UNIVERSIDADE FEDERAL DO RIO DE JANEIRO INSTITUTO COPPEAD DE ADMINISTRAÇÃO

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PERFORMANCE ANALYSIS OF PGBL AND VGBL RETIREMENT FUNDS

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Master's dissertation presented to the Instituto

Coppead de Administração, Universidade Fed-

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requirements in order to obtain the title of Mas-

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Supervisor: Carlos Heitor Campani, Ph.D.

RIO DE JANEIRO

2019

CIP - Catalogação na Publicação

Clem Soares, William

PERFORMANCE ANALYSIS OF PGBL AND VGBL RETIREMENT FUNDS / William Clem Soares. -- Rio de Janeiro, 2019.

46 f.

Orientador: Carlos Heitor Campani. Dissertação (mestrado) - Universidade Federal do Rio de Janeiro, Instituto COPPEAD de Administração, Programa de Pós-Graduação em Administração, 2019.

 Investment Performance. 2. PGBL/VGBL Funds.
 Insurance Companies. 4. Brazilian Financial Market. I. Heitor Campani, Carlos, orient. II.
 Título.

Elaborado pelo Sistema de Geração Automática da UFRJ com os dados fornecidos pelo(a) autor(a), sob a responsabilidade de Miguel Romeu Amorim Neto - CRB-7/6283.

C676p

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RIO DE JANEIRO 2019

Resumo

Analisamos o desempenho dos fundos de aposentadoria no mercado brasileiro. Neste segmento, o Plano Gerador de Benefícios Livres (PGBL) e a Geração de Vida Livre (VGBL) são os produtos mais notáveis, representando mais de 90% deste mercado. Nós esclarecemos o desempenho dos fundos PBGL / VGBL controlados por empresas puramente seguradoras, em oposição aos fundos PBGL / VGBL controlados por empresas diretamente ligadas a grandes bancos de varejo. Nossos resultados sugerem um melhor desempenho para seguradoras puras, tanto para fundos conservadores quanto agressivos, em termos de majores retornos médios. Nós também comparamos o desempenhos de fundos com base na análise do Alfa de Jensen: os resultados para a maioria dos desempenhos analisados foram abaixo do mercado. Além disso, também foi avaliado a influência da taxa de administração cobrada e do tamanho do fundo sobre os retornos líquidos e sobre o risco. Altas taxas de administração mostraram não valer a pena, já que o impacto negativo foi duplo: menor retorno com maior risco. Por outro lado, maiores fundos apresentaram maiores retornos líquidos com nenhuma evidência de maior risco. Finalmente, a análise confirmou o maior retorno líquido de fundos controlados por companhias puramente seguradoras também após o controle da taxa de administração e do tamanho do fundo: estes fundos mostraram, com evidências estatísticas, fornecer de 0.8% a 1% de retorno a mais por ano.

Palavras-chave: Performance de Investimentos, Fundos PGBL/VGBL, Seguradoras, Mercado Financeiro Brasileiro

Abstract

We analyze the performance of retirement funds in the Brazilian market. In this segment, the Free Benefit Generating Plan (PGBL) and the Free Benefit Generating Life (VGBL) represent the most notable products, accounting for more than 90% of the market share. We shed light on the performance of PBGL/VGBL funds controlled by pure insurance companies as opposed to PBGL/VGBL funds controlled by companies directly linked to large retail banks. Our results suggest a better performance for pure insurance companies, for both conservative and aggressive funds, in terms of higher average returns. We also compare performances of funds based on the Jensen's alpha analysis: Results for most of the funds analyzed were poor, underperforming the market. In addition, it was also assessed the influence of the administrative fee charged and fund's size on net returns and risk. Higher administrative fees showed not to payoff since the negative impact was twofold: lower net returns with higher risk. On the other hand, larger funds presented higher net returns with no evidence of higher risk attached. Finally, the analysis confirmed the higher net returns of funds controlled by pure insurance companies also after controlling for administrative fee and size of the fund: These funds showed, with statistical evidence, to provide from 0.8% to 1% more per year.

 $\it Keywords$: Investment Performance, PGBL/VGBL Funds, Insurance Companies, Brazilian Financial Market

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1 Introduction

One of the hot topics in the Brazilian economy is the pension and social security system. Many researchers argue that the primary structure (public) for pensions is financially unsustainable and, as a consequence, risky for future retirees. In April 2017, the Organization for Economic Cooperation and Development (OCDE) released a memo based on a study made by Gragnolati et al. (2011), claiming that the Brazilian pension expenses and population aging have significantly increased and, as such, if the current pension system did not change, the pensions' budget would contribute to a future financial collapse.

