresponding protection during their old age period - they are allowed to withdraw almost all their funds; thus leaving them totally unprotected from then onwards.

In the case of El Salvador, there is a draft bill advocating that all workers' funds whose monthly income is lower than two minimum wages – that is over 70% of the total workforce - be transferred onto the public pension system. In this same context, and for a long time already, all Salvadoran workers were compelled to buy government bonds whose return on investment was lower than inflation. Should the foregoing not be enough, the Salvadorian Government now intends to gain access to over US$ 8,000 million worth of funds which all workers have managed to have deposited in their individual accounts.

To sum up, there is no doubt most social security and pension systems are a very tempting target for populism drives aimed at using them as a test ground for the formulation of easy-win cheering at the expense of frustration and helplessness. A clear illustration of this is Peru. Where do you think the Peruvian MPs which approved this Law will be, at a time when the workers demand protection after spending their money saved in their accounts? A safe bet is to assume they would have left their MP seats for good!

We once said it is very easy to create illusions and/or expectations whose end product will be sundry frustrations; this is so simply because such frustrations are harvested two or three generations later. We want to move forward on the basis of another approach, that is with responsibility while aiming to show our affiliates not only the benefits but also their cost; without resorting to deceptions or delusions. The widespread habit of showing the benefit and concealing its cost is bound to generate applause, but leads us directly onto disaster. Warranting all rights but not displaying their costs is neither responsible nor ethical.

In his book "Nicomachean Ethics", Aristotle argues that ethics does not merely back a set of principles, but also advocates a discerning stance on how to achieve them. Thus, we intend to persevere on this path.

Thank you very much.

Guillermo Arthur
Chairman of FIAP

INTERNATIONAL FEDERATION OF PENSION FUND ADMINISTRATORS (FIAP)

FIAP was created in May, 1996. The legal status of this international institution was granted on 29th June 2004 in the city of Montevideo, by Supreme Decree Nro 801, issued by Uruguayan Ministery of Education and Culture. It currently has eighteen "full members" in fifteen countries and fourteen "collaborating members". The "full members" are associations, federations, chambers or other institutions that represent the interests of the pension industry in the respective country. Thus, the following countries are represented in FIAP: Bolivia, Colombia, Costa Rica, Curaçao, Chile, Dominican Republic, El Salvador, Honduras, Spain, Kazakhstan, Mexico, Panama, Peru, Ukraine and Uruguay.

The workers number of the FIAP member associations and institutes are more than 113 million as of December 2015, and accumulate more than USD 577 thousand million in their respective individual accounts.

The "collaborating members" are mainly companies that provide services and products to the pension fund management industry and currently include: ALFI (Association of the Luxembourg Fund Industry); Amundi Asset Management; BNY Mellon; Brown Brothers Harriman & Co; CEM Benchmarking Inc.; Citywire Americas; Compass Group Global Advisors; ICG Asset Management; M&G Investments; Morgan Stanley; Pictet & Cie (Europe) S.A., Spanish branch; S&P Dow Jones Indices; State Street Global Advisors; and Vanguard.

The main objectives of FIAP are:

- To contribute to the success of the new pension systems based on individual funding and private management.

- To promote reforms to pension systems that lead to the adoption of pension programs based on individual funding and private management.

In order to achieve these objectives FIAP has undertaken intense activities that include the holding of Seminars, Conferences, Workshops and Round Tables, specialized publications, the creation of a Web site, permanent contact with international organizations and authorities of the different countries, support of its partners in the promotion of improvements to the regulations of the respective countries, participation of its Chairman and the Steering Committee in propagating activities of the new individually funded systems, drawing up of documents to contest criticism faced by such systems and the preparation of Guidelines to assist in the better design of individually-funded systems regulation.

INTRODUCTORY LECTURE

LATIN AMERICA AND THE EMERGING COUNTRIES THROUGHOUT THE WORLD ECONOMIC STAGE[1]

FELIPE LARRAÍN[2]

1 *Text based on the inauguration presentation made by Mr. Larraín when attending the FIAP Seminar held on 19 May 2016 in Panama.*

2 *Nowadays Mr. Felipe Larraín is the Director of the Latin American Centre for Economic and Social Policies (Better known for its Spanish acronym: CLAPES UC) and Professor at the Chilean Catholic University. In 2014 he was appointed to the UN's Leadership Council for Sustainable Development and to the World Bank's Advisory Board for Doing Business. In 2015 he was distinguished as one of the top one hundred most influential world leaders by the Association to Advance Collegiate Schools of Business (AACSB). In period 2010 - 2014 he served as Minister of Finance of Chile and Vice President of the Republic during February 2014. He was granted recognition as the best Minister of Finance of the Americas and Latin America by reputable publications ranging from The Banker, America Economia, Emerging Markets and Latin Finance. In period 1997 - 2000 he was a Professor at the Robert F. Kennedy Chair of Latin American Studies at Harvard University. He is the author of 12 books and has written over 120 articles which have been published in books and magazines in Asia, America, Europe and Latin America. His book Macroeconomics in the Global Economy (written together with Jeffrey Sachs) was translated into 10 languages, including German, Chinese, Japanese and Russian.*

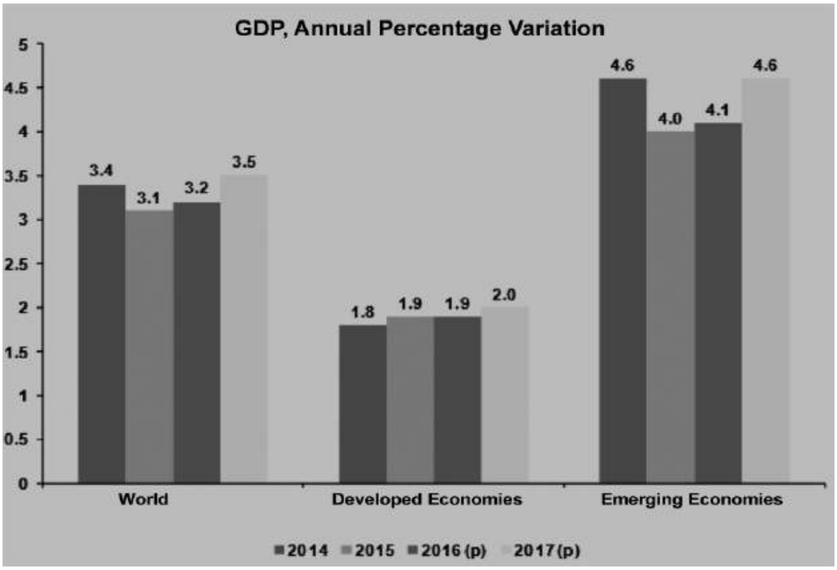
The aim of this paper is to analyse the evolution of the global economy; the performance of the emerging economies, particularly in Latin America, and will be focused on two Atlantic economies and two Pacific ones; all this while glancing also through the regional overall political scenario.

Global economic growth in 2016 and 2017

With an expansion over 3% (See Graph # 1), indeed, the global economy is not in critical condition by any means. In fact, it has registered a slight slowdown in period 2015 – 2016; with a tangible - albeit small - improvement amid the developed world and a slowdown experienced by most emerging economies. In short and from a global perspective, we can perceive a growth-reshuffle process.

GRAPH # 1

GLOBAL GROWTH IN 2016 AND 2017

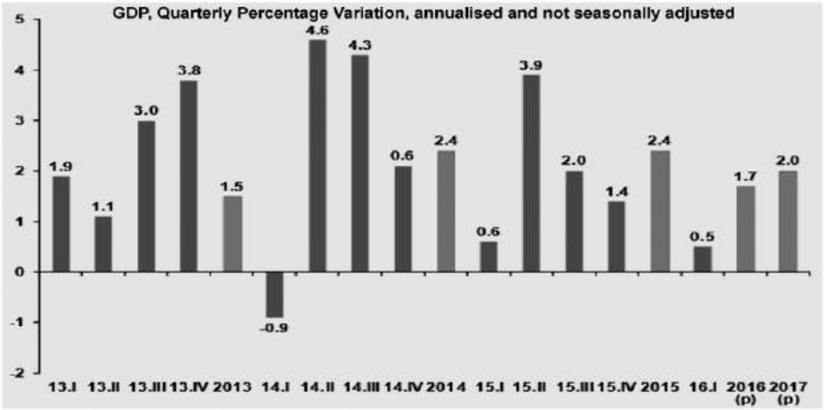


SOURCE: INTERNATIONAL MONETARY FUND (IMF), APRIL 2016.

In the United States, which accounts for 25% of global GDP, the economy is likely to grow this year by around 2% (See Graph # 2). Each year in the USA, the first quarter usually shows a poor economic performance which gets better and picks up during the rest of the year. Fortunately, the USA economy is recovering and creating jobs, although not as many we would have hoped for. Last April some 160,000 new jobs were created (See Graph # 3).

GRAPH # 2

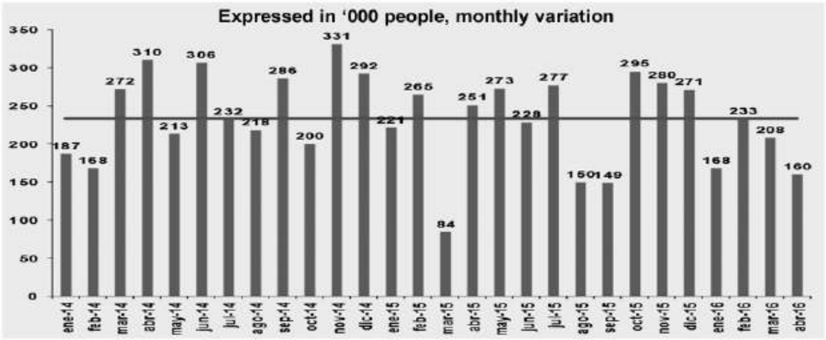
GROWTH IN THE USA



SOURCE: BUREAU OF ECONOMIC ANALYSIS.

GRAPH # 3

USA: JOB-CREATION SLOWS DOWN

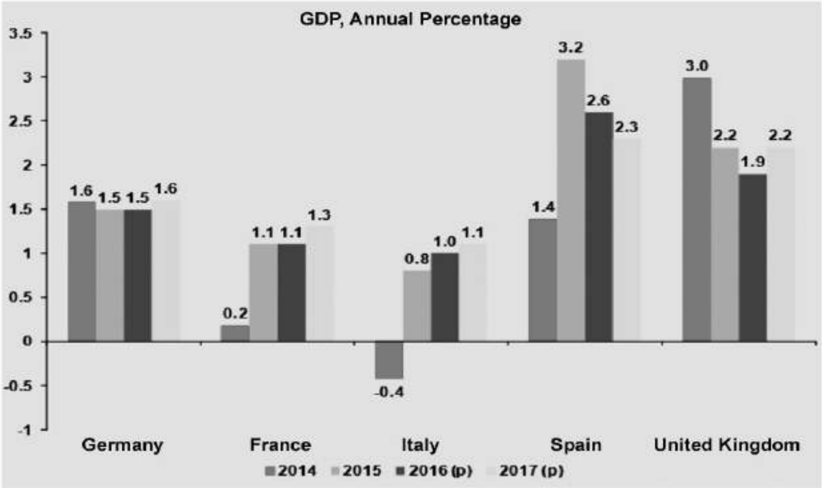


SOURCE: BUREAU OF LABOUR STATISTICS.

In Europe, different realities do prevail (See Graph # 4). Germany grows around 1.5% - a very flat rate - but with very little volatility. France has recovered somewhat and has grown by about 1%. It is remarkable and noteworthy what has happened there. The socialist government of President Hollande has just enacted a decree aimed at reforming the labour market, chiefly by reducing severance pay and increase total working hours. There is some unrest in the streets, but the President has decided to go forward by means of an administrative decree rather than opting for a Bill which has to be endorsed/approved in Congress. The President simply did not have enough votes within his own Party to try this latter option.

GRAPH # 4

GROWTH EXPERIENCED AMID THE MAIN EUROPEAN ECONOMIES



SOURCE: INTERNATIONAL MONETARY FUND (IMF), APRIL 2016.

As regards Italy, the recession is now over and some headway in the right direction has been secured. However, a serious indebtedness is haunting the financial system. To this effect, a warning light has been switched on due to the fact bad indebtedness is now in the region of 17% - 18% of the overall indebtedness figure. A very high rate indeed!

Spain and the UK are currently the fastest growing economies. In both cases though against a background of tremendous political uncertainty. In Spain there are new elections - scheduled for June - and it is still unclear if the forthcoming voting will/could overcome the political stalemate. Further to the point, there are no political parties or coalitions in Spain which could form a new government on realistic terms; they all lack a majority support from the electorate.

As regard the United Kingdom, it is important to mention three potential dangers lurking behind the horizon in Europe and which they would have to contend with. The first noteworthy one is the so-called Brexit. It seems very popular to ask the people whether or not they wish to remain in the European Union; albeit the key question is what happens if the answer is "No". As things stand, most surveys and opinion polls suggest it will a hotly contested event and nobody feels able to predict the outcome. It was not enough what Prime Minister Cameron said - on his return from the last meeting of the European Union - when he claimed to have secured a series of positive achievements for the UK. The true fact is that his own party are now inclined to play an election gamble by challenging Cameron's leadership and appear to have merely adopted a stance against staying within the EU block.

The *Brexit* referendum is heralding bad news, particularly for England, and for Europe and the world to a lesser extent. In addition to *Brexit* there is an underlying possibility of a *Grexit*. Indeed, the overall Greek economic situation has deteriorated, thus there is a distinct possibility of Greece ending up outside the European Union altogether. With Greece out we will not have a widespread debacle, but should be witness the United Kingdom and Greece leaving the EU, then we may face a much more complex scenario. Still on the Greece case, moving from the Euro to the Drachma will be far from easy!

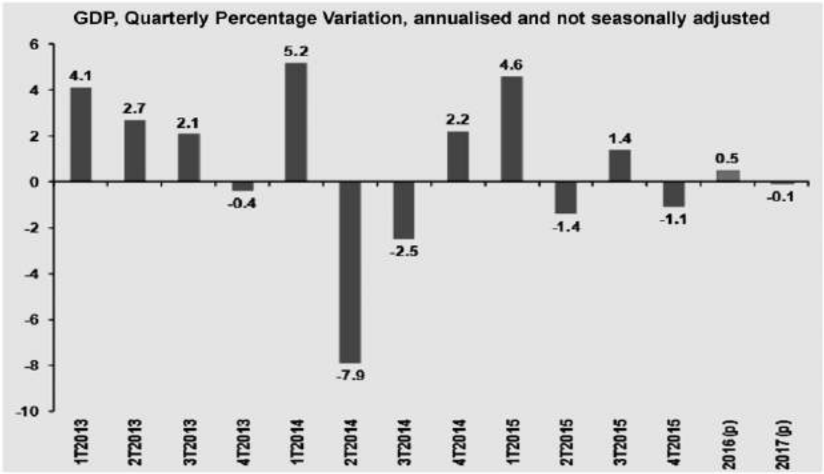
Furthermore, it becomes imperative to mention the immigration crisis. It is a very serious problem for Europe and has evolved and bound to become a very complex political situation. Several hundred thousand people from North Africa and the Middle East are anxious to enter Europe, for they wish to escape from widespread economic miseries, political persecution and/or the lack of personal safety in their own countries. This issue brought about, for example, the recent resignation of the Austrian Chancellor and is haunting also German Chancellor Mrs Angela Merkel. She has become politically exposed thanks to her stance on the issue. Alongside all this, we are now witnessing the surge of some far-right political parties, all which are dead against all forms of immigration.

Japan's economy is virtually stagnant, with a projected growth forecast of 0.5% in 2016 and a slight drop expected for 2017 (See Graph # 5). Against this background it becomes very difficult to manage an economy where the population is dwindling.

In addition to Japan, we notice there are several other countries throughout the world showing negative population growth rates.

GRAPH # 5

JAPAN: STILL SHOWING HER ECONOMIC WEAKNESS



SOURCE: BUREAU OF STATISTICS OF JAPAN AND THE IMF.

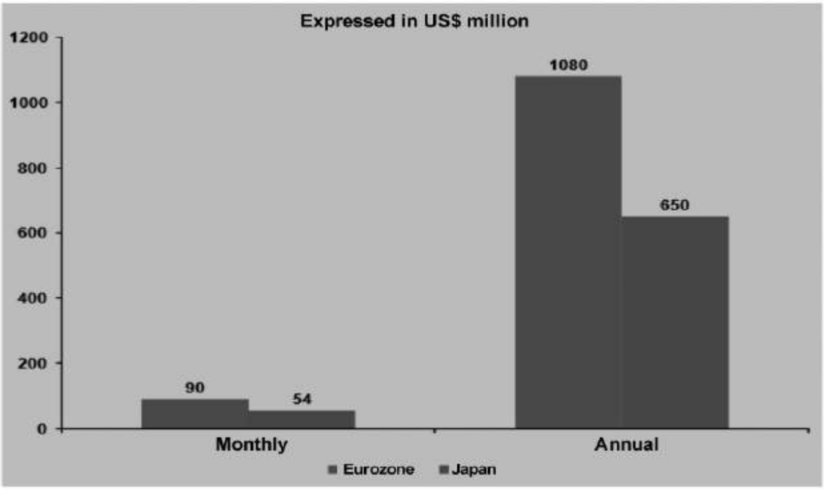
Another of the issues we will have to deal with is the end of the US ultra-expansionist monetary policy and the continuation of such policy in Europe and Japan.

Inflation amid developed economies

The Euro Zone has had a negative inflation of -0.2% in twelve months, whereas Japan and the United States registered rates of 0% and 0.9% respectively. The inflation risk is complicated but deflation can be worse. Countries with no inflation or negative rates also display large monetary incentives; in the region of US$ 90 billion worth per month in the Euro Zone with the Japanese equivalent monthly cash injection being US$ 54 billion (See Graph # 6). In year terms, the figures should be US$ 1.7 billion worth for Europe and Japan (With US$ 1.7 trillion being the relevant US measurement).

GRAPH # 6

MONETARY INCENTIVES IN THE EURO ZONE AND JAPAN

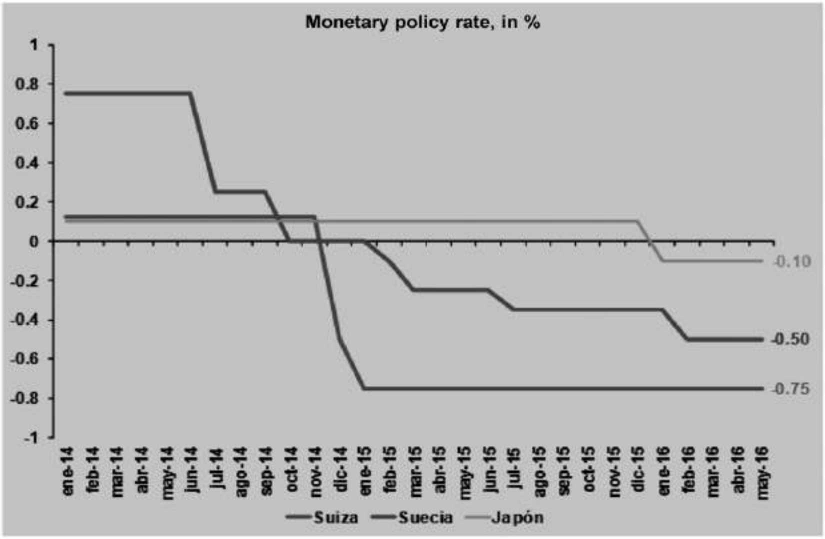


SOURCE: OWN COMPILATION BASED ON ANNOUNCEMENTS ISSUED BY SUNDRY CENTRAL BANK ENTITIES.

This huge increase in money supply has had an effect on interest rates, which is a problem for the worldwide industry which manages pension funds, thus turning it very different to handle returns in a context of reasonable interest rates. That said, it is very remarkable to notice we are in a world with negative interest rates and flirting with deflation.

GRAPH # 7

THE NEW CLUB OF NEGATIVE RATES



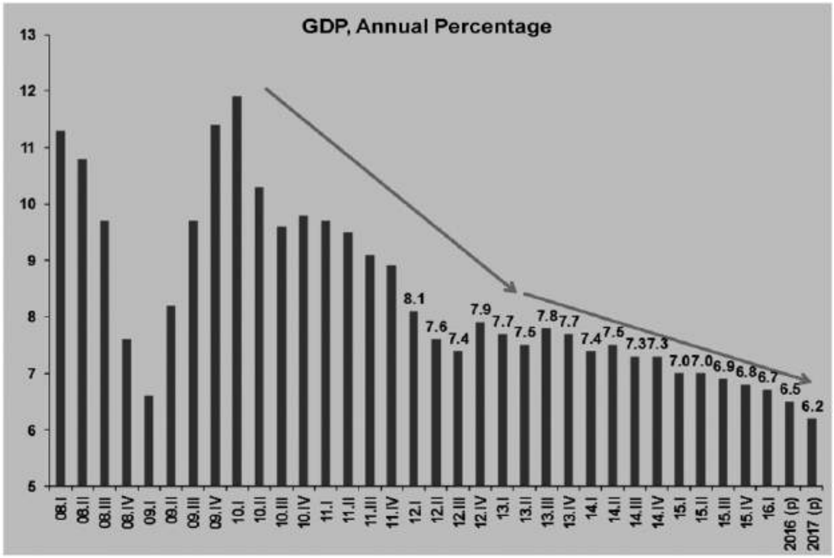
SOURCE: OWN COMPILATION BASED ON ANNOUNCEMENTS ISSUED BY SUNDRY CENTRAL BANK ENTITIES.

China and her influence on a whole host of commodities

The Chinese economy is growing in excess of 6%; and if it can continue to expand at such level it should not be a major problem. This so because, although she grew at an average of almost 10% for 35 years, nowadays the size of her economy is 24 times what it was in 1978, when economic reforms advocated by Deng Xiaoping were introduced. However, a potentially troublesome area warrants a closer look here; namely the fact there is a suspicion that China is growing by about 1 percentage point less than what the relevant statistics suggest. (See Graph # 8). The question mark stems from sundry related indicators such as power consumption.

GRAPH # 8

ECONOMIC SLOWDOWN IN CHINA



SOURCE: BUREAU OF STATISTICS OF CHINA AND THE IMF.

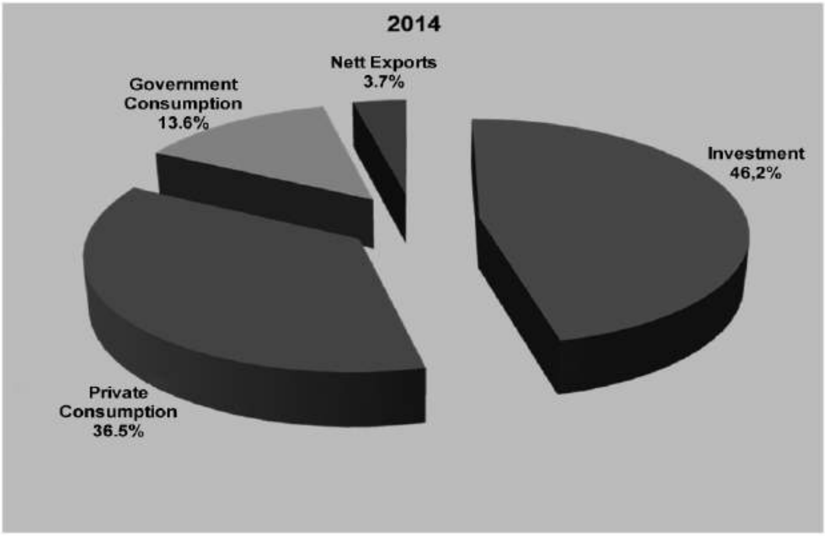
It looks odd also that a country, whose investment is almost 50% of GDP, shows her consumption being merely a 36% of total GDP (See Graph # 9). A more normal reading for an economy like China, should show consumption being in the region of 60% of GDP coupled with an investment rate closer to 30%.

The foregoing means that, along with a slowdown, China is undergoing a process of economic restructuring; that is moving from investment onto consumption. Such shift is a welcome change, because when the investment has a negative return, what lies behind are ghost towns, bridges leading to nowhere and roads where there is no traffic.

Further to the point, implementation of investments must go ahead whenever their rate of return is greater than the capital cost and such was not happening; so it is good when China is decreasing investment and ensuring an increase of consumption rates. Further to the point, China's economic evolution favours exporting countries, particularly those which are active producers and exporters of agricultural produce – the case of many throughout Latin America - but not so good news for those actively involved in large scale production and exports of mining ores and associated by-products; such as copper. This is so chiefly because only investment drives will lead to the demand and subsequent consumption of such metallic ore.

GRAPH # 9

CHINA: A BREAKDOWN OF HER GDP

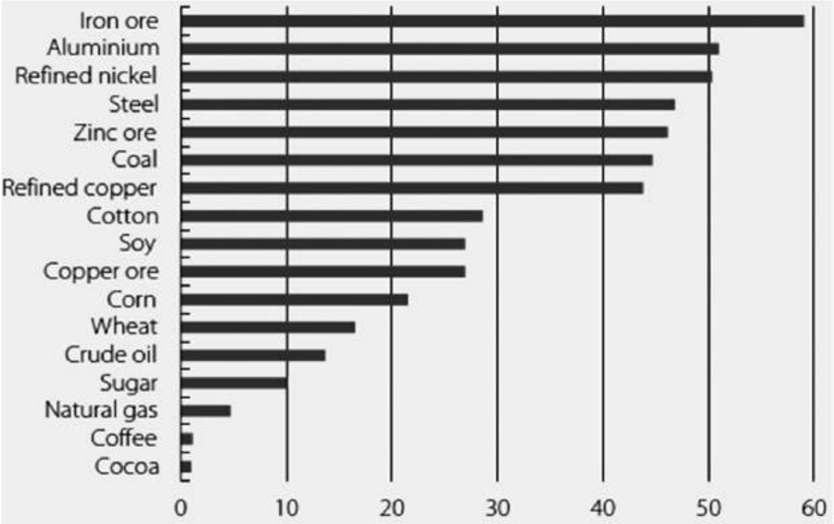


SOURCE: THE WORLD BANK.

Nowadays China is reducing the monetary policy rate and increasing credit, which activates a yellow warning light due to her increased borrowing. Debt exceeds 200% of her GDP and constitutes a huge indebtedness, but China is much forgiven due to the fact some 33% of worldwide international reserves are in the latter country; they amount to some US$ 3.5 trillion worth of reserves. That said, the debt is not a minor issue and is a matter of concern to many regions amid the emerging world; with such worries being triggered by China's participation in most commodity markets (See Graph # 10). Suffice to mention she handles 60% of world demand for steel and iron ores, 50% for aluminium and nickel and 45% for copper. For those countries producing cocoa or coffee, this is not so important because the Chinese consumption of these products is not great but, on the other hand, the prices prevailing in the *commodity* markets will always depend on the level of demand made by the world's leading consumer.

GRAPH # 10

CHINA'S PARTICIPATION IN COMMODITY MARKETS
(% OF TOTAL DEMAND)



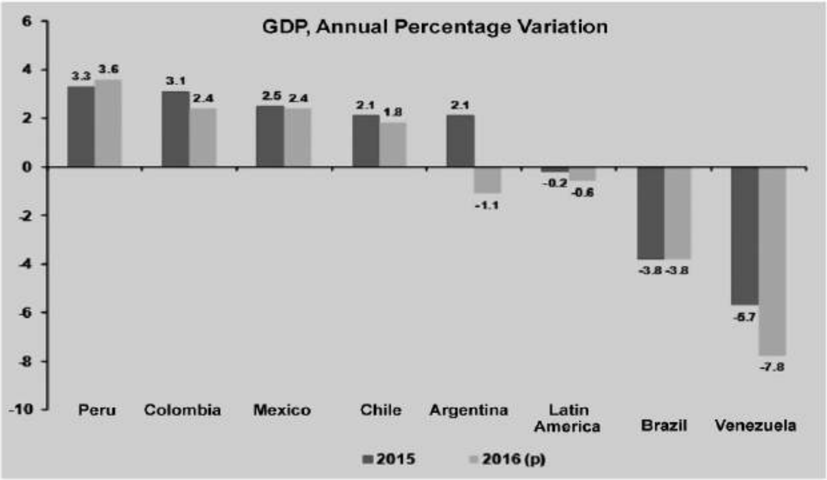
SOURCE: CAIXABANK RESEARCH, MONTHLY REPORT, DECEMBER 2015.

Latin America

Those Latin American countries showing highest growth rates are those which are members of the Pacific Alliance (See Graph # 11), to which Costa Rica and Panama are undergoing the customary entry procedures on grounds they are reckoned to be a safe bet. Indeed, the Pacific Alliance encompasses the best-managed regional economies (Namely: Colombia, Chile, Peru and Mexico).

GRAPH # 11

LATIN AMERICA: ASSORTED GROWTH PACES



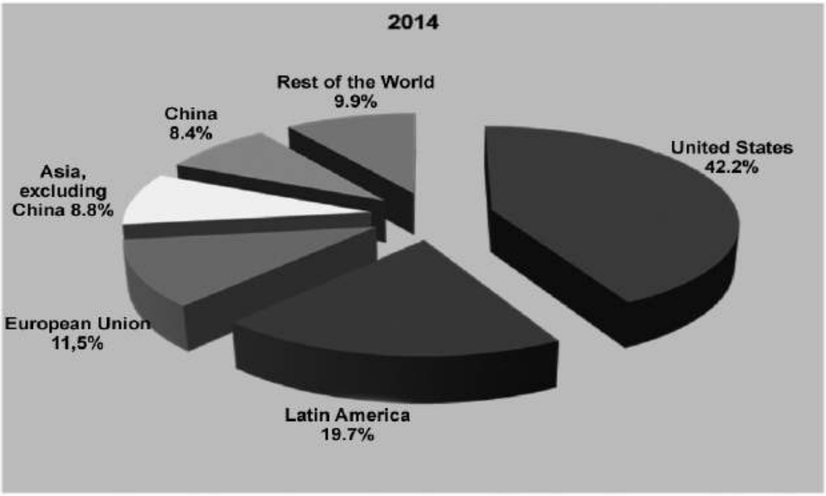
SOURCE: CONSENSUS FORECASTS - APRIL 2016.

The average growth rate in the region has been consistently falling and is now in negative territory, clearly influenced by the remarkable Venezuelan crisis; suffice to say this country's growth rate should drop by about 8%. Brazil is also confronting a crisis and probably Argentina may be in recession this year, albeit with better expectations. Within the region, the Peruvian economy has managed to show one of the fastest growth rates.

In terms of end destination markets, we can safely assume China is not as important for Latin America, but such assumption is based on average indicators. As regards Mexico, it is rated as an unimportant target market but it competes with China as a country supplier for the US market. On the other hand, for country suppliers located to the south of the China region this issue has become very, very important. Intra-Latin American trade represents 20% and the United States is the most important with 42%; but within such percentage an impressive 80% originates from Mexico. If we move away further to the South, there is a much reduced dependence on the US economy (See Graph # 12).

GRAPH # 12

LATIN AMERICA: EXPORTS BROKEN DOWN BY END DESTINATION

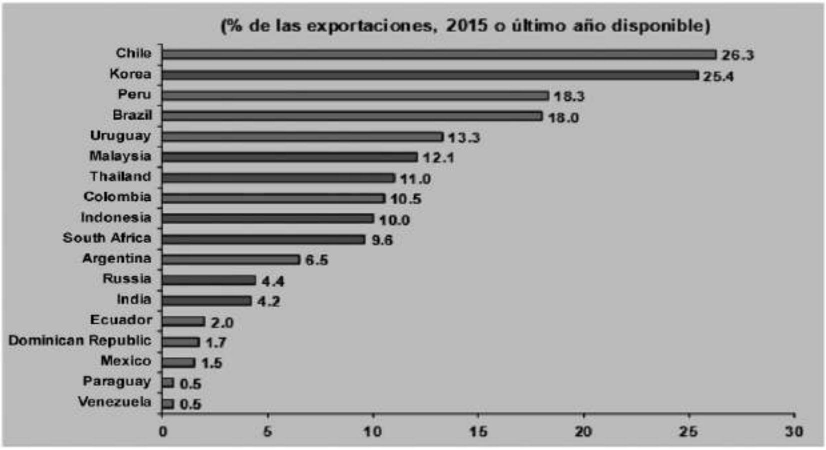


SOURCE: WTO.

Within the region, Chile is the country with the highest exposure to China, with 26.3% of her exports going to such market (See Graph # 13). Shipments from Chile to China are even higher than those from Korea. Chile, Peru and Brazil are more dependent on China than on Malaysia, Thailand, Indonesia and India. Certainly, this is what I term as with a direct dependency status!

GRAPH # 13

EXPOSURE ONTO CHINA



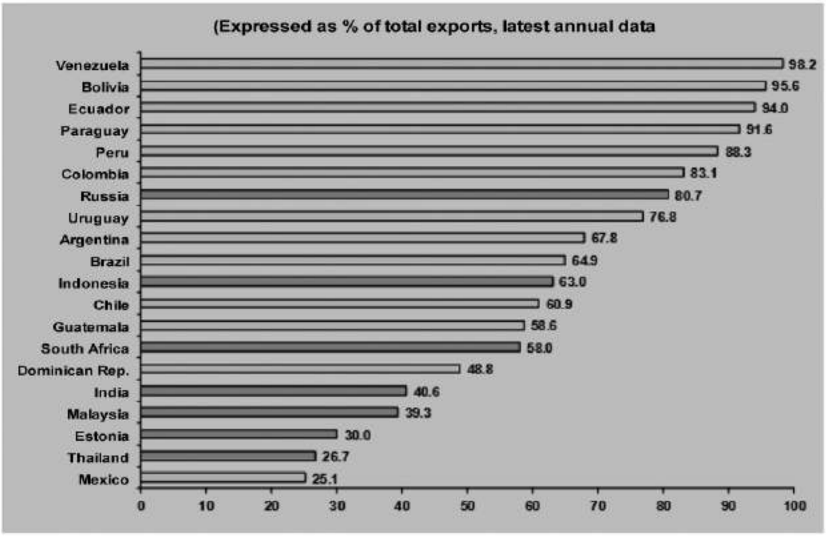
SOURCE: COMTRADE, WTO AND THE CHILEAN CENTRAL BANK.

But there is another dependency, albeit indirect, which is the exposure to natural resources (See Graph # 14). In this context, please note that 92.8% of total exports from Venezuela is oil, and as such this country is rated as one of very few cases suffering from a single-production-and-exporting status. Such status can only be rated as a dramatic case - which when coupled with a remarkable economic mismanagement - becomes even worse once we bear in mind the impressive drop experienced by the oil price in world markets.

Over 60% of what Bolivia, Ecuador, Paraguay, Peru, Colombia and Chile are exporting to the world are natural resources. As regards Mexico, and following her admission in 1994 to the North American Free Trade Agreement (Better known for its English acronym: NAFTA), is the country which has managed to implement the most successful diversification drive away from natural resources; together with Panama. Suffice to say the latter is now a service-based economy, which is enjoying an overall reduced dependency from world market fluctuations.

GRAPH # 14

EXPOSURE ONTO NATURAL RESOURCES



SOURCE: WTO AND THE CHILEAN CENTRAL BANK.

Fiscal Balances

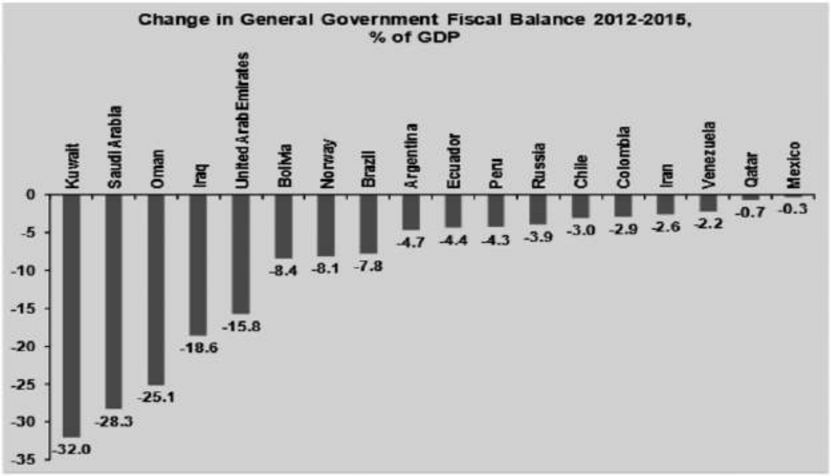
Venezuela shows a fiscal deficit of 19% of total GDP, suffers from no access to credit sources and is mainly financed through money issues. Currently her inflation is a three-digit rate and hyperinflation is a distinct possibility. Maybe Venezuela will not be like Zimbabwe, which is the most recent hyperinflation case - courtesy of 92-year-old Robert Mugabe - who adamantly states he is still too young to retire!

Since 2012 the fiscal balance in Kuwait has decayed by 32 points of total GDP (See Graph # 15), going from a surplus to a deficit. In many cases, countries which have suffered greater fiscal deterioration are those whose income is highly dependent on *commodity* prices and enforce no taxation systems. When I visited Bahrain and Dubai to deliver a series of lectures, I was invited to comment on how to diversify their economies and tax revenues which are highly dependent on oil. In some of these countries no income tax is levied - a feat you may find worth a cheer or two - but there is also a pressing need to finance the State. It is amid the Middle East countries where there has been a higher decay in fiscal balances, but other countries

– namely Brazil and Argentina – are also suffering from such anomaly. Venezuela cannot be blamed very much for the worldwide drop in oil prices but let it be stated again: The key issue here is a widespread economic mismanagement.

GRAPH # 15

WORSENING OF SUNDRY FISCAL BALANCES

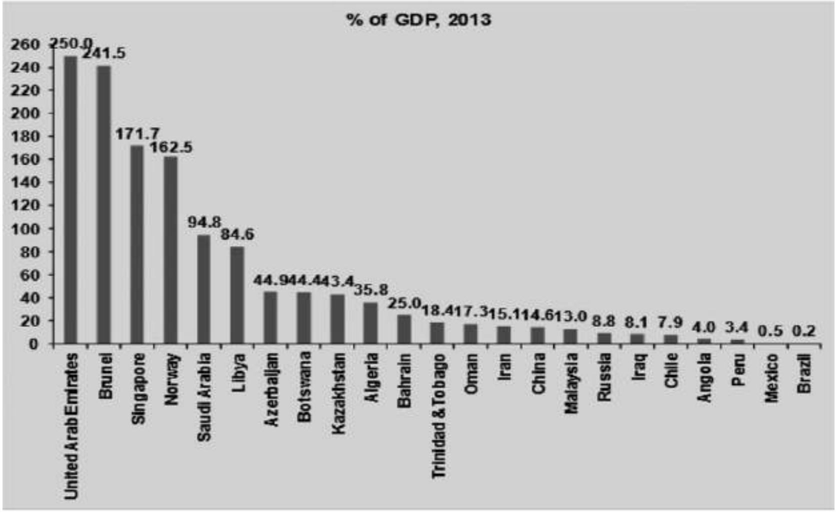


SOURCE: THE IMF.

Sovereign Wealth Funds (SWFs can help but resources are finite. Even if a country has accumulated substantial savings - such as Norway (See Graph # 16) – but there is a huge fiscal deficit to be sorted out and if nothing is done about it, then such sovereign funds are bound to be depleted. A sound fiscal policy plus a relevant fiscal solvency become crucial; particularly whenever it comes to address an adverse cycle represented by steady drops in key commodity prices.

GRAPH # 16

ASSORTED SWFS THROUGHOUT THE WORLD



SOURCE: THE IMF.

Argentina

In Argentina the economic reforms are clearly well-targeted, but there are important risks yet to be addressed. One of the positive developments has been the reduction or removal of export taxes. This kind of taxation was considered a bad policy; but there are countries that suffer from a poorly designed taxation system. Their financial balance is partially secured via taxes levied on foreign trade. That said, in the end it all works out as a tax applied to imports.

The new government abrogated the taxation scheme levied on agricultural produce exports ranging from wheat, corn and beef, which was a way to securing a cheaper consumer basket. Needless to say the local farm producers were left with no choice but to sell in the local market; thus causing further price drops. The above tax abrogation drive has also benefitted a whole host of goods produced by the chemical, plastics and rubber industries as well as the outputs from textile, footwear, and base metals' companies plus items made from precious stones. What has not been removed, mainly due to fiscal reasons, is the tax applied to soybean exports, but which was dropped from 35% to 30%.

The foregoing, coupled with the end of exchange controls and the setting in place of a unified exchange rate, has had the effect of encouraging local producers to come back and resupply their relevant markets. The stocks that were accumulated were handed back and this factor generated a significant increase in exports, while also boosting the local production figures we have come to notice in the past few months. When the export taxes are abrogated and a reasonable exchange rate is paid, then it is hardly surprising that most producers are willing to sell!

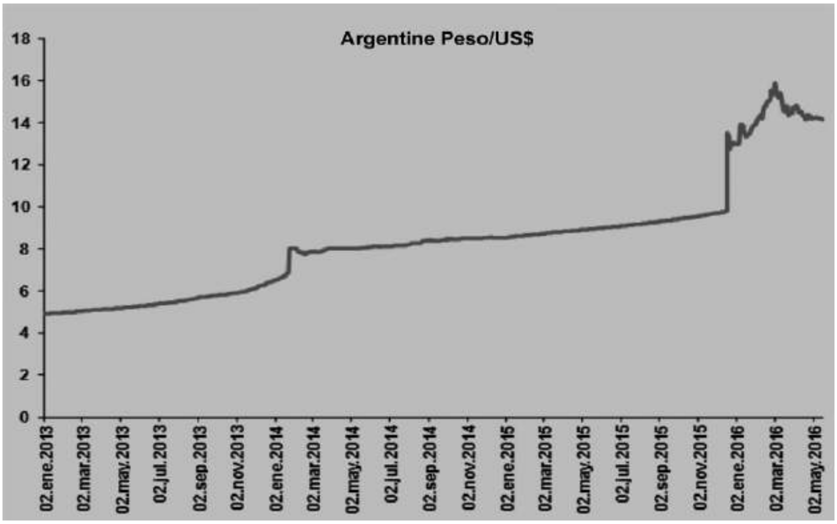
A third noteworthy element is the voluntary return to external financial markets. Argentina has just managed to place a bond issue well worth in excess of US$ 15,000 million which was oversubscribed. Indeed, this is a significant boost to the new policies introduced by the government lead by President Macri. But not all is rosy since there are risks yet to be addressed, and the main one has to do with the depreciation of the Argentine currency (“Peso”).

Some analysts said and still believe the depreciation would be very high, which has not yet happened (See Graph # 17). But a steady stabilization of the Argentine currency will depend on two factors: A reduction of both the fiscal deficit, which is currently between 5% and 6% of total GDP and inflation which nowadays stands at 40% (see Graph # No. 18). Much of the inflation entails a corrective nature.

The abrogation of subsidies is not a popular drive, but at some point it will have to be implemented. Argentina has subsidies applied on gas consumption, public transport, electricity bills and generally on all public services. In turn these subsidies help to the generation of losses to many service supply companies, which ultimately turn to the State and demand the relevant retribution; thus ending up with the predictive fiscal deficit.

GRAPH # 17

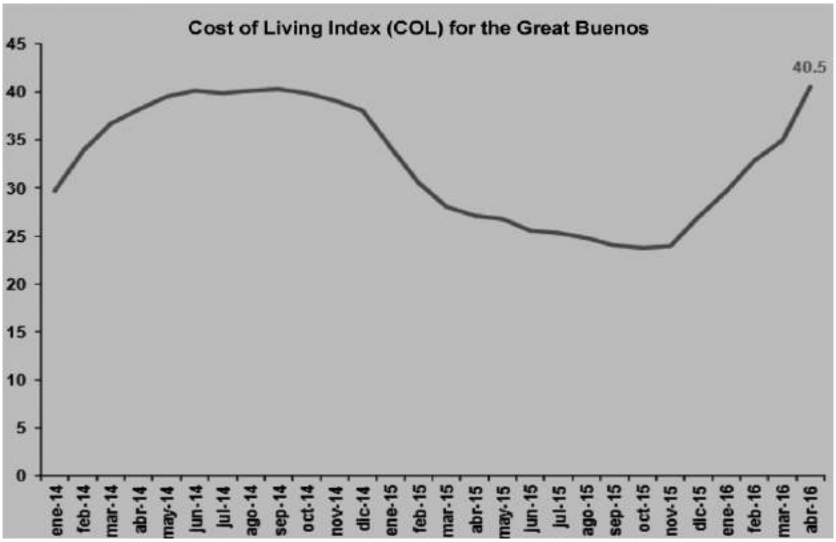
DEPRECIATION OF THE ARGENTINEAN CURRENCY ("PESO")



SOURCE: THE CHILEAN CENTRAL BANK.

GRAPH # 18

ARGENTINA: VERY HIGH INFLATION



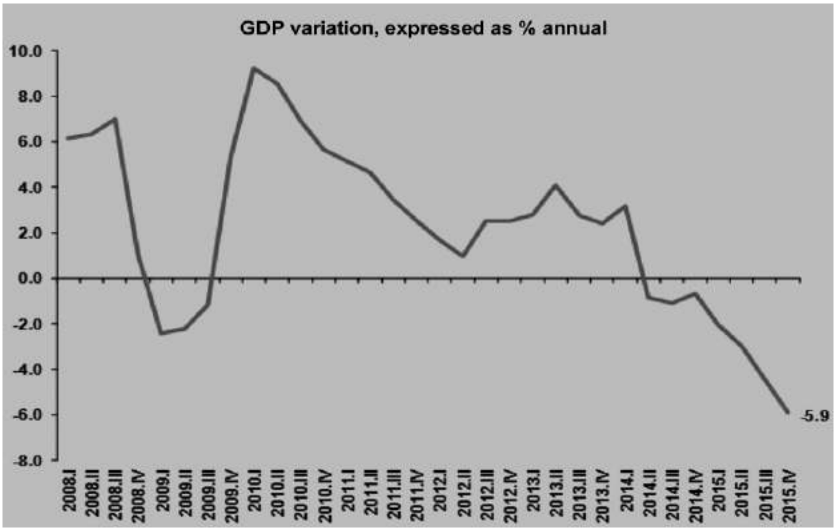
SOURCE: THE GENERAL DIRECTORATE OF STATISTICS AND CENSUSES ("DIRECCIÓN GENERAL DE ESTADÍSTICA Y CENSOS") – MINISTRY OF FINANCE GCBA.

Brazil

This is a perfect storm case. Brazil is experiencing the worst economic recession in almost 100 years. Since 1930 Brazil had not recorded a GDP drop in two consecutive years, whose cumulative effect is -7% (See Graph # 19) and in 2016 she will have a recession. By the last quarter of 2015, which is the latest available data, Brazil's GDP fell 5.9% and the projected fiscal deficit this year is expected to be equivalent to 10 GDP percentage points. Taxes in Brazil account for 36% of GDP, which added to the fiscal deficit implies a fiscal spending of 46% of GDP; with these two indicators leading us directly to the issue of pensions, whose need for reform is rated as urgent. The retirement age in Brazil is 50 years for women and 55 for men; with its relevant cost being met from State funds (See Graph # 20). Inflation is in the region of 10% and unemployment is also around 10% of total workforce.

GRAPH # 19

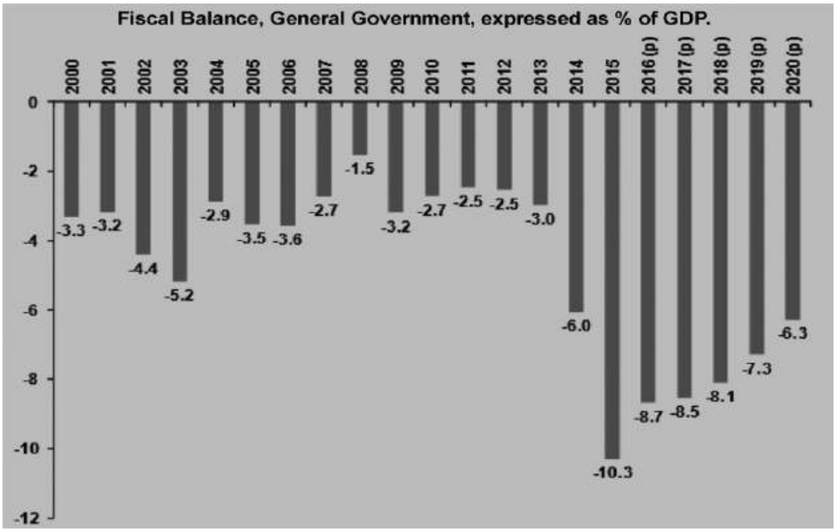
RECESSION IN BRAZIL GOES IS WORSENING EVEN FURTHER



SOURCE: BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS (BETTER KNOWN FOR ITS PORTUGUESE ACRONYM: IBGE).

GRAPH # 20

BRAZIL: PERSISTENT FISCAL DEFICITS



SOURCE: THE IMF.

The political situation in Brazil is far from easy, now with an interim president and a new cabinet. The economic team is highly regarded and respected, but has yet to address a huge challenge ahead; with the main issue being the question marks placed against the need to introduce the badly-needed reforms; provided it has the necessary support to carry them through. One of the most complex issues facing the country are the massive and widespread corruption practises.

Brazil is the largest economy in the region, accounting for 35% of the overall figure. Argentina is in recession, with a drop in exports and with shipments to Brazil showing the largest drop by far, particularly car exports. Brazil, as a market, poses a number of implications whose reach go beyond her local economy!

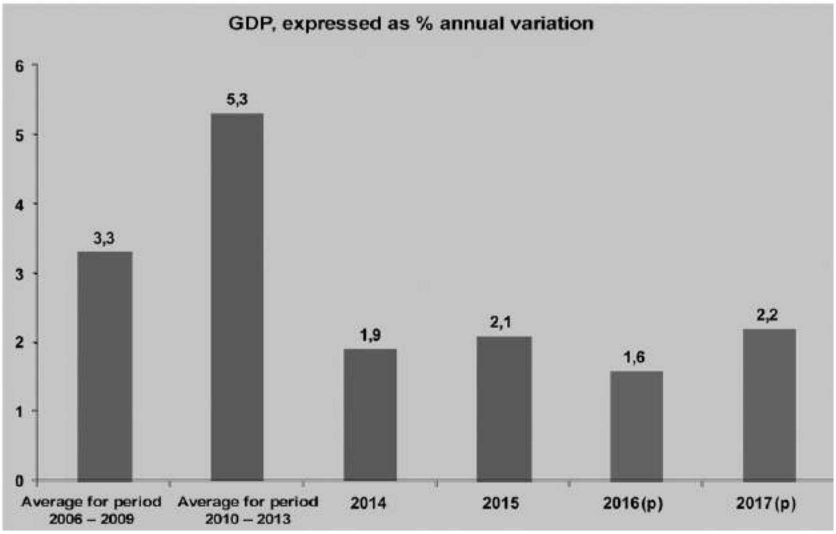
Chile

In Chile there is no recession but a remarkable and widespread economic slowdown. The economy is merely growing by 2% after an average expansion of 5.3% in period

2010-2013. In 2014 she grew 1.9%; 2.1% in 2015 with the projection for 2016 being in the region of 1.6% and 2.2% for year 2017 (See Graph # 21). The average growth rate in period 2014-2017 is bound to be a very unsatisfactory rate below 2%.

GRAPH # 21

THE CHILEAN REMARKABLE SLOWDOWN

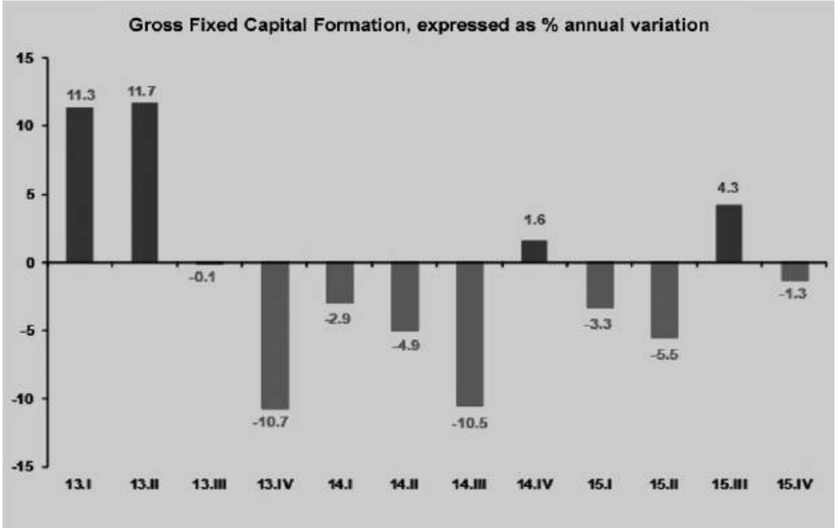


SOURCE: THE CHILEAN CENTRAL BANK AND CONSENSUS FORECASTS - APRIL 2016.

All the foregoing setbacks have coupled with a significant drop in fixed assets' investment initiatives (See Graph # 22). All such has happened despite the absence of both local and external recession indicators. As a result, Chile has completed eight consecutive quarters of investment decline and the unemployment rate has now started to increase. This is the tricky part of the overall scenario because – and for a long time - the unemployment rate remained at low levels but nowadays is showing an upswing. Should that not be enough, consumption is slowing down in line with a moderation in the total wages' bill.

GRAPH # 22

CHILE: STEADY DROP OF INVESTMENT IN FIXED CAPITAL INVESTMENT



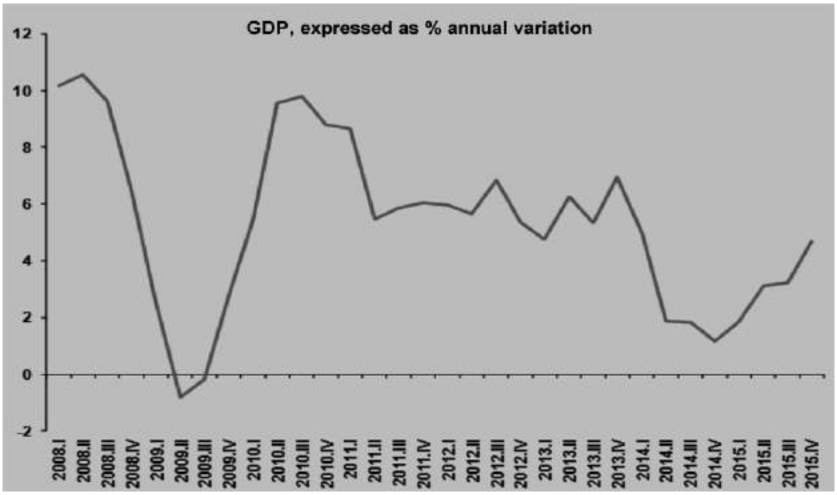
SOURCE: THE CHILEAN CENTRAL BANK.

Peru

The Peruvian economic performance has presented us with a pleasant surprise, in spite of and beyond a populist Law which granted the early withdrawal of pension funds. Such Law was approved during the past election period. As a result, and during the past few months there has been an economy boost (See Graph # 23), with some sectors – such as fishing and mining growing at a past pace (See Graph # 24). The fisheries sector is a key economic sector in Peru but mining has secured a far greater importance too in line with the power generation, gas, water and services' sectors.

GRAPH # 23

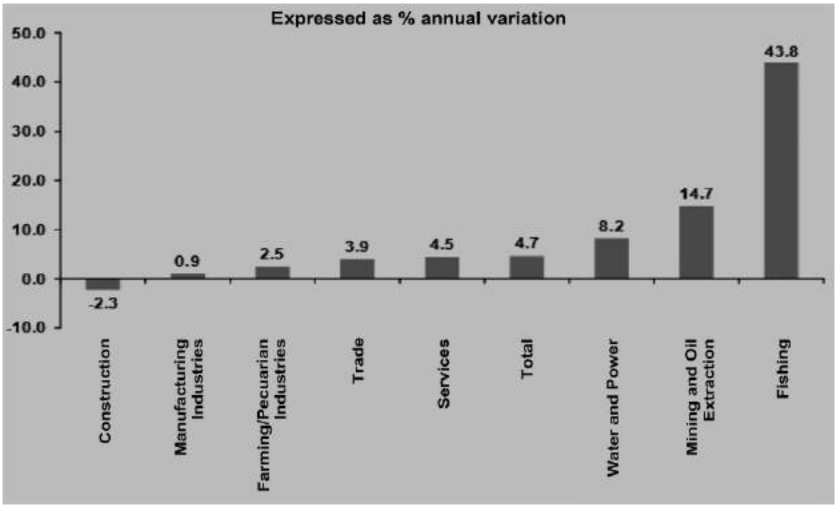
PERU: THE ECONOMY GAINS MOMENTUM



SOURCE: THE PERUVIAN CENTRAL BANK.

GRAPH # 24

PERU: GROWTH BROKEN DOWN BY ECONOMIC SECTORS



SOURCE: THE PERUVIAN CENTRAL BANK.

Who is to be held responsible for the slowdown?

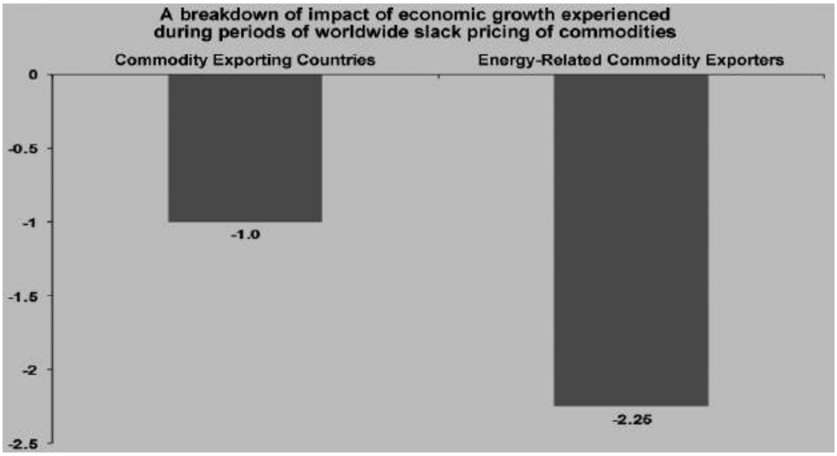
An important issue is to define where the responsibilities for the regional economic slowdown are to be placed. In a nutshell, we can say the world is today showing a fairly flat growth of slightly over 3%; albeit with an implicit drop of 1.5 percentage points if we use - as our yardstick - a protracted/extended economic series.

A recent International Monetary Fund survey, published in the World Economic Outlook issue for October 2015, can illustrate us what has happened in Latin America. The survey work says that if you are an exporter of general *commodities* - and because of such condition - you are bound to suffer an annual growth decline of 1%; but if you export *energy-related commodities* you should experience a fall of 2.25% (see Graph # 25).

This is important to bear in mind, chiefly because there is a widespread temptation for governments to claim it is their own merit when things go well; but when things go wrong the blame is attributed to external problems. Two cases of economic slowdown - Chile and Colombia - are useful for the analysis of period 2010-2013 vis-à-vis 2014-2016 (See Graph # 26).

GRAPH # 25

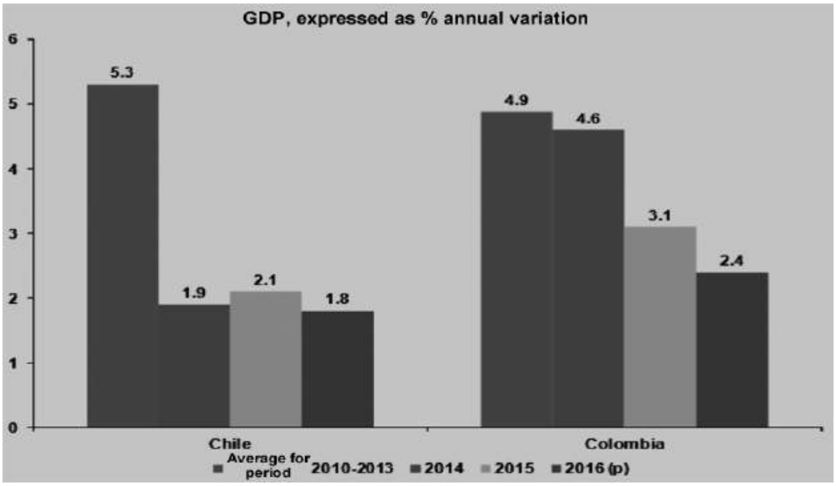
HOW MUCH OF THE SLOWER GROWTH IS DUE TO THE WORLD ECONOMY STATUS?



SOURCE: IMF, WORLD ECONOMIC OUTLOOK, OCTOBER 2015.

GRAPH # 26

ECONOMIC SLOWDOWN IN CHILE VIS-A-VIS COLOMBIA



SOURCE: IMF AND THE CHILEAN CENTRAL BANK.

In Chile copper exports account for 50% of total exports and oil in Colombia is just over 50%. Applying the IMF numbers to the Chilean case, if she grew 5%, then if should go down 1 percentage point and thus her growth was 4%, but when growth drops 3.2 percentage points, 1 percentage point is attributed to external factors and the rest is due to internal causes. In simple terms, two thirds (2/3) of the problem is internal. As regards Colombia it can be stated her whole problem originates abroad. As far as Venezuela is concerned, which is very dependent on oil, you cannot fully blame the external factor chiefly because the problems where there much before the current crisis showed up (See Chart # 1).

CHART # 1

A BREAKDOWN BY COUNTRY OF THE ECONOMIC SLOWDOWN EXPERIENCED IN PERIOD 2010-2013 PLUS YEAR 2015, AND CAUSED BY INTERNAL AND EXTERNAL FACTORS

	Chile	Colombia
Internal	2.2 (68.8%)	-0.45
External	1.0 (31.2%)	2.25
Total	3.2	1.8

SOURCE: MY OWN COMPILATION BASED ON DATA RELEASED BY THE IMF AND THE CHILEAN CENTRAL BANK.

Changes in the overall Latin American political scene

In Venezuela the recent political changes entailed the opposition wining the elections for the Legislative Assembly during December 2015; but at this point in time there is a confrontation which has yet to be settled and whose outcome is difficult to predict. The last and rather nasty exchange of views was between President Maduro with Mr. Luis Almagro – the latter in his capacity as Secretary General of the Organization of American States (OAS). Mr. Almagro voiced an explicit call endorsed by the OAS urging the Venezuelan Government onto accepting the revoke referendum procedure stipulated in the Venezuelan Constitution. At this point in time there is an ongoing deep and bitter confrontation between the Legislature - controlled by the opposition - and the Government lead by President Maduro which enjoys a staunch backing from the supporters of late President Chavez; albeit a major change as hinted above took place in December last year.

The next noteworthy change was the election of Mauricio Macri as the new president of Argentina as from December 2015. In February 2016 President Evo Morales in Bolivia lost the constitutional referendum aimed at ensuring his re-election. In May 2016, and in Brazil, President Dilma Rousseff was suspended from office whereas in June 2016 there was a fiercely contested second ballot in Peru between two presidential candidates, namely the right winger Mrs. Keiko Fujimori and the right off-centre Mr. Pedro Pablo Kuczynski.

In February 2017 there will be presidential elections in Ecuador, with the currently enforced Constitution preventing President Correa from being re-elected. The leading candidate so far is Sr. Guillermo Lasso, a centre-right political figure. As regards Chile, the municipal elections scheduled for October 2016 - coupled with parliamentary and presidential elections to be held in 2017 - are the most noteworthy events on the political front.

Populism is now a declining trend

What is happening in Latin America is a populism downfall, a policy which was advocated by sundry governments within the region. Populist policies last longer whenever there is a concurrent upswing to record price levels benefitting the main exports of natural resources; but in the event of sudden/unexpected price drops then the predictable outcome shows up in the form of a major and wide-ranging crisis. Thus none of the welfare conditions introduced by populist governments throughout the region are sustainable any longer.

One of the most common errors of judgement committed by external analysts is to assume all Latin American countries – and for that matter all the emerging economies worldwide – are to be classified in the same category. In simple English such external analysts tend to place such economies inside one single bag! Such is a huge mistake, simply because there are countries that have more sound and solid economic and political institutions vis-à-vis other nations. This is clearly perceived when you pay a close look on the fiscal issue and on political matters alike.

Still on this, it is important to understand that such state of affairs goes beyond the dividing line between right, centre or left-minded governments. Throughout Latin America we have seen right-wing governments advocating populist policies, not just left-minded ones. Fortunately, populism governments are now in decline because they have carried out policies and expansive drives which proved to be unsustainable.

Indeed, Latin America is the region where populism bloomed in a major degree than most; perhaps due to both the existing differences and associated but significant distributional inequalities. The nett result in all these experiences is that the most vulnerable and low-income brackets of the population, do end up worse off than when such populist policies were introduced. In other words, what is done to assist the have-nots ends up hurting precisely all those which were supposed to become the beneficiaries.

So, beyond the dividing line of political affiliations, what really matters are the policies and what can be perceived as a revaluation of responsibility in politics; hopefully such change of curse will have positive implications for the future. Sometimes, this revaluation may well mean an explicit mention of issues which may not be too popular at the time, and may be coupled with opting for distinctly unpopular decisions. However, these are usually the correct/advisable ones from a public policy viewpoint. Any economic growth policies based on unsustainable aims and means is tantamount to a statue being erected on clay feet. Its collapse will be inevitable!

This augurs well for the region, but not without serious problems to be addressed. In terms of size, the biggest problem and the most dramatic equivalent go to Brazil and Venezuela respectively. On the other hand, there is also an appreciation for the work well done, but to ensuring a sound development of all countries alike it is not good enough to talk nicely, provide subsidies and create a welfare state. A job well done is what creates opportunities, employment possibilities and entrepreneurship initiatives; all which ultimately will influence and boost the chances of people to have a good pension.

If we are to secure a good pension, one crucial thing is to have a job and a continued contribution onto our own social security entity. If a worker contributes with only half of his/her dues to the social security system during his/her working life, then he/she becomes exposed to interest rates close to 0% or negative; in addition to demographic issues and all sorts of populist-based changes to the relevant regulations. It follows that the goal of securing a good pension becomes a very uphill struggle. Indeed, experience tell us it is far better to have a well thought out pension system in place and, ideally, supplemented with dynamic labour markets altogether. But let it be said: Such goal is not an easy task to anyone!

SPECIAL LECTURE

USEFUL COMMUNICATION SKILLS FOR TIMES OF WIDESPREAD DISTRUST

RAFAEL RUBIO[1]

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This paper’s main purpose and aim is to try and extricate ourselves – albeit for a short while - from the economic and financial framework and tackle the social and political contexts; on how they affect our stakeholders - not the political stakeholders - but the social security current and would-be membership, pension systems and public opinion alike.

In one way or other, if we are to understand the concept of social legitimacy and how all companies and institutions actively involved in the management of pension systems; must be able to perform in a new context. Such context entails a fast changing social legitimacy and is generating real risks. The main tool in this new context is obviously a proper behaviour, but also a proper communication.

Mistrust and fear of failure

When people were invited to comment if it is feasible to trust people, the relevant statistics (See Chart # 1) showed that less than half believe this is possible. Such survey was conducted in Spain, but in other countries the survey readings are fairly similar. In Latin America the results showed somewhat lower trust rates.

CHART # 1

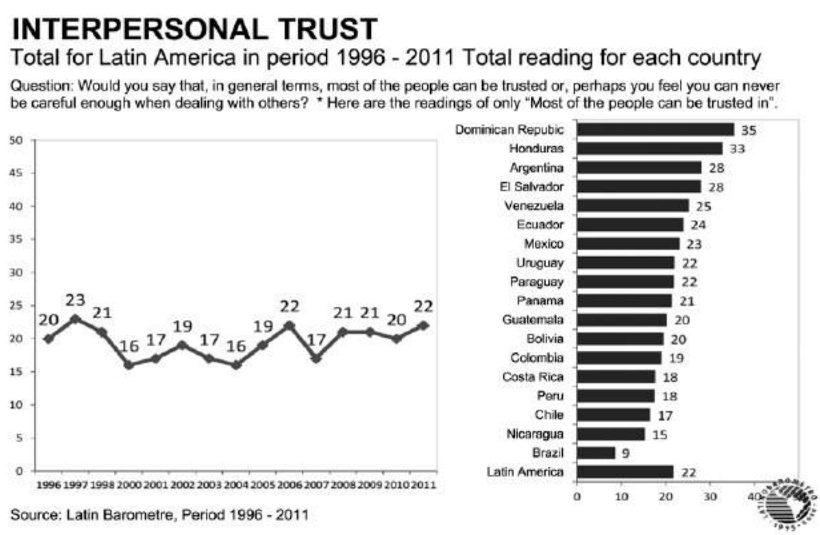
Average	4.58
Typical variation	2.24
(N)	(2451)

Would you say that, in general terms, most of the people can be trusted or, perhaps you feel you can never be careful enough when dealing with others? Please rate, within a scale of 0 to 10, whereby 0 means “You can never be wise enough” and 10 entailing “You can trust most people”.

