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**A PENSION MANAGER'S VIEW OF EXCHANGE TRADED FUNDS
FROM SÃO PAULO TO SANTIAGO**

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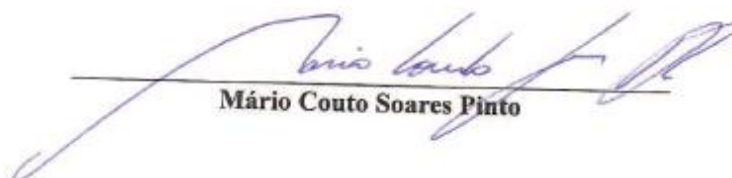
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ABSTRACT

How do pension funds in Chile and Brazil invest in Exchange Traded Funds (ETFs); and how can international ETF managers enter and distribute to these pensions?

This paper examines the current Chilean and Brazilian pension markets, how these pension markets are structured, how they have historically invested their portfolios in ETFs and how they utilize Exchange Traded Funds (ETFs). This investigation will give an overview of the current pension landscape in each country, ETFs and ETF managers in the region, as well as distribution allowances and regulations for ETF providers within the region. Finally it will offer insights throughout that will be useful to those building a business or creating an expansion plan in Brazil or Chile.

Keywords: Pension funds, Administradoras de Fondos de Pensiones (AFPs), Exchange Traded Funds (ETFs), Investments, Investors, Latin America, Chile, Brazil

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1. INTRODUCTION

Latin America is a burgeoning institutional investment market with \$1.4 trillion in fund assets, \$710 billion in pension assets, and a prediction for growth to \$2.86 trillion in assets by 2020. Pensions in Chile and Brazil represent 5 of the top 100 pensions in the world, with Brazil's Previ being in the top 30 funds globally. Pair these statistics with historic growth in the region's middle class, an potentially easing regulatory landscape and positive GDP numbers, and this demonstrates why this territory is being eyed by many, especially given anemic growth in the US and EU. The pension market in the region is predicted to grow to upwards of \$4 trillion in 2020, by some of the more aggressive forecasts. In addition, Latin American mutual and pension funds have continued to increase their allocation to ETFs. Currently pensions invest \$80 billion to foreign funds, ETFs, stocks and bonds that have steadily grown as the pensions have moved away from local only portfolios. Given these trends international ETF asset managers such as Vanguard, iShares, SPDR, Wisdomtree, and First Trust, have moved into Latin America as well.

On the alternative side Latin America is far from a homogenous society with divergence in terms of language, culture, economic prospects and financial markets. As there are 11 countries in the region, this paper could easily span multiple pension and investment schemes, but instead will take the two largest pension systems, Chile and Brazil, as the focus of this investigation. These two countries have been chosen not solely for their size but also given their history, structure, differentiated investment parameters, and philosophy in pension fund systems. Brazil and Chile have been highly monitored as Brazil is the largest market in Lat-Am, and Chile is the most advanced and accessible pension system. It will be an interesting comparison as Chile historically has had a goal of market neutrality to attract investors and has been the most willing to open its pensions to foreign funds. Most of those international funds allowed include ETFs as the preferred investment vehicles. Chile has been consistently ranked the most neutral market in the region for ETFs due to their system having the largest allocation to international investments. One could argue that since their economic regime was modeled after US free-market Friedman economic system that the cultural proximity to the US allows a smoother entry for the largest ETF players who are predominately from the US.

In comparison, historically Brazil has had numerous and strict regulations with little allowance for international managers within their pensions. Similar to their economy, they have given preference to domestic investment managers in order to protect their local growth, among other reasons. Their relatively closed competitive environment means a drastically different financial market with markedly fewer ETF managers, funds and ETF innovation in the country as measure by number of ETFs and managers. However, the pension market is continuing to grow according to Towers Watson and as one of the largest pension markets in the region, the question may be is the size worth the market entry risk and the costs associated with branching into a new market?

Some analysts including Citibank and Mckinsey assert we may be at a tipping point as many pensions have been researching international managers and potential changes in the market that would allow for foreign investment. All this is occurring for Brazil in particular at a time when protests line the streets urging the government for more economic prosperity and the economy is beginning to show signs of stalling mandating more competitive measures. With the potential

change in mindset, we've seen international managers evaluate the opportunity to enter Latin America's largest institutional investment pool, which is Brazil. Rumbblings of a transformation in Brazil's foreign investment outlook and a change to allow international managers more access could open the ETF market with sizeable profits for those who are well positioned. Simultaneously, if interest rates decrease and the local economy slows, we may have pension managers looking to outside options out of necessity in order to meet their liability and return expectations as many investment firms interviewed noted.

Alternatively with the current political landscape and history of being a closed and domestic focused economy all of these events could lead the country in the opposite direction, towards more protectionist policies akin to Argentina. Thus for fund managers looking to expand it may be important to ascertain whether this is a market worth expanding into and simultaneously for pension managers looking to beat their return targets in a challenging environment, should they spend time engaging with ETF due diligence on the hopes that regulations may change? This paper attempts to add to the body of research available on this subject matter.

1.1. RESEARCH HYPOTHESIS

The initial analysis is that traditionally, pension funds in Brazil and Chile have allocated capital to ETFs but in varying ways and with a substantial lag behind the US and other developed markets. They have invested with regional managers in Latin America or their particular country, and the investments within the funds have been regionally focused to some degree. Furthermore, those that have branched out from this space are using the biggest ETF players and only beginning to delve into those outside the top five international managers. The untested hypothesis herein proposes the reasons for this lack of diversified investing have been; that historically the regulators have not been receptive to international investments, as well as the ETF universe largely didn't market in the region or used JV's to distribute with varying success. The initial hypothesis is that this will change across the region as a whole given the loosening regulations, increasing sophistication, growing distribution of ETFs, the expanding need for higher returns, and local pension manager interest in diversification in countries like Chile, Colombia, Peru and Mexico.

Given these recent trends before conducting the following research the working hypothesis was that foreign ETF investment over the next decade in the region will be sizeable but that it will vary widely based on the country in the region with both Brazil and Chile growing. That Brazil will grow but at a slower pace than Chile but allow and expand their ETF use none the less.

However, through the interviews conducted, research analyzed those firms, who expand appropriately, and in the right domicile, can generate significant profits as distributors and investors in the region going forward. Country selection will ultimately be a deciding factor in each firm's expansion. These predictions as well as the data herein this paper may also assist pension funds in positioning their portfolios accordingly. The importance of this paper will be outlined within the following section. With that being said, this paper is a very small portion of the available universe of information on this subject matter and is offered as an initial entrepreneurial exercise

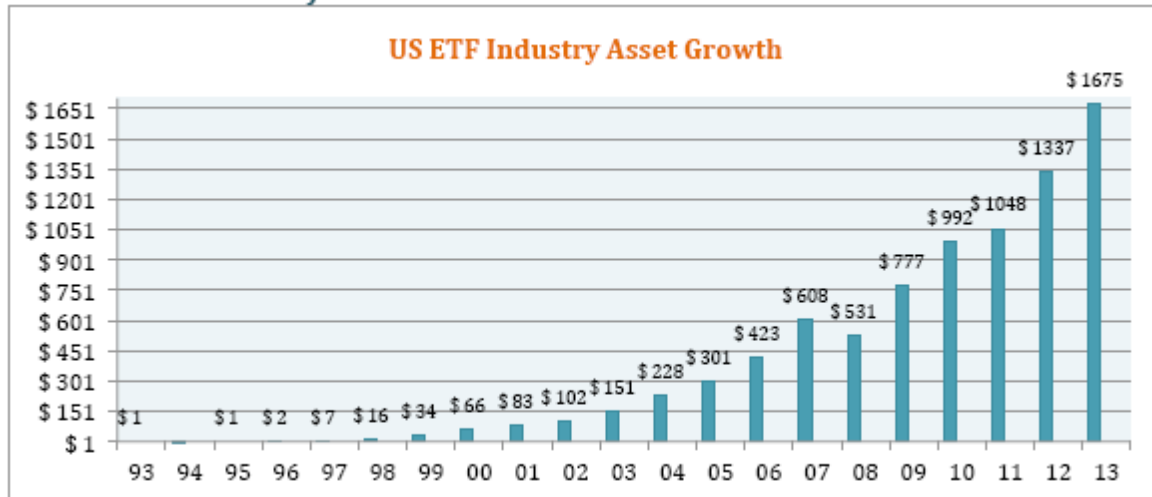
submitted with the understanding of probable changes through time in the findings. It is important to note that to offer significant insights into this region additional study and commentary are necessary. It would be interesting to specifically assess the predictions and market outlook segments in Brazil and Chile, that we only briefly highlight in the below writings.

1.2. PURPOSE & JUSTIFICATION

It is relevant to consider the ETF business in Latin America given the growth we have seen in the ETF industry in the world's largest investment market, the United States. In the US, ETF assets have tripled in five years and grown to almost \$2 trillion in assets in the two decades since their creation in the early 90's according to the Investment Company Institute. Exhibit (1) illustrates the substantial and compounding growth in ETFs as a vehicle for investors. It originally took 15 years to reach over \$500 million in ETFs assets, (from 1993 to 2007) then took only five years to double growth, (2007 to 2011) and then only two years (2012 to 2013), as you can see in Exhibit (1). The growth does not appear to be slowing into 2014 thus far.

ETFs are one of the fastest growing investment vehicles globally according to CNBC. They have become an investment vehicle utilized by pensions and retail investors and as one pension manager explained that given the integration between global markets and economies it is important to analyze any investment investors are frequently implementing. As we saw in 2008, if investors do not understand investment vehicles such as wrapped mortgage products, there can be pain if the risk is not realized. To provide further context, as of 2014 ETFs are the most traded investments on any exchange globally (ETF.com, 2014). Although it is important to note, they are still lagging considerably behind mutual funds in their total AUM levels as mutual funds are the largest and most commonly used commingled vehicle globally since their creation in the late 1800's. Given their antiquity it is especially impressive that ETFs have gained on them in such a rapid fashion with trillions of assets in 15 years.

Exhibit 1: ETF Industry Asset Growth



Source: Investment Company Institute, December 2013, Assets in USD Billions

Figure 1: ETF Industry Asset Growth

Now that we understand the compounding of assets in ETFs, in the Exhibit (2) below, note the growth represented in both total AUM levels as well as the proliferation of products. The current number of ETFs is now more than 1,550 and climbing in the US, while the number globally is closer to 5,500 distinct ETF vehicles (SPDR ETFs, 2014). This ETF growth is especially interesting given the global recession and slow recovery we have seen following 2008. One might expect companies to be consolidating and investors to be wary of additional investment types, however that has not proven to be the case. Even more dramatic are the growth numbers in both global ETF assets and the quantity of ETFs as noted in Exhibit (2) below.

	2011	2012	2013	2014 YTD
ETF AUM	\$1.5 TN	\$1.9 TN	\$2.4 TN	\$2.6 TN
Number of ETFs	4,648	5,023	5,283	5,423

Table 1: Global ETF Asset Growth

Source: SPDR ETFs, 6/30/2014

Part of the reason for the extremely rapid growth is institutional and retail investors have been transitioning from mutual funds into ETFs. In fact from 2007 to 2013 investors bought over \$415 billion in ETFs while simultaneously selling over \$196 billion in assets out of mutual funds, within US equity fund flows (Morningstar Direct, 2014). If we are considering the year to date flows thus far, we can see ETF providers globally have taken in \$75 billion in new assets since April 30, 2014 alone (Morningstar Direct, 2014). Exhibit (3) delineates the one-year net flows per ETF providers in the top 11 global ETF managers.

Many attribute this to the difficulty of outperforming the market in general and a move by investors to seek out passive or indexed funds in lieu of actively managed strategies. Therefore, as most mutual funds are active investments they have suffered from this investor sentiment shift. As this trend is normally cyclical there are those that believe it will revert. However, there may be more at play than investor behavior alone. When compared to the new ETF structure, mutual funds do not have the inherent tax efficiency, liquidity, transparency and low costs that ETFs are allowed within their configuration. Many would argue that ETFs are, in fact, a more efficient vehicle in general. We will discuss the characteristics of ETFs in detail further in this paper.

Given the importance of ETFs in mature and significant markets like the US, an analysis of Latin American ETF usage will be insightful for the region and for pension investors globally. By examining ETF usage in Latin America, we may find insight into where future growth will be in an investment vehicle that is more and more relevant to investors today. Simultaneously we may be able to extrapolate future ETF trends in other developing markets globally based on Latin American investor behavior.

Rank	Fund Family	1 year Net Flows in \$ millions
1	Vanguard	75,007
2	Dimensional Fund Advisors	24,781
3	JPMorgan	23,174
4	Goldman Sachs	20,081
5	Oakmark	15,774
6	MFS	15,098
7	MainStay	13,653
8	BlackRock	13,393
9	OppenheimerFunds	12,410
10	John Hancock	11,208
11	T. Rowe Price	10,741

Table 2: *ETF Fund Flows*

Source: Morningstar Direct for the period ending 4/30/14. Excludes money market funds and fund-of-funds.

When looking at ETFs in Latin America, the main ETF buyers are pensions, foundations, and endowments thus; an analysis of the pension markets ETF investing process will provide insight into the predominant ETF users in the region. Depending on the country, these institutional pension assets can be as much as 95% of the investable market due to the centralization of wealth. This paper can be used as a resource to understand the purchasing needs of these increasingly important pensions to better distribute investments to them. Institutional investors can also use this paper in an effort to replicate Chilean & Brazilian pensions strategies or to understand the competitive pension market. Considering the accumulative growth of ETF's globally and the market saturation of developed markets like the US, the opportunity to interact with a new buyers' market in Latin America is potentially lucrative. If it is any indication Cerulli research distributes a paper similar to this for \$15,000 to fund distributors anxious to break into the region. Thus, my goal is to create a picture of the Latin American ETF landscape and develop internationalization strategies to capitalize on these growth opportunities, which can then be augmented by additional research.

Furthermore, from a financial responsibility and cost standpoint, there are advantages to understanding how to increase international ETF usage. Historically we have seen that with more options and international players, the average cost of investing decreases. Currently in Latin America expenses are well over 1.27% on average, mutual funds may charge as much as 3-5%, and hedge funds are usually the most expensive as they earn a 2% fee and 20% of the profits (Hougan & Nadig, 2014). Comparatively ETFs on average cost .44 basis points. That means that there is almost 1% less cost with ETFs than in their mutual fund counterparts. Thus if we were to take three asset groups, International and US equity and fixed income, and average the expense ratio of ETFs on all of these assets, you'll find this equates to close to \$7.2 billion in fees annually (Hougan & Nadig, 2014). As ETF.com notes, "If that same money was invested in mutual funds, you'd be talking \$21.9 billion in fees. To put it another way, ETFs are taking \$14,761,866,000 every year out of the coffers of Wall Street and putting it into the pockets of investors around the world. That's \$40.4 million per day, or about \$500 a second. In the time it's taken you to read this, ETF investors have saved about \$50,000 versus where they would be if they invested in mutual funds. That kind of money matters," (Hougan & Nadig, 2014).

In tandem with price compression due to the continued growth of the assets, it is often difficult for these large pensions to find liquidity and diversification within their home markets. As with many developing markets, the exchanges are limited in their number of securities, volume, and liquidity. With new pensions like Mexico's Afores bringing in more than \$1 billion a month, the investors are desperate for new investment vehicles to diversify. In tandem, many countries are just now beginning to realize the difficulty faced by countries stressed pensions systems such as the US, where declining rates have been the norm for years.

Thus, as local rates decline Latin American pensions are now struggling to reach their high return targets. In some cases their targets may be inflation plus 6 percent. It is incredibly difficult to achieve a 6% return when interest rates are declining, and their portfolios have a high overweight to fixed income. Additionally, from a risk/reward standpoint there are sizeable differences between portfolios with international allocations, than portfolios with a large percentage fixed income and local equities. As pensions increasingly purchase ETFs and managers continue to grow and invest in the region, what effects will that have on increasing the risk/return parameters and cost for the regions participants?

This paper is specifically useful for international ETF managers, distributors and actors interested in Brazil and Chile's pensions. This paper is also focused on delivering insight to pension managers to demonstrate historical and current investing trends in ETFs in Latin America. The research herein will be of interest to those concerned with the investing processes of the region's chief pensions in regards to ETFs. I hope to understand the needs of the pension investors in the two biggest markets as leverage to successfully pair their needs with investments for mutual profit.

1.3. RESEARCH METHODOLOGY

My predominant form of research intelligence were to study academic reports on the pension industry, industry trade reports, interview a subset of end clients, analyze regulatory documents and collect and analyze economic data sources. Given that pensions in Chile must report holdings, an ETF usage analysis was readily available and publicly disclosed each month. Brazil does not have public reporting requirements of their pensions and thus the analysis was more difficult given the varying fund structures therein and the lack of public information. The subset of Chilean pension investments available through Chilean Risk Commission (CCR) going back to the creation of the first ETF in the 1990s up until Q4 of 2013 was analyzed. The reader will find average allocations, investment products and how the pensions have used ETFs since they were allowed in the investment portfolio. An analysis was conducted of SEC Form 13F filings across the region, which detail institutional purchasers of ETFs globally. This information gave color into all of the holders within the pension system of ETFs in Latin America. Finally, general investment trends were aggregated across the pension universe to highlight specific strategies of the largest pensions in their quarterly and annual financial reports thus we could track all of their allocations and when they began purchasing ETFs.

Methodology

Interviews:

65 participants

100 hours

3 countries

7 conferences

Interviewees represent more than \$1 trillion in assets

- Interviews
- Market Analysis
 - Cerulli, Bloomberg, ETF.com databases
- Market Research
 - Fundfire, Ignites, Economic databases
- Historical Data Analysis
 - CCR, Abrapp, APEP, State Secretariat, Superintendencia de Pensions
- Academic Research

In order to control selection bias we included pension funds that vary by size, regulatory type, and investment maturity in Brazil and Chile. In Chile, data was available for the industry at large due to the plethora of public data available on the pension system. The study includes varying levels of those who interact with ETFs from fund investors, fund companies, pensions, traders, trading platforms, consultants, distributors and regulatory bodies. Through institutional research subscriptions to Cerulli Data, Institutional Investor, Morningstar Data, ProFunds Latin America and Bloomberg Data multiple data sets were compared to lessen any selection bias in the data and compare across regions and time periods.

1.4. INTERVIEW INFORMATION

The paper gleans additional intelligence from 65 stakeholders in Brazil and Chile during a range of interviews. These stakeholders included those from the pension ecosystem i.e. managers, board of directors, analysts as well as regulators and centers of influence. Interviews were conducted with 65 pension industry experts across the US, Chile and Brazil, spending over 100 hours in conversations with portfolio managers, chief investment officers, distribution agents and traders. Through the interviewed firms we have spoken to investors who manage and oversee more than a \$1 trillion in assets including the worlds largest fund company, and the largest pension in Brazil as well as Chile. Interviews were also conducted with managers in the ETF sphere including portfolio managers, business groups and investment committees. In tandem, information was consolidated through ETF industry conferences and trade events. Averaging to over 300 hours in sessions focused on the pension industry, in order to ask questions to the speakers and hear the general commentary from the industry outside of one-on-one interview sessions.

The process for conducting these interviews was to use our network in the region to gain access to the market participants through referrals, cold-calls, meetings at conferences and trade

events and during over a year of travel throughout the US, Chile and Brazil. The participants had asked that their names and information not be shared and expressed that any opinions they shared were their own personal opinions and not as representatives of any company.

In the below table you can see all the firms, types of companies, countries of location as well as number of interviewees for those interviewed regarding the pension landscape. With this data you can see a relatively sample of participants across pensions, fund distributors, fund management firms (both foreign and domestic) as well as industry trade representatives. In some instances the fund company is also a distribution company as a third party representative thus you may see the names listed twice below but representing different interviewees. All interviews conducted were solely about general market trends in the pension landscape in country and nothing proprietary to each firm was discussed. In addition interviews asked for anonymity and only to relate our discussions in terms of averages and generalities across the market in instances where the information could be deemed proprietary.

Firm/Pension	Category	Contacts	Method	Country of Domicile
AFP Modelo	Pension	2	Phone	Chile
AFP Provida	Pension	2	In-person	Chile
AFP Capital	Pension	2	In-person	Chile
AFP Habitat	Pension	1	In-person	Chile
AFP Planvital	Pension	1	In-person	Chile
Larrain Vial	Fund Company	1	In-person	Chile
BTG Pactual	Fund Company	2	In-person	Chile
BTG Pactual	Fund Distributor	2	Phone	Chile & Brazil
BCI	Fund Company	4	In-person	Chile
BICE	Fund Company	2	In-person	Chile
BICE	Fund Distributor	3	In-person	Chile
Nevasa	Fund Company	2	In-person	Chile
Mutual Fund Association of Chile	Regulatory Body	1	In-person	Chile
Natixius	Fund Company	2	Phone	US
First Trust	Fund Company	3	In-person	US
Vanguard	Fund Company	2	Phone	US
Goldman Sachs	Fund Company	3	Phone	US
Blackrock	Fund Company	1	Phone	US
SsgA	Fund Company	6	Phone	US
Previ	Pension	2	Phone	Brazil
Petros	Pension	1	In-person	Brazil
Faelba	Pension	1	Phone	Brazil
Itau	Fund Company	1	Phone	Brazil
Goldman Sachs	Fund Distributor	1	Phone	Brazil
Credit Suisse	Fund Distributor	3	In-person	Chile & Brazil
S&P Indices	Industry Representative (index provider)	2	In-person	US & Brazil

MSCI Indices	Industry Representative (index provider)	1	In-person	US & Brazil & Chile
Pershing	Industry Representative (trading platform)	2	In-person	US & Chile
BBVA Compass	Fund Distributor	1	In-person	Spain & US & Chile & Brazil
BofA – ML	Industry Representative (trading firm)	2	In-person	US
Deutsche Bank	Industry Representative (trading firm)	2	In-person	US & Chile
Latin Markets	Industry Representative (industry conferences)	2	Phone	US
Deloitte	Industry Representative (consultant)	2	In-person	US

Sample Interview Questions Below you will find sample questions asked to the varying interviewees based on the type of end entity they are, the questions varied according to if the respondent was a distributor, fund company, pension or industry representative.

Question List Pensions

Do you use Exchange traded funds?

If so, how?

Which ETFs do you utilize?

Which firms are you using the most?

When did you start investing in ETFs?

How do you think about asset allocation?

Are you directly responsible for ETF implementation and usage?

How are you covered by the fund distributors and fund companies?

Can you speak to me in general about the pension investment landscape in country?

Are investors looking for more ETF options or are their sufficient investment options?

What do you think the future holds for ETF usage by pensions?

How do you conduct ETF due diligence?

What is important to you in purchasing an ETF?

Fund Distributors & Fund Companies

Do you distribute ETFs or funds in Latin America?

What percentage is local vs international funds?

What has been your experience thus far in distributing to pensions?

What funds are most sought after by the pensions?

How do you foresee the ETF landscape in the next 3 to 5 years?

How do you distribute in Brazil and Chile?

How is the regulatory process for fund approval and reporting in each country?

What is your presence and history in the region?
How do you compare the Brazilian and Chile pension landscape when it comes to ETFs?
Where do you think the most opportunity for growth is going forward with these two countries from an investment standpoint?

Industry Representatives

How does your firm interact with pensions in Chile and Brazil?
How does your strategy differ in each country?
What trends have you seen in pensions investment allocations generally and to ETFs?
What is important to your pension clients or contacts in both countries from your companies?
What knowledge or experience do you have about ETF usage in these two countries?

Which ETF firms do you come across most often in Brazil and Chile?

Where do you see the ETF market going in both country in the next 1, 3 and 5 years?