A good alternative to protect the future incomes from any modification made in the primary system is in the complementary (private) pension system. Simply put, in Brazil we can differentiate two kinds of vehicles in the private pension system: Pension Funds and Specially Constituted Investment Funds (FIE). The Pension Funds term is used to describe funds managed by non-profit institutions which do not provide open access to the general public, but only for employees from certain companies. On its turn, the term FIE is used to describe the legal vehicle used by for-profit open-access pension institutions: the participation is available to every Brazilian citizen, according to his own decision. FIE are the ones linked to plans like PGBL and VGBL, which are the focus of this article.

In Brazil, the private pension system is divided between two types of institutions: pure insurance companies and insurance companies linked to retail banks. The difference between them is the fact that, for pure insurers, pension products are the main source of income, while retail banks have credit as their primary source of income. According to data kindly provided by Quantum Finance, in December 2017, 91% of total PGBL and VGBL net worth were controlled by five companies linked to a large retail bank (Bradesco, BrasilPrev, Caixa Econômica Federal, Itaú and Santander). Retail banks overwhelmingly dominate the sector. As a consequence, it can be hypothesized that pure insurance companies will have to differentiate themselves with more significant performance and lower administrative fees.

The purpose of this paper is to compare the performance of PGBL/VGBL retirement funds, differentiating pure insurance companies from companies linked to large retail banks. No other previous work has performed such analysis. We do hope the article helps with the development of this market segment in Brazil.

The following section presents a brief theoretical framework and reviews the literature that

supports this research. Subsequently, we introduce the methodology, as well as the data used, and then we present the results and analyses.

2 The Environment in Brazil

The Brazilian social security system is divided into two main categories: the primary (public) and the complementary (private) pension system. The primary pension plan is mandatory and every worker has to contribute. However, workers from private and public sectors are treated differently by current law. The workers from the public sector have a special social security regime called RPPS protected by the 40th article of the Federal Constitution. On the other hand, workers from the private sector are destined to the general social security regime (RGPS). More details can be found in Amaral (2013).

The complementary pension system can also be divided into two categories. The complementary pension plans can be closed-access, available only for individuals working on specific departments in the public sector or specific companies from the private sector: these plans are managed by the so called EFPC (Closed Entities of Complementary Pension). And there are the open-access pension plans, available to every person, which are managed by the so called EAPC (Open Entities of Complementary Pension). Figure 1 illustrates this division.

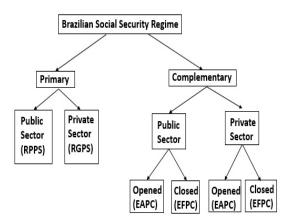


Figure 1: Social Security Scheme. Source: Elaborated by the authors.

In Brazil, closed funds (managed by EFPC) are simply known by the term Pension Funds. These funds were created just to manage the resources of a specific group or entity in the private or public sector. On its turn, open-access funds managed by EAPC have also a specific vehicle: the Specially Constituted Investment Funds (FIE). While EFPC are not for-profit organizations,

EAPCs are for-profit institutions.

According to Fenaprevi, which is a non-profit Brazilian institution that represents the EAPC, there are tree plans that one can choose if they decide to invest in a given EAPC. These plans are: Free Benefit Generating Plan (PBGL), Free Benefit Generating Life (VGBL) and Traditional Plans (which are old-fashioned nowadays and difficult to find). PGBL and VGBL plans have become very popular, and they currently account for more than 90% of the sector, as according to Campani & Brito (2018). Moreover, FenaPrevi (2017) indicated that almost all the new contracts issued are about just PGBL and VGBL products (99.4% in October 2017). Therefore, because of their relevance, we will focus in these two categories.

The main difference between these two plans is basically the additional tax benefit for the PGBL products. Apart from that, they are exactly the same for practical matters. In PGBL products, one can deduce up to 12% of his annual income for tax purposes. For a detailed discussion on PGBL and VGBL plans, see Campani & da Costa (2018) and Schossler & Conto (2001).

According to FenaPrevi (2017), the provision destined to FIE has boosted incredibly: it went from R\$ 615 billions in January 2017 to more than R\$ 735 billions in October 2017. It has confirmed a trajectory of increasing demand for PGBL and VGBL products well-known by the market: this trend seems to become even stronger in the future.

The data provided by Quantum Finance also added more information about this market. According to them, the size of this market in net worth was of 771 billion in December 2017, with 13491 of active plans and 1280 of active funds. The informations also confirmed the particular characteristic of the sector, which is considered as an oligopoly. Five insurance compannies linked to a retail bank (BrasilPrev, Caixa Econômica Federal, Santander, Itaú and Bradesco) control the most significant part of the market share: 91% of the total net worth (702.7 billion), 63% of the total FIE (806) and 63% (8474) of all active plans available of this market.

Conversely, the only four pure insurance companies with portfolios that surpass ten years of existence (Porto Seguro, Sulamérica, Mapfre and Icatu Seguros) hold all together: 1.5% of the total net worth (11.5 billion), 6% of the total FIE (81) and 13% (1744) of all active plans available in this market. We conclude that this sector is highly concentrated at the hands of large retail banks.