SOURCE: CIS 2009. E 2.826

If the average reading is taken within the rest of Latin America (See Graph # 1), the figures are much lower. The index of interpersonal trust, since 1996, remains more or less constant, but at very low levels. These people represent public opinion, which often may entail a risk or an element of instability.

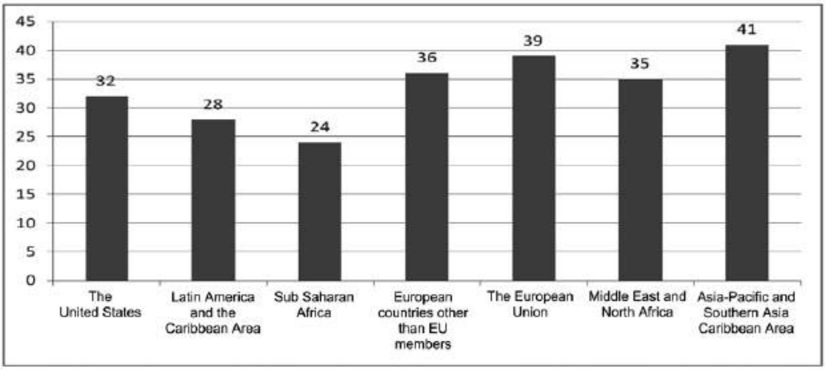
GRAPH # 1



To this we can add an element which directly influences - from a sociological viewpoint - the percentage of people who stated their fear of being associated with a likely failure (See Graph # 2). To a certain degree this is so, because such fear is linked with any hypothetical future and does affect the context in which most pension fund managers do operate. As you can see, the fear in Latin American countries is much lower. In fact, is the lowest after Sub-Saharan Africa, but even so one thing is clear: one in four people are afraid of failure. The foregoing raises a number of questions concerning the social impact of technology, now commonly termed as "The fourth industrial revolution".

GRAPH # 2

PERCENTAGE OF ADULT POPULATION STATING THEIR FEAR TO FAILURE.



SOURCE: GEM, 2012.

Technological revolution and social changes

Two senior personalities, namely Eric Schmidt - who performed as CEO of Google in period 2001 – 2011 - and Jared Cohen - First Chief Technology Officer of the State Department when Hillary Clinton was Secretary of State - got together in 2013 and wrote a book now commonly referred to as "The New Digital Age". Its opening and bold statement reads: "Internet is one of the few things humans have managed to build and yet do not fully understand".

Manuel Castell, a sociologist currently enjoying a worldwide reference status within the information society and its associated technology impact, stated something similar albeit in a slightly provocative way: "The technological revolution is now closely linked to information flows, has transformed our way of thinking, of producing, consuming, trading, managing, communicating; not to mention living, making war and making love."

Furthermore, and while resorting to a very graphic statement, he went onto showing to what extent society is changing, how it is perceiving reality and its associated values; although it is in this context when doubts arise. In line with Manuel Castell, Pope Benedict XVI raised a very "radical" thought by stating: "As well as the industrial revolution led to social changes, chiefly by modifying the production cycle; nowadays the Internet transformation is leading cultural and social changes". This transformation is happening within the digital context, but it is bound to bringing along much wider consequences; with the following likely to become its first message: For a long time, at least in what politics is concerned, the digital approach has been understood as a fake world or with less true content and far distant from the real world. As if the online world was nothing more than a distorted *offline* world as the myth of Plato's cave reflection was deemed!

This is not a thought to be rated as in isolation. There are many who still do not understand that what happens on the Internet is not entirely real - and in common with Las Vegas - what happens on the Internet stays on the Internet. Therefore, the social consequences affect those people who "live and abide by" Internet and deemed to be *millennials* and digital natives... and as far as the rest of us is concerned, we merely use Internet as best we can; since it has brought no profound changes to our lives.

However, and with a view to illustrating how real is what we call "virtual", I can state the following: If at this point in time any of you gets a WhatsApp message, where your girlfriend, wife or friend is telling you: "We have left you"; by no stretch of imagination or at no time we would be thinking that such individual has been left in the virtual world since, in the real world, we would be still together. Indeed, we would not turn up at his doorstep the following morning and state: "Well, what was stated in the WhatsApp is only a fact within the virtual world and where we are no longer friends, but in the real world, we remain deeply united".

Well, this is the same thing since - even in the unlikely event that you have never used the Internet - the consequences of technology in your lives are very real, are directly influencing your work, are bound to affect public opinion and have already changed the way of thinking and performing within their own world or areas of influence.

Life expectations

Therefore, it is hardly surprising to note the Internet technologies are also influencing the attitude of people vis-à-vis their life expectancy. Some recent notes published by Bloomberg show spectacular graphics on the change in life expectancy (See Chart # 2), and how this change should affect the pension system (Impact on happiness/ satisfaction during retirement and the willingness to retire at a later date); see Graphs # 3 and # 4). More than 20% of the would-be pensioners are keen to continue working beyond the age limit of 65, and there was an increase amid those who did not feel happy with their retirement terms. In my view these, which are objective data so to speak, have much to do with this cultural change we are talking about.

CHART # 2

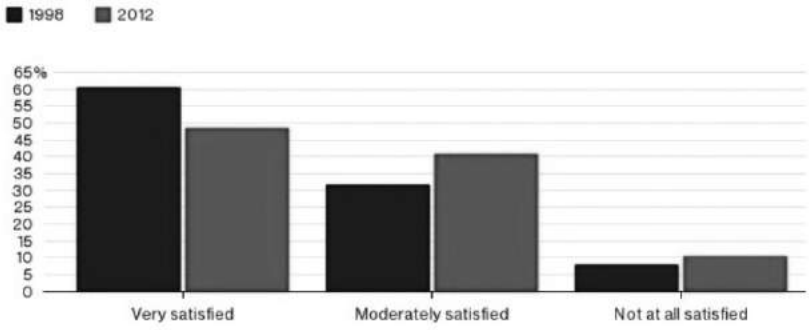
LONGER LIFE EXPECTANCIES ALLOW LONGER WORKING CAREERS
AVERAGE LIFE EXPECTANCY AT THE AGE OF 65, BROKEN DOWN BY LEVEL OF EDUCATION

	1979	2011	Difference
Male, lowest 25%	77.5	81.5	4 ▲
Male, second-lowest	77.7	82.8	5.1 ▲
Male, second-highest	77.8	83.3	5.5 ▲
Male, highest 25%	78.9	85	6.1 ▲
Female, lowest 25%	82.3	83.7	1.4 ▲
Female, second-lowest	82.6	85.3	2.7 ▲
Female, second-highest	82.9	85.2	2.3 ▲
Female, highest 25%	83.4	86.6	3.2 ▲

SOURCE: BOSTON COLLEGE´S CENTER FOR RETIREMENT RESEARCH 2015.

GRAPH # 3

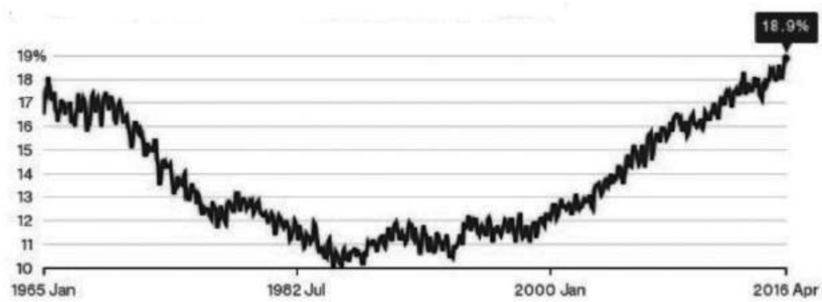
DEGREE OF SATISFACTION DURING RETIREMENT
WOULD YOU SAY YOUR RETIREMENT IS HIGHLY SATISFACTORY, MODERATELY SATISFACTORY OR UNSATISFACTORY?



SOURCE: EMPLOYEE BENEFIT RESEARCH INSTITUTE 2016 - ANALYSIS OF THE MICHIGAN HEALTH AND RETIREMENT SURVEY.

GRAPH # 4

AMERICANS ARE WORKING LONGER
EMPLOYMENT RATIO/POPULATION FOR PEOPLE AGED 65 AND OLDER



SOURCE: U.S. BUREAU OF LABOR STATISTICS.

Nowadays, our work is absolutely influenced, or directed, by an increasingly growing and fragmented public - the renowned gap brought about by their understanding of technology. We have seen it lately in the form of new platforms like *Snapchat*. How many of you have looked into it without understanding how it is used or, have merely wondered what is new in it? What is this all about? If this happens with a simple tool, just imagine what it would be – as potential end users - with their way of seeing life.

A month ago in Spain we witnessed one of the most interesting cultural debates of the decade. A *youtuber* which has 27 million online followers was interviewed by a traditional journalist. They discussed things such as the importance of being a credit card holder. This interview generated dozens of columnists taking sides with one or the other; but all agreed the attitude of the counterpart was rated as "absurd". Cases like this highlight the fact that more than a gap in the levels of access to technology, there is a difference of basic assumptions. In turn such difference causes a generational clash whereby one party does not understand at all what the other is doing or saying (and vice versa).

This is perhaps the key to this article and its implications for your work: the existence of a mismatch between what is symbolic and what is rated as material. The symbolic element is the society's culture which evolves at a very fast pace, and what we rate as material is the economic and political system. The latter is moving forward very slowly and showing a significant adaptation difficulty, not to mention getting the same pace or even getting to understand each other.

Social changes, new values

In this context there are a number of values which are part and parcel of the welfare state, which in the 20th century had become deeply-rooted within the Western society; and which now appears to be no longer sustainable. This is so not only due to both economic or economies of scale problems, but as a result of it currently undergoing a crisis. Furthermore, it appears as if members of society no longer understand the values which generated the welfare state as core values for governing their lives and society as a whole. What we are now witnessing are a number of determinants and a series of values ahead of us.

Transparency: we live in a transparent world whereby, whether we like it or not, everything we do is bound to be known by others. In times past, the Communication Directors whenever facing a crisis would usually crossed their fingers and merely stated: "Please, this is not to be known whatsoever" while rushing to sweep the problems under the carpet as quickly as possible. Oddly enough, that was regarded as a professional attitude, because in 90% of all cases the crisis ended by not being disclosed to the public.

Nowadays such stance would be tantamount to committing suicide - simply because more often than not – the use of proportions has changed radically, to the extent a possibility of keeping something secret or under wraps is deemed at 90%, but against such possibility.

"There is nothing hidden that will not be revealed in the end". This statement extracted from the Gospel of St. John appears to set our attitude/stance towards life. This state of affairs will affect people and institutions alike, and should mark any entity’s attitude when addressing their proper information handling stance.

Information is not communication

In an attempt to address this situation, some institutions try to tackle the transparency shortcomings by putting forward far too much information; in the belief that by placing on the table such data wealth then the communication problems are sorted out.

But let it be said: There is no direct relationship between the quality of communication and the amount of information provided. The mere fact of putting a lot of data on the table is not a synonymous to communicating. This happens particularly with highly technical tasks - such as those performed in the world of pensions - where what matters is to supply a lot of information albeit without really trying to get your audience to understand; no to mention they becoming fully aware about what are we really telling them. In the current context, usually an information oversupply or glut will merely hinder communication.

A mere showing of facts aimed at correcting misperceptions does not usually solve the problems, chiefly due to the peculiar way people tend to perceive information. We live in a world where society is highly fragmented and the concept of public sphere of interest is steadily fading away. No longer there is a general public sphere where we all can become a part, but extremely mobile small blocks which happen to be very isolated from each other. This is quite perceivable in the communication of social networks; every day is more difficult to find a community.

The ability to become communicated and to be informed, in a selective/almost personalised fashion, is primarily through technology and social networks; which in turn generate micro communities with little in common with each other.

Such state of affairs greatly hinders the work or communication amid institutions like ours. This is due, on the one hand, to a false perception of reality. When you always communicate with the same people and talk about the same subjects or issues, you run the risk of ending up perceiving a deformed/distorted version of reality. Such possibility is chiefly due to one of the paradoxes which – from a social viewpoint - favours technology; that is a feedback from mistakes.

In addition to the foregoing, these micro communities generate a lack of dialogue; thus making it difficult to become aware of what your counterparts' will really is. Despite it has never been easier to understand what other people think, this possibility has never been so seldom practiced. Again, and although now it is easier than ever before to learn and become aware of somebody else's intentions; it is also easier to reinforce our own perception. Thus, in the end each of us tends to do what is more comfortable to us all: Try to gather information from people who think very much like us.

When Antony Scalia, the well-known Judge of the Supreme Court of the United States died a short while ago, I was surprised by a widespread comment of his aides. All of them stressed he always cared to choose his would-be staff members amid those whose thoughts and opinions were radically different from his own. In doing so, he would secure for himself a more objective view and also the possibility of a useful contrasting of their deeply-rooted statements and perspectives with his own.

The fact all the Supreme Court judges who had an ideology opposed to Scalia's own were prepared to praise his legal rigor, his way of thinking and how he performed his job/work, is largely thanks to his (Scalia's) deeply entrenched desire to understand the world and also get to know it through people who did not think like him.

The image burden

One element that radically affects society has to do with the image burden. Society as a whole has become increasingly voluble/volatile and more sentimentally-inspired. The 20 December 2015 Spanish elections are a clear illustration of volubility. On this occasion some 47% of total voters decided on their own vote during the last week of the run-up period; whereas on past occasions it was only a 15% of total voters which would make up their minds almost at the last minute.

Nowadays, when it comes to making decisions, people have become increasingly more impulsive; and more eager also to taking to the streets while demanding legislative or radical social changes alike. Normally, all this has a lot to do with the image burden and generates a significant hindrance when it comes to explaining complex concepts which, in turn, call for a suitable abstraction stance.

Further to the point, communication has become synonymous to entertainment and is filled with spectators; thus one of the current and significant communication challenges is to be able to reducing complexity without insulting intelligence. Complex decisions have to be explained as such, although they cannot be conveyed in a profound way.

This fickleness generates a way of merely seeking instant gratification; wanting and demanding it all and now. Regrettably, such stance encompasses a great danger from the social point of view, because it entails the end of desire. When you have it all and at the right time, the individual ends up by abrogating desire and the ability to project himself onto a medium to long term future; which is an essential element for this industry. Thus, it is hardly surprising to note such person becomes concerned only with what happens here and now, and as regards the rest he will merely bother about "some other time".

Common good: A responsibility for us all

Although people demand everything to be supplied to them right now, it may strike you as a surprising paradox the fact they expect the State to meet such aspirations. Needless to say, the latter is finding it increasingly difficult to perform as the single interpreter/supplier of this collective interest. Such single interpreter/supplier role is being made more exacting simply because such society wants to have a role in the interpretation of the collective interest.

Should such on-going process not be enough, this society is also suffering from a widespread hierarchies' dilution process. Thus, the micropower identified by Mr. Moses Naim - specifically the political micropower – lacks enough strength to move

forward its own projects under its own steam. Such has become the fashionable subject many authors have been writing about during the past five or six years.
Indeed, if this is so with the almighty and omnipresent State power, what should be happening to the private power? Needless to say, such private power needs the backing of all sorts of alliances and combinations. Such events entail a fundamental change, with the idea of common good becoming everyone's responsibility becoming part and parcel of the overall society. The common good is no longer something that the State has to supply us with - please let us not forget we are consumers of services provided by the State – and we are now becoming partakers of something whose implementation/setting up is now the responsibility of each and everyone concerned.

Remains to be seen if via a whole host of support services and a series of platforms for public-private partnerships - or even through private companies or civil society associations – we could be taking on the responsibilities that hitherto were traditionally undertaken by the public sector. In one way or other, our society is realising this state of affairs at a fast pace; the common good has become everyone's responsibility. Such responsibility is – so to speak – part of the basic principles consecrated by President Obama in 2009 in the form of a "Memorandum on Transparency and Open Government".

This is the concept from which stems the welfare society, as an evolution of the Welfare State, and whereby no one can achieve his/her aims all by himself/herself. As a matter of course, most public policies are not performed by the State but by a myriad of individuals; and where the common good is a grey - albeit growing - area which is steadily being adopted by businesses and the civil society alike; with both taking on more and more responsibilities.

As opposed to efficiency, what is required is more and better management

Whenever the Organisation for Economic Co-operation and Development (OECD) invited comments as to what is today regarded as a better life, the answers received had little to do with those voiced 15 years ago. Nowadays we mention issues ranging from household disposable income, the gap between rich and poor, paid employment, total annual hours of work, educational level, school equity, life expectancy to social trust and political trust.

Most, if not all social values - which society is demanding from the State and also from itself - are changing at a very fast pace. However, the institutions concerned and the economy as a whole, are still not able to put forward a fair answer. There lays the big challenge.

The efficiency terms we commonly thought about and resorted to when it came to measure our work standards, are now being measured in terms of how we are improving the overall society. The social question demands skipping gaps and pitfalls, focusing ourselves onto both the common good and on the most vulnerable.

Democracy has less to do with voting and more with motivating the citizenship. Most of our speech is concerned with social empowerment, to serve – from an ethical perspective - as a reference model while promoting political and social awareness.

We are not talking merely about efficiency but about something else too: It is about something you can all notice, for instance, while watching the HBO hit series "Show me a hero". It describes how the youngest mayor in the US – while performing as such in a town nearby New York - manages to implement public policies by resorting to a basic premise: "Efficiency is a cold, calculating and inhuman approach, whereas administration, management and - moreso a *successful management* - are rated as warm and vibrant; in a nutshell a human approach."

Efficiency is replaced by a human relationship and the confidence crisis is substituted - not because they are more effective or better whenever we are performing our job - but because they ensure a better governance. What society is today asking companies and States alike – in addition to demanding the customary results - is their capability to manage and deliver their economic, political and social issues in an exemplary manner too.

In short, (See Chart # 3), growth expressed in economic terms would be replaced by happiness. Likewise, the authority to impose is to be substituted by the ability to connect, communicate and persuade. Still on this, a competitive economy must be replaced by an economy of collaboration, the economy based on consumption by a shared economic approach and public investments by public-private partnerships.

These are the elements of the new governance, which are not only changing the way governments perform their work, but are spreading onto the affairs of private companies. For example, today there are no private companies performing without their relevant transparency policies. At this point in time, this issue is actively discussed by the Spanish media. There are no private companies in where the collaboration and support of their workforce has not been allocated a top priority status.

Governance is no longer confined to becoming a public sector element. Instead it is becoming a key factor strongly influencing the overall affairs of any institution performing its business - or other affairs for that matter - within the society it has chosen to operate.

CHART # 3

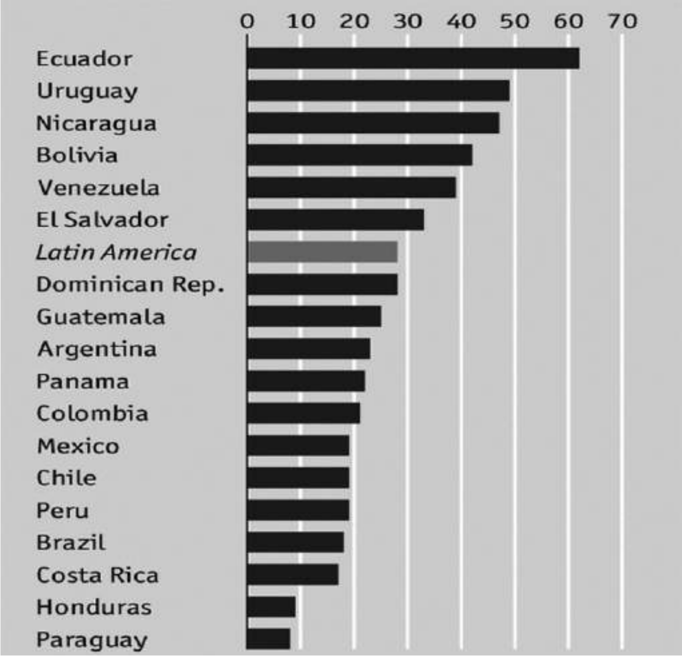
IN THE 20th CENTURY	IN THE 21ST CENTURY
Growth	Happiness
The authority is to impose any decision	The capability to connect, communicate and persuade
Electronic Government [*E-Government*]	Digital and M obile Government [*Mobile Government*]
An economy based on a competition stance [*Competition*]	Collaboration economy [*Co-petence*]
Consumption-based economy [*Market Economy*]	Shared economy approach [*Sharing-economy*]
Design of Public Policies [*Policy-Making Process*]	Co-design focused on the user/beneficiary
Government Innovation	Social Innovation
Public Finances and Budget	Social Finances and *Crowdfunding*
Public Investments	Public-Private Sector Partnerships
Monetary Incentives [*Prizes*]	Recognition Incentives [*Awards*]
Standards	[*Taylor-made*]
Efficiency	Effectiveness
Confidential grading of own data	Transparency and Access to Information
A decision capture stance	Participation in the decision-taking stage
Public Services	Services Granted to the Public

SOURCE: CHART COMPILED BY MR. MANUEL ARENILLA, INAP.

If we are to carry out these policies and assume a significant role in society, trust is a key factor; with such key factor being closely related to communications. To this effect a survey was conducted throughout Latin America and aimed at identifying if the people trust/believe their respective governments are acting on their behalf (See Graph # 5). The first five or six countries are usually those with the worst economic performance, and all coincided on one thing: They rate communications as essential when it comes to managing Government and public sector entities. Those six countries have fully taken on board communications as part and parcel of a basic element of management. Being efficient or being right are rated as not good enough; they must be supplemented with a capacity to explain what you are doing or aiming for.

GRAPH # 5

THE COUNTRY IS TO BE GOVERNED FOR THE BENEFIT OF ALL
PERCENTAGE (%) OF THOSE IN AGREEMENT, YEAR 2013



SOURCE: LATIN BAROMETRE 2013.

The widespread understanding of proper communications amid companies and governments alike, is that such communication is rated as a skill which falls onto both salesmen and firefighters. To salesmen, simply because there is a product to sell, or how to win an election and, at that time, you must resort to the communications' people. As regards firefighters, because during a critical time you always call in the media, as if they could do something to sort out the issue.

Mr. Edward R. Murrow, one of the founding fathers of American public diplomacy – during the aftermath of the Bay of Pigs' intervention fiasco during year 1961 - was once questioned about image and reputation management. He merely replied "If they want to place me amid the crash landings, I would damn well be amid the take-offs"). For years, this concept has been understood in the private sector, where the Communications' Directors have been gradually but steadily incorporated onto the Boards of Directors; mainly to perform a cross-cutting job.

When communications are understood as a management tool, it then becomes a transversal instrument which is common to all business areas; and helps highlighting all management decisions once they are adopted by the company concerned. Furthermore, it helps those decisions to be understood vis-à-vis the overall society and allows securing a pole position in a fickle world and in where a mere reaction is not good enough.

Whenever the initiative pole position has been secured, you will be able to impose a suitable framework: But when the communication skills are implemented once the crisis has already happened - and your experts can only react to it – then it is usually too late and not much good!

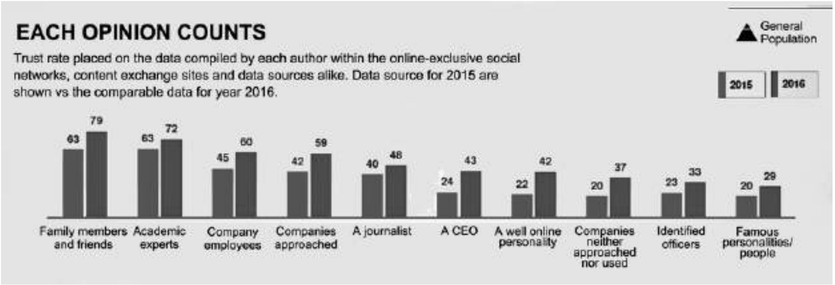
In this context, it is important to bear in mind the great power of this sector is not only due to its economic base, but mainly on account of its broad social base. With a social base as the one enjoyed by this industry, the best guarantee of a proper communication drive is achieved whenever all those hyperconnected people do become the protagonists of our communications' approach.

This is when you will come to gauge that - by taking care of our affiliates and keep an on-going and active relationship with them - is the best guarantee to communicate well. A recent survey from Edelman (See Graph # 6), a reputable and international communications consultancy entity, stipulated for year 2016 the opinions which bears most weight - and by far – do stem from family and friends; with an overall rate of 80%.

The second best are the viewpoints of experts and academics, followed by those voiced by employees, businesses, press people, CEOs and such like. The last position in this opinion-based ranking encompasses the viewpoints from the so-called "rich and famous", whom we often want them to become the spokesmen of our businesses; albeit without really knowing why.

In a nutshell, we have the greatest potential for a proper communication and interaction drive with the overall society, as well as with the State-controlled and political institutions. At this point in time, we would need only to be capable of caring for and implementing policies which, given time, would allow us to encourage these people to become not only users and financiers of our services; but mainly spokesmen within themselves. All this with a view to ensuring the sound social legitimacy we have been talking about.

GRAPH # 6



SOURCE: EDELMAN.

CHAPTER I

OPTIMIZATION OF THE INVESTMENT OF PENSION RESOURCES

THE BENEFITS OF ALTERNATIVE ASSETS IN A PORTFOLIO

VIKRANT SAWHNEY[1]

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In this brief article I want to explain how alternative assets can fit into an overall pension portfolio. I also hope to clear up some of the misperceptions and anxieties people have about alternatives assets.

Current environment

There is a very difficult environment to invest in. Interest rates are low or negative, growth is declining, and volatility and correlations are high. So for many of us it is really difficult, if we are to meet our own commitments/obligations, to generate the returns; whether such are with the pensioners or families alike. In short with all the people on whose behalf we manage their monies. The overall scenario looks incredibly challenging.

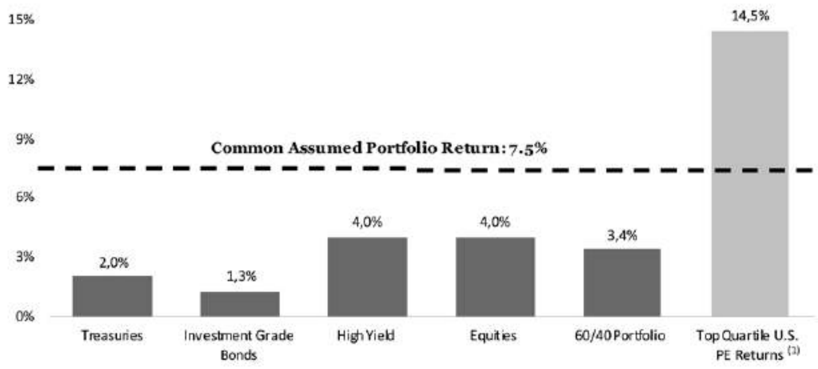
What we have learnt over many years is that alternatives, if employed correctly by resorting to the proper strategies and with the proper managers, can actually reduce your portfolios' risks and secure a returns' increment.

Alternative Assets offer a way to lift pension plan returns. However, those assets must be comfortable with illiquidity in a portion of the portfolio and must stay disciplined in working with top-quality managers. We are seeing rising allocations to alternatives across our base of institutional investors, particularly in the Private Equity (PE) asset class.

If we believe we are really in a world of low interest rates, high volatility, low growth, then the returns in traditional asset classes will be lower than what they have been over the past 20 years. Graph #1 shows that even if net returns in private equity decline some, there is plenty of room to outperform the returns of treasuries, investment grade bonds, high-yield and equities.

GRAPH # 1

CONTINUED PRIVATE EQUITY OUTPERFORMANCE EXPECTED
PROJECTED ANNUALIZED RETURNS
(FIVE-YEAR PROJECTED RETURN)



SOURCE: SOURCE: GOLDMAN SACHS INVESTMENT STRATEGY GROUP "2014 OUTLOOK" REPORT, JANUARY 2014.
(1) REPRESENTS HISTORICAL 20-YEAR ANNUALIZED RETURNS AS OF SEPTEMBER 30, 2013. SOURCE: THOMSON REUTERS.

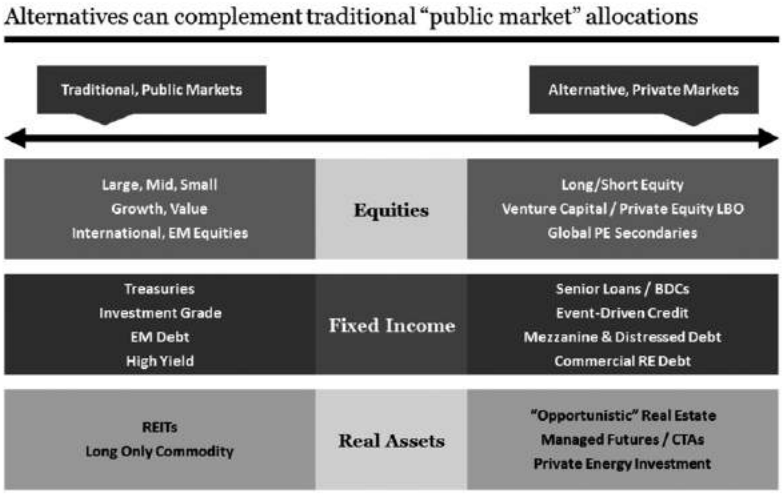
Alternatives in context

Figure #1 shows that for each of the traditional liquid asset classes, whether these are equities, fixed income or real estate and/or commodities, there is a cousin or a brother in alternatives that gives you an exposure to the same alternative asset class, rather than in a traditional liquid format.

Why would we do that? I believe the alternatives have proven they can generate alpha within those asset classes. Why do you get into liquid markets? It is because the investments have been arranged with a longer term perspective in mind, and so there is not a focus on daily or monthly liquidity, and you can invest behind trends or managements or teams which you have the power to play out over 3, 4, 5, 6, or even 7 years; thus you are not worried about what happens from one day to the next; you have more flexibility and are able to think long term.

Graph #2 is very interesting; the bottom axis looks at the risk, and so the further you are to the right, the riskier something becomes. The vertical axis looks at returns and what you see is if you take something like PE, it generates very high returns but the risk is also quite low. If you draw with a pencil a line from PE to the MSCI world equities index (Global PE, excluding the United States) what you see is that global public equities over 20 years have generated half the return of PE with twice the risk, is to say, half the return with two times the risk.

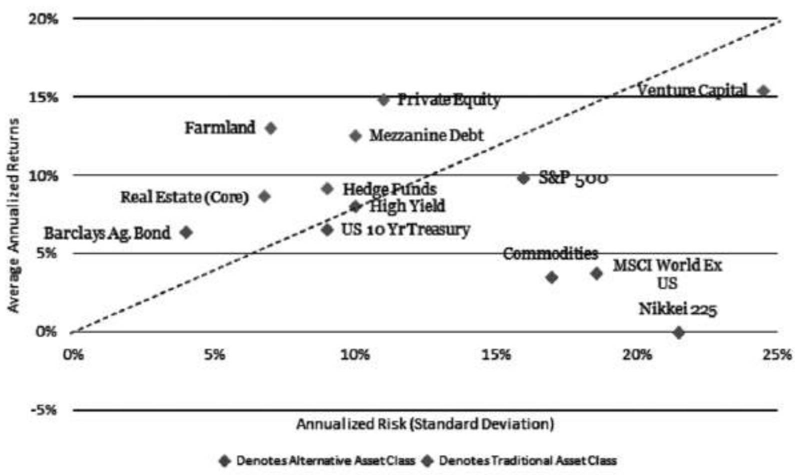
FIGURE # 1



SOURCE: THE AUTHOR.

GRAPH #2

PRIVATE EQUITY HAS HISTORICALLY OUTPERFORMED MOST OTHER ASSET CLASSES ON BOTH AN ABSOLUTE AND RISK-ADJUSTED BASIS
RISK-RETURN OF VARIOUS ASSET CLASSES
1995–2015[2]



SOURCE: THE AUTHOR.

You can look also at the differences with a bit more modest viewpoint but if you look at the axis in S&P 500, they tore a benchmark liquid equity index and thus the returns are lower, meaningfully lower than private equity: 500 basis points

2 *Period ending 3/31/15. The returns and volatility of the asset classes presented are based on the following indices: (i) Private Equity: Cambridge Assoc. Global Private Equity; (ii) Venture Capital: Cambridge Assoc. Global Venture Capital; (iii) Mezzanine Debt: Cambridge Assoc. Mezzanine Debt; (iii) Hedge Funds: HFRI Fund-Weighted Composite; (iv) Commodities: DJ-UBS Commodity Index (TR); (v) Barclays Ag. Bond: Barclays Aggregate Bond Index; (vi) Real Estate (Core): NCREIF ODCE Property Index; (vii) Farmland: NCREIF Farmland Index; (viii) U.S. 10 Yr Treasury: U.S. 10 year Treasury; (ix) High Yield: Credit Suisse High Yield Index. Note: Past performance is not necessarily indicative of future results. There can be no assurance any alternative asset classes will achieve their objectives or avoid significant losses. These indices have been selected as generally well-known and widely recognized indices and not as a benchmark for any specifc fund. Equity indices include reinvestment of dividends. A summary of the investment guidelines for the indices is available upon request.*

and the risk is more than 50% greater. So, why is it that alternatives have provided historically and are likely to continue providing or going forward with higher returns and lower risks vis-à-vis liquid asset classes?

We believe Private Equity as an asset class has been able to outperform public equity markets through cycles due to:

a. **Superior governance:** You are focused on long-term value, not on your mark-to-market for the next quarter and reporting to the public tomorrow; you are focused on long term value creation, not on one-day value creation.
b. **Staying power:** You can invest and exit opportunistically; you are never forced to act.
c. **Operating intervention capabilities:** You have skills and resources to help drive growth in cash flows.
d. **Informational advantage:** Detailed due diligence conducted on every investment.
e. **Customized terms:** Privately structured transactions allow for downside protection.
f. **Strong alignment between manager and costumer:** The manager, in a typical private equity style, drawn down from the structure; the manager does not receive an interest unless they have delivered a return of at least 8% to the investor. Such 8% hurdle must be in cash. It cannot be on the basis of mark-to-market. So you get money back above an 8% hurdle, then the manager gets money back. I think this incentive alignment is very critical.

Table #1 highlights what the historical results are as far as all these differential tools are concerned. I will try not to pick an arbitrarily short time period but to look at this over different time periods: 3, 5, 10 and/or 20 years. What you will see is that along such time, private equity has outperformed liquid markets by somewhere between 500 and 700 basis points; a sizable figure by any means!

What you see on the right hand side of the Table #1 is due to these tools, based on their superior governance, also due to the long term nature of the asset class and the volatility being a lot lower. So this is over a long period of time, and through all of the crisis volatility experienced in the past few years.

TABLE # 1

PRIVATE EQUITY OUTPERFORMANCE
THROUGH CYCLES, PRIVATE EQUITY HAS SIGNIFICANTLY OUTPERFORMED PUBLIC EQUITIES, IN TERMS OF BOTH RETURNS AND VOLATILITY

	Annualized Net Returns[1]				Annualized Volatility of Quarterly Returns[1]			
	3 Years	5 Years	10 Years	20 Years	3 Years	5 Years	10 Years	20 Years
Global Private Equity	13.9%	13.6%	11.8%	13.2%	4.8%	6.7%	9.5%	10.4%
U.S. Private Equity	16.7%	16.2%	12.2%	13.5%	3.7%	5.5%	9.5%	11.3%
MSCI World	12.2%	9.8%	6.4%	7.0%	10.7%	13.0%	16.3%	15.4%
U.S. Private Equity Outperformance	4.5%	6.4%	5.8%	6.5%	(7.0)%	(7.5)%	(6.8)%	(4.1)%

SOURCE: THE AUTHOR.
NOTE: PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. THESE COMPARISONS ARE BEING PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THESE RETURNS REPRESENT RETURNS OF VARIOUS ASSET CLASSES AND NOT THOSE OF ANY SPECIFIC FUND. THESE INDICES DIFFER FROM FUNDS IN THAT FUNDS ARE ACTIVELY MANAGED ENTITIES THAT BEAR FEES, AND FUND RETURNS ARE ULTIMATELY REDUCED BY MANAGEMENT FEES, CARRY, AND PARTNERSHIP EXPENSES.
(1) ALL DATA IS FOR THE PERIOD ENDING SEPTEMBER 30, 2015. THE RETURNS AND VOLATILITY OF THE ASSET CLASSES PRESENTED ARE BASED ON THE FOLLOWING INDICES: PRIVATE EQUITY: CAMBRIDGE ASSOC. GLOBAL BUYOUT & GROWTH EQUITY AND U.S. BUYOUT & GROWTH EQUITY. MSCI WORLD, BLOOMBERG.

Asset class examples: incorporating Alternatives Assets in the portfolio

Going back in time some 10 -12 years, I believe alternatives habitually meant 2 things: Hedge Funds and PE. Nowadays it has really evolved; now we have much better offerings in real estate, credit second areas and opportunistic real state (See Table # 2).

So as you construct an alternative portfolio - if you think this is the smart thing to do - you have to think about what are your key objectives pertaining risks, returns, liquidity, currency or interest rate risk. Furthermore, you have to ponder diversifying away from whatever is the course or which is the income return for the pensioners you serve. Likewise, if you are dealing with a commodity – and depending on the economy concerned - you probably want to diversify away from such.

TABLE # 2

THE BENEFITS OF ALTERNATIVES ASSETS CAN ANSWER SPECIFIC INVESTOR OBJECTIVES

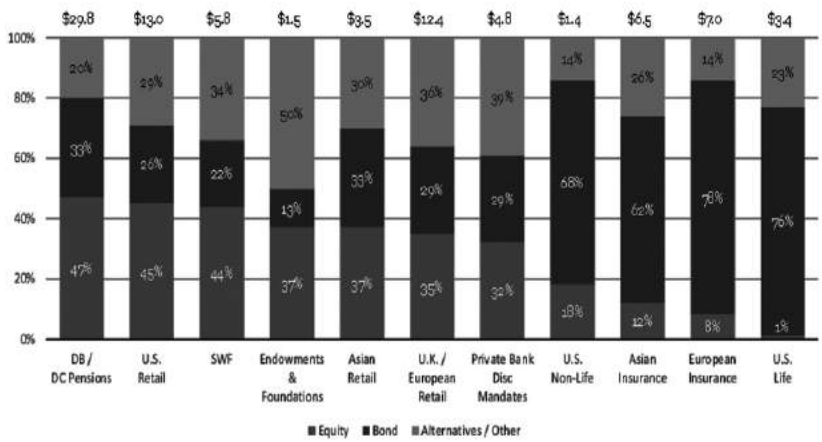
Strategy	Diversification	Return Enhancement	Inflation Protection	Interest Rate Diversification	Downside Protection
Alternative Equities					
Long/Short Equity Hedge Fund	?				?
Private Equity		?			
Private Equity Secondaries	?	?			?
Alternative Fixed Income					
Long/Short Credit Hedge Fund	?		?	?	?
Mezzanine Debt	?	?	?	?	
Real Estate Debt					
Alternative Real Assets					
Opportunistic Real Estate	?	?	?		
Private Energy	?	?	?		

SOURCE: THE AUTHOR.

Graph # 2 shows what institutional investors around the world do, and they are typically allocating between 20 and 50 per cent of their assets into alternatives. Yu will note sundry foundations like Yale, Harvard and others, which over time, have generated the highest return concerning managers and asset managers. And they allocate 50% of their capital to alternatives and the returns’ recycles have been much higher than anybody else´s; and so that is a noteworthy point worth bearing in mind.

GRAPH # 2

THE MAJORITY OF INSTITUTIONAL INVESTORS HAVE BETWEEN 20%–50% INVESTED IN ALTERNATIVES
ASSET ALLOCATION ACROSS INVESTORS

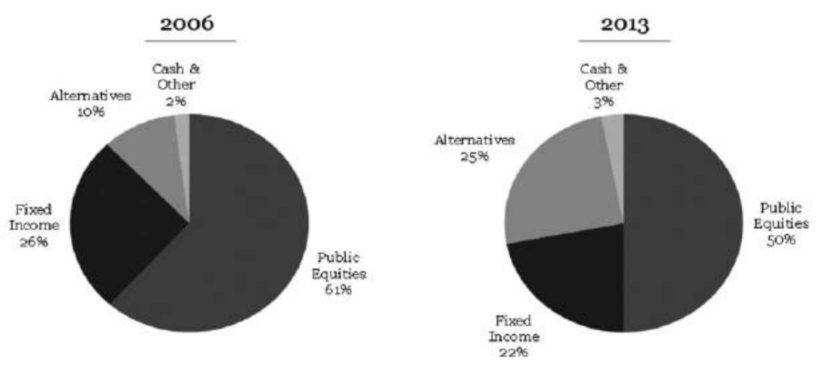


SOURCE: "GLOBAL ASSET MANAGERS: GREAT ROTATION? PROBABLY NOT." MORGAN STANLEY RESEARCH (OCTOBER 8, 2013).

Figure #2 is really interesting. This is the US State pension plans. What you see was in year 2006, so before the global financial crisis, US State pension plans allocated 10% of their capital to alternatives.

FIGURE # 2

ALTERNATIVES HAVE BECOME AN INCREASINGLY MORE IMPORTANT ASSET ALLOCATION FOR PUBLIC PENSION PLANS



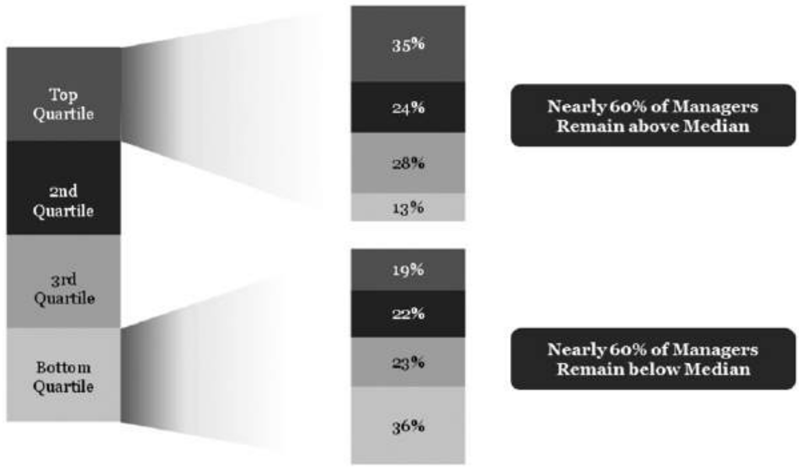
SOURCE: CLIFF WATER 2014 REPORT ON STATE PENSION ASSET ALLOCATION AND PERFORMANCE. REPRESENTS DATA FOR STATE FUNDS.

Now there is often a question; alternatives do not pay, they are risky, but what happens here is that the numbers are going up by 25%; nowadays it has become 2 and a half times larger. So today US State pension plans tend to be underfunded and have massive and growing retiree obligations to fulfil. With the added benefit of the financial crisis and all of the turmoil we have been through, such pension systems have increased their allocation to alternatives by 2 and a half times. Why have they done that? Because if they do not do that, they will never be able to achieve the returns they need to secure in order to meet the fund liabilities. It would not be possible for the system to go forward; they would not be able to deliver.

I think Figure # 3 is interesting and a little bit hard to follow. What it says is that generally there is a performance consistency across managers; so somebody who has a good track record, best practices, good team, good culture and good discipline tends to stay good.

FIGURE # 3

PRIVATE MARKET PERSISTENCE?
PERFORMANCE OFTEN CONTINUES ACROSS VINTAGES



SOURCE: STEVEN N. KAPLAN, ROBERT S. HARRIS, TIM JENKINSON, RUDIGER STUCKER, "HAS PERSISTENCE PERSISTED IN PRIVATE EQUITY? EVIDENCE FROM BUYOUT AND VENTURE CAPITAL FUNDS (FEBRUARY 2014) . DARDEN BUSINESS SCHOOL PAPER: 2304808. VINTAGES ARE ONLY THROUGH 2008 SINCE MORE RECENT VINTAGES MAY SELL BE INVESTING AND HAVE FEW REALIZATIONS.

As you allocate your alternatives, I think there are 2 critical decisions: one is how much and within which sub asset classes, but the other concerns the managers; you have to pick the right managers. This is particularly valid if you are newer to an alternative allocation. What seems to be responsible is to pick a fewer best team class managers with long track records and usually resorting to good procedures, so it would be a safe bet they will perform as responsible custodians for your money. Then as you become more involved, you can take more risks with new managers for spinouts but with a consistency pertaining track record, culture and investment decision-making processes. I think it is critical to **preserving your capital and not losing money.**

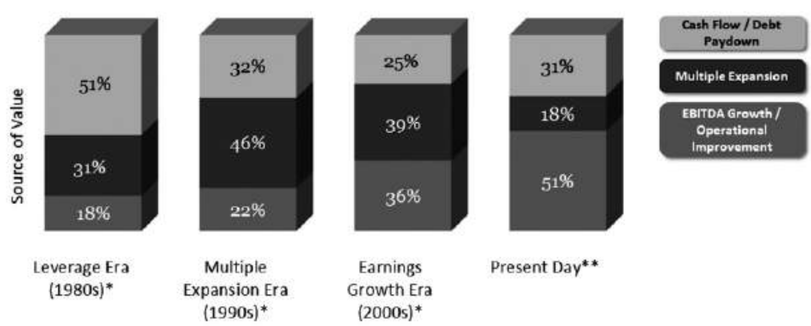
Driving value creation

These are a couple of examples of how the differential value is driving the private equity and with details concerning some of the things we are doing in our firm, Blackstone.

You can see in Graph # 4 a common perception of private equity. In the 1980s this was a business step gearing assets with a 90% debt and 10% equity; with very little of the value creation stemming from the actual growing of companies' earnings. What you see nowadays is that more than 50% of the value for the industry as a whole, is driven by a steady growth of the businesses' cash flows. It is organic; it is operational, is not financial engineering. And that is a critical point since in a low growth environment is becomes really important to be able to extract a differential growth via actions subject to your control.

GRAPH # 4

THE OPERATIONAL IMPERATIVE: DRIVERS OF ALPHA IN PRIVATE EQUITY
VALUE CREATION IN PRIVATE EQUITY HAS SHIFTED; GROWTH IN PROFITS IS CRITICAL TO GENERATING ATTRACTIVE RETURNS



* GOLDMAN SACHS; BCG-IESE ESTIMATE. "WHY PRIVATE EQUITY IS HERE TO STAY." PUBLISHED IN 2008.
** CAPITAL DYNAMICS. "VALUE CREATION IN PRIVATE EQUITY." PUBLISHED IN JUNE 2014.
SOURCE: THE AUTHOR.

Blackstone portfolio operations

Now I want to focus on our own firm, Blackstone, just because I can give some tangible examples. In our company we focus a lot in finding a way to expand and better the business we buy; and I am prepared to expand a little bit on such key issue. Over the course of time, about 68% of the value we create for our limited partners comes from earning´s growth scrolls; not from multiple expansion and neither from leverage. 68% is coming from earnings' growth. What I believe is important about this, is none of us know what the yield on the 10-year Treasury bonds is going to be; that is in 2, 4 or 5 years from now. We have no idea and we can merely speculate about it. That means we do not know what multiples are going to be a true fact. Multiples can go up or down and they are unpredictable.

What we can control in our alternatives is the rate of growth of our companies. We cannot control interest rates and, likewise, we cannot control multiples. Such factors may well surprise us during the upside or the downside cycles. Again. we can speculate about them, but it is very difficult to predict and thus we should not rely on that.

One in every company we acquire will bring in an ex CDO and port members from the industry; who do invest equity in the company and help advisors on how to make the business better. These are not just Wall Street people who have never worked in a real company; but we do also some interesting things. Like all of our companies, they purchase their office supplies and services jointly via Blackstone, so whether they entail travel services or office furniture, they purchase all of that collectively. In doing so, the collective buying power of all the companies we own, allows them to buy much more cheaply. We save hundreds of millions of dollars every year by merely buying together; it is an amazing feat!

The second thing we do – and which is really unique to the US – starts by recognising the US health care system is in complete disarray. Because of this fact, we do manage the health care feature within our companies; also based on a collaborative approach.

Whenever we negotiate with an insurance company, Blackstone becomes one of the largest customer the US insurance companies aim to serve on a global basis. So it is hardly surprising we get better terms, coupled with a better service for our employees, which become happier employees benefitting from a good medical care structure. Furthermore, good benefits become tantamount to productive employers.

In driving value while also increasing market and profitability we make our companies bigger, more valuable and more attractive to the public markets; and also more attractive to whoever the next buyer may be. Certainly this is not something you can easily do or arrange in a public context. You do not have the time nor the flexibility; you can only do that in a private sector context and where you have 5, 7 or 8 years to optimize your value targets.

Examples

a. **Food business company**

There is a food business company we acquired in 2007 that produces salad dressings, pickles and frozen dinners. We managed to make 4 times the money placed there by our investors, simply by making the business better. What were our specific and relevant actions? We replaced the management team, did some critical acquisitions and consolidated the manufacturing footprint. We really brought back to life its marketing and sales organisations. This approach allowed us to create a proper alignment for the employers to really drive towards cash flow growths.

So with all the expertise we were able to bring to bear - and using a world-class management team - we are now in the pole position against the background of a business which grows a plus-managed GTP. Thus we are able to generate 4 times the money for our investors, although we refrain from saying we bought out the business during the Spring of 2007, that is right before the world expansion ended!

b. A company of security officer services and a provider of janitorial services

These are businesses where we managed to secure, on the one hand, about 5 times our money; and an equally interesting rate of about 3 times our money in the second case. How did we manage to secure such target aims? It was by penetrating new accounts, using the Blackstone network to get these businesses to become international accounts. Again, it was by redesigning the overall operations of these companies and by setting a new profile of sales incentives, a penetration drive into new markets and by resorting to our best practices stipulated in our company's portfolio. Thus these companies managed to earn impressive returns and became stable-minded businesses; albeit these are not companies you may have heard about.

Nonetheless they are currently generating 3 to 5 times the money multiple for the benefit of our pension fund investors. So those are the kind of things we attempt to do within other firms; trying to operate with businesses we know about. At first look they are not as sexy as the high flying tech names or some of the other well-known companies whose names we are familiar with, thanks to them being quoted habitually on the news and on TV.

Final remarks

I wish to add a few things I do strongly believe in - but I readily admit to be biased because I have spent 20 years abiding by them. Of course, there are other alternatives available for all of us to increasing returns in our portfolio while dampening the risk and volatility factors; not a mean feature!

Also I feel very strongly we are in a very, very odd/funny environment, where volatility is high, financial entails a re-pricing drive and whereby Central Banks are creating all kind of weird asset pricing practices. That said, rates may still encompass a good return over a long time but otherwise they may not and while correlations are higher than ever.

I personally feel investing habitually in a liquid market is tantamount to paying a visit to the nearest gambling casino: you do not know what is causing the price movements, it is not necessarily rational. That said, alternatives perform like a port or an anchor during a storm. My overall impression is that we happen to be operating in a sort of odd/strange macro economy and market environments.

A second point, which I mentioned at the beginning of my presentation, is the fact liquidity is an overvalued feature. Indeed, you all know what your obligations are. Whenever there is a portion of your portfolio which does not have to be liquid, the testing time comes when you actually try to sell it. Even in the US, which is the most liquid market, it is not as liquid as you think it is. This means, more often than not, whenever you need to sell it is when – perhaps while another crisis may be unfolding – you are prevented from doing so; unless you are prepared to take a very large discount.

So I think the liquidity feature is overvalued and, nowadays, we do not all have as much liquidity as we believe we do.

The third point I wish to make, as I talk about alternatives which have really grown during the past 10 years, all of you can tailor your portfolio. It does not have to be private equity. Since there are all sorts of risk flavours, direction, liquidity and fees to consider/ponder; so you should be able to come up with something that is customized to suit your objectives.

ALTERNATIVE ASSETS: SOURCE OF RETURNS, LOCAL INDUSTRY AND THE ROLE PLAYED BY THE AFP ENTITIES

ALDO FERRINI[1]

1 *Aldo Ferrini is a Business Administrator graduated in 1996 from the Pacific University. He also holds a MBA Degree awarded to him in 2003 by IESE in Barcelona, Spain. He is currently the General Manager of AFP Integra, a position he has held since April 2016. Since joining Integra in 1997, the noteworthy positions he has held range from Risk and Planning Manager, Vice President of Investments to Deputy General Manager. In 2008 he left on transfer to Colombia to take up the position of Vice President of Finance and Risks of the entity known as ING Pensiones y Cesantias ("ING Pensions and Unemployment"). The latter is a pension management entity whose portfolio at the time was in excess of US$ 6 billion worth of assets. Mr Ferrini held his position until December 2010. While in Colombia he has been a Board Member of Messrs Invita Seguros de Vida (Life Insurance), Incasa EAH and ING Pensiones y Cesantias (see above).*

In was in period 2003 - 2004 when AFP Integra implemented its first investment fund in alternative assets and the result was very bad. Investing in suck kind of assets is not easy and that is one of the lessons learnt the hard way. At the time it could be assumed such move was tantamount or similar to investing in listed stock companies (*public equity*), but in real life such instruments are totally different worlds altogether.

In 2008 such investments continued to be implemented, albeit following a regulatory change in year 2012 which is specified below, and were definitely regarded as an asset type.

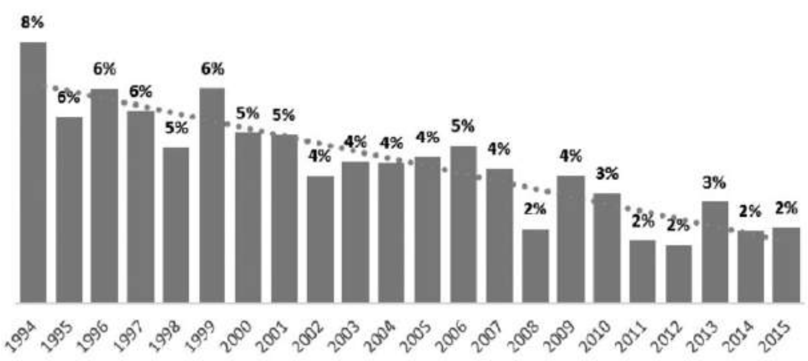
The classic definition of "alternative product" provided by the CAIA (Chartered Alternative Analyst Association) is anything other than bonds or shares.

The challenge

The main challenge is to achieve investment returns in a world where interest rates have been steadily dropping for many years now - and where the *public equity* returns have experienced a downward trend for at least the past 20 years - and with the pension funds showing also a reduced profitability. The Fund Account # 2 in Peru, which was introduced in 1994, has experienced a downward trend too. The international *equity* market dropped in line with the Peruvian stock market. In this context, as quoted by Vik Sawhney, returns can be clearly found in alternative markets.

Graph # 1 is slightly misleading, since it shows a returns' downward trend from about 5% in 2001 to 2% in 2015. In 1994 the yield peaked at 8% but there is no data referred to earlier periods. From this evolution it can be assumed as though alternative assets appear as the option for improving the fund returns. That said, such assets are not supposed to reach the levels recorded in period 1994- 95 - when the market was completely different, and while everything was invested in the local market at higher rates and significant risk premiums. However, they are a great option if we are to improve yields.

GRAPH # 1
RETURN RATIOS OF THE TREASURY BONDS OVER A 10-YEAR PERIOD

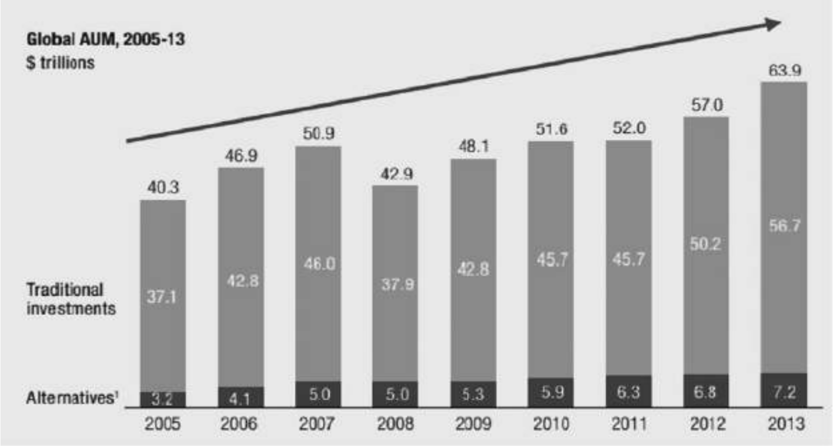


SOURCE: ALDO FERRINI.

The asset type

The worldwide growth of the alternative assets' industry has been quite significant. Indeed, its growth rate has been twice as much when compared with the traditional assets' market (See Graph # 2). All investors, including most pension funds, are currently looking for this yield, with such aim being a significant challenge.

GRAPH # 2



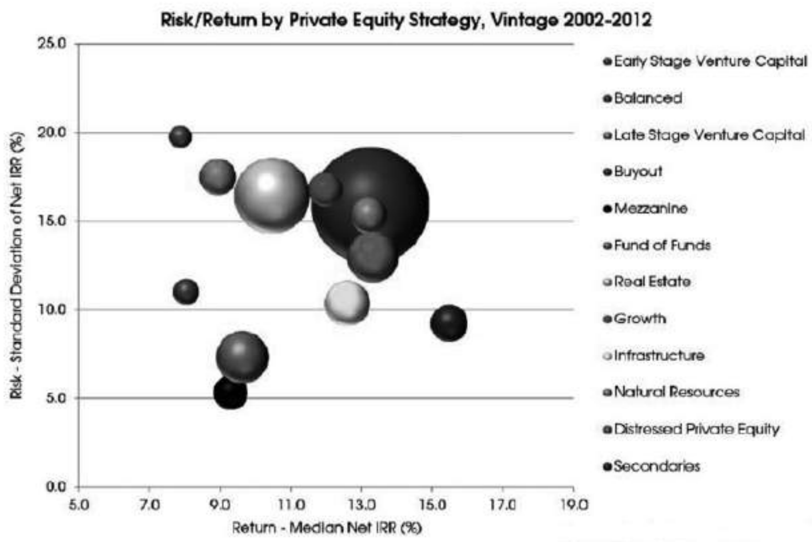
SOURCE: ALDO FERRINI.

It becomes relevant to wonder what has turn such assets into a successful proposition and what would happen when they stop growing at this impressive rate; and while also interest rates start to rise and move out of that market coupled with another discount rate. While on this, let us not mention other comparisons with fixed income rates we should have to address.

Whenever entering this alternative market, the first thing that comes to mind is the *private equity concept,* and where buying and selling company stocks are undertaken using multiple strategies. However, the field of alternative assets is much broader-based.

Whenever looking into the *private equity* market, it is very important to choose a suitable strategy. As shown in this Graph (See Graph # 3), there are different combinations of risk-return and assorted/different strategy sizes. The traditional buyout strategy is the abode, with such encompassing the size of the industry, risk-return and different strategies and return ratios. Thus, it becomes very important to define the strategy to be used and how it fits with your portfolio.

GRAPH # 3

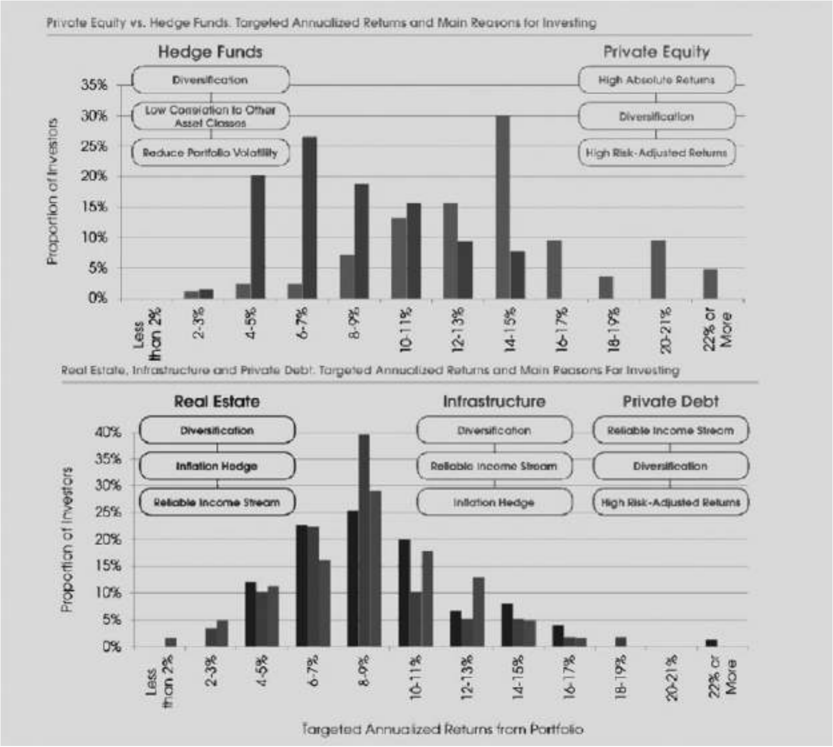


SOURCE: ALDO FERRINI.

Above all these alternatives there is the option of performing as a co-investor. Such option entails entering a *private equity* fund and, furthermore, arrange a direct purchase of a specific asset. The great benefit here is that commissions are lower, but its shortcoming entails a greater responsibility when it comes to managing such co-investment. In short, you should be at least a little more active while performing such task.

In Chart # 1 we notice five large groups of alternative strategies: *hedge funds, private equity, real estate*, infrastructure and private debt; in which AFP Integra operates more swiftly and comfortable. However, the hedge fund strategy does not suit very well with the overall Integra inclinations.

CHART # 1

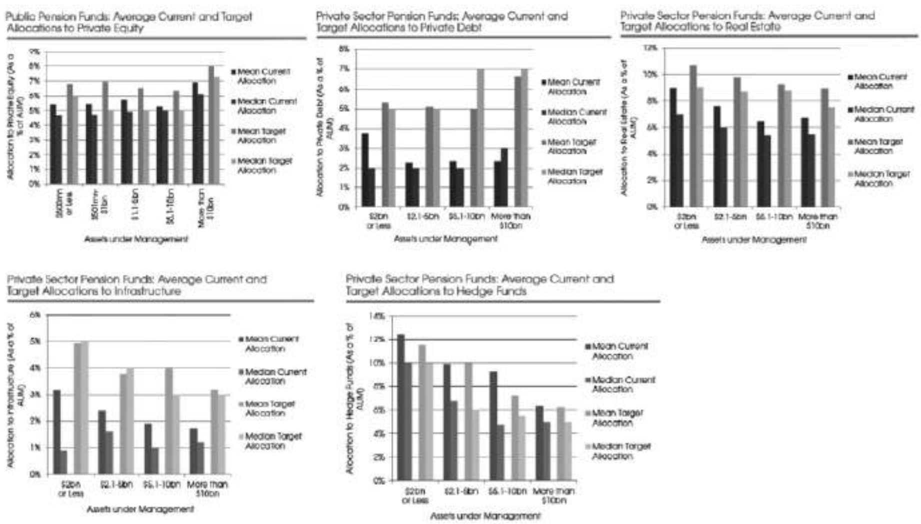


SOURCE: PREQIN PERFORMANCE ANALYST.

For a traditional portfolio, these five strategies bring about a diversifying effect. Two of them, namely *private equity and private debt,* have a plus or beneficial factor in the form of a better-adjusted return vis-à-vis traditional assets. However, *private debt* strategies, infrastructure and *real estate*, have recurring sources of returns, which are tantamount to an *equity* mix with a bond; thus being very effective pension portfolios such as those managed by Integra. Furthermore, *real estate* and infrastructure also provide an inflation-proof cover to the funds concerned.

The point to note here is the strategy to be adopted, which should be chosen in line with the existing mandate, and not necessarily calling for alternative searches as a single group or only for a private equity. There is a capability in place for using any of the foregoing strategies, with a view to ensuring they are in line with the portfolio in a best suitable way (See Chart # 2).

CHART # 2



SOURCE: PREQIN FUNDS IN MARKET.

The important message stemming from these graphs is that in all strategies considered (except for the hedge funds), with the current position of both pension and global pension funds – as viewed by the industrial statistics' specialists known as Preqin – is *below the target allocation*. This means that the demand for alternative assets continues to grow and all funds are aiming to have a greater exposure to such market. No doubt such factor is creating a significant opportunity but also a great challenge; chiefly because the universe of opportunities where you can invest does not grow at the same rate as demand.

The total number of companies that can be purchased are practically the same, but with a little initiative work it may be possible to convince someone else to sell or participate in any project. However, let it be said such possibility does not mean the number of investment opportunities is bound to double or triple year on year. All the foregoing factors and events should generate a greater competition, but the possibility of multiple entries onto these options are now less attractive than 10 -15 years ago.

A 30% *target allocation* is approximately the investment ratio currently being placed in the market for alternative assets; a figure which is coincidental with that stipulated by Vik Sawhney. The AFP Integra office in Peru is not so far from this ceiling, a fact which provides a very welcome peace of mind!

Benefits

The benefits stemming from alternative assets are crystal clear: The have had a higher return than shares and bonds (See Graph # 4), and whose diversification effect on both the portfolio and the sundry different investment strategies has been rated as very important. In the past few years, the return point shows 8 of the 10 alternative asset types as being more profitable than global equities; with 9 out of 10 alternative asset types also being more profitable than global bonds (See Table #1). From the viewpoint of benefits, certainly this has been the most important factor.

GRAPH # 4

PERFORMANCE OF ALTERNATIVE ASSETS

SOURCE: BCA RESEARCH 2016.

TABLE NO. 1
COMPOSITE ANNUAL GROWTH RATE FOR DIFFERENT ASSET TYPES

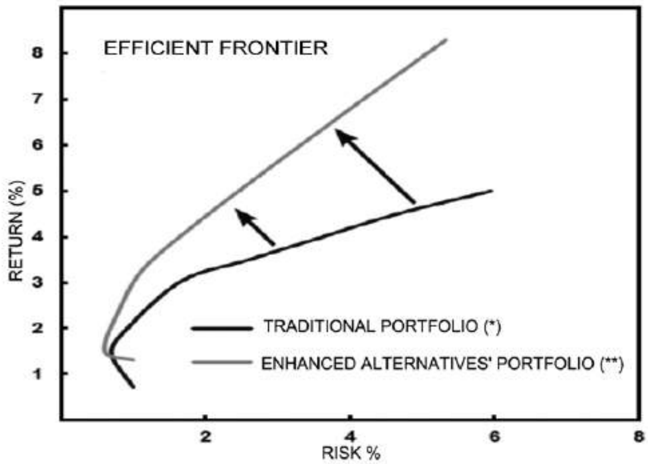
CAGR SINCE 1997	
ASSET CLASS	RETURN (%)
VENTURE CAPITAL	13.6
PRIVATE EQUITY	$\boxed{13.4}$
FARMLAND	12.7
DIRECT REAL ESTATE	9.7
REITS	9.3
TIMBERLAND	7.3
HEDGE FUNDS	6.9
WINE	6
GLOBAL EQUITIES	$\boxed{5.8}$
STRUCTURED PRODUCTS	5.6
GLOBAL FIXED INCOME	4.8
COMMODITY FUTURES	-1.3

SOURCE: BCA RESEARCH 2016.

A well-run alternative assets' strategy helps to increase or improve the efficient portfolio frontier (See Graph #5), so it becomes imperative for the fund managers to choose well. The effect posed by diversification when it comes to reducing volatility is very relevant; and must be looked upon in tandem with both the impact of an enhanced/efficient borderline and/or the profitability success generated in the alternatives' market.

Such overall improvement is not necessarily due to an improvement of multiples, but to an enhancement of the operational management within the companies concerned. Such is the great attribute encompassed within the world of alternative assets. For pension funds, liquidity is indeed a very comparative advantage. If the market allocates or not far too much weight to the liquidity factor, will depend on what strategy and what is the status or management of the cash flows shown by each fund.

GRAPH # 5



(*) PORTFOLIO ENCOMPASSING A 50% IN SHARES; A 47.5% IN BONDS AND A 2.5% IN CASH.
(**) PORTFOLIO ENCOMPASSING A 40% IN SHARES; A 37.5% IN BONDS; A 20% IN ALTERNATIVE ASSETS AND A 2.5% IN CASH.
SOURCE: BCA RESEARCH 2016.

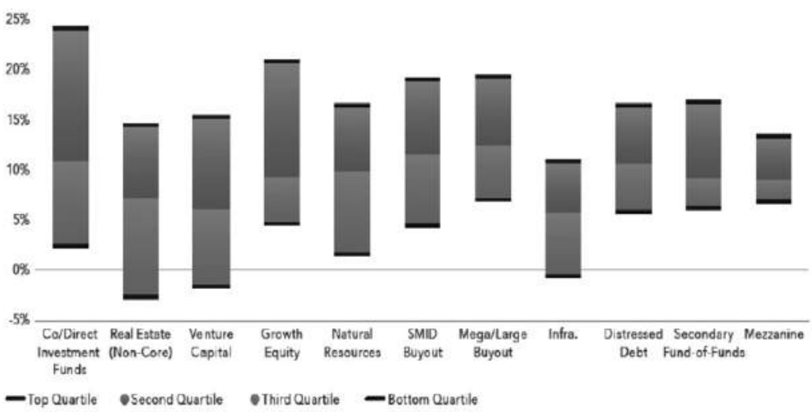
The great advantage of the pension funds is clearly they need not to be liquid. In Peru, now the law provides the option for the would-be pensioners or contributors to withdraw 95.5% of their funds at the time of retirement. Prior to such option being introduced, the funds were expected to show - and for a long time - remarkable surpluses coupled with the relevant cash flows. Such factors entailed a competitive advantage which must be put to good use right now.