The goal of this paper was not to determine the attractiveness of ETFs or investment returns in general, but moreover to consolidate the opinions of the key centers of influence in the region and industry to paint a picture of the ETF landscape in pensions. The focus was also not to determine which pensions were having the most success with ETFs, or to determine which managers were having the most success. From a compliance standpoint we had to ensure we were not privy to insider trading and thus had to generalize about the pension industry at large as opposed to individual buying decisions of pensions. The goal of this paper is to use all compiled information to compare the two countries pension systems in their use of ETFs. As the news continues to report on increases in ETFs in Lat-Am and the ETF industry looks to grow therein, perhaps this paper can serve as further intelligence on how pension investors are utilizing ETFs.

1.5. RESEARCH QUESTION

The fundamental question this paper attempts to shed light onto is how do the pensions of Chile and Brazil compare in their use of exchange traded funds.

How do Chilean and Brazilian pension funds invest in exchange traded funds within their investment portfolios?

Variables to Consider: Country location of the pensions Characteristics of the pensions: i.e. size, age, region, and regulatory body Position and characteristics of the interviewees Type of ETFs Regional or International ETF managers Previous ETFs used in their pension portfolios Political landscape in each country Cultural sentiment towards foreign firms

1.6. THEORETICAL GROUNDS

The sources used fall into a few main categories. The first set relates to quantitative research from the ETF universe on the funds available in the region, asset flows, investor purchasing numbers, asset allocations, regulatory bodies and parameters. The next subset will be from the varying pension regulators and will also be quantitative research highlighting what they have bought historically, asset allocation breakdown, ETF exposure, and returns within the portfolios. Lastly, this paper looks at research on Brazilian and Chilean investor buying behavior in general to determine cultural leanings and behaviors specific to each country and region.

2. LATIN AMERICAN PENSION SYSTEMS OVERVIEW

Latin American private and public pension funds play a significant role in the economy and ecosystem of this developing region. Fundamentally they are a funding source for both international and domestic capital markets, a foundation for the countries social security systems and crucially important social unifiers for citizens with few economic safety nets. As noted in the introduction, it is widely estimated that their importance will grow alongside the region's growth rates by those we interviewed. The increasing contributions of the young and urbanized labor force, as well as general market appreciation, will add to the investor pools further according to the OECD findings. Throughout the conversations with investors in the region they remarked about how for them, the difficulty was having such large flows to manage in new assets each month, as opposed to the largest global problem for pensions, which is insufficient funding for future pension participants. These pensions are a significant contributor to GDP and eyed closely by those in the investment universe given the general ability and willingness on the pensions behalf to buy ETFs and foreign investments.

2.1. LATIN AMERICA'S LARGEST PENSIONS

While there are 11 Latin American countries, more than 95% of the assets are in five countries Brazil, Chile, Mexico, Colombia and Peru. The two largest pension systems are in Chile and Brazil, which are the areas of focus herein. As you can see in Exhibit (4) below, a majority of the largest pensions in the region are in Brazil and Chile as of 2012 and this trend has only increased with the growth in both countries (Campos Consulting, 2012). Wealth in the pension systems is quite concentrated with the largest three to five pensions holding a predominance of the assets. The concentration of assets in Latin America differs from the US market, where the pensions are widely distributed in addition to being privatized by company, state, or government entity. In Latin America normally these pensions require a percentage of each employee's paycheck be allocated into a pension (10% is the regional average). In the US employees are not mandated to invest a portion of their paycheck but often have the option to contribute.

	Fund Name	Manager	Country	Assets (\$bn)	% Fixed Income	% Equity	Growth (%)
1	Plano 1	Previ	Brazil	80.4	31	60	6.28
2	Sistema Petrobras	Petros	Brazil	32.4	50	37	22.75
3	Reg/Replan	Funcef	Brazil	21.6	46	35	7.43
4	Type C	Provida	Chile	20.2	59	39	4.15
5	Obligatoria Moderado	Porvenir	Colombia	12.5	49	44	19.40
6	Type C	Habitat	Chile	16.0	63	37	6.48
7	Type C	Capital	Chile	13.3	60	40	5.37
8	Obligacion Moderado	Proteccion	Colombia	14.6	48	43	20.57
9	Type C	Cuprum	Chile	11.1	61	39	1.35
10	Obligacion Moderado	BBVA Horizonte	Colombia	9.4	48	46	21.55

Table 3: Latin America's Largest Pension Figures

Source: Campos Consulting Date: All data as of end of 2012, Funcef 2011, Allocation for individual plans except Petros, which is total portfolio

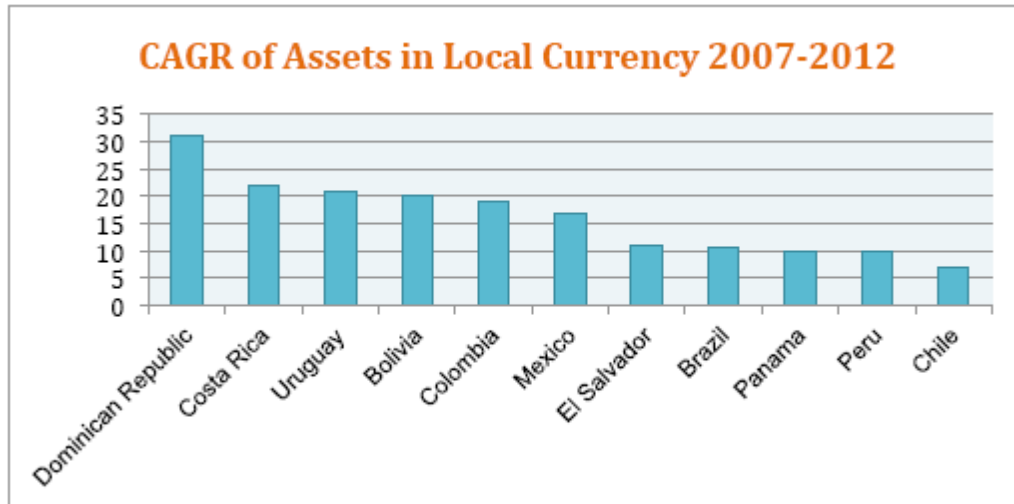
While there are many consistencies across the pension landscape in Latin America such as size and concentration, we've seen recent trends materialize in the last decade. The main trends found in the pension systems of Latin America are; continued growth in population demographics given their young populace, overall GDP growth as seen in the region at large for many years, and mounting investor expertise in their portfolio strategies. Within Latin America, one pension manager in Chile in our interviews noted a recent proliferation of investment products due to the surging asset levels, fiduciary need for asset allocation and diversification, regulators and investors increasing sophistication, and an opening of governmental regulations and oversight bodies to include international investors. In the last decade in Chile, it would not have been abnormal to see 70-100% of a pensions assets in local investments and principally bonds according to the historical CCR filings, now you'll find diversified portfolios of hedge funds, private equity, alternatives, fixed income and stocks in Chile. As one large multi-national pension manager notes this trend is not isolated to Chile. You'll also note the type of investment vehicles in the region have grown sizably from historically individual bonds, structured products and stocks to commingled vehicle such as mutual funds, ETFs and even levered vehicles when you look at data from the 13F filings globally.

In tandem, there has been a significant uptick in merger and acquisition (M&A) activity between pension funds and their parent firms. In the US it would be very difficult to imagine a foreign entity purchasing a state or federal workers pension plan, even a controlling or minority stake, however in Latin America this is the norm for ownership structures. This is a new development in almost every country in Latin America, you have seen international financial and insurance firms buyout or buy a portion of large private pensions, with the exception of Brazil given its closed financial system.

Another interesting characteristic of the pensions in the region is that given they are in developing markets they on average have a large runway for future growth when you consider their asset to GDP levels. As of the end of 2013, all Latin American countries, except Chile, maintain pension AUM/GDP ratios that average below the OECD general rate of 33% (OECD,

2014). In Exhibit (5) you'll note the CAGR growth broken down by country. This statistic is significant as it demonstrates that the pensions still have noteworthy growth potential. The closer CAGR is to GDP the lessened growth potential and market saturation there is in the country in question. In tandem to the Assets/GDP levels we discussed, the pension funds of Latin America experienced positive CAGR growth across the five largest economies in 2012. Colombia was the highest at 19%, Mexico 18%, Brazil at 10%, Peru 10% and Chile 8% (Campos Consulting, 2012).

Exhibit 5: CAGR of Latin American Pension Assets



Source: OECD, 2012.

Figure 2: CAGR of Latin American Pension Assets

Another recent trend is the increasing amount of M&A activity that has happened since 2011 amongst the pension fund management companies. As of the end of 2013 there were 16 transactions involving more than \$286 billion in assets or over 61% of the regions total pension assets aside from Brazil (Campos Consulting, 2012).

Chile represented the most M&A activity in both absolute dollar amounts with three deals amounting to \$114 billion in affected assets (Campos Consulting, 2012). That is almost 68% of all Chilean pension assets. Following is Colombia with three transactions, worth over \$71 billion in assets, representing 90% of the country's pension assets (Campos Consulting, 2012). Finally, Mexico had four deals worth \$26 billion covering 68% of the local assets (Campos Consulting, 2012). Throughout Latin America, there followed many additional sales in countries like Costa Rica and Uruguay, but of substantially smaller scale.

Given the growth, regulatory changes, and attention on the pension systems in Latin America, we could expand upon this landscape indefinitely however to better understand the system we will compare the polarized examples of Chile and Brazil. By analyzing Chile and Brazil, we can extrapolate out to the other economies as Chile has long been an example in the region while Brazil you could argue, has been a model for countries like Argentina, Venezuela, etc.

Specifically we are going to analyze one investment type, ETFs, and their usage by Chilean and Brazilian pensions to see in detail the investment selection process for pension funds' portfolios, buying patterns, portfolio allocations and risk levels. Before we delve into how these pensions utilize ETFs, we'll briefly cover the characteristics of ETFs as with any investment definition it is important that we define the vehicle for purposes of mutual understanding.

3. EXCHANGE TRADED FUND OVERVIEW & KEY VEHICLE STRUCTURES

Exchange Traded Funds or ETFs, are a recent investment innovation to the securities markets. An ETF is a commingled investment vehicle first created in 1993 in the United States after a fund sponsor, SSgA, received an exemption from the SEC for relief from multiple provisions under the Investment Company Act of 1940, which previously did not allow ETFs in current form.

ETFs combine many features of both mutual funds and stocks in order to allow investors to access a grouping of securities or companies, at lower costs, with trading flexibility and transparency. ETFs span the range of investment strategies from fixed income to equity, to commodities, to leverage and inversed products to hard assets. Given mutual funds are the historical norm in commingled products we will use a comparison between ETFs to better explain the investment vehicles unique features. There are four core distinctions between mutual funds and ETFs, which are, trading, fees, taxes and transparency according to Blackrock iShares (Blackrock, 2014).

■

ETF Overview

ETF or Exchange Traded Fund: Commingled investment vehicle comprised of a grouping of securities that trades intra-day on the exchange similar to a stock.

- **Trading**
 - Allowed to trade intra-day in lieu of mutual funds which price once daily
- **Taxes**
 - Due to the process of selling and buying in the ETF they can negate capital gains
- **Fees**
 - Generally lower than their mutual fund counterparts for a variety of reasons
- **Transparency**
 - Show daily holdings and are completely transparent as opposed to other commingled vehicles with less reporting

The main structural differential is the ability to trade intra-day in lieu of end of day as in the case of mutual funds. For mutual fund investors, they must trade through the mutual fund company (not on an exchange) after the market close at the closing NAV (Net Asset Value) pricing. In comparison, ETFs trade like a stock at market value according to their current NAV that is listed every 15 seconds on the exchange. However this does mean that ETF trades include brokerage or transaction fees whereas mutual funds do not.

ETF shares are created by an institutional investor, otherwise known as an Authorized

Participant (AP), the AP provides a basket of securities, cash, or both, to the ETF. The basket of securities is called the creation basket. Then the AP receives a set amount of ETF shares, this is referred to as a creation unit. These shares then trade on the stock exchange and when a sale is needed the same process happens in reverse, whereas the AP will create a redemption basket in kind (in direct securities), in cash or a mixture of the two depending on the ETFs allowance. While this process may seem complex, it happens almost instantaneously. In addition, due to sophisticated hedging and trading strategies this process ends up creating substantial trading efficiencies when done correctly.

The second substantial differentiation is taxation treatment. ETFs allow for preferential tax treatment through the creation/redemption process, where the (APs) create baskets or creation units for each ETF on an exchange instead of transacting directly with the fund. This technique provides positive tax treatment of capital gains, as the portfolio manager does not have to realize a sale in securities with gains, but instead can exchange the securities in the market. That type of trading avoids negative tax consequence for investors that have not technically sold their shares. The full explanation of the creation/redemption process is outside of the scope of this paper but is a unique feature of ETFs.

The next large differential is fees for ETFs. There are many varying types of fees from operational (custody, fund accounting), to brokerage fees (transaction and trading fees), to management fees (payment to fund managers), on average ETF fees tend to be lower than mutual funds. This is largely due to ETFs slant towards passive management, in which most ETFs track an underlying index or benchmark. Thus the expenses tend to be sizably less than their mutual fund counterparts. In addition as ETFs grow, their scale allows for cost efficiency that is normally passed on to the shareholders.

Finally regarding transparency, investors are increasingly interested in seeing the underlying holdings of the commingled portfolios they invest in such as a mutual fund or ETF in order to understand their risk, allocations, exposure etc. After the 2008 crisis, investors realized the danger in not fully understanding the liquidity and risk in their end holdings. ETFs benefit from daily holdings disclosure while mutual funds disclose on a monthly basis, and hedge funds on a quarterly or annual basis. After the Great Recession transparency into underlying holdings has become incredibly important to institutional investors in particular.

Many attribute ETFs growth to these aforementioned factors, as they are the fastest growing investment vehicles globally (Hougan & Nadig, 2014). Examining Latin American investor's use of ETFs will shed more light onto how investors are using these products and which fund managers are benefiting from these new growth trends.

3.1. CURRENT STATE OF ETFs IN LATIN AMERICA

There is almost \$14 billion in foreign ETF manager's products in Latin American pensions, and these numbers have steadily risen. While local mutual fund managers are present in the leading

countries in the region, they are not prevalent. Usually you will see one or two local players who are unrelated to the international ETF managers but these players will represent a small portion of the assets. In the ETF realm managers from the US dwarf local ETF distribution both globally and in Latin America. The ETF industry is centralized within the main global ETF companies; iShares, Vanguard, State Street and Powershares. These four players hold more than 70% of the total ETF assets. Given the importance of first mover advantage, price, liquidity and volume in the ETFs it is no surprise that the largest ETFs, and thus ETF managers, hold such sway. The main countries in regards to ETF usage are Chile, Mexico, Colombia, Peru and Brazil both when looking at retail and institutional use. The largest market for ETFs is Chile with over \$16 billion in US ETF assets, followed by Mexico with over \$10 billion in AUM, Colombia with \$4.3 billion, Peru with \$4 billion and Brazil with \$2 billion as of the end of 2013 (Llanos-Small, Katie, 2013). Brazil is sizably smaller due to restrictions prohibiting foreign managers entry without a local presence.

3.2. FUTURE STATE: ETFs IN LATIN AMERICA

As one ETF distribution agent from the US said during our interviews, “We expect Latin America to be one of the largest growth engines for our company in the next 3 years.” While critics and even many locals in our interviews deemed Brazil “the land always poised for growth but never reaching it,” in my conversations with industry participants there was an undercurrent of positivity for the future implementation of ETFs.

One pension manager in Brazil predicts that his country will be largest opportunity for investors going forward as he is hopeful that the mix of low interest rates, rising return expectations and a slowing economy will mandate that the local government opens the market to varying options. Others are not as optimistic, as one US fund company explicitly has chosen to not enter Brazil in the near future as he sees the local regulations as prohibitive to international investment firms and countries like Chile reap the rewards in terms of attention and distribution efforts. And another household name in finance recently closed their doors in Brazil.

There are four trends our interviewees anticipated for Latin America’s ETF landscape:

- 1) Product proliferation
- 2) Expansion of ETFs to all three investment groups: Institutional, Advisor & Retail
- 3) Third party ETF Portfolio Strategists
- 4) Longer Holding Periods & Strategic Usage of ETFs

First a constant thread the market participants mentioned was the opportunity for an increasing product set in both new and different types of product as well as total number of ETF products available. Although currently we have over 1,550 ETFs in existence and many fund closures have made recent headlines, there are over 1,000 ETFs in registration as of this paper’s writing (SEC, 2014). Many of the US ETF providers were interviewed stated that we are just beginning to see innovation in this sector. If Latin America follows the US and developed markets in ETF implementation as it historically has we could expect the proliferation of active ETFs, alternative

ETFs (or liquid alts), local providers to start creating more in country ETFs especially in fixed income for distribution both in Brazil and Chile as well as globally.

Historically, the progression for ETF buying begins with a need for liquidity for institutional investors, followed by active traders like hedge funds looking for ways to make opportunistic bets, then we see first early adopters in the advisory and institutional space as a set investment, and finally we see ETFs as part of the retail clients portfolios as well (Hougin & Nadig, 2014). This progression or drip down from institutional investors, to advisors, to retail clients has not progressed completely in Latin America. At this stage it is still solidly an institutional investment and only beginning to seep into the advisory space or the retail space. The original hypothesis was that this trend would continue and ETFs would follow the growth pattern in the US in Chile and on a slower and more protectionist scale in Brazil. The alternative argument is that protectionist workers parties and local governments will thwart this expansion which we saw a bit in the US in the early 2000's as more complex investments came to market. Given the interviews conducted the pension managers general consensus was that these obstacles will be overcome in Latin American countries like Chile, Mexico and Colombia but will differ dramatically in countries like Brazil, Argentina, Venezuela etc.

In addition, we have recently seen the rise of third-party ETF strategists who create portfolios with groups of ETFs representing their overall investment views in the US and other developed markets. Similar to a fee account these managers charge a small percentage on top of the expense ratios of the ETFs to self create a portfolio for investors both institutional and retail. Given that investors like Burton Malkiel (author of *A Random Walk*) manage portfolios like this and have rapidly grown assets one ETF industry participant commented that this portion of the market will grow for institutional investors in Latin America next. One of the ETF providers who uses these firms in the US expressed that, it is a way for firms to monetize using ETFs with a revenue and fee component as well as for pensions to continue outsourcing a portion of their portfolios for areas they are not able or interested in managing internally.

Lastly, according to the portfolio strategists who work with ETF users in Latin America they anticipate that the way that institutional investors will use ETFs in Latin America will change and that these investments will become part of a longer-term strategic allocation in their portfolios. In their conversations with pensions across Latin America they have seen this global trend occurring with ETFs across institutions. While in Latin America holding patterns according to the interviews ranged from a month to two years, the average investor holds their ETFs for 6 months in the pensions therein. According to a study by Greenwich Associates in 2013, 36% of institutions report using ETFs for longer than two years, in this same study five years ago the percentage investing for two years ago was zero (Greenwich Associates, 2013). As Latin American pension investors continue investing in ETFs, the market grows, the costs continue to drop and the options proliferate three of our pension managers mentioned they would expect this same trend of longer holding periods to appear in Latin America.

The predictions by our participants do not come without concerns however. It is extremely important to note the main items that could derail continued ETF growth in the region. The main concerns when our interviewees were asked what keeps them up at night were the following:

- 1) Bad or Misrepresented products
- 2) A Repeat Economic Recession
- 3) Reversion to hidden and increasing costs

With the advent of a slew of new products comes the likelihood that many of the products are not fully vetted, simply mis-marketed or toxic products. Investors in the US have seen this with leveraged products that have essentially provided negative returns since inception and are mismarketed to clients as well as with the new “smart beta” trend, which has not been fully researched and continues to grow rapidly without a set definition of the term. These bad apples could cause regulators and investors to toss out the barrel given the difficulty of finding those appropriate and qualified ETFs (Hougin & Nadig, 2014).

As investors saw in 2008 during the economic crisis, the ripple affects of the US mortgage crisis made waves around the world and many countries shut their doors to international managers and products that they deemed toxic given the volatile return period. During this time Mexico completely eliminated foreign fund managers from the allowable investments in the AFORES, the local pension system. This could happen again if markets revert in government’s attempts to protect local investors.

Finally, given these new trends of third party portfolio strategists and revenue trails, Hougin & Nadig could see an instance where fees just take a new form and the investor continues to pay for it (Hougin & Nadig, 2014). As firms mandate more from the ETF players in revenue share, who eventually shoulders that burden? The end investors according to one pension manager in Chile.

3.3. LEGAL NOTES ON DISTRIBUTING ETFs IN LATIN AMERICA

ETF usage in Latin America, by international or foreign firms, is restricted and supervised by varying agencies of each country. One of the largest differences between Chile and Brazil is that Chile allows non-local exchange listed ETFs to be offered into their markets, while Brazil mandates that any foreign ETFs be listed on the local exchanges and thus converted into local currency as well as supported by a local operator. Thus before looking at each region and how the pensions purchase, how the distributors market, and how the traders implement in the market, it is important to note that much of this is driven by how the regulators allow ETFs to be used in each country. Keep in mind while reading about the differences in Brazilian and Chilean purchasing of ETFs that local law influences their actions heavily.

While there are stark differences between the two countries, there are also many similarities from how to do private placements, to parameters for size and experience by manager. We will delve into each country’s allowances following a discussion of their local market, which should give an interesting perspective into how to legally distribute and thus buy ETFs to each country.

3.4. INTERNATIONAL ETF PROVIDERS

When assessing managers in the ETF space it is important to view their AUM, total number of ETFs, market share as well as trends in inflows and outflows. Exhibit (6) depicts the ten largest ETF managers globally and their AUM and flows as of June 12, 2014 globally (ETF.com, 2014). The global provider market share is largely mimicked in Latin America with the top five participants holding a majority of the assets. As we move down the list the assets disperse, as many of the providers have not yet begun to distribute into the region in a meaningful way (ETF.com, 2014).

Issuer	AUM (\$, mm)	Net Flows (\$, mm)	% of AUM
Blackrock	709,647.45	-646.31	-0.09%
SSgA	390,748.22	-241.93	-0.06%
Vanguard	378,173.32	435.11	0.12%
Invesco PowerShares	99,635.32	-319.48	-0.32%
ProShares	27,409.58	19.52	0.07%
First Trust	26,780.40	80.30	0.30%
Guggenheim	26,709.53	-73.76	-0.28%
Van Eck	24,340.72	-18.49	-0.08%
Charles Schwab	20,863.86	-16.06	-0.08%
PIMCO	14,957.70	0.00	0.00%
ALPS	10,643.21	0.00	0.00%
Barclays Capital	8,523.50	9.86	0.12%

Table 4: ETF League Table As Of June 12, 2014

Source: ETF.com Daily Flows on June 12, 2014 and asset totals of that date.

To get a fuller picture we can look at the top 15 ETF managers globally in Exhibit (7) and see not only their flows and AUM but also their market share and total number of ETFs per provider. You can see that within the top 5 we have more than 70% of the assets and over 1200 products amongst those five managers (Ssga, 2014). While there is a large drop off in assets overall outside of the top five managers and a crowding around 1% market share amongst the bottom ten managers (SsgA, 2014).

ETF Family	# of ETFs	AUM MM	Market Share	Asset Flows MTD	Asset Flows YTD
Blackrock	761	\$1,000,663	38.4	\$9,278	\$38,273
State Street	215	\$427,739	16.4	\$10,159	-\$7,706
Vanguard	104	\$393,860	15.1	\$6,755	\$33,744
Powershares	195	\$105,041	4.0	-\$549	-\$1,177
Deutsche Bank	393	\$59,499	2.3	\$9,450	\$11,534
Societe Generale	271	\$49,420	1.9	\$119	\$3,537
Nomura	55	\$41,042	1.6	-\$1,120	\$4,568
Wisdomtree	70	\$36,228	1.4	\$528	-\$19
First Trust	100	\$27,905	1.1	\$1,066	\$6,512
Guggenheim	68	\$27,292	1.0	\$575	\$4,397
Proshares	145	\$27,142	1.0	-\$238	\$2,073
UBS AG	339	\$26,207	1.0	\$84	\$8,692
Van Eck	67	\$24,842	1.0	-\$573	-\$198
Charles Schwab	21	\$21,472	0.8	\$574	\$3,443
DWA	24	\$19,707	0.8	-\$767	\$3,249

Source: SSaA ETF Snapshot. May 2014. All assets in USD billions.