3 Literature Review

The importance of pension products to the Brazilian economy has significantly increased in the past few years, as commented by Silva (2016) and Silva et al. (2015). This is supported by the strong and increasing demand by the population for complementary pension products. Costa & Soares (2017) studied this growing demand, providing interesting insights: For example, this demand seems not to have reached the lower layers of the Brazilian society or those with low schooling levels.

Campani & da Costa (2018) made a deep research encompassing the four largest PGBL and VGBL providers in Brazil. They had concluded that, despite the higher fees usually charged by FIE, in the long run they are still very competitive when compared to standard investment funds, due to exclusive tax benefits guaranteed by law. They also have pointed out that these fees, although still at high levels, have been showing a decreasing pattern, which allows them to conjecture that in the long run, with the development of this market, fees tend to equalize with the ones charged by standard investment funds.

Higher fees are charged under the assumption of active management and potential superior performance. In order to check whether or not PBGL and VGBL funds are active managed, Campani & Brito (2018) performed a dynamic style analysis to find out that this was not the case with such funds: in other words, high fees were not justifiable. The passivity presented by the funds analyzed (all of them managed by institutions linked to a retail bank) was shown to be such that, with a very simple strategy, anyone could obtain, at least, the same performance but with lower fees.

Another important point is why the market share is so heavily dominated by retail banks once pension or insurance products are not their primary service. Many authors tried to address this topic. Vanzetta (2013) aimed to analyze the role of the distribution of insurance and pension products by banks (bancassurance) in the Brazilian insurance market. According to him, the union of the two markets occurred after 1967, when the entire collection related to insurances started to be done through the banking network, thereby providing a rich fund-raising system for the institution's main activity: lending. Since then, convergence movement between the two businesses only grew through mergers and acquisitions of banks and insurance companies, with major historical milestones, such as the 1988 constitution that established the linkage of the insurance industry to the Brazilian financial system. Currently, the attractiveness of

selling insurance for banks remains very high and easy, since their clients are already there. Backed by the capillarity of the banking network, the bancassurance had a relevant role in the popularization of insurance and pension products among the population. In a nutshell, still according to Vanzetta (2013), the decision by the financial institutions to start selling insurance and pension products goes through the strategy of diversifying product portfolio, in order to cover its costs through products and services that are complementary to the financial intermediation.

Aligned with this argumentation, Pagnussatt (2010) claimed that the consolidation of the banking and insurance industry in Brazil, the increasing competition among players, the regulatory changes and the increasing importance of revenues from insurance subsidiaries to banking conglomerates have encouraged the review of strategies by banks and by pure insurance companies. Within this perspective, strategic alliances with insurance companies emerged as an important mean to achieve competitive advantage. The results show the dominance of the Brazilian insurance market by insurance companies controlled by banking conglomerates, especially in segments with higher affinity for the financial services: retirement savings, "capitalization" (combines lottery-based drawings with an incentive savings product) and life insurance.

On the other hand, Bottino (2012) believes that the concentration of insurance and pension services by retail banks may be dangerous to society. According to him, the market share concentration among a few players creates an oligopoly extremely harmful for investors who are offered old-fashioned products at exorbitant fees. His proposal is twofold: political changes and promotion of the competition among players in order to create a more efficient market.

Some other authors focused on how insurance companies allocate their resources. Mette (2009), for instance, studied whether the insurance companies in Brazil are optimizing their asset allocation, using data from 2001 to 2007. The results have shown that most of these institutions allocated their assets efficiently, at least as according to Markowitz theory. On the other hand, Amaral (2013) compared the performance of FIE and standard investment funds, with data from 2005 to 2011: The results showed that FIE (i.e., funds linked to PGBL and VGBL plans) performed below the standard funds. Similar results were found by Medeiros (2015).

Lima (2006) studied the performance of PGBL funds in the period of 2003 and 2004, concluding that they did not beat the CDI rate, which is commonly used as the riskless rate in Brazil. Cardoso (2006) had the objective to study the existence of performance persistence in PGBL, VGBL and FAPI (Fund of Individual Scheduled Retirement - perhaps the most relevant example of a tradition plan) funds from January 2001 to December 2004: His conclusion was

that it was not possible to ascertain that a given fund will repeat in the future the performance obtained in the past.

So far, we are not aware of any other work that has compared the performance of funds managed by retail banks and pure insurance companies in the PGBL and VGBL industry. The importance of this comparison is claimed by the fact that, as Bottino (2012) has argued, the retail banks may be inefficient due to the lack of competition and, as a consequence, they may deliver poor performance attached to high fees. We believe that savvy investors will find relevant the analysis carried out below, as well as regulators and competitors of this market segment.