Alpha or beta?

If we are to beat the stock or global markets, it is not enough to merely enter the market for alternative assets and buy any instrument. Graph # 6 shows a high dispersion factor among managers positioned at t*he top quarter* and those in the opposite far end or *bottom quarter.*

GRAPH # 6

SPREAD OF RETURNS BROKEN DOWN BY STRATEGY TYPE



SOURCE: HAMILTON LANE FUND INVESTMENT DATABASE, AUGUST 2015.

For instance, and as far as the *direct investment funds* is concerned, it can be noticed those positioned in the second quartile did yield between that range and the third quartile. That said, please note the fourth quartile in which the dispersion factor extends from the beginning of such range and the start of the first, and representing some 20 percentage points.

In plain English, chances are that you might experience a total failure or setback when adopting an alternatives' strategy. The message was very clear in this first investment which, fortunately was very small. Please note it is an essential requirement to undertake a *due diligence drive* whenever seeking background data on any alternatives' fund and the relevant investment strategy to abide by.

In the alternative assets' market, it is fairly common to come across a biased choice, whereby you may choose the best fund among those which come forward; regrettably such habit usually translates into a big mistake. Integra's own experience during the past 8 - 10 years tells us it is essential to search for the best alternatives fund or the best fund management and/or GP operators in the international market. This advice is based on the fact those fund management entities which tend to call on us first are usually a small fraction of the potential universe which is to be had out there!

In the alternatives' market there are many managers, but it becomes very difficult to choose the best one. To assist with a proper manager identification drive you will need a *due diligence* team. The purchase of an alternative fund is not like buying Apple shares; should you make a mistake with them it will take you some 35 seconds to sell then again during the next day. Whenever a *private equity* fund is acquired, it is tied for 10 years or more. During such period the fund's follow-up or monitoring work is much more protracted as opposed to global or traditional market cases.

Differences also vary depending on the strategy adopted, and it is not about finding the best of all; but to search for the strategy that fits better with the portfolio as well as choosing the fund itself and its size. Those who have made a good move on this score are likely to persevere in doing well; whereas those who have done wrong will probably continue making mistakes. What is relevant here is the fund size.

The more stable funds are those which will consider a slightly more predictable return; and are usually the largest and most capable of fulfilling their return ratio promises. For a pension fund such aspect is very important. Probably, when a *family office* or someone who can take on a little more risk - and which also holds a less remarkable fiduciary duty than what any AFP has - could go for the top quarter and secure significant returns.

Latin America also has a role to play

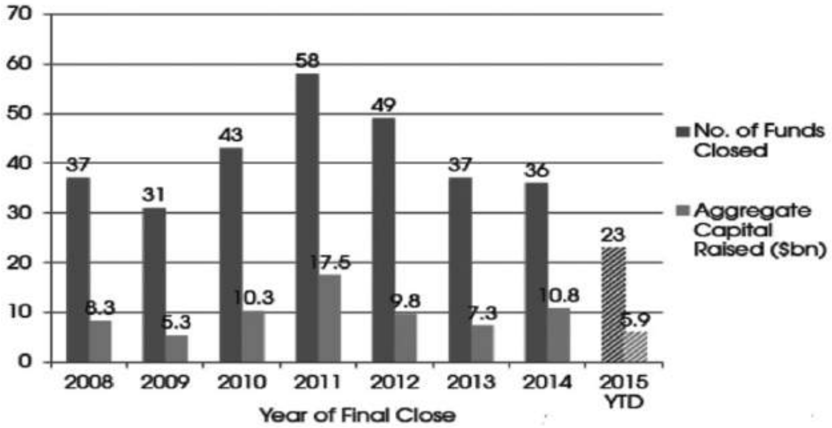
It is hardly surprising the industry is slowing down its pace in Latin America (See Graph # 7), with the overall economy following suit. It is a well-known fact there are less funds capable of raising money; a feature which is only too natural. The overall region has become less attractive and less people are interested in investing. Part of this slowdown is what has also been noticed in Peru; mainly due to the fact most managers of private equity funds (General Partner or GP) have not been able to invest what they have managed to raise.

The Peruvian experience shows many funds which were raised by the GPs in period ranging from 2008, 2010 and 2012, were subsequently unable to invest. In these circumstances of investment inability, then it becomes easy to predict a very negative effect for the investor.

In simple words, if such managers do not actually invest all the funds, much of the return offered will fade away in the form of commissions paid out; with the funding venture turning out to be a pretty bad one. The ability to systematically invest the funds and ensure they are spread out during the investment period is crucial; all this is crucial if we are to ensure the success of the relevant strategy adopted for each of the funds concerned.

GRAPH # 7

RISE OF PRIVATE EQUITY FUNDS THROUGHOUT LATIN AMERICA
(2008 - NOV. 2015)

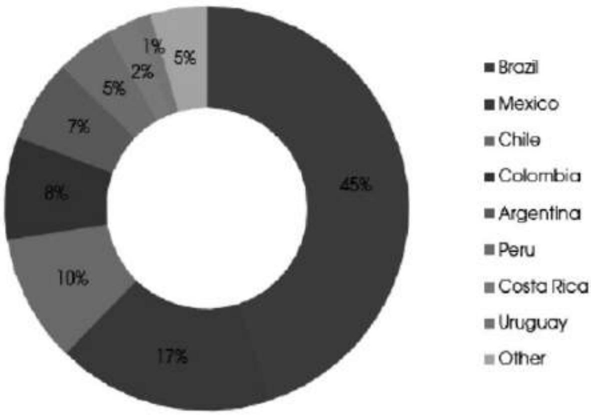


SOURCE: PREQIN FUNDS IN MARKET.

Another of the problems within Latin America is the high concentration in Brazil (See Graph # 8) and, on the other hand, the capital raising drives do rely heavily on private pension funds (See Graph # 9). Such fact is also commonplace in Peru and where, should there be a fund to be invested, it is arranged in the form of either a *private equity* or an alternative fund. However, if a minimum of two of the four existing AFPs are not keen to go forward, then it becomes virtually impossible to secure anything. Furthermore, such state of affairs generates a series of problems. It does not matter how good the fund is, merely because at that point in time, the relevant AFP does not have such strategy in its current portfolio.

GRAPH # 8

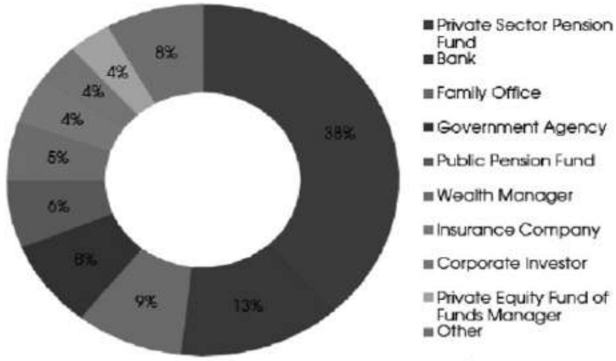
BREAKDOWN BY L.A. COUNTRIES OF THE MANAGEMENT ENTITIES WHOSE FUNDS ARE BASED ON PRIVATE EQUITY



SOURCE: PREQIN FUND MANAGER PROFILES.

GRAPH # 9

BREAKDOWN (BY TYPE) OF ALL INVESTORS BASED IN LATIN AMERICA



SOURCE: PREQIN INVESTOR INTELLIGENCE.

The Peruvian Experience

Peru is a relatively small market, with almost all the pension funds having adopted the *private equity* format. Since December 2014 no significant changes have been introduced; there are two large funds with all the others being very small. These small funds will generate a fairly onerous follow up cost to the pension funds; thus there is a sort of disincentive to any steady investment in them. To invest less than US$ 30 million in a ticket is too expensive for the negligible effect on the portfolio status, if any at all.

Without the active role performed by the regulator and the AFPs alike, we would not have been able to secure this market development status and the alternative assets' creation. Prior to the reform of year 2012, it was only feasible to invest up to 3% of all funds in international alternatives; and the alternative asset class was yet to be created. Therefore, the effort to place a 3% of total portfolio funds in alternatives did not generate any important benefits in terms of diversification or return enhancement targets.

Such state of affairs changed radically in 2012 with the setting in place of the alternative assets class/option. For instance - and concerned with the most aggressive fund type - it is now feasible to invest up to 20% in alternatives and with different ceilings; all set in line with the strategy defined by the regulator. It is hard to say what is the origin of these limits, but with the possibility of making them more flexible lays a significant challenge. All this as well as letting each AFP to define - at their leisure and within a specific time period - if they will go for the options ranging from *private equity, private debts*, infrastructure to *hedge funds.*

Another big issue yet to be addressed is how to calculate these limits. Should they be calculated on the committed capital? The main question here is that such 20% ceiling is theoretical. It never materialises but merely generates an effect on diversification, while discouraging or providing incentives to those strategies which advocate a faster capital deployment approach. Fortunately, this is an issue which is being addressed together with the relevant Peruvian Superintendence; chiefly by resorting to the formulation of a way forward which combines NIB with the committed amount. Such approach will enable us to enjoy a more realistic view of both the alternatives' market and the committed investment than hitherto; albeit never reaching such 20% ceiling.

So, there is still more work to do. Somehow it will be necessary to raise these limits to ensure we have more flexibility; since the 20% ceiling is better-suited for long-term periods. Surely there may be times when it may be more convenient to alternate the long or short terms while aiming to reach 25% or 30% ceilings, which are a distinct impossibility with the current limits!

This is the position adopted by Integra on alternative assets allocated to the Fund # 2 portfolio. We deem it fully valid as a percentage of targets/goals. It has risen from 2% in 2008 to 9% in Fund 3, which is a quite interesting move, but still far from the 20% ceiling. Whenever compared with how much has been committed and invested, the commitment level ensures the relevant funds' position goes up to 17%. What matters here is to ensure the committed funds are both quickly reversed and do reach the 20% ceiling. As we are already aware, the strategy being applied to the world of alternatives within Peru and - seemingly within the rest of the industry - is quite similar. We are allocating to the portfolio a value we believe will be important. The main problem here is when you start formulating the strategy, a significant percentage of the fund may well enter the "j" curve; a fact likely to generate not-so-good or undesirable returns in the short term; albeit in the long run they should perform better.

Local Industry: The Challenges Ahead

The following are some of the already identified challenges within the local industry and which will probably be commonplace in any other of the Latin America countries:

1. **First time manager:** Most of the funds coming in are allocated to *first time managers*. Such fact is a very complicated issue due to the fact their experience or track record as managers is hardly known; but rather as being bankers or business managers. However, being a manager goes beyond knowing how to handle a company, since he/she is expected how to assemble a portfolio as well as buying and/or selling a company.

2. **Lack of vintages:** Basically, on the marketplace there is one fund and one strategy per year with no room left for other similar schemes. Such is a fairly limited diversification in the local market for alternatives.

3. **High dependence on the AFPs:** What needs to be done in Peru for ensuring a sound development of the local alternatives' market is to start looking for capital raising alternatives outside Peru. Those who have had the opportunity to place an initial fund and succeed in the marketplace, should be allowed now to raise money abroad.

4. **Inadequate legislation:** When joining a *private equity* strategy or buyout a business, you must be well acquainted with the exit mechanisms; chiefly because in Peru the legislation applicable to *drag-alongs, tag-alongs* or *puts* is far from being perfect. Therefore, if there is a mistake regarding the credentials/character of the chosen partner, the exit option could prove very cumbersome

as well as leaving the fund exposed to a high cost too. Here again, the existing legislations framework still lacks a suitable improvement to be introduced!

5. **Generation of higher returns:** The challenge for the local GPs is to prove they can generate higher returns. Obviously, whenever you receive a GP the sale becomes its *back testing;* albeit the profitability does not materialise until the sale has been formalised. However, we are yet to see such higher returns within the local markets.

6. **Cost structure:** The size of the funds raised turns the cost structures into a very expensive proposition, which is most likely to go against the local fund's profitability and attractiveness.

7. **Handling Conflicts of Interests:** Very small markets are bound to generate conflicts of interest. More often than not, many fund managing operators happen to be connected or related to a local financial institution; a factor which has the potential to leading towards a conflict of interests. The foregoing does not mean the likelihood of a conflict entails a negative connotation; but calls to exercising an utmost care when it comes to handle such eventuality. It is crucial for leading investors to retain an active role he/she may put to good use within the alternative funds.

8. **An active government role.**

9. **Exit clause or option:** This is a sizable and cumbersome challenge which shows up at the time of exercising the exit option, albeit none exist option has been registered in Peru. It is always advisable to bear in mind that the absence of a suitable exit clause or mechanism will entail the relevant strategy gets confined to paper rather than to real-life circumstances. If you have no role to play at the time the valuation is supposed to increase and there is no actual asset sale; then no value is generated. The latter is one of the main and ever-present problem within the local markets. Should this shortcoming not be addressed before long, the life or track record of the alternatives' market in Peru is bound to be short-lived!

Conclusions

To sum up, from the AFP viewpoint we have two great options. Due to the prevailing limits we must go to a local party; chiefly because we cannot invest all the money abroad. However, working with a *private equity* or an international alternative is a totally different kettle of fish vis-a-vis the option of operating with a national alternative instrument. There is a much more active role in the local market due to the reputational risks which can stem from appointing a bad/incompetent manager. This factor is highly relevant to a very regulated entity.

Another major question likely to arise with the strategies has to do with the great success of the alternatives' market; with its background scenario allowing us to notice a recent history of a downward trend of the relevant interest rates. Here the relevant question should be: What happens when interest rates start to go up? Are the outputs really going to be as good? Would it be possible that the world of alternative assets is equal to or better than the traditional world?

We must put forward all these questions before rushing onto the alternatives' market, which undoubtedly should help enhancing the portfolio; thus becoming a good move altogether. That said, we must be careful not to get carried away by a context which hitherto is very positive for alternative assets. In plain English, you must put the miracle to a relevant test!

OPPORTUNITIES AND RISKS OF ALTERNATIVE INVESTMENTS BY PENSION FUNDS

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Investment by pension funds in alternative investments is an important topic for both the OECD and the International Organisation of Pension Supervisors (IOPS). Over the past decades the pension funds have been increasingly invested in alternative investments and other complex products. Potential risks inherent to this type of investment justify special attention from regulatory and supervisory authorities. Several projects were specifically developed looking at the regulatory framework, market practice and implementation of pension fund investment strategies with respect to these types of investments. Based on the results of these surveys, OECD/IOPS good practices were published[2].

The OECD also collects the Global Pension Statistics[3] and conducts the annual survey of Large Pension Funds (LPFs) and Public Pension Reserve Funds (PPRFs)[4] . As a part of this data collection exercise data, investment behaviour and performance of pension funds, including their investment in alternative instruments are analysed and the results are presented in the annual publications[5].

This brief article was divided into the four key sections. The first section discussed the impact of low interest rate environment on pension funds and in particular on their investment strategies. In the second section, the trends of pension fund investments in non-traditional assets in OECD and IOPS jurisdictions are presented. The third section elaborated on key opportunities and risks for investment in alternative assets by pension funds. Forth section covers regulatory and supervisory aspects in relation to alternative investments by pension funds by presenting the

2 *OECD/IOPS Working paper: Pension Fund Use of Alternative Investments and Derivatives: Regulation, Industry Practice and Implementation Issues, 2011; OECD/IOPS Good Practices on Pension Funds' Use of Alternative Investments and Derivatives, 2011; IOPS Good Practices in Risk Management of Alternative Investments by Pension Funds, 2010.*

3 *http://www.oecd.org/daf/fin/private-pensions/oecd-iops-world-bank-join-forces-to-improve-private-pension-statistics.htm*

4 *http://www.oecd.org/daf/fin/private-pensions/survey-large-pension-funds.htm*

5 *http://www.oecd.org/pensions/pensionmarketsinfocus.htm*

OECD/IOPS Good practices and discussing key supervisory developments in the area. Final remarks are made in the conclusion section.

I. The impact of low interest rate environment on pension funds

During 2014, the **pension funds** demonstrated strong performance. The total assets under management **(AUM)** in the OECD jurisdictions valued **USD 25 trillion**[6]**. Positive real net investments returns** were observed in most OECD and non-OECD jurisdictions, and in 21 OECD countries pension funds were showing real net returns higher than 5%.

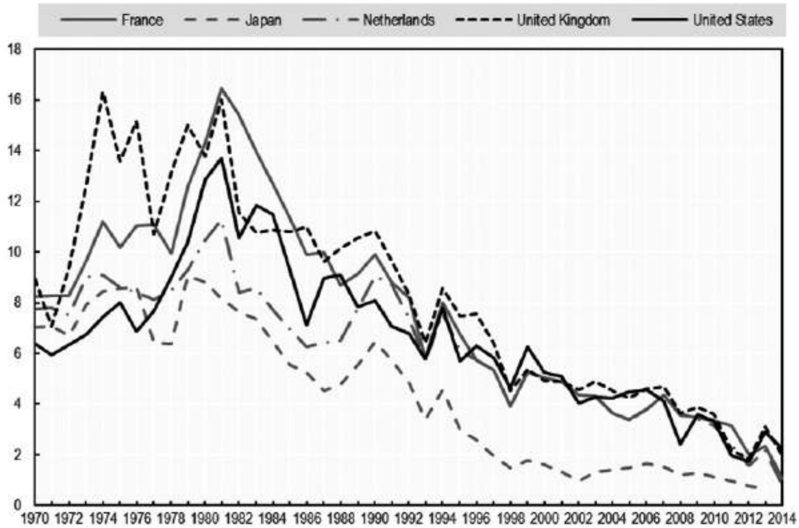
Against this positive background, as a result of the financial crisis and ensuing environment of low growth and falling inflation, the pension funds and other institutional investors are currently operating in the **environment of low interest rates**, which is likely to persist for years to come. This poses a serious challenge to insurance companies and pension funds. Interest rates have been decreasing over the past four decades. In 2014, nominal yields on long-term (10-year) governmental bonds in several OECD countries were below 2%[7]. (See below Figure 1).

6 *OECD, Pension Markets in Focus, 2015, http://www.oecd.org/daf/fin/private-pensions/Pension-Markets-in-Focus-2015.pdf*

7 *OECD, OECD Business and Finance Outlook, 2015.*

FIGURE 1

YIELDS OF 10-YEAR GOVERNMENT BONDS IN SELECTED OECD COUNTRIES, 1970-2014



SOURCE: DATASTREAM.

Prolonged low interest rates are seen to reflect economic conditions characterised by low inflation (both prices and salaries) and low returns on investment. The fall in interest rates is happening in the context of falling inflation rates.

The OECD Business and Finance Outlook[8], published in 2015, aimed to assess the impact of low interest rates environment on pension funds and insurance companies. It was argued, that the low interest rate environment may have a **potential negative impact** in particular on defined benefits **(DB)** pension plans and annuities providers with low interest rates affecting their assets and liability side, resulting in deterioration of their solvency positions. Outlook of these institutions depends on the nature of the promises made by pension funds and insurance companies and their potential for adjustment. Potential adverse effects of low interest rates are higher where the liabilities of these plans are composed of fixed investment return guarantees and where they offer fixed benefits or pay-out promises. For defined

8 *Idem footnote 6.*

contribution **(DC)** plans, low interest rate environment may affect their asset sides, as they do not have explicit liabilities (unless they offer guarantees) – value of assets will be growing slowly (due to low returns and yields) which can result in reduced retirement income. A trend was observed that, in order to meet promises which were made when interests rates were higher for DB plans and provide sufficient income for DC plans, pension funds are (or will be) reviewing their investment strategies with an objective to increase returns ('search for yield'). A concern was expressed that an excessive 'search for yield' can lead pension funds taking riskier investment strategies and may lead to heightening insolvency risks for DB plans or not providing (generating) sufficient and secure retirement income for DC plans. The OECD Outlook did not detect the 'search for yield' at the aggregate level, but this trend can be observed in selected jurisdictions.

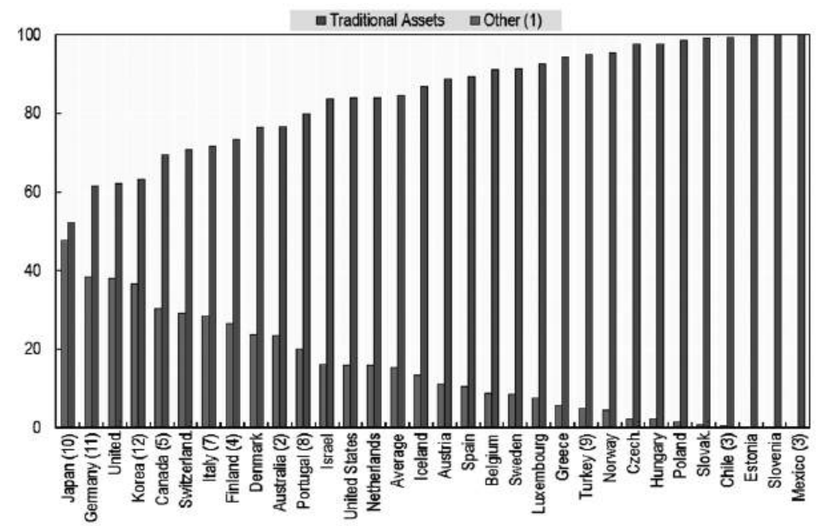
II. Trends of pension fund investments in non-traditional assets

Analysis of pension fund investments' patters in the OECD and IOPS jurisdictions shows that **traditional asset classes** such as **equities, bills, bonds, cash and deposits** still make up **most of pension fund portfolio.** Pension funds in the OECD countries invested in 2014 23.8% of their portfolio in equities, 51.3% in bills and bonds, and 9.6% in cash and deposits[9].

9 *Pension Markets in Focus, 2015*

FIGURE 2

PENSION FUND ASSET ALLOCATION FOR SELECTED INVESTMENT CATEGORIES IN SELECTED OECD COUNTRIES, 2014

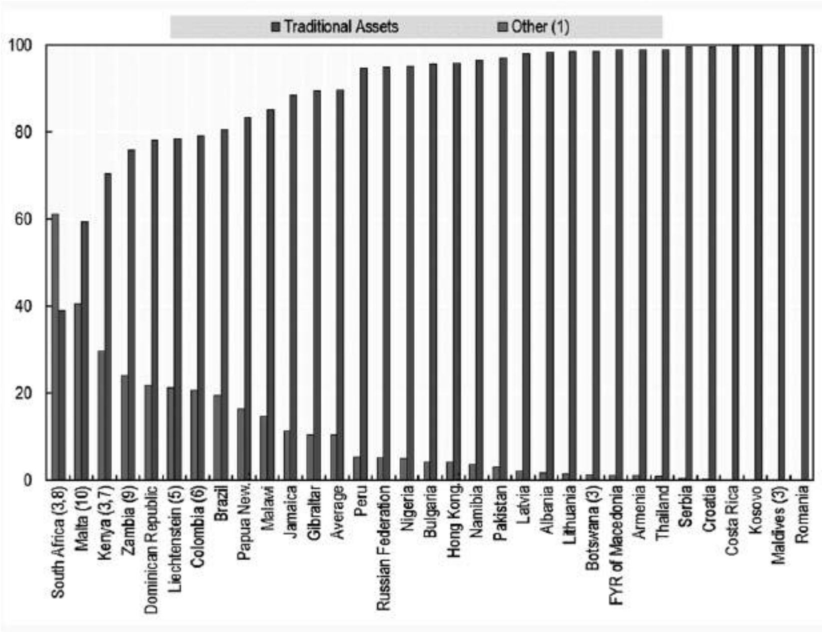


SOURCE: OECD GLOBAL PENSION STATISTICS (GPS).
NOTE: THE GPS DATABASE PROVIDES INFORMATION ABOUT INVESTMENTS IN COLLECTIVE INVESTMENT SCHEMES AND THE LOOK-THROUGH OF COLLECTIVE INVESTMENT SCHEMES IN CASH AND DEPOSITS, BILLS AND BONDS, EQUITIES AND OTHER. WHEN THE LOOK-THROUGH WAS NOT PROVIDED BY THE COUNTRIES, ESTIMATES WERE MADE ASSUMING THAT MUTUAL FUNDS' INVESTMENT ALLOCATION IN CASH AND DEPOSITS, BILLS AND BONDS, EQUITIES AND OTHER WAS THE SAME AS PENSION FUNDS' DIRECT INVESTMENTS IN THESE CATEGORIES. THEREFORE, ASSET ALLOCATION DATA IN THIS FIGURE INCLUDE BOTH DIRECT INVESTMENT IN EQUITIES, BILLS AND BONDS, CASH AND DEPOSITS AND INDIRECT INVESTMENT THROUGH COLLECTIVE INVESTMENT SCHEMES.
1. THE "OTHER" CATEGORY INCLUDES LOANS, LAND AND BUILDINGS, UNALLOCATED INSURANCE CONTRACTS, HEDGE FUNDS, PRIVATE EQUITY FUNDS, STRUCTURED PRODUCTS, OTHER MUTUAL FUNDS (I.E. NOT INVESTED IN CASH, BILLS AND BONDS, OR EQUITIES) AND OTHER INVESTMENTS.
2. SOURCE: AUSTRALIAN BUREAU OF STATISTICS (ABS). THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY NET EQUITY OF PENSION FUNDS IN LIFE OFFICE RESERVES (14% OF TOTAL INVESTMENT).
3. MARKET OF FAIR VALUES OF DERIVATIVES HELD ARE NEGATIVE IN 2014 AND ARE EXCLUDED FROM THE ASSET ALLOCATION.
4. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LAND AND BUILDINGS (12% OF TOTAL INVESTMENT).
5. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY OTHER INVESTMENTS OF COLLECTIVE INVESTMENT SCHEMES (17% OF TOTAL INVESTMENT).
6. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LAND AND BUILDINGS (DIRECT AND INDIRECT INVESTMENTS IN THIS CATEGORY ACCOUNT FOR 17% OF TOTAL INVESTMENT).
7. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY UNALLOCATED INSURANCE CONTRACTS (22% OF TOTAL INVESTMENT) AND BY REAL ESTATE (3% OF TOTAL INVESTMENT).
8. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LAND AND BUILDINGS (DIRECT AND INDIRECT INVESTMENTS IN THIS CATEGORY ACCOUNT FOR 14% OF TOTAL INVESTMENT).
9. DATA REFER TO PERSONAL PLANS.
10. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY OUTWARD INVESTMENTS IN SECURITIES (23% OF TOTAL INVESTMENT) AND ACCOUNTS PAYABLE AND RECEIVABLE (18% OF TOTAL INVESTMENT).
11. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LOANS (14% OF TOTAL INVESTMENT) AND OTHER INVESTMENTS OF COLLECTIVE INVESTMENT SCHEMES (16% OF TOTAL INVESTMENT).
12. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY UNALLOCATED INSURANCE CONTRACTS (34% OF TOTAL INVESTMENT).

In IOPS non-OECD jurisdictions, the trend to favour traditional asset classes is slightly higher, with around 90% of assets invested in traditional asset classes and around 10% in other. (See Figure 3).

FIGURE 3

PENSION FUND ASSET ALLOCATION FOR SELECTED INVESTMENT CATEGORIES IN SELECTED NON-OECD COUNTRIES, 2014



SOURCE: OECD GLOBAL PENSION STATISTICS (GPS).
1. THE "OTHER" CATEGORY INCLUDES LOANS, LAND AND BUILDINGS, UNALLOCATED INSURANCE CONTRACTS, HEDGE FUNDS, PRIVATE EQUITY FUNDS, STRUCTURED PRODUCTS, OTHER MUTUAL FUNDS (I.E. NOT INVESTED IN CASH, BILLS AND BONDS, OR EQUITIES) AND OTHER INVESTMENTS.
2. DATA ONLY REFER TO MPF SCHEMES AND MPF-EXEMPTED ORSO REGISTERED SCHEMES.
3. DATA REFER TO 2013.
4. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LAND AND BUILDINGS (11% OF TOTAL INVESTMENT).
5. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LAND AND BUILDINGS (12% OF TOTAL INVESTMENT).
6. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY OTHER INVESTMENTS OF COLLECTIVE INVESTMENT SCHEMES (14% OF TOTAL INVESTMENT).
7. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LAND AND BUILDINGS (17% OF TOTAL INVESTMENT) AND UNALLOCATED INSURANCE CONTRACTS (10% OF TOTAL INVESTMENT).
8. DATA ONLY REFER TO THE FUNDS SUPERVISED BY THE PENSION FUNDS ACT. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY UNALLOCATED INSURANCE CONTRACTS (50% OF TOTAL INVESTMENT).
9. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY LAND AND BUILDINGS (14% OF TOTAL INVESTMENT).
10. THE HIGH VALUE FOR THE "OTHER" CATEGORY IS DRIVEN MAINLY BY UNALLOCATED INSURANCE CONTRACTS (26% OF TOTAL INVESTMENT).

However, given the environment of low interest rates and investment returns, the allocation of pension funds may change over time as they will be looking for **strategies to attain higher returns.** In most of the largest pension fund markets, pension funds are showing interest and invest in alternative investments, such as

private equities in Brazil, **land and building** in Canada, **derivatives** in the United Kingdom, and **other investments** in the United States. **Investment abroad**, like in Chile or Iceland, is another way for searching for higher returns though international diversification.

The OECD data shows, that two countries that experienced highest returns in 2014 – Denmark and the Netherlands – have moved towards alternative investments. In 2014, pension funds in Denmark and the Netherland reached returns above 15% and on average had 7% real returns over the last 5 years.

The OECD statistical data reveals that during the past decade there was a large increase in the **amount invested** by pension funds in alternative assets – **more than 7 trillion USD** in the end of 2014 from just over 2 trillion USD in the end of 2001. However, the **exposure** by pension funds to alternative investments remains still limited, representing on average **10-15% of total assets.** In a few OECD and IOPS Member jurisdictions, pension funds expanded their allocation to alternative investments over the last 10 years by more than 5 percentage points[10]. At the end of 2014 around 16% of total assets were invested in alternatives in Israel and the United States, 19.4 % in Brazil, 29% in Switzerland, 30.4% in Canada and 37.9% in the United Kingdom.

Overall, the pension funds in large pension markets invest in a relatively broad range of alternative products: loans, land and building, real estate investment funds (REITS), various mutual funds, private equity funds, hedge funds, structured products, and other investments (as derivatives). Highest increase in alternatives was observed in specific mutual funds (collective investment schemes) and other investments (such as derivatives, commodities, trade credits, etc.). Also interest was shown to invest in asset categories such land and building, either directly or through collective investment, by pension funds in Australia, Canada, Switzerland and the United States as well as in private equities – in Brazil, Germany, Israel, Switzerland, but these investments remain below 5%.

Large pension funds in OECD and IOPS jurisdictions increased their asset allocations to alternatives, including infrastructure (between 2010 and 2014: from 14.3% to 15.3%). Historical data for 34 large pension funds[11] shows that allocations in listed equities declined in favour of alternative investments. Allocations for real estate and unlisted infrastructure increased for all surveyed LPFs. The OECD data shows, that the investments by LPFs in infrastructure still remain at a quite low level. 23 LPFs,

10 *Idem footnote 7.*

11 *OECD, Annual Survey of Large Pension Funds and Public Pension Reserve Funds, Report on Pension Funds' Long-Term Investment, 2015.*

for which historical data is available, invested in **infrastructure** about 3.5% of total assets. Taking a large sample of 77 LPFs, the investment in infrastructure presents even a smaller share of invested assets, about 1.1% in 2014. Highest infrastructure investment was observed in Canada, about 16%, and in Australia, about 10-12%. Transportation and energy, among them renewable electricity projects – solar powers, wind energy, are among the largest allocations by the LPFs surveyed.

III. Key opportunities and risks for investment in alternative assets by pension funds

It is noteworthy, that the use of alternative investments in pension fund investment portfolios offers a number of opportunities but also creates unique risk exposure. Investments in alternative assets can allow (1) for better risk management and control of the overall portfolio risk and to achieve better asset/liability matching through proper diversification of assets; (2) to reach better risk-adjusted returns; (3) to benefit, as long-term investors, from illiquid premiums associated with less liquid assets and (4) the exposure to other innovative assets with potentially stable long-term income (i.e. wind power farms or other infrastructure investment). However, alternative investments may expose pension funds to potential risks: liquidity risks, refinancing risks, counterparty risks, operational risks, outsourcing, valuations issues, etc. One of the major issues raised by the regulators and supervisors in the OECD and IOPS jurisdictions in relation to the use of alternative investments by pension funds was the concern that pension fund managers may not fully understand the products they invest in and may not have necessary risk management system in place[12]. Other supervisory concerns include inadequate due diligence and monitoring, particularly for overseas' investments and investments involving multiple layers of management and over-reliance on valuation provided by investment managers with inadequate independent analysis/assessment to verify valuations provided[13].

IV. Regulatory and supervisory aspects in relation to alternative investments by pension funds

In order to manage or overcome such potential risks, in a number of the OECD and IOPS jurisdictions regulations are in place in the form of various authorisation requirements and/or restrictions, including qualitative and quantitative limits,

12 *IOPS, Pension Fund Use of Alternative Investments and Derivatives: Regulation, Industry Practice and Implementation issues, IOPS Working Paper N13, 2011.*

13 *IOPS Project on supervision of investment management, including non-traditional investment, infrastructure and long-term investment (on-going).*

applying to pension fund investments in alternative investments. Most countries impose ceilings for investment in alternative investments. In the most countries **limits** exist for pension fund investment in real estate (23 OECD and 31 non-OECD) and loans (25 OECD and 26 non-OECD countries) as well as in retail investment funds, private investment funds. In a number of countries, however, the trend towards **greater investment flexibility** can be observed with adoption of prudent person rule which goes together with the implementation of the risk-based supervisory regimes. Application of **prudent person approach** is now prevalent throughout OECD countries, which places fiduciary responsibilities on pension fund managers to diversify their investment portfolios and seek highest returns at acceptable levels of risks. The EU IORPs Directive sets the "prudent person rule" as the underlying principle for capital investments", which should allow for sufficient flexibility to ensure most efficient and secure investment policy[14] . In 2014, 15 jurisdictions (12 OECD and 3 non-OECD) reported less stringent limits on some non-traditional assets since 2004. Several countries (7) raised the limits on pension fund investments in real estate, and Canada removed limits on investment in real estate and resource property investment. There are no restrictions on investments in alternative asset classes in some of the largest pension fund markets such as Australia, Canada, the Netherlands, the United Kingdom and the United States, as well as in other countries - Austria, Belgium, Ireland, Malta, Malawi and New Zealand. In most OECD and IOPS jurisdictions, derivatives are mainly used for hedging purposes. Vast majority of jurisdictions prevent engagement in derivative transactions for leverage and speculation. In Denmark there are no limits for the use of derivatives by pension funds.

Financial crises raised the bar for the pension fund industry in terms of thinking about risks and the way to manage risks affecting private pension schemes and pension funds' operations. Controlling investment risks is a central element of risk management process and pension fund industry may need to develop more capacities and skills to manage them. OECD/IOPS Good practices on the use of alternative investments and derivatives[15] offer a useful guidance on the expectations of pension regulatory and supervisory authorities when assessing the risk management of pension funds that use alternative investments. They also aim to help and encourage pension funds to improve their risk management processes and allow for safe and more efficient use of these instruments. Several key issues are highlighted by the OECD/IOPS Good practices. Primarily, all **significant risks** related to the use of pension funds of alternative investments should be measured,

14 *Proposal for a Directive of the European Parliament and of the Council on the activities and supervision of institutions for occupational retirement provision, Brussels, 28 June 2016.*

15 *OECD/IOPS Good Practices on Pension Funds' Use of Alternative Investments and Derivatives, 2011.*

assessed and integrated in the risk management system. Pension funds need to have **appropriate risk management systems** and **written investment policy statements** which should specify: type of alternative assets that fund intends to invest in, their inherent risks, expected volatility and liquidity, valuation methods (and whether an external valuation advisor is used). When pension funds use derivatives, a special reference should be made in the investment statement. Written investment policy statements should be **reviewed regularly** (annually in certain jurisdictions, every three years in line with the EU Directive and immediately in case of significant change of the investment policy). What is even more important is **tracking and evaluating risks** on a regular **(daily)** basis and maintaining constant dialogue between parts of the management involved in asset allocation and risk identification. This is already a recurring practice in pension funds' risk management in a number of EU countries and the US. Other key area is the **internal governance.** It is of critical importance that the **governing board** has sufficient **understanding of investment strategy** and **inherent risks.** There should be clear asset selection process and written operational policies and procedures for implementing (and exiting) the alternative investment and derivatives policy set the by the governing board. The governing board should have the responsibility to approve investment and investment management policies (approving and monitoring investment targets, strategies and procedures) and monitor as well as evaluate investment management on a periodical basis. In case of any deficiencies in this process, the governing board should take corrective measures. **Independent control** and **audit** are key functions to ensure compliance with the pension fund's policies on alternative investment and derivatives usage. Moreover, the OECD/IOPS Good Practices underline that **due diligence in selecting external managers** is one of the most important processes with regard to alternative investments. Governing boards need to assess the capacities of the managers of the funds in which pension funds intend to invest based on a timely and sufficient information about the funds and their managers. It is highlighted that the due diligence needs to be applied before pension funds investment in alternative assets. Governing boards need to ensure that persons responsible for investment process meet fit and proper criteria. Focus should be laid on people – management and staff and in particular their integrity and experience; process – quality of risk management system, investment process and out-sourcing and performance as well as the way valuation is performed. Considering long-term horizon of a majority of alternative investments performing risk assessment is a very difficult and challenging task. In addition, alternative investment mandates to external managers need to be based on adequate contract basis. The OECD/IOPS also underline the importance of **keeping members informed** about pension fund investments in alternative assets and derivatives. Pension funds are expected at least annually report on their exposure to alternative investments, the related fees and charges paid, the way these investments are managed (internally or externally); actual and potential profits or losses made on alternative investments.

Investments in non-traditional asset classes is also the area of **increased supervisory attention** in view of complexity of these investments and inherent risks that can affect in a negative way the achievement of pension fund members' retirement goals. In this regard, the IOPS is currently developing a project on supervision of investment management, including non-traditional investment, infrastructure and long-term investment aiming to review supervisory practices towards these investments across the IOPS jurisdictions. It is also envisaged that the project will result in issuing of IOPS guidelines in the area of supervising investment management process with a focus on non-traditional investment, infrastructure and long-term investment.

The key supervisory requirement observed in IOPS jurisdictions is the need for adequate and appropriate risk management process applied by pension funds to these investments[16]. Only in a few jurisdictions, pension supervisory authorities require to have in place a separate investment strategy and risk management process relative to alternative investments. Separate risk reporting and internal controls mechanisms are even rarer practices across IOPS jurisdictions. In the jurisdictions where pension funds are increasingly investing in alternative assets, they are receiving more attention from supervisors as a part of risk based supervisory regime. Thus, APRA, the Australian supervisor, expects more scrutiny from trustees when investing in alternative classes. In Canada, application of prudence is required in investment of pension assets in derivatives. As a common practice, to explain their expectations towards pension funds when investing in alternative instruments, the pension supervisory authorities are issuing guidance for investment in alternative investments (Australia[17], Canada, the Netherlands and the UK).

V. Main conclusions

In conclusion, the main messages highlighted in this article are the following:

- Low interest rate environment will have a negative impact on pension funds and other institutional investors, which might be here for a long time;
- There was an increase of total assets invested in alternative investments, but on average pension funds invested about 10-15 % of total assets in 2014;

16 *OECD/IOPS Good Practices on Pension Funds' Use of Alternative Investments and Derivatives.*

17 *APRA Prudential Standard SPS 220 – Risk Management (SPS 220) requires trustees to have in place a risk management framework for identifying, assessing, managing, mitigating and monitoring material risks; APRA Prudential Standard SPS 530 – Investment Governance (SPS 530) requires trustees to implement a sound investment governance framework and to manage investments in a manner consistent with the interest of beneficiaries.*

- Alternative investments present opportunities and risks for pension funds that need to be carefully considered and balanced;

- Regulatory and supervisory authorities need to follow the developments and adjust their regulatory and supervisory frameworks. Establishment of open dialogue with the pension fund industry when introducing new requirements or changes in the regulation and supervisory frameworks is of critical importance.

OPPORTUNITIES AND RISKS OF ALTERNATIVE INVESTMENTS

DARIUSH YAZDANI[1]

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Benefits of alternative investments

Basically, there are 3 main benefits stemming from alternative investments:

(i) **Broader diversification:** alternatives aid portfolio diversification by tapping into new sources of returns, such as less mainstream asset classes and non-traditional strategies; all which are uncorrelated to conventional equities and fixed income securities.

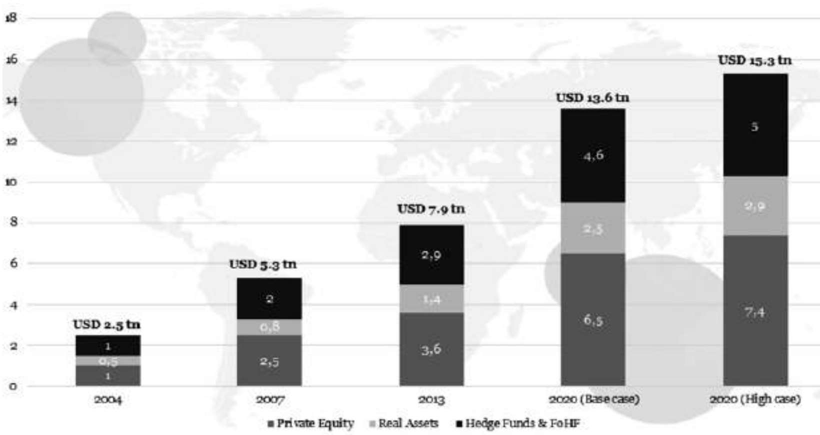
(ii) **Ability to reduce risk and portfolio volatility:** hedging techniques used in alternative investment strategies can help reduce volatility, chiefly by cushioning portfolios against extreme market conditions, particularly in down markets.

(iii) **Potential to enhance returns:** by using a range of hedging strategies and investing in areas and ways in which traditional investments cannot, with alternatives offering the potential for enhanced returns.

Graph # 1 shows evolution of global alternative assets globally; and looking at Graph # 2 we can see that the pension fund allocation to alternatives has been rising from 2008 to 2014, from 21% to 26%. However, there are differences when we look at the regions (see Graphs # 3 and # 4). North America has a 29% allocation to alternatives. Europe, 24%; Asia Pacific, 7%; and South America, only 6%.

GRAPH # 1

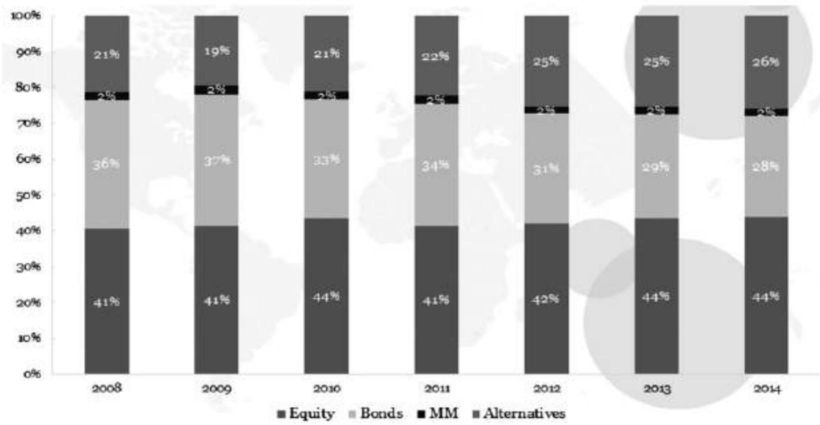
ALTERNATIVE ASSETS IN USD TN



SOURCE: PWC MARKET RESEARCH CENTRE ANALYSIS, BASED ON PREQUIN, HFR AND LIPPER DATA.

GRAPH # 2

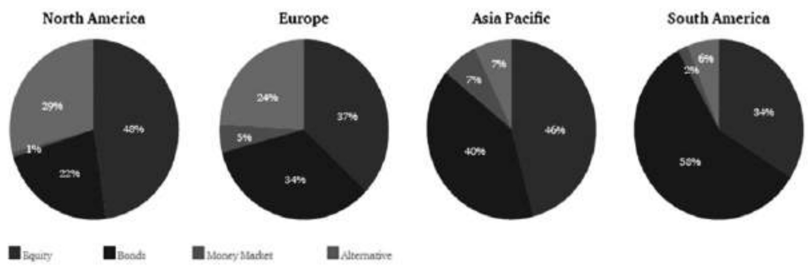
EVOLUTION OF ASSET ALLOCATION OF PENSION FUNDS FROM 2008 TO 2014



SOURCE: PWC MARKET RESEARCH CENTRE.

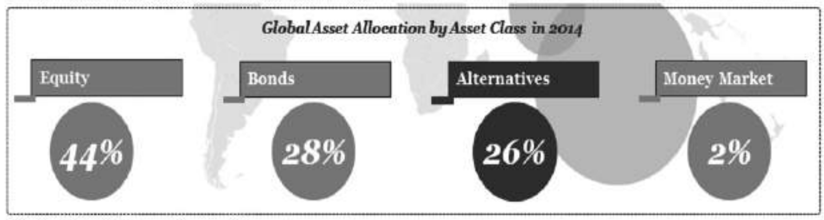
GRAPH # 3

REGIONAL ASSET ALLOCATION BY ASSET CLASS IN 2014



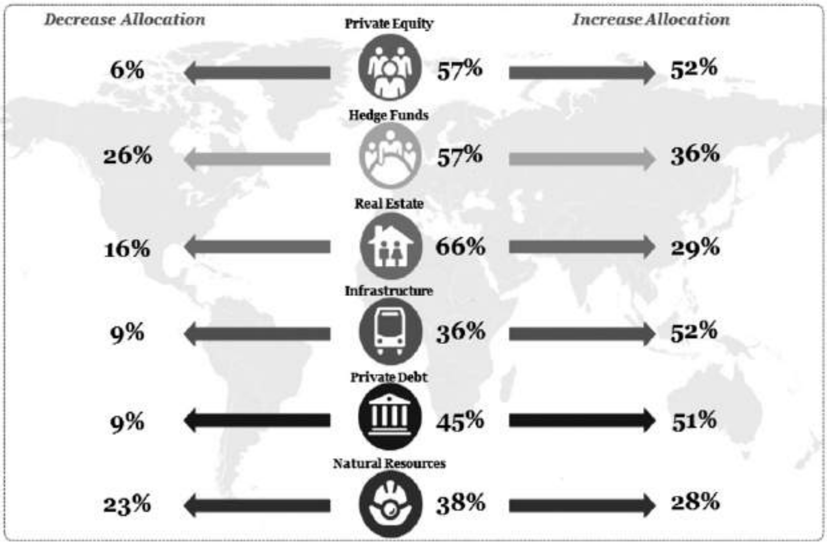
SOURCE: PWC MARKET RESEARCH CENTRE BASED ON NATIONAL PENSION ASSOCIATIONS AND THE OECD.

GRAPH # 4



SOURCE: PWC MARKET RESEARCH CENTRE.

FIGURE # 1
INSTITUTIONAL INVESTORS' APPETITE FOR ALTERNATIVE ASSETS

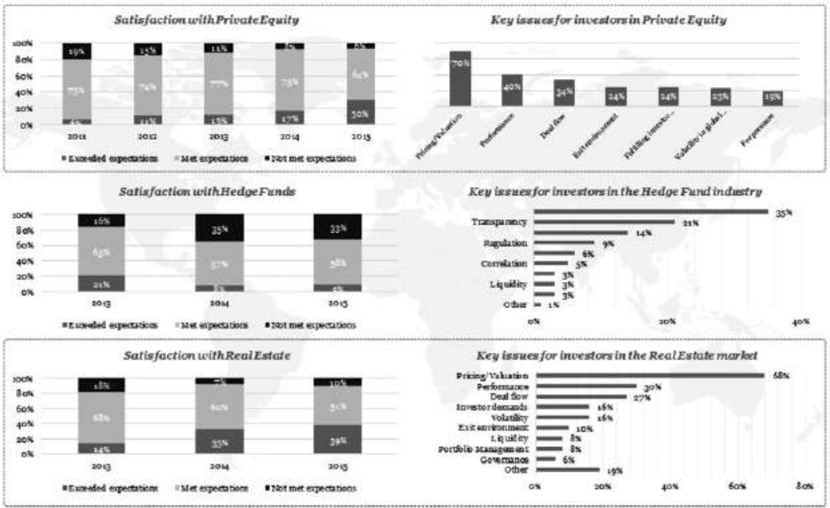


SOURCE: PWC MARKET RESEARCH CENTRE BASED ON PREQUIN.

Figure # 1 shows, basically, the investments' appetite shown by institutional investors (not only pension funds) for alternative assets. Currently, 57% is invested in private equity, and 52% of institutional investors want to increase it, but a 6% want to do otherwise. The same you can notice with hedge funds, real estate, infrastructure, private debt and natural resources. If we look at the sub asset classes of alternatives, there is an increasing demand for private equity, infrastructure and private debt.

FIGURE # 2

INSTITUTIONAL INVESTORS' APPETITE FOR ALTERNATIVE ASSETS



SOURCE: PWC MARKET RESEARCH CENTRE BASED ON PREQUIN.

Figure # 2 shows to what extent are institutional investors satisfied and what are their reasons or what are they concerned about whenever they are investing in alternative assets. So, for private equity and real estate, we can see that investors´ expectations have been fulfilled and even exceeded. This is a positive message for investments in private equity and real estate. Whereas, if we look at hedge funds, the percentage of exceeded expectations has steadily dropped.

What are the major concerns when investors are considering investments into various alternative asset classes? On the private equity side, the top 3 concerns when investors are investing are: pricing/valuation, performance, and deal flow. The key issues on the hedge fund side are: transparency, regulation to a certain extent and the correlation to the traditional asset classes. And the key issues on the real estate market are, again: pricing/valuation, performance and deal flow.

Why do we watch this trend of increasing investments in alternatives? As I have already pointed out, we have this search for alpha in a low rate interest environment, where pension funds were heavily invested in bonds or new cash asset classes.

They have shifted within a low rate interest environment, more onto alternatives and equity; and so we are seeing still this even in the more mixture markets of US and Europe. In United States of America funding ratios for state public pension funds have fallen significantly, with these funding gaps leading public pension funds to allocating larger shares of capital to alternative investments. In Europe, modifications of local legal frameworks, softening of the barriers, as well as search for higher returns do motivate pension funds to invest in alternative asset classes. This trend in US and Europe is still ongoing, year after year.

On the other side, we are also seeing some regulatory positions or new regulations that are allowing pension funds to have more investments in alternatives. One of the examples of South America is Colombia. In this country, in 2015, the government allowed pension funds to invest in infrastructure projects; and in 2016, Colombian pension funds will be allowed to invest up to 20% of their assets in real estate, commodities, private equity, hedge funds and other alternative investments.

How do we invest in alternatives?

(i) **Direct investments.** Direct investments in alternatives are commonplace amid pension funds. But there are some challenges regarding this approach. First, the direct management of the various alternative asset types requires a variety of specialized skill-sets (the investor needs to have a profound knowledge of the characteristics of that especial asset classes; a key factor for understanding the underlying risks). Second, specialized teams are typically separated from the investment and the operational personnel supporting traditional assets; as well as other alternative assets types. Indeed, even within the alternative asset classes, the investor needs to have separate asset classes for private equity and for real estate alike.

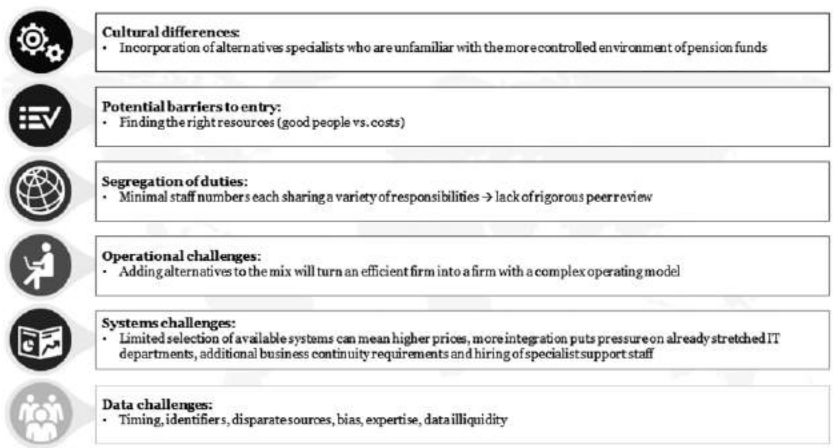
(ii) **Indirect investments** (through funds or external asset managers). Indirect investors collaborate with either other investors or external asset managers; chiefly with a view to spreading their investment through multiple alternative asset classes. These kind of investments are often a more viable solution for institutional asset managers seeking exposure onto these asset types; mainly because they can manage them within their core operational models. The latter stance means that if the investors do not want to set up new teams and/or do not want to extend their operations; it then becomes easier to have this investment area externalised towards a third party asset manager.

Challenges of Pension Funds with direct and indirect investments in alternatives

Let us look a bit more into detail the indirect and direct investments and the challenges that pension funds face whenever implementing them. Figure # 3 shows you the challenges of direct investments.

FIGURE # 3

CHALLENGES OF PENSION FUNDS WITH DIRECT INVESTMENTS IN ALTERNATIVES



SOURCE: THE AUTHOR.

One of the challenges of direct investments are the cultural differences. Firms, particularly pension funds, will recruit from boutique investment funds, but those people are unfamiliar with the more controlled environment of pension funds. This can suffocate those investment managers. So if the company wants to have a real expert there, then will have to pay a very high premium for it.

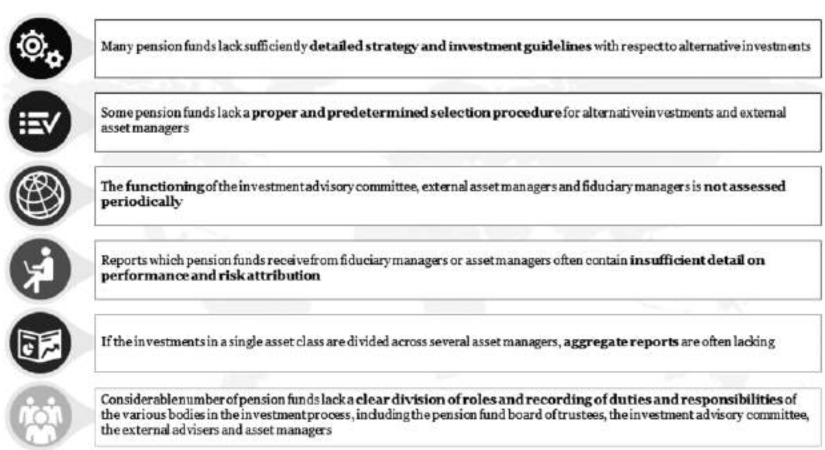
There is a segregation of duties. What we see within pension funds and other institutional investors is that they have small alternative teams which, in turn, creates challenges. Why is that? Because staff members might share various responsibilities; a fact which hinders a very thorough or peer review. For example, if one person might have to review himself because he has the two positions at the same time, a fact increasing the risk when investing directly in alternatives as a pension fund.

We have operational challenges. Adding alternatives to the mix will turn an efficient firm into one suffering from a complex operating model. Alternative investments are not like traditional investments; they are very specialised, not only from the investment point but also from the operational teams.

We also have system challenges. You will have to add systems, programmes and data drivers that are separate to what you all already have, which means you are increasing the cost of your organisation and again, its complexity. Limited selection of available systems can mean higher prices, more integration puts pressure on already stretched Information Technology departments, additional business continuity requirements and the need to hiring specialist support staff.

And finally we have data challenges. You do not have the same data source suppliers, with your existing data source providers may be even biased.

FIGURE # 4
CHALLENGES OF PENSION FUNDS WITH DIRECT INVESTMENTS IN ALTERNATIVES



SOURCE: THE AUTHOR.

Figure # 4 shows the challenges of indirect investments. Let us assume that you decide you do not want to have your own team but you want to invest in an external asset manager. So what are the challenges that you are likely to face there? We have seen that many pension funds lack sufficiently detailed strategy and investment guidelines with regards to alternative investments. Before going for the choice of an external asset manager, it is crucial to have a clear strategy coupled with clear investment guidelines to hand over to such external asset manager.

Some pension funds lack a proper and predetermined selection procedure for alternative investments and external asset managers. This is a very important issue, because you need to be transparent about how you are going to choose an external asset manager. And what are the procedures? How are you going to evaluate one against the other? Is there a guideline? Has such been accepted? The foregoing are the risks that you have to consider and/or address.

Again, what we notice – as a real-life fact - is most reports for pension funds received from fiduciary or asset managers often contain insufficient details on performance and risk attributions. To this effect it is you who needs to be diligent enough on those points, because the asset manager will deliver you what you previously asked for.

If the investment is in a single asset class and/or is divided across several asset managers, the corresponding aggregate reports are often lacking; each asset manager will provide you with its own reporting. Who is going to aggregate those reports and see your performance? Do you have the right structure in place for that? Again, considerable number of pension funds lack a clear division of roles; not to mention the recording of duties and responsibilities of the various bodies participating in the investment process. Never forget the latter process customarily entails the pension fund board of trustees, the investment advisory committee, the external advisors and asset managers.

How to tackle the challenges: best practices

How to tackle these challenges? I have put them in 4 different categories:

(i) Investment policy:

In this area the keys issues are: (a) Consistency with investment strategy and risk profile (if you are in a more complex asset class, you need to have a very sound risk process and profile in place); (b) Proactive risk management function (you need to have handy things like scenario analysis and stress testing plus the expert staff complement and (c) Assessment of management costs and fees.

(ii) Selection & assessment policy

Here the crucial issues are: (a) To have a formalized and predetermined procedure to select external asset managers, and (b) follow these steps in the selection procedure: lay down the mandate, count with the long list of assets managers, produce a short list of preferred candidates and then act with due diligence.

(iii) Governance

There needs to be a balance between complexity of investments and the level of risk control. Also, it is key to have a clear investment policy and expertise in risk management, as well as to bear in mind a clear division and record of duties and responsibilities of various bodies.

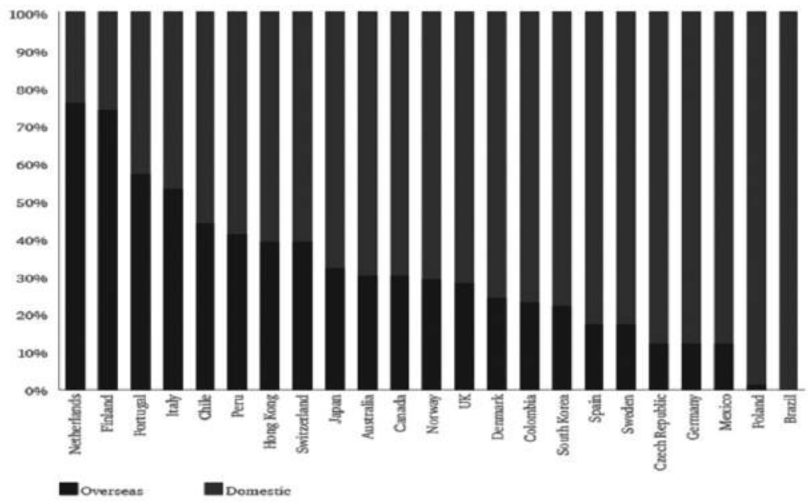
(iv) Monitoring

As regards this function, first and foremost you must have handy the relevant and complete information/data about strategy, positions, performance and risks. Second, you need to have frequent formal contacts with asset managers of the various investment products (via conference calls or onsite visits). Third, you need to review other elements relating to external asset managers: for example, staffing ownerships, particularly if you are in direct investments. And finally, it is crucial to monitor the valuation process.

Further diversification through foreign investments

GRAPH # 5

OVERSEAS INVESTMENTS OF PENSION FUNDS FOR SELECTED COUNTRIES IN 2014



SOURCE: PWC MARKET RESEARCH CENTRE, NATIONAL PENSION ASSOCIATIONS AND THE OECD.

I would like to finish my presentation pointing out another possibility of risk diversification of a research that we have done in connection with foreign investments. In 2008, foreign investments of pension funds (excluding the US) accounted, on average, for about 25% of their total pension investments, rising to 31% in 2014. Pension funds going out onto foreign investments which have come to our notice increased from 25% to 31%.

ALTERNATIVE ASSETS: THEIR VALUATION, RISKS, INVESTMENT INCENTIVES AND PERFORMANCE

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At this point in time, the main challenge for the industry is to increase the pensions' values. However, there are not many alternatives. The possibilities are: to increase the regular monthly savings, continue accruing the existing system's contributions but over a protracted time period or increase the profitability rate.

The emphasis seems to be placed on increasing the expected profitability returns, but for this we must take risks. The idea of investing in alternative assets with a view to increasing the expected returns without having to take on more risks, lacks consistency and is totally unfounded. In my view it is not right to think that alternative assets should have a special quota or being specifically reserved for the pension funds' portfolios, thus being segregated from the rest of the variable equities. Many of these assets are definitely rated as risky, but due to their valuation it would appear the risks have been miscalculated at their low end.

What follows is an insight viewed from the conceptual framework together with some trade-offs which support this opinion.

Risk valuation and assessment

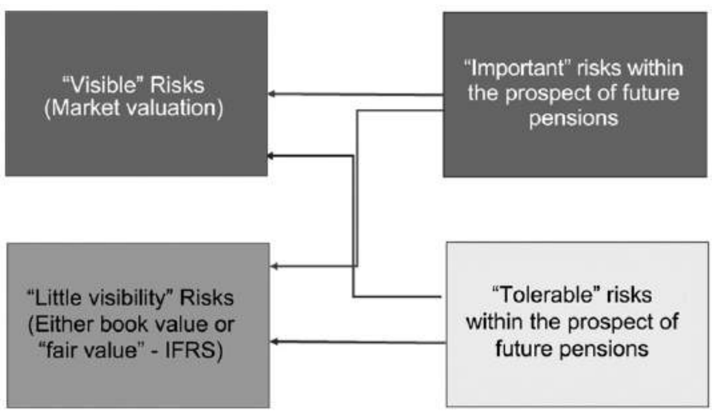
Risks become visible whenever there are market prices; you only need to see how the value of the investments do change. This is very difficult to explain to operators within the industry, particularly to would-be pensioners and the authorities alike.

There are risks that are barely visible in the investments' valuation stage. For instance, when a book value or "fair value" is adopted and using the worldwide-use IFRS standards.

In parallel, there are long-term risks which become important from either the pensions' viewpoint and/or other minor issues.

Ideally, the availability of a *match* highlighting the significant risks would be desirable and not used for identifying those of lesser significance. However, the problem here is that the valuation approach may lead to confusion. From the viewpoint of the future pensions, there are some important risks when the accounting valuation is used and which will not be visible enough. Likewise, the assets concerned will show up as apparently safe but in real life they are definitely unsafe. On the other hand, there are tolerable risks which - when valued at market prices - will become very visible; but whose analysis becomes very complex whenever it comes to consider the decisions and risk perceptions yet to be adopted/gauged by the current affiliates and would-be pensioners (See Figure # 1).

FIGURE # 1



SOURCE: DATA COMPILED BY THE AUTHOR.

Essentially tolerable risks

There are two types of paid risks which in their "pure form" would not be important for long-term investments, mainly because they have a high Sharpe ratio in such horizon (up to 10 years or more). One is the exchange rate risk (or prices) when investing in fixed income instruments (such as government bonds and those issued by companies at a fixed interest rate). In this case the profits and losses tend to offset each other and the profitability is more stable over long periods of time. The other is the illiquidity risk, which investors could be willing to take if the investment horizon is a long term one (some of this is encompassed within some alternative assets). In both cases the shocks are short-lived, thus there is an average reversion in the investment returns (there are losses which are then reversed and transformed into higher profits). Therefore, they are risks which, in principle, do not really matter.

The problem is that these two risks very seldom occur in their "pure form". Instead, they often come mixed with other risks, ranging from credit, systemic, market and/ or tail risks' types.

Both risks could be made invisible. For instance, you can take a state bond whit a sound market liquidity and accrue interest at the IRR rate it was purchased, regardless of market price changes over time. The problem is, that unless in this ideal case, there is no certainty these risks are indeed tolerated, since usually they will be mixed with other risk types. Furthermore, if not valued at market prices, wealth transfers between affiliates are bound to happen.

On the other hand, if these risks become visible when valuing them at market prices, then when stating these market risks are rated as tolerable, they should be fully explained to would-be pensioners, *stakeholders* and politicians alike. In Chile, within the industry there a widespread conviction that the market risks are tolerable. Evidence of this is the so-called Fund A, which basically invests 100% in equities: 80% of which are stocks with the remaining 20% being *high yield* fixed income instruments. Both are rated as implicit systematic risks and are considered tolerable, albeit we may not know how to explain them clearly enough. Perhaps this is one of the causes of a bad image/reputation currently attributed to the pensions' system. However, it is a known fact when assuming such risk; since it should lead to higher long-term returns compared to those funds invested exclusively in fixed income instruments.

There is another type of risk referred to as "tail risk". Tail risks are real "sleeping monsters". Usually they do not manifest themselves within market prices or profitability/yields. They show up all of a sudden and at the worst possible times: during the so-called crisis. There are some kind of assets which, during such crisis, deliver a poor performance. The question that comes to mind is whether we really want to encourage insertions of such instrument types in the respective portfolios.

Risk vs. valuation

It has been stated there is an apparent trade-off between risk and recovery. Whenever opting for allocating our assets a value other than the market price helps to conceal some risks, but certain illiquid assets - particularly those rated as *private equity* - work out as potentially attractive and often have no market prices: thus there is no alternative to them. At this stage it becomes necessary to find ways/means to avoid "financial bubbles". In other words, we should prevent the value of our investments does not end up being "overvalued or inflated" due to the prevailing accounting practices; all lacking a sound economic foundation.

Furthermore, it must be borne in mind there is an incentives' problem which may become complex, chiefly due to the fact the valuation of an asset can make it look attractive, albeit very risky. This can happen on account of the volatility not being registered while, at the same time, the asset is being allocated to accrue an attractive interest rate. In turn, the effect will be the creation of an infinite Sharpe ratio (an asset showing almost no volatility and displaying a favourable trend). As a result, an incentive is generated which compels the purchase of these assets, seemingly very attractive, but without considering the real risk which is being taken.

Thus, the valuation can generate inadequate incentives for investment, a fact which should be taken into account when investing in either illiquid assets or in those lacking market prices. That said, and since there are hidden risks, it becomes necessary to set a limit to these investments while ensuring a real diversification; chiefly by means of considering the underlying assets and applying – from the very outset - the relevant regulations.

Valuation of illiquid assets

Table # 1 refers to the funds' valuation practices (trusts) which are investing in illiquid assets throughout Latin America. This has been an initiative developed together with Mrs. Marta Del Sante and commissioned by the Uruguay-based AFAPs. It has been a laborious job to secure an agreement with the Uruguayan institutions on issues related to the assets' valuation but, stemming from a review of practices applied in sundry countries, some recommendations have emerged and which should be shared with all other forward-looking operators within the industry.

As regards real estate income, this paper recommends at least an annual revaluation as from the present value of future cash flows. This process must be performed by an external expert to the investment fund concerned; an approach from which a great deal has been achieved using the IFRS standards. Once this approach has been secured, this paper recommends an adjustment of the investments' present value; every time new financial statements and/or new information on projected cash flows are issued.

TABLE # 1

VALUATION OF ILLIQUID FUNDS (TRUSTS) THROUGHOUT LATIN AMERICA

Fund type	Recommendations
Real Estate Funds (IFRS – NIC 40)	Resort to an external expert to apply, at least, an annual valuation. Should there be enough information available, such valuation must be based on the current value of future flows. Should that data be lacking, then resort to another IFRS' accepted method(s). A daily adjustment of the FP investment's value between EEFF due to inflation (or resort to another adjustment unit), and every time a new Financial Statement is issued. Alternatively, as in Mexico, to accrue interest (This calls for a complex institutional framework coupled with a detailed and frequent knowledge of the composition of the invested funds' portfolio and the future flows' projection).
Real Estate or Housing Development Funds (IFRS – NIC 40)	Resort to an external expert to apply, at least, an annual valuation. Initial valuation at cost. Move onto a Market or Cost model (A complicated issue due to initial uncertainty concerning the future flows, difficult to use an income-based model). Between EEFF there should be a daily adjustment in line with inflation or a profitability rate (Mexico).
Business Development Fund or "Private Equity"	IFRS does not allocate a "Fair Value" to ongoing companies. It merely values separate components. To use economic valuation (VP). To avoid historical cost due to potential wealth transfers which, in this case, may reach significant ratios. As regards Chile, a reasonable way forward is to resort to two valuations each year. In line with the foregoing cases, the quota's daily adjustment may be arranged in line with inflation or a profitability rate (Mexico).
Infrastructure Funds	Should there be projects undergoing their advanced development stages – thus already generating inflows - then resort to the *business development* option, preferably based on the VP income methodology. Use a daily adjustment in line with inflation or based on accrued interest (Mexico).
Credit Portfolio Funds	To discount the estimated future inflows using an IRR which is as close as possible to the current and relevant market rate. To indicate any non-payment probabilities and the expected inflow or rate evolutions over time. Even when the portfolios are kept beyond their due dates - and with a view to avoid any inadequate incentives - it is advisable to arrange for frequent reviews of the discount rates. Daily adjustment of quota similar to the foregoing fund types.
Funds concerned with Cattle Breeding, Forestry and Other Biological Assets	Initial valuation at cost. Whenever enough data is to hand, then opt for a Reasonable Value alternative. A daily valuation in line with foregoing prescription.