Table 5: Top 15 Global ETF Providers Snapshot

To take a deeper dive into the ETF landscape we'll look at the two largest players in the region, State Street Global Advisors, owners of SPDR ETFs, and Blackrock Asset Management, owners of iShares ETFs.

3.5. STATE STREET GLOBAL ADVISOR – SsgA OR SPDR ETFs ANALYSIS

SSgA offers SPDR ETFs, which is a family of traditional market capitalization weighted ETF indices and they are largely passive index providers of a large segment of markets globally. SPDR stands for S&P Depositary Receipts, they were one of the first providers of ETFs. SSgA created and launched **SPY – S&P 500** Index in 1993, that was the first ETF and spawned the ETF industry. As of December of 2013, SSgA was actively engaging in Mexico, Colombia, Peru and Chile from an ETF standpoint. It is important to note that as SSgA falls under State Street, their parent company, they have additional sales forces selling custody and services into the region. These groups are distinct from SPDR ETFs and legally not allowed to distribute the products as they are generally not licensed professionals and not managed by a series 24 representative which is required for FINRA registered firms in the US.

SSgA currently does not have representation in Brazil from an ETF standpoint. They can sell into the country through reverse inquiry or into large official institutions such as the central banks. State Street Bank has one of the highest capital levels in the US banking industry as well according to their 2013 balance sheet. In Chile they have 52 ETFs approved by the CCR (the Chilean Pension Regulator) for pension use although their assets are highly concentrated in their top products (CCR, 2014). From a marketing perspective, they do not have a Chilean dedicated website or Spanish website and literature. They prefer to lean heavily on the third party distributor that is ultimately

responsible for selling their investments. They have annual roadshows with the Latin American leadership team as their additional coverage. Thus their model is essentially to utilize the resources they have in the US for this client base in a very centralized model with all governance, marketing, distribution decisions headquartered out of Boston, MA. This international as opposed to global model has been the cornerstone of their strategy.

SPDRS has almost 99% of their Chilean AUM in **SPY** (their flagship S&P 500 product) as well as their largest sector ETFs, according to industry estimates. Globally, of their \$427 billion in assets, approximately \$206 billion (almost 50%) is in two funds; **SPY** and **GLD (SPDR Gold Trust)** (Condon, 2014). Given both funds low expense ratios of **SPY** specifically of .09%, concentration and tight margins may equate to a profitability issue.

SPDR uses Celfin Capital (which has since been purchased by Brazilian BTG Pactual) as their distribution agent in the Andean region, with supplemental coverage from the US. Interestingly, they had grown steadily in Chile moving from \$3 billion in 2010, \$5 billion in 2011, to \$7 billion in 2012, with Chile being their largest region in Latin America by far (Cerulli, 2014). The closest country by AUM was Mexico, which has held steady at around \$2 billion in assets since 2010 (Cerulli, 2014). However, their AUM declined for the first time in 2013 coming down to around \$6.5 billion (Cerulli, Data). That decline paired with their concentration risk in a few products, and their very small margins due to low expense ratios, leaves many wondering what the future will be for a provider like SSgA. As one pension investor noted in Chile, “They are not the low cost provider and they are not the highest service provider. As liquidity evens out in all the products what is their competitive advantage?” On the other side of the conversation in almost all of the interviews in Chile investors are currently using their flagship ETFs and plan to continue using those investments. As you can read in many a industry piece, they have been dogged by lower cost alternatives such as Vanguard and their long time competitor, Blackrock’s iShares. Regardless, at this point their liquidity, broad product offering and flagship products ensure that currently they are a major player in the Andean region with broad brand awareness and usage by the AFP’s in Chile.

3.6. BLACKROCK ASSET MANAGEMENT – iShares ETFs Analysis

Blackrock’s iShares boasts the status of being the largest ETF provider globally with more than 700 funds and almost a trillion dollars in assets under management. They are owned by BlackRock, which is considered the largest asset manager in the world. Similar to SPDR they are a family of traditional ETFs based on varying indices with a bias towards market capitalization weighted ETFs that cover the beta of a staggering amount of market segments.

iShares and SPDR are attractive models to juxtapose as two of the largest and most storied ETF firms but with glaringly different operating structures and distribution philosophies. While their products are largely similar their approach to distribution and management is quite distinctive. iShares operates according to a global leadership structure with key leadership roles located in Latin America, Asia and Europe. They have a more decentralized and local approach to distribution and leadership with regional customization in products, marketing, distribution and hiring. As an example, the former head of Blackrock’s Latin America business, Daniel Gamba, was promoted to head all of the America’s Institutional iShares business, which is an executive level position. This shows their commitment to have senior leadership members in Latin America and to

recruit talent from the region. This is quite different from SSgA's model of remote direction from Boston and no representation in country in Latin America. In the conversations in both Brazil and Chile the pension managers intermittently used the term ETFs and iShares to talk about their entire portfolio of ETFs highlighting the top of mind space that iShares enjoys in the region.

iShares is present and operating across the region with local offices in Mexico, Chile and Brazil. They are by far the most entrenched in the region with a significant local employee presence throughout Latin America. In fact, Mexico City is their ninth largest location in the America's. Blackrock does not use third party distributors such as Celfin in Latin America but instead has locally registered representatives. They also created Spanish and Brazilian domestic marketing, websites and local investment products in Chile, Brazil and Mexico. They have 9 local ETFs in Brazil, 11 local ETFs in Mexico and hundreds of ETFs that are domiciled in the US, Canada, the UK and Germany but listed on local exchanges such as the BMV in Mexico and the Santiago Stock Exchange in Chile (Cerulli, 2014). They are the largest ETF player in the region with 59% market share in Brazil, and a majority market share in Chile as well (Cerulli, 2014).

Now that we have an understanding ETFs, the market at large and the major players, it is worthwhile to engage further into Brazil and Chile's pension landscape and how they utilize ETFs in their pension systems.

4. BRAZILIAN PENSION BACKGROUND

Brazil's pension system is unique in the region and globally, due to its continued use of defined benefit (DB) structure, size as the largest pension system in Latin America and relative closed stature as a domestically biased and publically mandated contribution pension system.

It is based on article 201 of the Federal Constitution, which mandates that the government provide for their citizens upon retirement. Thought INSS (a Brazilian regulatory body for the pensions) Brazilian workers contribute part of their payroll monthly either through an automatic or mandated but self determined system. Each year there is a calculation produced through INSS that determines the amount workers must contribute according to Brazil Business the current allocations are:

For registered and freelance contributors (Mello, 2014):

Wages up to BRL 1.174,86 -INSS rate at 8%

Wages from BRL 1.174,87 to 1.958,10 -INSS rate at 9%

Wages from BRL 1.958,11 to BRL 3.916,20 -INSS rate at 11%

For individual and optional workers (Mello, 2014):

Income up to BRL 622,00 -INSS rate at 11%

Income up to BRL 622,01 to BRL 3.916,20 -INSS rate at 20%

However the public pension system is currently stretched and in debt, mostly due to an overpromise of benefits to workers, which is why many workers also participate in a private pension plan or a plan through their company. The country also has a large home country bias with a majority of the assets invested in local securities and little diversification in the system.

We will delve more into some of these specific challenges in later sections.

4.1. BRAZILIAN PENSION STRUCTURE

Structurally Brazil's pension system is comprised of three separate pension schemes. The first segment is exclusively for public-sector employees, the Regime Propio de Previdencia Social or its abbreviation RPPS (Civil Servant's System), and is run by the Ministry of Pensions and Social Assistance (Campos Consulting, 2012). The second system, Regime Geral de Previdencia Social (RGPS) or the Basic Social Security System, is the general regime which relates to all private sector workforce and is mandatory (Campos Consulting, 2012). The National Institute of Social Security heads RGPS, and is financed through shared payroll taxes and revenues from sales taxes.

The final scheme is the Regime Previdencia Complementar (RPC) or the Complementary System, which is an additional system for private sector employees and the oldest Latin American system. In essence this system is meant to be additive to the RPPS scheme and is voluntary.

The RPC contains both open pension funds (entidades abertas de previdencia privada) and closed pension funds (entidades fechadas). The open funds can be for-profit or nonprofit, are allowed as banks or insurance companies and are defined contribution plans accessible to any employee of an organization in Brazil. The closed pension funds are more constrictive in ownership structure and less constrictive in plan type. These funds are structured as non-profit organizations, which are available to single employers, multi-employers or labor unions for collective employee benefits. These plans may be defined contribution, defined benefit, variable or mixed.

4.2. CHALLENGES IN BRAZILIAN PENSIONS

While we will delved into the structure of Brazil's pensions and their investment lineups, it is important also to understand a few of the pressures and the current status of the Brazilian pension system. First, if we compare Brazil's pension to the global pension market the country spends a much larger percentage of GDP on their pension system, especially considering their young workforce which should be supplementing the costs. This is in stark contrast to the US, as we have a mature workforce and underfunded pensions due to historic low interest rate levels among other reasons. In 2012 the IMF warned that the Brazilian pension system might face a funding gap close to 25% of GDP over the next 20 years as the population ages (IMF, 2012).

However, Brazil began in 2012 to address this problem by closing most DB plans to new participants and capping the yields pension funds can utilize in their forecasts. The new target is inflation plus 4.5% into 2018, from their previous target of inflation plus 6% (IMF, 2012). Obviously those numbers are still lofty goals given decreasing interest rates, social unrest, and a slowing economy post world cup and the Olympics.

4.3. KEY REGULATORS & GOVERNING BODIES IN BRAZIL

In determining what investments may be sold into which funds and how investments are utilized it is also important to understand the governance body. The key institutions and regulators in Brazil differ depending on the pension type. Closed pensions funds are regulated by both the State Secretariat for Pension Funds and The National Board of Complementary Pensions. Meanwhile, open funds are supervised by different regulatory bodies, which include both the Superintendence of Private Insurance alongside the National Board of Private Insurance. Finally the two national Pension Fund Associations wield sizable power in determining allowable investments and as sounding boards for the pension managers. These associations are Abrapp -Associação Brasileira de Entidades Fechadas de Previdência Privada, and APEP -Associação dos Fundos de Pensão de Empresas Privadas (Campos Consulting, 2012). You will often find pensions moving in a herd for new investment allocations and using these organizations to publicly vet ideas.

As in the US and many countries globally, Brazilian pension plan sponsors needed to revise their traditional defined benefit system in order to lessen their risk post 2008 according to the IMF study (IMF, 2012). Instead of transitioning to defined contribution plans as many other countries have they developed a unique hybrid plan called, mixed or variable contribution plans.

However, the large majority of these variable plans are defined contribution plans as far as benefit accumulation upon retirement is concerned. The difference is in their risk benefits for the employee upon death and the final dispersion of assets accumulated. An in depth explanation of this is beyond the scope of this paper but it warrants noting a structural difference.

4.4. BRAZIL ASSET ALLOCATION & INVESTMENT LANDSCAPE

Brazil accounts for more than two thirds of the \$3 trillion in total Latin American institutional assets. These assets are broken down into four key areas; Mutual Funds, Pensions, Central Bank Assets and Insurance pools. Each area has seen substantial growth and is largely predicted to continue increasing. The country boasts over \$1 trillion in mutual funds, close to \$400 billion in Central Bank assets, over \$500 billion in pensions and over \$350 billion in insurance assets as shown in Exhibit (8) (Cerulli, 2014). To focus specifically on pensions as the theme of this paper, Brazil is one of the world's largest pension systems and the largest in Latin America. Brazil has \$284 billion in closed pension systems and over \$550 billion in total pension assets (Cerulli, 2014). In tandem the pensions are projected to grow at an 11% growth rate according to Cerulli research, which is a very high level rate albeit less than the 13% growth we saw in 2013 (Towers Watson, 2014).

4.5. CURRENT STATE: EXCHANGE TRADED FUNDS IN BRAZIL

As we discussed previously Brazilian Pension Funds mandate listing on the local exchange in order to invest in ETFs and given that, the market has remained relatively closed to foreign ETFs. In Chile you often see AFPs buying ETFs on the NYSE, the London Stock Exchange, Canadian Exchange, the NASDAQ among other global exchanges. These funds may be denominated in USD, GBP, CAD and domiciled in the varying international countries. In Brazil, the ETFs that may be offered to Brazilian investors are for local investors only, and those investors without residence in Brazil are not eligible to purchase any of these local ETFs. Thus, the ETF international ETF market is non-existent and the local market is comparatively quite small.

Trading ETFs in Brazil is unique and in some manners easier and in others more complex than in the Chilean market we will be analyzing. The local ETF market has approximately \$2 billion in 14 local ETFs as of the date of this paper although the rate of additional funds being added is accelerating (CCR, 2014). These ETFs largely allow for exposure to Brazilian fixed income, debt and currency as opposed to broad based global exposure, which is the case for Chile. In fact, Blackrock iShares was the first to have a Brazilian-listed ETF that offered exposure to equities outside of Brazil that launched this April 2014 (Leite & Condon, 2014). The ETF was their **iShares S&P500 FIC FI Investimento no Exterior** which gives exposure to the **iShares S&P500** offering that has been wildly successful in the US and based upon the world's largest and most liquid market (Leite & Condon, 2014).

The difficulty lies in trading volume and expertise by the local Brazilian traders. Whereas on the NYSE an S&P500 index of iShares or any of the large providers would be incredibly liquid and trade with very tight spreads in Brazil this ETF could very easily experience wide spreads and low trade volume. As an example, in the US there are often enough buyers and sellers to cross trades for large ETFs without problem. In this instance, one buyer wants to buy 10,000 shares of SPY and another wants to sell 10,000 shares, the exchange and the intermediary would in essence connect the two parties (without revealing who they are through automated trading processes) and execute the trade without having to go through the creation/redemption process. In lieu of not having one person on each side of the trade it is commonplace to measure liquidity based upon the underlying indices total liquidity. Total liquidity means, the availability and volume of underlying holdings of any ETF in regards to each individual security. Typically these underlying holdings are behemoth companies that are highly traded i.e. Apple or Exxon, and thus it is quite easy for US Authorized Participants to create a basket of securities and execute the trade in this manner. In Brazil this ETF trades on BOVESPA, which would not have a high trade volume for the ETF or underlying holdings. Thus purchasers would have to call traders in the US and coordinate with AP's to create units of an ETF and execute through the NYSE. This can be done and is done frequently in other markets however it is a matter of familiarity with the trading process by the pension managers, ETF traders locally and US traders working with Brazilian pensions.

This complexity may be another reason why we see two providers capture the market almost entirely. iShares dominates the local market with 59% market share followed by bank and local ETF provider Itau, with 41-48% market share depending on the source. Itau has over \$58 million in Brazilian ETFs, brought the first Brazilian ETF and has the largest ETF in country by

AUM **IT Now PIBB** (Lam Research, 2014). The ETF with the highest trade volume, which is another way to measure size and market share, is **iShares BOVA CI** (Lam Research, 2014). In Exhibit (11) and (12) below you can see a list of local Brazilian ETFs by the two largest providers in Brazil; Itau and iShares (BOVESPA, 2014). Here you can see two lists showing the firm AUM, Fund Type, Fees and varying other factors used by pensions to determine their interest and ability to invest.

In interviews with Brazilian pension managers, ETF fund managers, family offices and traders there are common themes to what factors and parameters they look at before deciding to invest in these funds. Given the limited options for pension managers the most important factor is typically fund type, the managers are often looking to utilize specific sectors, countries or asset classes in their investment regime and thus they are looking for new ways to access that subset of the market. Similar to Chile they are then interested in liquidity and tradability, however Brazilian pension funds do not trade as often as Chilean funds. The reason is the funds in their system are more stable and less likely to move, so investors can utilize longer-term investments and keep a smaller cash bucket of liquid investments like ETFs as stated one US ETF provider who tracks the inflows and outflows of ETFs in the pensions in Chile.

Exhibit 11: Itau Brazilian ETF List

	It Now PIBB	It Now ISE	It Now IDIV	It Now IMAT	It Now IGCT	It Now IFNC
AUM (mil)	\$512	\$16	\$25	\$7	\$18	\$7
Fund Type	High Liquidity	Corporate Sustainability	Dividends	Basic Materials	Corporate Governance	Financial Sector
Benchmark	IBRX-50	ISEE	IDIV	IMAT	IGC	IFNC
Market Maker	Itauvest DTVM	Itauvest DTVM	Itauvest DTVM	Itauvest DTVM	Itauvest DTVM	BTG Pactual
Fees	.059%	.40%	.50%	.50%	.50%	.60%
Replication	Full	Full	Full	Full	Optimized	Full
NAV Pricing	Market close	Market close	Market close	Market close	Market close	Market close

Table 6: Itau Brazilian ETF List

Source: BM&F Bovespa & Itau Asset Management as of Oct 20th, 2013.

Exhibit 12: ETFs Listed on BOVESPA

Ticker	Theme	Inception Date	Expense Ratio	AUM (\$)	Holdings	Market Value (R\$)
IVVB11	S&P 500	04/28/14	.27%	7,986,187	502	44.512559
BOVA11	IBOVESPA	11/28/08	.54%	1,201,790,588	74	56.289957
BRAX11	BRAX11 IBX- Brazil	02/22/10	.20%	121,583,687	104	46.762957
MILA11	BM&FBOVESPA MidLarge Cap	11/28/08	.54%	5,204,062	70	52.04062
SMAL11	BM&FBOVESPA Small Cap	11/28/08	.69%	37,212,775	85	62.021292
CSM011	BM&F BOVESPA Consumer	02/22/10	.69%	10,380,265	47	51.901324
ECOO11	Green Energy ICO2	06/15/12	.38%	115,446,063	33	60.761086
MOBI11	BM&FBOVESPA Real Estate	02/22/10	.69%	2,738,304	21	13.69152
UTIP11	BM&FBOVESPA Utilities	05/15/12	.69%	7,754,440	21	25.8485

Source: BM&F Bovespa December, 2013.

Table 7: ETFs Listed on BOVESPA

Notably, the main Lead Market Makers (LMMs) and Authorized Participants (APs), who are tasked with creating liquidity in these products, are also Brazilian local banks BTG Pactual and Itau. Although the local Brazilian ETF trade volume is limited as you can see in Exhibit (13). In addition the main APs, or the firms allowed to build creation units of the underlying ETFs and distribute them to the providers, are also local Brazil firms: Itau Corretora De Valores, BTG Pactual, Fator, Gradual, XP Investimentos and CM Capital Markets (BOVESPA, 2014). These firms will work in coordination with the US traders on the NYSE to deal with liquidity issues in non-locally based ETFs. There is a pervasive domestic bias to portfolios across Latin America but particularly in Brazil given the barriers to entry. As these participants continue to gain sophistication and trade flow in the market our participants generally expected we will see new products and increased usage by the Brazilian pension managers. However overall they were not optimistic on the short term.

ETF Name	Code	Date	Nº of Trades
CIIII	X BOV11	02/27/2014	0
SHARES BOVA CI AIXAETFXBOV CI	BOVA11	02/28/2014	5,492
SHARES BRAX CI	B RAX11	02/28/2014	4
SHARES CSMO CI	CSMO11	02/28/2014	2
SHARES ECOO CI	E COO11	02/28/2014	14
SHARES MILA CI	MILA11	02/28/2014	2
SHARES MOBI CI I	M OBI11	02/28/2014	2
SHARES SMAL CI I	SMAL11	02/28/2014	8
SHARES UTIP CI I	U TIP11	02/28/2014	2
T NOW IDIV CI I	DIVO11	02/28/2014	17
T NOW IFNC CI I	F IND11	02/28/2014	2

T NOW IGCT CII	GOVE11	02/28/2014	3
T NOW IMAT CII	M ATB11	02/28/2014	2
T NOW ISE CII	ISUS11	02/28/2014	7
T NOW PIBB CII	P IBB11	02/28/2014	102

Table 8: Trade Volume of ETFs listed on BOVESPA

Source: BOVESPA, 2014

4.6. FUTURE STATE: EXCHANGE TRADED FUNDS IN BRAZIL

When considering future Brazilian ETF usage the question both pension managers and ETF firms say was most foremost for them in regards to ETFs was, will Brazil open its market for globalization? Is the government and industry interested and capable of this feat? As we discussed the barriers to entry are substantial and thus, will Brazil's constituents consider a globalization of the market in the next 5-10 years? Without a more open financial market most ETF companies we interviewed who are not already in the market asserted that there will be little room for growth in the ETF industry as compared to Chile and the rest of Latin America.

First let's discuss what investors and stakeholders in the market would like to see happen. In the course of the interviews the resounding interest from Brazilian pension investors was to see more options available for sale into Brazil within the ETF landscape. As an example one investor said, "Without new investment options and the ability to invest in diversified schemes it will be difficult to reach our return targets as rates change." That is a pretty strong statement in favor of allowing international access to local investors. However the Brazilian interviewees would temper that sentiment with the caveat that historically even after allowances are made in the region for new investment options, the implementation has always been slow in their experience. There will be a big learning and due diligence curve for pension investors to feel comfortable with new ETFs and perhaps more importantly for their boards and regulatory bodies to feel comfortable. Another investor commented that in order to invest in any new vehicles they often have to do an obscene amount of investigation, which almost prohibits them from considering international mandates. Thus one of the largest ETF firms in Brazil noted investors are interested and willing to push for access in new ETF options and would like the possibility to buy them, whether or not they would implement them is another story.

Considering the largest Brazilian pension investors would like the government to allow new investments for consideration, what is the likelihood that the Ministry of Finance, the Central Bank and the Brazilian Pension System, under a worker's party president, would allow for this? If history is an indicator than we are in for a longer wait in Brazil than many fund companies and investors anticipate and desire. Brazil, in recent rankings by the International Monetary Fund (IMF), was ranked the America's most closed major economy (IMF, 2012). The G20 tells a similar story regarding the economy in Brazil and has ranked their openness for trade near the bottom.

Interestingly at the beginning of our research our US interviewees had more positive comments regarding Brazil and President Dilma Rousseff's interest in opening the Brazilian trade and financial markets. Rousseff attended the Davos World Economic Forum for the first time in her presidency purportedly due to pressure felt for better services and economic opportunities by

her people as evidenced by the street protests throughout Brazil. She began negotiations with the EU on a Free Trade Agreement and was rumored to even be considering talks with the US. Given that her platform was built on the BRIC upsurge, protectionism against the West and the US, and an alignment with Mercosur countries like Argentina who believe free markets do not benefit the people, this must have been a bitter pill to swallow. However the declining GDP numbers, plummeting commodities costs, and cumbersome government processes in Brazil seemed to mandate at least consideration of free trade agreements with the EU if not the US. We heard demands from groups like Brazil's National Confederation of Industry and the Federation of Industries of the State of Sao Paulo call for free trade agreements with the US, despite historical disagreements. As trade seemed to be opening with the Trans-Pacific Partnership and MILA Stock Integration and Free Trade Agreement, it appeared that Brazil would not want to be "left behind."

However, as the Brazilian presidential election nears on October 5th, with Dilma five to nine points ahead of her business friendly challenger Marina Silva, those sentiments may have been misguided (MercoPress, 2014a). It seemed that the BOVESPA was being held aloft by investor sentiment that perhaps a change in government would bring about this opening of the market. After it was revealed that Rousseff was up in the polls with one month left before the election, the BOVESPA declined by 10% and individual companies such as Banco do Brasil were down 8%, the largest amount since 2008. Meanwhile Petrobras was hit by a 24% turndown due to the news and the influence the government has on their business (MercoPress, 2014a). The reasons for this are largely due to two different platforms. Silva spoke of opening up financial markets, trade and lessening the bureaucracy while Rousseff campaigned on social welfare programs, protecting jobs and maintaining industry unions.