4 Methodology and Data

PGBL and VGBL funds are usually classified in three categories: conservative, moderate and aggressive, as according to Campani & Brito (2018). Conservative funds only invest in fixed income instruments; moderate funds area allowed to invest 15-30% (depending on the institution) in stocks; and aggressive funds can invest up to 40-49% in stocks. To our objectives, conservative and aggressive funds suffice.

There are many ways to measure funds performance. According to Varga (2001), the simplest performance indicator is the average return. Nonetheless, the average return does not account for the risk taken to achieve that return. As a consequence, we will also use other measures which do consider risk.

Initially, it will be calculated the annualized geometric mean of each FIE. Subsequently, for conservative funds, the returns will be compared with the annualized geometric mean of CDI returns (used as a benchmark). Next, for aggressive funds, it will be used a daily weighted average of CDI and IBRX-100 (60% of CDI and 40% of IBRX-100). The acronym CDI represents the average rate at which the Brazilian banks are willing to borrow/lend to each other for one day and it is quite often considered as the riskless rate in the Brazilian financial market. On its turn, the Brazil Index of Shares IBRX-100 is a total return index referring to a theoretical portfolio composed of the 100 most traded shares on the Brazilian exchange.

The weights that compose the benchmark for aggressive funds were determined based on the work of Campani & Brito (2018). The paper demonstrates that, although aggressive funds were allowed to invest up to 49% in variable income products, on average, the investments were closer to 40%: in such way, fund managers can better control their allocation in order not to stay out

of regulation.

In addition, to detect any superior performance of pure insurance companies, it will be calculated a simple regression analysis. The dependent variable will be the mean (total or net) annualized returns and the independent variable will be a dummy variable representing the "pure insurance company" effect to be investigated. Equation (1) represents the simple regression analysis.

$$R_{i,M} = \beta_0 + \beta_1 * dummy_{PIC,i}$$
 (1)

where β_1 is the marginal return due to the "pure insurance company" effect, while the intercept (β_0) is the average of the mean returns for companies linked to retail banks. $R_{i,M}$ is the mean (total or net) annualized return for fund i.

Secondly, it will be calculated the Sharpe ratio in order to consider the risk and return tradeoff. The Sharpe ratio is widely used in studies of performance analysis with investment funds and assets in general. However, it loses meaning when the portfolio return is lower than the risk-free rate, given by the CDI returns. To overcome this caveat, Israelsen (2005) presents an adjusted definition, which will be used by this study, as according to equation (2):

$$SR_{i} = \frac{R_{i,M} - R_{f,M}}{\sigma_{i}^{\frac{R_{i,M} - R_{f,M}}{abs(R_{i,M} - R_{f,M})}}}$$
(2)

where SR_i represents the Sharpe ratio for fund i, $R_{i,M}$ is the mean (total or net) annualized return for fund i, $R_{f,M}$ represents the mean annualized return for the risk-free rate, σ_i is the annualized standard deviation for fund i, and the function abs returns the absolute value of $(R_{i,M} - R_{f,M})$. This adjusted formula correctly orders the performances even when the portfolio return is lower than the risk-free rate.

After the ranking, the Mann-Whitney test will be performed to assess difference between the two medians on the ranking. This test is a non-parametric method appropriate for examining the difference in medians for two independent populations. The null hypothesis considers that there is no difference between the two medians. The alternative hypothesis considers the opposite. It In addition, a simple regression analysis will be performed to evaluate whether there is any direct correlation between the Sharpe ratio and pure insurance companies. As before, funds controlled by pure insurance companies are labeled as one, while funds belonging to companies

linked to a large retail bank are labeled as zero. The equation is the following (3):

$$SR_i = \beta_2 + \beta_3 * dummy_{PIC,i}$$
 (3)

where β_3 is the marginal Sharpe ratio due to the "pure insurance company" effect, while the intercept (β_2) is the average of the Sharpe ratios for companies linked to retail banks. SR_i is the Sharpe ratio for fund i.

Third, the analysis of Jensen's alpha will be performed to determine which funds deliver positive alphas. This important performance indicator is originated from the CAPM model. The measurement is risk-adjusted and, originally, it represents the average return on a portfolio above (if positive) or below (if negative) that one predicted by the CAPM. A positive value for Jensen's alpha means that the funds' managers have "outperformed the market" with their cherry-picking skills. However, the CAPM is not adequate to our analysis, and we therefore adopt alternative models for conservative and aggressive funds.

For conservative funds, the Jensen's alpha will be evaluated based on a two-factor model, in which the factors represent relevant instruments in the Brazilian fixed income market: IMA-B (basket of government bonds indexed by IPCA, the official Brazilian inflation rate), and IRF-M (basket of government bonds with pre-fixed rates). These indices translate into two major risk sources: inflation and pre-fixed rates. The equation used to calculate the alphas is thus the following:

$$R_{i,t} - CDI_t = \alpha_{0,i} + \alpha_{1,i} * (IMA_t - CDI_t) + \alpha_{2,i} * (IRF_t - CDI_t)$$
 (4)

where $\alpha_{1,i}$ and $\alpha_{2,i}$ are the fund's exposures to the IMA-B and IRF-M factors. The $\alpha_{0,i}$ is the Jensen's alpha for fund i.