SOURCE: WALKER, DEL SANTE (2015).

What is done in Chile whenever it comes to adjust the value of the quota between financial statements, is an adjustment either via inflation or using another readjustment unit deemed more relevant. In Mexico, they are mostly inclined to allocate a certain profitability, particularly to the investments trusts' illiquid share. Thus, when it comes to adjusting the value of quotas or investments within illiquid assets, these can be adjusted via inflation or, alternatively, allocated some sort of interest based on a specific methodology. There are not many other alternatives. Thereafter it is highly likely that sharp/sudden adjustments will be experienced at the time the new financial statements and/or projections are issued.

As regards the real estate development funds (subject to the IFRS IAS 40 standard), it is also advisable to arrange an annual valuation onto an external expert. Since in a real estate development it is difficult to project cash flows, the initial valuation would be the cost so as to eventually converge towards a market model; this with a view to look for and identify a comparable value. Alternatively, should there be projectable flows, try to valuate on the basis of present value. In between successive financial statements the way forward is to allocate interest, as in the case of Mexico, or resort to an inflation adjustment approach.

As regards the companies' development funds, which are the "Local Version" of private equity, only a few companies have developed the *expertise*. The IFRS standards do not value active companies at their fair value, but value their components instead. In this case, hiring the services of an outside valuation expert becomes inevitable. In Chile, and for a number of years now, companies usually hire two external valuation experts; with the one showing the most conservative valuation of its overall portfolio being customarily chosen. This process is performed once a year, due to the fact the valuer needs to know the flow projections' data normally produced by the companies; and where investment influxes are being considered. If we are to avoid the so-called accounting bubbles, then market-based amendments are to be implemented. When it comes to consider investing in infrastructure funds, the valuation is very similar to the local companies' development option.

As regards the credit portfolio funds, their valuation may be easier because there are very similar market pointers/referents and the future cash flow estimates can be discounted on the basis of an Internal Rate of Return (IRR) as close as possible to the prevailing and/or relevant market rates. If we are to avoid perverse incentives, the valuation assessments should frequently reflect both the likelihood of default as well as interest rates' variations. Likewise, in between either financial statements or revaluations, such funds should eventually accrue interest.

As for funds in livestock, forestry, biological and other general assets, there has been a remarkable breakthrough of the IFRS standards with the stipulations of IAS

41. The initial valuation is at cost, and whenever sufficient information becomes available then it is changed to "fair value"; that is onto a current value of the cash flows expected from the sale value.

However, there is an inevitable problem with the valuation of illiquid assets: If they are not suitably valued, it is highly likely to have wealth transfers between affiliates, which is evident in the following example (see Table # 2). Considering the assumption of a 30% of the funds being undervalued by 25%, this entails a 6% of total funds would be undervalued. If 20% of the members move away from the fund, either on retirement grounds or because they are moving their money to another AFP at a time the investment is undervalued; then these people will lose wealth and will have to put up with a 6% loss whereas the contributors remaining in the fund will benefit from a 1.5% earning. Thus a wealth redistribution has been generated. This is one of the thinking exercises all Fund Managers need to do when considering the fraction of the funds to be allocated onto alternative assets. So, if the aim is to stamp out wealth transfers, then the recommendation is to limit the total fund percentage invested in illiquid assets. It is not possible to avoid the policy of setting limits to such investments.

TABLE # 2

Percentage of a fund which was wrongly evaluated	Subvaluation percentage	Subvaluation of 100% of the fund	Ratio of the fund which "left"	Wealth transfer onto those w hich are staying on	Wealth transfer onto those which are leaving
10%	5%	-0.5%	20%	+0.12%	-0.5%
10%	25%	-2%	20%	+0.5%	-2%
30%	5%	-1.4%	20%	0.36%	-1.4%
30%	***25%***	***-6%***	***20%***	***1.5%***	***-6%***

SOURCE: WALKER, DEL SANTE (2015).

Professional investment in alternative assets

A recent paper from Gerakos et al. (2015), focuses on the performance and costs of third-party fund managers. The survey is broken down by selected specialist institutions, the so-called *Asset Manager Funds* (AMF), i.e., "Specialist funds for fund managers." This analytical survey covers period 2000 - 2012 with the specific purpose of studying the performance sources plus the value creation secured by the administrators subcontracted by institutional investors. These are professionals who know their business and whom are entrusted with funds to be invested on behalf of other professional investors. For instance, in the *Asset Class* referred to large American companies - with the typical S&P 500 benchmark – the conclusion it has been realised that the specialist AMFs generate a gross alpha of about 1.19% a year on the basis of net terms or after commissions and do remain positive by about 0.71% The latter implies a value creation of 71 base points in a year.

However, when going further into the Gerakos et al paper, the analysts have noticed the AMFs are investing in many kinds of assets other than the original ones. For instance, in the case of large companies, they have deviated/moved away from the *benchmark* (S&P 500). When attempting to "homologate" with the benchmark, the result is a negative gross alpha and a net alpha after commissions which is even more negative. This fact is detected by means of a style analysis at market prices - which entails seeking a broader composition of different portfolios - would show a similar performance to that of the delegated fund manager. The delegated fund administrators would opt for an exposure to risk factors which some institutional fund managers - such as the AFP pension funds in Latin America - would not have access to on their own. What they would do is take bets on certain risk factors, which are sometimes referred to as *smart beta*, which may be valuable for those who cannot achieve such exposure on their own; as it is the case of *private equity* funds.

In the upper diagonal, Table # 3 shows the percentage invested in the benchmark they were supposed to invest. For instance, in the US *public equity*, the benchmark is known as Russell 3000 and the total investment in this *asset class* is never 100% but only 9.8%. The balance, adding up to 100%, is distributed in certain tilts or bets towards *value, growth, small* and others. If it was a 100% liability, then the diagonal should show 100% and 0% from there down. However, what can be seen at the bottom of Table # 3 are the types of bets done the AMFs for generating alpha on the original *benchmarks.*

Due to the foregoing, a company handling alternative asset investments could generate an exposure to paid risk factors which are currently encompassed within the pension funds; but this will not be cost-free by any means. Indeed, it is bound to secure a higher profitability but subject to certain risks which must be thoroughly identified.

TABLE # 3

Panel A: Sharpe weights ($w_1 + \cdots + w_{19} = 100\%$)

Factors	All	Asset Class: U.S. public equity	Global public equity	U.S. fixed income	Global fixed income	Asset blends	Hedge funds
Asset-class benchmark	16.9						
Russell 3000		9.8					
MSCI World			19.2				
Barclays Capital U.S. Aggregate				25.0			
Barclays Capital Global Aggregate					26.1		
60% * MSCI World + 40% * Barclays Global Aggr.						3.8	
HFRX Absolute Return							13.4
Equity: US							
S&P 500/Citigroup Value	9.7	27.9	3.6	0.6	0.7	10.0	1.0
S&P 500/Citigroup Growth	8.9	22.9	7.7	0.5	0.6	8.7	1.6
S&P 400 Midcap	3.4	10.5	1.8	0.5	0.3	2.1	0.7
S&P Small Cap	5.5	14.6	3.2	0.9	1.6	1.6	0.9
Equity: Global							
S&P Europe BMI	9.3	1.8	32.0	0.6	1.2	6.1	3.6
MSCI Emerging Market Free Float Adjusted Index	6.4	3.5	18.1	1.1	1.4	4.3	2.7
FI: US							
U.S. 3 Month T-Bill	8.3	0.5	0.7	6.7	14.2	35.7	44.3
Barclays Capital US Intermediate Govt	4.0	0.2	0.3	11.6	5.7	3.4	4.5
Barclays Capital US Long Govt	4.5	0.6	1.8	8.4	11.8	2.7	2.2
Barclays Capital US Corporate Investment Grade	7.3	0.2	1.0	22.2	9.3	2.5	2.0
Barclays Capital US Mortgage Backed Securities	4.4	0.3	0.8	14.5	2.8	4.5	2.1
FI: Global							
Barclays Capital Euro Aggregate Govt	1.0	0.2	0.6	0.2	4.1	1.6	1.1
Barclays Capital Euro Aggregate Corporate	1.1	0.4	0.9	0.4	1.8	3.0	2.0
JP Morgan EMBI Global Diversified	2.7	0.8	1.2	3.8	11.1	2.2	1.2
Hedge Funds							
UBS Global Infrastructure & Utilities	1.5	2.2	2.1	0.3	0.8	1.8	1.2
Dow Jones UBS Commodity Index Total Return	2.0	1.9	3.4	0.7	1.7	2.1	3.6
DBCR Carry Total Return	1.8	1.2	0.8	1.4	3.3	2.4	4.8
DBCR Momentum Total Return	1.3	0.5	0.8	0.6	1.4	1.7	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: GERAKOS, J., LINNAINMAA, J. T., & MORSE, A. (2015).

Performance of Hedge Funds and Private Equity

The following is an analysis based on recent academic studies on the performance of *Hedge Funds* (HF) and *Private Equity* (PE). One advantage of pondering the evidence found in academic literature is that there are a number of standards which are typical of such work. This is particularly so in the case of those articles published in prestigious journals, whose main plus factor is having passed the scrutiny of rigorous peers. In principle, it can be assumed that there is no conflict of interest between the authors and the pension funds' management industry.

The HF offer very few traditional risks, particularly those rated as tail risks; whereas PE share the feature of other alternative assets which is to have a very low liquidity. This would make it interesting whenever pondering the relevant literature on these two cases.

Hedge Funds: Performance and Risks

The HF industry has experienced a very high growth in the past two decades; with unique investment opportunities and an exposure to more complex risks than those found in traditional assets (Getmansky, Lee & Lo, 2015).

The first thing to bear in mind are the possibly biased viewpoints inserted and referred to the reported yields. Table # 4 (taken from Getmansky et al.) identifies two types of biased viewpoints. A 12.6% profitability is shown at the top for a 5.9% volatility; which means a Sharpe ratio greater than 2, which in turn entails a very high reading. Whenever the adjustment starts with the biased statements, you usually get to half the expected profitability. First, there is a biased survival viewpoint (only those which are still alive do remain in the database). Second, is the so-called *backfill bias* (selection bias based on the manager's data) and which is referred to those funds which, ex-post, have done well and are enrolled in the databases while being filled backwards. These two adjustments influence the HF's lower profitability from 12.6% to 6.3%; thus halving it and making it far less attractive than originally rated.

TABLE # 4

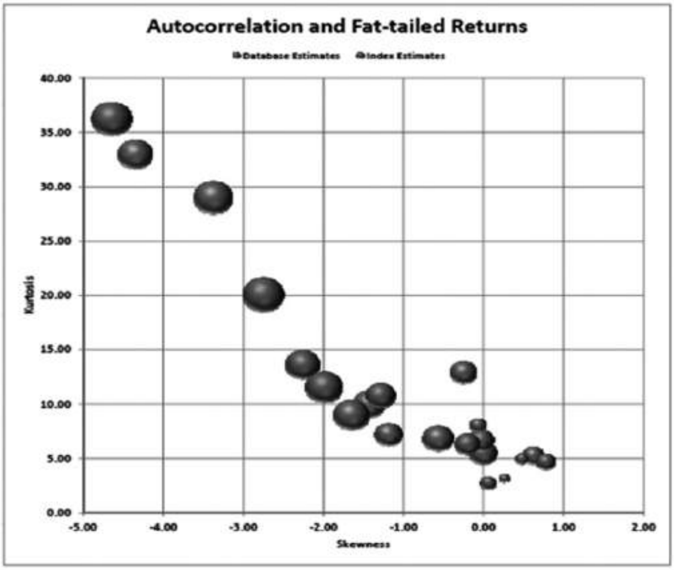
From 1996 to 2014	# fund-months	Annualized Mean	Annualized Volatility	Skewness	Kurtosis	Maximum DD	ac(1)	Box-Q(3) p value
Naive Estimate	351364	12.6%	5.9%	-0.25	4.41	-14.9%	0.28	0.00003
Remove Survivorship Bias	927690	9.7%	5.6%	-0.22	4.96	-15.0%	0.26	0.00009
Remove Backfill Bias	195816	11.5%	8.1%	-0.54	9.02	-19.9%	0.32	0.00000
Remove Both Biases	505844	6.3%	6.3%	-0.50	5.72	-20.5%	0.25	0.00056

SOURCE: GETMANSKY ET AL. (2015).

A second element to bear in mind refers to the "sleeping monsters". There are many more risk elements but average and variance. All this relates to the distribution option whenever considering the returns' probability distribution. A sharp tail (left or right) is referred to as *Skewness* or asymmetry (see Table # 4 and Graph # 1). A negative *skewness* implies a long left tail, i.e., losses tend to be higher than profits. That is the distribution of returns is skewed to the left; this is not a Gauss Bell Curve. On the other hand, whenever the tails are fat, we are talking about *Kurtosis.* A type of investment with a long left tail and also fat tails indicates that the profit rates in the unexpectedly bad events are more likely when compared to other asset types. This is noticeable amid the Hedge Funds shown in Table # 4.

Graph # 1 (also taken from Getmansky et al. (2015)) represents the "sleeping monsters", expressed in three dimensions. On axis "x" is the asymmetry level of the left tail; on axis "y" we can see how fat are the tails. The size of the sphere is the persistence of returns (also known as autocorrelation). What we see here is a very different distribution from the Normal Distribution Pattern and therefore the Sharpe ratio - as a measure of the HF investments' convenience – is now of very little use. In other words, the Sharpe ratio ignores at least three risk dimensions. It simply does not take them into account.

GRAPH # 1



SOURCE: GETMANSKY ET AL. (2015).

Furthermore, there is evidence that many HF types tend to spread at the worst possible moments (Boyson et al., 2010) and, last but not least, it is not easy to identify in advance which administrators will show outstanding future performances (Hentati-Kaffel et al., 2015).

Private Equity: performance and risks

As regards the PE, a recent review of the literature concerning performance and risk issues has determined the reported performance as likely to be overestimated, mainly due to the problem of book value valuation (Phalippou & Gottschalg, 2009). However, even when the valuation problems are corrected, there would be enough evidence pointing towards higher profits/returns vis-à-vis other more traditional asset returns (Harris et al., 2014). This "excess" performance would be in the region of 3 percentage points per year, which is a pretty high figure.

On the other hand, and contradicting the established beliefs/assumptions (See Sensoy, Wang & Weisbach, 2013), it is not easy to identify the managers whom will have the most outstanding future performances. For instance, it is never so easy to secure a prior identification of those operators which are bound to be – in the next ten years – amid the top 25% best performances.

A key additional element has to do with the PE cash flows being procyclical and cash-absorbent alike. In other words, the contributions' requests (Capital Calls) are made when valuations are low and will deliver the flows whenever the valuations are high (See Robinson & Sensoy, 2011).

Jegadeesh et al. (2014) argue there is a significant exposure to market risks as well as the risks associated to small business; not to mention the risks related to the credit spread. Thus we are talking about three major risk factors. These could be detected thanks to a PE subset which are traded either through funds and/or directly amid the formal secondary markets. Most of the time these risks cannot be seen because they are valued at book value. Here again, the influence of the famous "J" may show itself on the results of the investment with performances gradually going upwards; but still we cannot adequately measure the risk of something which is not valued at market prices.

The risk can be noticed by analysing the PE funds traded at the stock exchanges. When a thorough survey is undertaken on how the PE performed vis-à-vis the market (See Table # 5, taken from Crill & Lee, 2013), it will be concluded such PE funds are clearly procyclical. More often than not, this feature is not noticed, chiefly because it is the part which is concealed by the accounting valuation. Thus, when resorting to a market valuation is when the behaviour of the "sleeping monsters" can be appreciated, particularly when they wakeup: It is not a matter of no-risks such are simply not seen.

The Beta value of 1.44 for this type of investment becomes noticeable. The exposure to Value (HML) is 0.41 and the exposure to small business (SMB) is 0.52. All these risks are significant. In the end, there is a significant exposure to several risk factors which differ from the market risk (or Beta). If we are to properly measure the PE performance, we must resort to a much more complex methodology; thus not merely watching either the alpha factor, the difference with the S&P 500 or the Midcap Company Index alike.

TABLE # 5

	THREE-FACTOR REGRESSIONS				
	12 x a (%)	b	h	s	R2
1998-2012	0.06	1.44	0.41	0.52	0.75
t-stat	0.02	20.16	4.11	5.33	
1998-2004	5.31	1.24	0.10	0.42	0.70
t-stat	0.87	10.54	0.63	3.47	
2005-2012	-2.22	1.48	0.75	0.38	0.80
t-stat	-0.43	13.70	4.13	1.79	

SOURCE: CRILL & LEE (2013), "WHEN PRIVATE EQUITY GOES PUBLIC", MIMEO DFA.

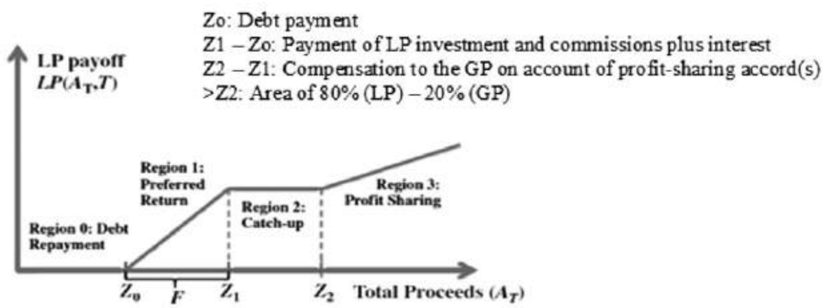
It is fair to state now there is enough evidence showing that, on average, the PE have higher returns than the traditional asset types, albeit the following facts must be noted: These are illiquid and long-term investments, it is inevitable all underlying investments will be risky ones and the commissions are high. If we consider the risks involved, are the *limited partners*' type of investors being supplied with significant alphas?

Graph # 2 is taken from Sorensen, M., Wang, N., & Yang, J. (2014). Whenever lecturing on Options, we usually place the value of the underlying asset on the "x" axis (In the case of a PE, this is the total sum received once the investment is liquidated); whereas the option value is placed on the "y" axis. Whenever handling a PE case, Graph # 2 illustrates the payments' pattern to be in line with the investment's liquidation value. In the first section of the "x" axis (ranging from 0 to Z0), and since the debt must be paid, there will be no benefits for the partners concerned.

PE funds use more debt or *leverage* than a typical company. In the second section (Z1 - Z0) the *Limited Partner* gets compensated (Common investor, "limited partner", LP). The third section (Z2 - Z1) is to be known as *catch up.* It is where the *General Partner* (The GP's General Partner or Administrator) recovers part of its investments and the commissions it has yet to receive. Finally, there is the section where profits (> Z2), are split in a typical 80-20 ratio for the LP and GP respectively.

It becomes very difficult to secure an economic exploitation of this payments' pattern, since it depends on the value of a long-term "opaque" portfolio and the GP's management, all which will hardly override the exposure risk to the underlying asset.

GRAPH # 2



SOURCE: SORENSEN, M., WANG, N., & YANG, J. (2014). VALUING PRIVATE EQUITY. REVIEW OF FINANCIAL STUDIES, 27(7), 1977-2021.

Which are the "recipes" for results similar to HF and PE whenever based on traded assets?

According to Cochrane (2014), in the case of *hedge funds*, the recipe is: "Buy the S&P 500, reduce the leverage and subtract the commissions". If you wish to obtain *private equity* returns the recipe is; "Buy a S&P 400, increase the *leverage* and subtract the commissions".

The problem is that the implicit risks of investing are not always visible and obvious. For instance, an investment in PE entails: First, due to the fixed commissions charged by GP to LP, what we have is a short position with a 2% interest applied to the *committed capital* (equivalent to the introduction of debt onto the pension fund). As a second factor, there is a risk of illiquidity whereby the specific investment becomes very difficult to get rid of. A third factor entails the risk of a *commitment* (or future capital commitments), equivalent to short positions over call options on underlying opaque assets. This is the consequence whenever the GP decides when and what to do with the *capital call.* As factor # 4, the investments entail a high leverage. The fifth and last factor is that, from a financial viewpoint, the positions are complex and encompass long and short positions for the *calls* on opaque assets (As shown in Graph # 2).

If all the foregoing were visible or self-evident, would there be the same appetite for asset class combinations - traded at market prices - even when offering similar risk-return profiles?

Conclusions

The raison d'etre of this analytical survey is to explore and deepen the foundations of the returns expected from alternative assets. Despite all what was stated beforehand, things are not completely black or white options. To go forward with limited *private equity* investment funds makes sense when a potential added value could be contributed by other illiquid assets and *hedge funds*. But it is not the panacea. It entails taking risks which, in some cases, will be invisible and, in other circumstances, should be visible only at the time of a crisis.

Alternative assets without market prices pose the additional challenge of possible transfers of wealth between affiliates when they move from one fund to another; or in the event of withdrawals. Last but not least, since there are assets with market prices which, to some extent, allow for an exposure to similar risks and which could fulfil a similar role to that associated to alternative assets; it makes sense to wonder: Why not take these risks based on assets which do have market prices? We can easily assume a reply: It would not be done/allowed because the risks would appear to be intolerable.

CHAPTER II

FUTURE CHALLENGES FOR THE INVESTMENTS OF THE PENSION FUNDS

ÁNGEL MARTÍNEZ-ALDAMA. Effects of demographics on the public pension systems.
LEONARDO VILLAR. Demographic trends and their likely effects on the capital markets and pension funds' investments.
MELVIN ESCUDERO. Suggestions for enhancing the supply of financial instruments on to the pension funds within the Pacific Alliance member countries.

EFFECTS OF DEMOGRAPHICS ON THE PUBLIC PENSION SYSTEMS

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The purpose of this paper is to explain the effects of the so-called demographic challenge likely to be confronted by the public pension systems; as well as highlighting what can be done to alleviate the effects of this invisible monster which is threatening to impose its strong hold on us right now.

Table # 1 shows the countries of the Organisation for Economic Co-operation and Development (OECD) and their projection of public spending on pensions by year 2060 if no amendments / reforms are introduced onto them; that is with their operations being based on the currently enforced legal framework. The data suggests an OECD average referred to public spending on pensions likely to be in the region of 9.7% of GDP by year 2020. Furthermore, by year 2050 such average would escalate to 11.4% of GDP. In plain English, we are talking about a 20% increase in pensions' spending in only three decades.

TABLE # 1

PROJECTION OF PUBLIC PENSION OUTLAYS UP TO YEAR 2060 PROVIDED NO REFORMS ARE INTRODUCED DURING THE INTERIM PERIOD
(AS % OF GDP)

	2010	2020	2030	2040	2050	2060	Variation 2010 - 2060
Luxembourg	9,2	10,8	14,0	16,5	18,1	18,6	9,4
Belgium	11,0	13,1	15,5	16,5	16,7	16,6	5,6
Austria	14,1	15,1	16,7	16,5	16,4	16,1	2,0
Finland	12,0	14,0	15,6	15,2	14,9	15,2	3,2
France	14,6	14,4	14,9	15,2	15,1	15,1	0,5
Hungary	11,9	11,5	11,1	12,1	13,5	14,7	2,8
Greece	13,6	13,7	14,1	14,9	15,4	14,6	1,0
Italy	15,3	14,5	14,5	15,6	15,7	14,4	-0,9
Norway	9,3	11,6	12,9	13,7	13,9	14,2	4,9
Spain	10,1	10,6	10,6	12,3	14,0	13,7	3,6
Germany	10,8	10,9	12,0	12,7	13,0	13,4	2,6
EU27	10,8	11,1	11,9	12,6	13,1	13,2	2,4
Portugal	12,5	13,5	13,2	13,1	13,1	12,7	0,2
Czech Republic	9,1	8,7	8,9	9,7	11,0	11,8	2,7
Ireland	7,5	9,0	9,0	10,0	11,4	11,7	4,1
The Netherlands	6,8	7,4	9,1	10,4	10,4	10,4	3,6
Sweden	9,6	9,6	10,1	10,2	9,9	10,2	0,6
Poland	11,8	10,9	10,9	10,3	10,0	9,6	-2,2
Denmark	10,1	10,8	10,7	10,3	9,6	9,5	-0,6
United Kingdom	7,7	7,0	7,7	8,2	8,2	9,2	1,5
Estonia	8,9	7,7	8,2	8,1	8,0	7,7	-1,1
Russia	7,1	8,9	9,0	8,4	7,5	6,9	-0,2
Korea	0,9	1,4	2,5	3,9	5,5	6,5	5,6
Canada	5,0	5,8	6,6	6,5	6,3	6,2	1,2
United States	4,6	4,9	4,9	4,8	4,8	4,7	0,1
South Africa	1,3	1,8	1,7	1,6	1,5	1,4	0,1
Brazil	8,5				15,8		
Average OECD	**9,3**	**9,7**	**10,5**	**11,1**	**11,4**		
Switzerland	6,3	6,8	8,1	8,6	8,6		
Argentina	5,9				8,6		
New Zealand	4,7	5,3	6,7	7,7	8,0		
Iceland	4,0				6,9		
Australia	3,6	3,7	4,3	4,7	4,9		
China	2,2				2,6		
India	1,7				0,9		

Source: INVERCO quoting OECD data extracted from "Pensions at a glance 2013"

However, if we take the case of a specific country within our region, such as Brazil, the relevant outlays would rise from 8.5% to 15.8% of the country's GDP. This is an increase of 80% and, therefore, such effect is certainly very important to bear in mind from now on.

With regards to rates of public and private replacement, the OECD model presented here is a mixed bag - whereby the weight of the public system would be 41% - which, when added to the private capitalization system should raise the replacement rate up to 68 %. This represents a significant weight within the public system, but also an equally important weight factor onto the private system. When compared with the 68% standard for the OECD countries - and where the public and private systems account for 41% and 27% respectively - it is worth noting the cases of Chile and Mexico amid the Latin America region. In both countries the weight of the public systems' replacement rate would be tantamount to 4 or 5 points.

As regards the Chilean case - when adding the private system - the replacement rate reaches 42%. In other words, the pension percentage on our last salary once we have collected each US$ 100 worth in the last pay slip, then our pension would be US$ 42. In Mexico, the equivalent replacement rate reaches 29%.

TABLE # 2

REPLACEMENT RATES AMID THE PUBLIC AND PRIVATE PENSIONS
(OECD COUNTRIES DATA VALID FOR YEAR 2013)

	Public system	Compulsory private system	Total compulsory systems	Voluntary private system	TOTAL
Mexico	3.8	24.7	28.5		28.5
Japan	35.6		35.6		35.6
Korea	39.6		39.6		39.6
Chile	4.8	37.2	41.9		41.9
Poland	24.5	24.3	48.8		48.8
Estonia	27.4	24.8	52.2		52.2
Australia	13.6	38.7	52.3		52.3
Greece	53.9		53.9		53.9
New Zealand	40.6		40.6	14.1	54.7
Portugal	54.7		54.7		54.7
Finland	54.8		54.8		54.8
Switzerland	32.0	23.1	55.2		55.2
Sweden	33.9	21.7	55.6		55.6
Belgium	41.0		41.0	15.1	56.2
Luxembourg	56.4		56.4		56.4
Germany	42.0		42.0	16.0	58.0
France	58.8		58.8		58.8
Norway	45.7	6.8	52.5	11.3	63.8
Turkey	64.5		64.5		64.5
Slovakia	37.6	28.3	65.9		65.9
United Kingdom	32.6		32.6	34.5	67.1
Average OECD	**40.6**	**13.4**	**54.0**	**14.0**	**67.9**
Italy	71.2		71.2		71.2
Iceland	6.5	65.8	72.3		72.3
Canada	39.2		39.2	33.9	73.1
Israel	22.2	51.1	73.4		73.4
Hungary	73.6		73.6		73.6
SPAIN	**73.9**		**73.9**		**73.9**
United States	38.3		38.3	37.8	76.2
Austria	76.6		76.6		76.6
Denmark	30.6	47.9	78.5		78.5
Ireland	36.7		36.7	43.0	79.7
Czech Republic	43.5		43.5	39.2	82.8
The Netherlands	29.5	61.1	90.7		90.7

Source: INVERCO quoting OE data extracted from "Pensions at a glance 2013"

In Europe we can identify extreme cases. For instance, in The Netherlands the weight of the private system is very relevant. Indeed, the private pension system accounts for two thirds with the remaining one third being rated as part of the public pension. Other noteworthy cases are those for Spain and Italy, where the weight of the replacement rate of the private system is hardly noticeable.

In Table # 3 you can appreciate the evolution of replacement rates of all public pension systems prevailing throughout Europe. The data was extracted from a recent publication issued by the European Commission and showing the overall European Union likely to evolve from a replacement rate of 43% in 2013 to a 36% equivalent by year 2060; thus clearly pointing to a drop of 7 percentage points in the replacement rate within four decades. But as we all know – such average figures in Europe and any region elsewhere are - only mere average figures. Specific and real-life cases can be very different.

TABLE # 3

EVOLUTION OF THE REPLACEMENT RATES AMID THE PUBLIC PENSIONS IN EUROPE

	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060	Variation 2013 - 2060
Belgium	39.5	41.6	41.8	41.8	41.4	41.0	40.4	40.1	39.2	38.8	-0.7
Denmark	39.7	36.5	35.5	35.1	34.3	33.5	32.9	32.5	32.7	32.8	-6.9
Germany	42.5	41.9	40.3	38.7	36.8	35.9	35.7	35.5	35.4	35.5	-7.0
Ireland	31.2	29.3	29.3	29.3	29.3	29.3	29.2	29.1	28.9	28.7	-2.4
Spain	79.0	73.6	66.1	60.6	58.3	56.1	53.6	51.7	49.9	48.6	-30.4
France	50.6	50.3	48.8	47.2	44.4	42.9	41.2	40.5	40.6	39.2	-11.4
Italy	59.9	61.2	59.1	57.8	54.3	52.3	49.7	50.2	50.9	51.8	-8.0
Luxembourg	:	74.6	67.0	64.8	67.4	68.2	65.8	63.9	65.7	64.6	:
The Netherlands	29.8	29.7	29.9	29.0	28.3	28.2	28.2	28.4	28.4	28.3	-1.4
Austria	51.0	49.1	48.5	52.4	52.0	49.9	49.2	48.7	46.8	44.7	-6.3
Poland	53.0	53.8	53.1	47.9	43.8	39.4	34.4	31.2	29.8	28.7	-24.4
Portugal	57.5	50.7	44.8	43.2	38.8	36.1	39.0	35.2	31.8	30.7	-26.7
Finland	46.0	51.3	48.6	46.3	45.3	45.7	45.3	45.7	44.9	44.1	-1.9
Sweden	35.6	33.7	34.0	33.5	31.6	31.2	30.6	30.8	29.4	29.0	-6.7
Norway	43.7	41.0	39.8	38.4	37.3	36.7	36.0	35.9	35.9	36.2	-7.5
European Union	42.5	42.7	41.3	40.0	38.7	37.7	36.9	36.4	35.9	35.9	-6.6
Euro Zone	46.3	45.9	43.9	42.7	41.4	40.3	39.4	38.9	38.6	38.6	-7.7

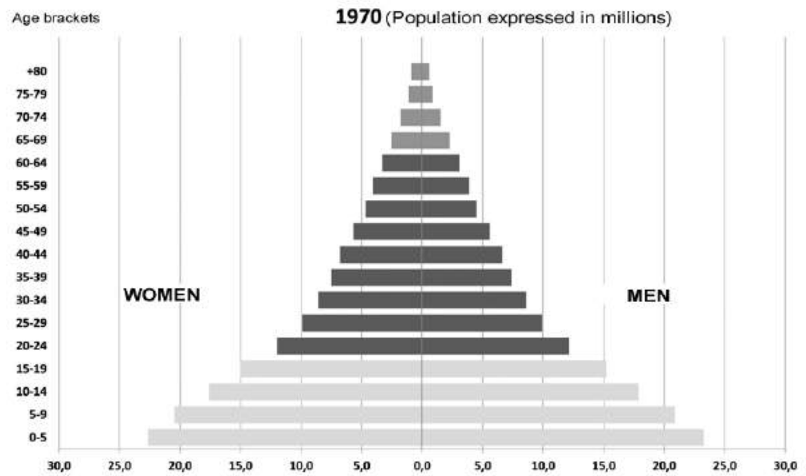
Source: "The 2015 ageing report" (European Commission)

To further illustrate the Spanish case, and due to the amendments introduced in the past four years, the replacement rate would go down from 80% to 49%, Thus the drop would be tantamount to 30 percentage points. Once again I must stress this is referred only to the replacement rate without any additional reforms / amendments; albeit incorporating those already made. To the latter ratio we must add the effects expected from both the increase in retirement age (67 years) and the number of years considered when calculating the pension and the sustainability factor alike. Such factors will be implemented as from year 2018 onwards.

In the Netherlands the private system enjoys a significant influence in the replacement rate, whereas the public system hardly matters. Therefore, against this overall scenario, to become realistic is a must. The countries which have introduced no reforms and have yet to implement robust capitalization systems, are bound to face a significant reduction in their membership's own income levels. Such will be due to the mere effect of the parameters being changed and which will become essential to implement - chiefly on account of the demographic evolution - unless you wish and are prepared to see your public systems becoming unsustainable!
Graphs # 1, # 2 and # 3, all compiled with data extracted from a United Nations' report, show the demographic pyramid in Latin America in years 1970, 2015 and 2016 respectively. They clearly reflect the evolution experienced by such pyramid. In a nutshell, all countries within this geographical area will undergo the same effects in terms of ageing we witnessed in Europe some 15 years earlier. Such is the magnitude of a problem that should concern us all.

GRAPH # 1

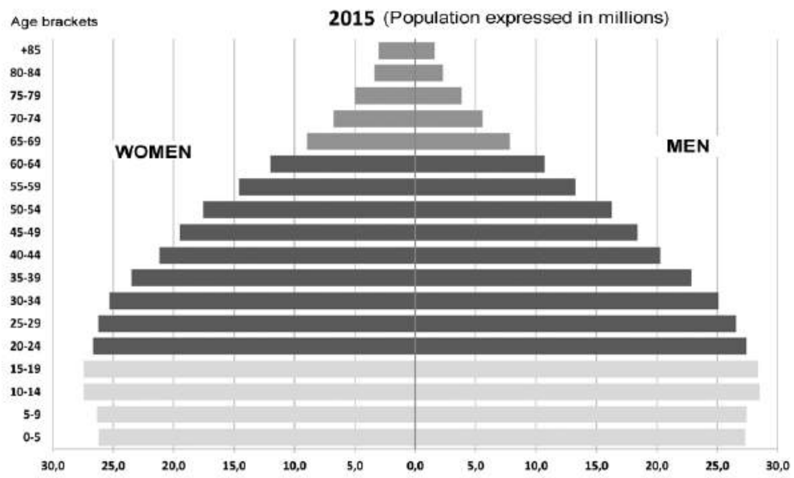
POPULATION PYRAMID IN LATIN AMERICA - 1970



SOURCE: WORLD POPULATION PROSPECTS: THE 2015 REVISION (UNITED NATIONS).

GRAPH # 2

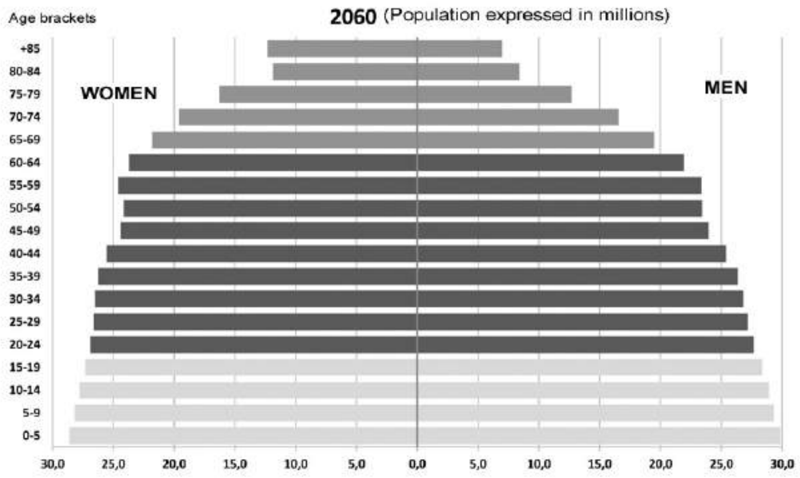
LIKELY POPULATION PYRAMID IN LATIN AMERICA - 2015



SOURCE: WORLD POPULATION PROSPECTS: THE 2015 REVISION (UNITED NATIONS).

GRAPH # 3

LIKELY POPULATION PYRAMID IN LATIN AMERICA - 2060



SOURCE: WORLD POPULATION PROSPECTS: THE 2015 REVISION (UNITED NATIONS).

In closing, I wish to draw your attention to the relevant data extracted from a recent Standard and Poor's report known as *The Global Ageing 2016*. It is a genuine x-ray slide highlighting the magnitude of the surge in public spending due to ageing. When we speak about public spending, we refer to sundry and different programmes: pensions, health, unemployment and dependency. Be as it may, the most important cost element is still in the form of pension outlays.

The Standard and Poor's data suggest that by year 2050 almost 30% of the nearly 60 countries surveyed will suffer from a sizable level of speculative credit rating and a 50% of BBB. Nowadays, such percentages amount to only 10% and 25% respectively.

Furthermore, it is worth noting the likely effects on public spending brought to bear by the ageing population. Suffice to say the net debt emission in Brazil by 2050 will have increased by 300%. The equivalent figure for Argentina is 220%, 180% in Mexico, 130% in Chile, 90% in Peru and 80% in Colombia.

The dependency ratio - that is the population percentage over 65 vis-à-vis those still enjoying a working-age status (20-64 years) - in the case of Brazil by 2050 will move from 11% to 37%; that is by four times as much. In Chile, the ratio will increase from 16% to 44%; tantamount to three times over its current level. In Colombia, it should grow also three times with the same being the case expected for Mexico and Peru.

In Brazil, ageing outlays as a percentage of GDP will double, from 13% to 26%. In Chile such surge will be from 9% to 13%, in Colombia from 6% to 10% and in Mexico from 5% to 11%.

A relevant and final remark must be made to you on this key issue of pension outlays now bestowed with significant and growing importance; particularly when it comes to justify pension reforms vis-à-vis the political powers. In Europe all pension outlays will increase from 9.8% to 10.7% of GDP; that is a 10% increase. As regards Asia, the likely increment is predicted as close to 80%, from 3,5% to 6% del PIB. However, in Latin America, there will be an opposite effect with a drop in such spending; from 5.1% to 4.2% of GDP.

The foregoing factor greatly enhances the significance of the individual capitalization programmes already undergoing implementation within these countries. I believe it is a point to bear in mind whenever we come to addressing and communicating all the plus factors and advantages closely associated to and implicit within these systems.

DEMOGRAPHIC TRENDS AND THEIR LIKELY EFFECTS ON THE CAPITAL MARKETS AND PENSION FUNDS' INVESTMENTS

LEONARDO VILLAR[1]

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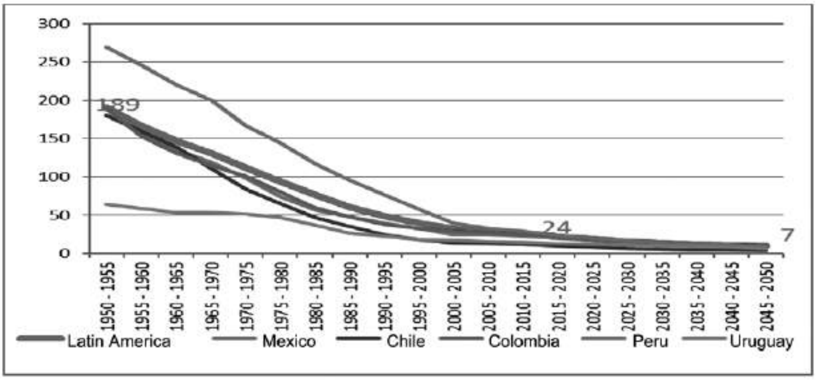
Starting from a review of the ageing population process throughout Latin America, this paper then focuses on analysing its impact on the economy in terms of growth and savings alike. It also explores the challenges associated to the pension funds based on the individually-funded program and the capital markets.

Demographic trends

The starting point for a proper addressing of the demographic trends is the sharp decline of enfant mortality rates experienced during the fifties of the 20th century. Graph # 1 shows such deaths averaging 189 children out of each one thousand born in all Latin American countries; and all happening before reaching the age of five. Fortunately, this mortality figure has been curved downwards to 24 for one thousand and a further reduction to 7 is forecasted for year 2050. This performance is replicated in each and everyone of the larger countries within the region and which were included in the Graph. Such Graph also shows a much more accelerated trend in countries like Peru; which was dragging much behind all others by year 1950. A less rapid reduction trend has been recorded in others such as Uruguay - which largely outstripped the others - and whose infant mortality rates were significantly small for the period under review.

GRAPH # 1

DEATH RATE FOR EACH 1,000 CHILDREN BORN ALIVE AND UNDER THE 5-YEAR AGE

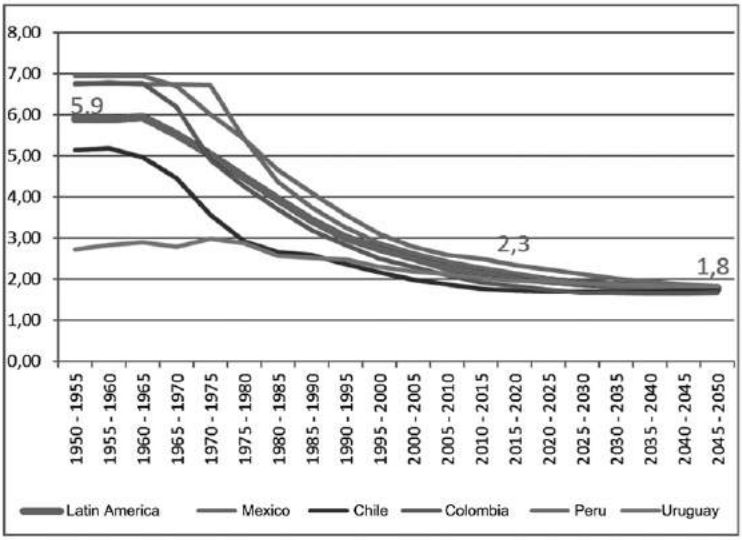


SOURCE: LATIN AMERICAN AND CARIBBEAN DEMOGRAPHIC CENTRE (BETTER KNOWN FOR ITS SPANISH ACRONYM: CELADE).

The drastic reduction in infant mortality generated the so-called baby boom during the 50s, 60s and 70s of the twentieth century, thereafter began to show other special features; chiefly in the form of a rapid fall in fertility rate associated with the widespread use of contraception and birth control methods. The average number of children per woman in Latin America - which was close to 6 in 1950 - nowadays is 2.3 and the 2050 outlook suggests it would have dropped down further, to 1.8.

GRAPH # 2

AVERAGE NUMBER OF CHILDREN PER WOMAN



SOURCE: CELADE.

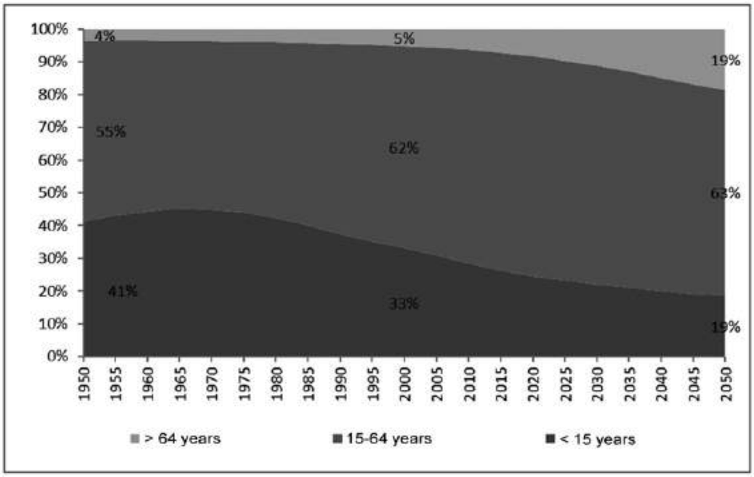
This situation entailed - during the 1950s and 1970s - we had a very large proportion of children which, in subsequent years, began to decline and made way to the so-called *demographic bonus* of the 80s and 90s; i.e. at a time a significant proportion of the population was reaching its working-age status.

Possibly, we are still going through such demographic bonus phase. However, it is clear that this phenomenon is already going through its declining phase and, by contrast, over the coming decades we shall witness a significant increase of people reaching the age of 65 and over; whom are members of the cohorts born between 1950 and 1970. So far, we have seen how the population of people over 65 has remained relatively steady at about 4% or 5% of total population; but it will increase rapidly over the next two decades to become about 20% of the total population (see Chart 3).

The foregoing is a dramatic change, which is in open contrast with the relative stability such segment of the population has had in the past 60 years. This change in the age structure of the population is now coupled with the fact people reaching the 60-year age bracket will be going on retirement age by year 2050. Furthermore, it is predictable they will have a life expectancy of 22 years thereafter; which is twice as much the 11 years they were expected to live had they been born in the 1950s.

GRAPH # 3

LATIN AMERICA: INCIDENCE RATE OF EACH AGE GROUP ON THE TOTAL POPULATION IN PERIOD 1950 - 2050

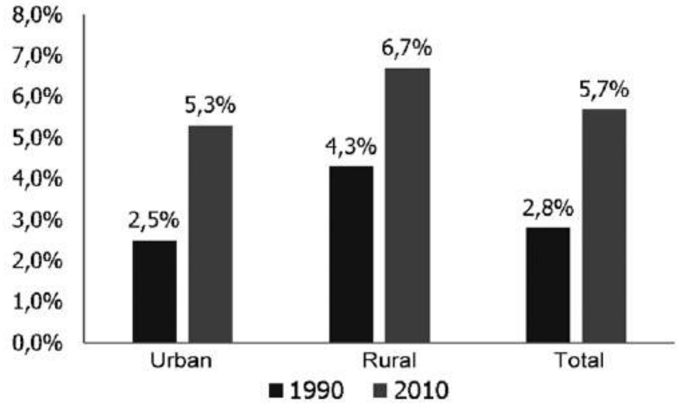


SOURCE: CELADE.

On the other hand, the ageing of the population is accompanied by what is now referred to as "domestic ageing", This social phenomenon is reflected in the fact most families are no longer widespread, but have increasingly become nuclear families instead; partly as a result of allowing economic development in itself to take place with its strongly appealing highest levels of *per capita* income. The true fact is that every time we look at this evolution we notice a growing number of broken families as well as more people coming of age and opting to live all alone; that is without being assisted or accompanied by their children or grandchildren. For instance, in the Colombian case it has only taken 20 years – from 1990 to 2010 - for the percentage of households encompassing only elderly people to go from 2.8% to 5.7% (See Graph # 4). It is almost certain this trend will be further enhanced in coming decades.

GRAPH # 4

PERCENTAGE OF HOUSEHOLDS ENCOMPASSING ELDERLY COUPLES ONLY



SOURCE: FEDESARROLLO AND THE SALDARRIAGA CONCHA FOUNDATION (2015), BASED ON THE DATA COMPILED BY THE HEALTH AND DEMOGRAPHIC NATIONAL SURVEY ("ENCUESTA NACIONAL DE DEMOGRAFÍA Y SALUD - ENDS"), WHICH IS PART OF THE NATIONAL STATISTICS AND ADMINISTRATION DEPARTMENT ("DEPARTAMENTO ADMINISTRATIVO NACIONAL DE ESTADÍSTICA – DANE").

Economic impact of the ageing factor

Both demographic and domestic population ageing per se are positive results, thus reflecting better living conditions and improved health status alike. But at the same time these phenomena bear significant implications for the economy, since they bring along sizeable challenges for public policies; not to mention other likely key economic and financial development consequences in coming decades. Such key consequences should show up on four fronts: (i) the feasibility of all pension systems based on a simple PAYGO approach, (ii) the challenges likely to bear weight on social and taxation policies, (iii) the impact on productivity and economic growth and (iv) the impact on savings and their investment returns.

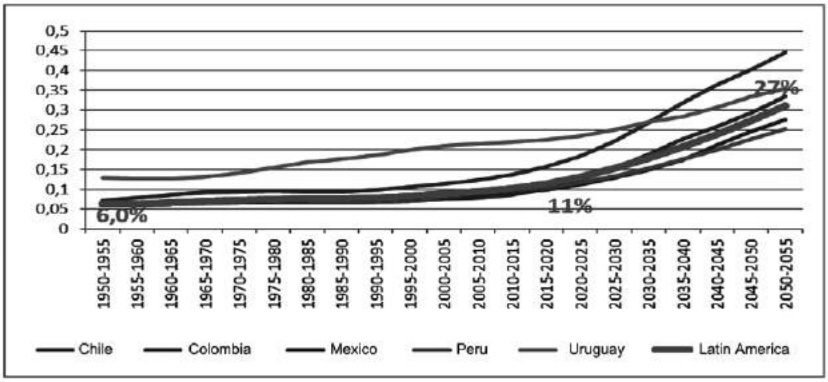
An ageing population and the viability of pension systems based on a simple Pay-As-You-Go (PAYGO) approach

The first implication of an ageing population such as the one we are witnessing today, turns the pensions systems based on a simple PAYGO approach into a totally non-viable proposition. In 1950, for every elderly person aged over 64 years, there were 16 people enjoying a working-age status; in plain English 16 people then could afford to bear the brunt of keeping one elderly person.

Nowadays, the ratio is 1 to 9 and has become a much more strenuous proposition to keep one elderly person. Ominous as it may sound today, please bear in mind that by year 2050 such ratio in most Latin American countries will be 1 to 3; whereby three people will have to support one elder. This relationship, of course, turns the mere suggestion of a simple PAYGO approach into something completely unworkable. Furthermore, it places a question mark on the prospect of pensions being funded only by those who are still working.

GRAPH # 5

DEPENDENCY RATIO
(POPULATION → 64 YEARS OLD / WORKING-AGE POPULATION)



SOURCE: CELADE.

From a fiscal viewpoint, behind the foregoing state of affairs lay concealed significant implications. Despite the reforms already introduced to the pension systems and the progress secured so far by the individually-funded schemes; many countries still rely on simple PAYGO schemes either in full form or coexisting with individually funded systems.

In many cases, such as Colombia, the simple PAYGO schemes have even won supporters among members of some pension schemes. Worse still, a very high proportion of the elders - about 78% of them as far as Colombia is concerned – are totally lacking a pension coverage and thus will have to be somehow assisted with their subsistence needs. It is highly likely it will be addressed by resorting to non-contributory pension benefits coming from the general taxation system.

An ageing population and its challenges to the social and fiscal policies

The ageing population will have not only a large fiscal impact in the form of pension payments linked to simple PAYGO schemes; since it will be supplemented with non-contributory economic benefits earmarked for the population not covered by the pension system.

An additional burden will be in the form of huge costs associated with social security coverage on matters referred to health and other government support systems; all closely associated with the health and care of the elderly.

Furthermore, these costs will have to be financed with public funds during the period in which, it is very likely the pension funds will be suffering from a substantial capital draining. Such unwelcome fact is a consequence of the same ageing population process, which is bound to turn a lot more difficult the task of securing the necessary resources required to cover the already predictable governments' fiscal imbalances.

Indeed, what we see today is a fast-paced increment in size of all funds in the individually-funded program, mainly due to the contribution of an affiliated segment of the population; with most of them rated as contributors. These contributions, with their relevant financial returns, are invested by the social security fund entities in private projects and government bonds which, in turn, should facilitate the financing of the already predictable government deficits.

Whenever the ageing population begins to induce higher pension outlays and the proportion of contributors begins to shrink, then the funds in the individually-funded program will start to decrease in size. At this point, needless to say, it will become more difficult to finance the fiscal deficits associated with the outlays linked to this same ageing process. As a result, an increase in the tax burden will become inevitable but its implementation will also become more difficult - particularly if the population ageing process has a negative impact on economic growth - as it appears most likely in your minds after reading the following paragraphs.

Ageing population, productivity and economic growth

From an economic growth viewpoint, the ageing process means the workforce will grow at a lower rate vis-à-vis the total population. In this regard, the relative population ageing heralds the end of the demographic bonus which benefited the Latin American economies since the 80s of the past century. To this you must add the fact pointing towards a highly likelihood of labour productivity amid the people turning 50 or 60 years starting a gradual but steady decline; particularly with jobs linked to low training levels/requirements.

It is true that, from the point of view of human capital, ageing leads onto positive effects. On the one hand, amid the people with higher training levels their productivity can show an upward path until they reach a very old age. That said, this process of demographic change entails a society with a smaller proportion of children and young people, so it becomes easier to supply them with higher educational resources.

This is explained not only for fiscal reasons in relation to public education. It also shows up at household level, in which there is an already decreasing family-group size. At this point it is very likely the parental investment in human capital will follow with an incremental fashion and benefitting their children (Choukhmane, Coeurdacier and Jin, 2014).

In any case, the effort spent on increasing productivity by means of boosting the human capital factor of young people will have to be considerable; particularly if we are to offset the decline of the *demographic bonus* and lower and overall average productivity of workers, brought about by ageing. On this same line of thinking, it becomes predictable the ageing population process goes hand-in-hand with a slowdown in the per capita economic growth.

<u>Impact of ageing on savings and profitability</u>

What is the likely impact magnitude to be brought about by the ageing population process, particularly on the macroeconomic savings and on the profitability expected from those savings?

The traditional life-cycle theory suggests most people will be rational, thus will attempt to uphold a stable pattern in consumption behaviour. Therefore, they would be prepared to implement a proactive savings' stance throughout their productive phase; and then resort to withdraw them at their retirement or end-life cycles. Some surveys have questioned this process of savings' withdrawal as ageing progresses. Such doubts arise from evidence such as the sharp drop in consumption now becoming commonplace and rife whenever people leave their jobs and go on retirement.

Many people do continue saving, even during their retirement period; a fact which is deemed as linked to the prospect of leaving a legacy to their next of kin. It also goes against the life-cycle theory a fact – which is now increasingly quoted in surveys focused on behavioural economics – whereby people tend to behave in line with short-term criteria.

Only when it comes to retire from our active-life status that we become aware of how much time we have left to live and its implicit financial requirements.

Thus, when retirement time comes, the new pensioners will notice an income drop. So they would opt for a consumption drop so as to ensuring it becomes in line and adaptable to their new environment; in which they will have to meet the needs stemming from their remaining lifetime. Also they become distinctly aware of their family group's disintegration and the fact their own grown-up children will not be capable or willing to assist them thereafter.

The more recent academic literature supports the idea whereby - in real-life terms – the case advocated by the more traditional life-cycle theories does not usually happen. Specifically, Poterba (2007) presented evidence contradicting the stance whereby the ageing hypothesis would generate an asset market meltdown associated with the assets' disposal/liquidation undertaken by the elderly; and whenever the latter are confronted with the reduced income fact due to their dropping out from the labour market. This has not been detected within the advanced economies. On the contrary, many people spend their old-age period stockpiling financial assets.

Still, estimates on the behaviour of individual savings amid older cohorts (Deaton and Paxson, 2000) - and most surveys compiled with cross-section aggregate data from many countries (Poterba, 2007; Park & Ree, 2005) - confirm the flow savings get significantly reduced with ageing; all which is consistent with the fact that during the last living stages the income levels are significantly curtailed.

Despite the consumption drop, the savings' flows decrease significantly with age, even if it does not lead to a reduction of the accumulated savings' balance. In other words, during the old age period we can maintain our wealth and even get it to increase slightly – in contradiction with the stance advocated by the more traditional versions of the life-cycle theory - albeit the level of our savings' flow should drop significantly year on year.

As regards the ageing population impact on the yields expected from the financial market, there are several angles to consider. As a matter of principle, the lower economic growth associated with ageing would predict a reduction in the real financial yields/performances.

In theory, an economy whose growth is slowing down should have lower long-term profitability rates. Looking at this scenario from another angle, a predictable drop in the savings' flow would have a negative impact on demand for financial assets which, in turn, could cause a price drop for those assets and an increase in the real interest rate. Thus, the theory suggests opposing effects.

From the empirical surveys' perspective, we notice no significant relationship between population ageing and the overall size of the capital market; nor do we spot it on the total returns expected from the financial resources placed on the economy as a whole (Park and Ree, 2005 and Poterba, 2007).

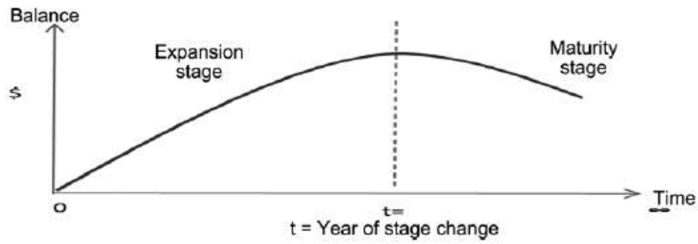
However, on the other hand, several authors suggest that ageing is associated with an ongoing substitution of shares by fixed income bonds (Park and Ree, 2005); which is consistent with the idea of a substitution of riskier assets - and therefore more profitable instruments – by less risky equivalents. Such factor could lead to a fall in the average returns expected from such financial assets. This leads us to a more specific topic which is the overall outlook for the pension funds based on an individually-funded program vis-à-vis the ageing population.

Impact of ageing on the flows and pension fund balances based on an individually-funded approach.

With the ageing process, it can be expected the yield of pension funds based on an individually-funded program to be similar to the returns expected from the assets of an individual throughout his/her life cycle. In a first stage the main feature is the expansion of the amount of relevant resources. Going further into specifics, it is a stage in which all pension funds are enlisting and receiving the monthly contributions from new members; with such members noticing such accumulated contributions' balances increasing year on year (See Graph # 6). At that stage, the number of contributors and their contributions are significantly higher than the number of pensioners and their fund withdrawals. The second stage, by contrast, is the one in which people grow older and their withdrawals become larger than the contributions payable by the new contributors, Thus, the total pension resources will show a declining course.

GRAPH # 6

THE SAVINGS DURING THE LIFE CYCLES OF THE INDIVIDUALS AND THE CAPITALISATION FUNDS



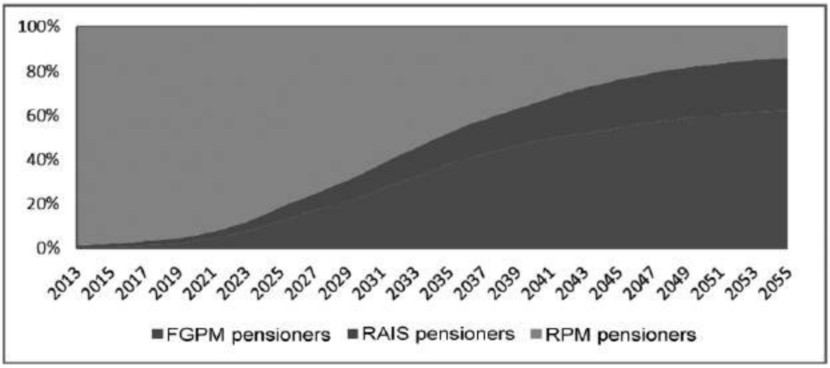
SOURCE: MY OWN DATA COMPILATION.

In the case of Colombia, and merely by way of illustration, ASOFONDOS estimates the current total number of pensioners amid the funds based on the individually-funded program standing at only 2% of its overall membership; whereas the overall outlook for year 2050 forecasts a total of 23% of its membership will be pensioners (See Graph # 7).

The likely impact of this change on the balances of pension savings managed by the AFPs is summarized in Graph # 8, which shows such balances as from 2027 likely to be decreasing at a significant pace. Should we include the relevant resources to the Minimum Pension Guarantee Fund (Better known for its Spanish acronym: FGPM), the pension amounts subject to management would evolve from the current 20% of GDP to 31% by 2027; albeit thereafter – by year 2050 - would be dropping to 12.3%.

GRAPH # 7

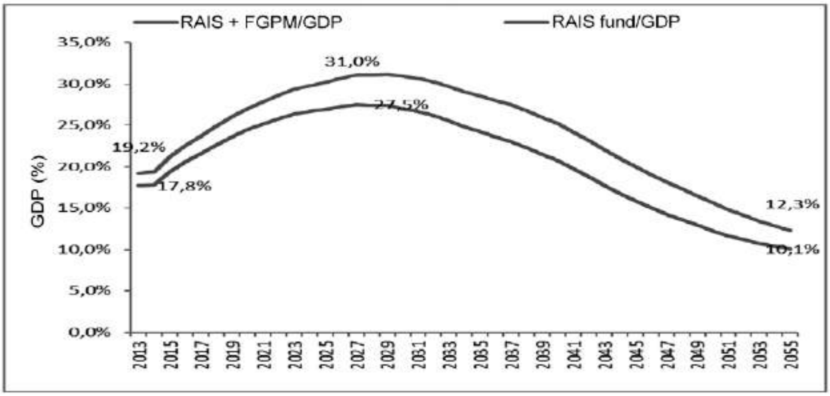
PENSIONERS ASCRIBED TO THE CAPITALISATION FUNDS - COLOMBIA



SOURCE: ASOCIACIÓN COLOMBIANA DE ADMINISTRADORAS DE FONDOS DE PENSIONES Y DE CESANTÍA (ASOFONDOS), COLOMBIA. NOTE: FGPM = FONDO DE GARANTÍA DE PENSIÓN MÍNIMA (MINIMUM PENSION GUARANTEE FUND); RAIS = RÉGIMEN DE AHORRO INDIVIDUAL CON SOLIDARIDAD (INDIVIDUALLY-FUNDED SYSTEM); RPM = RÉGIMEN DE PRIMA MEDIA (PUBLIC PAYGO SYSTEM).

GRAPH # 8

BALANCE OF THE INDIVIDUAL SAVING ACCOUNTS' SCHEMES – COLOMBIA



SOURCE: ASOFONDOS.

The questions prompted by the foregoing perspective referred to the funds' balances managed by the AFPs are multiple and wide-ranging: What will happen when the resources start to drop as a result of the withdrawals exceeding the total contributions aimed at funding those resources? Will those monies vanish from the financial system? Will they move onto other financial assets or onto other areas of the overall economy? Are they likely to be reinvested in life and care insurance or placed into other savings schemes? What will happen in the meantime with key factors such as the risk and profitability of those resources?

As regards the questions concerning the resources taken out of the AFP-masterminded pension systems and if such monies will eventually vanish from the financial system; I must stress what I stated earlier. Indeed, there is no international evidence of any meltdown asset. In plain English, what I said then referred to the fact people are growing old but such process does not mean there will be a drop in the total financial assets contained within the overall economy.

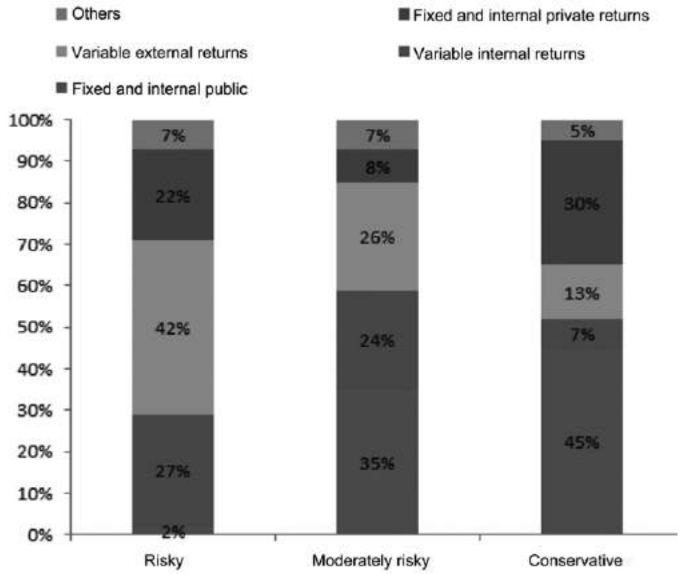
The foregoing suggests that all resources taken out from the individually-funded program will go somewhere else; possibly onto insurance companies managing annuities or other financial and/or non-financial assets.

As regards the question concerning the risk and profitability of those resources taken out of the AFP-managed funds; intuition suggests both the investment terms and risks must be lower. For instance, it is predictable such process will involve a substitution of shares by investments in fixed income securities, which is likely to reduce yields expected from long-term assets.

To further illustrate you, as shown in Graphs 9 and 10 for the Colombian case, the "higher risk" funds – with a high predominance of stock shares and where it is likely to expect younger people to become participants - the average rates of return may be more than 1 percentage point higher than those achieved by other funding schemes earmarked for elderly people. These are funds where people are currently contributing to the system. When people are about to undergo their withdrawal phase, the differences can become much greater.

GRAPH # 9

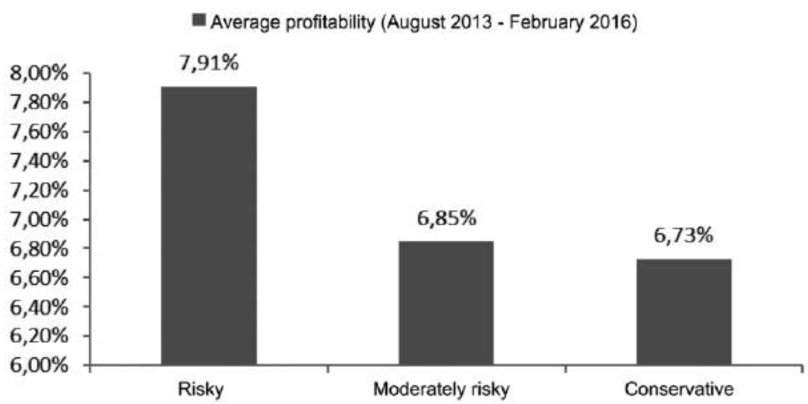
FUND RETURNS CLASSIFIED BY INVESTMENT RISK - COLOMBIA



SOURCE: THE COLOMBIAN FINANCIAL SUPERINTENDENCE.

GRAPH # 10

AVERAGE INVESTMENT RETURNS (AUGUST 2013 - FEBRUARY 2016) - COLOMBIA



SOURCE: THE COLOMBIAN FINANCIAL SUPERINTENDENCE.

To sum up, ageing is bound to generate lower economic growth and probably lower real yields. It will begin with a gradual reduction of the pension funds based on the individually-funded program; and which may require portfolios of lower relative risk and, therefore, less profitable. Since it is unlikely the total magnitude of financial assets in the economy will drop, the fund withdrawals are raising some doubts as to which will be the institutions or financial instruments to be allocated the money-channelling role.

Challenges to be addressed by the pension funds

Which are, in this ageing population context, the challenges yet to be addressed by the fund managers - which are hitherto masterminding the funds of the individually-funded program and the capital markets alike?

The first challenge is almost obvious. It becomes essential – if not crucial - to try and maximise the investment returns during the pension fund accumulation phase; so as to ensure the would-be pensioners will reach their retirement age with more assets readily available. In this way, such pensioners will definitely enjoy a better support when it comes to covering their own longevity risk factor at their retirement date.

The second challenge is to try to defer the time in which the outflows from the pension savings get underway. To this day not all people are affiliated to the individually-funded system and, in some countries such as Colombia, this scheme competes with a public system. As and when the capitalisation funds manage to capture a larger fraction of the total workforce they also get to compete with the public system on a better footing. The subsequent start of the pay-out phase may well be postponed. Indeed, the latter is a very desirable effect altogether and a significant challenge for the AFP entities to achieve!

But a more important factor within the society fabrics such as our own, most people have no access to any pension systems whatsoever; neither public nor private. In Colombia, only 23% of the population has access to the pensions system.

A multiple target of achieving a sound people's formalisation while attracting more contributors is something which could help this ageing population phase to be pushed back into the future; while extending also the capitalisation stage. The expected plus factors here should be in terms of an enhanced ability to generating higher rates of return.

Notwithstanding the foregoing challenges, the AFP entities are also compelled to have appropriate schemes in place and aimed at addressing the resources' reduction phase to be brought about by the pension payments extended to their affiliates. On this score, and in contrast to the scheduled withdrawal scheme, one of the issues the AFP entities will face refers to the widespread development of the annuity system. As far as Colombia is concerned, the former is the most widely used.