In a telling statement last week Rousseff's Trade Minister Mauro Borges is paraphrased in an interview Folha do Sao Paulo newspaper saying, "that an attempt to open the country to foreign trade would be a disaster for Brazilian industry and lead to the mexicanization of the economy, in reference to the light assembly factories known as maquiladoras that dominate Mexico's non-oil exports (MercoPress, 2014b)." That does not seem to bode particularly well for Brazil's ETF industry and it's allowance for foreign investment firms. Thus in conclusion while many industry participants are anxious for access to Latin America's largest pension market without a substantial political shift it looks unlikely to change in the immediate future.

Unfortunately for investors looking for ways to diversify outside of the country, lessen their overall cost, increase competition in their pension and potentially re-allocate risk, they may have to learn patience.

4.7. BRAZILIAN LEGAL & REGULATORY PARAMETERS FOR ETF DISTRIBUTION

Brazil has one of the most closed distribution and foreign entry market for ETFs in Latin America and certainly in comparison to Chile's pension investment due diligence process. Thus it is especially important to analyze not only the potential success of a venture distributing in Brazil

but the viability of entering the market for an international fund manager.

U.S and foreign ETFs may be marketed to Brazilian pension funds without local authorization if they are sold as a private placement (which comes with many evolving stipulations) however, they must invest in ETFs through a Brazilian-organized mutual fund approved locally for foreign investment. Then the mutual fund can invest in the ETF and issue quotes to domestic pension funds as a sort of intermediary. The process is substantially more proscriptive than we see in Chile, Mexico and Peru. In these other countries, companies can operate independent of a local operator and must only consider the regulations for being an offshore fund company with private offerings in country. This mandate of having a local Brazilian presence or joint venture has been prohibitive to many small companies and not entirely palatable to large operators who wish to utilize their own resources and protect their intellectual property.

In addition, similar to Mexico Brazil mandates that the ETFs sold in country be listed on the exchange in order to be sold into their market. In Chile institutional investors can and do buy ETFs listed on foreign exchanges such as the NYSE or LSE where there is larger trading volume and better liquidity. The Brazilian exchange the ETFs in Brazil are listed on is called the BM&FBOVESPA, which is the largest stock exchange in Latin-America. The following are parameters to list an ETF to trade on BM&FBOVESPA (BOVESPA, 2014):

The ETF manager must sign an Index Licensing and Authorization for Use Contract between the manger and the index provider.

- 1) The manager must provide the following documentation to the exchange:**
- 2) Standard registration request (sample is provided on their website);**
- 3) Declaration of intent to list signed by the ETF administrator (contract provided on the website);**
- 4) The fund manager must submit and comply with all mandated documentation from the SEC of Brazil (CVM) for ETF registration;**
- 5) The fund manager must pay all applicable feeds for the application process in accordance with the pricing policy which does vary;**
- 6) The exchange will review the documents within a 30 day time frame and return to the ETF manager who will have 30 days to meet the requested demands;**

5. CHILEAN PENSION BACKGROUND

The Chilean pension system is considered one of the most sophisticated and diversified pensions systems in Latin America. Having set the bar in Latin America for international allocations, multi-fondos or multiple risk fund systems, defined contribution structures and privatization in pensions it is often cited as the leader in the region.

First we will explain the structure of the pension system followed by the local landscape. The Chilean pension system has been in place since 1981 and was established during the controversial Pinochet regime, modeled largely after Friedman economics along with the economy and government at the time (Kritzer, 2008). The system was modeled after Milton Friedman's book, "Capitalism and Freedom." Jose Pinera was one of the key stakeholders who modeled the system after Friedman's book. Pinera was the Chilean Labor and Pension Minister, under Augusto Pinochet in the 80's. This change led to creating a completely private funded pension system, where workers are mandated to contribute 10% of their salaries to the pension system (Kritzer, 2008). The mandatory contributions have led to the AFP system growing dramatically; the portfolio funds now account for 62% of GDP (FundPro, 2014).

Due to the growth in assets of the model and high funding levels countries have replicated this system all over the world according to our interviewees who distribute funds to pensions. It has gone through numerous relatively minor regulatory changes such as under Bachelet's previous presidency; all Chileans were guaranteed a minimum monthly pension of \$160 as well as a subsidy based on the number of children they have. In addition in 2008, a new reform was introduced that mandates an auction process every two years where the AFPs bid for any new workers during this period for 24 months (Kritzer, 2008). The auction goes to the plan that bids the lowest total expense ratio for the pension. The estimated 700,000 new works must then stay in the AFP with the lowest fee for that period (Kritzer, 2008). After two years you can change your pension plan from for example Metlife to Principal but during your first two years of contributing to the pension system you must stay invested with the plan that won the government auction. According to the Chilean pensions interviewed this has put a lot of pressure on their expense ratios.

While the system started with 32 AFPs in 1997, today there are 6 remaining AFPs due to consolidation in the industry (CCR, 2013). There are news headlines as of the writing of this paper for a government constructed AFP under new President Michelle Bachelet's decree, that has not yet been put into place. The AFPs in order of size are Provida, Habitat, Capital, Cuprum, Planvital, and Modelo and they vary in terms of ownership structure, management fee, asset allocation and investment vehicle lineup (Compass Bank, 2014).

Every Pension manager has five different mandated risk plans according to a risk profile from most risky in Plan A to most conservative in Plan E. The measure risk according to allocation to equity, alternatives and fixed income as you have more equity and alternatives and less fixed income your risk increases. Participants can move from Plan A, B, C, D and E within each pension provider as well as change their pension from the varying providers such as Provida, Habitat, Cuprum, Capital etc. As you can see in Exhibit (14) below, the plan with the largest assets is the medium risk Plan C, although given that participants are allowed to move from plan to plan this can and does change (Compass Bank, 2014).

They charge a 1% fee overall for insurance coverage purposes and their management fees can vary as well from AFP Planvital being the most expensive, with an average expense of 2.36% to AFP Modelo with an average cost of .77% as the least expensive option (Compass Bank, 2014).

Exhibit 14: Chilean AFP List

AFP	Owner	Plan A	Plan B	Plan C	Plan D	Plan E	Total
Provida Habitat	Metlife	6,418	7,483	20,058	8,609	4,472	47,040
	Chilean Chamber of Construction	6,829	7,708	16,804	6,247	6,284	43,872
Cuprum	Principal Financial Group	7,242	5,330	11,781	4,409	6,622	35,385
Capital	Grupo de Inversiones Suramericana	6,207	5,956	13,044	5,838	4,187	35,232
Planvital	Assicurazioni Generali	547	666	2,007	983	313	4,517
Modelo	Soceidad De Inversiones Atlantico	409	1,019	551	216	353	2,548

Table 9: Chilean AFP List

Source: Latin Asset Management and CCR, and Compass Bank as of July 31st, 2014. All data in USD million.

with lower limits and exposure to risky assets. Thus, these multi-funds are structured based upon risk allowing the participants to assign their contributions amongst them, with the caveat that as people approach retirement the funds automatically restrict more aggressive fund choices. The AFPs are required to offer these five funds with different risk profiles while participants can choose from two of the five modes.

The second structure is the solidarity pension system; in this section the system is structured as government aid for low-income and non-pensioned citizens. Finally, there is the voluntary scheme which allows participants to determine amount saved, fund type, risk etc. and is an additive to the mandatory scheme.

AFPs investment options are determined by the Chilean Risk Rating Commission (Comision Clasificadora de Riesgo – CCR), which determines the allowable investments for all Chilean AFPs and provides an extensive list of instruments rated and approved for use. In the case of foreign ETFs (fondos extranjeros), they must be approved by the CCR through a rigorous application process. Simultaneously they mandate percentage per fund limits in tandem with the Central Bank (CCR, 2013).

Under the current administration Chilean pensions bid through an auction process for the right to gain access to all new entrants into the pension system and workforce. The auction is purely based on who can provide the lowest annual commission to the participants. The fund is set for a two-year period after the auction and participants are mandated to stay for 2 years, which forces the pensions to compete on cost and also to rotate access to new investor pools. There is a similar process in Peru and in 2012 AFP Habitat won the auction to manage all new assets and thus, they created a new Peruvian AFP to be linked to their Chilean AFP Habitat (SP, 2014).

5.1. CURRENT STATE: EXCHANGE TRADED FUNDS IN CHILE

The CCR has an approved list for all Chilean pensions that include 374 ETFs that are available for pension purchasing, to see the full list please reference Appendix (1) (CCR, 2014). This list serves as a menu of fund options for the AFPs. They also have a uniquely developed local ETF market with 18 locally traded and listed ETFs from Itau as well as dozens of iShares funds listed on the Santiago Stock Exchange. Chile, Brazil and Mexico are the only Latin American markets with the locally traded and created ETFs.

Chile is a \$15.5 billion market in total US ETF assets and is the most sizeable in the region. As with most global pension systems and all of Latin America, the ETF ecosystem is very concentrated among the top providers as you'll note in the below Exhibit (16) (Compass Group, 2014). IShares has 8.3 billion or 17% of AFP money in the international allocation segment, followed by The Vanguard group with 16%, then we see mutual funds come in with Aberdeen Asset Management at 11%, Franklin Templeton at 7% and Schrodgers with 5% (Compass Group, 2014).

Increasingly AFP's prefer to use ETFs over Mutual Funds and both types of investments over separately managed accounts. As you can see below the investments are very concentrated with the top 10 ETFs amassing more than 82% market share of all ETF assets by AFPs (Compass Group, 2014). Within the top products we see only three providers iShares, Vanguard and SSgA SPDR ETFs which also are the three largest ETF providers globally. These assets have stayed relatively consistent however you have seen movement out of SPY (SPDR S&P500 ETF) and into iShares S&P 500 Product (IVV).

Fund	USD AUM	Million
IShares S&P 500 Index Fund	2,473	
IShares Inc. MSCI Japan Index	2,364	
Vanguard S&P 500 ETF	2,277	
Vanguard Value Index Fund	2,116	
Vanguard Total Stock Market Index Fund	783	
Select Sector SPDR Trust Technology ETF	774	
IShares Inc. MSCI EMU Index	669	
SPDR S&P 500 ETF Trust	649	
IShares Inc. MSCI Hong Kong Index	628	
IShares S&P 100 Index Fund	583	
Total	13,317	
Concentration Ratio	82.6%	

Table 10: Top 10 ETFs by Chilean AFPs

Source: The Compass Group, AFP's International Investment. USD million, as of July 31st, 2014.

The pensions main quantitative factors for analyzing portfolios are size, liquidity, performance and cost according to the trading firms that cover these institutions. These are paired

with traditional factors such as tracking error, information ratio, beta etc. however given the average size of these pensions the differentiating factor for ETF purchasing is the ability to get into or out of an ETF at the desired moment in large quantities is incredibly important. Thus, after AFPs run a more traditional quantitative screening process that will analyze the ETF portfolios, there is a much larger focus in liquidity metrics such as AUM, volume and average and quoted spreads by the Chilean pensions as stated the market participants. ETF providers must pass the initial screening process to be considered for purchasing on a future basis.

In Chile pensions can and do trade and purchase local ETFs, which are generally traded on the local exchange, Santiago Stock exchange. Size certainly matters.

When you are trading a portfolio of tens of billions of dollars your average investment size is potentially larger than many of the ETFs in existence. On average the traders interviewed stated the trades seen by Chilean pensions are from \$25 to \$200 million in any one ETF by an AFP. Thus, prior to trading the AFP will determine the liquidity of a potential \$100 million trade. They will get quotes from their trading partners to determine the cost of buying in and subsequently how quickly they can close out their desired trade. Often these trades are placed at auction by the AFP traders putting a desired trade out to their frequent trading partners and having them bid their lowest spreads on the chosen ETF trade. The trader with the best pricing is frequently given the business. I've found that the AFPs normally look for basis point spreads of up to 4bps but preferably 2bps or less to execute each trade. They are sizably more conscious of the cost associated with trading than the average ETF user, which is not surprising given their size.

In the US trading is considerably more automated due to the size and liquidity in the market, sophistication of traders as well as advanced and integrated trading systems. The process in the US is as such; first the pension traders would source the trade online with limit orders if volume allows, secondly they would go to the Authorized Participants direct to create units of the ETF, and finally they would utilize traders to minimize the trading spread.

Most of the pensions trade in line given their mandate of beating the benchmark (which is comprised of the average returns of all the AFPs). This competitive ranking against one another to a moving target of aggregate returns across the system is unique from local US pensions where they may benchmark themselves to the S&P 500 or MSCI World or an aggregate proprietary benchmark. Thus another interesting trend you'll find is a relative herd mentality within the AFP system whereas after the first AFP utilizes a new ETF or ETF family successfully, others follow suit and incorporate these investments into their lineup as well. Given that the AFPs compete for every dollar into their funds and that participants can easily move from one lineup to another every additional basis point of outperformance is incredibly important.

An emerging trend that has increased the usage of ETFs by AFPs and the total dollar amount in ETFs, is the need for liquidity due to participants moves from one pension to another. An entrepreneurial group in Chile that has cornered the AFP market by gaining influence into a large group of wealthy pension participants and providing recommendations of which AFPs and specific underlying funds are the "best" and thus recommending the participants move into this portfolio. For a small nominal fee this group purports to augment returns by delineating the most appropriate fund for investors in a more market timing fashion. Therefore at any given time up to 30% of an AFP's assets could move simultaneously out of or into a new fund. With traditional mutual funds

or non-daily liquid investments this could be catastrophic. Thus AFPs have begun to hold sizeable short term or daily liquid buckets, of which ETFs are a majority of the assets, I've been told the average is at least 30% liquidity in any fund.

Across the board ETF providers commented that they expect more innovation and new trends to emerge in Chile's pensions, that will have an affect on the ETFs they use in their portfolios. This is one small example of the import in analyzing the potential future state of Chilean pensions.

5.2. FUTURE STATE: EXCHANGE TRADED FUNDS IN CHILE

Chile is essentially structured out of a model of what Friedman economists would say is the ideal state of the US economic and financial structure, or capitalism at it's best. Given it is the only essentially designed economy in the world many of our ETF distributors commented that some of the trends they have seen in the US in regards to ETF usage may come to pass in Chile. As US insurance and international finance firms from developed economies already own a majority of the Chilean Pensions and understandably lend their westernized approach to investing to their venture these firms would expect to see a continual evolution in country to look at ETFs in a similar fashion as US institutional investors do.

In one conversation with a large Chilean pension manager he told me how initially they were drawn to high-liquidity products like the State Street funds but now where applicable almost entirely substitute those products with the less liquid but lower cost alternative, Vanguard. When they believe that an area is best suited with passive management they utilize the lowest cost option and then augment with active or "smart beta" ETFs for less efficient market pools. This strategy is very similar to what US ETF providers said they hear long time ETF users doing in the US. While there was divergence in our interviewees opinions regarding the outcome for Chile these four trends were aggregated as the most common.

There are four trends our interview participants foresaw for Chile's ETF landscape:

- 1) Product proliferation
- 2) Expansion of ETFs to all three investment groups: Institutional, Advisor & Retail
- 3) Third party ETF Portfolio Strategists
- 4) Longer Holding Periods & Strategic Usage of ETFs

One of the largest pension managers in Chile foresees that Chile will follow largely in the path of their US counterparts in their usage of ETFs but may innovate when it comes to items like trading, currency exposure, and local vs offshore ETFs given their size and need for these options. The US ETF firms interviewed anticipated that the Chilean pensions may help grow the UCIT ETF business in Europe and pioneer which type of ETF (US 40 Act ETF or Europea UCIT ETF) is considered the premier fund vehicle for Latin American pension investors. Both our US and

Chilean interviewees expected Chile to continue to be a guide for other pensions systems in Latin America from Peru to Mexico to Colombia in how to utilize ETFs in their systems. However the Brazilian pension fund managers do not look to Chile for guidance on how to invest in their systems according to our interviewees. One economist interviewed predicts that with the potential integration of the Andean region and Mexico's stock exchanges into MILA we could even see them becoming larger and more powerful than Brazil's pension in Latin America.

The main concerns echoed for Chile and their ETF industry are political intervention, commodity collapse and economic inequality disturbances. As Michele Bachelet takes the helm again as the President of Chile she is pushing for pension fund reforms and changes to the system. Almost all the pension managers in Chile we spoke to and the ETF providers who cover them mentioned that Bachelet's changes could threaten the free market pension system that has been in creation since the 80's and potentially move to a more protectionist investment regime. In addition, our interviewees expressed concern that Chile's economy is heavily dependent on commodities and given the recent price volatility there is always a chance for a major correction, which could have a crippling affect on the social security system. And finally, like in much of Latin America there have been protests regarding social services, education, corruption and economic stagnation in Chile both before Bachelet's election and following the election. While most Chilean participants were not overly concerned they did note that given history in the country there is always a possibility that the unrest could spread and create destabilization across the financial and retirement system.

5.3. CHILEAN INTERNATIONAL CROSS BORDER ALLOCATIONS

As Exhibit (18) demonstrates, Chile is ripe for international investment as compared even to a developed market such as Spain, that boasts a GDP almost 5 times as large but has in its top asset managers only \$80 billion in international allocations, which is just slightly larger than Chile's allocation (Mitchell, 2014). As highted in the below graphic, almost \$75 billion of the Chilean Pensions assets are in foreign investments, which is a bit less than half of the overall pool of assets (Compass Group, 2014). Although Chilean AFPs allow up to 80% exposure for international investment and represent the highest allotment of international investments in Latin America, in practice the actual amount invested is closer to about 40% or \$68 billion, according to The Institutional Investor (Mitchell, 2014). However, offshore or foreign allocations rose over 17% in 2013, growing by 40% during the past 2 years according to Deutsche Asset Management. This high exposure and growth rate is a stark change from the Brazilian pensions we reviewed earlier. In Brazil you would see an overwhelming allocation to local fixed income as opposed to Chile where majority of the assets are in foreign commingled vehicles such as mutual funds and ETFs, per Exhibit (18) below (Compass Group, 2014). These two investment vehicles represent more than \$50 billion of assets, more than 68% of the foreign assets in total.

Exhibit: 18: AFP's Foreign Investment Breakdown		
Instrument	Total USD Amount	Total %
Total Equity	51,806	70%
Mutual Funds	34,319	46%
ETFs	16,130	22%
Local Investment Funds	1,249	2%
Intl Investment Funds	108	0%
Total Fixed Income	22,312	30%
Mutual Funds	19,279	26%
Government Bonds	1,331	2%
Local Mutual Funds	319	0%
Local Investment Funds	717	1%
Corporate Bonds	86	0%
Cash	580	1%
Others	78	0%
Total	74,196	100%

Table II: AFP's Foreign Investment Breakdown

Source: The Compass Group, Data in USD million, as of July 31st , 2014.

Although you can see that the AFPs allocate aggressively to international companies, it is a market for established participants given their rigorous registration process, which is outlined in further detail in the following section that highlights market entry requirements. However to summarize, managers must have \$10 billion in assets, funds must have \$100 million in assets and on average AFPs typically only invest with funds closer to the \$500 million AUM limit (CCR, 2013).

Given these mandates and the continuous reporting required by the AFPs perhaps, we note that many foreign firms including Aberdeen, Fidelity, Investec, PIMCO, UBS, Vanguard and State Street Global Advisors use local fund management to distribute their funds to the region. While others have even opted for local offices such as Deutsche Asset Management and Blackrock's IShares Asset Management group. While foreign mutual funds still hold a majority of the assets, with \$34 billion invest in these funds the fastest growing segment by far are ETFs as you can see by the largest managers in below Exhibit (19), being iShares and Vanguard (Compass Group, 2014). These are two ETF providers and the worlds largest ETF companies. You'll also note their market share, which is 6% higher than their closest competitor Aberdeen, a mutual fund company (Compass Group, 2014).

Exhibit 19: Top 30 Foreign Managers AFP Market Share		
Manager	AFP Investment USD (million)	Market Share
iShares	8,482	12.2%
Vanguard	7,793	11.2%
Aberdeen	4,241	6.1%
Templeton	3,935	5.6%
Investec	3,128	4.5%
Pioneer	3,030	4.3%
Schroder	2,757	4.0%
Invesco	2,600	3.7%
BNP Paribas	2,595	3.7%
Axa	2,545	3.7%
Julius Baer	2,391	3.4%
Deutsche	2,300	3.3%
Dimensional	2,266	3.2%
State Street	2,139	3.1%
Mellon	1,999	2.9%
Robeco	1,986	2.8%
JPMorgan	1,902	2.7%
Fidelity	1,781	2.6%
Pimco	1,432	2.1%
Pictet	1,427	2.0%
Goldman Sachs	1,044	1.5%
Aviva	914	1.3%
Blackrock	883	1.3%
Henderson	861	1.2%
Ashmore	650	0.9%
BlueBay	541	0.8%
ING	422	0.6%
Matthews	422	0.6%
UBS	386	0.6%
Total	50,790	72%

Table 12: Top 30 Foreign Managers AFP Market Share

Source: The Compass Group, AFP's International Investment. Data in USD million, as of July 31st, 2014.

We also note Chilean Pensions are large emerging market buyers with an almost 52% allocation to emerging markets which is concentrated in Asia, global high yield and emerging market bonds (Mitchell, 2014). In 2014 we have seen two consecutive months of growth in cross-border investments by Chilean AFPs. They added \$743 million to their international portfolios in May of 2014 and another \$626 million in the previous month (Fundpro, 2014). Currently AFP's total international allocation is \$70.2 billion or 41.7% of their entire system of portfolios according to Latin Asset Management estimates (Lam Research, 2014).

It is also interesting to examine the current breakdown by vehicle type. In Exhibit (20) below each type of security is highlighted from a net flows and AUM perspective. In the exhibit you'll see there was a noted increase in mutual fund and ETF allocation while bond positions were decreased.

Exhibit 20: Chilean AFP International Investment Vehicle Breakdown

Instrument Type	Inflows / Outflows	AUMs
Mutual funds	574	50,388
ETFs	389	15,351
Stocks	0	58
Investment funds	-46	2,372
Bonds	-122	1,559
Others	-52	456
Total	743	70,184
<i>In USD millions</i>		

Table 13: Chilean AFP International Investment Vehicle Breakdown
Source: June 16, 2014 by LAM Research

5.4. CHILEAN PENSION INVESTMENT ALLOCATION

Distributors covering Chilean AFPs often remarked on the sophistication of the Chilean pensions system in terms of their diversified investment allocation with a wide array of asset classes, investment vehicles and strategies represented in the system. Distributors and pensions managers alike noted that Chile in their opinion had the widest availability to purchase investment vehicles in Latin America. Their investment scheme has evolved since their inception and they continue to pioneer with investment implementation according to one of the largest ETF providers.

However, the Chilean pensions themselves often remarked that they do not see their system as sophisticated as other markets. Chilean Pensions have returned 8.7% annualized to participants since inception in 1981 (CCR, 2013). In order to continue to meet these targets they have needed to augment their traditionally fixed income focus that we see in many Latin American pensions. To analyze the most current holdings of the pensions an average of all the pensions holdings will give us an understanding of how they invest their portfolios.

You can see in the below Exhibit (17) that on average they invest fairly equally between local and foreign investments, with 56% of their product locally based in fixed income and equity and 44% invested abroad (Compass Group, 2014). As we outlined previously in the paper there are five different risk based plans within every AFP. These plan types tend to vary dramatically from Plan A which holds 77% foreign investments to Plan E that holds less than 8% as noted in the below table Exhibit (17). This tends to be due to the high equity allocation in Plan A, which is the most aggressive plan, juxtaposed against Plan E's high fixed income allocation as the least volatile portfolio. According to one Chilean pension manager a majority of Chilean participants look for less risky assets to invest in.