A similar approach was used to evaluate the Jensen's alpha for aggressive funds. As aggressive funds are a blend of fixed income and variable income products, a six-factor model was proposed to calculate the alphas. It was used the same two factors from the multiple regression for conservative funds and added four more factors based on the Carhart (1997) model.

The Carhart (1997) model is an important contribution for portfolio's analysis. It is an extension of the Fama-French three-factor model that includes a momentum factor. According to Fama & French (1993), the average returns on stocks are related to firm characteristics like size, earnings/price, cash flow/price, book-to-market equity, past sales growth and past returns. As a consequence, the authors have presented a model that includes two additional risk

factors: (i) the difference between the return on a portfolio of small stocks and the return on a portfolio of large stocks (SMB — small minus big), and (ii) the difference between the return on a portfolio of high book-to-market ratio stocks and the return on a portfolio of low book-to-market stocks (HML — high minus low). In the Carhart (1997) model, momentum in a given stock is described as the tendency for the stock price to continue rising if it is performing well or to continue declining if it is performing negatively. The monthly momentum can be calculated by subtracting the equal weighted average of the lowest performing firms from the equal weighted average of the highest performing firms, both lagged one month, according to Carhart (1997). Similar to the three factor model from Fama & French (1993), momentum factor is defined by the acronym WML, which means winners minus losers.

Therefore, the model used to assess the Jensen's alphas of aggressive funds will be as follows:

$$R_{i,t} - CDI_t = \alpha_{3,i} + \alpha_{4,i} * (R_{m,t} - CDI_t) + \alpha_{5,i} * SMB_t + \alpha_{6,i} * HML_t + \alpha_{7,i} * WML_t + \alpha_{8,i} * (IMA_t - CDI_t) + \alpha_{9,i} * (IRF_t - CDI_t)$$

where $\alpha_{4,i}$, $\alpha_{5,i}$, $\alpha_{6,i}$, $\alpha_{7,i}$, $\alpha_{8,i}$ and $\alpha_{9,i}$ are fund's exposures to the six risk factors. The $\alpha_{3,i}$ is the Jensen's alpha for the aggressive fund i.

Finally, we developed a regression analysis in which it is investigated the influence of three variables on the annualized net returns: administrative fees, size and pure insurance company effect. It is expected that administrative fees have an impact on net returns. High fees are charged under the assumption of high performance, so it will be investigated. Likewise, the size is expected to influence the net returns. Do small funds deliver higher returns to attract more resources? This is the question to be answered with the regression. And lastly, the "pure insurance effect" will be assessed due to reasons aforementioned. The equation writes as follows:

$$R_{i,m} = \beta_4 + \beta_5 * Fee_i + \beta_6 * Ln(Size_i) + \beta_7 * dummy_{PIC,i}$$
 (6)

where β_4 is the regression intercept, β_5 and β_6 are the slopes of the fee and size factors, and β_7 is the marginal net return due to the "pure insurance company" effect after controlling for the fee and size effects. The fund size refers to the fund net worth held in December 2017.

In addition, a similar investigation was performed but related to the risk (as measured by the standard deviation) of all funds during the period analyzed. Are high administrative fees associated with high risk? Are small funds more volatile than bigger funds? Are pure insurance companies riskier than insurance companies linked to retail banks? These are questions answered

by the regression. The equation below describes this analysis:

$$\sigma_{i} = \beta_{8} + \beta_{9} * Fee_{i} + \beta_{10} * Ln(Size_{i}) + \beta_{11} * dummy_{PIC,i}$$

$$(7)$$

where β_8 is the regression intercept, β_9 and β_{10} are the slopes of the fee and size factors, and β_{11} is the marginal standard deviation (risk) due to the "pure insurance company" effect after controlling for the fee and size effects. All other variables are defined just as previously.

All data concerning the funds were provided by Quantum Finance. The returns were provided on a daily basis from January 3rd, 2008, to December 28th, 2017, which sums up to a total of 2470 observations.

The selection criteria started with the mapping of all aggressive and conservative PGBL and VGBL funds available in the market. Then, we selected funds with at least 10 years of existence in December 2017. This time frame was chosen to have the longest possible period, within the restriction of having at least four pure insurance companies. It was also important that the fund received investments from solely one institution (although not common, some funds are shared by more than just one institution). In addition, only non-Master funds were chosen. These criteria were important to allow the comparison performed by this study and they refined the selected universe of PGBL and VGBL funds to 9 institutions (five retails banks and four insurance companies) and a total of 131 (PGBL and VGBL) funds. The list of funds and institutions can be seen on appendix A.