The time lag for developing the annuity market is a worldwide issue which stems partly from the high costs associated with this type of insurance cover. As stated in a FIAP document: "Research and analyst specialists who have looked into this issue have concluded that the RV (annuities) are not "actuarially fair". In other words, a person with an average life expectancy, for every dollar disbursed as premium payments, the RV only delivers him between 74 to 85 US$ cents. That said, it is relevant to state here that the precise grade of "actuarial fairness" depends on the interest rate used to discount the income flow and, to a lesser extent, on the type of RV) (Centre for Retirement Research, 2006)." (Please see FIAP, 2014, page 9). Thus, the insurance cover provided through underwritten annuities ends up creating a very large cost ranging between 15% and 26%.

The challenge here is to reduce this cost and make headway on the possibilities to ensuring a widespread assurance cover. The current lack of financial instruments covering longevity risks, particularly the risks of a longer-than-expected collective longevity types, makes it difficult to develop this type of insurance cover. In the

FIAP (2014) event the possibility of longevity bonds being developed was discussed. The demand for these bonds would be clearly placed on insurance entities offering annuities, but so far it is unclear where would the corresponding bid be coming from.

In plain English, it is not readily identifiable what type of agent would be interested in issuing instruments whose return on investment is higher than the life length of a population segment.

In Colombia, the under development status of the annuity system is particularly notorious. Only 9.8% of old-age pensioners within the individually-funded scheme receives annuity payments. Part of the blame for this state of affairs is placed on the existence of a state-guaranteed minimum pension, which entails two negative effects.

The first one is a discouragement of demand for annuities, chiefly because people feel they are well guaranteed by the relevant regulation. On the other hand, its deters the supply of this type of insurance when stipulating all insurance companies must cover the risk represented by a person eventually receiving less than the minimum pension – and whose amount is equivalent to a minimum wage income. It follows such clause would force the insurers to cough up the missing surpluses.

In other words, and as regards the Colombian case, the system of minimum pension guarantee mitigates the individual longevity risk but puts the onus onto the pension system. The first factor reduces the demand for annuities and the second one deters their supply.

In Colombia the predominant pension payments' scheme based on the individually-funded system, is the scheduled withdrawal option. It poses several difficulties. First, from the pensioner's viewpoint, the scheduled withdrawal option is wide open to the risk of a sharp drop in his/her future income. Such drop may occur if longevity is higher than expected or if the returns from the money savings is lower.

The problems posed by the recent decision adopted in Peru allowing the withdrawal of all funds saved at the time the individual leaves his/her job on retirement grounds are an extreme manifestation of such risk. Such withdrawal stance may well translate into a total lack of pension coverage and likely to affect even those elders whose life-long pension contributions did reach peak levels.

While not as extreme, the risk also shows up in Colombia for those opting for a scheduled withdrawal scheme; and which may well become a sharply reduced pension if they happen to live too long.

As mentioned elsewhere in this paper, Colombia operates a minimum pension guarantee scheme. However, the would-be pensioners whose monthly take-home pay exceeds the minimum wage - and which is based on a programmed pension fund withdrawal – face a significant risk. Indeed, at some point in time during their pensioned-off status, the pension resources could drop to a point where their pensions would be also brought down to such minimum level. At such time the pensioners' financial risks would move onto the insurer; a fact which also brings about some complications.

From the portfolio manager's viewpoint, the programmed retirement system is inefficient, chiefly because it suffers from a purely individual character; thus makes it impossible to diversify the longevity risks. This leaves the portfolio manager with no choice but to become particularly reticent to any risk whenever deciding on undertaking any investment of this kind. Here the predictable outcome should be in the form of a drop of the feasible profitability that could expected from the savings made by the affiliate throughout his/her working life.

Capital market challenges and new financial instruments: reverse mortgages

In this context, a challenge of tremendous importance for the capital market is to create appropriate tools aimed at generating what an elder - or an insurer catering for the elders - would be looking for. In other words, securing the conversion of accumulated assets into a regular income aimed at catering for the longevity risks.

As already mentioned, among the assets that could serve this purpose, an interesting possibility would be the longevity bonds. However, their introduction and development would require a bond issuer who may be interested in paying more in the event of increased longevity; a feature which is not easy to find.

An interesting alternative asset may come up in the form of reverse mortgages; which have been advocated time and time again by Robert C. Merton (A respectable Holder of the Nobel Prize for Economics in year 1997).

A reverse mortgage is, basically, a mechanism used for converting a domestic dwelling into a regular income for the rest of the owner/pensioner's life. In economies like ours, a domestic dwelling/house is the main asset most people have secured in their active lifetime.

Among its features outstands the fact it is not a liquid asset and their owners want to keep it as long as they live, while also expecting to have a regular income. Such aim can be achieved by an equivalent process, but in reverse to that with which they acquired the property.

Whoever funds the annuity grants monthly instalments or quotas to the owner is partially acquiring such housing. Such financier, needless to say, is taking the housing as a guarantee of the already granted and/or yet to be advanced monies. At the end of the house-owner's life who has been receiving such regular payments, the house in question will be partly owned by the financier in conjunction with the late owner's heirs. The latter, in turn, can either gain access to a funding or to the possibility of making a cash payment in exchange of the property's full ownership.

The main plus factor of this approach has to do with its possibility of extending its cover onto people currently lacking a pension but have manage to save in non-financial assets; chiefly in the form of a domestic dwelling. As regards the Colombian case, the overall perspective with the current pension system shows that by year 2050 those entitled to a pension will hardly be a mere 20% of all elderly people. A reverse mortgage scheme could help cover the annuities and become an important revenue for the remaining 80%.

Of course, this scheme is not something that could be easily arranged and implemented, not to mention it being designed by a financial intermediary all by itself. To be implemented properly, this scheme calls for a sizable State Regulation Package together with complementary developments to be prepared or arranged by the financial system plus, a massive/tailor-made financial education drive aimed at the elders and would-be heirs keen to entering this innovative scheme.

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SUGGESTIONS FOR ENHANCING THE SUPPLY OF FINANCIAL INSTRUMENTS ONTO THE PENSION FUNDS WITHIN THE PACIFIC ALLIANCE MEMBER COUNTRIES

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I have spent 23 years closely involved in the pensions' management business. For me, it all started in 1993 when I joined the Peruvian Banking, Insurance and AFP Superintendence (SBS). As in Chile, Colombia and Mexico the AFP system has gone from a very closed, operated and controlled entity onto becoming – via a gradual transformation – an internationally-minded scheme; whose sophistication has catered for a sound and welcome diversification.

In the early 90s, we wondered amid ourselves: When will be our time to investing abroad? It appeared like something so far away into the future, not to say it was almost impossible to implement; albeit at the beginning of the 2000s Chile, Colombia, Mexico and Peru were already investing abroad.

The next question then was: When will we invest in alternative assets, that is in *private equity or real estate?* In the mid-2000s, a major investment drive onto these instruments got underway. With the international crisis, governments reacted by granting pension funds the ability to invest in infrastructure. The question now was: When will we be tackling the derivatives and hedge funds?

Likewise, this is a good time for us to consider there is a great opportunity within the Pacific Alliance. On 1 May, and at the premises of the Government Palace in Lima, we witnessed the quick-off for the free trade agreement between Chile, Colombia, Mexico and Peru. About 93% of all goods and services transacted within the block are exempted from any kind of import duty. In eight years we should reach the 100% target, by incorporating more sensitive goods such as pharmaceuticals and farming/Pecuarian products. The latter two categories usually entail very complex negotiations worldwide, particularly amid the integration schemes.

When the idea of the Pacific Alliance was launched in Peru during year 2011 many people asked: "When will this become a true fact? Surely it may never happen or will take at least ten years". The truth is that after four and a half years the four countries are already integrated on trade and services; with another 40 observer countries keen to consider participating/joining the scheme; including Panama and other Central American countries. Even the new president of Argentina, Mr. Mauricio Macri said: "We must assess what chances do we have to climb onto this train." It appears the Pacific Alliance train is a serious key undertaking which can make all of a difference.

I have had the opportunity to work with the Business Council of the Pacific Alliance. Such is the private and corporate body whose composition encompasses Colombian, Chilean, Mexican and Peruvian businessmen leading the integration process. This Treaty is not an initiative adopted only by the governments concerned, but is shared with the private sector alike. The latter has the capacity of putting forward proposals, implement them and provide an overall collaboration stance.

All such factors do influence the process into becoming a fast-paced one. In four years the Trade Agreement was in place and we now expect that - in less than four years – we will secure also the financial integration.

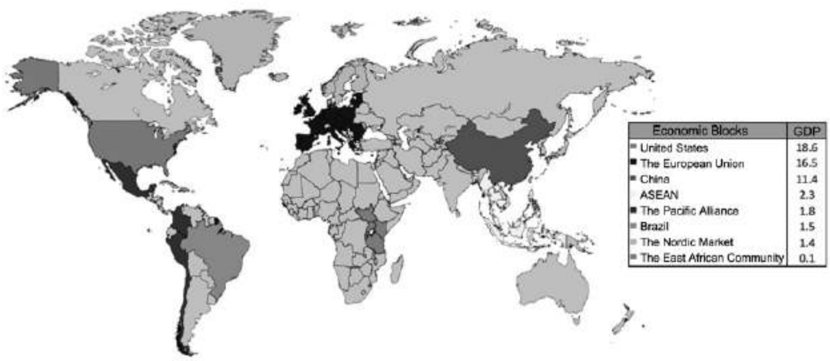
The financial integration is already a tangible promise. In July 2015 the leaders of the Pacific Alliance met in Paracas, southern Peru, and undertook to instruct their Finance Ministers to move forward with this project. Almost twelve months have gone by and the private sector representatives have met several times with their public sector colleagues.

The most recent teams' meeting was in January 2016, when we met in Lima with a view to analysing how to implement the financial integration. This is a subject I will elaborate further as it was the outcome of these discussions and placed at the top of the priority ranking. The latter ranking should help us realising if such scheme is bound to move forward soon or will merely take more time before we see any news.

Figure # 1 is a map of the world with the United States and China - the main economies - facing each other; with the Euro Zone and Brazil also showing up. Furthermore, the map shows three financial integration efforts being implemented at a regional level: namely the Association of Southeast Asian Nations (Commonly referred to as ASEAN for its acronym in English), which encompasses Southeast Asian economies such as Malaysia, Thailand and Singapore to name a few. Then comes the Pacific Alliance with Colombia, Chile, Mexico and Peru; and at the top of the map you can also see the Nordic Market.

FIGURE # 1

FINANCIAL-ECONOMIC INTEGRATION AGREEMENTS VS. MAIN WORLDWIDE ECONOMIES



SOURCE: IMF, MAY 2016.

If we are to quantify the size of what these integration processes represent, we can notice the Pacific Alliance poses as with an interesting magnitude, much like ASEAN and greater than Brazil. The Pacific Alliance and Brazil are virtually the same size; albeit Brazil in the past two years has been adversely affected by an economic recession and a sharp currency devaluation.

These figures place the Pacific Alliance as the 8th largest economy worldwide. The commercial and service angle has a mirror within the financial, banking side and pension funds areas. We would be talking also about the possibility of securing our position as the 8th financial market together with becoming the world's largest pensions market.

In the breakdown by country (See Table # 1), in the case of market capitalization, the Pacific Alliance shows up with a size exceeding its Brazilian market equivalent.

TABLE # 1
THE PACIFIC ALLIANCE DATA CALCULATED AS AN AVERAGE FOR ITS NOMINAL GDP

Estimated data for the end of 2016	Chile	Colombia	Mexico	Peru	Pacific Alliance	Brazil
Population (million)	18.2	48.8	128.6	32.4	228.0	206.1
Nominal GDP (US$ 000 million)	235.4	253.2	1,100	178.6	~1,800.0	1,500.0
Nominal per capita GDP (US$ thousand)	12.9	5.2	8.4	5.5	8.2	7.4
GDP growth (real %)	1.5	2.5	2.4	3.7	2.4	-3.8
Inflation (%)	3.5	5.3	3.3	3.4	3.6	7.1
Market Cap (US$ 000 million)	216.4	107.8	424.6	71.7	820.5	651.7

NOTES:
*THE PACIFIC ALLIANCE DATA CALCULATED AS AN AVERAGE FOR ITS NOMINAL GDP.
**MARKET CAP AT APRIL 2016.
SOURCE: WEF, APRIL 2016. IMF OUTLOOK APRIL 2016.

However, despite these spectacular figures, reality is telling us there are a number of challenges yet to be addressed. We can have the capitalization processes for Colombia, Chile, Mexico and Peru and add them up: it appears very easy but all still remain as very segmented markets.

A number of necessary amendments are to be introduced if we are to ensure a proper integration, not only legal, but also on how businesses are to be conducted within the financial sector as a whole. The principle of all this is to have a common and shared vision; at the levels of regulators and key stakeholders alike. That is part and parcel of the proposals we are looking into and which I will describe later.

To think of a joint vision leading us, sooner rather than later, towards a full integration will very much depend on both how much pressure is exercised by the private sector and/or the capacity of the public sector to identify the benefits likely to stem from this integration.

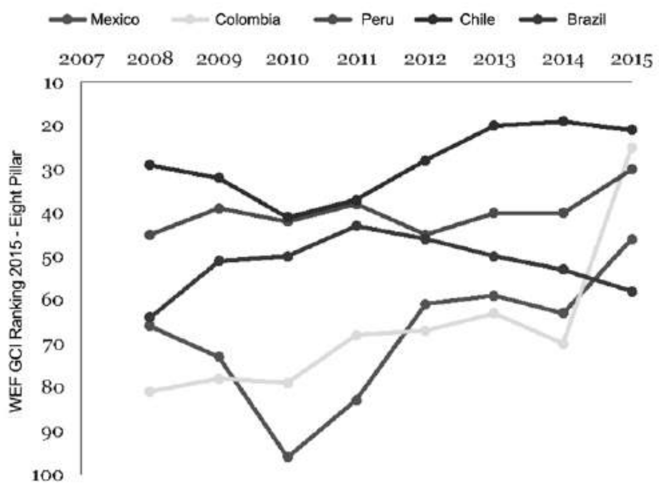
To a certain extent, this is already happening with some groups in the goods and services' sectors and also the financial sector. For instance, in the banking business the noteworthy names of BBVA and Scotiabank are to be highlighted here; together with that of the SURA Group in the pension funds area. These are the groups enjoying a greater presence within the Pacific Alliance four member countries.

Another important aspect is to see how the Alliance is positioned on the competitiveness' issue. In graphs # 1 and # 2 we can see the four countries have managed to improve their competitiveness in the financial sector, whereas Brazil has been declining steadily, chiefly due to the effects brought about by its current economic crisis. The same is perceived in terms of GDP per capita and competitiveness levels alike.

With regards to the potential GDP; Chile, Mexico and Peru are still at the bottom end compared to OECD countries or developed economies such as the United States, Germany, Canada, United Kingdom and Norway, to name a few. This fact goes to show that in segmented markets within the four economies of the Alliance, competitiveness as a trend is improving. But the space to grow and reach at least the OECD average, does generate a great potential for a further development, sophistication and expansion of financial businesses' volumes. In stating so, I am not referring myself only to just banking, AFP entities, insurance companies or mutual funds, but to the overall business of *asset management*.

GRAPH # 1

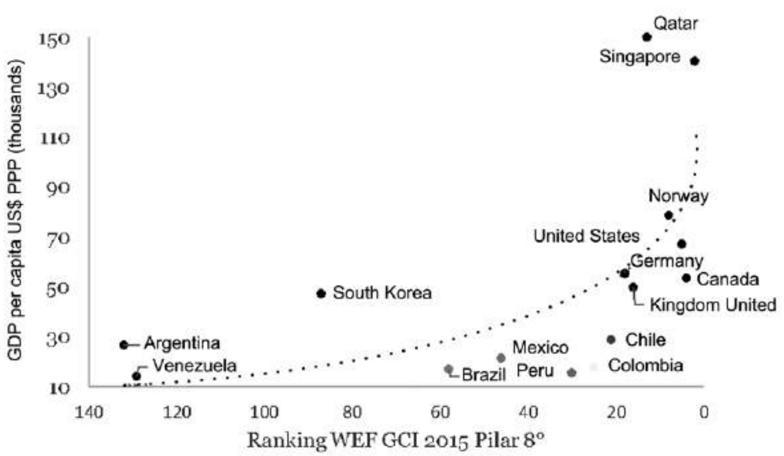
DEVELOPMENT OF THE FINANCIAL MARKET (EIGHTH PILLAR)
(A COUNTRY RANKING)



SOURCE: WEF, GCI REPORT 2015-2016; WEF WEO 2016.

GRAPH # 2

DEVELOPMENT OF THE FINANCIAL MARKET AND PER CAPITA GDP
(SCORE OF THE EIGHTH PILLAR, US$ PPP)

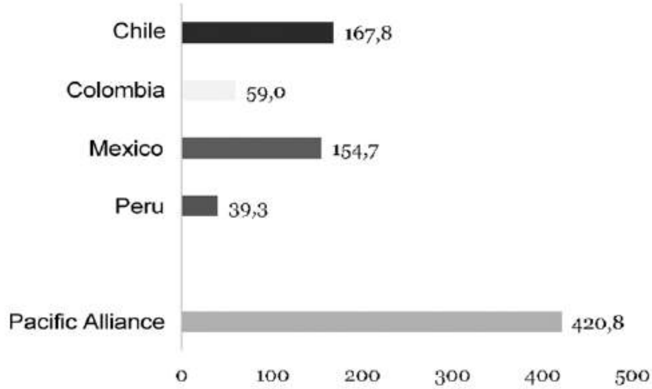


SOURCE: WEF, GCI REPORT 2015-2016; WEF WEO 2016.

Graphs # 3 and 4 illustrate the size of the pension funds. It can be noticed such funds represent some US$ 420 billion which represents about 17% of total GDP within the four-country block. Chile has the greatest presence, slightly in excess of 70% of total GDP.

GRAPH # 3

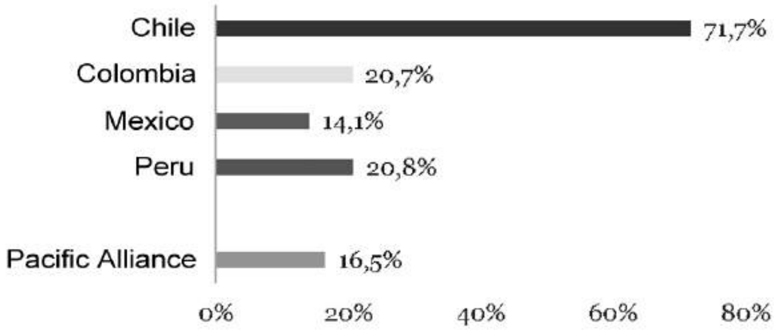
MAGNITUDE OF THE PENSION FUNDS IN THE PACIFIC ALLIANCE – 2016
(IN US$ 000 MILLION)



SOURCE: WEF WEO 2016 AND WEBSITES OF THE SUPERVISING ENTITIES. DATA FOR CHILE, MEXICO AND PERU IS DATED APRIL 2016, WHEREAS COLOMBIA'S OWN IS DATED FEBRUARY 2016. PENSION FUNDS AS % OF AIOS' GDP TO JUNE 2015.

GRAPH # 4

PENSION FUNDS IN THE PACIFIC ALLIANCE – 2016
(% OF GDP)



SOURCE: WEF WEO 2016 AND WEBSITES OF THE SUPERVISING ENTITIES. DATA FOR CHILE, MEXICO AND PERU IS DATED APRIL 2016, WHEREAS COLOMBIA'S OWN IS DATED FEBRUARY 2016. PENSION FUNDS AS % OF AIOS' GDP TO JUNE 2015.

The future prospects are suggesting that, within the next ten years, the pension funds managed by the AFP entities will rise to US $ 1.2 billion[2]. These projections do take into account the growth trend of funds, the contributor's average age of 37 years plus the new contributions receivable as well as the average returns ranging from 10% to 20%.

However, if we consider the insurance companies and mutual fund entities already operating in the region, we are estimating a yen-year time market worth US$ 1,8 billion vis-à-vis its current magnitude of US$ 700 million. Thus, we are thinking this market will double or triple in ten years. The next question is where all these resources are going to be invested?

The Pacific Alliance market will exceed $ 1 trillion worth in a decade and these are resources that will have to be invested somewhere. Either they are invested in local products or exported to international markets, as it has been the case in previous years. Because of the sundry opportunities, you must be considering investing within the Pacific Alliance.

From the viewpoint of investments abroad, in Table # 2 and Figure # 5, Chile is perceived with a 42% of total investment placed abroad, Colombia with 35%, Mexico with 20%; and Peru with about 40%. The bars indicate the investment ceilings. In the early 2000s, you could not invest abroad. Nowadays Chile already operates with a ceiling of 100% for the "A" fund type going abroad and the same goes for Mexico, whose ceiling is 20%.

Clearly, there is a convergence towards increased investment ceilings for the funds going abroad, and it is likely Colombia, Mexico and Peru will join Chile at its equivalent exposure levels.

TABLE # 2

PENSION FUND INVESTMENTS AMID THE PACIFIC ALLIANCE MEMBER COUNTRIES – 2016

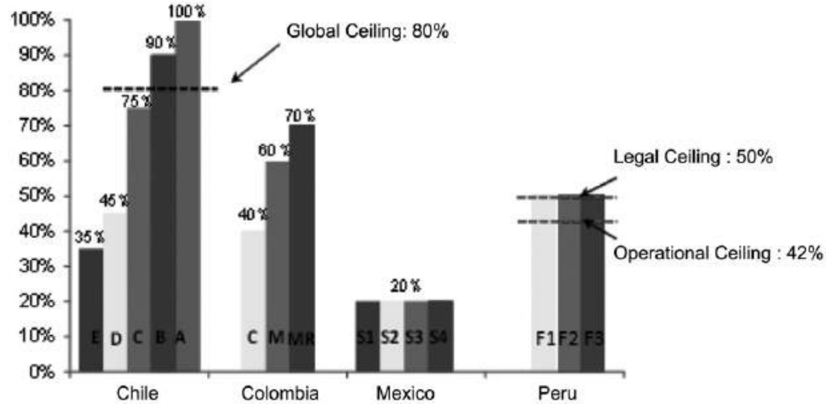
Investments	Chile	Colombia	Mexico	Peru
% Local Investments	57.6%	65.0%	80.0%	61.0%
% Foreign Investments	42.4%	35.0%	20.0%	39.0%

SOURCE: WEF WEO 2016 AND WEBSITES OF THE SUPERVISING ENTITIES.

2 *The unit of measurement in Spanish is known as billion. In English it is equivalent to a "trillion" unit.*

GRAPH # 5

CEILINGS OF THE INVESTMENTS GOING ABROAD



SOURCE: PRESENTATION OF THE BANKING, INSURANCE AND PENSION FUNDS ("AFPS") SUPERINTENDENCE - 2015.

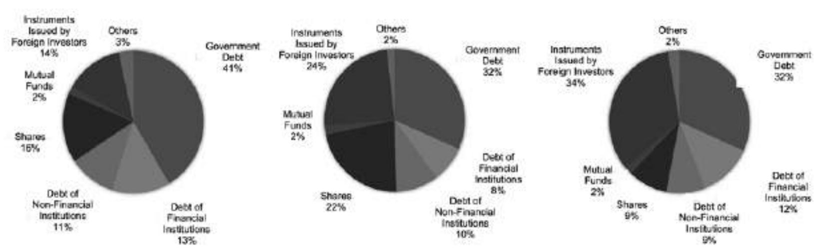
Irrespective of how many funds are available in each country, probably in the next ten years the four Pacific Alliance member countries will be exporting – on a global basis - about 40% to 50% of all their capital. So, competition will not only be in terms of investment returns but, as it in the old days, will be taking place within the domestic market. It is here where much of the risks' volatility will come from and will depend on how it is invested globally in products which would have become more and more sophisticated.

Since being highly concentrated on fixed returns and government papers, now the investment portfolios will be more concentrated in equity and alternative products' funds. It is estimated the four countries are investing a 4% average on alternative products. Depending on the type of fund, the ceiling for the US pension funds ranges from 20% to 30%. Let us consider that in the long term, the alternative products will continue to gain ground within the investments' area.

As shown in Graph # 6, investment on instruments abroad is clearly showing a growing trend and enhanced participation. The sovereign bonds and similar papers are still rated as important - in the case of Colombia and Mexico - which show significant percentages of resources invested in government securities. Chile is the oldest pioneer country for this industry, followed by Peru. Eventually the government securities will experience a downward trend within the overall portfolio - as in Colombia and Mexico - which will increase the investment ceilings for the funds being invested abroad.

GRAPH # 6

INVESTMENT IN FOREIGN FINANCIAL INSTRUMENTS



SOURCE: THE INTERNATIONAL ASSOCIATION OF PENSION FUNDS' SUPERVISION ENTITIES ("ASOCIACIÓN INTERNACIONAL DE ORGANISMOS DE SUPERVISIÓN DE FONDOS DE PENSIONES – AIOS"). NOTE: THE FIRST PIE CHART REFERS TO INFORMATION VALID FOR YEAR 2005; THE SECOND ONE IS FOR 2010 WITH THE THIRD ONE BEING REFERRED TO YEAR 2015.

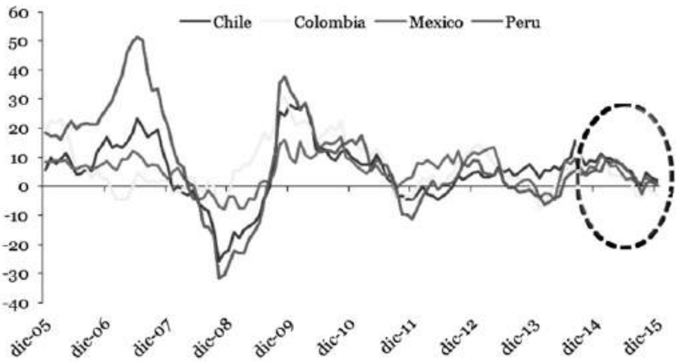
However, the financial integration of the Pacific Alliance will cater also for new growth possibilities of the local markets. Here are some profitability indicators (See Graph # 7). In recent years, profitability has been very low and *commodity* prices have also fallen due to the international crisis. But this year we had an upswing and during the course of this year the equity indicators are aiming at a 41% return in the Peruvian stock exchange (See Graph # 8) and slightly less in other markets.

I mention the Peruvian stock exchange because it had suffered due to both being the smallest and showing the most illiquid status. As a result of the amendments introduced in late January, we are witnessing a general recovery during year 2016 so far. If sustained, such trend will somehow change the course of negative numbers for the overall system (See Graph # 9). Most of such welcome trend is taking place in spite not only to an adverse international context, but also because emerging markets have come under fire.

We have noticed significant withdrawals and experienced large losses across almost all the emerging world. Apparently, this year we may be getting to rock bottom with a possibility of a significant reversal. If that is the case, then we will start to see better numbers for all pension systems encompassed within the Pacific Alliance.

GRAPH # 7

REAL PROFITABILITY OF THE PENSION FUNDS
(% OF ANNUAL VARIATION)



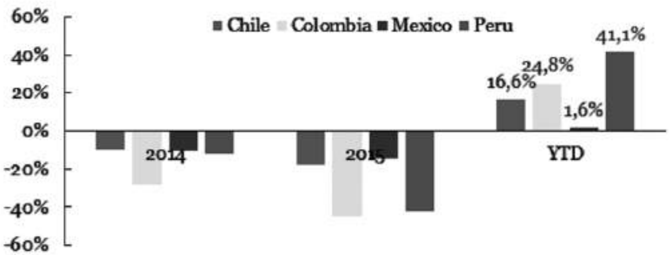
PROFITABILITY OF THE PRIVATE PENSION SYSTEMS (DECEMBER 2015)

Chile	Colombia	Mexico	Peru
2.27%	-3.08%	0.42%	1.21%

SOURCE: THE INTERNATIONAL ASOCIACIÓN OF PENSION FUNDS' SUPERVISION ENTITIES ("ASOCIACIÓN INTERNACIONAL DE ORGANISMOS DE SUPERVISIÓN DE FONDOS DE PENSIONES – AIOS").

GRAPH # 8

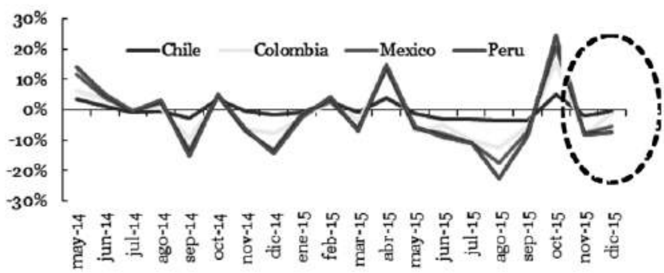
PROFITABILITY OF THE STOCK EXCHANGE INDEXES
(EXPRESSED AS % VARIATION)



SOURCE: BLOOMBERG, APRIL 2016.

GRAPH # 9

ASSETS OWNED BY THE PENSION FUNDS
(EXPRESSED AS % OF MONTHLY VARIATION)



SOURCE: THE INTERNATIONAL ASOCIACIÓN OF PENSION FUNDS' SUPERVISION ENTITIES ("ASOCIACIÓN INTERNACIONAL DE ORGANISMOS DE SUPERVISIÓN DE FONDOS DE PENSIONES – AIOS").

When it comes to consider reviewing and projecting a financial integration, there are four points which are invariably raised in all the meetings I have attended. These are as follows:

First: How do we create a single market for the operational and investment instruments? If we do, we will probably be the largest financial market in Latin America and the 8th worldwide. In such context, the four countries will be viewed as a single market and there will be no conceptual separation in terms of Peru being a mining country; Colombia and Mexico depending on oil and Chile rated as copper-wealthy. Seen as a block of countries means it is looked upon as more diversified, and whereby certain dependencies with any product or *commodity* or with any particular sector will be no longer the case.

Second: The placements in the securities markets via public and private share supplies will be conducted simultaneously. So if, for instance, someone is authorized to place on the stock exchange a new Initial Public Offering (or IPO for its acronym in English) for new shares, this move can be arranged to take place simultaneously on the stock exchanges of the four countries concerned. The same will apply when placing a corporate bond or if someone goes to the market with a new *private equity fund*. Then the *fund raising* becomes commonplace in all four countries and requiring one license only but fitted with common features?

Third: Institutional investors, led by the AFP entities, followed by insurance companies and mutual funds have the same investment ceilings. If they invest in Colombia, Chile, Mexico and Peru, all these investments would be within the limits of local investment. This factor would completely change the map of the internal diversification and how the money will be invested.

By way of a reflection, let me tell you in Peru there are 20 companies issuing instruments; they are the same as ten years ago and will probably remain so in ten years from now. Several products and investment modalities can be taken out, but such move would not become a qualitative change of any great significance.

However, if we include Colombia, Chile and Mexico *overnight* (from one day to the next) we could have 200 issuing companies altogether. Peru would win ten times and Mexico would benefit 100%, simply because it is the largest market within the Alliance.

Fourth: I have left for the end the issue of tax convergence, because it is always complicated and is a bit difficult for governments to agree. However, if this tax issue is addressed in a neutral manner, it should play in favour of all four countries.

We are not advocating the total abrogation of all taxes but suggesting instead a taxation uniformity applied to the capital markets and the financial sector alike. From a fiscal viewpoint we have an integrated platform which should allow for subsequent and trouble-free agreements; this should be so since - and in spite of everything - the capital markets are still small-sized.

Stock market integration

On this view of things in need of integration, the first point has to do with trading platforms. The best known are the stock exchanges and secondary markets for company shares. These platforms are already completing their integration processes, not only at the level of the interconnected negotiations, but also with the possibility of conducting crossed transactions. But they are not the only markets to watch. We must arrange also for the homogenisation of all modalities governing public and private supplies, both within the primary and secondary markets alike.

When we talk about private markets, we need to standardize the OTC *(Over The Counter)* markets for short, medium and long term fixed return instruments. In stating so, I am not referring only to the calculation, coupons, interest rates and trading conventions. For instance, in Chile almost everything is negotiated indexed to inflation; whereas in Colombia, Mexico and Peru almost everything is negotiated in nominal terms.

Each market may have its preferences, what matters here are the mechanisms, methods, mathematical conventions, etc., must be uniformingly applied. Such matter is still in abeyance and would be important to apply onto the bond markets.

Integration of the derivatives' markets

What comes next is the derivatives' market, not just the *forwards and currency swaps* but also interest rate derivatives, *commodities* and indexes. For the platforms to work, the whole issue of clearing and settlement must be integrated; but what we have today is the four countries resorting to different clearing and settlement procedures.

That said, there are great similarities which would facilitate the adoption of these conventions. The liquidator and compensating entity could be a single one for the entire Pacific Alliance member countries, but such aim is more complicated to implement, because it would be like having a single stock exchange for the whole Alliance.

The natural mechanism is to go slowly by putting in place the same rules, and if such are adopted by all member countries, then we would see if all can be merged into a single entity; in charge of conducting all clearing and settlement procedures.

Another element is the custody method in each country. When investing abroad, the methodology varies between the four countries. The idea is that the whole custody mechanism within the Pacific Alliance follows a single structure. In other words, the AFP entities would need not to take the decision to invest in one country or another, depending on how secure is the custody method or how complicated is the administrative procedure, but the custody method has the same rules. The same reasoning applies onto two other products which have a major impact on the money market: the securities-lending format and the Repurchase Agreement (REPO) market.

Due to the number of assets held in custody, the pension fund entities are to become the major players in both the securities-lending and REPOs, such markets must abide by the same standardization approach. Nowadays, the advantage of this approach stems from it being relatively small and, therefore, it is relatively easy to work out an agreement on them.

With the integrated mechanisms, trading and trading rules, as well as those applicable to custody, clearing and settlements, the next step is to integrate the money markets. For instance, the Pacific Alliance currently upholds the slogans of free flow of people, capitals plus goods and services.

To ensure the free flow of capitals becomes a consummated fact, it is essential to allow currencies to be transacted within the four countries; so if I happen to be in Colombia and would like to open a deposit in Mexican pesos I can arrange such transaction; or if I am in Peru, I should be able to open a deposit in Chilean pesos. This factual possibility leads us to currency convertibility.

The opening of deposits or savings accounts and arranging for short, medium and long term financial cover would have to be equivalent in the four countries concerned. The foregoing state of affairs implies a standardizing of the rules for negotiating commercial papers, as well as having the same market-access structure leading to the lending of securities and reports.

Next comes the integration of derivatives' markets. By making a difference from the simplest to the most complex overall scenarios are the *forward* and *currency swaps'* markets; supplemented by the swaps' interest rate markets, and those pertaining indexes and *commodities* plus the futures and options markets; all which should have the same contract standardisation and liquidation rules.

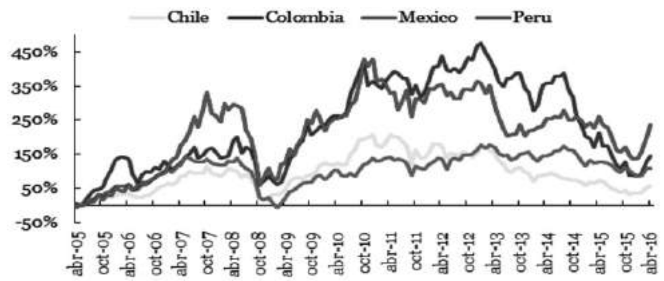
Curiously, these markets are not as large, so it would be easy to agree on the best practices and thus achieve the required standard. The derivatives' market is always the most sophisticated, complex and debateable; but there are internationally accepted practices which can be incorporated without experiencing any significant difficulties.

The integrated market for shares is where most progress has been made, as seen in Graph # 10. In period April - May the investment returns are recovered. The other noteworthy factor stems from the fact the Pacific Alliance member countries put together entail 841 share-issuing and listed companies; whereas Brazil encompasses only 358 equivalent companies (See Table # 3).

The Sao Paulo Stock Exchange has already been buying shares in Mexico and Chile, and also want to do the same in Peru. In real life, this means the Pacific Alliance market is not a threat but a significant opportunity; chiefly because it is becoming consolidated. Once the latter process is completed, this market could generate sizable turnovers and flows.

GRAPH # 10

PROFITABILITY OF THE MSCI INDEXES (IN US$)



SOURCE: BLOOMBERG, MAY 2016.

TABLE # 3

Companies listed April 2016	
Chile	310
Colombia	73
Mexico	145
Peru	313
Pacific Alliance	841
Brazil	358

SOURCE: WFE (WORLD FEDERATION EXCHANGES), MAY 2016. NOTE: ALTHOUGH THERE ARE 323 COMPANIES LISTED IN THE LIMA STOCK EXCHANGE, LESS THAN 100 ARE QUOTED REGULARLY; WITH LESS THAN 30 SHOWING SIGNIFICANT OR RELEVANT TRANSACTION VOLUMES.

So everything which has to do with primary and secondary supplies should be fully integrated. Here is a couple of illustrations of what was implemented in December 2015: The Mexican company Corpobell placed an IPO in the four countries and MILATRAC's ETF was listed on the Mexican stock market a couple of weeks ago.

Furthermore, we must complete the integrated platforms of the single stock exchange, the homologation of the negotiating mechanisms and also the costs of the stock exchanges while keeping a watching brief on how the relevant fees and expenses are reduced.

To illustrate how it works, let us say I have a broker in Chile through whom I should be able to directly undertake the operation in Mexico. To arrange this deal, the broker should be duly empowered to operate in Mexico; thus the broker's license should be the same in all four countries.

The foregoing leads us to the idea of having two types of licenses: one for those who meet the Pacific Alliance requirements and one for those brokers who wish to operate only in their own local market. Although the MILA arrangement is a step forward, nowadays it does not include this concept of a single market with the already described integration magnitude.

Integration of the fixed revenue market

As regards the fixed revenue market we notice all the Pacific Alliance member countries have investment grade, unlike Brazil which has lost her own investment grade rating (See Table No. 4). This should improve with time, because our countries are growing. Despite the adverse international context, in 2015 the average growth within the four-countries block was 2.4% and this year is expected to close at levels of 3%, with Peru showing the fastest growth rate with a level of 3.7%. Thus, we are talking about an area which has a genuine growth, and is bound to generate a greater solvency status, and likely to become much more attractive to investors in the long term.

TABLE # 4
RISK CLASSIFICATION

	Moody's	S&P	Fitch
Chile	Aa3	AA-	A+
Colombia	Baa2	BBB	BBB
Mexico	A3	BBB+	BBB+
Peru	A3	BBB+	BBB+
Brazil	Ba2	BB	BB

SOURCE: BLOOMBERG, MAY 2016.

What must be integrated onto the fixed revenue market? All commercial papers, sovereign and corporate bonds which are placed simultaneously. Likewise, the risk ratings should resort to similar criteria based on a Pacific Alliance standard;

thus enabling a rating equivalent to companies enjoying a corporate rating status. Also there are the requirements to be fulfilled when it comes to consider the placement prospects, a process which is already moving, and concerned also with the public and private supply stance. Finally, we must ensure the OTC negotiation is standardized in all the markets alike.

The case of mutual funds and ETFs is very similar to those pertaining shares, but it should be allowed for an administrator - who is licensed in Mexico - to be able to serve clients in Chile, Colombia and Peru alike. This is only possible if all regulators have a uniformed regulation structure or at least being accepted in the four countries; a concept that many refer to as "common passport". We can adopt a "common passport" for almost all investment products, so if you wish to arrange a regional placement, it should encompass and meet a slightly higher standard than if placed only in its country of origin. This is something whose feasibility is being evaluated with keen interest.

Integration of infrastructure funds

In closing, allow me to refer to the markets for infrastructure funds and alternative products. The idea of launching a Pacific Alliance infrastructure fund has been the subject of discussion, for the past 18 months, between the teams advising their respective Finance Ministers of the Alliance. No agreement has been reached yet because the regulatory frameworks are markedly different between the four countries concerned (Colombia, Chile, Mexico and Peru).

If our goal is to have an infrastructure market allowing for an effective integration, then the regulatory frameworks must look alike; there must be a common denominator allowing for certain similarity in the creation of scale products. When these issues are looked into on a case-by-case basis or whenever applying sundry approaches, such stance undermines the possibility of handling a higher flow and more volume alike.

As regards the institutional investors, the regulations also have to bear more similarities between each other. In Colombia, the trusts are widely used, whereas in Peru the more used option are the funds. The best way forward is to try and have the same menu options’ structure and avoid reducing the number of alternatives; but go for quite the opposite. We must incorporate as many as possible while ensuring also the pension and security regulators allow such menu to become feasible in the four countries.

I very much hope during the next three years - not ten - these proposals will allow us to really have in place a market that is the 8th largest economy in the world. The number of transactions and flows that can be undertaken in the capital markets would contribute to improving the pension funds.

The pension funds’ structure will become more diversified, although I would not call it an international diversification but "an inward-looking diversification", geared towards our local four-countries market but also ensuring a global presence. More opportunities mean better long-term and risk-adjusted returns, i.e. we will have more money to pay better pensions.

CHAPTER III

CORPORATE SOCIAL RESPONSIBILITY AND CORPORATE GOVERNANCE

EXPERIENCES, LESSONS AND TRENDS IN CORPORATE SOCIAL RESPONSIBILITY AND CORPORATE GOVERNANCE: AN INTERNATIONAL VIEWPOINT

ROBERT ECCLES[1]

1 *Robert Eccles is the first Non-Executive Chairman of Arabesque Partners, the first ESG Quant Fund with headquarters in London and a research group in Frankfurt. He is a Professor of Management Practice at Harvard Business School. Bob is the founding Chairman of the Sustainability Accounting Standards Board and was involved in establishing the International Integrated Reporting Council. He is the world's foremost expert on integrated reporting and one of the world's leaders on how companies and investors can create sustainable strategies. His most recent book, with Michael P. Krzus and Sydney Ribot, is The Integrated Reporting Movement: Meaning, Momentum, Motives and Materiality".*

In this short article I am going to deliver an overview of what I see are some of the main international trends going on in the capital markets, and concerning the topic of corporate social responsibility and corporate governance.

I will be touching on some performance data extracted from some studies/surveys I have produced about fiduciary duty from the perspective of both companies and investors alike, and also on the issues we are thinking about today, such as corporate social responsibility. The document concludes with a few thoughts.

Some Numbers

- 80% of surveys show that stock price performance is positively correlated with sustainability[2].
- 79% of CEOs see sustainability as a route to competitive advantage[3].
- 73% of the 50 largest pension funds with a global coverage have made a public commitment to sustainable investing[4]. Sustainable investing means different things to different people: social responsible investing, ESG integration, impact investing, etc. So, all over the world there are questions about what the terminology really means.
- There are about USD 21 trillion in sustainable products, in which companies are publishing reports[5]. 5,478 companies have published their sustainability reports in year 2015, up from 436 in 2005 [6].

2 *Source: G Clark, A Feiner & M Viehs, From the stockholder to the stakeholder, 2015, http://goo.gl/G1dnGy*

3 *Source: UNGC & Accenture, The investor study: Insights from PRI signatories, 2015, https://goo.gl/CLk3IH*

4 *Source: Own calculations based on Towers Watson, The world's 300 largest pension funds – year end 2013, 2014, http://goo.gl/DCsWkx*

5 *Source: Global Sustainable Investment Alliance (GSIA), Global sustainable investment review, 2015, http://goo.gl/mnaSmL*

6 *Source: GRI, Sustainability disclosure database, 2016, http://goo.gl/MAhrnk*

There is a very interesting survey, produced and issued by the Sloan Manager Review at MIT[7]. They have been producing this survey for about 7 or 8 years now and looking at sustainability from a corporative perspective. This year they found that 75% of investment firms reckon sustainability performance is materially important and materiality is a key concept. Materiality is probably a more important term than sustainability. 75% of key decision-takers quote improved revenue performance and operational efficiency derived from sustainability, as sound enough reasons to invest.

Interestingly enough, there is a lack of communication about sustainability both inside pension funds and inside companies too. You will see that the senior people within the company and an investor on a pension fund, say they could believe in sustainability.

However, the number of people who agree with such statement go down in number as you work your way down the hierarchy from middle management. And then there is a very interesting thing, which has been a significant issue to consider within my focus; that is my research for years and concerned with the communication between companies and investors.

So, even though you have both the investment and the corporate communities currently talking and agreeing about sustainability being a main contributing factor to financial performance. That said, if you look at the nature of the conversation and what really happens nowadays at the conference calls and/or annual general meetings, by far the conversation is still on fairly traditional financial terms (sustainability issues only in 54% of earnings calls and shareholder meetings). I think that is something which must be put right.

Sustainability in this season is falling out of favour; there are a lot of complicated reasons for such, both in the corporate and investment communities alike. Curiously enough, about 79% of CEOs are cynically stating they see it as a source of competitive advantage and only 60% would say they really have figured out that they got a so-called sustainable strategy. Furthermore, only 25% would say they have really built the business more around that.

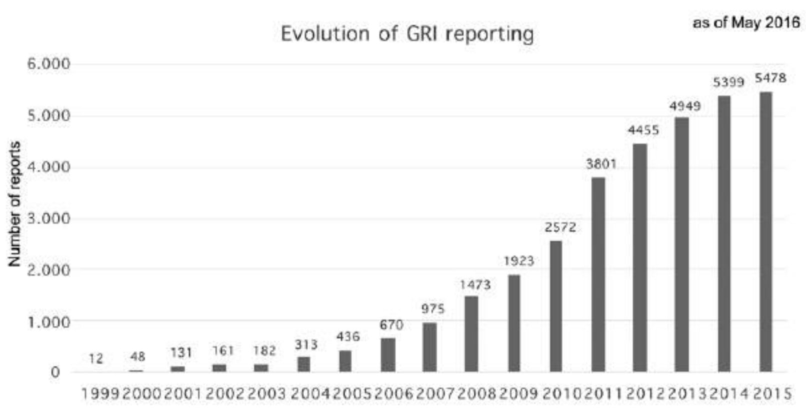
The MIT survey shows only 44% of companies and 36% of investors do consider inclusion on a sustainability index as an important investment-decision factor. Although a sustainability strategy is considered important, only 60% of companies

7 *G. Unruh, D. Kiron, N. Kruschwitz, M. Reeves, H. Rubel, and A.M. zum Felde, "Investing for a Sustainable Future," MIT Sloan Management Review, May 2016. Available online: http://sloanreview.mit.edu/offers-sustainability2016/*

have developed one and only 25% say a business case has been fully developed.

Graph # 1 shows there are a bunch of companies producing sustainability reports. In all EU member countries, and on an annual basis, any company with 500 or more employees has to issue a sustainability report.

GRAPH # 1



SOURCE: HTTP://DATABASE.GLOBALREPORTING.ORG/SEARCH
NOTE: THE NUMBERS FOR 2015 ARE BEING UPDATED.

Sustainability Pays: Picking 90 High Sustainability Firms

Does sustainability create value for shareholders or is it basically a transfer payment? There is kind of philanthropy, and you may be doing something good for the society or for the planet as a whole, but you are going to give out some return. So, together with a couple of colleagues, Professor George Serafeim and Professor Ioannis Ioannou at Harvard and London Business School respectively, we produced a complicated survey.

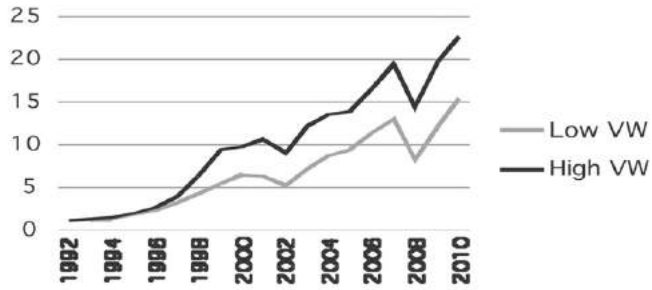
We basically compared 90 high sustainability firms (firms with an explicit emphasis on employees, customers, products, the community and the environment as being part of their business model), together with their 90 twins (exact matching considering size, ROA, Asset Turnover and Leverage but observing low sustainability practices).

We looked at these firms from the early 1990s up to about year 2008. When we look empirically at these firms in the early 1990s, there was no reason to think that the financial performance of one group would be better than the other. We noticed then, whether it was stock returns or return on assets, the high sustainability firms outperformed the low sustainability firms quite significantly.

They also behaved very differently: there is a deeper stakeholder engagement; they had a long-term time horizon, higher levels of transparency in terms of what they are communicating to their investors, a greater use of non-financial metrics internally (not just financial information but environmental, social and governance information) and had in place different corporate governance processes. Likewise, there was an enhanced likelihood that the Board was going to be involved in sustainability; with the management team being rewarded on the basis of things other than short term financial returns.

GRAPH # 2

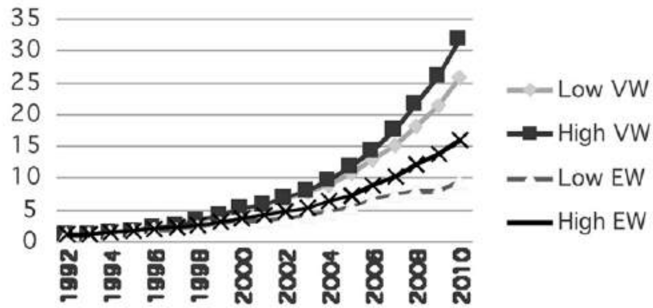
BUY-AND-HOLD STOCK RETURNS -



SOURCE: THE AUTHOR'S OWN DATA COMPILATION.

GRAPH # 3

BUY-AND-HOLD FINANCIAL RETURNS



SOURCE: THE AUTHOR'S OWN DATA COMPILATION.

When you look at Graphs # 2 and # 3, one of the things which is important to bear in mind is that it took about 6 or 7 years for the so-called added performance of high sustainability firms to kick in.

Standards for Reporting on the Material ESG Issues

There is an organization called the Sustainability Accounting Standards Board (SASB). I was the founding Chairman of the SASB and Mike Bloomberg is the current Chairman.

Thinking behind the SASB, from an investor point of view, sustainability issues vary from one sector to the next. For instance, a bank´s carbon emissions are immaterial from a shareholder's viewpoint. So, the SASB created a 10-sector classification system which, in turn is subdivided into 79 different industries while identifying what the material issues are, as seen from an investor´s perspective for such specific industry and what the key performance indicator will be.

One of the things we have found in the United States is an increasing investors' interest for the work being done, chiefly because it enables them to get a more down-to-earth sense of what these issues are at the time they come to think about it from an investor´s perspective.

SASB is a non-profit organisation, so you can go to the SASB´s website, register, and you can download the provisional standards for any industry that you are interested in[8] .

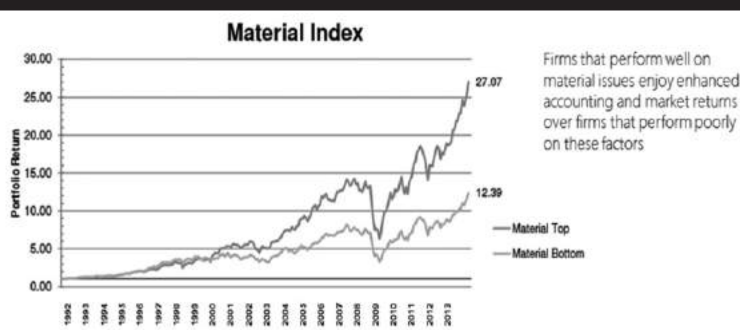
My colleague George and other two experts did a follow-up study[9], which is one of the most important surveys ever produced. They identified what are the material issues from the point of view of a company with a sustainable strategy; with the ability to create value of the short, medium or long term. Also, they examined those actions deemed as good things to do but not necessarily being the core of the business. I think this analysis is important when it comes to shift the dialog on the nature of corporate social responsibility and which tends to be mistaken with philanthropy.

In the foregoing survey they found companies which were performing well on the material issues and had recorded a better financial performance vis-à-vis firms that were performing poorly (see Graph # 4). Such is correlation, not chance, but again you will notice it took about 6 or 7 years to this issue to become a fact.

And then they did the opposite, and found companies performing well on immaterial issues do not achieve better returns than firms that perform poorly on these factors (see Graph # 5).

GRAPH # 4

IMPORTANCE OF MATERIALITY – MATERIAL INDEX



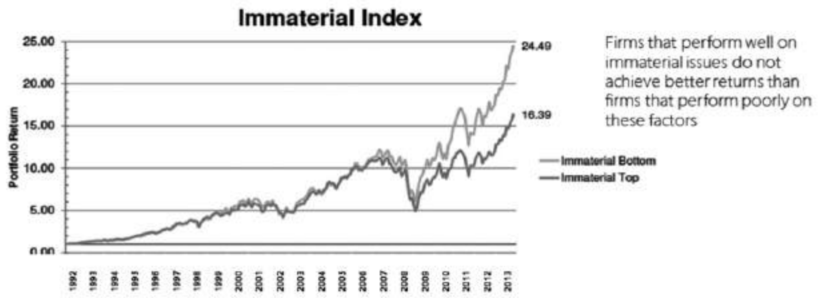
SOURCE: HBS RESEARCH, AVAILABLE AT HTTP://HBSWK.HBS.EDU/ITEM/7755.HTML

8 *On April 7, 2016 the SASB issued a press release announcing the completion of its provisional standards for all sectors of the economy.*

9 *Khan, Mozaffar and Serafeim, George and Yoon, Aaron, Corporate Sustainability: First Evidence on Materiality (March 9, 2015). The Accounting Review, Forthcoming. Available at SSRN: http://ssrn.com/abstract=2575912 or http://dx.doi.org/10.2139/ssrn.2575912*

GRAPH # 5

UNIMPORTANCE OF IMMATERIALITY – IMMATERIAL INDEX



SOURCE: HBS RESEARCH, AVAILABLE AT HTTP://HBSWK.HBS.EDU/ITEM/7755.HTML

Changing the Conversation: Long-Termism and ESG Integration

What we shall see is that takes time for companies and investors to realise the benefits of the type of investments, which gets us to the issue of short-termism.

What we see now is a kind of convergence around sustainability and ESG integration, with the long-term being split among 3 groups. The first group, called "Focusing Capital on the Long Term" is an initiative of Mackenzie & Company and the Canadian Pension Plan (CPP) Investment Board. This group purchased 2 hundred billion dollars in assets, they have been through it for 4 or 5 years and are doing a great work.

The second group, called "The Coalition for Inclusive Capitalism" have been involved in this lately and after the Rothschild's drive; thus bringing together asset owners, asset managers and asset creators to a sort of changing the nature of the conversation between the investment and the corporate communities.

The good news is that there is a new initiative which is not in the public domain, it is an organisation called CECP. This is a business force for good; it is also non-profit. They have launched something called the Strategic Investor Initiative; so companies can implement their investments for their own benefit, with investors getting the information they need and thus ensuring they get returns from sustainability.

Fiduciary Duty

When you get to sustainability and you get to the question of a time frame, such comes up with the question of fiduciary duty. I am going to refer to fiduciary duty from both a company and investor perspective alike.

I have developed a fairly simple idea whereby the Board of Directors should arrange for an annual publication of a statement addressed to significant audiences and materiality campaigns. If all you care about is short term, shareholders can make that call just to be explicit about it; if you think other audiences and other groups are important for the company's abilities to create value, you should call them.

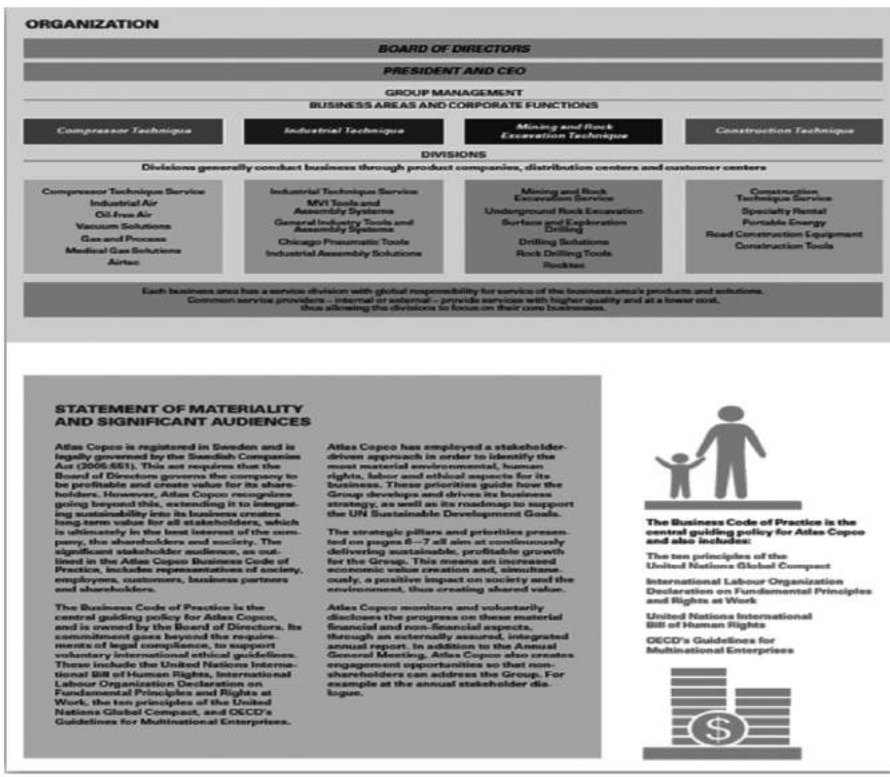
There is an urban myth stating most lawyers will never let you call up other audiences, because the Board has a fiduciary duty to push the shareholders' interest first (shareholder supremacy). But this is not true; it comes out of the ideology of the agency theory and financial economics.

I have recollections from leading law firms all over the world and for all G20 countries and another 12 or 13 others on fiduciary duty. What these memos make clear is that the fiduciary duty of the Board is to their Company, to the interests of the Corporation and it can take account of shareholders and other audiences as it fits in well.

Figure # 1 shows an illustration of the first company to publish a statement of significant audiences and materiality. Getting somebody to go in first is one of the hardest things you can imagine; everybody wants to be a leader, nobody wants to go first. Atlas Copco came out and they were the first ones, a Swedish industrial products company. As we speak, I am looking for some Latin American companies to issue an integrated report of significant audiences and materiality.

FIGURE # 1

ATLAS COPCO: FIRST BOARD-LEVEL STATEMENT



SOURCE: THE AUTHOR'S OWN DATA COMPILATION.

Trends in the Capital Markets

One trend is related to the meaning of fiduciary duty. For instance, are the trustees of a pension fund deliberately disregarding their fiduciary duty concerned with their "taking account of the sustainability issues or ESG integration"?

There is an interesting report issued by the Principals and concerning responsible investment, its heading is "Fiduciary Duty in the 21st Century". They basically stress that if you have a long-term view for your beneficiaries, then you are ignoring on purpose your fiduciary duty if you do not take these issues into account. Such is so, simply because some are probably risking an opportunity they rightly deserve. These things matter; they matter for all kind of reasons: climate change, natural resources and increasing expectations of civil society.

One other trend you are likely to notice is the changing nature of the relationship between asset owners and asset managers. A varying degree of asset owners are starting to select a value with their asset managers, to the extent on which they are incorporating sustainability ESG issues in their resource-allocation decisions (see Figure # 2). Asset owners, for all asset classes, are evaluating their asset managers in terms of "ESG integration". In future, I think you are going to notice this as a growing trend. Again arises the question from the audience, as to whether is this happening with the Latin American pension funds and the asset managers they use? I do not know the answer.

FIGURE # 2

TRENDS IN THE ASSET OWNER/ASSET MANAGER RELATIONSHIP

SOURCE: THE AUTHOR'S OWN DATA COMPILATION.

Closing remarks

Something important is to think about how these global trends apply to other jurisdictions.

First of all, I think the issue of fiduciary duty needs to be clarified in Latin America, on both the company side and the investor´s side. Second, it is important to assess what needs to be done in terms of pension fund regulations in Latin American countries and concerning the fiduciary duty issue. Third, I think you can look around the world and find out what and which are the best global practices currently enforced or applied (chiefly in the United States, Europe and Australia). Last but not least, there may be some practices that are country-specific but you could adapt to your own market.

SUSTAINABLE INVESTMENT: FROM THEORY TO PRACTICE

ERIC BORREMANS[1]

1 *Eric Borremans holds a degree in Finance from Solvay Business School and an MBA from Columbia Business School. He joined Pictet Asset Management in 2013. He is a sustainability expert responsible for the development and implementation of sustainable investment concepts. He is also Vice-Chairman of the Institutional Investors Group on Climate Change (IIGCC) and a member of the FTSE Environmental Markets Advisory Committee. Before joining Pictet, he spent eleven years with BNP Paribas Investment Partners in Paris as Head of CSR & SRI Development. He was previously Head of Research Services with Sustainable Asset Management (Zurich) until 2002.*

What I will try to do in this presentation is share with you some experiences on implementing sustainable investment strategies. This is something that we have been doing now for just over 15 years. And I will also try to elaborate some of the points that Professor Eccles alluded to. I ´d like to say three, or cover three main points. First one is what is a sustainable or what is an unsustainable portfolio, illustrate through some examples why we believe as an asset manager that this makes sense for investors. And thirdly, touch upon some ideas on how to implement a sustainable strategy through European equities, through a European equity portfolio.

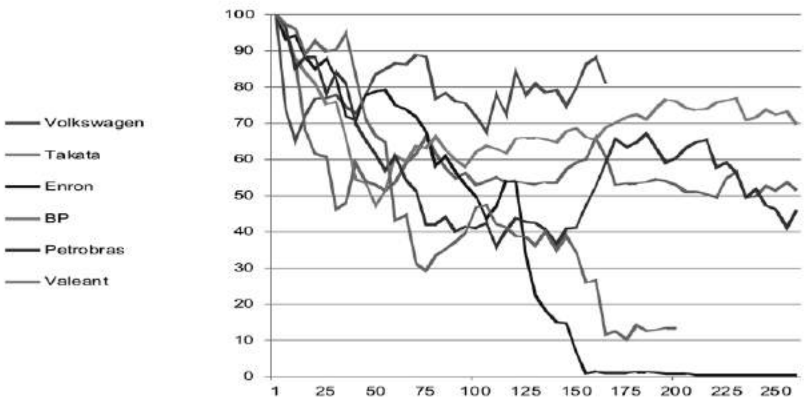
1. What are talking about?

What is a sustainable or what is an unsustainable investment?

Well, let´s do a bit of history or a bit of archaeology. One of the key points in trying to illustrate what is sustainable or is sustainable or unsustainable is to talk about torpedoes; we call those ESG torpedoes (see Graph No. 1).

GRAPH NO.1

ESG TORPEDOES CAN BE LETHAL



SOURCE: PICTET ASSET MANAGEMENT DATASTREAM

So, for those of you who were investing in the market back into 2001, you may remember the story of Enron, the US energy company that went bankrupt following some accounting manipulation and fraud. Shareholders lost all of their equity in hundred and fifty trading days. More recently, think about the BP explosion of the Deepwater horizon platform in the Gulf of Mexico. A year after the incident, shareholders had lost over 30% of their initial stake. That hurts.

Petrobras, closer to us. A number of allegations on corruption and bribery. A year after the first allegation irrupted shareholders had lost 55% of their equity.

Closer to us, in September last year, Volkswagen admitted to the US Environmental Protection Agency that they had designed a device, a software device for manipulating a MIS test 3:30:45 emission results of their cars. The jury is still out. A few days ago the Norwegian pension funds publicly announced that they would sue Volkswagen for not disclosing all the information at the time of the incident and as of today shareholders have lost just over 20% of the stake in that company.

Now, the question you may ask is: Were they all predictable surprises? We would like to think that yes; to a certain extent, those sort of torpedoes could have been avoided by an investor with an ESG mindset, and I ´ll come to that a bit later.

Now, the next point is, and that I think, a very important message to you as asset owners, is that integrating ESG into your investment strategy means that there is no one size fits all; there are different ways of doing it. Let me use an analogy. Think of yourselves as going into a showroom to buy a new car. Well, you can look at it in different ways: you may buy a conventional car with a very good pollution control, a catalyst, meaning that you will reduce your emissions significantly; that´s one way of doing it. Or another option would be to buy a hybrid car; you will probably reduce your emissions by 30% or something. Or third option would be to buy a full electric car with no petrol, no diesel, no nothing, no ethanol; it will only run on electricity.

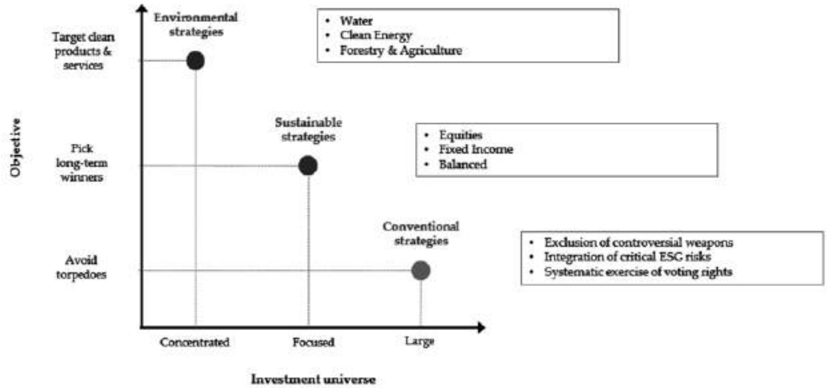
Well, integrating ESG into your investment strategy is exactly the same thing (see Graph No.2). Think about conventional strategies; the list one should do is to trying out for of all the sort of torpedoes that I mentioned earlier. How to do that?

First of all, by systematically integrating ESG risks into your analysis of investments, potentially do some exclusion: controversial weapons, antipersonnel landmines; some Dutch pension funds got really hard hit by the media a few years ago because they were investing in a number of companies that were manufacturers of such weapons.

Obviously, the first thing to do is to exercise your rights as active owners, to exercise your voting rights or potentially engage with the companies you invested in. That is one option. You buy a conventional car but with some basic devices attached to it.

GRAPH NO.2

SEVERAL OPTIONS FOR INTEGRATING SUSTAINABILITY



SOURCE: PRODUCED BY THE AUTHOR.

Another option would be to try aims to pick the long term winners. Not only avoid the torpedoes, but trying to identify companies that truly embrace sustainability into their development strategy. And that can be done for equities, it can be done fixed income, it can be done for balanced strategies, so it can be done in a number of asset classes. That´s the hybrid car.

And the third option would be to allocate part of your portfolio to environmental strategies, thematic funds or thematic strategies gird to companies that are providing solutions to environmental problems; for example, companies activing the water sector, water treatment technologies, renewable energy, energy efficiencies, light emitting diodes, sustainable agriculture or sustainable forestry.

Why is that diversification tool more than a co holding? Well, because effectively you are investing in 5% of the economy. Now, the good news is that this fraction of the economy is set to grow at a faster rate than the 3% that we saw this morning for the global economy. But it´s a tool for diversification. So, this third option is the equivalent of the electric car.

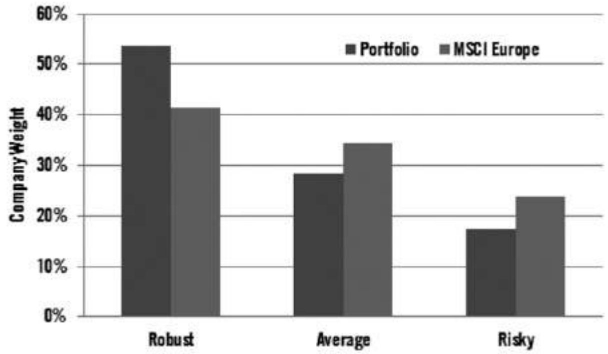
One thing to devise a sustainable strategy, whatever that strategy is, but irrespectively of what you decide to do, one thing you have to be prepared for is to report to your beneficiaries what are the tangible results, what are the environmental and social impacts of your portfolio in absolute terms or relatives to a benchmark. That has to be done using transparent indicators and initiatives such as the ESB and to increase transparency of companies to provide the on the line data, is absolutely key in that exercise.

So let me show you some examples, different ways that one can report on the ESGness of your portfolio.

Corporate governance obviously is the main topic (see Graph No.3). One obvious idea would be to say: “Okay, in my portfolio I have over 50% companies with a robust governance compared to just about 45% in the benchmark”. So move away to strong governance. But likewise I am on the way of companies with risky or average governance models. So you just compare yourself, such as, MSCI world 3:36:01 or a MSCI Europe, or MSCI emerging markets, depending on your area, the area in which you invest. That is one possibility.

GRAPH NO.3

CORPORATE GOVERNANCE IN PORTFOLIO VS BENCHMARK[2]

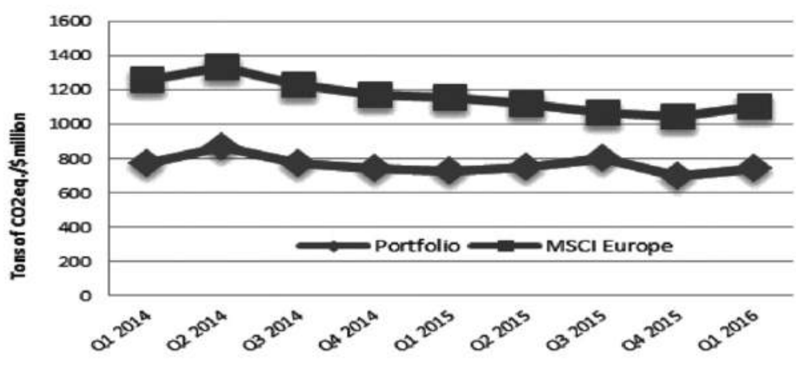


SOURCE: ISS, PICTET ASSET MANAGEMENT. AS AT 31.03.2016.