Exhibit 17: Chilean AFP Investment Allocation

Asset Class	A		B		C		D		E		Total	
	USD	%	USD	%	USD	%	USD	%	USD	%	USD	%
Local Investment	6,179	22.3	11,808	41.9	37,098	57.7	18,807	71.5	20,506	92.2	94,398	56.0
Equity	4,023	14.6	4,453	15.8	8,129	12.7	1,305	5.0	170	0.8	18,080	10.7
Stocks	3,346	12.1	3,735	13.3	6,645	10.3	1,081	4.1	170	0.8	14,976	8.9
Invest. Funds	677	2.5	719	2.6	1,484	2.3	224	0.9	-	-	3,104	1.8
Fixed Income	2,214	8.0	7,406	26.3	29,014	45.2	17,538	66.7	20,341	91.5	76,512	45.4
Central Bank	203	0.7	1,076	3.8	3,864	6.0	2,962	11.3	4,013	18.1	12,118	7.2
Treasury	373	1.4	1,950	6.9	8,318	13.0	5,023	19.1	5,583	25.1	21,247	12.6
Residual	39	0.1	81	0.3	402	0.6	218	0.8	89	0.4	829	0.5
Corporate	456	1.7	1,278	4.5	5,535	8.6	2,605	9.9	2,331	10.5	12,207	7.2
Bank	830	3.0	1,751	6.2	6,992	10.9	3,575	13.6	3,447	15.5	16,595	9.8
Mortgage	46	0.2	141	0.5	661	1.0	219	0.8	155	0.7	1,222	0.7
Time Deposit	246	0.9	1,094	3.9	3,083	4.8	2,814	10.7	4,638	20.9	11,875	7.0
Invest. Funds	15	0.1	26	0.1	103	0.2	27	0.1	19	0.1	191	0.1
Cash	6	0.0	8	0.0	56	0.1	94	0.4	66	0.3	229	0.1
Forwards	-61	-0.2	-56	-0.2	-75	-0.1	-42	-0.2	-11	-0.1	-244	-0.1
Others	2	0.0	5	0.0	31	0.1	7	0.0	5	0.0	50	0.0
Foreign Investment	21,473	77.7	16,355	58.1	27,147	42.3	7,495	28.5	1,726	7.8	74,196	44.0
Equity	17,828	64.5	12,245	43.5	17,070	26.6	3,822	14.5	841	3.8	51,806	30.7
Mutual Funds	12,710	46.0	8,700	30.9	10,838	16.9	2,046	7.8	26	0.1	34,319	20.4
Others	5,118	18.5	3,545	12.6	6,232	9.7	1,777	6.8	815	3.7	17,487	10.4
Fixed Income	3,628	13.1	4,097	14.6	10,046	15.6	3,662	13.9	879	4.0	22,312	13.2
Forwards	16	0.1	13	0.1	30	0.1	10	0.0	6	0.0	75	0.0
Others	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	3	0.0
Total investment	27,652	100	28,163	100	64,245	100	26,302	100	22,232	100	168,595	100

Source: The Compass Group, AFP's International Investment. Data in USD million, as of July 31st, 2014.

As a recent trend the AFPs have been increasing equity exposure as they captured \$666 million in new equity investments as can be noted in the below Exhibit (21) Lam Research, 2014).

Exhibit 21: Chilean AFP Equity, Fixed Income, and Convertible Allocation

Mutual Funds/ETFs Asset Class	Inflows / Outflows	AUMs
Equity	666	47,559
Convertibles	223	2,705
Fixed income	74	15,474
Total	963	65,739
<i>In USD millions</i>		

Table 14: Chilean AFP Investment Allocation

Source: June 16, 2014 by LAM Research

While we have analyzed asset flows between fixed income, equity and alternatives it is also important to consider country and geographic allocation trends. If we again focus on the recent quarter trend AFPs increased their exposure to European-equity products with inflows into the product type of \$332 million as you can see in Exhibit (22) (Lam Research, 2014). The largest new allocations were **iShares MSCI EMU ETF**, \$216 million, which beat the closest mutual fund, **Threadneedle UK Equity Income**, by more \$139million as Threadneedle only drew in \$77 million (Lam Research, 2014). The other leading ETF was **Vanguard Total Stock Market ETF**, with \$130 million in new assets from the pensions (Lam Research, 2014).

AFPs currently allocate \$47.5 billion to equity across the system, the largest current allocation is Asia with \$18.9 billion in assets followed by North America with \$14.9 billion in assets and Europe comes in third with \$4.6 billion in assets (Lam Research, 2014). In the below Exhibit (22) you can see the current inflows and AUMs in the Chilean AFPs equity portfolios as of the first quarter which we have referenced in our above market breakdown.

Equity MFs /ETFs Region	Inflows / Outflows	AUMs
Europe	332	4,616
North America	287	14,931
Asia	195	18,933
Japan	105	3,961
Global	0	18
Latin America	-8	2,031
Emerging Markets	-45	1,614
Eastern Europe	-201	1,455
Total	666	47,559
<i>In USD millions</i>		

Table 15: Chilean AFP Region Allocation
Source: June 16, 2014 by LAM Research

5.5. LEGAL & REGULATORY PARAMETERS FOR ETF DISTRIBUTION IN CHILE

To demonstrate the aggressiveness of Chile’s approval process for the pensions we have seen the regulator approve 113 mutual funds and 14 International ETFs in the first quarter of 2014 according to Funds LatAm People, full list of additional investments in Appendix 3 (Funds LatAM People, 2014).

Market Entry Chile:

The securities regulator for ETFs in Chile is the Comision Clasificadora de Riesgo (CCR). As one of the oldest pension systems in existence in Latin America their entry system and process for registration are robust. In each country it is particularly important to think about how you can distribute within the legal parameters we will discuss how to register in the country for AFPs and also how you are allowed to market foreign securities.

1. Private placements

Pursuant to Article 4 of Law 18,045 (the “Securities Law”), “an offer of securities in Chile constitutes a public offering if it is directed to the public or to certain sectors or specific group of the public” (CCR, 2014). Thus any distribution effort that falls outside of this definition will be a private offering and excluded from the standard securities law.

Additionally another important agency is the *Superintendencia de Valores y Seguros* (the SVS) which has the right to determine that certain investments are not a public offer depending on number and type of end investor as well as how the investment is marketed. It is important to note that in 2012, the SVS issued General Rule N°336 (NCG 336), which outlines in more detail what types of investments are considered private placements.

(a) The offering documents must have disclaimers mentioned in NCG 336, essentially that the securities are not registered or supervised by the SVS (CCR, 2014).

(b) The offering must not be made by public means (i.e. not publicly advertised etc); and

(c) The offer must comply with any of the following conditions:

(i) Be marketed only to Qualified Investors (this is outlined in the SVS document but essentially applies to pensions and money managers pending AUM levels).

(ii) Marketed to only 250 Qualified Investors within a 12 month period and can include 50 not qualified investors.

(iii) Offering of securities of more than UF 5,000.

Given the SVS has not provided strict direction here most firms interviewed determined that for a foreign firm selling foreign securities into Chile they would not be considered a PO as long as they are sold through personal contact without publicity of the investments.

Thus most firms have two options 1) promote their ETFs directly or 2) use a placement agent. Following that choice it is important to think about how those representatives will market. Below are general guidelines that were shared across multiple distributors:

(i) Marketing to investors should be on a one-on-one, whether in person, via email or over the phone. No public advertisements.

(ii) Open or large seminars and meetings for investors must be carefully vetted and generally were prohibited unless registered locally;

(iii) It is preferable to distribute all sale documents from offshore rather than in Chile;

(iv) Travel in order to market securities is fine as long as you follow the aforementioned for sale documents;

(v) Activities can be focused on promotion and marketing but the buy and sell should not be done in Chile;

(vi) Finally payments must be wire transferred abroad.

2. Chilean Pension Funds Foreign Securities

Similar to Peru the largest buyers of ETFs in the region are Chile pensions or AFPs, thus after products are registered the next question becomes how do we make them available to the pension managers. The *Administradoras de Fondos de Pensiones* (the AFPs) are the legal entities for pension funds in Chile.

Pursuant to the Pension Funds Law, the off-shore investments must comply with the requirements in “Pension Funds Investment Regime” (the Regulation) and Resolution N° 1558 (the Resolution), of the *Superintendencia de Pensiones* (the Superintendence of Pensions).

(ii) Allowable Instruments. Pursuant to article 45 of the Pension Funds Law, which specifies allowable securities, including foreign investment funds and ETFs.

(iii) CCR Rating. CCR controls the allowable securities for the AFPs and give requirements for what type of investments are allowed. The CCR considers for approval: country risk, debt rating, systems for risk management, regulatory systems and liquidity instruments.

(iv) Requirements for CCR’s approval.

As in Peru the application process must be “sponsored” with a letter by an AFP. This sponsorship does not necessitate that the sponsoring fund purchase only write of their interest. The CCR looks at the risk rating of the manager and funds home country mandating A

rating of the funds and BBB for the holding company. They mandate the risk rating be rated by two internationally recognized services S&P, Moody’s or Fitch are the norm. Under this guideline the following requirements must be met: 1) The manager must have US\$ 10,000 million in assets under management of third parties; 2) The manger must demonstrate at least five years of operation in managing ETFs; 3) The mangers must show the relationship between itself and the parent company; 4) Each ETF must have US\$ 100 million in assets under management; 5) The manager must demonstrate prudent policies in regards to indebtness, derivatives and risk policies:

6) Obligations of the fund must not exceed 35% of the value of its assets;

In addition, the CCR requires consistent reporting from the fund family and each ETF. The manager must sign a commitment form saying they will adhere to these promises:

- 1) Annual application form update
- 2) To report any new and relevant changes to the CCR.
- 3) To provide soft versions on an ongoing basis of amended Prospectuses, Articles of Incorporation etc and to provide annual prospectus and KIID document.
- 4) To provide annual financial statements of the fund to the CCR
- 5) To publish the NAV through the international portal of the CCR on a continuous basis

6. CONCLUSIONS

After consolidating the responses from the interviewees regarding both Chilean and Brazilian pensions, ETF ecosystems, investment allocations, regulatory landscapes, investing backgrounds and potential future states there were a few main outcomes shared by the group. Firstly, that although there are common threads in the responses there is no blanket approach to Latin America and opinions range from our participants. Just as Chile and Brazil speak two different languages they also contain two diverse systems for investing, retirement and their economies at large. Given the history and current landscape in both countries interviewees don't see the two converging in a meaningful way in the immediate future. Given their very distinct differences the conclusions came out for each country differed in regards to the future state of pensions in Brazil and Chile.

Chile has the most open allowances for ETFs and foreign investments in Latin America according to the number of investable vehicles, allocation to ETFs in the region, history of investing in the pensions outlined in the public data and interviews with our participants. Without major political change or upheaval our pension managers and industry participants believe that the use of ETFs will continue and Chilean pensions will continue to be the most open to ETFs pension system in Latin America, with Mexico as a close second and Colombia following according to the interviewees. Given their broad spectrum of product options both domestic and foreign, diversified asset allocation and stability the participants believe they will remain a large and innovative ETF user. The largest pensions inside of Chile will most likely fluctuate but as they invest very similarly, this should not alter the way ETFs are used in their system. In regards to the international fund companies in Chile, participants noted the largest ETF players globally are also the largest ETF players in Chile. Blackrock, Vanguard, iShares and SsgA hold a majority of the assets and as our AFP managers mentioned consumer-buying behavior by pensions is quite similar to the US from an institutional standpoint thus they don't believe those major fund families will be overturned. The main difference in Chile from developed markets is the high allocation to international and emerging markets as well as large amount of Chilean fixed income, which they state will continue. In tandem, they have the highest exposure to foreign funds in Latin America and are quite high on the list of global foreign fund users according to their historical investment allocations. Thus in summary Chile almost 70% of the interviewees believe that Chile in the next 3 years will continue to have high ETF implementation, a stable investment process with ETFs, and heavy international allocation.

Our original hypothesis for Chile was that the ETF ecosystem in Chile will continue to grow and evolve, following in a similar path to that of the US and Europe's institutional ETF usage. However the participants outlined that these four trends will define Chile's future use of ETFs; product proliferation, investor ETF implementation across institutional, advisor and retail channels, the advent of third party ETF portfolio strategists and finally changes in the way ETFs are used such as longer holding periods and strategic use of ETFs in core portfolios. Pension managers also expressed more pessimism than our hypothesis stated towards the government's intervention into the pension system in the short term.

Tale of two countries...

BRAZIL

- No foreign ETFs
- Highly protected domestic market
- Developing but thinly traded local ETF market
- Stringent governmental regulation
- Fixed income and local bias
- Enormous opportunity if the market opens

CHILE

- 374 foreign ETFs
- Approve on average 10+ new foreign ETFs every quarter
- Developing but thinly traded local ETF market
- Open architecture governmental regulation
- Higher allocation to equity than fixed income

As for Brazil, in this country there is a large pool of both pension and institutional assets, which according to one US provider have been tantalizing the fund company world for some time. With trillions in investable assets and a concentration within a few main institutions it continued to come up more often than Chile as the country ETF providers were analyzing to enter. In tandem, providers in the US noted the growing workforce and infrastructure building in country and believe that this will most likely add to the institutional pool of assets in the next 5 years. However, whereas Chile is a market historically open to foreign investment and a widespread user of ETFs, Brazil is one of the most financially closed markets in Latin America as both our Brazilian pension managers and US providers noted. They have a less than 7 local ETF providers owned by Brazilian banks and financial institutions however these funds have seen small volume, are new and largely untested, are based on local markets for the most part and there is only one international player, Blackrock iShares, in country. Given that any provider has to establish a local presence and JV, they have successfully blocked entry to a majority of the ETF firms we interviewed.

In my interviews with pensions in the region there was resounding interest in investing in ETFs but little hope that it would happen in the imminent future. Although as a caveat the participants in the Brazilian market noted that they are very cautious in implementing new products and do not foresee a fast increase in ETF usage if they were approved. Many managers even went as far to say that if the funds were allowed it would be a long and slow process before their boards and regulators felt comfortable allowing real investment.

While there are headlines of the market opening due to pressures created by the slowdown in the local economy, low rates, public protests and industry requests for a more competitive market, our interviewed group believe that with the current political situation any changes seem unlikely. The current and most likely repeat President Dilma Rousseff has stated of late through her party platform that any market openings in trade or the financial system would spell ruin for the working class. When during our interviewees we expressed that other participants had positive outlooks for Brazil's foreign investment market opening almost all of our pension participants expressed they disagreed and do not expect to be able to use more foreign funds in the immediate future. While her competitor Marina Silva may be pro-business and free trade to some extent Dilma

and the Works Party do not appear to share this viewpoint.

The base case for Brazil is that in this political context there will be a stagnation in the ETF market for foreign investment firms, they will be able to gain assets located offshore but very little onshore given their barriers to entry according to our Brazilian and Chilean participants. US participants on average expressed more positive outlook if they had not yet done business in the country. One US participant expressed that he viewed Brazil as Chile was in the early 2000's and saw much opportunity. Of those interviewed who were currently doing business in Brazil as ETF distributors, traders or providers they on average had a less positive outlook on new funds being allowed and were focused more on local investments. Participants expect to see few additional local ETF launches in country and a growth in the assets by the already established firms but few overarching changes in how they buy, trade, create and establish ETFs.

In summary, our participants often noted that the Pacific-Atlantic divide in Latin America was perhaps most apparent between two countries like Brazil and Chile and their approach to the ETF market. Participants saw one country with large possibility of growth and innovation in the ETF landscape from global and local players in Chile and than a landscape of few options and little new foreign ETFs allowed but dominated by local players in Brazil. Given this divide as one US ETF firm noted, "you can easily get caught up with the opportunity in Brazil and it's huge size but in my experience you'll spend a lot of money with little results (in new ETF sales)."

7. GLOSSARY

In this paper, the following words and phrases have the subsequent definitions:

“1940 Act”	the U.S. Investment Company Act of 1940 (as amended);
“Assets”	A quantity of money or cash that is held in the name of an institution for investment purposes.
“AUM or Assets under management”	Refers to the quantity of money a firm or institution manages in their portfolios.
“Asset Allocation”	A risk principle and strategy that looks to structure a portfolio based on the investors risk profile and coordinate a diversified strategy.
“Authorized Participant or AP”	A designated institutional investor chosen by the ETF company, that helps with the trading and creation of ETFs, the AP buys and creates the shares of the underlying ETF and gives this basket to the fund sponsor in exchange for ETF units. These units then can be sold to buyers and the AP continues to assist with the trading process.
“AFP or Las administradoras de fondos de pensiones”	Chilean pension institutions.
“CAGR or Compound Annual Growth Rate”	A statistic used to measure the growth rate of an investment on a year over year basis during a specified time period.
“Commingled Investment Vehicle”	A fund or vehicle that is comprised of multiple investment accounts to allow for better treatments on pricing, trading etc.
“class” or “Class”	any class of Shares each representing interests in a fund;
“Creation/redemption process”	The process by which ETF shares are bought and redeemed on the exchange and traded intra-day.
“Creation basket”	The unit of shares created by the that Authorized Participants are distributed to the fund

“Custodian”	BNY Mellon Trust Company (Ireland) Limited;
“Defined benefit”	A pension plan where the employee benefits are based on a formula comprised of items such as salary history, employment duration etc as opposed to the returns of the market and underlying fund.
“Defined contribution”	A pension plan where the employee benefits are not set or formula based but determined by the market returns and how much the employee contributes to grow the plan.
“Diversification”	A technique in portfolio management that looks to use different asset classes and types of investments with distinct risk and return profiles in order to attempt to lessen the overall portfolio risk.
“Distributor or Distribution company or Fund distributors”	Refers to a group or entity that is tasked with selling a companies investors as a third party.
“€” or “euro” or “EUR”	the currency unit referred to in the Second Council Regulation (EC) no. 974/98 on the introduction of the euro;
“Exposure”	the monetary amount invested in a particular portfolio or investment.
“Exchange or Stock Exchange”	A securities exchange or market where publicly held companies are issued or traded, it allows companies access to capital while giving investors an opportunity for ownership rights.
“Exchange Traded Funds or ETF”	An investable security that trades throught the day on the exchange like a stock but that tracks an index or basket or securities while trading on the exchange.
“EU”	the European Union;
“Expense Ratio”	A term used to express the cost that an investment company charges to run and manage an investment fund. Usually calcuated on a yearly basis.
“Family Offices”	These are private asset management or advisor

	firms that manage individual ultra high net worth clients assets.
“FINRA”	A US government regulatory body that works with the SEC in management of financial markets, exchanges and securities companies.
“Flows”	Cash movements for the purpose of buying or selling investments or securities.
“Foreign fund or international fund or foreign vehicle”	A fund or vehicle that is domiciled outside of the country that it is distributed in.
“Foreign manager or International manager”	A fund or investment manager that is domiciled and regulated in a country outside of the country in which it is distributed.
“GDP or Gross Domestic Product”	A unit to measure all the economic output of a country in order to measure economic growth and productivity.
“JV or Joint Venture”	An arrangement where two or more business parties combine their resources for a certain task, project or business activity and share in the profits, losses and associated costs.
“Institutional Investor”	An institution or organization that invests in large sums and thus qualifies for various types of investment vehicles and have different protective regulations that may allow for distinct investment types due to their assumed sophistication.
“Investment Grade”	in reference to a security that has a rating of BBB- or higher from Standard & Poor’s or Baa3 or higher from Moody’s Investors Service, Inc. or the same or higher from another NRSRO or if the security is not rated but considered by the manager to be of similar quality;
“Investors”	An individual, firm or entity who commits capital to investment securities, products or vehicles expecting a financial return in exchange for investment risk.
“Investment or Investment Vehicle”	A financial asset that is created and purchased in order to potentially generate a return via sale or

	income through ownership for an investor, as well as a revenue stream for the creator or funding mechanism for the issuer.
‘Investment Vehicle’ ‘Mutual Fund’	Another term for an investment A pooled investment vehicle comprised of many investors assets in order to access the benefits allocated to larger asset pools such as commingled pools. The shares can be purchased at the NAV price as of close of business.
‘Liquidity’	The extent to which a security or investment can trade (or be bought or sold) without affecting the share price of the investment.
‘Market share’	The percentage of the investable market or industry held by a fund or ETF company.
‘NASDAQ’	The NASDAQ OMX Group, Inc;
‘MILA or Mercado Integrado Latinoamericano’	A recent program that integrates the stock exchange markets of Chile, Colombia, and Peru and is looking to include Mexico.
‘Net Asset Value’ or ‘NAV’	the Net Asset Value of the Company, or of a Fund or class, as appropriate, calculated as described herein;
‘Pension or Pension Fund or Pension Scheme’	A pooled fund comprised of contributions from employees, unions or other groups to provide benefits to the employees or members. They are considered institutional investors and typically tax exempt organizations.
‘Portfolio’	A group of investable assets that can be commingled investments or individual investments and either self managed or professionally managed.
‘REITs’	real estate investment trusts;
‘Retail Investor’	An individual who buys and sells securities or investments for their personal account and not on behalf of professional entity.
‘Reverse Inquiry’	This is an instance where an investor specifically asks for a security as opposed to being marketed that said security.
‘Risk-reward’	An investment principle that investors use to judge the potential upside vs the potential downside in an

	investment.
“SEC Form 13F”	Known as the Information Required of Institutional Investment Managers Form it is a filing with the SEC that is demanded on a quarterly basis by institutional investment managers who have over \$100 million in qualified assets.
“SEC of Securities & Exchange Commission”	A US government entity created to regulate the US securities market and US investors.
“Seperately Managed Accounts or SMAs”	These are singular private investment accounts that are custom to an investor and buy individual securities.
“Shareholder”	a holder of Shares;
“Target Return”	The needed or expected amount that an investor wants to make by investing.
“Transparency”	The ability to view the underlying holdings of any commingled or investment vehicle to ascertain their risk and return profiles.
“Underlying holdings”	Stocks or shares that make up a fund or vehicle as the individual contents.
“UCITS”	an undertaking for collective investment in transferable securities established pursuant to the Regulations or, in the case of UCITS established in a Member State other than Ireland, the Directive;
“UCITS Notices”	the notices issued by the Central Bank from time to time pursuant to the Regulations;
“U.K.” or “United Kingdom”	the United Kingdom of Great Britain and Northern Ireland;
“U.S.”	the United States of America (including the States and the District of Columbia), its territories, possessions and all other areas subject to its jurisdiction;

“US\$” or “U.S. Dollar” or “USD” U.S. Dollars, the lawful currency of the U.S.;

“Volume” The amount or quantity of shares traded on the exchange in any given ETF or investment fund.

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9. APPENDIXES

9.1. APPENDIX 1: List of All ETFs Available in Chile by iShares

In the below appendix you can see the list of all ETFs available for purchase in Chile by the largest participant in the Chilean market, iShares. By viewing this list investors can ascertain what gaps there are in the market that are not covered by iShares, what ETFs and sectors are most popular based on assets, what the average fees are paid by investors in the region as well as the domicile of choice by Chilean investors.