The risk factors from the Carhart (1997) four factor model were retrieved from NEFIN Center website: NEFIN is the Brazilian Center for Research in Financial Economics of the University of São Paulo. The factors were generated based on the assessment of the Brazilian stock market and more information is provided by Nefin (2017).

Both fixed income factors (IMA-B and IRF-M) as well as the benchmarks (IBRX-100 and CDI) time-series were retrieved from the Bloomberg data services platform.

5 Results

5.1 Geometric Mean Return Analysis

To preserve the identity of each fund, figures 2 and 3 do not assume any specific order. Figure 2 represents the comparison between mean annualized total returns and mean annualized net

returns of conservative funds. Net return is the total return deduced by the administrative fee charged by each institution. More information about how much is charged by each institution can be seen on Appendix B.

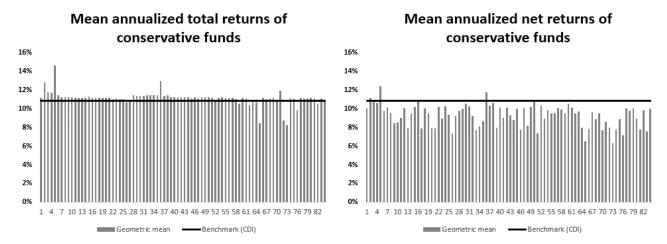


Figure 2: Annual returns of conservative funds. Source: Elaborated by the authors.

As one can see, for total returns of conservative funds, only 9 out of 84 funds did not beat the benchmark, which is the annualized geometric mean of CDI returns (10.83%). This can be explained by the fact that these funds may invest in corporate bonds, which deliver higher returns than the benchmark. However, after the administrative fee has been charged, this behavior reverts. Only 3 out of 84 funds delivered net returns to investors higher than the CDI.

To determine whether pure insurance companies experienced better returns, a simple regression analysis was performed (equation 1). The results can be seen on table 1.

Table 1: Simple regression analysis for conservative funds with total or net returns as dependent variables and a dummy variable representing the "pure insurance company" effect.

	Total retu	rns conser	vative funds	Net returns conservative funds			
	Estimate	t-value	P-value	Estimate	t-value	P-value	
Intercept	11.00%	134.3	0.0%***	9.20%	68.3	0.0%***	
Pure insurance company effect ${f Adjusted~R2}$	$0.75\% \ 10.9\%$	3.3	0.1%***	$0.87\% \ 5.1\%$	2.3	2.2%**	

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*.

On table 1, there is statistically significant indication that pure insurance companies deliver higher returns, on average. A premium of 0.75% per year is found on the regression to the total returns. On its turn, a premium of 0.87% per year is found on the the net returns.

Figure 3 represents the analysis to aggressive funds. For the total returns, only 19 out of 47 funds beat the benchmark (daily weighted average of CDI, 60%, and IBRX-100, 40%), that has presented a mean annualized return of 8.16% per year. When assessing the net returns, only 9

out of 47 funds beat this benchmark.

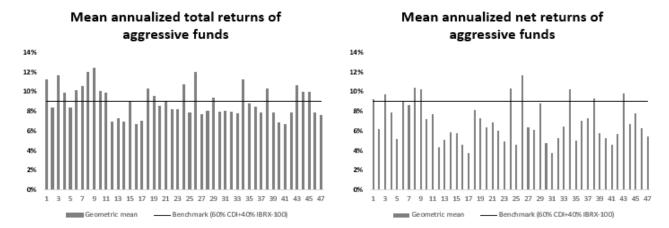


Figure 3: Annual returns of aggressive funds.

Source: Elaborated by the authors.

Another simple regression analysis was performed to compare performance between the two types of institutions, but now to aggressive funds (equation 1). The results can be seen on table 2.

Table 2: Simple regression analysis for aggressive funds with total or net returns as dependent variables and a dummy variable representing the "pure insurance company" effect.

	Total retu	Total returns aggressive funds		Net returns aggressive fund		
	Estimate	t-value	P-value	Estimate	t-value	P-value
Intercept	8.66%	32.9	0.0%***	6.63%	19.1	0.0%***
Pure insurance company effect	1.04%	2.2	3.7% **	1.03%	1.6	11.4%
Adjusted R2	7.3%			3.4%		

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*.

As table 2 indicates, to total returns, there is a premium return for funds administrated by pure insurance companies (1.04%). However, no statistical evidence was found on the regression of the net returns.

One important caveat from tables 1 and 2 is the fact that both yielded low adjusted R2 for total and net returns. However, the models have no intention to explain that the returns are based on just one variable, in this case the variable "pure insurance company". Therefore, low adjusted R2 are irrelevant for this analysis. The same argument applies to the simple regression analyzes (tables 3 and 4) on the following section.