2 *In response to increased pressure from regulators and shareholders for stronger corporate governance, companies are expected to strengthen board competence and independence, to adopt executive remuneration plans based on long-term performance, to respect minority shareholder rights, and to reinforce risk control and audit functions. This indicator provides the portfolio breakdown v. its benchmark according to three levels of corporate governance (robust, average, risky). Results are based on total company weight in each category.*

Another possibility and that is very popular with asset owners, pension firms in Europe and increasingly in the US is to measure the carbon footprint of your portfolio (see Graph No.4). We ´ve had only a briefly about the Paris conference on climate change, the global agreement to limit global warming to 2 degrees, potentially 1.5 degrees. One of the implications of that agreement is that carbon emitting greenhouse gas is likely to have a price. Well, it would make sense, then, to measure. If your portfolio is more or less carbon intensive than the benchmark. Are you investing in companies that depend on fossil fuels either as producers or as users? And this would be one way of doing it¡

GRAPH NO.4
CARBON INTENSITY OF PORTFOLIO VS BENCHMARK [3]



SOURCE: INRATE, PICTET ASSET MANAGEMENT. AS AT 31.03.2016.

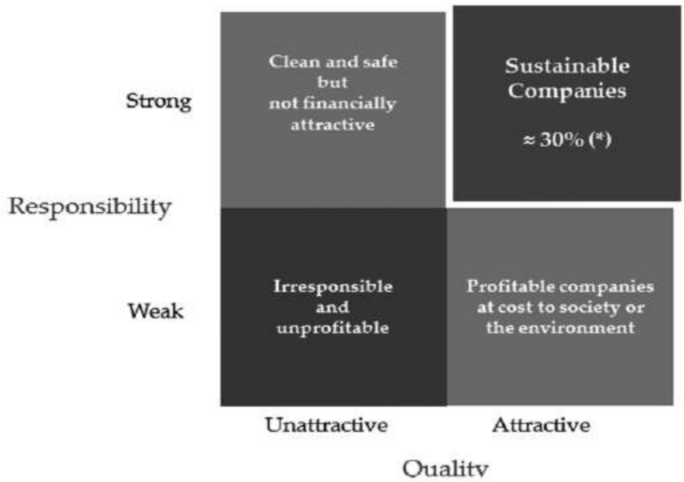
You can easily for a conventional strategy by applying the right criteria, reduce your carbon footprint by anywhere between 30% and 40%, without eating into your budget risk; without blowing your tracking area. That´s perfectly possible by reducing exposure to coalmining companies, for example, and re allocating a fraction of your portfolio to companies in active, in renewable energy or energy

3 *This indicator compares the carbon intensity of the portfolio against its benchmark. GHG emissions include direct emissions from production activities (e.g. from car manufacturing) as well as indirect emissions associated with product use (e.g. from car driving). In order to provide meaningful comparisons, total GHG emissions are expressed in tonnes of CO2 (tCO2 eq.) divided by company revenue. Final results are based on company weights in the portfolio and benchmark.*

efficiency or great operators. We aim to generate steady returns by investing in financially robust companies that benefit from the drive to a more sustainable economy, while avoiding those that generate profits at the expense of society or the natural environment (see Graph No. 5).

GRAPH NO.5

TARGET SUSTAINABLE AND AVOID UNSUSTAINABLE COMPANIES

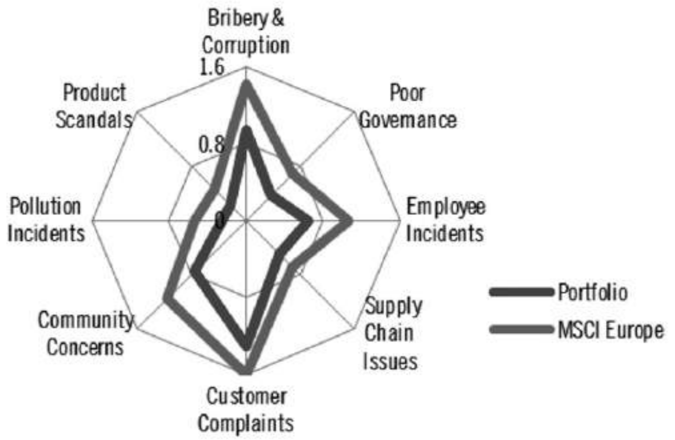


(*) BY WEIGHT IN MSCI EUROPE. THIS WEIGHT IS INDICATIVE AND SUBJECT TO CHANGE.
SOURCE: PICTET ASSET MANAGEMENT.

The third example or possibility, is to measure what we would call the controversy footprint of your portfolio (see Graph No.6). Is your portfolio more or less exposed to the most controversial companies compared to the benchmarks? Here the name of the game being to have the smallest controversy footprints as possible. And I mentioned active ownership earlier; if your set yourself that as an objective, it would make sense to, once you have exercised voting right systematically to report what percentage of your portfolio have your effectively voted on. Did you vote for, against or did you abstain?

GRAPH NO.6

ESG CONTROVERSIES OF PORTFOLIO VS BENCHMARK[4]



SOURCE: SUSTAINALYTICS, PICTET ASSET MANAGEMENT. AS AT 31.03.2016.

Typically, I mean, we find that we end up opposing or abstaining anywhere between 10% and 20% of the resolutions of the companies or proposed that the EGMs of the companies in which we invest. That´s pretty much the figure you are likely to end up with, and obviously support relevant shareholder resolutions when those make sense.

2. The Case for Sustainable Investment

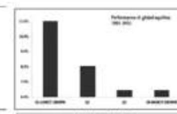
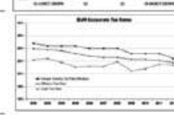
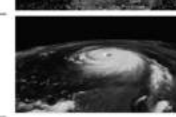
Going, turning into my second point now, the case for sustainable investment, why you believe it makes sense for investors to embark on this journey.

4 *This indicator measures the extent to which companies are impacted by ESG controversies such as bribery, corruption, product recalls, pollution incidents and conflicts with local communities. Controversies are evaluated based on their degree of severity and recurrence, as well as company accountability and reliability of information sources. Controversies are measured on a relative scale and categorised into eight different themes. Final results are based on company weights in the portfolio and benchmark.*

The basic message here is to say that companies are facing increasing disruptive challenges and we would like to think of those challenges in 4 clusters (see Table No.1).

TABLE NO.1

COMPANIES FACE DISRUPTIVE CHALLENGES

Financial pressures	Short-termism Over-dependency on leverage Misallocation of capital to deliver fast growth	 (1)
Governance concerns	Market abuse Principal-agent issues Accounting creativity and tax avoidance	 (2)
Social challenges	Product health & safety concerns Poor labour standards Human rights violations	
Environmental limits	Depletion of natural resources Environmental degradation Climate change	

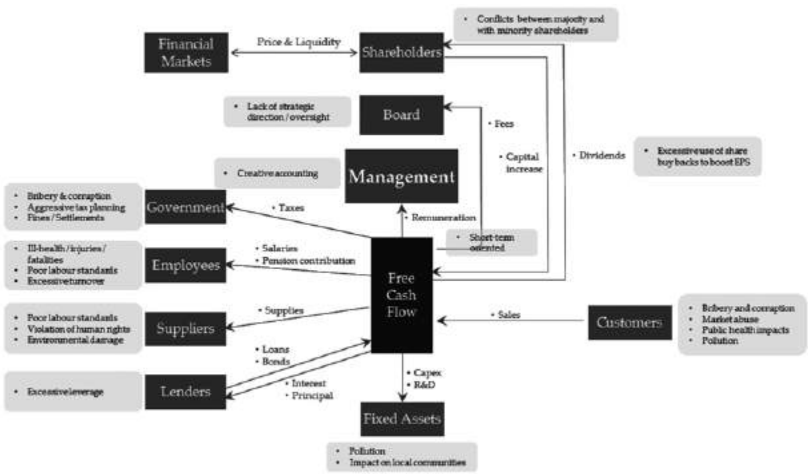
(1) SOURCE: PICTET ASSET MANAGEMENT. ANNUAL COMPOUNDED PERFORMANCE OF A UNIVERSE OF GLOBAL EQUITIES BY ASSETS GROWTH 1991-2011. LARGEST 20% GLOBAL EQUITIES: NORTH AMERICA, EUROPE, JAPAN. RANKED BY TOTAL ASSETS GROWTH OVER 5-YEAR PERIODS. EQUALLY-WEIGHTED PORTFOLIOS REBALANCED TWICE A YEAR. TOTAL RETURN IN USD.
(2) SOURCE: HOLT VALUESEARCH® , FACTSET COMPUSTAT DATA BASE. UNIVERSE EUR GREATER THAN $1B IN MARKET CAP. EFFECTIVE TAX RATE = ANNUAL BOOK TAX EXPENSE PER THE INCOME STATEMENT / ANNUAL PRE TAX EARNINGS. CASH TAX RATE = ANNUAL CASH TAXES PAID PER THE STATEMENT OF CASH FLOWS / ANNUAL PRETAX EARNINGS.

Challenges that relate to a pressure from investors and financial markets to deliver short term results at the expense of the long term. Challenges related to corporate governance conflicts of interest between minority and majority shareholders, for example. Challenges related more to society in general, where there it is, for example, in the area of public health, today we find that companies producing carbonated soft drinks, and the increasing pressure for example, is a result of government tax being applied to carbonated soft drinks. That was the case in Mexico, not so long ago, it is now being discussed in the UK; surely that cannot be good for business, but also environmental challenges, climate change, environmental degradation and the like.

Let me elaborate on 3 examples to make the points as to why this makes sense, and now we are going into examples of materiality (see Graph No.7).

GRAPH NO.7

WHERE CAN IT GO WRONG ?



SOURCE: PRODUCED BY THE AUTHOR.

Let me elaborate on 3 examples to make the points as to why this makes sense, and now we are going into examples of materiality.

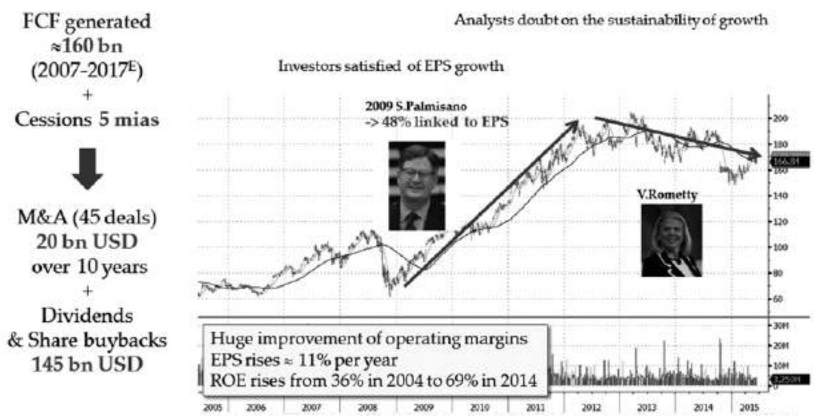
First example: The illusion of earnings per share. Earnings per share is one of the key metrics used by financial markets but also by managers to determine their variable remuneration: their bonuses.

Take the example of IBM. IBM generated or it is said to generate about 160 (hundred and sixty) billion dollars plus five billion dollars from disposals over the period 2007 to 2017; that´s what money coming in. How has that money been used?

Well, a little bit, 20 billion, has been used to finance merges and acquisitions, about 45 deals over a 10-year period, but the bulk of it, 145 (hundred and 45) billions, has been used to pay dividends and share buybacks (see Graph No.8). What has that led to?

GRAPH NO.8

EXCESSIVE SHARE BUYBACKS



SOURCE: PRODUCED BY THE AUTHOR.

To a huge improvement in earnings per share; you reduce the numbers of shares, obviously the earnings per share will go up: plus 11% per year and a sharp increase in the return of equity. What did financial markets think of it? Mm…They liked it!

Investors were satisfied of EPS growths under the CEO of Mr. Palmisano. Then, what happened? Mm…When Mrs. Rometty to cover, analysts started doubting about the sustainability of their growth; they couldn´t keep up. Now, let´s think about some of the rude codes as here, and you find out that ¡Mm! 40% of Mr. Palmisano´s remuneration was linked to earnings per share. That is the sort of information that you can easily find if your look for it.

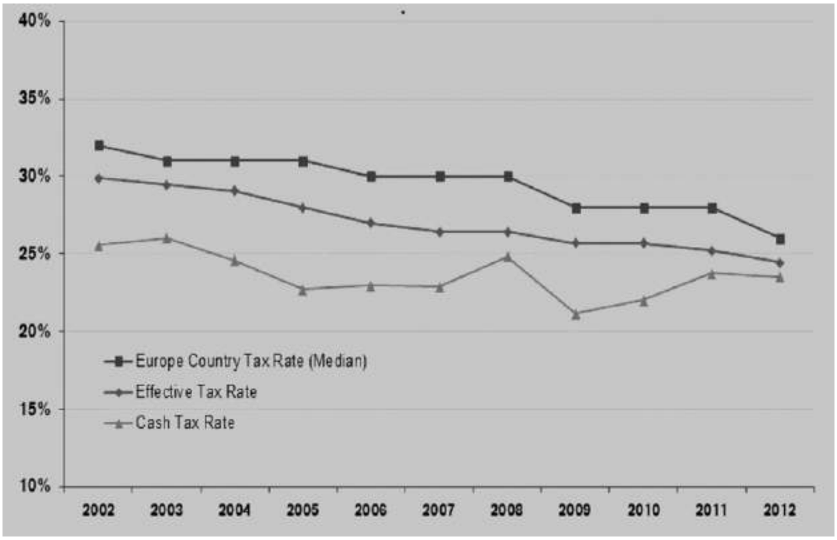
The second example is corporate tax rates. There has been a string of cases litigation, attacks on companies, US companies or European companies, because they are perceived as paying an abnormally low corporate tax rate. Why? Because when you shift profits from high tax jurisdictions to low tax jurisdictions and when the profit shifting is a bit artificial, well, obviously you can find ways and means of artificially decreasing your tax rate.

And governments do not like it, obviously, because governments need corporate tax to fill in their budgets, government deficits have been increasing, so that´s not going down very well.

Corporate tax rates have come down over the past 10 years in Europe. However, the effective and cash tax rates also have declined, creating a tax gap (see Graph No.9).

GRAPH NO.9

CORPORATE TAX RATES IN EUROPE



SOURCE: HOLT VALUESEARCH® , FACTSET COMPUSTAT DATA BASE. UNIVERSE EUR GREATER THAN $1B IN MARKET CAP. EFFECTIVE TAX RATE = ANNUAL BOOK TAX EXPENSE PER THE INCOME STATEMENT / ANNUAL PRE TAX EARNINGS. CASH TAX RATE = ANNUAL CASH TAXES PAID PER THE STATEMENT OF CASH FLOWS / ANNUAL PRETAX EARNINGS.

Table No. 2 shows a list of European companies, where the taxation gap between the effective tax rates and the country tax rates, is of 10% plus, sometimes higher than 20%.

TABLE NO.2

COMPANIES WITH LOW TAX RATES COULD BE AT RISK

Company	Ticker	Country	Industry	Market Cap	Corp Tax Rate 5 yr Median	Country Tax Rate	Taxation Gap Effective Tax Rate (5 yr) - Country Tax Rate
SOLVAY SOCIETE ANONYME	SOLB	BEL	Chemicals	€ 11,149	11%	34%	-23%
CARNIVAL PLC	CCL	GBR	Hotels, Restaurants & Leisure	€ 34,702	0%	23%	-23%
SES S.A.	SESFD	LUX	Media	€ 13,750	8%	29%	-21%
ACS ACTIVIDADES DE CONSTRU	ACS	ESP	Construction & Engineering	€ 10,052	10%	30%	-20%
UCB SA	UCB	BEL	Pharmaceuticals	€ 13,176	16%	34%	-18%
RENAULT SA	RENA	FRA	Automobiles	€ 26,505	17%	34%	-17%
DEUTSCHE POST AG	DPWGN	DEU	Air Freight & Logistics	€ 35,641	15%	30%	-16%
ASML HOLDING NV	ASML	NLD	Semiconductors & Semiconductor	€ 38,194	11%	25%	-14%
ANHEUSER-BUSCH INBEV SA	ABI	BEL	Beverages	€ 183,613	20%	34%	-14%
BELGACOM NV	BCOM	BEL	Diversified Telecommunication Ser	€ 10,652	20%	34%	-14%
FERROVIAL SA	FER1	ESP	Construction & Engineering	€ 14,780	16%	30%	-14%
IBERDROLA S.A.	IBE	ESP	Electric Utilities	€ 38,344	17%	30%	-13%
SANOFI S.A.	SASY	FRA	Pharmaceuticals	€ 125,293	21%	34%	-13%
EDP - ENERGIAS DE PORTUGAL	EDP	PRT	Electric Utilities	€ 13,075	19%	32%	-13%
KABEL DEUTSCHLAND HOLDING	KD8GN	DEU	Media	€ 10,782	18%	30%	-12%
VALEO SA	VLOF	FRA	Auto Components	€ 11,016	23%	34%	-12%

SOURCE: CREDIT SUISSE ACCOUNTING & TAX ANALYSIS. HOLT AND FACTSET DATA.

Again, this is data that anybody can look at and analyse and draw the consequences. Now, historically, paying low corporate tax was seen as a plus by financial analysts. Now, all you hear is that the higher the gap, the higher the chance that there will be a reversal to the mean and that the money will end up with government as opposed to end up in capex or in dividends.

The third example is on climate change, renewable energy. What is happening today is that the cost generating electricity for renewables, including solar in red, has been falling steadily over the last 5 years to the point where, especially in those latitudes where there is a lot of sunshine, so close to the equator or the tropics, it´s actually cheaper to generate solar, to generate electricity from solar compared to natural gas or coal.

In 2015, the International Energy Agency, estimated that over 50% of new capacity additions in the power generation sector were from renewables, so there is real money pouring into the sector. That is not good; that cannot be good news for oil and gas, and neither for coal and gas.

The foregoing is exacerbated by the fact that in parallel, the cost of storing energy, which has been a big hurdle for renewables, has been falling steadily. We are not quite yet to the point where utilities scale storage; it is cost effective, but it is not far off.

Now, the bad news for the oil and gas sector which typically represents, say 10% of the global index. Well, the theory now goes on that not all the oil and gas that sits on the balance sheet through proven reserves will be burnable, so maybe two thirds of it is not burnable. It depends, obviously, on the hydrocarbons.

And this path or trajectory is confirmed again by the International Energy Agency, who foresees that in what they call a forfeit scenario which is equivalent to 2 degrees global warming by 2100, the demand for oil and gas is said to decrease sharply, gas will stabilize. What does it mean for companies?

Let us take the example of Total, the French oil and gas company, and if you start playing around with the growth rates of oil demand going forward between 1.5 growth to infinity or -1.5 growth for the next 30 years, you have a share price that could come down by as much as 36%. If that is not material, I do not know what that is.

Let us go back to basics for a short second. How do companies generate value for investors? Well, effectively, companies will raise capital from shareholders, they will raise money from bondholders or commercial banks and they will put that money at work by investing it in fixed assets, they will pay thus, they will generate income from their customers, with that money they will pay their suppliers, their employees and eventually pay some tax to government.

After which, you, as investors, will either get your interest or your principal payback and hopefully some kind of dividends. That is how it should work. But things can go wrong in a number of ways.

They can go wrong as we saw with IBM through the excessive use of earnings per share. They can go wrong with excessive use of leverage; it can go wrong because companies engage in creative accounting, it can wrong because management remuneration criteria are short term oriented at the expense of the long term, it can go wrong because the companies engage us in aggressive tax planning or bribery and corruption and ends up with fines or settlements.

It can go wrong because of potential conflicts of interests between majority and minority shareholders, it can go wrong because of bribery and corruption with clients or market abuse or public health impacts: carbonated soft drinks. It can go wrong with pollution, the Samarco dam in Brazil, which was run by BHP Billiton and VALE S.A., is a good example of that.

It can go wrong because companies mistreat or neglect employees, thus leading to ill health or fatalities. It can go wrong through the supply chain or through mismanagement of the supply chain for a number or reasons.

But ultimately, what did all boys down to is probably a lack of strategic direction from the board or potentially, a lack of oversight from the board of directors, I guess. And a number of rude codes as those problems would lie probably exactly there.

3. Applying Sustainable Investment: European Equities

How to apply a sustainable investment strategy? We are taking the example of European equities. And this is one example among others. This is the example of the hybrid car, the dimension earlier around.

One would typically expect that a portfolio would aim to generate steady returns by investing in companies that are number 1 financially robust but at the same time deliver or implement superior standards of corporate responsibility.

The foregoing means that a portfolio of this kind, will target those companies in the top right corner, that displays trends in both areas, while at the same time avoiding to invest in companies that might be profitable today, but at the expense of society or the environment (see Graph No.10). Why? Because there is a concern that those negative externalities will crystalize back into the PNL at some point of time.

GRAPH NO.10

HOW WE IDENTIFY QUALITY COMPANIES

SOURCE: PRODUCED BY THE AUTHOR.

A portfolio like that would also avoid investing in clean and safe companies but that are not financially attractive; we are investors, not tree huggers. And obviously a company portfolio like that would avoid companies that fail on both criteria.

What does that leave you with? Or what would that leave you with? Well, probably about 30% of the end online benchmark. That is more than enough to create a diversified portfolio.

Some examples or some ideas to identify companies that are financially robust, one will look at: is this business profitable? Does it generate decent rates of returns for shareholders? Is its manager investing its business in a prudent way? Is it relying, overly relying on leverage? Is it growing its assets mainly through merges and acquisitions or maybe through organic growth? Is it reasonably priced? Are you buying quality at the right price? And what´s its track record in showing resilience across the economic cycle? That is financial robustness!

Alongside with that one, we have to look at corporate governance, including conventional, but maybe also unconventional ways of corporate governance, such as accounting integrity and tax citizenship.

Look at the company from an operational point of view; is it looking after its employees? Is it limiting its emissions? From a more strategic point of view, what is the product mix like? Is it a product mix that is girded to towards healthy food or unhealthy food? Is it girded to coal or to renewable energy or to energy efficiency? And at the end of the day, is the company walking to talk? What is the company reputation? Has it had a series of severe violation and incidents over time or not?

As far as research is concerned, there are different ways of doing this. You can buy plug and play ESG ratings from a number of sources or you can do your own. We prefer to do the latter.

We believe that different providers are stronger in different areas, so you have to be a bit like a cook, and you choose the best ingredients and devise the recipe yourself, but that is a matter of choice.

Some example of companies that would fit alongside the 4 quadrants that I mentioned earlier, a typical company that one could invest in is Log Home by contrast, Volkswagen would fall in the bottom left quadrant. Novartis, strong balance sheet but a strings of controversies in the US, corruption of pharmacies and professionals, and doctor; that would probably make it ineligible (see Graph No.11).

GRAPH NO.11

SOURCE: PICTET ASSET MANAGEMENT.
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4. Key Lessons

Just to finish off, some key lessons. Why does it make sense in all of you? Well, first of all, as I alluded to earlier, ESG torpedoes hurt or can be lethal for investors, so better stay away from it; equip yourself to avoid them.

In second place, Policy makers and consumers are on the move; there is demand for that and mostly within the regulation.

Third, institutional investors and millenials becoming more sophisticated.

Finally, solutions exist to deliver steady financial performance and positive/ measurable impact.

CORPORATE SOCIAL RESPONSIBILITY AND CORPORATE GOVERNANCE: THREE PROPOSALS TO THE PENSION FUND ADMINISTRATORS

ALFREDO ENRIONE[1]

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Allow me to start my presentation with a statement: The pension funds and the individual capitalization approach in our markets have been a "Force for Common Good" within the countries where they have been implemented. The combined effect of both initiatives have consistently promoted savings, individual responsibility, investment, a sound development of capital markets and overall development of good business practices. Furthermore, this combined effect has taken place against a background of an extraordinarily challenging environment.

Perhaps some of you may remember a famous Hollywood dancing couple in the 30s, namely Fred Astaire and Ginger Rogers (See Figure 1). They delighted millions of fans with their lively and sometimes acrobatic dances. Fred Astaire became far more famous than Ginger Rogers, although she had to perform the same steps and jumps, albeit wearing high heels while showing her back to the camera. When we look at the challenges being addressed by the FIAP fund management companies, such undertaking reminds me of Ginger. They have to do what all other institutional investors do throughout the world, but wearing some high heels and showing the back to the camera.

FIGURE 1
FRED ASTAIRE AND GINGER ROGERS

The first and key fact to note is they operate in very shallow markets (see Figure 2). If we take all FIAP member countries, (excluding Spain), their combined stock market capitalization drive is equivalent to the comparable figure for Singapore. As you know much better than I do, the size of most financial markets has a huge impact on the operational costs and the possibilities of adopting a good choice.

A second key factor to bear in mind are the markets in which they operate have very low liquidity. Paraphrasing Don Joaquin Cortez, the managers are victims of "The Hotel California Curse"; in other words, *you can check out anytime you wish but you can never leave.* As a result, and although ex post there are companies in which you rather not be, it is very difficult to get out without causing damage to the very significant contributors.

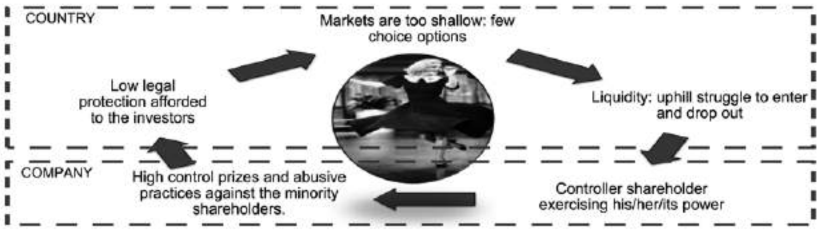
The third crucial factor has to do with the companies' ownership - including the largest ones and where institutional investors tend to gather - has become extremely concentrated. The Shareholders' meetings, the Boards of Directors and their overall management are usually under one controlling individual/entity. As a result, the quality of management and corporate governance are largely defined by such controllers' preferences.

To further complicate the outlook, in our markets there is a protracted track record of value expropriations exercised by the controllers to the detriment of the minority shareholders. This is reflected on the huge "control premiums" prevailing amid the markets where the FIAP more developed partners operate.

Last but not least, in those cases where there are flagrant disregards or transgressions to the principles of good corporate governance, the minority stakeholders are left with no option but resort to the Courts of Justice; albeit being also at a disadvantage vis-à-vis those operating in more developed markets. Most international indicators are showing that technical quality, speed of response and predictability of the Courts also suffer from levels of underdevelopment status. Even in very evident cases where the controlling entities have received multi-million fines, such monies have always gone to the Treasury coffers, and never been allocated as compensations to those truly affected.

FIGURE 2

GINGER ROGERS AND THE INSTITUTIONAL INVESTORS



SOURCE: OWN DATA COMPILATION.

Thus, if institutional investors are faced with less efficient markets, with controllers adopting an abusive stance coupled with the prevalence of lower degrees of legal protection; then corporate governance becomes even more important than within most developed countries. As a result, the "Force for Common Good" role performed by the Pension Management Fund entities (better known for their Spanish acronym: AFP), becomes crucial when it comes to bear a decisive weight and influence over their predominant market standards.

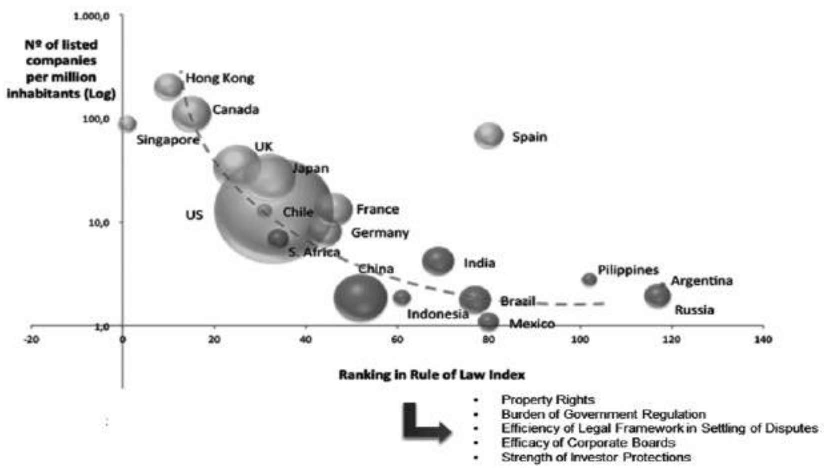
Quality of corporate governance

But how is the corporate governance we need?

When we think about the country-level standards or practices, the recipe to be applied is well known: We need property rights, more efficient regulations, protection afforded to the investors, etc. (See Graph 1).

GRAPH 1

FINANCIAL MARKETS AND CORPORATE GOVERNANCE SHOWN AT COUNTRY-LEVEL STATUS

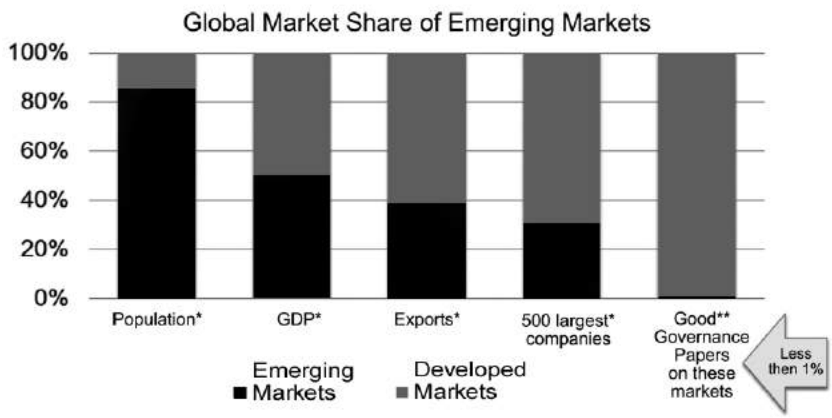


SOURCE: WORLD BANK, WEF GCI AND WWW.CENTERFORFINANCIALSTABILITY.ORG

Unfortunately, when it comes to the proper recipe to be applied at company level, then we are much less familiar with it. For instance, less than 1% of all papers produced worldwide on corporate governance do come from emerging markets (See Graph 2). In this respect, it does not seem responsible to sell "recipes" concerning corporate governance. Moreover, on a personal level and after working with over one hundred organizations during nearly twenty years, my conclusion is that the optimal solution always has to be drawn on an ad hoc basis.

GRAPH 2

GLOBAL MARKET SHARE CURRENTLY ENJOYED BY EMERGING MARKETS



SOURCES:
* IMF WORLD OUTLOOK APRIL 2014
** ARARAT, M. AND DALLAS, G. (2011) "CORPORATE GOVERNANCE IN EMERGING MARKETS: WHY IT MATTERS TO INVESTORS – AND WHAT THEY CAN DO ABOUT IT, PRIVATE SECTOR OPINION 22, CORPORATE GOVERNANCE FORUM IMF.

In this respect, and elaborating further on the idea that the AFP are to be regarded as a Force for Common Good, I would like to put forward three proposals focused on how, from the perspective of your industry, you can and should influence the operational quality of corporate governance and its proper functioning within the markets in which they operate:

Proposal # 1: To implement a thorough review of your own practices

Doubtless there are a number of reasons to be critical about the quality of corporate governance amid the companies in which you are investing. If we are to demand improvements of our market standards, we must first examine the likely shortcomings at our end of the bargain. In plain English "Rather than caring for imperfections elsewhere - such as a straw in somebody else's eye – we must assure ourselves we are carrying no beams planted in our own eyesight".

I would like to suggest some self-examination questions: Does your respective local market regard its companies as an example of good corporate governance practices? Do you meet the same criteria you are customarily preaching and/or imposing within the companies you are currently investing in? Do you really believe that your management boards and their processes are significantly better than the market average?

I have worked with the Management Boards of over one hundred companies scattered throughout Latin America, on sundry matters pertaining processes' improvements and evaluations; thus I firmly believe it is worth our while to ask ourselves: Do you really have a world-class Management Board that you can boast vis-à-vis the local market? Can the Board members track records pertaining their knowledge and experience be rated as world class? Do they currently encompass a diversity status?

Rafael Rubio spoke today about perceptions and communication. In Latin America, the latest available statistical data are pointing towards a few key factors: About 95% of all Boards of Directors entail men; as regards the Chilean case some 80% of their membership are lawyers, economists or engineers; with 75% being graduates from only two universities. We all live in the same fashionable districts, our children go to the same schools; and when we want to know what is going on, we usually get a rough estimate from our friends and neighbours. In this "random sample", we usually live under the impression or conviction that we are right. Is there a real diversity within the boards of our institutional investors?

Do you feel, in your capacities as CEOs, that this Management Board model is supplying you with any values? Do you customarily implement the best practices in terms of strategy, risk assessment and *compliance*? When it comes to improving decisions, do you supply your Board Management with the relevant *management* information?

Here is a huge opportunity that has to do with diversity. In our markets and all of a sudden, many companies have been confronted with a problem but, regrettably, most resort to the same sources of information: Indeed, we talk among ourselves and we invariably end up asking the Management as to what is going on. How many Board Directors do really come up with new information or data aimed at enriching the decisions yet to be adopted? Is sustainability with the *stakeholders* an issue that is steadily kept on the agenda of the Board of Directors or is, rather deemed to be a second level of responsibility, worth outsourcing to third parties? Or perhaps it is as put by Rubio, the latter are expected to be on call, thus ready to rush in - as a fire brigade would do - when it comes to put out a fire?

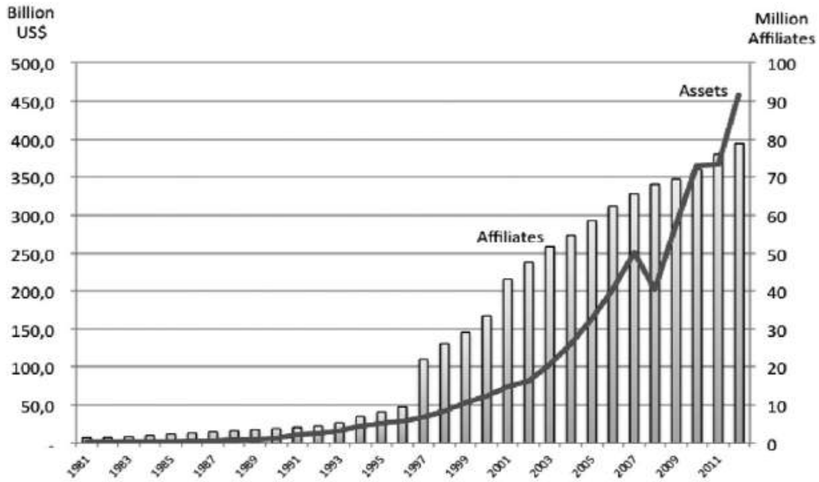
Still on the ESG (*Environmental, Social and Corporate Governance*) practices' review, has the Board reviewed or evaluated if their products are really good/beneficial to their customers? Have the relevant processes ever considered the needs of the customers? Are they transparent in all matters pertaining the strategy at the time it comes to raise key factors concerning sustainability and *stakeholders*? Do they measure and evaluate it? Robert Eccles raised the idea of a statement. Let us be explicit about what *stakeholders* we have on the map and what are we going to do about it.

Proposal # 2: To explore a "universal property" perspective

When you look at what FIAP is in the context of your markets, particularly in Latin America, we are talking about US$ 500 billion (See Graph 3) and pension savings owned by some one hundred million people; you must conclude this is a huge social, political and economic force. A force for common good!

GRAPH 3

THE ECONOMIC AND POLITICAL POWER
ASSETS UNDER MANAGEMENT AND AFFILIATES INSERTED WITHIN THE INDIVIDUAL CAPITALIZATION SYSTEMS – FIAP COUNTRIES



SOURCE: FIAP.

Our countries are confronting enormous social challenges concerned with the trust and quality of their institutions. The AFPs have performed a positive role and should continue to do so, in the form of an even greater active role than ever before. In this respect I do have a great personal concern I would like to get off my chest!

The already available FIAP statistics indicate that, nowadays, about 29% of the assets of institutional pension investors today are placed abroad (See Graph 4). As regards Chile and Peru, it is roughly 40%. In other words, some 29% of the overall pension portfolios throughout the region. The corporate governance of the companies in which we are steadily investing - when it comes to be fully aware of what is going on with our money - have rated the issue as not our problem. In a nutshell, we do not know what is happening with such monies; in real life we have left such key issue to someone else to manage altogether!

It can be argued there are very good reasons, coupled with economic and technical terms, which may justify such diversification as a justification for such state of affairs. However, let it be said it is also very tempting to leave this issue unchecked since it clearly involves a danger. All this because pension funds in local markets are, unquestionably, the main force for promoting – as far as corporate governance is concerned - a whole host of best practices in addition and further beyond those currently enforced by any relevant and official regulator.

GRAPH 4

DIVERSIFICATION OF PENSION FUNDS ABROAD
(EXPRESSED AS A % OF WHAT IS INVESTED ABROAD OF THE OVERALL TOTAL PENSION FUND INVESTMENTS – FIAP COUNTRIES)

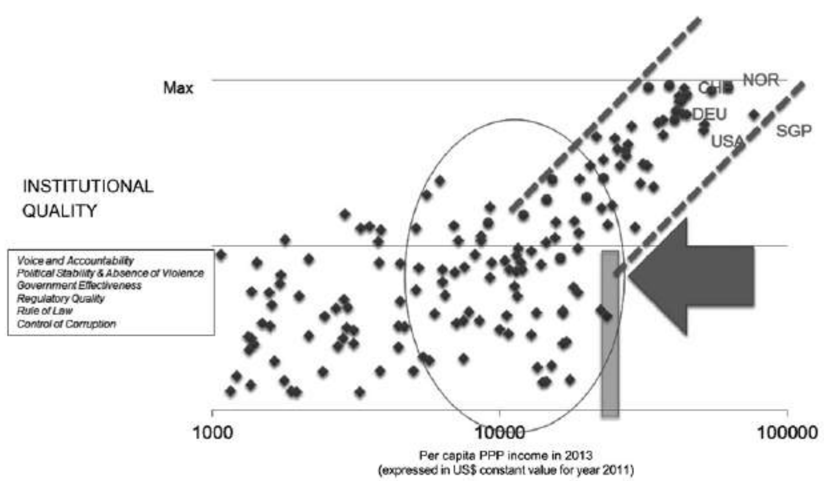
SOURCE: FIAP.

What may become a matter for concern is that the level of commitment and activism may lose strength and momentum. Here are a couple of illustrations: A close watch at economic growth, per capita income and quality of the institutions shows growth can be secured; while achieving also a certain level of wealth even with bad institutions (See Graph 5). If there are *commodities* available, as it has been the case in Latin America, coupled with good prices for such, good macroeconomic policies or whenever we are in a good neighbourhood, you can also expect to grow. But growth can only be possible to a certain extent, reaching roughly a per capita figure of US$ 20,000.

As from such level upwards, you should expect the surge of a close relationship between the quality of the institutions and economic growth. Whenever we are in long term business, the value of pensions and assets has much to do with the institutions with which we happen to be involved with. The FIAP member countries are precisely on the edge, some a little below and others touching the US$ 20,000 mark.

GRAPH 5

STATUS OF THE INSTITUTIONS WITHIN WHICH THEY OPERATE

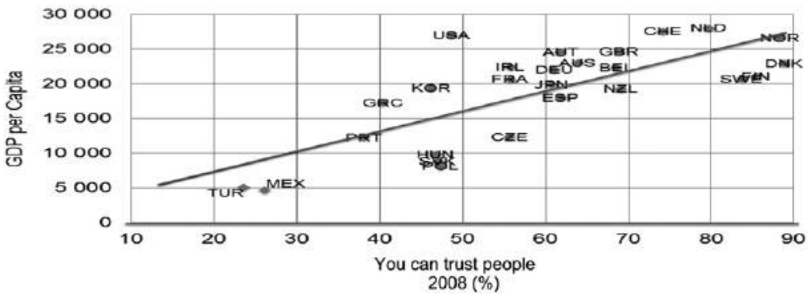


SOURCE: HTTP://INFO.WORLDBANK.ORG/GOVERNANCE/WGI/INDEX.ASPX#HOME; HTTP://DATABANK.WORLDBANK.ORG/

Regarding the role and influence of the confidence feeling - and as demonstrated by countless studies undertaken by historians, sociologists, political scientists and economists alike - there is a close correlation between trust and economic growth (See Graph 6 with OECD data).

GRAPH 6

CONFIDENCE DOES INFLUENCE GROWTH

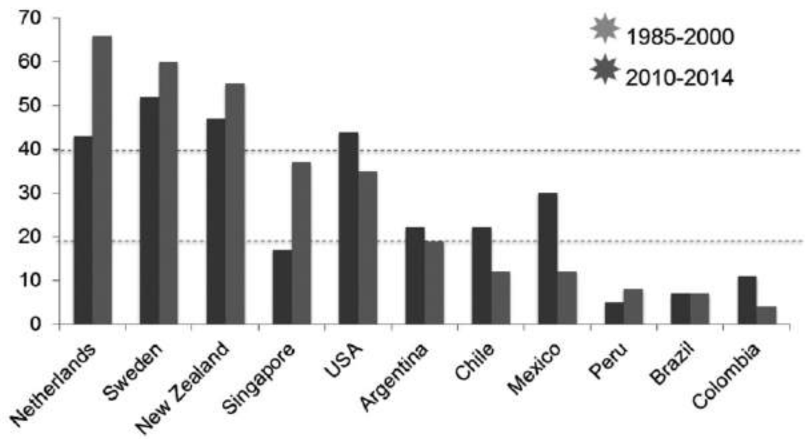


SOURCE: OECD.

Regrettably, we are not doing well on this dimension either, and could well become a limiting factor for our long-term growth. Recent research work produced by The World Value Survey shows what has happened in recent years (See Graph 7). While in countries such as The Netherlands, Sweden and Singapore there have been giant leaps in confidence levels, in Latin America we have experienced a net destruction of such confidence feeling. Mexico has halved it, Peru has secured some headway albeit it still is at very low levels. The case of Chile is dramatic to say the least!

GRAPH 7

TRUST INDEX - WORLD VALUE SURVEY



SOURCE: WORLD VALUE SURVEY.

It is clear that pension funds have a single business purpose, but whenever you must manage such significant sizes, diversification degrees and investment horizons, it is time to seriously consider the concept of "universal property" (*universal ownership*). This means that the investments' long-term value will depend on the country risk rating, the social fabric, the quality of the institutions concerned, the human capital and environmental performance alike. In the latter case, for instance, we are also lagging behind (See Table 1).

TABLE 1

THE ENVIRONMENTAL PERFORMANCE WITHIN THE FIAP COUNTRIES HAS MUCH ROOM FOR IMPROVEMENT ALTHOUGH PROGRESS HAS SHOWN A VERY SLOW PACE

Ranking	Country	Score (maximum=100)	Average annual improving 2005-2015
6	Spain	88.91	0.90%
42	Costa Rica	80.03	1.40%
44	Ukraine	79.69	2.20%
51	Panama	78.00	0.60%
52	Chile	77.67	0.50%
57	Colombia	75.93	1.40%
58	Dominican Republic	75.32	2.10%
65	Uruguay	73.98	1.20%
67	Mexico	73.59	1.00%
69	Kazakhstan	73.29	2.20%
73	Peru	72.95	2.00%
76	Bolivia	71.09	1.80%
88	Honduras	69.64	1.70%

SOURCE: ENVIRONMENTAL PERFORMANCE INDEX, YALE UNIVERSITY. ANNUAL REPORT 2016.

Therefore, I wish to encourage you to – in addition to being excellent fund managers searching for the best combinations of risk and return – never lose sight of the long term; which can also influence these risks and returns throughout the markets where you are operating.

Proposal # 2: To ensure the investments are perceived as “Force for Good”

The challenges are huge. Some countries have dropped the individual capitalization system, such as Argentina, whereas others – for instance Peru - are aiming to undermine it altogether. These seemingly irrational decisions or policies stem from their own political and social contexts. How far you reckon it could still be an alternative to ignore these social dimensions and rate them as part and parcel of your own businesses’ sustainability prospects?

How far can we ensure the investments are perceived as a Force for Common Good? If you, whom are rated as associated with the largest investments' economic strength at a regional level, are customarily setting high standards for, at least, a fraction of the local portfolio and also for international investments; then you must fulfil and disseminate those standards.

You must develop and disseminate data concerned with rankings in terms of the local market and ESG parameters, while also strengthening their communication areas. In other words, if you had resorted to all your talent and strength, and focused a part of it to communicate a good degree of understanding and appreciation of this Force for Common Good by society as a whole; it is highly likely that our state of affairs would be entirely different. That said, I think there is an important task for you to perform, chiefly by leveraging actions into consistent agendas with other interested parties/actors. I mean to say with the stock exchanges, legislators - in terms of sustainability - and with the universities.

Something that may be obvious to you but surprising to me is that, in real life, you have always invested in "alternative" assets. This is so because, while being illiquid investments when you have invested in large companies – which in theory are liquid within their local markets - in practice they are not. While working in close contact with sundry Boards of Directors, I have discovered more often than not an on-going antagonism between the minority shareholders and the main Controller.

The directors appointed to these companies usually enjoy a control mandate, and perform like any goalkeeper or a watchdog would do. Here there might be an opportunity, by learning what The Blackstone Group has raised today; that is: What if we designate directors with a criterion of value, rather than resorting to a control criterion? There we can appoint someone with a world class reputation and knowledge, who will be heard loud and clear while influencing future events and, last but not least, generating value. What if our power can be used in helping with benchmarks, alternative models, best industry practices, tools and ESG practices? And why not go a step further and publicly grant a recognition to those good controllers?

I have learned during my life term so far, that awards and recognition are also a way to bring about change.

Resorting back to the Ginger Rogers analogy, I found a blog that I thought is very appropriate when referring to institutional investors. It reads: What are the features which make a good dancer? Well, he/she may be well aware of his/her limitations, has grown up as sensitive to the environment, is capable of watching and perceiving the details. Furthermore, he/she is always learning and making connections; identifying patterns, is capable of anticipating events, operates and remains focused, and is well disciplined". These could well be the perfect features of a good investment manager.

I am convinced that yourselves are one of the most powerful forces in your respective markets and, I trust, some of these ideas will strike you as a thought provoking catalyst.

CHAPTER IV

ENHANCING THE CONTRIBUTION OF VOLUNTARY PENSION SAVINGS TO THE PROVISION OF PENSIONS

CURRENT STATUS AND PROSPECTS OF VOLUNTARY PENSION SAVINGS IN LATIN AMERICA

CARLOS NORIEGA[1]

1 *Mr. Carlos Noriega holds a degree in Economics from the Mexican Autonomous Technological Institute (better known as ITAM, as per its Spanish acronym) and a PhD in Economics from the University of Rochester, New York. Nowadays, and since August 2013, has been the Executive Chairman of the Mexican Association of Afores (AMAFORE), which groups together the Pension Fund Managers. Mr. Noriega was actively involved with the Retirement Savings' Sector (also commonly known as SAR) since its inception in 1992. He began his career within the public sector and served in sundry positions as shown below. While with the Finance and Public Credit Secretariat, he was appointed as Director General of Fiscal Planning, and then as Coordinator of the Advisory Team for the Secretary and Deputy Secretary alike. While with INFONAVIT he held the position of Deputy Director General. Thereafter, with the Bank of Mexico he served as Manager in charge of Economic Research. Since 2000 and until 2013 Mr. Noriega performed as an independent consultant on issues related to social security and public sector finances, plus savings and loans. He was a partner of the company known as Grupo de Economistas y Asociados (GEA for short). On the academic front Mr. Noriega has been a lecturer at ITAM, a dependency of the Anahuac University and at UNAM. He has also written several economic research articles.*

All pension systems, if they are to fully accomplish what is expected from them, must recognize a minimum of three objectives; with all three to be secured simultaneously. These are (i) the assurance cover - that is to avoid any pensioner becoming destitute during his/her old age – (ii) the certainty of a regular income once the worker is no longer working and, of course, (iii) perform a solidarity and income redistribution role. These three factors are entailed/combined in any pension system and, therefore, a variety of economic, political and social considerations do influence both its formation and development stages alike. Nowadays they also bear a considerable weight in the outcome concerning the amendments/reforms yet to be introduced onto these systems.

Undoubtedly, the granting of more and better pensions calls for an interaction of different instruments, all required by any sound pension system. The consensus which has been gradually generated over time, points towards a pension system encompassing at least three different models, namely: a non-contributory solidarity pillar - which is to be focused essentially on addressing the issue of extreme poverty - a contributory pillar very much linked to the workers' jobs and careers, where responsibility is shared by both the employer and the workers and, last but not least, the voluntary savings, which are expected to perform as a supplement primarily aimed at meeting the aspirational aspect of each would-be pensioner. In plain English, there is to be a transitional move onto the next steps, whereby the responsibility gets transferred from the State onto the employer and, finally, to rest with the worker himself/herself.

Of course this scheme depends on the conditions that may prevail in each country. Generally speaking, I believe it is within Latin America where we notice why the relevance of each of these instruments differs from one another.

The weaknesses and shortcomings within the labour market

A general glance shows there are labour markets with a low presence of the formal sector of the economy; low government contributions due to budgetary constraints;

with the workforce contributions being also relatively low; chiefly due to both the low levels of income and salaries being commonplace throughout the region. Likewise, the financial system does not necessarily reproduce the conditions prevailing within the most developed countries, whose systems go further in depth and are more liquid. Therefore, and in this context, the pension systems must be further developed. These are some of the major challenges we are coming up against.

If the informal sector is large, a pension system based primarily on the employers' contributions will not secure any desired relevance. If informality reduces the contributions' density, the savings as required by law will not be generated.

Furthermore, if the Government suffers from limited budgets, it will be unable to compensate for the lack of savings expected from the workers and employers alike. Worse still, such expected compensation will never materialise. Last but not least, if the financial systems do not cater for the right conditions, the profitability of these savings will also be affected.

So, the two key considerations for any sound voluntary pension savings are: (i) To address the weaknesses of the currently enforced schemes and concerned with the non-contributory pillar - whose resources are usually very small - and (ii) on the other hand, to meet the shortcomings brought about by informality onto the contributions' model.

The role of voluntary savings

If we look forward into the future, to the extent most labour markets become more flexible and where independent work or *freelancing* becomes more relevant, the contributory pillar will also lose relative strength; so the role of the voluntary savings' pillar becomes even more important.

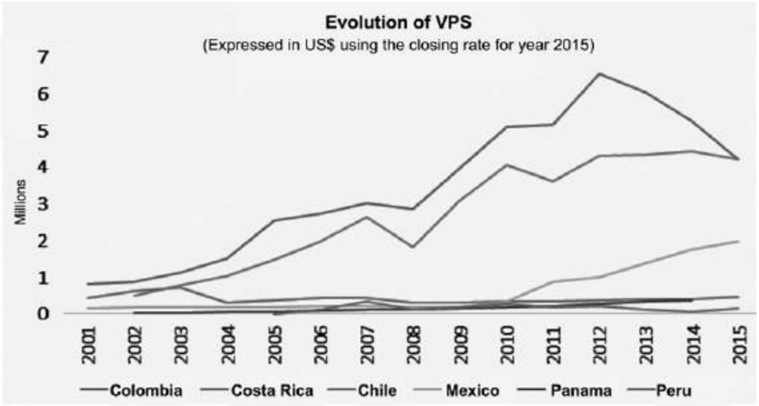
Needless to say, and in line with the extent of the worker or would-be pensioner becoming aware of his pension likely status, such worker is bound to wish his future pension to be higher than the one offered by the formal system; so he/she will have no option but to supplement it with voluntary savings.

That said, we envisage the voluntary savings' approach, on the one hand, being the element which supplements the shortcomings of an insufficient pension scheme and, on the other hand, becoming a purely aspirational issue confined to each would-be pensioner.

If we analyse the figures for voluntary pension savings in Latin America, we see a significant growth (See Graph # 1). Indeed, in recent years both the relevant authorities and the pension fund managing companies have boosted the voluntary savings approach, thus generating a sizable surge in the overall savings level. However, although relevant, these increases still do not represent a significant factor for the pension systems; chiefly due to the small base or starting point. As a proportion of compulsory savings, the voluntary savings total figure in Mexico is yet to reach the 2% mark (See Graph # 1).

GRAPH # 1

GROWTH OF VOLUNTARY PENSION SAVINGS IN LATIN AMERICA



SOURCE: OWN COMPILATION WITH DATA SUPPLIED BY FIAP.

TABLE # 1

THE VPS AMID FIAP MEMBER COUNTRIES
(% OF TOTAL FUNDS)

Country	VPS (% of Funds)
Colombia	8.0
Costa Rica	6.4
Chile	2.7
Mexico	1.3
Panama (2014)	59.7
Peru	0.5

SOURCE: OWN COMPILATION WITH DATA SUPPLIED BY FIAP.

Probably, Panama is the FIAP member country where voluntary savings have become more important, but even so, none of these countries can claim this is a real complement to the main issue. In a general context, and if we peruse the figures for more developed countries such as the OECD (see Table # 2), voluntary savings can represent up to 20% of the replacement rate. Indeed, voluntary savings play a very important role in achieving the replacement rate goals. Therefore, the goals appear to be more developed and feasible; since they are based on the growing awareness shown, so far, by both the workforce concerned and the institutions aimed at generating the voluntary savings.

TABLE # 2

EFFECT OF VPS IN THE REPLACEMENT RATE

COUNTRY	WITH NO VPS	WITH VPS	%
Belgium	60.9	72.1	18.4
Canada	47.9	86.1	79.7
Germany	50.0	64.7	29.4
Ireland	42.2	72.1	70.9
New Zealand	43.0	56.8	32.0
United Kingdom	28.5	61.2	114.6
The United States	44.8	81.9	82.7
Average	59.2	66.9	18.6

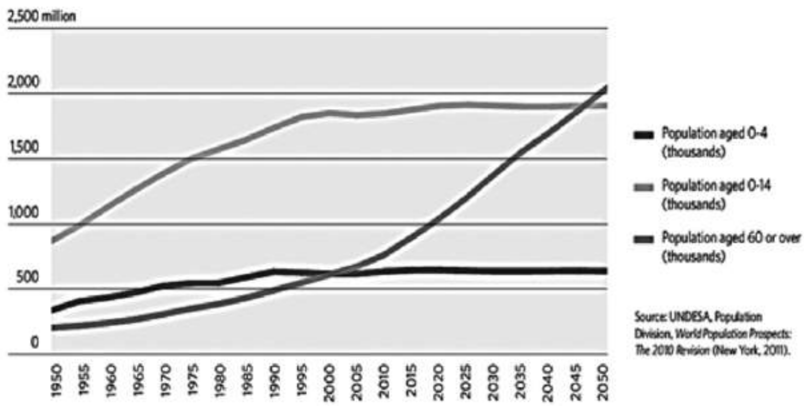
SOURCE: OWN COMPILATION USING OECD DATA.

The challenge of demographic change

This issue also becomes relevant if we bear in mind the demographic transition process currently underway in the region. The demographic transition not only presents us, almost around the corner, with a radically different society to the one we have grown accustomed to; but also makes it compelling for us to build suitable institutions and mechanisms for addressing an ageing population environment. The speed of this transformation process generates by itself a major challenge.

GRAPH # 2

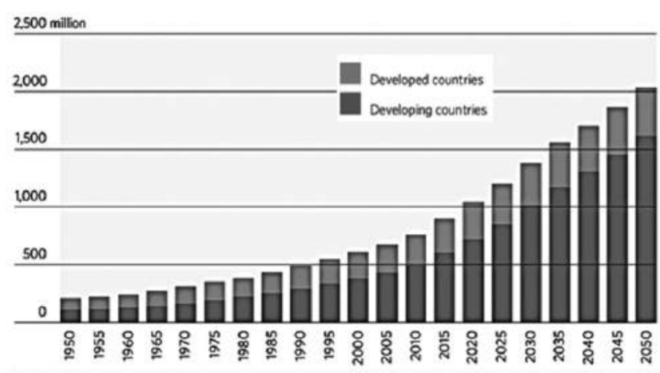
WORLDWIDE GROWTH OF DEPENDANT POPULATION BY AGE GROUP, 1950-2050



SOURCE: THE UNITED NATIONS.

GRAPH # 3

GROWTH OF THE POPULATION AGED OVER 60 AND ITS DISTRIBUTION IN DEVELOPED AND DEVELOPING COUNTRIES



SOURCE: THE UNITED NATIONS.

While almost all OECD countries had a demographic transition that took between 300 and 400 years, our countries will manage to achieve such conformation in about 50 or 70 years. This not only compels all institutions to adapt quickly, albeit in our case we still are not culturally prepared to understand a society of this nature.

GRAPH # 4

A FORECAST/PROJECTION OF THE POPULATION AGED 65 AND OVER (EXPRESSED IN 000 MILLION)

The pension system enforced some 50 to 80 years ago has benefitted those few who managed to reach 65 and over; but in many cases the oldies had to become dependants of their own children and survived thanks to a wider family structure.

In our countries, the demographic transition and the growing migration from rural areas into the cities, coupled with the steady transformation of the labour markets - which in turn encouraged a much greater mobility - deprived the elderly people from continuing their survival from their family institutions. Furthermore, we need not mention the role of the government institutions; which simply did not extend their coverage to such age brackets.

Henceforth the demographic transition becomes not only a challenge and a worrying reference factor alike, but is now performing like a motorcar braking system being applied onto the set of changes we are experiencing. Therefore, it becomes even more urgent to generate a pension system which relies heavily on both voluntary savings and a growing or continued degree of awareness; yet to be shown by the current workforce and would-be pensioners. The foregoing figures show that the dependency ratio will become increasingly difficult to cater for with the traditional systems.

As a result of the current system's shortcomings, pension savings become important. The pension systems have not been adjusted and it has become imperative to introduce an increase in the contributions; chiefly on account of the longevity rates we are currently noticing. Voluntary savings are important vis-a-via the flexibility adopted by the sundry labour markets and their prevailing informality.

In this context it is also relevant to put to good use the investment opportunities as well as harmonising the sundry pillars hitherto holding together the pension systems.

In a forum like this we would have to consider also the harmonization of all pension systems across our national borders. The issue of what is happening in Peru - and which could have been replicated in El Salvador - is likely to affect the systems of other countries. Thus it becomes compelling for us to allocate an even greater weight and adopt a steady advocating stance in favour of the voluntary pension savings.

In January this year, in Mexico, we hosted a seminar within the FIAP framework and aimed at understanding what is happening to the pension savings' schemes currently enforced in our member countries. The meeting had, as a main objective, the production and issue of a diagnosis of the overall scenario; as well as undertaking a review of the programmes being carried out. All this with a view to reaching some conclusions focused on the public policy proposals.

The first part was referred to the key determinants of the voluntary pension savings. At this point we must make a distinction between savings in general and retirement/pension savings; and within the latter what percentage of these savings is captured by the pension fund management entities. This same classification helps us understand the problems facing these savings. If there is a low savings' rate, then the ageing effect amid the general population in our countries will augur a decline in the saving rates.

Needless to say, it becomes twice as crucial to ensuring a fraction of such savings is invested and spent on pensions.

At that seminar, the models analysed and concerning the savings' determinants reflect the theoretical difficulties when it comes to identifying such savings' causes - even if the savings are private and voluntary-based - together with our chances of influencing and promoting them.

Although the overall scenario here may show as valid the typical variables concerning the income and wealth levels - and while the yield rates at times are displaying the correct signs - the econometric exercises do not show such levels as sufficiently robust while it becomes even harder to also influence them.

Financial education and promotion of the VPS approach

If we try to measure the workers' knowledge on matters related to pensions, their level of financial literacy or, more to the point, their awareness on what their future pensions entail; we are bound to come across very different results. Most people may be worried about their future, mainly because they lack the proper elements to influence their likely pensions or perhaps, because their expectations concerning their own and specific skills are very high.

Nor is it easy to tell if people feel satisfied and prepared to achieve any relevant savings goals; so it is hardly surprising their answers - whenever they consider the savings determinants - tend to focus mainly on their own income level.

In our countries, the fact people rates their level of income as most important, so not being compelled to depend on voluntary savings; and irrespective of the fact such income stems from a salary or an informal/menial job.

Another clearly identified factor is the intangibility of the benefits offered by the pension savings; with the lack of confidence in the Pension Fund Administrators (AFPs) being a major stumbling block when it comes to think about saving for their future.

Finally, there are institutional causes, i.e. there are no simple mechanisms to help materialising such savings; the absence of automatic systems is rated as a chore which compels the would-be pensioner to go an extra mile towards implementing such savings.

Furthermore, fiscal cases were also identified as missing, chiefly in the form of insufficient government incentives for promoting savings; albeit coupled with a low level of financial education.

The latter issue is clearly reflected in the fact most workers are not fully aware on how pension systems work and, worse still, being unaware of how crucial is the individual worker's decision to be in close contact with the pension entities concerned. I imagine if he/she did, he/she would demand to be fully briefed on their own savings' status and – last but not least - be prepared to make additional contributions.

To sum up, the absence of a state policy aimed at promoting voluntary savings is far too obvious and should be thoroughly addressed.

Why voluntary savings are so important? Indeed, if we manage to get the workforce to become and remain in close touch with their pension fund entities, the indirect plus factor here is to persuade most workers to start planning their individual future status; while also ensuring they develop a greater confidence in the AFPs. Ideally, and because it is in their own interest, they should become partakers of the pension systems and be keen to back them up.

Since these are the immediate results to be expected whenever promoting voluntary savings - along with such goal becoming a State policy responsibility - it should also be a compelling initiative to be shared by the fund managing entities; merely by adopting a more active participation in further promoting such VPS initiative.

Policy proposals

Among the main proposals which emerged from a seminar focused on VPS, I will now mention the conclusions we managed to get to. As regards the proposals to the authorities, the first-and-foremost one is the need to generate a State policy advocating voluntary savings within the pension systems.

The latter ranges from having in place a programme encompassing specific actions, chronology and targets pertaining savings, plus a legitimation process for all defined contribution schemes; and whereby the State grants a definite backing and boost to these systems. While providing such definite and open endorsement, the State’s political capital must be clearly perceived and rated as a positive favouring of the retirement savings schemes.

A formalization of employment must go hand in hand with a greater contribution, a promotion of voluntary affiliation by independent workers and the steady promotion of the pension savings’ culture.

There were more tangible amendment suggestions to be applied onto the legal framework describing the applicable pension system. The second key proposal calls for the generation of default schemes, whereby the worker automatically joins the voluntary savings schemes, while being supplied with a legal certainty concerning such, his own savings. As a result, these voluntary savings will be immune from seizure on account of any other debts/commitments incurred by the worker.

Going further to the point of fiscal matters, there was a mention of effective fiscal incentives, i.e. whereby the worker receives an immediate fiscal/taxation benefit whenever he/she is generating savings; as well as putting in place the relevant facilitation mechanisms for applying for and securing these fiscal/taxation benefits will be forthcoming whenever claimed for. Further to the point, in some cases, there will be a need to issue a statement or ask for a tax refund, a fact which usually inhibits the worker for securing the foregoing benefits.

With regards to the pension fund entities, the investment conclusions pointed towards more flexible investment rules, chiefly by offering a wider range of products for voluntary savings, some with exposure to higher risks and, therefore, onto higher cost effectiveness. Also, with a view to influencing even higher returns for voluntary savings, there were other suggestions advocating an altogether curbing down of administrative costs and lower commissions.

In operational terms, the suggestions were aiming for a simpler scheme pertaining sales and marketing schemes currently applied the pension management entities. The foregoing could be supplemented via the introduction of non-traditional mechanisms when it comes to making and/or collecting voluntary contributions. For instance, resorting to existing facilities – in the form of convenience stores - associated with the workers' monthly shopping at the supermarkets.

In short, the foregoing call for applying distinctly behavioural-based schemes as opposed to the traditional efforts which favour the stance of having a workforce solely aware of the pensions' financial implications.

As for the products, the suggestions advocated for a greater savings range, chiefly due to the possibility that these voluntary savings were bestowed with a more short-term output rather than having such savings steadily linked to pensions only. If we bear in mind the protracted time length required which must go by before gaining access to such monies; then in real-life such requirement becomes an inhibiting factor to any savings' incentive drive.

So, if the worker is gradually growing aware of the possibility of implementing a short or medium-term saving arrangement, and eventually such becoming part and parcel of his/her retirement pension; then him/her could become in touch with the pension managing entities and arrange for an upward adjustment of their retirement savings too.

When it comes to analysing the voluntary savings' modalities, the most important approach is to implement an automatic enrolment of all workers. Virtually all the seminar participants promoted this idea, which entails an employers' commitment to offer their staff complement a retirement savings system; albeit granting the employees a freedom to stay in such system or – if such staff really cannot or do not want to make those savings - they can withdraw from the scheme at no penalty or cost whatsoever.

Likewise, certain parametric adjustments to the voluntary savings were also suggested, so as to ensure the ceilings referred to - either fiscal/tax deductions or those concerned with the *matching* options likely to be put forward by the employer or worker - will evolve in line with the savings level of the workforce concerned.

Finally, the financial education angle was also touched upon. This is one of the most important aspects that were highlighted in this seminar. On the one hand, most attendants admitted most of the population lacks the technical skills or instruments, but above all, also lacks both a savings culture and the thorough knowledge referred to the financial institutions. In this respect, it should become a joint responsibility of the authorities and the pension management institutions to approach the workforce with a view to triggering such behavioural change altogether.

I cannot emphasize enough that this was one of the most relevant issues discussed and where the AFPs can play an important role in a close commitment approach with most of the would-be pensioners.

I must say the seminar ended with a positive connotation. While being well aware of the fact savings are low and the hindrances are considerable, some programmes presented by the seminar attendants entailed valuable and noteworthy skills for influencing the workers' collective will.

By following these guidelines, we can ensure not only voluntary savings but, more importantly, we will ensure most workers do understand their responsibility in achieving an adequate pension; a pension which is in line to their own expectations.

Therefore, when each and every worker realises he/she really understands the role of the pension systems and the relevant managing entities, he/she is most likely to become the most important advocate of these pension schemes.

COLLECTIVE VOLUNTARY SAVINGS: EXISTING EXPERIENCES, CHALLENGES AND PROPOSALS

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After reviewing other research works and presentations focused on voluntary savings quoted and disclosed in other similar fora, I noticed we have spent the past ten years and more talking about this topic: the same needs and changes yet to be addressed and/or introduced. However, very little has been secured in our forward moves, indeed very few companies are truly committed nowadays.

If we do not react, we are bound to be in serious trouble, since such do-very-little stance will be jeopardising the sustainability of the mandatory system. If we are to improve the current pensions, voluntary savings is the only way to secure such goal.

Ask for better returns from the system is difficult and, although the development of alternative assets is a sound proposition, it is also a long-winded one. We are also aware that by lowering the prices or commission rates the impact on pensions is negligible; although for most politicians is always an issue which suits them to instigate mere window-dressing drives.

What we have here is a structural problem: far too much informality and social security "gaps" due to no contributions being made at regular intervals, coupled with low contribution rates. If we are to address this state of affairs, the only viable solution is voluntary savings.

In coming paragraphs, I will analyse some illustrations of models which have been successfully implemented in some other countries, together with recommendations on how to promote such forward moves.

The first thing to assume is most people wishes to be in touch and given the opportunity to communicate their issues rather than wait to be passively supplied with information which for them, is invariably difficult to understand. They want us to speak their language and get down to their level. This is an issue we have overlooked far too long.

We have confined ourselves to technical matters while resorting to difficult terminologies, which to our would-be pensioners sounds like Middle Age jargons. While other industries are making headway, the pension funds management industry appears to be flabbergasted.

There are four key messages I wish to convey in this, my short contribution. The first must do with the fact that - throughout Latin America - we currently have a great debt with regards to voluntary savings; with less than 5% of the total workforce in the region being attached to any voluntary savings plan. Our sector is not currently advocating such approach or, at best, very few companies are doing so.

The second message refers to the concept of "voluntary savings" having a bad name, because it is not voluntary by any means. If Mexico has replacement rates of 28%, Chile 40% and, more generally, in Latin America it is less than 50%, it is wrong to speak of a voluntary decision; people are compelled to make savings!

The foregoing can be better understood with an example: Lets us imagine any of you must call on a doctor and the latter tells you: "You have a heart problem, but you can voluntarily follow a diet by merely stop eating French fries". By definition, what the doctor told you is not voluntary by any means; far from it. What you have been told, in no uncertain terms, is: "You cannot continue eating fried foods".

It sounds funny, but for some unexplained reason a critical issue for the people's future has been left on a voluntary basis. All systems take care of a compelling and mandatory bit - and since we have grown accustomed to assume such being enough - therefore we are asking people far too much and we should not bother them anymore.