Local Listed ETFs Available in Chile by iShares

Ticker▶ Asset Type	Name	Creation	Exchange	Domicile	Fees	AUM▶ As of 15/08/14	Holdings
AAXJ Renta variable	iShares MSCI All Country Asia ex Japan ETF	13/08/08	NASD	EE. UU.	0.67	2,777,020,715	N/D
ACWX Renta variable	iShares MSCI ACWI ex U.S. ETF	26/03/08	NASD	EE. UU.	0.34	1,759,674,497	N/D
ACWI Renta variable	iShares MSCI ACWI ETF	26/03/08	NASD	EE. UU.	0.34	5,833,435,697	1,284
INDY Renta variable	iShares India 50 ETF	18/11/09	NASD	EE. UU.	0.94	634,442,376	53
BKF Renta variable	iShares MSCI BRIC ETF	12/11/07	NYSE	EE. UU.	0.67	381,884,718	301
ECH Renta variable	iShares MSCI Chile Capped ETF	12/11/07	NYSE	EE. UU.	0.61	339,346,492	39
EIRL Renta variable	iShares MSCI Ireland Capped ETF	05/05/10	NYSE	EE. UU.	0.50	155,729,571	24
EIS Renta variable	iShares MSCI Israel Capped ETF	26/03/08	NYSE	EE. UU.	0.61	119,519,038	53
EWA Renta variable	iShares MSCI Australia ETF	12/03/96	NYSE	EE. UU.	0.51	1,985,975,052	71
EWC Renta variable	iShares MSCI Canada ETF	12/03/96	NYSE	EE. UU.	0.51	3,679,600,369	96
EWG Renta variable	iShares MSCI Germany ETF	12/03/96	NYSE	EE. UU.	0.51	4,545,498,053	55
EWH Renta variable	iShares MSCI Hong Kong ETF	12/03/96	NYSE	EE. UU.	0.51	2,591,429,261	40
EWI Renta variable	iShares MSCI Italy Capped ETF	12/03/96	NYSE	EE. UU.	0.50	1,584,870,202	27

EWL Renta variable	iShares MSCI Switzerland Capped ETF	12/03/96	NYSE	EE. UU.	0.51	1,051,558,777	39
Ticker▶ Asset Type	Name	Creation	Exchange	Domicile	Fees	AUM▶ As of 15/08/14	Holdings
EWN Renta variable	iShares MSCI Netherlands ETF	12/03/96	NYSE	EE. UU.	0.50	160,075,056	52
EWP Renta variable	iShares MSCI Spain Capped ETF	12/03/96	NYSE	EE. UU.	0.51	2,367,124,423	25
EWQ Renta variable	iShares MSCI France ETF	12/03/96	NYSE	EE. UU.	0.51	284,317,603	74
EWU Renta variable	iShares MSCI United Kingdom ETF	12/03/96	NYSE	EE. UU.	0.51	4,169,242,183	108
EZU Renta variable	iShares MSCI EMU ETF	25/07/00	NYSE	EE. UU.	0.50	8,702,510,038	246
IDU Renta variable	iShares U.S. Utilities ETF	12/06/00	NYSE	EE. UU.	0.46	1,107,672,902	63
ITB Renta variable	iShares U.S. Home Construction ETF	01/05/06	NYSE	EE. UU.	0.46	1,431,711,771	37
IVE Renta variable	iShares S&P 500 Value ETF	22/05/00	NYSE	EE. UU.	0.18	7,913,846,078	339
IVW Renta variable	iShares S&P 500 Growth ETF	22/05/00	NYSE	EE. UU.	0.18	10,269,416,548	342
IWB Renta variable	iShares Russell 1000 ETF	15/05/00	NYSE	EE. UU.	0.15	9,559,765,492	1,032
IWC Renta variable	iShares Micro-Cap ETF	12/08/05	NYSE	EE. UU.	0.60	857,187,374	1,376
IWD Renta variable	iShares Russell 1000 Value ETF	22/05/00	NYSE	EE. UU.	0.20	23,154,838,578	691
IWF Renta variable	iShares Russell 1000 Growth ETF	22/05/00	NYSE	EE. UU.	0.20	23,949,780,490	676
IWN Renta variable	iShares Russell 2000 Value ETF	24/07/00	NYSE	EE. UU.	0.25	5,708,774,346	1,321
IWO Renta variable	iShares Russell 2000 Growth ETF	24/07/00	NYSE	EE. UU.	0.25	5,705,886,315	1,163

IWP Renta variable	iShares Russell Mid-Cap Growth ETF	17/07/01	NYSE	EE. UU.	0.25	4,932,045,063	548
Ticker▶ Asset Type	Name	Creation	Exchange	Domicile	Fees	AUM▶ As of 15/03/14	Holdings
IWR Renta variable	iShares Russell Mid-Cap ETF	17/07/01	NYSE	EE. UU.	0.20	10,169,198,280	839
IWS Renta variable	iShares Russell Mid-Cap Value ETF	17/07/01	NYSE	EE. UU.	0.25	6,725,457,165	567
IWV Renta variable	iShares Russell 3000 ETF	22/05/00	NYSE	EE. UU.	0.20	5,653,081,950	2,999
IYC Renta variable	iShares U.S. Consumer Services ETF	12/06/00	NYSE	EE. UU.	0.46	447,205,390	188
IYE Renta variable	iShares U.S. Energy ETF	12/06/00	NYSE	EE. UU.	0.46	2,252,333,417	86
IYF Renta variable	iShares U.S. Financials ETF	22/05/00	NYSE	EE. UU.	0.46	1,362,373,537	272
IYJ Renta variable	iShares U.S. Industrials ETF	12/06/00	NYSE	EE. UU.	0.46	938,361,542	225
IYK Renta variable	iShares U.S. Consumer Goods ETF	12/06/00	NYSE	EE. UU.	0.46	459,638,807	118
IYM Renta variable	iShares U.S. Basic Materials ETF	12/06/00	NYSE	EE. UU.	0.46	947,904,464	61
IYW Renta variable	iShares U.S. Technology ETF	15/05/00	NYSE	EE. UU.	0.46	4,089,152,937	141
IYZ Renta variable	iShares U.S. Telecommunications ETF	22/05/00	NYSE	EE. UU.	0.46	574,984,842	26
SCJ Renta variable	iShares MSCI Japan Small-Cap ETF	20/12/07	NYSE	EE. UU.	0.50	170,699,915	787
SCZ Renta variable	iShares MSCI EAFE Small-Cap ETF	10/12/07	NYSE	EE. UU.	0.40	3,865,335,424	1,504
IAU Materias primas	iShares Gold Trust	21/01/05	NYSE	EE. UU.	0.25	6,913,172,720	1
SLV Materias	iShares Silver Trust	21/04/06	NYSE	EE. UU.	0.50	6,468,481,149	1

primas							
HYG Renta fija	iShares iBoxx \$ High Yield Corporate Bond ETF	04/04/07	NYSE	EE. UU.	0.50	12,357,623,417	945
Ticker▶ Asset Type	Name	Creation	Exchange	Domicile	Fees	AUM▶ As of 15/08/14	Holdings
LQD Renta fija	iShares iBoxx \$ Investment Grade Corporate Bond ETF	22/07/02	NYSE	EE. UU.	0.15	17,977,226,283	1,212
SHV Renta fija	iShares Short Treasury Bond ETF	05/01/07	NYSE	EE. UU.	0.15	2,205,007,333	20
SHY Renta fija	iShares 1-3 Year Treasury Bond ETF	22/07/02	NYSE	EE. UU.	0.15	9,198,453,489	70
TIP Renta fija	iShares TIPS Bond ETF	04/12/03	NYSE	EE. UU.	0.20	13,486,106,264	39
ECNS Renta variable	iShares MSCI China Small-Cap ETF	28/09/10	NYSE	EE. UU.	0.61	33,896,525	368
EEM Renta variable	iShares MSCI Emerging Markets ETF	07/04/03	NYSE	EE. UU.	0.67	43,368,485,211	838
EFA Renta variable	iShares MSCI EAFE ETF	14/08/01	NYSE	EE. UU.	0.34	54,255,082,308	908
EIDO Renta variable	iShares MSCI Indonesia ETF	05/05/10	NYSE	EE. UU.	0.61	565,412,266	106
ENZL Renta variable	iShares MSCI New Zealand Capped ETF	01/09/10	NYSE	EE. UU.	0.51	157,226,839	31
EPHE Renta variable	iShares MSCI Philippines ETF	28/09/10	NYSE	EE. UU.	0.61	333,275,682	42
EPOL Renta variable	iShares MSCI Poland Capped ETF	25/05/10	NYSE	EE. UU.	0.61	310,769,979	44
EPP Renta variable	iShares MSCI Pacific ex Japan ETF	25/10/01	NYSE	EE. UU.	0.50	3,425,481,052	145
EPU Renta variable	iShares MSCI Peru Capped ETF	19/06/09	NYSE	EE. UU.	0.61	251,791,206	25
ERUS Renta variable	iShares MSCI Russia Capped ETF	09/11/10	NYSE	EE. UU.	0.61	287,789,736	23

ESR Renta variable	iShares MSCI Emerging Markets Eastern Europe ETF	30/09/09	NYSE	EE. UU.	0.67	154,847,308	52
Ticker▶ Asset Type	Name	Creation	Exchange	Domicile	Fees	AUM▶ As of 15/08/14	Holdings
EWJ Renta variable	iShares MSCI Japan ETF	12/03/96	NYSE	EE. UU.	0.50	14,976,097,861	308
EWM Renta variable	iShares MSCI Malaysia ETF	12/03/96	NYSE	EE. UU.	0.51	785,445,181	43
EWS Renta variable	iShares MSCI Singapore ETF	12/03/96	NYSE	EE. UU.	0.51	980,715,008	30
EWT Renta variable	iShares MSCI Taiwan ETF	20/06/00	NYSE	EE. UU.	0.61	3,201,755,725	104
EWV Renta variable	iShares MSCI Mexico Capped ETF	12/03/96	NYSE	EE. UU.	0.50	3,207,762,792	59
EWY Renta variable	iShares MSCI South Korea Capped ETF	09/05/00	NYSE	EE. UU.	0.61	4,711,053,695	104
EWZ Renta variable	iShares MSCI Brazil Capped ETF	10/07/00	NYSE	EE. UU.	0.61	4,809,984,364	74
EWZS Renta variable	iShares MSCI Brazil Small-Cap ETF	28/09/10	NYSE	EE. UU.	0.61	37,859,455	85
EZA Renta variable	iShares MSCI South Africa ETF	03/02/03	NYSE	EE. UU.	0.61	584,878,418	52
FXI Renta variable	iShares China Large-Cap ETF	05/10/04	NYSE	EE. UU.	0.73	5,684,664,561	26
IEV Renta variable	iShares Europe ETF	25/07/00	NYSE	EE. UU.	0.60	3,355,130,696	355
ILF Renta variable	iShares Latin America 40 ETF	25/10/01	NYSE	EE. UU.	0.50	1,240,438,870	42
IVV Renta variable	iShares Core S&P 500 ETF	15/05/00	NYSE	EE. UU.	0.07	60,536,037,410	502
IWM Renta variable	iShares Russell 2000 ETF	22/05/00	NYSE	EE. UU.	0.20	22,919,746,346	1,973
MCHI Renta variable	iShares MSCI China ETF	29/03/11	NYSE	EE. UU.	0.61	1,124,865,707	142
THD Renta variable	iShares MSCI Thailand Capped ETF	26/03/08	NYSE	EE. UU.	0.61	558,921,532	126
TUR	iShares MSCI	26/03/08	NYSE	EE.	0.61	494,706,713	89

Renta variable	Turkey ETF			UU.			
IXC Renta variable	iShares Global Energy ETF	12/11/01	NYSE	EE. UU.	0.48	1,076,629,047	94
IXG Renta variable	iShares Global Financials ETF	12/11/01	NYSE	EE. UU.	0.48	294,764,067	228
IYR Renta variable	iShares U.S. Real Estate ETF	12/06/00	NYSE	EE. UU.	0.46	4,870,876,781	101
MXI Renta variable	iShares Global Materials ETF	12/09/06	NYSE	EE. UU.	0.48	384,147,727	119

9.2. APPENDIX 2: Local Listed Chilean ETFs -It Now IPSA: CFMITNIPSA

(as of 8/30/14) As in the first list of ETFs by iShares here you can see a list of all the ETFs available for purchase in Chile by the largest Brazilian ETF issuer Itau. This will give an interesting comparison showing the only local ETF firm's exposure and market penetration in Chile. Below by viewing the total assets and investment types you can see that the Brazilian provider has a focus on fixed income ETFs as opposed to a mix of alternatives, equity and fixed income that iShares has.

TICKER	NAME	ASSET CLASS / CATEGORY	COMMENCEMENT DATE	TOTAL NET ASSETS	NO. OF HOLDINGS	30-DAY SEC YIELD ₁
ANGL	Fallen Angel High Yield Bond ETF	Corporate Bond Income	04/10/2012	\$16.8M	108	4.38%
FLTR	Investment Grade Floating Rate ETF	Corporate Bond Income	04/25/2011	\$87.7M	146	0.41%
THHY	Treasury-Hedged High Yield Bond ETF	Corporate Bond Income	03/21/2013	\$10.1M	89	4.29%
BIZD	BDC Income ETF	Equity Income Income	02/11/2013	\$45.7M	29	8.20%
MORT	Mortgage REIT Income ETF	Equity Income Income	08/16/2011	\$120.4M	25	10.09%
PFXF	Preferred Securities ex Financials ETF	Equity Income Income	07/16/2012	\$171.8M	90	6.07%
EMAG	Emerging Markets Aggregate	International Bond Income	05/11/2011	\$19.4M	143	4.13%

TICKER	NAME	ASSET CLASS / CATEGORY	COMMENCEMENT DATE	TOTAL NET ASSETS	NO. OF HOLDINGS	30-DAY SEC YIELD ₁
HYEM	Bond ETF Emerging Markets High Yield Bond ETF	International Bond Income	05/08/2012	\$425.9M	373	6.40%
EMLC	Emerging Markets Local Currency Bond ETF	International Bond Income	07/22/2010	\$881.2M	233	4.61%
IHY	International High Yield Bond ETF	International Bond Income	04/02/2012	\$208.2M	484	4.75%
CHLC	Renminbi Bond ETF	International Bond Income	10/11/2011	\$5.2M	25	2.86%
XMPT	CEF Municipal Income ETF	Municipal Income Income	07/12/2011	\$34.7M	86	5.71%
HYD	High-Yield Municipal Index ETF	Municipal Income Income	02/04/2009	\$1.1B	595	4.90%
ITM	Intermediate Municipal Index ETF	Municipal Income Income	12/04/2007	\$708.0M	723	2.22%
MLN	Long Municipal Index ETF	Municipal Income Income	01/02/2008	\$82.6M	150	3.46%
PRB	Pre-Refunded Municipal Index ETF	Municipal Income Income	02/02/2009	\$29.7M	65	0.37%
SHYD	Short High-Yield Municipal Index ETF	Municipal Income Income	01/13/2014	\$60.5M	171	3.43%
SMB	Short Municipal Index ETF	Municipal Income Income	02/22/2008	\$249.7M	290	0.90%

9.3. APPENDIX 3: List of ETFs Approved by the CCR for Chilean AFPs

In the below graph you can see a complete list of all ETFs available for purchase not just in country but by the Chilean pensions. This list of hundreds of ETFs demonstrates the wealth of options the Chilean AFP's have from an ETF standpoint. You'll also note there are more than 15 ETF fund managers below and they are predominately from the US and Europe. However the type of assets within the ETFs tends to vary wildly showing more diversification than other pensions in the region.

Chilean AFP ETF Approved List by the Chilean Comision de Riesgo (CCR)

TICKER	ETF FUND NAME
EMLI	PIMCO Emerging Markets Advantage Local Bond Index Source UCITS ETF
EMLB	PIMCO Emerging Markets Advantage Local Bond Index Source UCITS ETF
STHYLN	PIMCO Short-Term High Yield Corporate Bond Index Source UCITS ETF
STHE LN	PIMCO Short-Term High Yield Corporate Bond Index Source UCITS ETF
EEM	iShares, Inc. - iShares MSCI Emerging Markets ETF
EZU	iShares, Inc. - iShares MSCI EMU ETF
EWQ	iShares, Inc. - iShares MSCI France ETF
EWG	iShares, Inc. - iShares MSCI Germany ETF
EWH	iShares, Inc. - iShares MSCI Hong Kong ETF
EWI	iShares, Inc. - iShares MSCI Italy Capped ETF
EWJ	iShares, Inc. - iShares MSCI Japan ETF
EWM	iShares, Inc. - iShares MSCI Malaysia ETF
EWV	iShares, Inc. - iShares MSCI Mexico Capped ETF
EPP	iShares, Inc. - iShares MSCI Pacific ex Japan ETF
EWS	iShares, Inc. - iShares MSCI Singapore ETF
EZA	iShares, Inc. - iShares MSCI South Africa ETF
EWY	iShares, Inc. - iShares MSCI South Korea Capped ETF
EWP	iShares, Inc. - iShares MSCI Spain Capped ETF
EWL	iShares, Inc. - iShares MSCI Switzerland Capped ETF
EWT	iShares, Inc. - iShares MSCI Taiwan ETF
THD	iShares, Inc. - iShares MSCI Thailand Capped ETF
TUR	iShares, Inc. - iShares MSCI Turkey ETF
EWU	iShares, Inc. - iShares MSCI United Kingdom ETF
EWD	iShares, Inc. - MSCI Sweden ETF
2823 HK	iShares Asia Trust - iShares FTSE A50 China Index ETF
ERUS US	iShares MSCI Russia Capped Index Fund, Inc. - iShares MSCI Russia Capped ETF
IDV	iShares Trust - iShares International Select Dividend ETF
IYM	iShares Trust - iShares U.S. Basic Materials ETF
IYK	iShares Trust - iShares U.S. Consumer Goods ETF
IYC	iShares Trust - iShares U.S. Consumer Services ETF
IYE	iShares Trust - iShares U.S. Energy ETF

TICKER	ETF FUND NAME
IYG	iShares Trust - iShares U.S. Financial Services ETF
TIP US	iShares Trust - iShares 0-5 Year TIPS Bond ETF
CLY US	iShares Trust - iShares 10+ Year Credit Bond ETF
TLH	iShares Trust - iShares 10-20 Year Treasury Bond ETF
CSJ	iShares Trust - iShares 1-3 Year Credit Bond ETF
ISHG US	iShares Trust - iShares 1-3 Year International Treasury Bond ETF
SHY	iShares Trust - iShares 1-3 Year Treasury Bond ETF
TLT	iShares Trust - iShares 20+ Year Treasury Bond ETF
IEI	iShares Trust - iShares 3-7 Year Treasury Bond ETF
IEF	iShares Trust - iShares 7-10 Year Treasury Bond ETF
QLTA US	iShares Trust - iShares Aaa - A Rated Corporate Bond ETF
AGZ	iShares Trust - iShares Agency Bond ETF
AIA	iShares Trust - iShares Asia 50 ETF
FXI	iShares Trust - iShares China Large-Cap ETF
ICF	iShares Trust - iShares Cohen & Steer REIT ETF
IVV	iShares Trust - iShares Core S&P 500 ETF
IJH	iShares Trust - iShares Core S&P Mid-Cap ETF
IJR	iShares Trust - iShares Core S&P Small-Cap ETF
ISI	iShares Trust - iShares Core S&P Total U.S. Stock Market ETF
AGG	iShares Trust - iShares Core Total U.S. Bond Market ETF
CFT	iShares Trust - iShares Credit Bond ETF
IYY	iShares Trust - iShares Dow Jones U.S. ETF
EMIF US	iShares Trust - iShares Emerging Markets Infrastructure ETF
IEV	iShares Trust - iShares Europe ETF
FLOT US	iShares Trust - iShares Floating Rate Bond ETF
IOO	iShares Trust - iShares Global 100 ETF
KXI	iShares Trust - iShares Global Consumer Staples ETF
IXC	iShares Trust - iShares Global Energy ETF
IXG	iShares Trust - iShares Global Financials ETF
IXJ	iShares Trust - iShares Global Healthcare ETF
EXI	iShares Trust - iShares Global Industrials ETF
IGF	iShares Trust - iShares Global Infrastructure ETF
MXI	iShares Trust - iShares Global Materials ETF
IXN	iShares Trust - iShares Global Tech ETF
IXP	iShares Trust - iShares Global Telecom ETF
WOOD	iShares Trust - iShares Global Timber & Forestry ETF
JXI	iShares Trust - iShares Global Utilities ETF
GBF	iShares Trust - iShares Government/Credit Bond ETF
HDV US	iShares Trust - iShares High Dividend ETF
HYG	iShares Trust - iShares iBoxx \$ High Yield Corporate Bond ETF

TICKER	ETF FUND NAME
LQD	iShares Trust - iShares iBoxx \$ Investment Grade Corporate Bond ETF
CIU	iShares Trust - iShares Intermediate Credit Bond ETF
GVI	iShares Trust - iShares Intermediate Government/Credit Bond ETF
WPS	iShares Trust - iShares International Developed Property ETF
IFGL	iShares Trust - iShares International Developed Real Estate ETF
EMB	iShares Trust - iShares J.P. Morgan USD Emerging Markets Bond ETF
ILF	iShares Trust - iShares Latin America 40 ETF
MBB	iShares Trust - iShares MBS ETF
IWC	iShares Trust - iShares Micro-Cap ETF
JKD	iShares Trust - iShares Morningstar Large-Cap ETF
JKE	iShares Trust - iShares Morningstar Large-Cap Growth ETF
JKF	iShares Trust - iShares Morningstar Large-Cap Value ETF
JKJ	iShares Trust - iShares Morningstar Small-Cap ETF
JKL US	iShares Trust - iShares Morningstar Small-Cap Value ETF
REM US	iShares Trust - iShares Mortgage Real Estate Capped ETF
ACWI	iShares Trust - iShares MSCI ACWI ETF
ACWX	iShares Trust - iShares MSCI ACWI ex U.S. ETF
AAXJ	iShares Trust - iShares MSCI All Country Asia ex Japan ETF
EPU	iShares Trust - iShares MSCI All Peru Capped ETF
MCHI US	iShares Trust - iShares MSCI China ETF
SCZ	iShares Trust - iShares MSCI EAFE Small-Cap ETF
EFA	iShares Trust - iShares MSCI EAFE ETF
EFG	iShares Trust - iShares MSCI EAFE Growth ETF
EFAV US	iShares Trust - iShares MSCI EAFE Minimum Volatility ETF
EFV	iShares Trust - iShares MSCI EAFE Value ETF
EIDO US	iShares Trust - iShares MSCI Indonesia ETF
TOK	iShares Trust - iShares MSCI Kokusai ETF
EPHE US	iShares Trust - iShares MSCI Philippines ETF
EPOL US	iShares Trust - iShares MSCI Poland Capped ETF
KLD	iShares Trust - iShares MSCI USA ESG Select ETF
USMV US	iShares Trust - iShares MSCI USA Minimum Volatility ETF
IBB	iShares Trust - iShares Nasdaq Biotechnology ETF
IGE	iShares Trust - iShares North American Natural Resources ETF
IGM	iShares Trust - iShares North American Tech ETF
IGN	iShares Trust - iShares North American Tech-Multimedia Networking ETF
IGV	iShares Trust - iShares North American Tech-Software ETF
SOXX	iShares Trust - iShares PHLX Semiconductor ETF
IWB	iShares Trust - iShares Russell 1000 ETF
IWF	iShares Trust - iShares Russell 1000 Growth ETF
IWD	iShares Trust - iShares Russell 1000 Value ETF

TICKER	ETF FUND NAME
IWM	iShares Trust - iShares Russell 2000 ETF
IWO	iShares Trust - iShares Russell 2000 Growth ETF
IWN	iShares Trust - iShares Russell 2000 Value ETF
IWW	iShares Trust - iShares Russell 3000 ETF
IWZ	iShares Trust - iShares Russell 3000 Growth ETF
IWW	iShares Trust - iShares Russell 3000 Value ETF
IWR	iShares Trust - iShares Russell Mid-Cap ETF
IWP	iShares Trust - iShares Russell Mid-Cap Growth ETF
IWS	iShares Trust - iShares Russell Mid-Cap Value ETF
IWY US	iShares Trust - iShares Russell Top 200 Growth ETF
OEF	iShares Trust - iShares S&P 100 ETF
IVW	iShares Trust - iShares S&P 500 Growth ETF
IVE	iShares Trust - iShares S&P 500 Value ETF
IJK	iShares Trust - iShares S&P Mid-Cap 400 Growth ETF
IJJ	iShares Trust - iShares S&P Mid-Cap 400 Value ETF
IJT	iShares Trust - iShares S&P Small-Cap 600 Growth ETF
IJS	iShares Trust - iShares S&P Small-Cap 600 Value ETF
DVY	iShares Trust - iShares Select Dividend ETF
SHV	iShares Trust - iShares Short Treasury Bond ETF
TIP	iShares Trust - iShares TIPS Bond ETF
IYT	iShares Trust - iShares Transportation Average ETF
IYF	iShares Trust - iShares U.S. Financials ETF
IYH	iShares Trust - iShares U.S. Healthcare ETF
IHF	iShares Trust - iShares U.S. Healthcare Providers ETF
ITB	iShares Trust - iShares U.S. Home Construction ETF
IYJ	iShares Trust - iShares U.S. Industrials ETF
IHI	iShares Trust - iShares U.S. Medical Devices ETF
IEO	iShares Trust - iShares U.S. Oil & Gas Exploration & Production ETF
IEZ	iShares Trust - iShares U.S. Oil Equipment & Services ETF
IHE	iShares Trust - iShares U.S. Pharmaceuticals ETF
PFF US	iShares Trust - iShares U.S. Preferred Stock ETF
IYR	iShares Trust - iShares U.S. Real Estate ETF
IAT	iShares Trust - iShares U.S. Regional Banks ETF
IYW	iShares Trust - iShares U.S. Technology ETF
IYZ	iShares Trust - iShares U.S. Telecommunications ETF
IDU	iShares Trust - iShares U.S. Utilities ETF
IEMG US	iShares, Inc. - iShares Core MSCI Emerging Markets ETF
EMHY US	iShares, Inc. - iShares Emerging Markets High Yield Bond Fund
LEMB US	iShares, Inc. - iShares Emerging Markets Local Currency Bond ETF
ACWW US	iShares, Inc. - iShares MSCI All Country World Minimum Volatility ETF