5.2 Sharpe Ratio Analysis

The results from the previous section were favorable to pure insurance companies. However, one can argue that they compare returns without taking into consideration the risk. Therefore,

to better assess the performance, the Sharpe ratio analysis is performed in this section. The goal is to rank the funds based on the trade-off between risk and return, which is embedded into the Sharpe ratio equation. Once again, the name of each fund will be preserved and the analysis will be made based on the comparison between the two types of institutions.

Figure 4 depicts the ranking for conservative funds. The numbers on the vertical axis indicate the position of each institution on the Sharpe ratio ranking. Therefore, the number one on this axis indicates the best performer fund. On this figure, there is a visual (slight) concentration of funds from pure insurance companies on the lower level for both total and net returns. To confirm statistically the differences between the medians, the Mann-Whitney test was performed for both total and net returns. To total returns of conservative funds, the test rejected the null hypothesize to a level of significance equal to 1%, with W = 187, p-value = 0.35% and a difference in the medians favoring pure insurance companies equal to 24.63%. On its turn, to net return of conservative funds, the null hypothesize was also rejected to a level of significance equal to 10%, with W = 256, p-value = 5.37% and a difference in the medians favoring pure insurance companies equal to 0.006%.

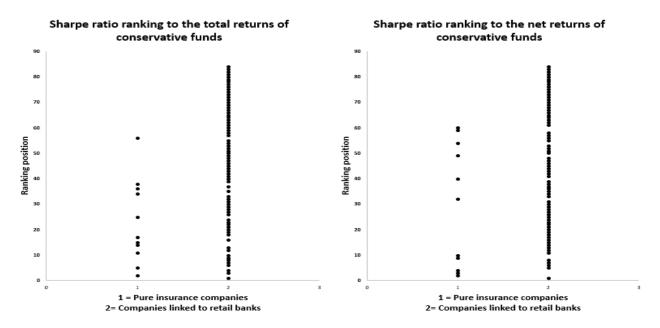


Figure 4: Sharpe ranking of conservative funds. The numbers on the vertical axis indicate the position of each institution on the Sharpe ratio ranking. The horizontal axis represents the two types of institutions.

Source: Elaborated by the authors.

To determine statistically the better performance of pure insurance companies, a simple regression analysis (equation 3) is presented below on table 3.

Table 3: Simple regression analysis for conservative funds with Sharpe ratio as dependent variable and a dummy representing the "pure insurance company" effect.

	Total retu	Total returns of conservative funds			Net returns of conservative funds			
	Estimate	t-value	P-value	$\mathbf{Estimat}\mathbf{e}$	t-value	P-value		
Intercept	48.44%	12.9	0.0%***	1.18%	0.9	37.3%		
Pure insurance company effect	26.87%	2.6	1.1%**	4.52%	1.2	22.0%		
Adjusted R2	6.5%			0.6%				

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*

There is a superior performance of 26.87% for total returns of funds administrated by pure insurance companies. To net returns, there is no statistical evidence of superior performance.

Figure 5 represents the Sharpe ratio ranking for aggressive funds. On this figure, the ranking for pure insurance companies is more disperse in both total and net returns than it was for conservative funds. In fact, the Mann-Whitney test favored none of the returns. To total returns of aggressive funds, the null hypothesize could not be rejected, with W = 165 and p-value = 12.87%. The same result was found to net return, with W = 186 and p-value = 30.45%.

The results of the regression analysis for the aggressive funds are displayed on table 4.

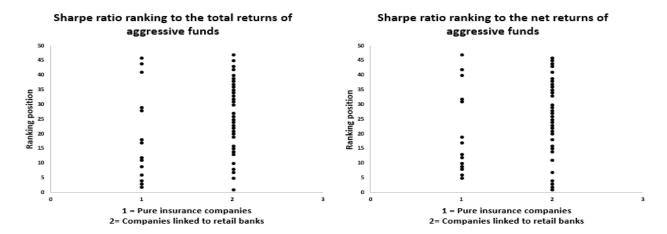


Figure 5: Sharpe ranking of aggressive funds. The numbers on the vertical axis indicate the position of each institution on the Sharpe ratio ranking. The horizontal axis represents the two types of institutions. Source: Elaborated by the authors.

Table 4: Simple regression analysis for aggressive funds with Sharpe ratio as dependent variable and a dummy representing the "pure insurance company" effect.

	Total retu	ırns aggre	Net retur	et returns aggressive funds		
	Estimate	t-value	P-value	Estimate	t-value	P-value
Intercept	2.55%	0.9	37.2%	-0.05%	-0.2	88.5%
Pure insurance company effect	7.58%	1.5	15.0%	-0.27%	-0.4	67.4%
Adjusted R2	2.4%			-1.8%		

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*.