However, voluntary savings is, in a way, mandatory such as the diet or exercise prescription you got from your doctor. We must advocate more energetically, irrespective of the people may feel inclined to take no notice.

Collective voluntary savings

The third message refers to the group or collective concept being the best way possible if we are to develop voluntary savings; chiefly because the individual option is only feasible to high-income segments.

The rationale behind this line of thinking is due to the fact the pension management entities can secure a profitable return for individual distribution schemes amid customers enjoying high savings' capacities. Such entities will not offer voluntary savings to a person which can only save US$ 10 per month, simply because the salesman will not earn a large enough commission to cater for his/her own transportation requirements. The only way to turn it into a massive option is via collective voluntary savings.

There are different alternatives of collective voluntary savings. It may be with a national coverage, through companies or a group of companies, but the fact is that this option is hardly used nowadays. Some initiatives such as the VCPS (Voluntary Collective Pension Savings – "Ahorro Previsional Voluntario Colectivo – APVC") in Chile has not secured good results.

However, there are companies like Principal or SURA which have done very well by turning around the model and inventing the VGPS (Voluntary Group Pension Savings – "Ahorro Previsional Voluntario Grupal APVG). This scheme simplifies and makes it affordable what the VCPS approach has failed to do. Therefore, the collective alternative can be put to a much better use.

The key role yet to be performed by the pension fund management entities

The fourth message is that our companies cannot expect the regulators or the current legal framework to do the work for us. Should we think or expect the relevant watchdogs or Members of Parliament will be taking decisions on time, then it is highly likely the opportunities to go forward will be lost.

We need to start moving now and this is feasible since there are success stories to tell. Principal and SURA are illustrations of this, but it becomes imperative we all get involved. The best business the AFP CEOs or Directors can do is to promote and sell voluntary savings to their customers. Such customers do not usually abscond; they usually stay and become promoters of the system and the pension fund management entities alike.

We must drop our current myopic way of thinking by merely assuming this is a business we can continue exploiting regardless of consequences; while graciously disregarding the fact the overall system is at risk. Voluntary pension savings is the only solution to the bad pensions our would-be Latin American pensioners are bound to receive (and not because it is the AFPs which are to be blamed for this).

The blame is closely associated to the current status of the system itself. Furthermore, voluntary savings are a mechanism that will provide the sustainability which our business is eagerly demanding.

A brief overview of Latin America

The pensions system throughout the region has been clearly a noteworthy plus factor, its positive impacts are infinite and range from the development of capital markets to the real participation of women within the overall labour market. It was only recently, when a Mexican economist explained to me the wide-ranging impact experienced by the pension systems since women have steadily come to join in the workplaces. By gaining access to a pension system, women no longer need to have many children; thus they would have to cater for their subsistence requirements once they reach their elderly age status. There is a specific issue we can rate as an economic benefit.

However, we cannot find content only with the economic aspects. If we bear in mind our main aim is to deliver the best possible pensions, then there are important challenges yet to be addressed.

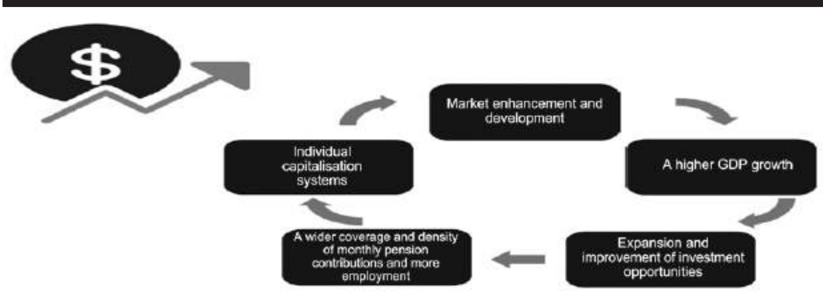
To start with, we need to lower the expectations of the people by telling them: "Your pension will not be as good as you think". The 70% replacement rate - which has been regarded as valid in Chile since the 1980s - when the current pension system was implemented - became inserted in the minds of people as if it would have been set in stone.

Such assumption has become the worst thing the current pension system has ever experienced; simply because it has been turned into a yardstick we have been currently measured against ever since.

People think they will receive a 70% worth of their take-home pay, but this it is not the case. It is far from such ideal rate. In a nutshell, we have a virtuous system, but exposed to sizable risks.

FIGURE # 1

A VIRTUOUS CIRCLE LINKING THE INDIVIDUAL CAPITALIZATION SYSTEM AND ECONOMIC GROWTH



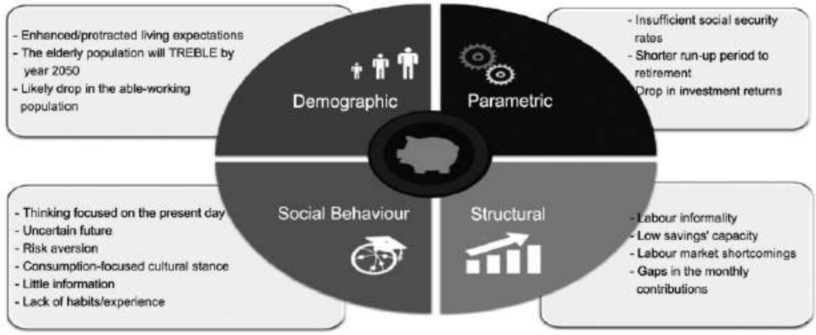
SOURCE: OWN DATA COMPILATION.

As former Minister Larraín singled out Brazil as facing an "economic perfect storm", I think we are also very close to face one within our pension system and, worse still, nothing appears to be playing for us!

Indeed, we are bound to face demographic problems; the population is growing old and living longer. Thus, they will be exposed to lower monthly pensions as there is a need to finance their protracted/extended subsistence years. We already have problems ranging from parametric ones, low monthly contributions and reduced number of years in which the would-be pensioners are entering their monthly contributions; all coupled with reduced yield rates!

All such problems put together are part of our system-design shortcomings. Likewise, throughout Latin America we appear to suffer from structural problems ranging from informal work, low savings' capacity and gaps within the monthly social security contributions. That said, the biggest problem of the most has to do with a behavioural pattern: People do not want to save!

FIGURE # 2
THE PROBLEMS WE ARE UP AGAINST



SOURCE: OWN DATA COMPILATION.

We now live in a world where saving money is perceived as something negative; perhaps with some virtues attached to it but distinctly boring and unattractive. People do not know how much they need to save.

At this point, allow me to go back once again to the doctor's illustration, whereby he will tell you: "Take the antibiotic known as erythromycin during a couple of days but I leave it to your discretion to stipulate how many times a day." No, what he actually told you was: "If you are to remove the infection, you must take one erythromycin pill a day for 11 days."

On the same token, in the world of savings, people usually do not know what to do and when that happens, the natural reaction is not to investigate but forget about it altogether!

I would wish to say this is a cultural problem which can be sorted out by resorting to education, but I am afraid this is not the case. Quite the opposite, it is solved by forcing or scaring people; by telling them literally: "If you do not save and grow old, you will die alone and penniless." This may prompt you to burst out laughing but am very serious in saying so!

When I have put forward these proposals in Chile or Mexico, I have told my audiences: "If you will not save, do not go to the doctor and do not take your prescribed remedies; the best you can do is, please, get sick and drop dead as soon as possible!" Again, it sounds funny, but people do not realize how illogical and irrational it is to worry about their body health and, at the same time, totally disregard their financial well-being.

The worst thing that could happen to most people is to end up being totally alone during their old age periods. Families no longer have four, five or six children; nowadays they have one or two at most; a fact which bears a significant impact on most pensions.

In bygone times people had more children, for them to cater for their parents' subsistence needs during their elderly life stage. But now people are mainly concerned with living only by themselves simply because - in addition to having fewer children - we have brought them up to become and feel free. Our best endeavours in life now are to provide our children – among many achievements and with a view to make them feel happy – with an apartment, a car and an overseas trip.

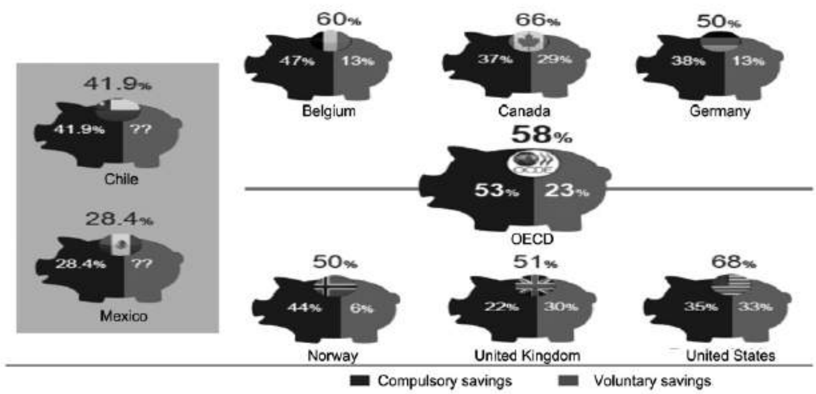
If we bear in mind the currently enforced pension system, the foregoing is a recipe for disaster. In a nutshell, we will be all alone and with replacement rates in the region of 30%.

The outlook is very critical. We all want a decent retirement and this can be secured only with the third pillar: a collective or group voluntary savings scheme. In countries which are a little more developed than our own, savings are having an impact on the replacement rates. This is a very relevant factor; it is part of a pension building process (See Figure # 3).

I have mentioned the cases of Mexico and Chile. The Mexico case is extremely worrying for two reasons: (i) the replacement rate is the lowest I have ever seen and (ii) because it has not yet materialised; it is a latent risk. The problem will begin to show up sometime during the next five or six years, with the political and social risks to be confronted by the Mexican pension scheme being bound to be huge.

FIGURE # 3

GROSS REPLACEMENT RATES DERIVED FROM THE PUBLIC, PRIVATE, COMPULSORY AND VOLUNTARY CONTRIBUTIONS
(EXPRESSED AS % OF SALARY)



SOURCE: "PENSIONS AT A GLANCE 2015", OECD.

The benefit of a collective savings scheme is its broad impact on the number of people. For instance, if a group plan is drawn up with a company like the "Falabella" chain of department stores - which throughout Latin America should have about 50,000 employees -the impact must be widespread.

Furthermore, the collective savings approach is easier and cheaper for the worker on two counts: it can be implemented via their employer and entailing simple plans. Thus, the supplier is chosen by the employer, with their prices being accessed collectively and at a lower cost. This approach is also more efficient for companies like SURA, Principal, GNP, Metlife, etc., to call onto a company and cater for 50,000 customers in one visit.

At this point, you can resort to using the so-called *social proof;* those who are familiar with behavioural economics or persuasion tactics, must know there is nothing more persuasive to witness a group of people - or the whole society for that matter - going forward and taking a decision on something. If I tell you: “This afternoon will go to a super tour along the Panama Canal” and here are five people who do not wish to go; surely the rest of the team will convince them about what they will miss if they do not change their minds and join them!

The fact almost all other work mates are saving but you and a few others are not, is something that will give you some food for thought. This and other suggestions are modern approaches to consider while in the process of convincing people about the need to put to good use some things they are not currently using; while stressing it is time to get started with such. The use of *social proof* is a relevant reason to say, “Here is one thing within the voluntary savings approach which can be interesting.”

The company or the employer would be the channel to be used whenever distributing a concept, which may entail benefits, such as a better deal for recruiting or selecting people; but particularly the prospect of retaining employees which - in the case of those rated as millennials – would otherwise leave the company after two years of thorough training at the company’s expense. Should the company concerned have savings plans in place, it should benefit from an enhanced capacity of retaining its skilled workforce.

Now, let us review the cases of six countries which have adopted certain minor decisions but which have managed to generate a great impact.

Six successful experiences

The United States

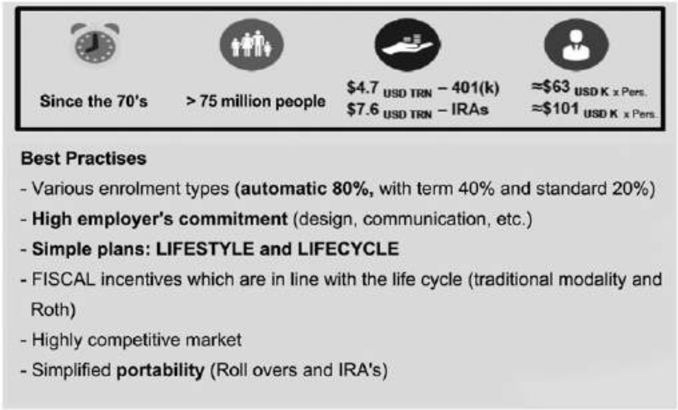
The collective voluntary savings experience in the United States - by means of Plan 401k - is perhaps one of the most successful we can mention (See figure # 4). Among the main best practices, it introduced the automatic enrolment which, in plain English means if any worker wishes to leave the system, he/she would be stating “I do not want to do any savings at all”. The real-life experience shows this approach works.

There is a very interesting presentation by Mr. Dan Ariely on this subject - which I recommend you look up in YouTube - in which he elaborates how to go about in encouraging a better rate of organ donations. The best way is that, instead of saying “Yes, I will donate” the person stipulates “No, I will not donate”. The “Yes, I will donate” option attracts a 20% support to the programme, but since people is less inclined to state: “No, I will not donate”, then the support can become as high as 80%!

These strategies must be put to good use mainly because a person, on his/her own volition, does not feel inclined to do any savings, he/she merely wants to go shopping or - worse still - does not know how to carry out any savings at all. The would-be pensioner would prefer to leave the issue in abeyance, that is will think about it at a much later and undefined future time.

Other good practices currently applied in the United States entail the development of simpler savings plans, rated as *lifecycle or lifestyle* plans and which are regarded *as target date* or *target risk*. People do not want to have many but fewer options. There is nothing worse than having to take a decision with many alternatives; you are better advised to deliver two or three options; all very simple ones. This practice works out very well, especially for people who are a little further away or aloof from the financial markets.

FIGURE # 4
THE BEST PRACTISES IN THE UNITED STATES

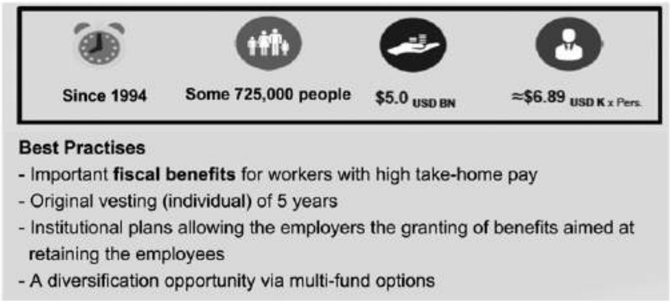


SOURCE: OWN DATA COMPILATION.

Colombia

As regards Colombia, the main benefit was a very attractive tax incentive, granting liquidity to the savings after five years (See Figure # 5). One of the reasons which explains the voluntary savings' drop are the amendments introduced to this benefit. The conclusion is that tax benefits bear a relevant impact when it comes to motivate people into making savings in a steady fashion.

FIGURE # 5
THE BEST PRACTISES IN COLOMBIA



SOURCE: OWN DATA COMPILATION.

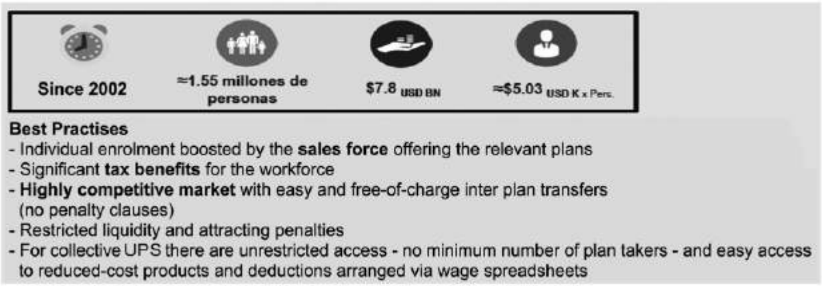
Chile

Chile's success stems from the intense market competition (See Figure # 6). The VPS scheme was enacted in period 1981 - 1982 but actually "went live" in year 2001 with the implementation of a new law (Law # 19,765), which granted access onto the voluntary savings to insurance companies plus mutual and investment funds; all which now openly compete in the marketplace. The effect was that voluntary savings' prices rose exponentially due to a surge in demand. The tax benefits did not change, in fact they have declined in recent years, but competition and access of more companies onto this industry, caused the savings to grow!

In the United States, there is a new plan that was introduced some five or six years ago and which still has few people subscribed to it, but its features are very relevant. By definition, the first one is the automatic enrolment and the second being a significant commitment from the public sector towards encouraging its sound development. This plan is already recording an interesting growth.

FIGURE # 6

THE BEST PRACTISES IN CHILE



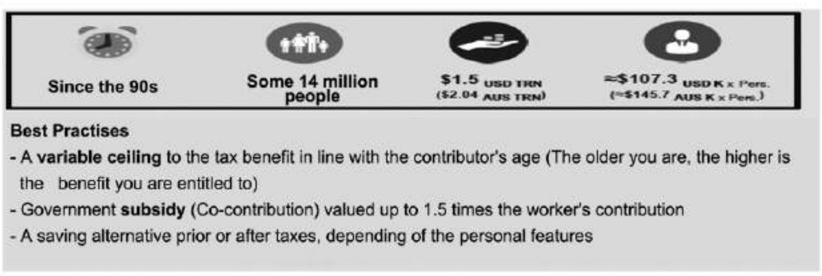
SOURCE: OWN DATA COMPILATION.

Australia

The *Superannuation* in Australia is a tremendous plan, which already has US $ 1.5 trillion worth of assets under its management umbrella. Australians are modern-minded and are not afraid to implement interesting things. The plan is a tax benefit related to age, not to any income level, so it encourages elderly people - who are the most in need – to save. Furthermore, there is a government subsidy applied to the price (See Figure # 7). It is an interesting plan worth considering.

FIGURE # 7

THE BEST PRACTISES IN AUSTRALIA

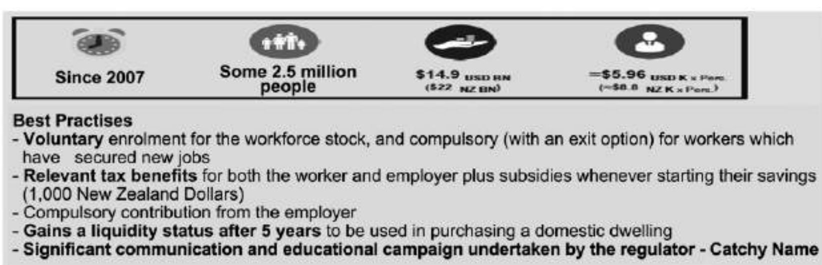


SOURCE: OWN DATA COMPILATION.

New Zealand

The KiwiSaver scheme applied in New Zealand is a very interesting one (See Figure # 8). This kiwi is not the well-known fruit but New Zealand's national bird. It got this name because it is very appealing to use it. The *KiwiSaver* name is not an acronym as the VPS or VCCT which are not readily understood. In Latin America, an equivalent name could be "*CondorSaver*", and may eventually generate a sense of closeness and tax benefits.

FIGURE # 8
THE BEST PRACTISES IN NEW ZEALAND



SOURCE: OWN DATA COMPILATION.

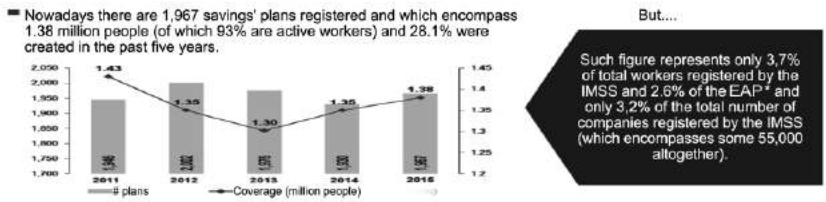
Mexico

The traditional voluntary savings' overall position in Mexico is very bad. The whole Mexican pension system (better known for its Spanish acronym AFORES – Retirement Funds' Managing Entities – "Administradoras de Fondos Para el Retiro"), manages some US$ 140 - 150 billion of which voluntary savings are less than US$ 2 billion; the latter being a negligible amount!

However, in Mexico there is an underlying cultural layer, since many of the corporate companies have developed similar plans to the successful 401k U.S. scheme; with some US$ 20 billion being hitherto managed. On the other hand, we must say it focuses on a few corporate companies and only a 3.7% of total employees are attached to such scheme. Indeed, it entails an important and very developed market, albeit it suffers from a low coverage. Likewise, it does not include the PFM (AFP) entities but chiefly investment fund managing concerns (See Graph # 1).

GRAPH # 1

MEXICAN PRIVATE PENSION PLANS



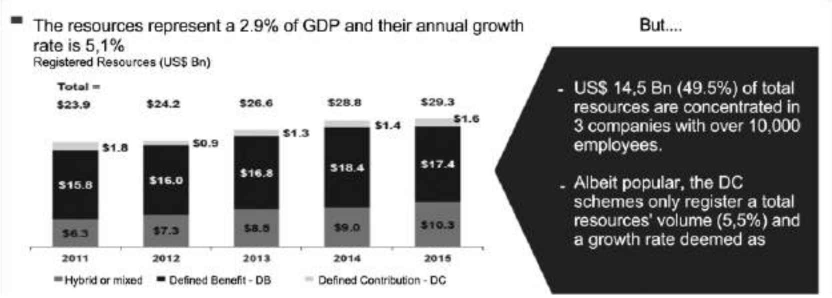
SOURCE: STATISTICAL DATA EXTRACTED FROM THE ELECTRONIC REGISTRAR OF PRIVATE PENSION PLANS – CONSAR.
• EAP: = ECONOMICALLY ACTIVE POPULATION (53,8 MILLION IN YEAR 2015).

The Columns in Graph # 2 denote the type of plan. In recent months, the defined contribution plans have experienced the largest growth due to a massive transfer of money onto such plan types; albeit those with a defined benefit still are the largest in numbers. Out of the US$ 29 billion worth of funds managed under this scheme, half come from three (3) companies, whose combined staff complement exceeds 100 thousand workers.

One of the challenges yet to be addressed by these companies is to increase the participation not only of large corporations but also smaller companies.

GRAPH # 2

MEXICAN PRIVATE PENSION PLANS



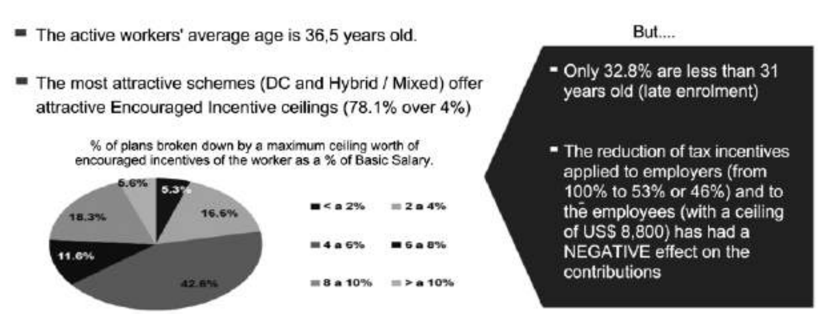
SOURCE: SOURCE: STATISTICAL DATA EXTRACTED FROM THE ELECTRONIC REGISTRAR OF PRIVATE PENSION PLANS – CONSAR.

The average age here is the relatively tender status of 36.5 years old, and what is shown in Graph # 3 is the fact most plans have a *matching* ranging from 4% to 6%, which turns them into an attractive proposition. It encompasses about 42% of the total number of plans. The balance - between 0% and 10% - is allocated onto other brackets; it is rated as a well-armed scheme. Here, Towers Watson and Mercer perform an important advisory role as well as on the choice options applied to the funds.

For you to have an idea, SURA manages about 20% of these assets. We are quite large on this issue, but it is an industry which is hardly growing. It is a success case being implemented properly, albeit we rely heavily on corporations, it covers a few customers only and suffers from a very low growth rate!

GRAPH # 3

MEXICAN PRIVATE PENSION PLANS



SOURCE: STATISTICAL DATA EXTRACTED FROM THE ELECTRONIC REGISTRAR OF PRIVATE PENSION PLANS – CONSAR.

Adjusting our language to real-life circumstances

Since Netflix has become the new way of watching television, in the banking world all transactions are made online or via cellular phones. However, in our industry the only thing which has changed is the quality of the picture, since we keep doing the same things as before and, worse still, we are lagging.

The worrying aspect is that while there are companies which are doing something different, we are not reacting to the new factors. Social changes and people's opinion go much faster than everything we currently do.

We must catch up, react and get closer to the people and understand that even though we are in a business that is technical, we cannot talk technical jargon to the people; we need to adjust our language to real-life circumstances. This is simple to understand albeit it appears difficult to implement!

To sum up my recommendations, there are two concepts that we must start working to ensure the system's sustainability (See Figure # 9). The first is to make things simpler. Since people perceives the system as very aloof they are inclined to avoiding it, it is obvious they need to understand it better.

Automatic enrolment is crucial; it is very simple and delivers excellent results. We must start using technologies; of which there are so many available which facilitate voluntary savings; and ranging from the media to the advisory tools. We can use simple products such as *lifecycle, lifestyle* and a more innovative marketing as "CondorSaver". Let us tell people: "This is what you should save additionally", not what you need to save voluntarily.

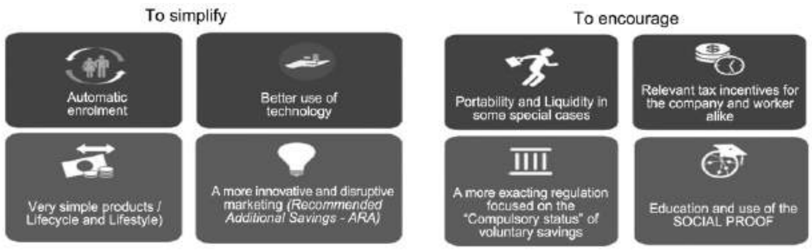
Let us also take out the word "voluntary" altogether We must talk about "recommended additional savings" instead of "voluntary savings."

My second recommendation is that we should encourage voluntary savings. If we consider the incentives - then the tax benefits coupled with the portability and liquidity options applicable to the voluntary product – do become a benefit people will value; and so, such options must be incorporated.

It also becomes necessary to have a regulation in place pushing towards compulsory voluntary savings and - last but not least - you must adopt behavioural economics and persuasion while encouraging a savings boost into the people's minds.

I reiterate the four key messages: (i) we have a debt to settle, (ii) voluntary savings "are not voluntary, (iii) we must make better use of the "collective" concept and (iv) we should not wait for regulators or the law to do the work that private operators must start implementing; ideally on a sooner-the-better basis!

FIGURE # 9



SOURCE: OWN DATA COMPILATION.

THE CHALLENGE OF ENCOURAGING VOLUNTARY SAVINGS

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The pension systems in both the developed economies and in the emerging world, are being currently stalked and becoming exposed to pressures urging them to match a number of current worldwide trends. The most significant of such worldwide trends are an enhanced longevity of people, much reduced fertility rates and low profitability yields expected from such funds over a long-term period.

The combined effect of all the foregoing factors is directly affecting the ability to deliver public pensions - similar to those we have hitherto grown accustomed to - onto the current and future generations alike. The fiscal burden related to the existing public pension systems has become unmanageable and so far, almost all developed countries, have been left with no choice but to introduce strong parametric adjustments.

Furthermore, the authorities of most of the countries concerned are now actively inviting private pension schemes to take a much further involvement in such industry and, of course, encouraging the setting in place of a much higher and better voluntary savings' scheme.

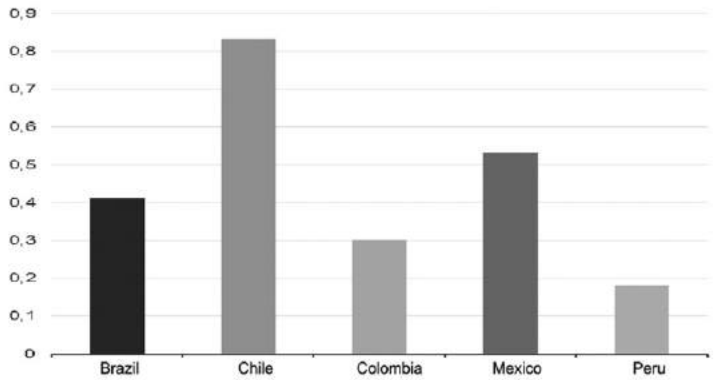
Amid the less developed or emerging economies, to all the foregoing global trends, the following structural factors must be considered. Such factors range from high informality of labour markets, low income levels caused in some cases by poverty to noteworthy weaknesses within the institutional framework. All such factors are usually intermingled with the immaturity of our political structure which - hardly surprisingly in fact - in turn have led to the adoption of sundry flawed/wrong policies and decision-taking processes.

A diagnosis of the problems which are undermining the pension-saving systems

Focusing on the Latin America case - and while using as a basis the home surveys undertaken within the Pacific Alliance member countries - we notice a distinct contrast of the Chilean pension system's participation level vis-a-vis the low participation equivalent rates prevailing in Peru, Colombia and Mexico (see Graph # 1). When we pay a closer look at the behaviour of individuals in line with their respective income tranches (See Graph # 2), it shows very clearly the ineffectiveness of the Peruvian pension system. The true fact is that the richest economic bracket in Peru - amid which it could be assumed this compulsory savings' system should be running smoothly – registers only a little over 30% of the membership as regular savers for their old-age pension requirements. As regards the other countries, the highest income bracket shows a 50% performance, with Chile showing the highest coverage figure in excess of 80%

GRAPH # 1

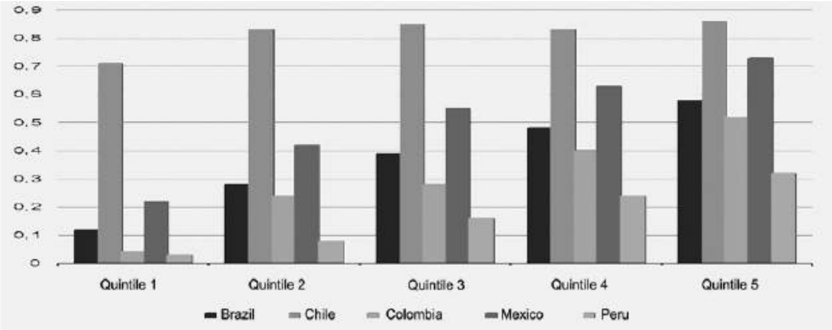
PENSION CONTRIBUTION RATIOS
(EXPRESSED AS A PERCENTAGE OF TOTAL WORKFORCE)



SOURCE: D. TUESTA (2014).

GRAPH # 2

PENSION CONTRIBUTIONS BROKEN DOWN BY INCOME BRACKETS
(EXPRESSED AS A PERCENTAGE OF TOTAL WORKFORCE)



SOURCE: D. TUESTA (2014).

The prevailing low coverage status - despite the compulsory requirement urging the compulsory contributions - particularly within emerging countries - should lead policymakers to think of schemes aimed at encouraging a greater presence of voluntary savings schemes. Of course, the existence of different realities and contexts throughout Latin America encompasses sundry challenges; with some being more complicated than others.

In this respect – and while bearing in mind the degree of maturity of the systems concerned and resorting also to a comprehensive view – the first requirement is the availability of a good diagnosis. Taking as a reference sundry schemes with different dimensions or pillars, a sound pension system must be fitted with a basic or universal assistance component and should normally encompass the entire population; all this while providing its membership with a universal coverage during their old-age years. With such foundations, it becomes feasible to set in place a mandatory savings' system which can accommodate all kinds of combinations; thus allowing for the introduction of complementary schemes that should ensure an overall better pension status.

As regards the systems with a reduced maturity degree - as is the case of the countries throughout the region – and where the care component is virtually non-existent; some of such countries are implementing initiatives which are yet to become fully operational and/or were introduced only a short while ago.

The mandatory components have a low participation amid the EAP (Economically Active Population), whereas the voluntary component – if we are lucky enough - in some cases reaches 3% of the EAP.

The next factor to be considered is the contrast between the different replacement rates. At the most, a more mature pensions' system has a replacement rate in the region of 70%, with such rate being possible when the working career profile entails a certain regularity. In other words, there are no continuous interruptions due to would-be pensioner becoming unemployed and, thus being unable to contribute to the system. This state of affairs is usually very common throughout the region and in which, if we are lucky again, we could expect a replacement rate of 40%.

For each of these schemes the challenges are different. In a mature pension system, the priority should go towards ensuring the people do save more; simply because their likely pensions - yet to be payable to them - will become smaller as years go by. This key factor compels the need to save a greater proportion of their income if they are to ensure a proper maintenance status during such additional years which will be spent either inactive and/or enduring their old age status.

The main challenge in the less mature systems, is to first set the full system in place. But it is in the voluntary savings approach where it becomes feasible to better formulate the scheme. In other words, such space could become a platform aimed at ensuring a greater participation of the would-be pensioners in these systems. In the labour market, an increase of savings is usually sought throughout the formal world, whereas in the informal universe the challenge is how to design a scheme allowing workers to join voluntarily; simply due to the fact the short term requirement becomes an impossibility in most of these countries.

Incentives which could assist with the voluntary savings' approach

In general, when we wish to find saving incentives which will work, and due to the nature of the individuals concerned, we seek to modify their behaviour. Saving habits for our old age stage – a very desirable goal for any society – usually face barriers that literature has classified into three groups, namely:

<u>Myopia:</u> It is a hyperbolic discounting of the future. The younger I am, the less interested I will be to the prospect of saving for my old age. In a nutshell, it is of most interest to me the identification of my current "self" identity than the one I will have when I am 65.

<u>Inertia:</u> There are things I have to do that are good for me, but I am prepared to leave them for later. For instance: undergo a food diet, stop smoking, going to the gym or

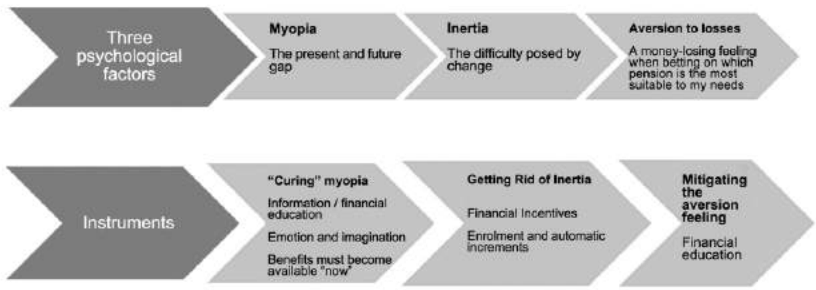
merely saying "I will do it tomorrow". The same goes for retirement, "There will be time to ponder about retirement, but not now."

Aversion to losses: During the early working years, the widespread perception about saving money is that I will not use it - because it will be allocated to my retirement. Thus I am losing it since I am not using it. It is all perceived as a reduction of my current salary and which, worse still, will not be retrieved onto me.

A series of tools have been developed and aimed at counteracting, influencing and modifying these psychological factors concealed behind human behaviour, namely: cure myopia, break inertia and mitigate aversion. These issues are related to financial incentives, all aligned vis-a-vis the field of emotions or imagination, as well as being linked to financial education (See Chart # 1).

CHART # 1

BEHAVIOUR ECONOMICS AND LONG-TERM SAVINGS:
THREE PSYCHOLOGICAL FACTORS AND SUNDRY INSTRUMENTS



SOURCE: COMPILED BY MR. DAVID TUESTA.

Matching Contribution

In the case of financial incentives for voluntary savings, which is part of a survey work I undertook with my World Bank colleagues, we invited many experts to explain how these incentives do work; particularly the *matching contributions'* schemes (Also commonly referred to as shared contributions). For instance, with regards to the coverage on voluntary plans and the associated tax benefit - as currently enforced by many OECD countries - the perception is that there is a slight positive correlation; with such factor not being rated as a mere coincidence. It is merely an illustration of how these two factors perform.

What is interesting is to note here is a cluster of countries that have an identical coverage in the voluntary contributions and tax benefits areas; albeit by comparison the incentive looks irrelevant.

So, in plain English, there is a compelling element allowing us to be adamant in stating this is a global success, but we must dig further into it and look for the details of specific cases. In that process, and while starting the review of one of the cases, it is striking to note its architecture and associated logic approach; both aimed at encouraging the *matching contribution* schemes.

Without going into a detailed analysis of each of them, suffice to note there are different ways to incorporating shared contributions schemes. As regards the matching angle, the idea is to reduce the contribution cost, so as to encourage people towards a more active participation. In turn this latter aim may well have a complementarity status within sundry areas with existing structures; such as the schemes known as KiwiSaver (New Zealand), 401K (United States) and/or Riester (Germany).

The matching contributions' schemes, may also be focused at giving the social security schemes a more noticeable presence; particularly on the problems of informality such as those prevailing in India or Colombia. Other experiences are focused on specific economic sectors such as fishing, agriculture, coffee, micro business ventures and such like.

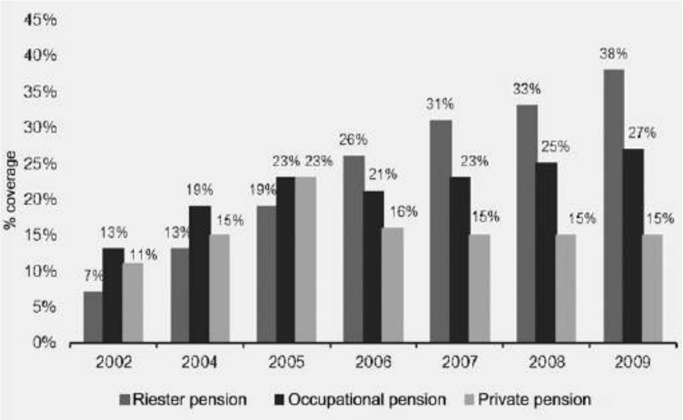
While serving with the World Bank team, my colleagues and I looked into and compiled almost 25 cases, but it was hard to state which of them really worked well. The key factor here is that we were working against a background whereby not all the systems concerned did supply us with their data; thus very much depended on the information quality we managed to gain access to. There are regulations, as in the case of Peru, which very seldom or never got implemented; thus being a mere statement of good intentions.

One of the prominent and noteworthy cases is the German experience. It is a combined approach encompassing assorted basic and small tax incentives, both addressed to whoever participates in the system. Such contribution has been gradually increasing to 4% of basic subsidy. The system entails sundry incentive types, with its highlight being the award granted for having more children; with the incentive adopting the format of larger monetary grants. Furthermore, this approach incorporates a tax deduction related to other social objectives. In the end, a person could end up being awarded a full subsidy ranging from € 3,500 to € 4,000. Graph # 3 shows the increased importance secured so far by the Riester voluntary participation vis-a-vis other existing private plans. Such scheme started very low in 2002 and is currently enjoying the pole position with a 38% market. This is so because some parameter adjustments were introduced, together with a reduction of the public pension benefits. The Riester challenge was to serve as a complement, so people would put their savings into the system and thus compensating the decline in profits granted to them by the public pension scheme.

It is estimated that by year 2040 such replacement rate will be achieved somehow. In the US case, an analysis of the effect on how the matching is implemented, shows no conclusive data suggesting this approach has been a key factor in the aim of increased participation; albeit it has been important for increasing the savings' rate of those already participating.

GRAPH # 3

RIESTER PARTICIPATION AMID PRIVATE PLANS

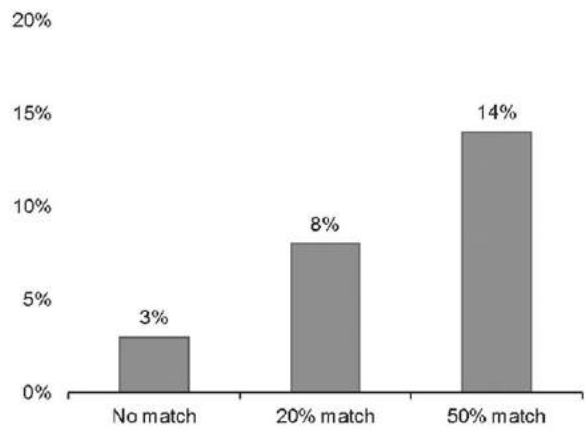


SOURCE: BÖRSCH-SUPAN ET AL (2012) AT HINZ, HOLZMANN, TUESTA AND TAKAYAMA (2013).

Still on the United States' case, a survey produced by Mrs Esther Duflo shows an increase of 5 percentage points in the participation rate whenever there are 20% increments of the *match;* and a much greater increase when the company contribution reaches 50%. However, the effects are not as conclusive as in the case of automatic enrolment.

GRAPH # 4

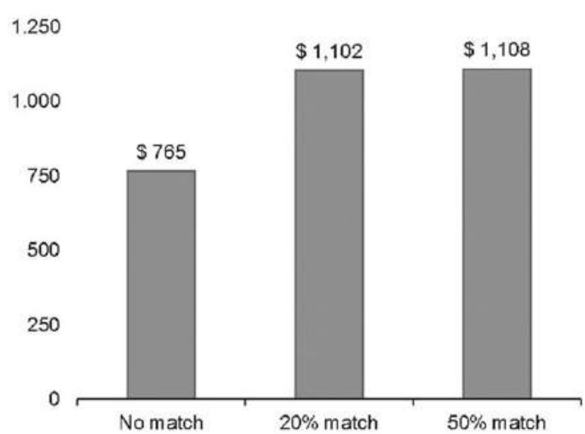
PERCENTAGE CONTRIBUTION TO IRA (INDIVIDUAL RETIREMENT ACCOUNT)



SOURCE: DUFLO ET AL (2006).

GRAPH # 5

AMOUNT OF THE CONTRIBUTION TO IRA



SOURCE: DUFLO ET AL (2006).

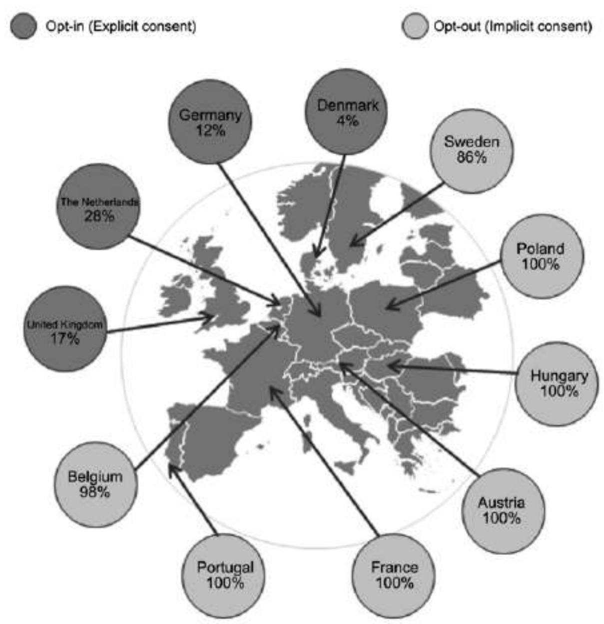
Automatic enrolment

Perhaps a way to better understand the logic of automatic enrolment is to review the case of organ donations. There are some statistics about how such practise works in countries where there is an automatic enrolment, versus those in which you need to undergo a pre-registration chore before you can even consider donating your organs.

All the foregoing is well documented and works quite well in formal economies. It is a subject on which we have more information and more conclusive answers (See Chart # 2). The fact that the system of automatic enrolment has had such positive results is a good reference for the AFP pension schemes. Needless to say the latter are better advised to consider and set in motion a similar scheme.

CHART # 2

THE CASE OF ORGAN DONATIONS IN EUROPE



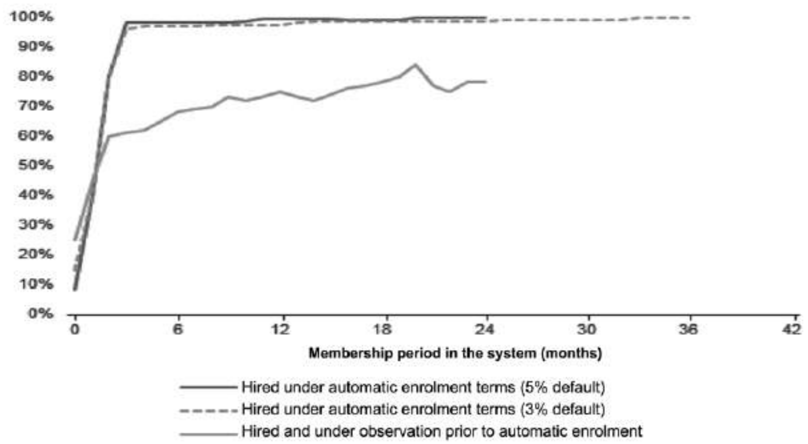
SOURCE: BENARTZI (2012).

It is possible people may decide to automatically increase their own savings in future. A series of relevant surveys undertaken in the USA, such as Beshears (See Graph # 6), mostly focused on the individual seniority at his/her workplace, shows how his/her initial participation came about at a time there was no automatic enrolment. For instance, people with a job track record of 18 years where only registering a scant 75% participation rate; which was already deemed as a high percentage altogether.

That said, when automatic enrolment was introduced - with a contribution rate of 3% - the enhanced participation went upwards to almost 100%. Another noteworthy event was when the rate was increased to 6% for new employees, most people continued to increase their own contributions in the same proportion; while also being granted an exit mechanism. The worker could leave the scheme whenever he/she felt like it, but in this case there was a small reduction, in the region of 2%, 3%.

GRAPH # 6

AUTOMATIC ENROLMENT ONTO THE US 401K PLANS

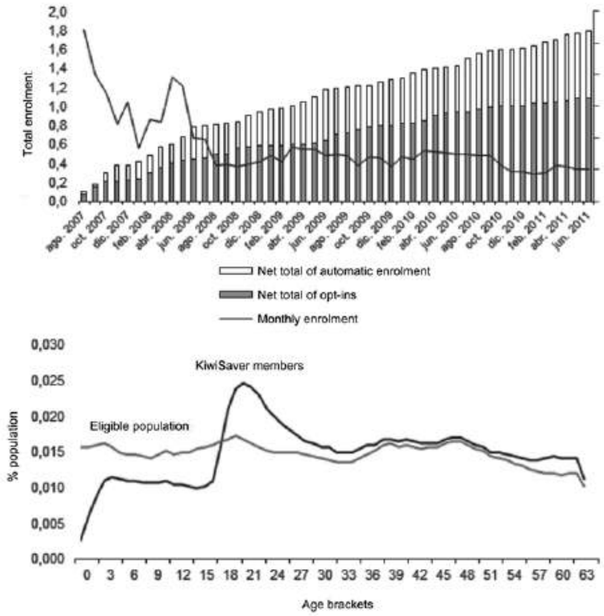


SOURCE: BESHEARS ET AL (2009).

The New Zealand approach is a comprehensive package of different types of measures, but where enrolment has also had shown up with significant effects. Graph # 7 shows the steady increasing incorporation onto the KiwiSaver system since 2007, denoting a strong participation growth within a scheme requiring the encouragement of increased voluntary savings.

GRAPH # 7

AUTOMATIC ENROLMENT ONTO THE KIWISAVER SYSTEM IN NEW ZEALAND



SOURCE: RASHBROOKE ET AL (2012) AT HINZ, HOLZMANN, TUESTA AND TAKAYAMA (2013).

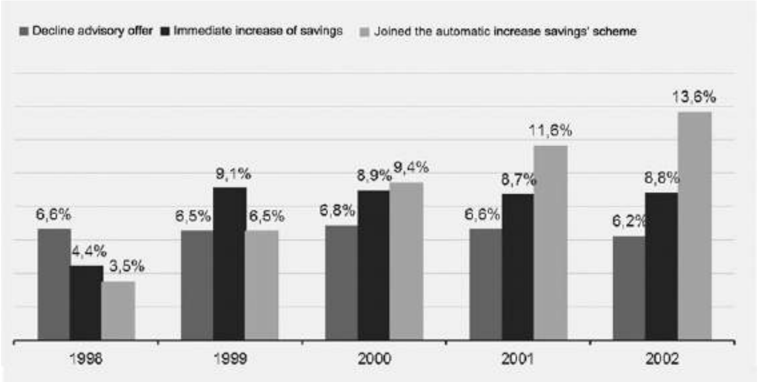
Another interesting aspect is the efficiency or effectiveness recorded by the KiwiSaver scheme. The foregoing Graph shows the eligible population invited to join the system in its early implementation years; chiefly in the form of the so-called “seed capital”. This is the government’s contribution implemented at the time the children were born. Although this Graph is reflecting a status trend below the actual eligible population, it is as from the 15 to 18 years’ onwards when the upward swing (“Statistical Hump”), becomes very visible. Thereafter, the trend remains above the eligible population.

Something that could also work well for the pension plans is the automatic increase of their savings rate. As you can easily surmise, the younger contributors to the system do not wish to save while at their respective young age brackets. However, what becomes feasible to their employers is to try and engage them, for instance whenever such employers award them their first wage increment. All this with a view to automatically increasing their contribution rate by one or two more points; with the next wage increase also entailing another two-points increase. Another alternative is to implement such encouragement either on their birthday or any special/meaningful anniversary to them.

In the US pension scheme this issue worked out well. Graph # 8 shows those would-be contributors; which in year 1998 were more "shy" and did not wish to save or commit themselves. They merely stated at the time: "I will do it tomorrow or some other time." But thereafter, by year 2002, they ended up saving much more than those who did not change their minds.

GRAPH # 8

EFFECT OF AUTOMATIC INCREASE IN THE CONTRIBUTIONS TO THE PENSIONS' PLAN



SOURCE: BENARTZI (2012)

Focused financial education

Another issue to be analysed are the regulations currently enforced in each of our countries, and then evaluate if it is feasible to perform relevant trial projects; that is prior to their formal launching onto the real world. There are some interesting things to apply onto the formal world. There is a positive relationship between an enhanced financial education and the introduction of the pension schemes within the confines of a financial inclusion (See Graph # 9).

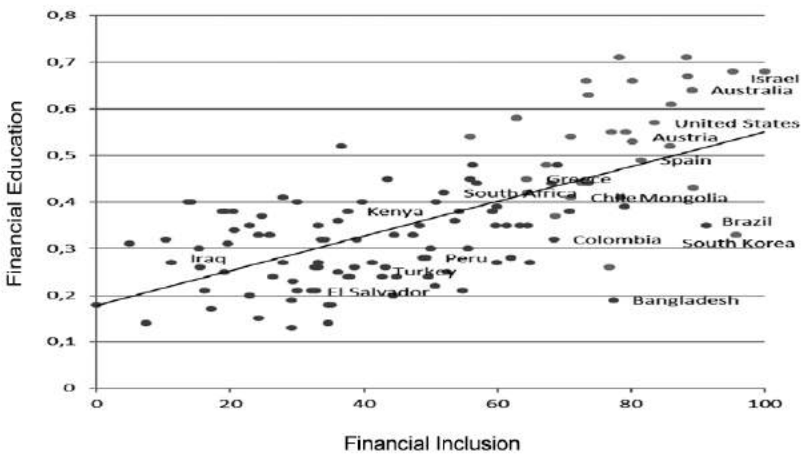
Now the key question is: How to encourage this education? The already available conclusions point towards the fact that a number of financial institutions have invested a lot of money but with very little, if any, follow-up surveys or research work as to their effectiveness.

The widespread suspicion suggests there has been a waste of money in all what is concerned with training programmes and/or financial education alike. Whenever the relevant advisory or education schemes are taught using a much more focused approach and are related to the real needs of the people concerned, then the results really become efficient altogether.

Plans to educate children as from their schooling time sound great, but the subsequent monitoring drives have shown they are having no effect whatsoever. So it was the case in the USA, where the systematic conveying of ideas concerned with saving for old age onto a public showed the following: Most people felt it either was not necessary for them to have it, were not interested and/or were thinking about something else. Definitely they were not keen of committing themselves to a scheme they could only collect from only when they got to 65. In a nutshell, this is a subject yet to be reviewed.

GRAPH # 9

FINANCIAL INCLUSION AND FINANCIAL EDUCATION



SOURCE: MITCHELL AND LUSARDI (2014) / CÁMARA AND TUESTA (2016).

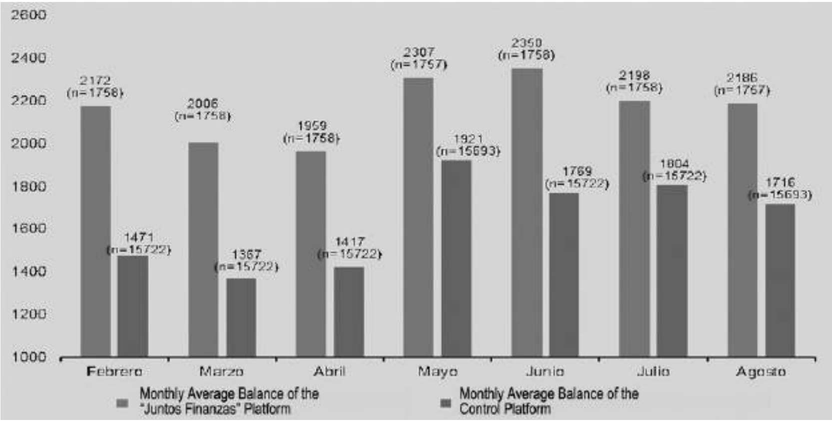
Mobile or cellular phones as inclusive instruments

An experiment we have been working on within the BBVA's "Juntos Finanzas" platform (Loosely translated as "Finances Together") entails the key digital issue element. The more inclusive digital device is the mobile or cellular phone, whose impressive penetration rate ranges from 80% to 90%, even within the poorest countries. As regards the savings' issue we started working with the lowest income population brackets. We managed to set up – via SMS and reminder notes - a relationship based on the use of the simplest types of cellular phones.

In this way we have been steadily conveying a myriad of saving tips. The results were very interesting and could not have been better. Indeed, everyone wanted to participate and receive counselling. Graph # 10 clearly shows the balance increments experienced within the control and participant groups alike. Nowadays, we have reached an average in the region of 25% and are implementing the same pensions' scheme in Spain and Mexico, with a view to consider how we can move further ahead in this line of voluntary savings.

GRAPH # 10

PAYROLL GROUP FOR JANUARY - AVERAGE MONTHLY SALARY FOR EACH MONTH CONSIDERED IN THE PROGRAMME



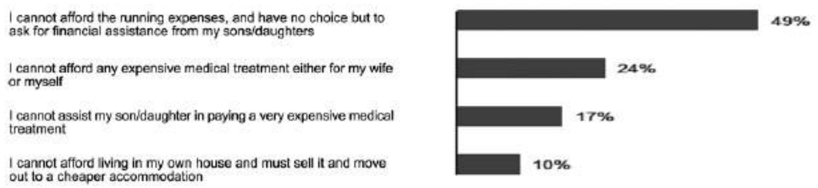
SOURCE: JUNTOS- FINANZAS BBVA (2015).

The next issue to consider is the suitable spearhead/vanguard drive, aimed at highlighting to the people how bad their future will be unless they do start saving today. Such people were asked to imagine the best and worst case scenarios.

Contrary to what we might think about the likelihood of scared people being more keen to enhance their involvement, we soon became convinced that - by deluding people with a unique but positive scenario of what will be their future when they reach 65 - such people are more likely to implement their savings. This reaction is in sharp contrast to the stance shown by those which were shown a negative scenario (See Charts # 3, 4 and 5).

CHART # 3

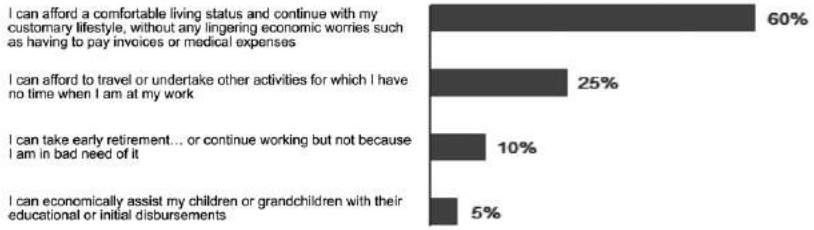
THE WORST SCENARIO WHEN GOING ONTO RETIREMENT



SOURCE: BENARTZI (2012) / BENARTZI, PREVITERO & IYENGAR – ING RETIREMENT RESEARCH INSTITUTE, 2011.

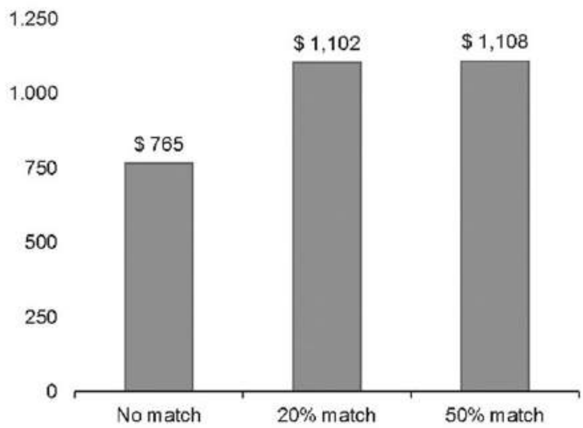
CHART # 4

THE BEST SCENARIO WHEN GOING ONTO RETIREMENT



SOURCE: BENARTZI (2012) / BENARTZI, PREVITERO & IYENGAR – ING RETIREMENT RESEARCH INSTITUTE, 2011.

CHART # 5
LIKELIHOOD OF INCREASED SAVINGS



SOURCE: BENARTZI (2012) / BENARTZI, PREVITERO & IYENGAR – ING RETIREMENT RESEARCH INSTITUTE, 2011.

The team preparing the *Save More Tomorrow* (SMART) schemes have also developed a mechanism known as FaceTool; which is rated as a kind of complementary scheme to the typical calculators.

The people are invited to sit down, then they are shown an ePAT platform and told; "Do you want to save a little more? Let's play with this". Thereafter they are shown their own real photo next to another digitally mastered and looking as if already aged 65. Then they are told: "If you save this rate, there will be a retribution; that is a higher replacement rate." Finally, the people reactions are put to the test. In the test cases applied to 30 people, and as a result of them been shown their current status in a straightforward fashion, 30% of them were keen to save.

At BBVA we are working also in an experiment within the confines of “My Retirement” initiative. In a three-minute video some people are applied makeup and transformed, albeit not given further details of what this is all about, and then showed their image in a mirror. Their reaction ranged from "I see my mother" to "I see my grandmother" statements. Thereafter, they were briefed on the pensions issue and their potential willingness to save; the tangible result was their enhanced willingness towards implementing pension savings.

As I stated beforehand, most successful experiences are to be found in the formal world. Indeed, there are things there we must take advantage and put to good use within the pension schemes we are currently managing. Further to the point, we have to hand a number of initiatives which should work and even increase the automatic savings. Such approach should prove to be an interesting measure worth considering. The big challenge is how do we make them work in the informal world.

BEHAVIOURAL SCIENCES AND PENSION SAVINGS

KARINA LORENZANA[1]

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I represent Ideas42, a non-profit organization devoted to applying behavioural sciences in solving the most difficult worldwide problems; with the ultimate goal being the improvement of living conditions for millions of people.

Behavioural sciences and behavioural economics have proven to be powerful tools when it comes to addressing complex social problems; and can be applied also onto pension systems; chiefly with a view to helping pension fund managers in persuading their account-holders to save more.

However, before addressing specific solutions, I would like to summarize in an image (See Image # 1), the sundry decades of findings associated to behavioural sciences.

IMAGE # 1

This is one of my favourite snapshots since it thoroughly captures the essence of human behaviour. Yes, it seems that these men are going to the gym to undergo their FT routines, but in doing so have decided to take the escalator!

In this picture you can easily appreciate we all are inclined to be inconsistent and unpredictable/complex; with the context and environment in which we operate having a great impact on our behaviour. In this case, with the staircase right in front of them, the athletes got onto the escalator, even if their choice was not consistent with their prime objective of improving their health status.

There are many cases whereby we do things that appear inconsistent with our goals, and saving for our retirement time is no exception. Although it is perhaps hardly surprising to note people are complex by nature, it is very powerful to be fully aware of such inclination. Indeed, if we are to understand how people actually behave, we can apply this knowledge while drawing up the relevant solutions.

Generally, most of the current programmes and policies are designed under the assumption of a standard behaviour model. When we have to adopt a decision, we ponder the costs and benefits, so our subsequent actions and results should reflect our choices and preferences.

By means of a behavioural analysis, we have come to understand that decision-making is much more complex; chiefly because our behaviour is subject to sundry and assorted elements within our environment and context. This means our actions do not always reflect our preferences. For instance, if someone is not saving today for his/her retirement, it does not mean he/she does not want to do it, or is not trying at least. If we assume, as shown in the standard model (See Image # 2), all our behaviour falls into line with our preferences; then it will be very difficult to find effective and lasting solutions.

IMAGE # 2

STANDARD MODEL

SOURCE: PRODUCED BY THE AUTHOR.

The standard model leads us to offer solutions ranging from providing further information to delivering financial incentives; while assuming people will always react in line with their interests. However, through the behavioural model (See Image # 3), we can expect the surge of sudden barriers or elements that may derail us from our goals. With this approach we can identify the barriers likely to face the desired behaviour, and thereafter design suitable solutions in line with the real-world human behaviour.

IMAGE # 3

BEHAVIOURAL MODEL

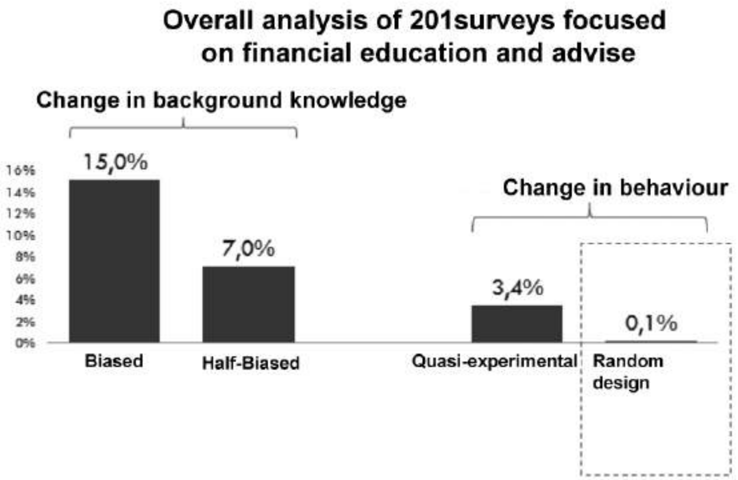
SOURCE: PRODUCED BY THE AUTHOR.

So how can the behavioural sciences be applied to the challenges which pension fund managers are trying to sort out? Particularly when we are aiming to reach onto the middle and low income workers plus those classified in the self-employed category?

First, let us analyse the standard model usually applied by civil servants, whenever they need to draw up the solutions aimed at changing the consumers' behaviour. The first thing that usually arises is to supply the people with more information for them to change their behaviour; this is a relatively easy solution. To the left of Graph # 1 we notice the financial education and counselling programmes can change, to some extent, the level of knowledge. However, on the right, we notice the supply of more information does not necessarily change the behaviour itself. This is due to the fact that knowing what to do is simply not enough when it comes to taking actions.

GRAPH # 1

THE INFORMATION BY ITSELF DOES NOT CHANGE OUR BEHAVIOUR



SOURCE: FERNANDEZ, LYNCH, & NETEMEYER, 2014; HTTP://WWW.USFINANCIALDIARIES.ORG/83-CHARTS/

To test this idea, we modified a financial education session so as to enable taking immediate steps toward the habit of saving - including automatic transfers and payments - which increased overall savings by 20%.

Financial incentives are another popular solution, which does not necessarily boost behaviour as we would expect. For instance, whenever matching the people's contributions (*matching contributions*), such move is bound to become reflected in an increase of the number of people who start saving; albeit it does not increase the overall savings' amount. On the other hand, lotteries have an impact on the level of savings, which is proportionately higher than the value of the prize offered.

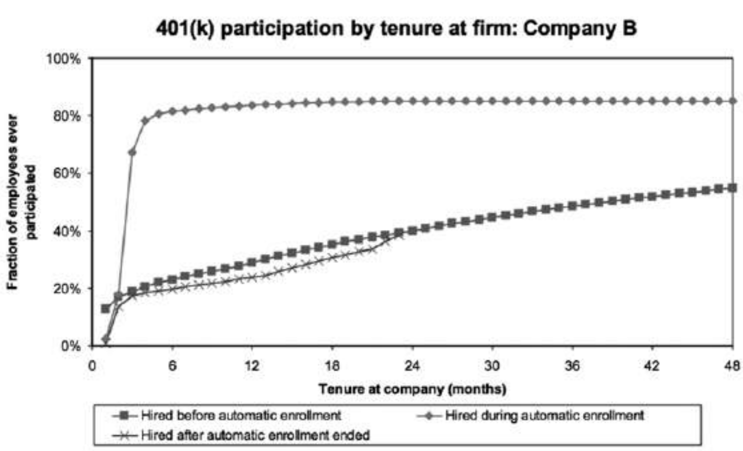
Behavioural sciences represent a powerful tool when it comes to improving the design of programmes, products and policies alike.

If we are to increase retirement savings, Graph # 2 is a classic example of how to use the default and automatic enrolment approach. The automatic enrolment of people in a savings plan doubled the number of people which are now saving; with such upswing becoming equivalent to an increase in excess of 40 percentage points.

But we cannot blind fold ourselves and apply behavioural solutions at leisure; instead we must understand first the context in which decisions are made. A relevant illustration of this assertion is to quote the case when the US government attempted to get tax refunds to be automatically converted into savings bonds; the nett result was savings did not increase. What went wrong then?

The moving spirit here was people did not intend to save such tax refund money. Quite the opposite, people had already in mind how they were going to use it for or allocate to. The behavioural approach requires a sound understanding of the problem's context. At Ideas42 we carefully diagnose each situation and, only after doing so, implement the appropriate solution.

GRAPH # 2
PARTICIPATION IN FUNDS AIMED AT RETIREMENT SAVINGS



SOURCE: CHOI, LAIBSON, MADRIAN, AND METRICK, 2014.

Now, how can we design solutions that are simple, affordable, scalable and do reach everyone, including those classified in the middle and low income brackets? Our team has been working in the Mexican pension system along with CONSAR ("Comisión Nacional del Sistema de Ahorro para el Retiro" - National Commission of the Savings System for Retirement) and the Afores (Retirement Fund Administrators); chiefly with a view to increase retirement savings. To this effect, we are using our exclusive process for identifying why people do not save enough and, thereafter, design innovative new solution processes.

Our formative work in Mexico entailed dozens of interviews with people from all segments of the population; a process which led us to identify various behavioural factors which should answer this question. We noted no visible indicators compelling us to consider retirement (but see below).

By being immersed in the current circumstances (In plain English: To be here and at this point in time), appears to refrain people from taking any action or initiative for their own future. Also the seemingly widespread uncertainty about the future also discourages action; with people not specifically thinking about their future. Last but not least, we discovered the AFORES entities are not included in any option point at the time most people were thinking either about their savings or their future.

A finding I wish to highlight here is that it becomes difficult to act on long-term goals. The idea of long term savings is partly to blame because such proposition is perceived as a loss in the short term. In a nutshell, we allocate too much priority to what entails an immediate consequence to ourselves while disregarding what will happen to us in the future.

If you ask a person today how much he/she would pay to receive a 100 Pesos' ticket, of course they would say 100 Pesos. But what if a person is asked how much he/she would pay to receive a 100 Pesos' ticket in a year? What do you think he/she would say? Having to wait that long leads people to allocate it a value of only 40 Pesos; so high is the money discount rate in their minds and which is compelling people to take it for granted vis-a-vis a year-long horizon!

When we interviewed the Mexican account holders, we realized that their "today-and-now" inclination is very easily perceived. For instance, we were told once: *"Thanks to our remarkable indolence, I can hardly imagine any person is currently thinking about retirement; we invariably push to one side such issues even if they matter most." We also heard the following: "Unfortunately I do not think anyone (amid my acquaintances) is preparing for his/her retirement period. They allocate little importance, if any at all, to such future event."*

Stemming from the foregoing quotations recorded in Mexico, we can be adamant in stating the behavioural approach does help us to identify most barriers standing in the way to retirement savings. Through this understanding, we can go forward and start designing the products and services better suited to the human condition. Our Image # 4 entails our high-level design recommendations; all aimed at increasing the retirement savings in Mexico.