TICKER	ETF FUND NAME
EWA	iShares, Inc. - iShares MSCI Australia ETF
EWZ	iShares, Inc. - iShares MSCI Brazil Capped ETF
BKF	iShares, Inc. - iShares MSCI BRIC ETF
EWC	iShares, Inc. - iShares MSCI Canada ETF
ECH	iShares, Inc. - iShares MSCI Chile Capped ETF
EEMV	iShares, Inc. - iShares MSCI Emerging Markets Minimum Volatility ETF
FM US	iShares, Inc. - iShares MSCI Frontier 100 ETF
PICK US	iShares, Inc. - iShares MSCI Global Metals & Mining Producers ETF
EUSA US	iShares, Inc. - iShares MSCI USA ETF
EXS1	iShares DAX (DE)
EXXY	iShares Dow Jones - UBS Commodity Swap (DE)
DJDVPEX GY	iShares Dow Jones U.S. Select Dividend (DE)
EXSI	iShares EURO STOXX (DE)
EXW1	iShares EURO STOXX 50 (DE)
MDAXEX GY	iShares MDAX (DE)
EXSA	iShares STOXX Europe 600 (DE)
ISM FP Equity	EasyETF iBoxx Liquid - EasyETF iBoxx Liquid Sovereigns Global
N/A	EasyETF Euro Stoxx 50
ETD FP Equity	EasyETF Euro Stoxx 50
C4D FP	AMUNDI ETF CAC 40
C40 FP	AMUNDI ETF CAC 40
CC1 FP	AMUNDI ETF MSCI China
CC1U FP	AMUNDI ETF MSCI China
AEEM FP	AMUNDI ETF MSCI Emerging Markets
AUEM FP	AMUNDI ETF MSCI Emerging Markets
CMU FP	AMUNDI ETF MSCI EMU
CEU FP	AMUNDI ETF MSCI Europe
CU9 FP	AMUNDI ETF MSCI Europe Ex EMU
CG1 FP	AMUNDI ETF MSCI Germany
CJ1Y FP	AMUNDI ETF MSCI Japan
CJ1 FP	AMUNDI ETF MSCI Japan
CN1 FP	AMUNDI ETF MSCI Nordic
CP9 FP	AMUNDI ETF MSCI Pacific Ex Japan
CP9U FP	AMUNDI ETF MSCI Pacific Ex Japan
CU1 FP	AMUNDI ETF MSCI UK
XNID LN	db x-trackers - CNX Nifty UCITS ETF
3049 HK	db x-trackers - CSI300 UCITS ETF
XDAX SW	db x-trackers - DAX UCITS ETF (DR)
XHFD LN	db x-trackers - DB Hedge Fund Index UCITS ETF
XESX LN	db x-trackers - Euro Stoxx 50® UCITS ETF (DR)

TICKER	ETF FUND NAME
XUKX LN	db x-trackers - FTSE 100 UCITS ETF
XX2D LN	db x-trackers - FTSE China 25 UCITS ETF
XFVT LN	db x-trackers - FTSE Vietnam UCITS ETF
XAXJ LN	db x-trackers - MSCI AC Asia Ex Japan Index UCITS ETF
XMBD LN	db x-trackers - MSCI Brazil Index UCITS ETF
XMAD LN	db x-trackers - MSCI EM Asia Index UCITS ETF
XMLD LN	db x-trackers - MSCI EM Latam Index UCITS ETF
XMMD LN	db x-trackers - MSCI Emerging Markets Index UCITS ETF
XMED LN	db x-trackers - MSCI Europe Index UCITS ETF (DR)
XXSC LN	db x-trackers - MSCI Europe Small Cap Index UCITS ETF
XMJD LN	db x-trackers - MSCI Japan Index UCITS ETF
XMRD LN	db x-trackers - MSCI Russia Capped Index UCITS ETF
XMWD LN	db x-trackers - MSCI World Index UCITS ETF
XSPU LN	db x-trackers - S&P 500 UCITS ETF
XGSD LN	db x-trackers - STOXX Global Select Dividend 100 UCITS ETF
	db x-trackers II - IBOXX SOVEREIGNS EUROZONE YIELD PLUS 1-3 UCITS ETF
MTX FP	Multi Units France - Lyxor UCITS ETF EuroMTS Global Investment Grade
L100.FP	Multi Units France - Lyxor UCITS ETF FTSE 100
DJI HE	Lyxor UCITS ETF Dow Jones Industrial Average
DJE FP	Lyxor UCITS ETF Dow Jones Industrial Average
TUR FP	Lyxor ETF Turkey (DJ Turkey Titans 20)
CAC FP	Lyxor UCITS ETF CAC 40
ASI SP	Lyxor UCITS ETF China Enterprise (HSCEI)
LYASI SW	Lyxor UCITS ETF China Enterprise (HSCEI)
ASI FP	Lyxor UCITS ETF China Enterprise (HSCEI)
CRN SP	Lyxor UCITS ETF Com. Thomson Reuters/CoreCommodity CRB Ex-Energy TR
CRN FP	Lyxor UCITS ETF Com. Thomson Reuters/CoreCommodity CRB Ex-Energy TR
LYCRN SW	Lyxor UCITS ETF Com. Thomson Reuters/CoreCommodity CRB Ex-Energy TR
CRB SP	Lyxor UCITS ETF Commodities Thomson Reuters/CoreCommodity CRB TR
CRB FP	Lyxor UCITS ETF Commodities Thomson Reuters/CoreCommodity CRB TR
CRB SW	Lyxor UCITS ETF Commodities Thomson Reuters/CoreCommodity CRB TR
CEC SP	Lyxor UCITS ETF Eastern Europe (CECE NTR EUR)
CEC FP	Lyxor UCITS ETF Eastern Europe (CECE NTR EUR)
CRP FP	Lyxor UCITS ETF Euro Corporate Bond
MSE FP	Lyxor UCITS ETF Euro STOXX 50
MAA FP	Lyxor UCITS ETF EuroMTS Highest Rated Macro-Weighted Govt Bond (DR)
JPN FP	Lyxor UCITS ETF Japan (TOPIX)
LYJPN SW	Lyxor UCITS ETF Japan (TOPIX)
2814.HK	Lyxor UCITS ETF Japan (TOPIX)
AEJ FP	Lyxor UCITS ETF MSCI AC Asia-Pacific Ex Japan

TICKER	ETF FUND NAME
2815 HK	Lyxor UCITS ETF MSCI AC Asia-Pacific Ex Japan
LYAEJ SW	Lyxor UCITS ETF MSCI AC Asia-Pacific Ex Japan
LYLTM SW	Lyxor UCITS ETF MSCI EM Latin America
LTM FP	Lyxor UCITS ETF MSCI EM Latin America
LYLEM SW	Lyxor UCITS ETF MSCI Emerging Markets
LEM FP	Lyxor UCITS ETF MSCI Emerging Markets
MFE FP	Lyxor UCITS ETF MSCI EMU
MEU FP	Lyxor UCITS ETF MSCI Europe
MEU HE	Lyxor UCITS ETF MSCI Europe
LYINR SW	Lyxor UCITS ETF MSCI India
INR FP	Lyxor UCITS ETF MSCI India
LYKRW SW	Lyxor UCITS ETF MSCI Korea
KRW SP	Lyxor UCITS ETF MSCI Korea
KRW FP	Lyxor UCITS ETF MSCI Korea
WLD FP	Lyxor UCITS ETF MSCI World
2812 HK	Lyxor UCITS ETF MSCI World
LYWLD SW	Lyxor UCITS ETF MSCI World
RUS FP	Lyxor UCITS ETF Russia (DJ Russia GDR)
LYRUS SW	Lyxor UCITS ETF Russia (DJ Russia GDR)
2831 HK	Lyxor UCITS ETF Russia (DJ Russia GDR)
DWM US	WisdomTree Trust - DEFA Fund
DTN US	WisdomTree Trust - Dividend ex-Financials Fund
DEM US	WisdomTree Trust - Emerging Markets Equity Income Fund
DLS US	WisdomTree Trust - International SmallCap Dividend Fund
DXJ US	WisdomTree Trust - Japan Hedged Equity Fund
DLN US	WisdomTree Trust - LargeCap Dividend Fund
DON US	WisdomTree Trust - MidCap Dividend Fund
DES US	WisdomTree Trust - SmallCap Dividend Fund
CYB US	WisdomTree Trust - WisdomTree Chinese Yuan Strategy Fund
DGS US	WisdomTree Trust - WisdomTree Emerging Markets SmallCap Dividend Fund
DAX PA	Multi Units Luxembourg - Lyxor UCITS ETF DAX
RWO	SPDR Index Shares Funds - SPDR Dow Jones Global Real Estate ETF
RWX	SPDR Index Shares Funds - SPDR Dow Jones International Real Estate ETF
FEZ	SPDR Index Shares Funds - SPDR EURO STOXX 50 ETF
CWI	SPDR Index Shares Funds - SPDR MSCI ACWI ex US ETF
BIK	SPDR Index Shares Funds - SPDR S&P BRIC 40 ETF
GXC	SPDR Index Shares Funds - SPDR S&P China ETF
GMF	SPDR Index Shares Funds - SPDR S&P Emerging Asia Pacific ETF
GMM	SPDR Index Shares Funds - SPDR S&P Emerging Markets ETF
EWX	SPDR Index Shares Funds - SPDR S&P Emerging Markets Small Cap ETF

TICKER	ETF FUND NAME
GNR	SPDR Index Shares Funds - SPDR S&P Global Natural Resources ETF
GWX	SPDR Index Shares Funds - SPDR S&P International Small Cap ETF
GWL	SPDR Index Shares Funds - SPDR S&P World ex US ETF
BIL US Equity	SPDR Series Trust - SPDR Barclays 1-3 Month T-Bill ETF
LAG US Equity	SPDR Series Trust - SPDR Barclays Aggregate Bond ETF
JNK US Equity	SPDR Series Trust - SPDR Barclays High Yield Bond ETF
ITR	SPDR Series Trust - SPDR Barclays Intermediate Term Corporate Bond ETF
ITE US Equity	SPDR Series Trust - SPDR Barclays Intermediate Term Treasury ETF
BWX US Equity	SPDR Series Trust - SPDR Barclays International Treasury Bond ETF
IPE US Equity	SPDR Series Trust - SPDR Barclays TIPS ETF
WIP US Equity	SPDR Series Trust - SPDR DB International Govt Inflation-Protected Bond ETF
RWR	SPDR Series Trust - SPDR Dow Jones REIT ETF
DGT	SPDR Series Trust - SPDR Global Dow ETF
MTK	SPDR Series Trust - SPDR Morgan Stanley Technology ETF
TMW	SPDR Series Trust - SPDR Russell 3000 ETF
SPYG	SPDR Series Trust - SPDR S&P 500 Growth ETF
SPYV	SPDR Series Trust - SPDR S&P 500 Value ETF
SLYG	SPDR Series Trust - SPDR S&P 600 Small Cap Growth ETF
SLYV	SPDR Series Trust - SPDR S&P 600 Small Cap Value ETF
KBE	SPDR Series Trust - SPDR S&P Bank ETF
XBI	SPDR Series Trust - SPDR S&P Biotech ETF
SDY	SPDR Series Trust - SPDR S&P Dividend ETF
XHB	SPDR Series Trust - SPDR S&P Homebuilders ETF
KIE	SPDR Series Trust - SPDR S&P Insurance ETF
XME	SPDR Series Trust - SPDR S&P Metals & Mining ETF
XES	SPDR Series Trust - SPDR S&P Oil & Gas Equipment & Services ETF
XOP	SPDR Series Trust - SPDR S&P Oil & Gas Exploration & Production ETF
XPH	SPDR Series Trust - SPDR S&P Pharmaceuticals ETF
KRE	SPDR Series Trust - SPDR S&P Regional Banking ETF
XRT	SPDR Series Trust - SPDR S&P Retail ETF
XLY US Equity	- The Consumer Discretionary Select Sector SPDR Fund
XLP US Equity	- The Consumer Staples Select Sector SPDR Fund
XLE US Equity	- The Energy Select Sector SPDR Fund
XLF US Equity	- The Financial Select Sector SPDR Fund
XLV US Equity	- The Health Care Select Sector SPDR Fund
XLI US Equity	- The Industrial Select Sector SPDR Fund
XLB US Equity	- The Materials Select Sector SPDR Fund
XLK US Equity	- The Technology Select Sector SPDR Fund
XLU US Equity	- The Utilities Select Sector SPDR Fund
SPY US Equity	SPDR S&P 500 ETF Trust

TICKER	ETF FUND NAME
MOO	Market Vectors ETF Trust - Agribusiness ETF
BBH US	Market Vectors ETF Trust - Biotech ETF
BRF	Market Vectors ETF Trust - Brazil Small-Cap ETF
KOL	Market Vectors ETF Trust - Coal ETF
HYEM	Market Vectors ETF Trust - Emerging Markets High Yield Bond ETF
GDX	Market Vectors ETF Trust - Gold Miners ETF
HYD US	Market Vectors ETF Trust - High-Yield Municipal Index ETF
IDX	Market Vectors ETF Trust - Indonesia Index ETF
ITM US	Market Vectors ETF Trust - Intermediate Municipal Index ETF
IHY US	Market Vectors ETF Trust - International High Yield Bond ETF
GDXJ	Market Vectors ETF Trust - Junior Gold Miners ETF
EMLC	Market Vectors ETF Trust - Market Vectors EM Local Currency Bond ETF
OIH US Equity/ OIH	Market Vectors ETF Trust - Oil Services ETF
PPH US	Market Vectors ETF Trust - Pharmaceutical ETF
PFXF US	Market Vectors ETF Trust - Preferred Securities ex Financials ETF
REMX	Market Vectors ETF Trust - Rare Earth/Strategic Metals ETF
RSX	Market Vectors ETF Trust - Russia ETF
HAP	Market Vectors ETF Trust - RVE Hard Assets Producers ETF
SMH US	Market Vectors ETF Trust - Semiconductor ETF
SMB US	Market Vectors ETF Trust - Short Municipal Index ETF
SLX	Market Vectors ETF Trust - Steel ETF
VNM	Market Vectors ETF Trust - Vietnam ETF
MOAT US	Market Vectors ETF Trust - Wide Moat ETF
BIV:US	Vanguard Bond Index Funds - Vanguard Intermediate-Term Bond ETF
BLV:US	Vanguard Bond Index Funds - Vanguard Long-Term Bond ETF
BSV:US	Vanguard Bond Index Funds - Vanguard Short-Term Bond ETF
BND:US	Vanguard Bond Index Funds - Vanguard Total Bond Market ETF
VOO US	Vanguard Index Funds - Vanguard S&P 500 ETF
VXF US	Vanguard Index Funds - Vanguard Extended Market ETF
VUG US	Vanguard Index Funds - Vanguard Growth ETF
VV US	Vanguard Index Funds - Vanguard Large-Cap ETF
VOT US	Vanguard Index Funds - Vanguard Mid-Cap Growth ETF
VO US	Vanguard Index Funds - Vanguard Mid-Cap ETF
VOE US	Vanguard Index Funds - Vanguard Mid-Cap Value ETF
VBK US	Vanguard Index Funds - Vanguard Small-Cap Growth ETF
VB US	Vanguard Index Funds - Vanguard Small-Cap ETF
VBR US	Vanguard Index Funds - Vanguard Small-Cap Value ETF
VTI US	Vanguard Index Funds - Vanguard Total Stock Market ETF
VTV US	Vanguard Index Funds - Vanguard Value ETF
VWO US	Vanguard International Equity Index Funds - Vanguard MSCI EM ETF

TICKER	ETF FUND NAME
VGK US	Vanguard International Equity Index Funds -Vanguard MSCI Europe ETF
VNQI	Vanguard International Equity Index Funds -Global ex -US Real Estate ETF
VPL US	Vanguard International Equity Index Funds -Vanguard MSCI Pacific ETF
VIG US	Vanguard Specialized Funds -Vanguard Dividend Appreciation ETF
VNQ US	Vanguard Specialized Funds -Vanguard REIT ETF
VCR US	Vanguard World Funds -Vanguard Consumer Discretionary ETF
VDC US	Vanguard World Funds -Vanguard Consumer Staples ETF
VDE US	Vanguard World Funds -Vanguard Energy ETF
VFH US	Vanguard World Funds -Vanguard Financials ETF
VHT US	Vanguard World Funds -Vanguard Health Care ETF
VIS US	Vanguard World Funds -Vanguard Industrials ETF
VGT US	Vanguard World Funds -Vanguard Information Technology ETF
VAW US	Vanguard World Funds -Vanguard Materials ETF
VOX US	Vanguard World Funds -Vanguard Telecommunication Services ETF
VPU US	Vanguard World Funds -Vanguard Utilities ETF
HEDJ US	WisdomTree Trust -Europe Hedged Equity Fund
DFE	WisdomTree Trust -Europe SmallCap Dividend Fund
DFJ US	WisdomTree Trust -Japan SmallCap Dividend Fund
EZM US	WisdomTree Trust -MidCap Earnings Fund
EES US	WisdomTree Trust -SmallCap Earnings Fund
CD5 FP	AMUNDI ETF EURO STOXX 50
C50 FP	AMUNDI ETF EURO STOXX 50

9.4. APPENDIX 4: List of Largest Asset Managers in Brazil

In the below list you will see a list of the largest asset managers in Brazil by size. This comprehensive list is a wealth of information into who the largest players are, what their AUM size is and what general trend line can we see in their asset flows. This list includes both mutual funds and ETFs given the small size of the ETF market.

Manager
Banco do Brasil
Itaú Unibanco
Bradesco
Caixa Econômica Federal
Santander Brasil
BTG Pactual
HSBC
Credit Suisse
Votorantim
Safra Asset Mgt.
Legg Mason
BNY Mellon Asset Mgt.
Funcef
JP Morgan
Intrag
Vinci Partners
Opportunity
BRL Trust
Quantitas
Real Grandeza
Morgan Stanley
GPS CFO
BW
JGP
GAP Prudential
Icatu
Fundacao Sistel
Porto Seguro
Gávea
Pessoas físicas Fundacao
SPX
Alfa
Integral Investimentos
Banrisul

Mutual fund industry asset growth by manager	
Title:	Mutual fund manager asset growth
Chart:	Month end administrator assets over last six months
Country:	Brazil
Industry:	Mutual funds
Period:	Ending September 30, 2013
Amounts in:	Milliones of Brazilian Reais
Source:	Latin Asset Management

Month end assets in prior five months all 2013					
AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
447665	442125	442343	449238	450492	444535
360661	362098	366534	361978	352130	338360
295983	290907	291247	281648	286447	283716
168291	166067	164745	163681	162608	160657
122761	124204	124276	123954	123456	122249
112634	113114	115409	114145	112089	109700
80204	81122	79212	76785	78526	79262
56893	56806	56839	54415	54431	54274
37454	37834	37959	37554	35698	35423
36486	34824	34953	32513	34335	32444
25649	25534	25867	25474	26350	26422
24137	23973	22403	22464	23997	23202
23338	22847	22126	21623	20992	21591
20752	21572	20481	20113	19283	18569
19024	19296	20875	20955	23665	23547
18587	18158	18090	17912	18243	18577
17007	16199	16872	17000	17051	17487
15724	15406	15307	15156	15530	15472
15616	14844	15259	14956	15709	15066
15200	14840	14397	14448	14744	14452
14237	13836	12170	13814	14906	14929
14016	14577	14330	15087	14929	15040
11371	11282	10713	10959	10800	10235
10404	10232	10333	10243	10705	11010
9847	10051	10329	9869	12024	12441
9202	9140	5484	5579	5782	5672
9092	9229	8657	8631	8497	8383

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Mapfre	6357	6491	6531	6325	6513	7522
Plural Capital	6234	6044	6030	5772	5565	5069
Fapes Fundacao	6188	6177	6312	6233	6549	6797
Pátria	6012	6436	6699	8766	8460	8677
Merrill Lynch	5733	5449	5495	5366	5811	6369
Riviera	5466	5460	5661	5711	645	658
Vale do Rio Doce Fundacao	5334	5604	5741	5581	5861	5767
Oliveira Trust	4950	4825	4810	4336	4788	5591
Pragma	4828	4860	4883	4754	4886	4810
Brasilprev Seguros	4610	4530	4568	4568	4517	4475
Modal	4589	4793	4889	4645	4841	4630
BNB	4294	4226	4205	4144	4142	4048
Advis Investimentos	4173	4898	5682	7363	8245	8874
Dynamo	4078	3979	3872	3639	3820	3727
Kinea	4075	4088	4078	3729	3564	3358
	3914	3836	3749	3628	3722	3465
	3850	3853	3456	3401	3543	3572
	3659	3661	3714	3692	3756	3853
	3552	3670	3664	3684	3610	3111
	3539	3802	3717	3664	3637	3590
	3533	3474	3461	3448	3425	3414
	3530	3530	3457	3366	3251	3216
Geracao Futuro	3398	3198	3066	2959	3284	3311
Consenso	3360	3316	2982	3018	2915	2887
Fator	3344	3285	3381	3399	3646	3536
Planner	3309	3108	3083	3504	3655	3729
Ceres Fundacao	3243	3184	3171	3153	3212	3221
Banco Clássico	3243	3122				
Petra	3227	3186	3265	2557	2731	2546
Peninsula	3217	3244	1779	1310	931	428
UBS	3107	3086	2896	2832	2889	2854
Serpros Fundacao	3099	3078	3123	3110	3168	3176
Gerval	2994	2922	3018	3396	3638	3749
Franklin Templeton	2942	2908	2947	2856	2996	2929
Global Equity / Global Capital	2923	2962	2984	2988	3037	3062
Polo Capital	2912	2928	2957	2514	2657	2603
BRZ	2789	2901	2920	2807	2834	2864
Schroder Brasil	2775	3476	3541	3840	5319	4921
Visao Prev	2736	2727	2847	2806	2918	3074

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
BBM	2708	2687	2646	2638	2657	2493
Ventor	2656	2752	2753	2719	2746	2772
Mercatto	2584	2567	2578	2611	2653	2882
Claritas	2514	2839	2959	3092	3221	3164
Perfin	2425	2349	2235	2137	2144	2099
Credit Agricole	2335	2462	2169	2102	1800	1840
Tarpon	2274	1964	2079	2037	2080	2103
Squadra Investimentos	2259	2273	2291	2324	2502	2477
NSG Capital	2215	1738	1761	1935	1476	1436
Rio Bravo Investimentos	2187	1765	1413	1458	1486	1465
Quest	2147	2129	2089	2045	2046	1762
Phronesis Investimentos	2137	2116	2097	1944	1978	1975
Ipanema	2046	2089	2053	2060	2037	2008
BC	2004	2078	2074	2025	2189	2249
Concórdia	1984	2034	2060	2131	2440	2531
	1966	1964	2002	2025	2029	2034
	1876	1971	2101	2108	1808	1661
	1825	1758	1800	1757	1870	1509
	1813	1742	1706	1752	1738	1708
	1780	1839	1937	1928	1999	2078
	1752	1632	1818	1685	1889	1885
	1701	1637	1568	1500	2316	2000
Mantiq	1661	1553	1530	1492	1475	1365
Ouro Preto Gestao	1629	1586	1618	1596	1594	1559
Pacifico	1624	1609	1573	1511	1618	1532
BancoOB	1603	1741	1632	1627	1529	1498
Investidor Profissional	1576	1465	1460	1428	1471	1457
Daycoval	1529	1594	1546	1591	1581	1603
Apex Capital	1450	1387	1302	1220	1201	1150
Proteus	1425	1408	1412	1403	1407	1429
BGI Brasil	1377	1593	1616	1815	2079	2428
TAG Investimentos	1354	1352	1234	1246	1240	1211
Guepardo	1316	1560	1469	1440	1423	1374
Neo Gestao	1303	1527	1616	1676	1686	1659
Equitas	1302	1327	1299	1280	1293	1110
MCAP Investimentos	1292	1230	1262	1167	1291	1304
BRB	1291	1292	1266	1264	1330	1462
M Square	1227	1181	1159	1138	1174	1101
Valora	1206	1182	1182	1172	972	1020

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
CM Capital Markets	1197	1162	1157	1132	1182	1211
DEC Investimentos	1172	287	281	270	289	291
Infra Asset	1115	1647	1645	1642	1096	1096
Araujo	1051	1040	1039	1039	1026	1026
J&M Investimentos	1039	990	987	871	844	818
Bogari Capital	1022	998	969	945	928	869
Tempo	985	974	969	943	1018	1042
Atmos Capital	962	911	885	813	831	718
Nucleo Capital	958	928	891	863	926	859
RB Capital	950	826	821	874	871	914
Oceana Investimentos	943	895	869	854	880	861
Bcsul Verax	931	941	978	986	328	1016
Deutsche Bank	911	880	952	950	961	116
JG Capital	888	887	828	582	582	577
Atico	883	772	754	757	761	703
	867	870	873	878	866	866
	847	828	880	902	954	915
	846	810	800	775	836	826
	833	816	796	845	856	859
	823	855	868	875	891	922
	791	790	1195	1214	1359	1433
	782	785	788	774	759	758
Turim 21	756	781	799	798	795	772
Tese Gestao	735	715	717	712	697	671
Forsix	723	717	717	717	717	717
EOS Investimentos	722	681	696	700	581	567
Angra	721	721	1382	1387	1448	1382
Saga	714	830	793	759	729	720
Drachma Investimentos	706	698	736	747	762	770
BR	704	703	721	752	769	1046
Besaf Bes	693	682	701	700	723	738
ASM	685	673	673	667	668	609
Skopos	664	619	589	595	708	737
Gaar Galvao	659	644	584	831	621	582
Financial Gestao de Ativos	639	637	630	624	609	596
Opus	618	616	701	785	844	826
Intercap	608	616	624	602	575	508
BS Andrade	607	594	570	574	585	576
JPP Gestao	603	622	622	620	619	622

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Lizar	597	725	404	321	444	277
Fama Investimentos	585	594	607	627	619	600
J Malucelli	575	594	587	558	583	615
STK Capital	551	531	540	534	575	565
Studio	535	523	462	442	464	468
Kapitalo	522	514	523	489	492	448
Lacan	518	497	352	351	346	328
Indie	507	466	303	281	273	253
RBC	495	457	443	436	424	455
UV Gestora	491	449	632	629	620	627
Redasset	468	285	294			
Somma Investimentos	460	449	447	452	448	455
Vila Rica Capital	458	430	465	135	135	135
Southern Cross do Brasil	453	453	453	453	453	453
Latour	449	450	450	448	436	437
	441	608	604	427	69	70
	418	402	383	375	372	363
	416	353	331	319	317	334
	416	702	416	416	416	416
	404	442	440	443	433	419
	401	1	3	4	12	390
	396	401	389	337	335	333
Silverado	386	387	460	464	462	461
Leblon Equities	385	385	393	408	417	425
Leme	379	344	261	308	306	304
Vision Brazil	372	371	363	362	406	7
Incentivo	368	353	350	345	338	335
Value	360	328	318	311	343	342
Rosenberg Investimentos	357	361	165	165	166	164
Constellation	355	330	332	267	256	249
Pine	350	414	416	347	362	568
Prada	345	341	336	332	324	319
Ber Capital	341	405	579	612	616	610
BR Partners	334	211	203	164	155	156
Fides	325	321	325	325	322	312
Orbe	317	314	313	333	341	321
Tenor Capital	316	333	319	355	396	339
Duna	301	302	310	372	407	467
Kyros Investimentos	299	277	265	259	249	237

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Unity Capital	285	281	292	282	314	319
A3 Performance	280	280	270	267	270	267
Serficom Brasil	275	272	271	269	274	269
DGF Investimentos	270	261	261	261	262	260
Argúcia	264	259	265	313	348	372
Explora	259	243	236	230	235	207
Nova Milano Investimentos	257	255	254	245	245	244
Nest	257	336	421	459	474	477
Set Investimentos	255	238	248	243	252	248
Cox	254	244	240	223	222	219
Vitoria	250	266	253	262	378	386
Teorema	240	242	239	231	242	241
Humaita	240	252	262	277	286	289
Jardim Botânico	237	233	232	229	241	241
TCG	236	236	236	225	225	225
	231	230	230	229	228	
	228	224	210	200	189	223
	228	222	222	217	219	208
Banco Brascan Brookfield	216	207	207	205	204	435
	216	238	287	351	506	522
	214	206	226	234	274	261
	212	212	212	212	212	212
Latinfinance	211	217	216	226	239	245
Tokyo Mitsubishi	206	205	212	220	265	273
Spinelli	201	196	191	192	216	221
Sumitomo	196	195	197	194	205	217
Bresser	194	197	189	190	206	205
TRX	189	187	186	184	181	170
Galt	184	181	165	166	166	167
Safdie	182	361	383	400	411	410
Arbela	179	175	172	174	185	187
Anga	175	178	178	177	176	173
Atlantica	173	171	168	168	168	168
Artesia Gestao	170	170	170	170	170	170
BRA Invest	165	161	166	166	166	168
Taler	163	159	170	168	164	164
Endurance Capital Partners	160	161	159	160	160	160
Ashmore	160	150	148	160	160	151
Foco	156	186	188	201	192	192

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
KBO Capital	153	140	104	122	88	78
Fibra	151	141	114	107	118	134
Triscorp Investimentos	148	149	149	149	149	150
Grau	148	120	102	82	111	119
Trapezus	147	140	128	104	91	82
Grand Prix Investimentos	137	135	136	136	113	110
Perimeter	137	101	118	93	93	91
Taboaco, Nieckele e Associados	135	134	134	110	114	114
Mirae	130	133	137	116	152	159
Apolo Investimentos	128	117	114	112	128	125
VKN	126	113	112	112	115	54
Rio Gestão de Recursos	126	125	125	126	131	65
Appia Prime	125	8	8			
Kadima	125	124	228	352	370	405
V2 Investimentos	123	122	140	138	139	141
	123	123	122	121	126	127
	122	221	223	228	224	224
	121	113	108	107	116	116
	115	108	109	96	97	96
	115					
	114	91	84			
	114	105	89	90	65	68
Flag	113	105	86	75	65	59
RMW Invest	111	80	60	49	41	26
Adinvest	110	110	124	123	120	125
Socopa	108	105	103	101	100	98
Estateer	106	106	105	104	105	104
BP Asset	105	105	96	97	92	92
RCB	103	117	125	124	145	143
Pavarini e Opice	102	108	102	100	109	111
GTI	102	99	101	99	110	115
Hix Investimentos	101	101	102	100	103	101
Skipper	97	97	114	114	115	115
3G Radar	97	89				
Venturestar	96	96	95	94	93	92
Arsa Investimentos	95	95	98	86	76	76
Multinvest Capital	95	95	95	91	92	93
Zero Conflit	95	101	81	85	90	96
Governanca e Gestao	94	93	95	94	94	208

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Sparta	94	91	94	94	81	80
Ujay	91	91	90	89	92	52
Meta Asset	91	88	93	93	104	106
Lerosa	90	87	85	81	103	108
Infinity	89	88	89	88	89	100
Quorum	84	84	74	73	72	72
Personale	84	80	78	72	78	81
RC	84	94	88	85	80	83
Genus	83					
Sonar Investimentos	83	115	114	110	107	104
Victoria	82	82	82			
Detomaso	82	84	84	84	82	81
Ideal Invest	81	90	93	100	105	80
Real Investor Gestao	80	75	74	74	74	69
Edge Brasil	78	76	76	65	64	64
	78	68	65	68	79	85
	77	57	68	78	85	89
	77	84	78	96	96	96
	71	83	81	63	72	97
	70	63	54	52	55	64
	69	70	45	42	43	4
	68	68	67	67	67	67
Portbank	67					
Capital	67	66	66	67	69	72
Cortex	66	71	65	63		
Multipla	62	62	61	61	60	60
First Value Capital	62	60	63	62	70	71
Antera	61	61	62	62	62	62
Real Assets	59	60	60	63	52	52
Easynvest	58	81	86			
Dex Capital	57	56	56	55	56	55
Eagle	55	53	51	51	56	56
GS Allocation	54	54	52	51	49	51
Sita	54	51	49	49	50	55
Sao Paulo	53	55	41			
GL	53	52	49	52	55	53
Totem	53	51	51	51	51	51
Magliano	52	51	49	49	47	49
BI Capital	51	38	38	38	40	34

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Supplier	50	46	43	35	31	29
Maxiplan	50	49	49	48	51	48
M Asset	49	48	48	46	47	47
G10	48	79	70	70	73	86
Apoema	48					
Unimed Seguradora	47					
Horus Investimentos	46	44	43	42	20	20
Santa Fe	46	46	50	48	54	37
Mundinvest	46	41	44	45	48	50
E2M Investimentos	46	44	44	43	46	46
Octante	45	44		44	47	47
Artesanal	45	47	47	46	49	50
Real Capital	45	44	44	44	43	42
SDA	43	43	43	42	44	57
LMX	43	43	45	44	47	54
	42	43	44	45	48	49
	42	40	41	41	44	43
	42	41	40	39	40	41
	41	13	13	13	14	14
	41	41				
	40	42	41	42	44	44
	39	40	40	40	41	41
KRON	39	39	37	33	31	
Bravia	38	36	37	36	38	39
Terra Boa	37	35	40	40	40	37
Aggrega Investimentos	36	36	35	65	63	55
Brazilian Cap	36	26	26	26	22	22
Interativa Investimentos	36	36	32	31	32	32
Cultinvest	36	35	34	35	40	34
Graphus Participacoes	35	34	33	33	34	34
Security	35	35	35	35	37	39
Prosper	35	153	145	143	138	146
FMD	35	27	26	26	27	27
Acrux	34	34	34	33	33	34
Gallo	34	33	33	33	33	33
Araras	34	53	53	52	52	51
3G Capital	33	29	34	33	36	33
Diamond Mountain	33	22	21	21	21	21
UM Investimentos	33	22	23	24	24	40

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Behavior Capital Mgt.	31	63	68	69	72	73
Propel Investimentos	31	26	25	22	14	14
Spectra	30	30	30	30	29	
Marau	29	29	11	11	12	7
Vista	29	14	14			
VBI Real Estate	29	29	23	19	19	11
DXA	29	1				
Ativa	29	29	20	44	31	30
Coinvalores	28	25	25	25	25	24
Alpha4X	28	28	28	29		
SLW Asset	28	26	27	28	23	24
LLA	28	27	27	26	28	29
Prumo	27					
Berkana	27	31	29	29	30	41
Pax	27	27	27	27	27	27
	27	23	23	22	24	26
	26	25	25	24	28	28
	26	26	20	20	20	10
	26	25	25	25	25	25
	25	26	24	24	24	24
	25	24	24	19	1	
	25	27	27	51	57	56
Geral	25	24	16	16	17	17
GPM	25	27	26	26	25	25
A7	25	24	24	26	31	31
Argos	24	25	17	17	18	18
Tendencia	23	24	26	26	25	25
Trio Capital	23	22	22	22	23	23
Murano	22	22	22	23	40	52
BR Opportunities	21	22	18	18	18	18
York	21	20	24	24	40	41
3R	21	19	18	9	11	11
Equity CP	19	21	13	19	19	18
Rio Verde	19	19	19	21	22	22
GBX	19	16	16	11	12	12
Rio de Janeiro	19	19	20	20	25	28
Target	18	18	24	23	23	23
Prisma Invest	18	17	18	18	19	19
Marlin Gestao	18	13	14	22	41	65

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Tática	17	17	17	17	18	18
Brado Capital	17		14	14	35	34
Solo Gestao	16	16	10	10	10	11
Fox	16	17	17	16	17	17
Highline	16	17	20			
Geriba	15	15	15	15	15	15
Effectus Investimentos	15	15	15	14	15	15
Smartquant Investimentos	15	14	14	13	12	6
CRPC	14	12	13	12	13	15
Iguana Investimentos	14	14	14	14	15	15
Versal Finance	13	11	11	17	11	11
Elite	13	12	12	12	13	14
Teorica	13	13	14	15	17	18
Iguatemi	13					
Mint Capital	12	12	12	11	13	13
	12	13	12	13	15	16
	12	12	6	6	6	
	12	10	11	4	4	3
	12	12	12	13	15	15
	12	12	12	12	12	13
	12	11	8	7		
	11	19	19	19	17	20
Pavarini	11					
Octo	11	9	9	9	9	9
Machado de Almeida	11	11	15	16	17	16
TF Gestao	11	12	12	11	12	12
Venture	11	11	11	11	12	12
Ifconsultant	11	10	10	10	10	10
Investfort	11	10	10	9	10	11
BRS	10	6	5	3	3	
NCH Brasil	10	9	9	9	10	
Proprio Capital	10	9	18	2	2	1
Root Capital	9	9	12	13	15	15
Principia	9	9	10	10	9	10
Loin Investments	8	8	8	8	8	8
TOV Investimentos	8	8	9	8	9	6
Yield Capital	8	8	7	7	8	7
Trivella Investimentos	8	7	7	7	8	8
Banseg	8	7	7	6	6	6

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Kodja Investimentos	7	7	7	9	9	9
Icone	7	6	1			
Zeitgeist Tech	7	6	6			
DWN Investimentos	7	9	9	8	9	10
Blackwood	6	6	6			
Invext Capital	6	6	6	6	6	6
Upside	6	6	6	6	6	7
MMJ Maturity	6	6	5	5	5	5
Itajui	6	6	6	2	2	2
FinPlan	6	6	6	6	6	6
Abaco	5	5	5	5	6	6
Diferencial Consultoria	5	5	5	6	6	6
Inseed	5	6	6	6	7	6
Vertex	5	5	5	5	6	5
Beta	5					
	5	5	6	8	14	24
	5	5				
	4	5	3	4	4	4
	4	4	13	13	7	13
	4	4	4	4	4	4
	4					
	4	4	4	4	4	4
GR Participacoes	4	4	3	3	2	2
B&Z Global Strategies	4	4				
Pilla	4	4	4	4	4	4
Banco Indusval	4	4	4	4	4	4
CRP	4	4	4	4	5	3
RBJ	4	3	3	4	4	4
Vetorial	4	4	4	4		0
Luminus	4	4	4	4	5	5
Sifra	3	3	3	3	3	3
Quarter Investimentos	3	3	4	5	5	5
Fundamento	3	3	3	3	5	3
Cimo	3	3	3	3	3	
Invest Capital	3	2	2	3	3	3
Kosmos	2					
Antares	2	3	2	2	3	3
INX	2	2	2			
Amx	2	1	1	1	0	0

Manager	AUM Sept	AUM Aug	AUM July	AUM June	AUM May	AUM March
Rappaport e irmaos	2	2	2	2	2	2
Local Invest	2	2	2	2	14	14
Lhynqz	2	1	2	2	2	2
Inva Capital	2	2	2	6	8	8
Simplific	2	3	3	3	3	3
Portfolio	1	1	1	1	1	1
CTM	1	1				
Virtus	1	1	1	1		
Lagoa	1	1	1	1	2	2
Reva	1	1	1	1	1	1
Phynance	1	1	0	0	0	0
Abradinvest	1	1	1	1	1	1
Corp	1	1	1	155	155	155
Sabra	0	1	1			
Linker Investimentos	0	0	1	1	1	1
Turing	0					
Vix Capital		83	83	82	63	62
Gradius		47	46	46	43	28
Gaia		40	39	39	40	40
Sextante		29	29	29	28	29
Constancia Investimentos		13	14	14	16	16
Tessa Capital		9	9	9	15	16
Kairos		2	2	2	2	2
BX		0	0	0	0	1
Plurimax		0		0		0
Avat		0	3	8	15	21
Itaiuba			39	39	34	7
GBM Brasil			2	2	3	3
GG Capital				147	149	108
Titulo				89	96	102
Bladex					28	15
Olimpia Partners						29
Atual						0
Total Industry	2363735	2363735	2358668	2338340	2344752	2312223
Exchange rate x 1 US Dollar	2.23	2.37	2.29	2.22	2.09	2.00

9.5. APPENDIX 5: List of newly approved Investments for Chilean Pensions

In the below list you can see a list of all of the funds and ETFs that have been approved by the CCR for sale to the Chilean AFPs. This list demonstrates how unique Chile is in the Latin American pension universe given their willingness to approve foreign funds and the speed at which they add additional options. It also gives us insight into what areas AFPs have interest in currently since they must sign a sponsor letter in order for approval to happen.

CCR Approved Funds for Pension Use YTD 2014	
ETF Fund Name	Domicile
Vanguard FTSE Developed Markets ETF	US
Db X-Trackers Harvest CSI 300 China A Shares ETF	US
Db X-Trackers MSCI EAFE Hedged Equity ETF	US
Db X-Trackers MSCI Japan Hedged Equity ETF	US
Db x-trackers II-iBoxx Sovereigns Eurozone Yield Plus 1-3	Luxemburg
PIMCO Emerging Markets Advantage Local Bond	Ireland
PIMCO Short-Term High Yield Corporate Bond	Ireland
iShares 1-3 Year International Treasury Bond	US
iShares 10+ Year Credit Bond	US
iShares Floating Rate Bond	US
iShares MSCI Frontier 100 ETF	US
Wisdomtree Europe Hedged Equity	US
Wisdomtree Europe Small Cal Dividend	US
Mutual Fund Name	Domicile
Blackrock Emerging Markets Equity Index Fund	Luxemburg
Blackrock Euro Government Bond Index Fund	Luxemburg
Blackrock Europe Equitiy Index Fund	Luxemburg
Blackrcok North America Equity Index Fund	Luxemburg
Blackrock North America Equity Index Fund	Luxemburg
GAM Star China Equity	Ireland
GAM Star Credit Opportunities USD	Ireland
Gam Star Technology	Ireland
GLG Japan CoreAlpha	UK
PIMCO Emerging Asia Bond Fund	Ireland
PIMCO Emerging Local Bond Fund	Ireland
PIMCO Emerging Markets Bond Fund	Ireland
PIMCO Emerging Markets Corporate Bond Fund	Ireland
PIMCO Global Bond Ex-US Fund	Ireland
PIMCO Global High Yield Bond Fund	Ireland
PIMCO Income Fund	Ireland
PIMCO EqS Dividend Fund	Ireland
PIMCO StockPLUS Fund	Ireland

Mutual Fund Name	Domicile
PIMCO Funds: Total Return Bond Fund	Ireland
PIMCO Unconstrained Bond Fund	Ireland
Baring Emerging Markets Fund	Ireland
Baring Latin America Fund	Ireland
Baring Eastern Europe Fund	Ireland
Baring High Yield Bond	Ireland
Baring ASEAN Frontiers Fund	Ireland
Baring Hong Kong China Fund	Ireland
Baring EM Debt Local Currency Fund	Ireland
BNY Mellon Brazil Equity Fund	Ireland
BNY Mellon Emerging Markets Debt Fund	Ireland
BNY Mellon Emerging Markets Debt Local Currency Fund	Ireland
DFA International Real Estate Securities Portfolio	US
DFA International Vector Equity Portfolio	US
DFA U.S. Large Cap Equity Portfolio	US
DFA U.S. Large Cap Growth Portfolio	US
DFA US Small Cap Growth Portfolio	US
DFA U.S. Vector Equity Portfolio	US
Goldman Sachs Growth & Emerging Markets CORE Equity Fund	Luxemburg
Investec Global Strategy Fund – High Income Bond Fund	Luxemburg
Muzinich Americayield Fund	Ireland
Muzinich Short Duration High Yield Fund	Ireland
Allianz Convertible Bond Fun	Luxemburg
Allianz Renminbi Fixed Income	Luxemburg
Allianz Thailand Equity	Luxemburg
Edmond De Rothschild China France	France
Epsilon Emerging Market Bond Total Return Fund	Luxemburg
Epsilon Euro Bond Fund	Luxemburg
Eurizon EasyFund Corporate EUR Short Term Bond Fund	Luxemburg
GAM Star North of South EM Equity Fund	Ireland
Invesco Nippon Small/Mid Cap Equity Fund	Luxemburg
Invesco Asian Equity Fund	Ireland
Ivesco UK Equity Fund	Ireland
Invesco Global High Income Fund	Ireland
Invesco Continental European Small Cap Equity Fund	Ireland
PIMCO Fundamental IndexPLUS AR Fund	US
Vanguard Emerging Markets Stock Index Fund	Ireland
Vanguard European Stock Index Fund	Ireland
Vanguard Eurozone Stock Index Fund	Ireland
Vanguard Global Stock Index Fund	Ireland
Vanguard Japan Stock Index Fund	Ireland
Vangaurd Pacific Ex-Japan Index	Ireland

Mutual Fund Name	Domicile
AXA Famlington Europe Opportunities	Luxemburg
Credit Suisse Sicav One: Equity Japan Value	Luxemburg
Credit Suisse Sicav One: Global Convertibles	Luxemburg
Fidelity Funds Global Inflation Linked Bond	Luxemburg
Fidelity Funds Global Real Asset Securities Fund	Luxemburg
Fidelity Funds Global Strategic Bond Fund	Luxemburg
Nuveen Preferred Securities Fund	US
Investec Global Strategy Fund – European Equity	Luxemburg
Allianz German Equity Fund	Luxemburg
Amundi Equity ASEAN	Luxemburg
Amundi Equity India	Luxemburg
Goldman Sachs Global Credit Portfolio (hedged)	Luxemburg
JPMorgan Asia Equity Fund	Luxemburg
Parvest World Corporate	Luxemburg
Parvest Convertible Europe Bond Fund	Luxemburg
Parvest Equity Best Selection Europe ex-UK	Luxemburg
Parvest Equity Japan Small Cap	Luxemburg
Parvest Equity Pacific Ex-Japan	Luxemburg
Parvest Equity World Energy	Luxemburg
Parvest Equity World Healthcare	Luxemburg
Parvest Global Environment	Luxemburg
Parvest World Commodities	Luxemburg
UBS Emerging Economies Corporates	Luxemburg
UBS China Opportunities	Luxemburg
Federated Strategic Value Dividend Fund	US
Federated Institutional High Yield Bond Fund	US
Federated Emerging Markets Debt Fund	US
Federated Emerging Markets Debt Fund	US
Federated International Leaders Fund	US
Nuveen Core Bond Fund	US
Nuveen Core Plus Bond Fund	US
Nuveen Dividend Value Fund	US
Nuveen Global Infrastructure Fund	US
Nuveen High Income Bond Fund	US
Nuveen Inflation Protected Securities Fund	US
Nuveen Large Cap Growth Opportunities Fund	US
Nuveen Mid Cap Growth Opportunities Fund	US
Nuveen Strategic Income Fund	US
Nuveen Tactical Market Opportunities Fund	US
Nuveen Santa Barbara Dividend Growth Fund	US

Nuveen Tradewinds Global All-Cap Fund	US
Nuveen Winslow Large Cap Growth Fund	US

Mutual Fund Name	Domicile
AXA IM Europe Short Duration High Yield	Luxemburg
AXA Emerging Markets Short Duration Bonds	Luxemburg
Blackrock Emerging Markets Equity Income Fund	Luxemburg
Federated Intercontinental Fund	US