IMAGE # 4

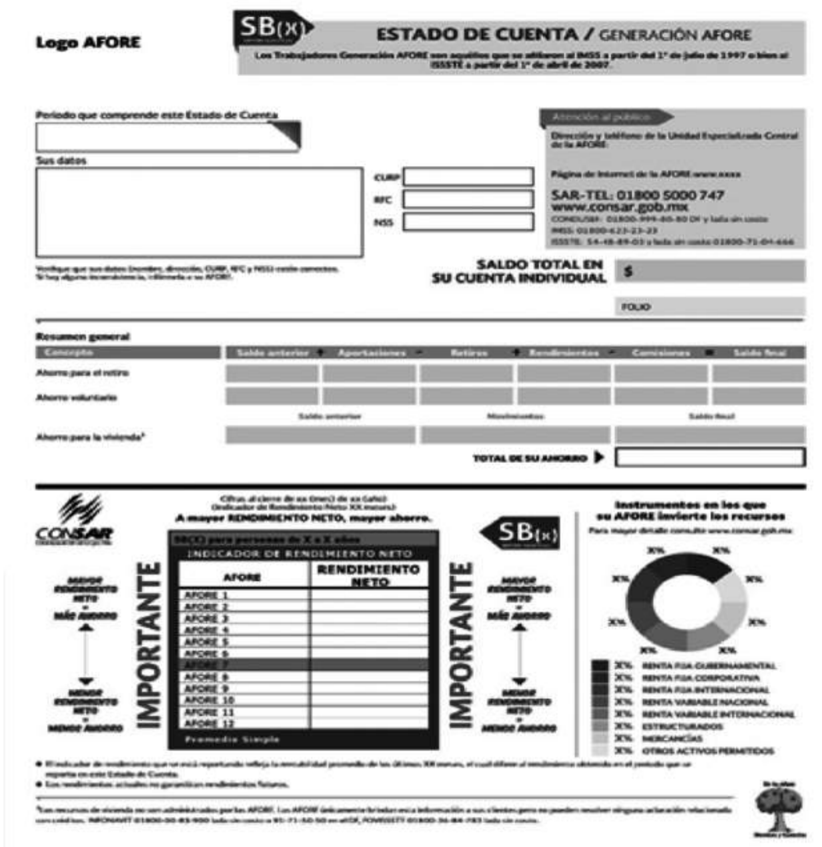
DESIGN RECOMMENDATIONS FOR INCREASING SAVINGS

SOURCE: PRODUCED BY THE AUTHOR.

I am now introducing you to our redesign of the customary Statement of Account.

IMAGE # 5

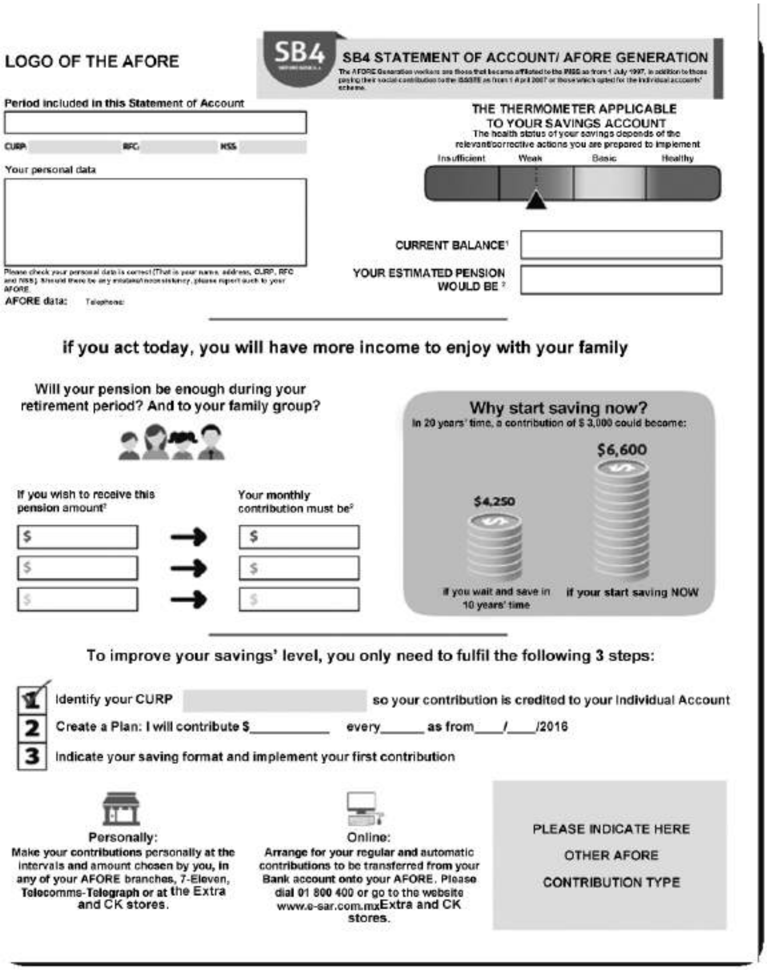
THE CURRENT STATEMENT OF ACCOUNT IN MEXICO



SOURCE: PRODUCED BY THE AUTHOR.

IMAGE # 6

OUR REDESIGNED STATEMENT OF ACCOUNT FOR MEXICO

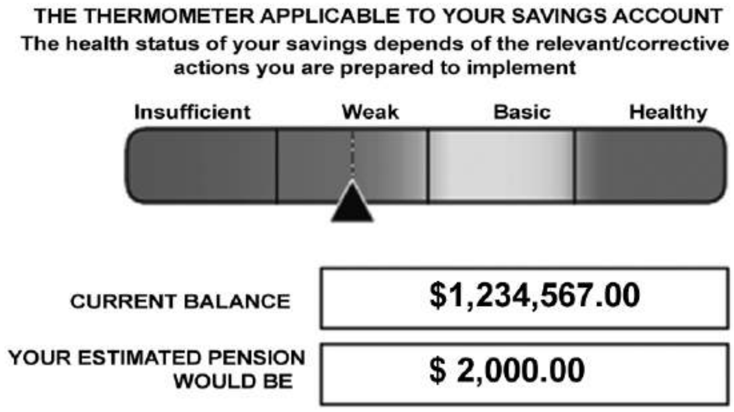


SOURCE: PRODUCED BY THE AUTHOR.

Image # 5 shows the original version of the Statement of Account and Image # 6 is an illustration of the proposed new format. The first key issue we identified during the diagnostic process, was the vast number of people which are totally unaware of the health status of their own retirement savings. If any would-be pensioner is unaware his/her account is not looking healthy enough, he/she is not likely to take any corrective action.

Thus, one of the pillars of the new Statement of Account performs as a thermometer aimed at specifically indicating the health status as far the account holder retirement is concerned (See Image # 7). Once the accountholder becomes fully aware he needs to save, the next question is when to start doing so.

IMAGE # 7
UNDERSTANDING WHY WE ARE SAVING



SOURCE: COMPILED AND PRODUCED BY THE AUTHOR.

Since saving for retirement is very easy to postpone, we have included Graph # 3 to stress the importance of start saving now. The coins' graph shows that the longer they take to start saving, the more difficult it will become to reach their retirement savings' goals.

GRAPH # 3

LEVERAGE TO START SAVING TODAY

SOURCE: COMPILED AND PRODUCED BY THE AUTHOR.

The next element helps the account holder to determine how much he/she needs to save. In the absence of basic rules, please note this stage can prove tricky, even overwhelming.

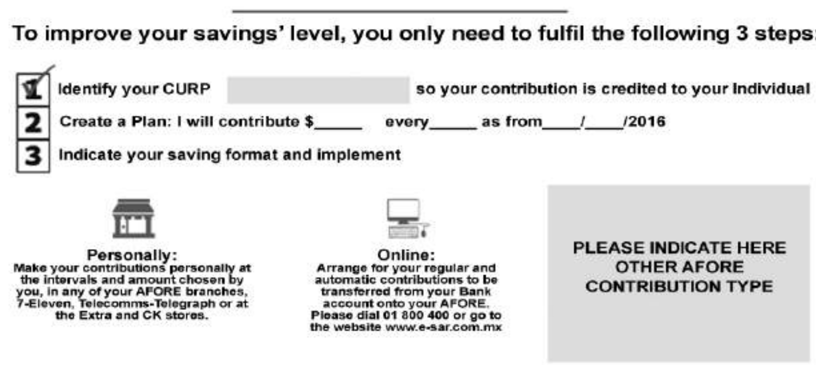
While using this element, the account holders can view their personalised options telling them how much they wanted to spend each month into the future; together with the corresponding savings' amounts required from them if they are to achieve such goal.

Since many people usually and mistakenly assume that all saving schemes are very much the same; we have included also suitable and relevant comparisons. This with a view to ensure it can be clearly demonstrated to them the benefits of saving via AFORE; that is whenever compared to other saving options such as short-term saving accounts or when merely placing their money under the mattress.

Finally, and because we are well aware of the need to creating links between information and action, we have added a key element to the new Statement of Account, and specifying very clearly the actions yet to be implemented (See Image # 8). Further to the point, we added a list of actions to be carried out when implementing a savings' plan. The reason for this arrangement is to turn such savings' plan into a most powerful tool for encouraging this practice; thus pre-emptying the possibility of it being dropped or abandoned altogether.

IMAGE # 8

CREATE A SPECIFIC PLAN


To improve your savings' level, you only need to fulfil the following 3 steps:

1 Identify your CURP so your contribution is credited to your Individual

2 Create a Plan: I will contribute $_____ every_____ as from____/____/2016

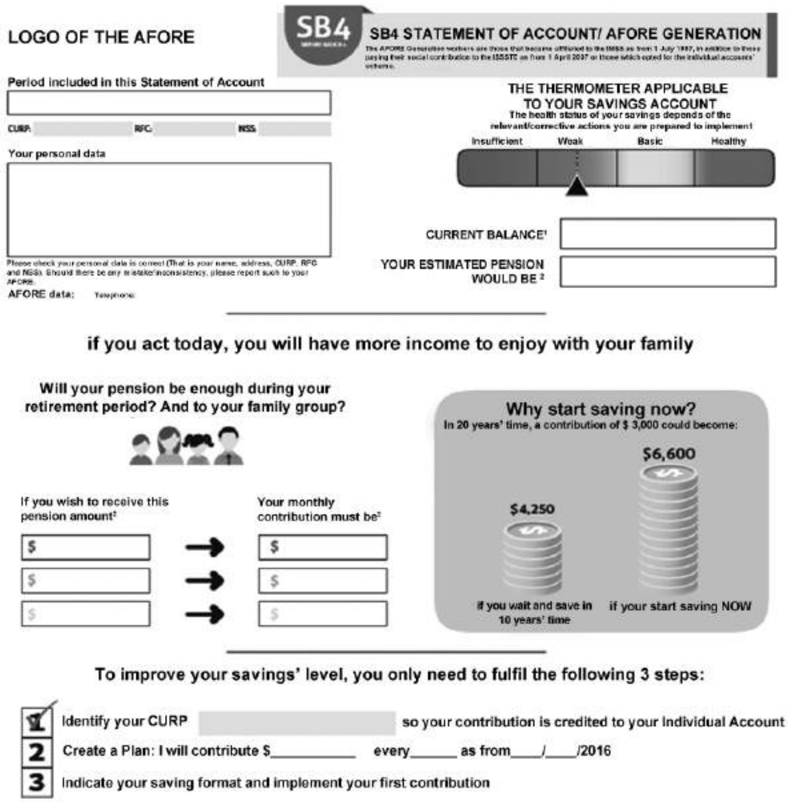
3 Indicate your saving format and implement

SOURCE: COMPILED AND PRODUCED BY THE AUTHOR.

In order to ease this step, we have pre-loaded the first elements of the savings' plan, so it can be proven to the account holder that he/she is already on the track to much enhanced savings. Furthermore, within the next few weeks we will begin the trial run of an intervention plan for a new Statement of Account and which entails over 100,000 account holders in Mexico (See Image # 9). We now know that a large-scale behaviour change calls for an integrated approach; this to ensure it is sustainable over time. To this effect and in coming months, we will be implementing another four trial-run drives of this kind; all to be Mexico-based. By putting to good use our behavioural sciences' findings, we believe there is now a great opportunity in Latin America to secure a positive impact on the retirement savings' issue.

IMAGE # 9

THE TRIAL RUN PLAN



LOGO OF THE AFORE

SB4 STATEMENT OF ACCOUNT/ AFORE GENERATION

The AFORE Generation workers are those that became affiliated to the IMSS as from 1 July 1997, in addition to those paying their social contribution to the ISSSTE as from 1 April 2007 or those which opted for the individual accounts' scheme.

Period included in this Statement of Account

CURP: RFC: NSS:

Your personal data

Please check your personal data is correct (That is your name, address, CURP, RFC and NSS). Should there be any mistake/inconsistency, please report such to your AFORE.

AFORE data: Telephone:

THE THERMOMETER APPLICABLE TO YOUR SAVINGS ACCOUNT

The health status of your savings depends of the relevant/corrective actions you are prepared to implement

Insufficient Weak Basic Healthy

CURRENT BALANCE[1]

YOUR ESTIMATED PENSION WOULD BE [2]

if you act today, you will have more income to enjoy with your family

Will your pension be enough during your retirement period? And to your family group?

If you wish to receive this pension amount[2]		Your monthly contribution must be[2]
$	→	$
$	→	$
$	→	$

Why start saving now?

In 20 years' time, a contribution of $ 3,000 could become:

$4,250 — If you wait and save in 10 years' time

$6,600 — If your start saving NOW

To improve your savings' level, you only need to fulfil the following 3 steps:

1. Identify your CURP so your contribution is credited to your Individual Account
2. Create a Plan: I will contribute $__________ every______ as from____/____/2016
3. Indicate your saving format and implement your first contribution

SOURCE: COMPILED AND PRODUCED BY THE AUTHOR.

CLOSING LECTURE

CLOSING LECTURE

DULCIDIO DE LA GUARDIA[1]

1 *Mr. Dulcidio is currently serving as Minister of Economics and Finance for the Republic of Panama. He graduated from the Florida State University with a Degree in Business Administration; he holds also a Master's Degree in Business Administration awarded by the Loyola University at New Orleans. Mr. de la Guardia has a Chartered Financial Analyst Degree bestowed to him by the CFA Institute Charlottesville, Virginia, USA. His professional experience entails being a member of the Board of Directors of the Panama Stock Exchange, ELECTRA Noroeste, the AFP entities known as PROGRESO and PROFUTURO, Primer Banco del Istmo SA, HSBC Bank, Central Latinoamericana de Valores, Corporacion Andina de Fomento (Andean Industrialisation Board) and the Panamanian Chamber of Capital Markets.*

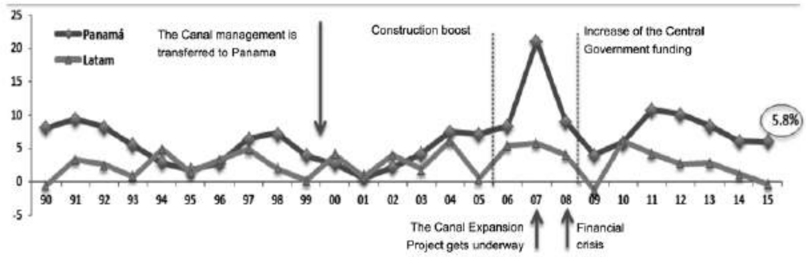
This paper discloses the key indicators pertaining the overall economic performance of Panama: and then goes on to highlight its fiscal performance and comparative advantages; tells you where are we heading to and finally it does let you have some relevant conclusions.

Panama has led the economic growth in Latin America since 2004, with an average 8% GDP annual growth. According to the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), in year 2015 Panama managed, yet again, to lead the economic growth throughout the region.

Open unemployment stood at 3.8% of the economically active population; thus in practical terms, Panama currently enjoys a very welcome full employment status. When comparing the level of unemployment with its peers in Latin America, ours is clearly the lower one!

GRAPH # 1

PANAMA GROWTH VS GDP GROWTH FOR LATIN AMERICA DURING THE PAST 25 YEARS (EXPRESSED AS % GROWTH / YOY)



SOURCES: ECLAC, INEC, CELSA AND BLOOMBERG.

TABLE # 1

UNEMPLOYMENT RATE

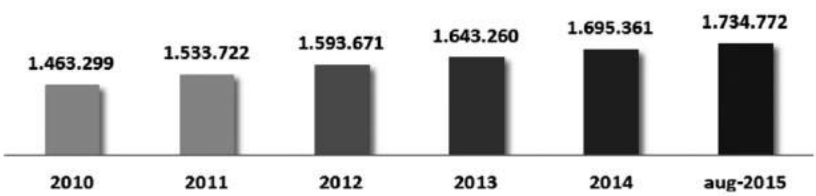
Panama	Paraguay	Costa Rica	Mexico	Brazil
3.8%	8.0%	6.4%	4%	7.4%

SOURCES: ELAC, INEC, CELSA AND BLOOMBERG.

The workforce experienced an increase of 39,400 staff in period 2014 - 2015, up to a new grand total of 1 million 734 thousand people.

GRAPH # 2

NUMBER OF PEOPLE EMPLOYED
2010 - 2015

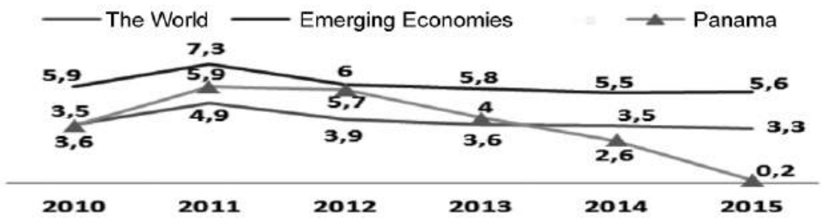


SOURCES: ECLAC, INEC, CELSA AND BLOOMBERG.

Since its peak reading in period 2008 – 2009, inflation has been continuously decreasing and last year stood at 0.2%. With Panama being a dollarized economy, its historical inflation evolution has been closely linked to the US inflation rate.

GRAPH # 3

INFLATION (%)
2010 – 2015



SOURCE: ECLAC, INEC, CELSA AND BLOOMBERG

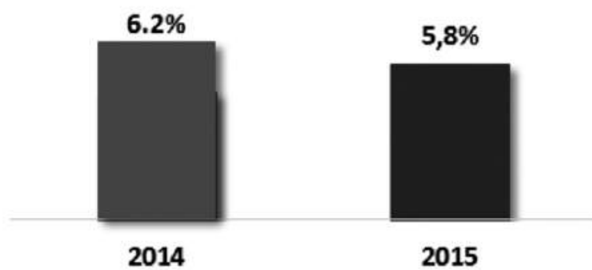
Clearly, the decline in oil and energy prices - Panama is a net importer of energy- has had a major impact on the ratio of price indicators; but the most important feature is such decline has continue unabated and, until April this year, inflation in Panama stood at 0.18%.

To sum up, Panama is growing close to its economic potential, with closely controlled inflation levels. This is certainly one of the Government main goals if we bear in mind, as a well-known fact, inflation is tantamount to a tax being applied to the most vulnerable population brackets!

Last year the country's GDP grew by 5.8%; which was a slight growth decrease compared to the year 2014 equivalent figure (6.2% - See Graph # 4). So here again, we are leading the growth league in Latin America. The most dynamic economic sectors were: electricity and water, financial intermediation, real estate, construction, mining plus transport and telecommunications (See Table No. 2). On the other hand, our less-dynamic sectors were fishing and agriculture (fishing showed a reduction), livestock and the primary sector (which experienced a slight increase of 0.4%).

GRAPH # 4

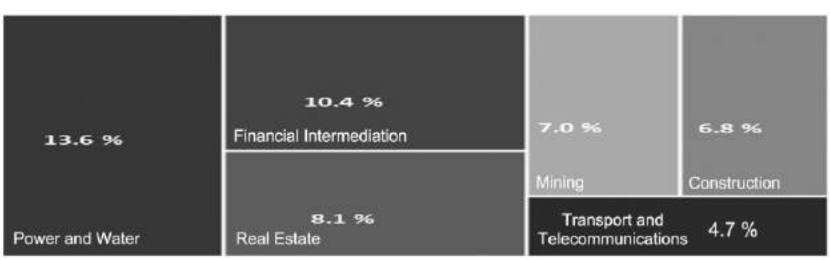
GROWTH RATE
2014 VS. 2015



SOURCES: NATIONAL STATISTICS AND CENSUS INSTITUTE AND THE IMF.

TABLE # 2

THE ACTIVITIES WHICH SHOWED THE BEST GROWTH RATES

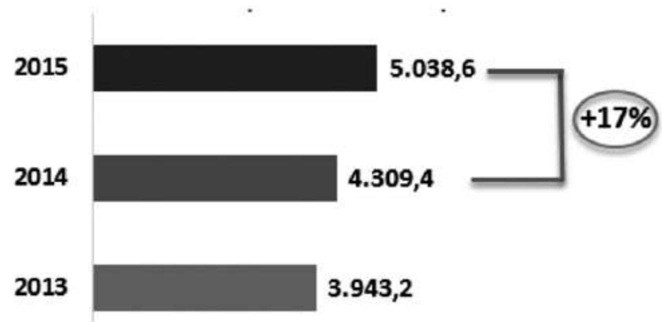


SOURCES: NATIONAL STATISTICS AND CENSUS INSTITUTE AND THE IMF.

Direct foreign investment during year 2015 recorded a highest level ever, with US$ or Balboas 5,038 million; an increase of 17% compared to equivalent figure for year 2014.

GRAPH # 5

DIRECT FOREIGN INVESTMENT IN PANAMA
2013 – 2015
(IN US$ MILLION)

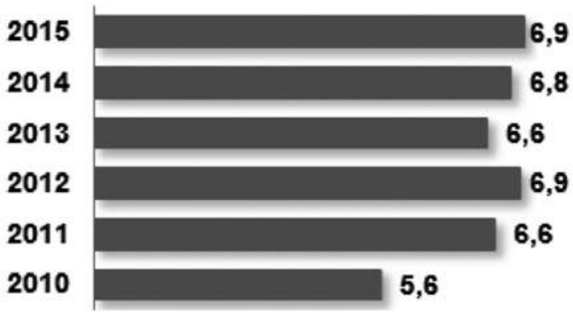


SOURCES: NATIONAL STATISTICS AND CENSUS INSTITUTE AND THE IMF.

The Canal is still one of the most important growth pillars within the Panamanian economy. The total cargo which went through it during 2014 amounted to 340 million tonnes. The Panama Canal contributions to the National Treasury accounted for 2.1% of GDP and we hope that this contribution will grow at a compound rate of 11% in period 2016 - 2019.

GRAPH # 6

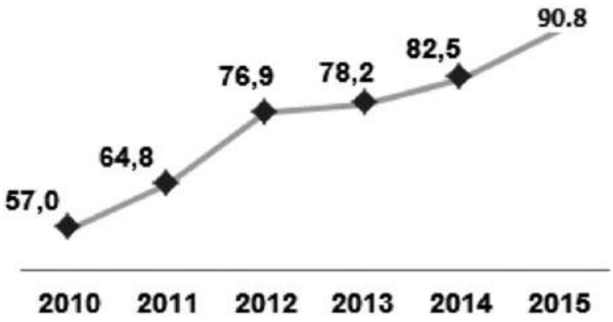
TOTAL CONTAINER MOVEMENTS
(EXPRESSED IN TEU[2] MILLION)



SOURCE: THE AUTHOR.

GRAPH # 7

TOTAL CARGO MOVEMENT
(EXPRESSED IN TEU MILLION)

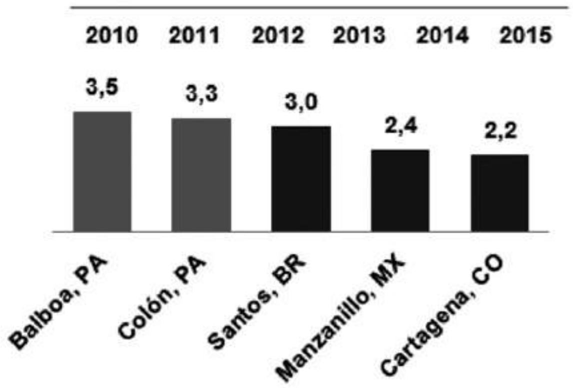


SOURCE: THE AUTHOR.

2 *The English TEU acronym stands for Twenty-Foot Equivalent Unit and it refers to a Twenty Foot Equivalent Unit. It is regarded as an inaccurate measurement unit applicable to any sea-going vessel capacity. It refers to both container ships and container port terminals; and is expressed in containers. One TEU is the capacity of a standard 20 feet container (6.1 metres) - usually in the form of a standardized sized metal box - which can be easily transported using different transportation modes ranging from ships, trains and trucks.*

GRAPH # 8

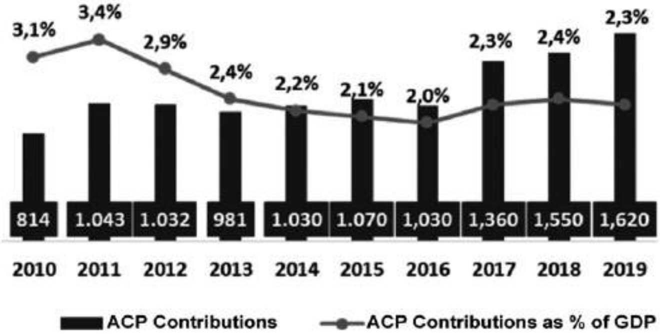
THE FIVE LARGEST PORTS IN LATIN AMERICA AND THE CARIBBEAN AREA
(EXPRESSED IN TEU MILLION)



SOURCES: THE PANAMA MARITIME AUTHORITY, ECLAC AND THE MARITIME AND LOGISTICS PROFILE OF LATIN AMERICA AND THE CARIBBEAN.

GRAPH # 9

PROJECTIONS OF ACP CONTRIBUTIONS
POST 19 FEBRUARY 2016 COLLECTIVE CONVENTION
(IN US$ MILLION)

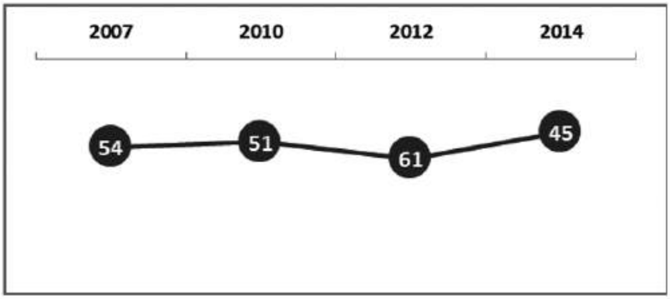


SOURCES: THE PANAMA CANAL AUTHORITY, MEF AND THE LOGISTICS PERFORMANCE INDEX (WORLD BANK).

The Canal has been expanded with the addition of new gate sluices which will be inaugurated on 26 June 2016, and should continue strengthening the Panamanian logistic hub's position we are currently implementing in our country. The *Doing Business* report prepared by the World Bank quotes the Panamanian logistics sector's competitive status for period 2007 – 2014; which went from position 54 to 45.

GRAPH # 10

PANAMA'S EVOLUTION IN THE LOGISTIC PERFORMANCE INDEX
(1=BEST AND QUALIFIED COUNTRIES: 160)



SOURCES: THE PANAMA CANAL AUTHORITY, MEF AND THE LOGISTICS PERFORMANCE INDEX (WORLD BANK).

Another of the economic sectors showing a very good performance and growth is tourism. Last year, the number of visitors was in the region of 2.3 million; with a 10% increase over the equivalent figure for year 2014. The disbursements incurred by such foreign visitors continues to grow also; with a 12% increase over the similar amount registered a year earlier.

The construction sector has shown a significant dynamism, since the total number of built square metres went up by 2,1% over the figure for year 2014. Energy consumption and saloon car sales also delivered good performance figures over year 2014.

TABLE # 3

THE RELEVANT DATA OF SOME ECONOMIC VARIABLES AND THEIR COMPARISONS BETWEEN 2014 VIS-À-VIS 2015

	Indicator	2014	2015	Change 2014-2015
Tourism	Number of visitors (in million people)	2.13	2.37	+10.9%
	Visitors' outlays (in Balboa millions)	3,727.9	4,199.7	+12.7%
Construction	Built area (in square metres million)	4,288.8	4,382.9	+2.19%
	Value of construction permits (in Balboa millions)	1,926.2	2,071.2	+7.5%
Others	Energy consumption (in kw million)	7,838.0	8,396.2	+7.1%
	Saloon car sales	60,306	64,735	+7.3%

SOURCE: NATIONAL STATISTICS AND CENSUS INSTITUTE.

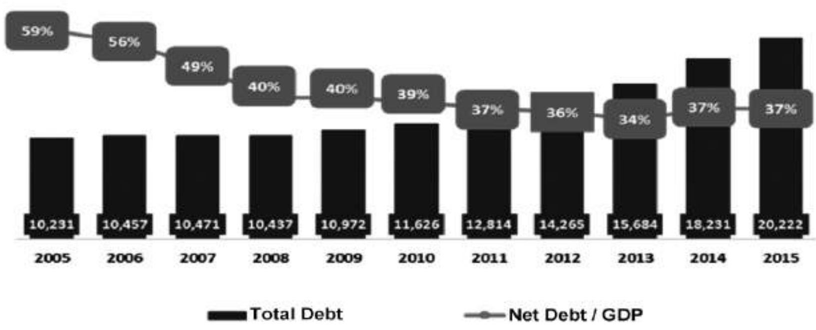
Fiscal performance

Public debt at late 2014 amounted to US$ 20,221 million. This represents an increase of US$ 1,990 million over the previous year. The most important thing to note here has to do with the debt / GDP ratio, which has remained stable (See Graph # 11). Out net debt, encompassing the gross debt less the assets entailed in the sovereign fund savings kept by the Republic of Panama, are close to 37% of GDP. The Panamanian debt's break down, in the context of a Dollar-based economy, is 77% and 23% external and internal debt respectively.

The current Government of the Republic of Panama, since taking office from the previous administration, has been making strenuous efforts towards developing the domestic capital markets; chiefly through auction processes. We have resorted also to issuing our Government Treasury notes and bills, for them to be acquired by domestic investors. We will continue making headways along this road, in order to further develop and support the domestic capitals' market.

GRAPH # 11

NETT PUBLIC DEBT/GDP
2005 – 2015
(IN US$ MILLION)

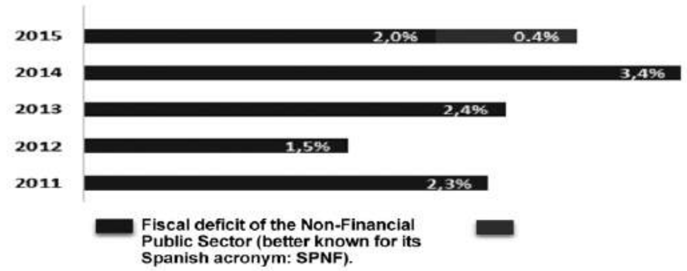


SOURCE: THE MINISTRY OF ECONOMIC AND FINANCIAL AFFAIRS, PANAMA.

As for the fiscal deficit in 2015, it stood at 2% of GDP, thus complying with the Panamanian fiscal rule. The improved fiscal performance recorded last year is the result of an increase of 3.9% in total revenue, whereas total outlays increased by only 2.5%.

GRAPH # 12

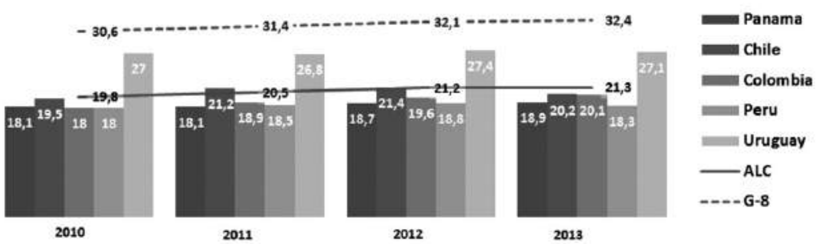
NON-FINANCIAL PUBLIC SECTOR DEFICIT, SEASONALLY ADJUSTED/GDP (%)
2010-2015



SOURCE: THE MINISTRY OF ECONOMIC AND FINANCIAL AFFAIRS, PANAMA.

GRAPH # 13

FISCAL REVENUES/GDP (%)
PANAMÁ VS. LATIN AMERICA AND THE CARIBBEAN AREA PLUS G-8 2010-2013



SOURCE: ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT - OCDE.

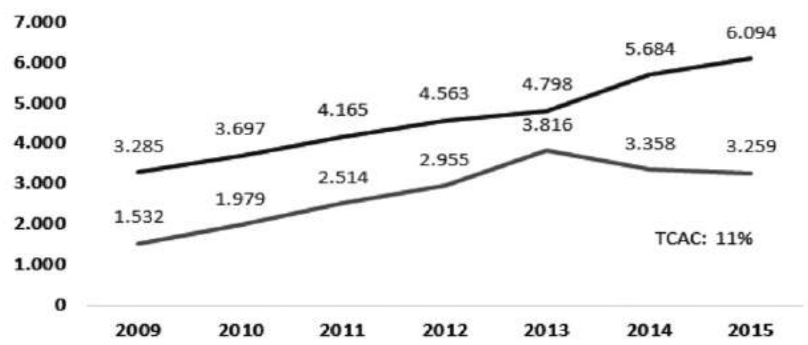
The results of the first quarter of 2016 are very encouraging. Revenues are growing at a rate of 15%, whereas outlays are growing at a rate of 1% - at least as far as the first quarter of 2016 is concerned – thus the fiscal deficit has dropped significantly over the level recorded during the previous year.

One of the Government priorities is to open a fiscal space for increasing capital spending - which stood at 7.1% of GDP – thus likely to becoming one of the highest in Latin America.

However, it is important to note that the operational outlays – that is Government functioning spending - has been growing at a greater pace than our revenue rate. This was the case until year 2015 (See Graph # 14). Thus, and as part of the Government public policy, some measures are undergoing implementation with a view to limit the growth of operational outlays; and prevent a decrease of the space we have created for capital expenditure.

GRAPH # 14

CENTRAL GOVERNMENT'S OPERATIONAL DISBURSEMENTS
2010-2015

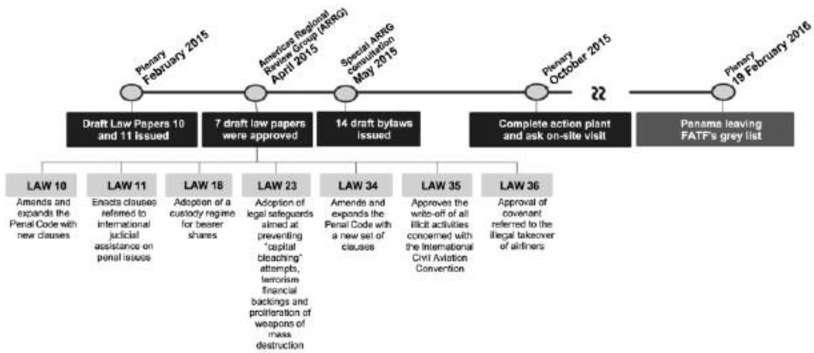


SOURCES: THE MINISTRY OF ECONOMIC AND FINANCIAL AFFAIRS, PANAMA. ECLAC AND THE ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT - OCDE.

On the rating agencies' front, Moody's, Standard and Poor's and Fitch have confirmed the investment grade rating with a stable outlook for the Republic of Panama. All agencies confirm the solid economic growth, the suitable diversification of the economy combined with a moderate debt level; as the main factors considered when endorsing their rating. Recently, Moody's highlighted Panama's exit from the grey list compiled by the Financial Action Task Force (FATF) as a remarkably positive indicator when it comes to allocating its own country risk rating.

FIGURE # 1

CHRONOLOGY OF THE RISK CLASSIFICATION PROCEDURE



SOURCE: THE MINISTRY OF ECONOMIC AND FINANCIAL AFFAIRS, PANAMA. MEF, PANAMÁ.

During June 2014 Panama was included in such ratings, prior to becoming part of the grey list compiled by the Financial Action Task Force (FATF). For all of us who came into office then, it was clear this was a serious threat to the financial sector and the whole Panamanian economy. So we worked almost around the clock together with the private sector and many State institutions in order to address the deficiencies and shortcomings affecting the legal and ruling frameworks of key Panamanian institutions.

Most of the issues addressed at the time were related to preventing and stamping out all money laundering practices in tandem with a strong drive against any terrorism financing.

In record time, we managed to get five reforms through the Panamanian Congress. Specific regulations for each sector were implemented, together with a huge new number of activities being included also; particularly the so-called non-financial assumptions, so for all these initiatives to be required in compliance with the money-laundering prevention rules.

Amid the noteworthy new requirements outstands the need to gaining full acquaintance and meet the client(s) personally and, last but not least, report any and all suspicious transactions to the Financial Analysis Unit.

Today, I can confirm to you that all legal, regulatory and institutional changes required have been approved and are fully enforced.

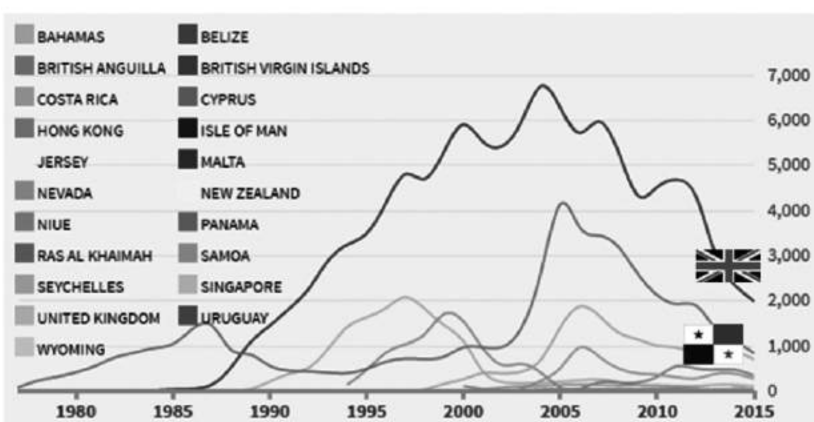
As a result of the foregoing initiatives and in record time, the Financial Action Group decided on February 2016 to grant its acknowledgement to the Panamanian efforts and took out my country from its grey list.

The “Panama Papers” case

There is no question about it, the "Panama Papers" have dented Panama’s reputation. That said, I have gone public and stated how crucial it is to separate facts from journalistic publications. Indeed, of the 200,000 companies quoted in the "Panama Papers", a little more than 20% (See Graph # 15) are companies genuinely incorporated in Panama. When we pay a closer look at the middlemen who sold these companies, they were not located in Panama. Furthermore, when we see the names of the banks which opted to become the legal vehicles, none of them are included or active in the Panamanian financial system.

GRAPH # 15

TOTAL NUMBER OF COMPANIES BROKEN DOWN BY COUNTRIES OF ORIGIN



SOURCE: INTERNATIONAL CONSORTIUM OF INVESTIGATIVE JOURNALISTS (ICIJ).

FIGURE # 2

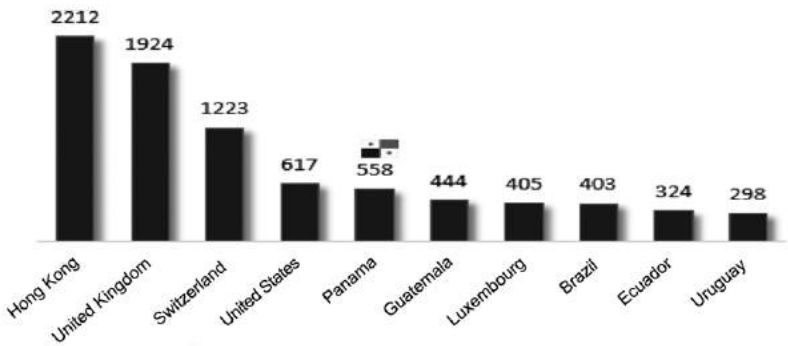
LIST OF BANKS QUOTED IN THE RELEVANT DOCUMENTATION

SOURCE: INTERNATIONAL CONSORTIUM OF INVESTIGATIVE JOURNALISTS (ICIJ).

I wish to clearly state that Panama is responsible for the companies included in our country and we have taken corrective actions to put right the deficiencies or shortcomings we may have on the transparency issue. However, this is a global problem affecting multiple jurisdictions as shown in the graphs. Such include companies or legal vehicles over 21 jurisdictions. Thus, each country must take its share of responsibility to ensure a proper - ideally full - compliance with the transparency rules while getting to get fully acquainted with their own customers.

FIGURE # 3

TOTAL NUMBER OF INTERMEDIARIES, BROKEN DOWN BY COUNTRY OF ORIGIN



SOURCE: INTERNATIONAL CONSORTIUM OF INVESTIGATIVE JOURNALISTS (ICIJ).

Whenever attending these international meetings and forums, I take the opportunity to remind the world what Panama has implemented already on the issue of transparency. Our country has one of the broader-based treaty networks for exchanging tax information within Latin American. We have negotiated 30 treaties, of which 25 are currently enforced. Through these agreements we exchange information on a recurring basis.

We are negotiating also six new treaties with Austria, Belgium, Germany, Bahrain, Vietnam and Colombia. The one with Colombia is almost complete. As I speak we have opened negotiations with three additional jurisdictions; namely Japan, India and Australia.

Recently, we implemented the Intergovernmental Agreement (Better known as IGA due to its acronym in English) and catering for the implementation of the Law on Foreign Tax Compliance (Also better known for its English acronym: FATCA).

Likewise, last year, the President of the Republic of Panama, in its statement to the United Nations General Assembly, was very clear in stating Panama would join the initiative of automatic exchange of information exchange on a bilateral basis. This will come on stream as from year 2018, in full compliance with the Common Reporting Standard (or CRS due to its acronym in English).

Panama's comparative advantages

Panama benefits from a unique geographical position, a fact which is further leveraged by the following comparative advantages:

First, a US Dollar-based economy. Since 1904, Panama has enjoyed the benefits stemming from a monetary treaty signed with the US government and which granted the US currency a legal tender status in Panama.

A second key factor within this context is the fact we have a sound financial system; rated as the second most developed in Latin America. Such status has the endorsement of the World Economic Forum which also bestowed Panama with its current position # 22 in its world record.

I cannot avoid mentioning the Panama Canal itself, through which circulates 5% of total world cargo. Such waterway is supplemented by a logistics park fitted with ports on both oceans; both ports in turn well connected with motorways and railways networks earmarked for moving such freight volume. The remaining key ingredient here is a very competitive air hub with daily flights to more than 30 countries and 81 cities scattered throughout Latin America and Europe altogether.

Furthermore, all such infrastructure has investment grade rating and enjoying a stable outlook since 2010. No other sector in our economy accounts for over 20% of GDP and we hope to secure an exposure to raw materials and commodities by 2018 or 2019.

These competitive advantages, when added to the good economic development and more political stability, have ensured Panama to be selected as the place to set up relevant regional headquarters and owned by more than 111 multinational companies.

However, the World Economic Forum has rated Panama as the second most competitive economy in Latin America. In some areas we have implemented significant progress as a country, particularly in what has to do with the quality of our airport and ports' infrastructure within the logistics' sector; not to mention an easy-to-do business approach and the customary efficiency of the financial system. Regrettably, in other areas Panama has experienced setbacks or marginal improvements at best; with noteworthy illustrations being the independence status of the judiciary, quality of education and health systems.

By law, all governments must adopt a strategic development plan, with President Varela's administration being now focused on two areas: Provide sustainability to the areas in which Panama has made significant improvements and reverse the negative trends in the worse-off or decayed areas. Let us refer first to the areas in need of enhancement and, thus, encompassing our future national challenges:

As regards judicial matters, the Panamanian institutional framework suffers from sundry weaknesses and which have had an impact on the business climate and also on our democratic governance. According to the World Economic Forum's Global Index, Panama holds the positions 84 and 119 for corruption and judiciary independence respectively.

Our Government's strategic plan aims to reversing these trends and enhance/ improve the justice sector indexes. To do this, only in 2016, the budget of the Public Ministry and the judiciary was increased by 20%. Yesterday, President Varela confirmed to the Court the availability of the necessary resources for implementing the penal prosecution system; which will replace the old system of criminal trials hitherto applied in Panama.

A number of important institutional reforms have been introduced with a view to implementing the prosecution and criminal justice system; together with the approval by the National Assembly of both the judiciary career and the bankruptcy law. The latter law is expected to safeguard the companies' regularization and revamping processes, particularly amid those which are rated as salvageable and can become employment generators.

As regards the education sector, the global competitiveness index puts Panama – on key factors such as location quality and technical capabilities – in positions 94 and 71 respectively. The Government's strategic plan stipulates an education-strengthening investment drive yet to be implemented and exceeding US$ 2,500 million altogether. Tangible and noteworthy actions are an increased investment in infrastructure, improvement of the teaching proficiency and other sundry education investment projects.

Further to the point, a specific project known as "Panamá Bilingüe" ("Bilingual Panama") is in full swing and focused on further training English language teachers so as to ensure they will be able, in turn, to properly teach their pupils attending public schools.

Another initiative entails the development of technical and vocational institutes - due to the fact in Panama there are very few alternatives for the students finishing their own schooling terms - with their only viable option being the university colleges. The intention here is to replicate the Singaporean technical vocational institutes, so as to them becoming technical alternatives to those boys not interested in attending college.

Finally, in conjunction with the schools and the private sector, we have implemented a project known as “Mi Escuela Primero” ("My School First"), aimed at implementing an ongoing and far-reaching public schools’ maintenance drive.

Next comes the health sector, with the World Economic Forum rating us in position 76. The five-year implementation plan encompasses important initiatives for improving the quality of education, with a strong emphasis going to the overall improvement and expansion of the drinking water and sewage sanitation requirements. Such drive will be implemented via the enlargement of the Panama Bay sanitation project, the introduction of a similar and suitable sanitation project in the West Panama area coupled with a significant expansion of most drinking water and sewage networks.

As for the potential opportunities in the infrastructure sectors, the strategic plan’s objective is to provide sustainability to the transport and logistics systems. A third (33%) of the strategic investment plan was allocated to improving the overall infrastructure in Panama. Some of the most noteworthy projects are Line 2 of the metro network - already under construction - and the start of the Line 3 that will run to the West of the city; and whose funding was confirmed last month by the Japanese Government.

Another noteworthy project is the construction of a fourth bridge over the Panama Canal. As you all know, the main city on the Atlantic area of Panama is Colon – which is located at the north end of the Canal – and currently undergoing renovation so as to advance the expansion of the power transmission network. The third power line will be completed this year whereas in early 2017 the fourth power line will be commissioned; hopefully together with the power interconnection drive with our next-door neighbour, Colombia.

Where are we heading to?

Many people ask me: "Well, after the Panama Canal is completed, what will be the growth pillars for our country be?" Let us tackle tourism first. Panama has become, in the form of many suitable facilities, the shopping capital city within Latin America. There have been significant and noteworthy investments; all undertaken by private operators and leading economic groups and aimed at improving Panama’s hotel infrastructure.

Mining is the second leading economic sector and on this score I can mention a major copper mine project currently undergoing its development stage, and which is owned by First Quantum of Australia. Its proven reserves are 50,000 million pounds’ worth of copper, 12 million ounces of gold and 250 tons of molybdenum.

This project entails an investment budget of US$ 6 billion and should be completed and commissioned by mid- 2018.

Once operational, this mine will generate annual raw materials' exports worth US$ 2 billion. For the time being, Panama enjoys no exposure amid the raw materials' markets, so this would be a further and very welcome diversification of our economy. Hopefully, and as an added benefit, Panama would become even more resistant to external economic shocks.

As regards the energy sector, the Canal expansion is already influencing the implementation of other significant investments. The first noteworthy initiative of this kind belongs to the Chevron and Bopa Group, which is expanding the liquid energy terminal they currently have on the Atlantic side of the Panama Canal; chiefly with the aim of generating a liquid energy hub for oil trans-shipment and related handling requirements.

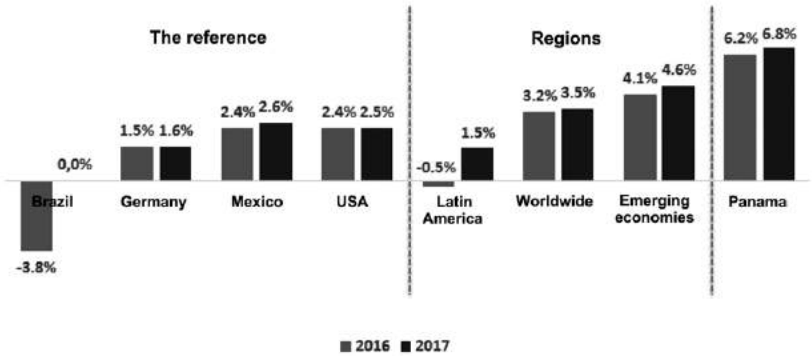
Further to the point, on 26 May the AS company will kick off the construction stage of a natural gas terminal to be fitted with a power plant. The overall investment budget is in the region of US$ 1,000 thousand million or Balboas.

In the Atlantic area of the Panama Canal there is construction work in progress, in the form of a major hydroelectric plant and whose location is next to the Boca del Toro area and fairly close to neighbouring Costa Rica. Its hydroelectric power rating will be 229 Megawatts and its overall investment budget exceeds US$ 1billion.

So, where are we heading to? According to the International Monetary Fund (IMF), Panama will continue to lead the economic growth of the Latin American region during years 2016 and 2017, with a growth rate exceeding 6%. Such IMF forecast is tantamount to five times the average growth rate for Latin America and about eight times the global growth; also forecasted by the latter institution.

GRAPH # 16

GROWTH OF PANAMA'S GDP VIS-A-VIS GROWTH RATES IN NEIGHBOURING COUNTRIES AND OTHER REGIONS
(CHANGE/YOY)



SOURCE: IMF AND WORLD ECONOMIC OUTLOOK REPORT 2016.

Conclusions

First and foremost, the sound diversification of the Panamanian economy has become one of the driving forces allowing us to apply a widespread resilience to our economy. No economic sector accounts for more than 20% of total GDP. Our public policy is to remain focused on this endeavour. Indeed, we will continue to expand at a good pace. The projection of both the IMF and ECLAC is that our economic growth this year will be 6%. Direct foreign investment continues flowing in unabated, and in the past year accounted for almost 10% of our GDP.

There is no question about it: The effect caused by journalistic leaks referred to the "Panama Papers" have clearly dented Panama's reputation. What we are doing in forums like this one is to remind the world what we have achieved - in a very short time since we took office – a definite enhancing drive addressed to all responsible Panamanian institutions.

Such directive is particularly relevant to our official entities engaged in preventing or curbing down malpractices ranging from money laundering to the financing of international terrorism. In plain English we are strengthening all institutions, with a view to ensuring our country will not be used by organized crime as a base to carry out their felonies.

We will continue our way forward with a firm step towards ensuring the implementation of the Government's strategic plan. Again, I wish to reiterate the firm commitment of the authorities lead by President Sr. Juan Carlos Varela onto adopting and setting in place all the suitable and necessary legal frameworks; all aimed at creating a more competitive and prosperous country within the region.

Thank you very much!

CLOSING REMARKS

Dear Friends:

We all have nothing but heartfelt appreciation words to our friends in Panama and Central America who kindly organized this seminar. Within the next few minutes, many of us will be both flying back home - albeit leaving behind the warmth and affection of our friends here in Panama and Central America - for whom we have to offer nothing else but words of deep gratitude.

We will leave behind a high degree of affection, but will be taking with us the home tasks yet to be addressed and all the lessons we have learned here.

I think it has been an extraordinarily successful seminar. From the start we said we were in bad need of identifying the way across the sundry turbulences still beleaguering the world economy; as well as how to counteract the factors conspiring against our endeavours for securing a good pension.

While attending this seminar we looked into and pondered alike the alternative assets, voluntary pension savings, the communications, corporate governance and other possible approaches to this main issue. All these pursuits while aiming for the ways and means which could lead us towards improving the overall performance of our pension systems' management teams and, ultimately, secure a steady / sound improvement of the workers' pensions.

The task yet to be addressed is how to improve the widespread understanding of these issues as well as tackling, yet again, our regulators; simply because many of these issues call for amendments to the existing rules governing our activity.

I want to end by reiterating my heartfelt thanks to all the seminar participants, to the FIAP membership and, particularly, our hosts for going out of their way while organizing this event which - I am sure you will all agree with me - has been an unquestionable success.

Thank you very much!

Guillermo Arthur
Chairman of FIAP

EARLIER FIAP PUBLICATIONS

EARLIER FIAP PUBLICATIONS

One of the aims of our Federation is to make known the advantages of pension systems based on individual saving and support the governments that wish to adopt them. With this in view, one of our regular activities as a Federation is the organization of seminars and round-tables. As a result of these activities, FIAP has published fourteen books, which summarize the presentations given at those seminars, and are sure that these have contributed towards improving the literature on this subject. These books are described below:

"Regulación de los Sistemas de Pensiones de Capitalización Individual: Visiones de los Sectores Público y Privado" (Seminario Lima-Perú, diciembre 2002).[1][2]

This publication tackles aspects such as the challenges of the new pension systems, the models and priorities of supervision, collection of contributions and management of individual accounts, coverage, regulation and supervision in the area of benefits, price formation in the social security industry, regulation and supervision of marketing and sales, and regulation and supervision of pension fund investments. The authors deal with these subjects from different points of view, which contribute to an enrichment of the debate on the subject of pensions in the countries that have carried out social security reforms, especially in Latin America.

1 *This book is the only one on the list that was published not by FIAP, but by the International Labour Office (ILO). However, it is included on this list because the seminar on the basis of which it was written was organized jointly by the International Association of Pension Fund Supervisory Authorities (AIOS) and FIAP.*

2 *This book is not available in an electronic version on the FIAP website.*

"Pension Reforms: Results and Challenges" (Seminar held in Cancun, Mexico, May 2003).

In this book an analysis is made of the results of the new social security systems, both in Latin America and in Central and Eastern Europe, from the point of view of how they have influenced improvement in pensions and contributed to the growth and economic development of the countries. In order to do this, it reviews the rates of return of the investments of social security resources and matches them with the growth of workers' wages. At the same time, it measures the impact of the reforms on savings and investment, thereby attempting to measure the contribution that they signify for the economic development of the country. There is also an analysis of the main challenges in the social security area for the industry, the regulators and the political system.

"Pension Reforms in Eastern Europe: Experiences and perspectives" (Seminar held in Kiev, Ukraine, May 2004).

This book summarizes the experiences of social security reforms in the countries of Central and Eastern Europe, such as Bulgaria, Croatia, Hungary, Poland, Kazakhstan and Kosovo. Also presented are the main perspectives for reform in Slovakia and Macedonia. The common denominator in all these countries is that they possess individually-funded systems in expansion. The book follows with an analysis of the challenges for implementing reforms, in terms of the regulation and supervision of pension funds and their fiscal and economic impact. The book concludes with an analysis of the conditions necessary to ensure the success of the reforms.

"Pension Fund Investment" (Seminar held in Lima, Peru, November 2004).

This book contains a diagnosis of pension fund investment regulation in Latin America. It contains an analysis of the improvements to that regulation, dealing especially with the case of the multi-fund system in Chile, Mexico and Peru. It also looks in depth at the development of the capital markets and analyses the political risks of pension fund investment in the region. Among the most important conclusions to be drawn from the aforementioned subjects are the role of the return of the investments as a deciding factor in improving pensions and the need for greater diversification, including investment abroad.

"The Strengthening of the New Pension Systems: The Role of each pillar in the Solution of Pension Problems" (Seminar held in Cartagena de Indias, Colombia, May 2005).

This publication analyses reforms to social security systems that have included mandatory individual capitalization/funding systems in their second pillar, in response to the criticisms and objections that are being leveled at them, and analyses future improvements. The role of each pillar within the social security system is highlighted and an in-depth study made of the structure of first pillar (non-contributory) programs in Latin America. The key issues of mandatory contribution programs in the second pillar are reviewed and experience in the area of voluntary social security saving (third pillar) is described. One of the most important conclusions arising from the discussion is that the criticisms made of the mandatory individual saving systems are seen to include aspects that, though part of social security, are not the responsibility of the contributory systems, as is the case of coverage.

"Pension Funds Investment Perspectives" (Seminar held in Santiago, Chile, May 2006).

This book discusses which the best investment alternatives for pension funds are. The facts show that 1% of additional return over the course of the whole working life of a member of a pension fund administrator may result in a pension that is 30% higher. To corroborate this, an in-depth analysis is made in this publication of issues such as the historic performance of the pension funds in Latin America, the regulation and control of investment risks, the best portfolios for social security funds, the characteristics of the multi-fund systems, the strategies for the international diversification of pension funds, the financial impact that occurs in the stage just prior to retiring age, and the importance of corporate governance in pension funds.

"Funded Systems: their contribution towards solving the pension problem" (Seminar held in Varna, Bulgaria, May-June 2007).

In the first instance, this book shows the political economics of pension reforms, taking into account the experience of countries in Central and Eastern Europe and also the pension reforms in Bulgaria and Mexico. Secondly, it analyses the results of the pension reforms for the workers, separating the effects on the labour market and on redistribution of income. An analysis is also included of the workings of the Disability and Survivorship Insurance (DSI) in the Chilean case. Thirdly, it shows how to structure an effective multiple-pillar system in the light of the new Chilean pension reform, the public/private ratio in the pension reform, the design alternatives for non-contributory pension programs (social pensions), and the fiscal effects of the pension reform in Chile. A fourth set of issues analyzed here concerns the investment policies and strategies of the pension funds, experiences and trends in multi-fund systems and regulation and monitoring of investment risk in mandated, defined-contribution pension systems. Finally, the book culminates with a number of different views of the prospects for the pension reforms in Europe.

"Pensions for the Future: Developing Individually Funded Programs" (Seminar held in Lima, Peru, May 2008).

This book analyzes the performance of the new pension systems in Latin America and Central and Eastern Europe, describes the progress of pension reforms in countries that have recently begun to implement them or are about to do it in the near future, and identifies best practices for improving the design of regulations in the individual capitalization programs. It examines issues related to the lessons of pension reforms, investments regulation, supervision models, coverage, pension options, pension business management, and disability and survivorship insurance in the cases of Argentina, Chile and Mexico. It also discusses the pension reforms in China, Philippines, Romania and New Zealand. It also analyzes the future of pensions in Peru, addressing the issues of pension coverage, quality of social protection, capital markets, and the supervisor´s vision. Finally, the book ends with a discussion on whether the battle of public opinion regarding the pension reform has been won.

"Investments and Payouts in Funded Pension Systems" (Seminar held in Warsaw, Poland, May 2009).

The book is divided into nine chapters. The first four chapters refer to subjects related to the pension accumulation phase, whereas the other five chapters show issues inherent to the payout phase. The first chapter of the book deals with the pension fund investment performance. In the second chapter, the book asks how much financial risk level a funded system may accept, showing the life-cycle risk perspective in the context of pensions. The third chapter shows a close relationship between economic cycles and pension funds. Chapter four shows the current tendencies of pension fund investments and presents the views of three outstanding speakers on infrastructure investments, thematic investments and Exchange Traded Funds (ETF), respectively. Regarding the pension payout phase, chapter five refers only to the issue of explaining the optimal pension modes in a mandatory pension system. Chapter six analyzes the market of annuities and programmed withdrawals under the commercial and descriptive perspectives. Chapter seven contains issues that are of vital importance for an adequate development of the pension market: the keys for success in the annuities market, the challenges involved in the selection of products during the payout phase and an explanation on why the funded pension systems will be more capable to face the demographic challenges than the PAYGO systems. The second-to-last chapter deals with the perspectives of the Polish pension system. Finally, the book finishes with chapter nine, where it is reviewed the future of mandatory pension funds in Europe and beyond, describing the financial crisis implications for the private pension funds, commenting the lessons derived from the crisis for the funded pension systems and stating the medium-term challenges to reform the mandatory pension funds in Europe and other industrial countries.

"Developing the Potential of the Individually Funded Pension Systems" (Seminar held in Viña del Mar-Chile, May 2010).

The publication provides the reader with several works that seek to identify means and instruments whereby pension fund managers can extend the contribution they make to solve the pension problem and, in more general terms, improve the quality of the population's social protection. Papers presented by renowned academics and authorities are featured at the beginning of the book. They address the seminar's subjects with a practical and objective focus aimed at highlighting the characteristics and concrete results of policies, products and organizational and management models that can serve as a reference for innovating and improving the processes and regulations of pension fund managers and regulators.

The book is divided into three parts. The first part, "How can the Coverage of the Individually Funded Programs be Extended?", explores different ways in which the funded programs can extend their coverage to sectors of the population that are not currently engaged in pension saving. The second part, "New Products", explores ways in which the pension industry can use its experience and capacity to advantage for attending to other social security protection needs of the population. The third part, "The Quest for Excellence", is divided into three chapters. The first one, "Pension Information and Education," analyzes the role played by financial education within the context of defined-contribution pension systems from the standpoint of the industry and the supervising agencies. The second chapter, "Ideas for Improving Operational Efficiency," analyzes the organization and process alternatives that enable the operational management and efficiency of the industry to be improved. Finally, the third chapter, "Ideas for improving the impact of investments on local economies," analyzes the investment alternatives available to the pension funds in housing, infrastructure and micro-companies.

"Advancing in the Strengthening and Consolidation of the Individually-Funded Pension Systems" (Seminar held in Punta Cana, Dominican Republic, May 2011).

This book provides the reader various studies analyzing different issues related with pension fund investment (best practice in the design of investment policies; impact of pension funds in the development of infrastructure projects and securitization of assets) and the benefits granted in the payout phase (pension options, advantages and disadvantages; replacement rates and adequacy of contributions), and also presents experiences and proposals that enable continued progress in strengthening and consolidating individually-funded pension systems, after the global financial crisis of recent years. Additionally, the book analyzes, from the points of view of the industry and the international organisations, the topic of the implicit and explicit public debt generated by pension systems, its accounting and impact on the creation and development of individually-funded programs, in light of recent events in Central and Eastern Europe.

"Opportunities and Challenges for Individually-Funded Systems in a Globalised World" (Seminar held in Cancun, México, May-June 2012).

This publication look into the opportunities and challenges being faced by the authorities and administrators, to boost the development and stability of individually-funded pension programs and obtain adequate replacement rates in a globalised world, with more volatile financial markets, imperfect labour markets and more demanding clients.

The book is divided into three parts. The first part analyses the spheres of responsibility and limits corresponding to pension funds, in the performance and public information of the companies in which they invest the pension funds under their management, and how these can contribute towards the development of the corporate governance of such companies. The second part evaluates the extent to which the design and characteristics of the individually-funded programs, especially contribution rates and retirement ages, are appropriate and consistent with the replacement rate targets expected of such programs, given the conditions of the labour market and the trends in life expectancies. Also this second part examines the contribution that can be made by voluntary pension savings in funding pensions and meeting the defined targets. Finally, in the third and last part of the book are analysed the basic conditions required to ensure the stability and development of the individually-funded pension systems, and the opportunities and challenges being faced in order to improve their public image and strengthen their relationship with their members in a globalised world where clients have become increasingly demanding.

"Individual Savings: Better Pensions plus Economic Development" (Seminar held in Cartagena de Indias, Colombia, April 2013).

This book starts by giving the reader an analysis of the lessons learned from the international recession with regard to managing risk and investing portfolios. It then goes on to describe the pension reforms that have been implemented recently and the trends that are being seen in pension systems, especially in the programs based on individual funding, as also the impact of these and the effects that they may have on the efficient functioning of the funded programs and their consistency with the fundamental principles on which these programs are based.

The book also analyses the most significant challenges facing the pension systems in achieving the aim of providing adequate pensions for their members in the long term, pointing out the aspects of design and operation in which changes should be made in order to enable the individually-funded programs to meet their target of providing adequate pensions, plus the limiting factors that are being faced due to shortcomings in the operations of other related markets. In particular, the book describes the virtuous circle between the development of the individually-funded programs and the countries' economic development, and finally it explains the interdependence between the labour market and the pension system and the experiences, lessons and recommendations that emerge for implementing public policies in matters of labour and social security.

"Reinforcing the Foundations of the Individually-Funded Pension System to Ensure its Sustainability"(Seminar held in Cusco-Peru, May 2014).

This book provides the reader with several papers, which based on the principles of economic freedom and individual savings, identify the mechanisms that enable underpinning the foundations of the sustainability of the individually-funded pension system. The book is organized into six parts: (i) Expanding coverage and promoting pension savings; (ii) Yield and risk management; (iii) Efficiency, competition and administration costs; (iv) The type and quality of pensions in the Individually-Funded Systems; (v) Corporate governance, transparency and relationships with members and pensioners; and (vi) Coexistence of alternative contributory pension systems. The book also, initially shows the work presented by the economist Herando de Soto, on the theme "Individual Savings and Economic Freedom". At the end the book shows the work of the 2011 Nobel Prize in economics, Thomas Sargent.

"Multi-Pillar Pension Systems: Investing in the Future" (Seminar held in Montevideo-Uruguay, September 2015).

This book analyses the lessons and recommendations stemming from experiences gained when applying the multi-pillar pension systems in sundry countries - including the so-called fourth pillar - and also tackles all proposals aimed at increasing the expected long-term investment returns and security, as well as the pension amounts the affiliates can get. The book encompasses 7 chapters: (i) Multi-pillar pension schemes showing the trends recorded amid OECD countries and what initiatives can be adopted for strengthening the multi-pillar pension schemes; (ii) Pension improvements and risk reductions, together with the analysis of topics such as the role likely to be played by a "longevity insurance" when it comes to an overall improvement of pensions; (iii) Promotion of the relevant pillars for the voluntary pension savings; (iv) Securing profitability increments via alternative investments; (v) Communicating with the affiliates and financial education issues; (vi) Financial integration of pension fund systems within the Pacific Alliance member countries; and (vii) The Regulator/Watch Dog viewpoints. At the end of the book there are some noteworthy paragraphs highlighting the work contribution from Mr. Moshe A. Milevsky, a distinguished professor of the Schulich Business School, York University, who is also the Executive Director of the IFID Centre in Toronto, Canada.

For your information, these publications are available in an electronic version on the FIAP website, <http://www.fiapinternacional.org>, in the "Publications/FIAP´s Books" section. Copies of these publications may be obtained writing to e-mail: <fiap@fiap.cl>.

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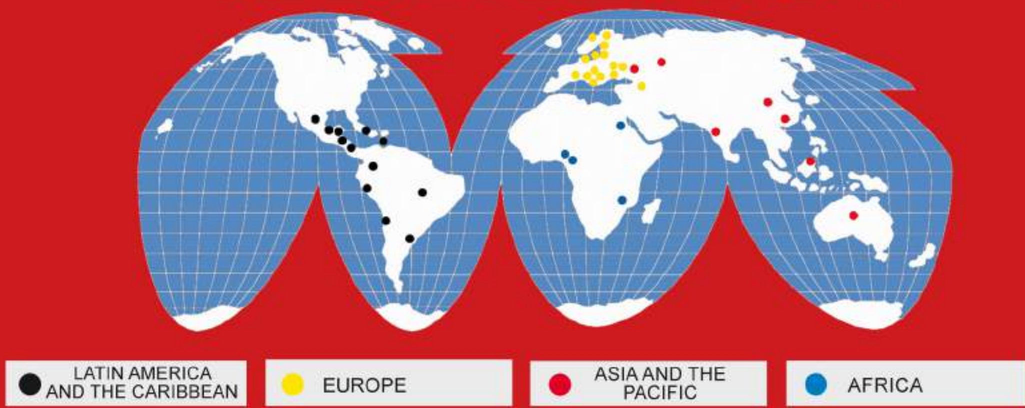
FIAP was created in May, 1996. The legal status of this international institution was granted on 29th June 2004 in the city of Montevideo, by Supreme Decree Nro 801, issued by Uruguayan Ministery of Education and Culture. It currently has eighteen "full members" in fifteen countries and fourteen "collaborating members".

The "full members" are associations, federations, chambers or other institutions that represent the interests of the pension industry in the respective country. Thus, the following countries are represented in FIAP: Bolivia, Colombia, Costa Rica, Curaçao, Chile, Dominican Republic, El Salvador, Honduras, Spain, Kazakhstan, Mexico, Panama, Peru, Ukraine and Uruguay.

COUNTRIES WITH REFORMED SYSTEMS (1)



Chile	1981	Armenia (**)	2018 (2)	Australia	1992	Nigeria	2005
Peru	1993	Poland (3)	1999	Kazakhstan	1998	Ghana (**)	
Colombia	1994	Sweden	1999	Hong-Kong	2000	Egypt (***)	
Uruguay	1996	Latvia	2001	China	1997	Malawi (**)	
Mexico	1997	Bulgaria	2002	India (*)	2004		
El Salvador	1998	Croatia	2002	Brunei	2010		
Costa Rica	2000	Estonia	2002				
Panama (*)	2002	Kosovo	2002				
Dominican Republic	2003	Russian Federation	2003				
Brazil (*)	2013	Lithuania	2004				
Honduras	2016	Slovakia	2005				
Curaçao (***)		Macedonia	2006				
		Romania	2008				
		United Kingdom	2012				
		Czech Republic (**)					
		Ukraine (**)					

The year given corresponds in each case to the start of operations in the mandatory pension system based on individual funding.
(1) Information updated to October 2016.
(2) Armenia: This program was approved in 2014, but due to a series of legal revisions, its implementation has been postponed. The scheme will enter into force on July 1, 2018.
(3) Poland: On February 1st, 2014, a new pension reform law took effect that, among other things: (i) makes second-pillar individual accounts voluntary for all new entrants to the workforce; and (ii) allows current participants to opt out of the second pillar and transfer their account balances to the public first-pillar notional defined contribution (NDC).
(*) Reform for public employees.
(**) Reform approved, but not yet implemented.
(***) Reform proposed, but not yet approved or implemented.

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