We can observe that both results (using total and net returns) lack statistical significance. And the biases are now opposed: while the bias still favors pure insurance companies when using total returns, this is not true when using net returns. These results, for aggressive funds, when coupled with the results of the previous section, lead us to conclude that funds administrated by pure insurance companies are, on average, more volatile than funds administrated by companies linked to retail banks: indeed, the mean annualized standard deviations are respectively 9.9% and 8.4%.

5.3 Jensen's Alpha Analysis

The results for Jensen's alpha can be found on Appendix C. In this assessment, an alpha of zero means that the fund performs in line with the market (as given by the risk factors of the model used). A positive alpha indicates the fund is outperforming the market, while a negative alpha indicates the funds fail to generate returns to the same rate as the broader sector: in other words, funds provide mean returns not compatible with their risk level. To carry out the analysis, a two-factor model with only fixed-income factors was applied to conservative funds, as demonstrated on equation 4. To aggressive funds, a six-factor model with a blend of fixed and variable income factors was used, as outlined on equation 5.

The two-factor model proved to be statistically significant to only 42 conservative funds (50% of the sample). Overall, the results show a very poor performance for the whole sample of funds. For pure insurance companies, the model was more effective than for companies linked to retail banks (only regression number 6 was rejected). However, we observe only two funds (3 and 4) yielding positive alphas to net returns, but these estimates were not statistically significant and the adjusted R2 were very low (1.2% and 1.0% respectively), which indicates lack of evidence even for these funds. All the other funds produced negative alphas to net returns. Regarding the funds managed by companies linked to retail banks, none of them delivered positive alpha for the net returns. Even those funds presenting positive alphas for gross returns were just a few statistically significant, what leads us to the conclusion that administrative fees cannot be the unique explanation for the extremely poor performance observed through the net returns.

To the analysis of aggressive funds, the six-factors model proved to be more effective statistically for most of the regressions. This might indicate that the fixed income Brazilian market is more difficult to be benchmarked. This result was also found by (Campani & Brito, 2018), who used, instead, the fixed income fund of the same characteristic and from the same company

as a benchmark for aggressive funds. Nonetheless, similar results can be observed to aggressive funds. Only 3 out of 47 regressions yielded significant positive alphas to total returns. However, to net returns, only three alphas were positive, but yet with no statistical significance. Many funds presented negative alphas with statistical evidence.

In summary, the vast majority of the alphas were not favorable to any kind of institution in particular. Predominantly, the alphas found by the models used in this work were most of the times statistically zero or negative. Furthermore, after the administrative fee has been charged, all the alphas diminished considerably, providing statistical evidence of underperformance. Overall, our results confirm the findings of other authors claiming that most of the retirement funds do not deliver positive alphas (check Campani & Brito (2018) for more details).

5.4 Robustness Check: Controlling for Administrative Fees and Size on Net Returns

Administrative fees are charged under the assumption of active management. A thorough discussion about this topic can be found in Campani & Brito (2018). The figure 6 depicts a boxplot graphic comparing administrative fees charged by pure insurance companies and companies linked to a large retail bank.

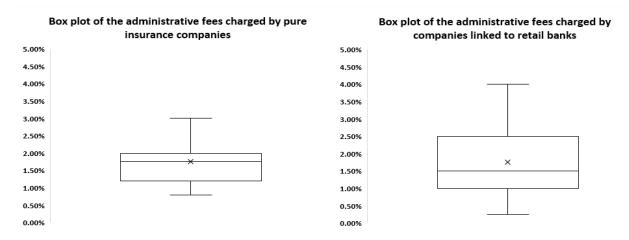


Figure 6: Box-plot of administrative fees charged by pure insurance companies and by companies linked to retail banks

Source: Elaborated by the authors.

As one can see above, the average fee of 1.75% is roughly the same for both types of institutions. However, it is clear that pure insurance companies have a more restricted range. On one hand, the pure insurance companies are not able to charge very high administration fees

because they do not have much access (as compared to retail banks) to costumers willing to pay for these higher fees. On the other hand, due to their cost structure, pure insurance companies are also not able to offer very low fees as retail banks can.

Figure 7 represents the box-plot graphic comparing the administrative fees charged by conservative and aggressive funds.

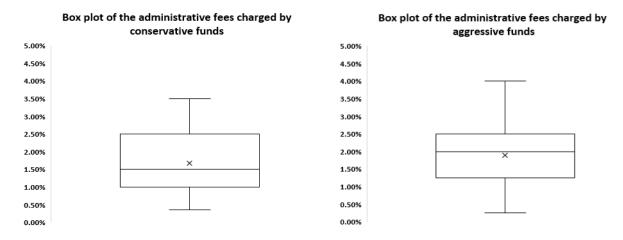


Figure 7: Box-plot of administrative fees charged by conservative and aggressive funds. Source: Elaborated by the authors.

In this figure, the average fee for conservative funds is 1.67% and the average fee for aggressive funds is 1.89%. Aggressive funds are indeed expected to charge higher fees than conservative funds because they are allowed to invest in more assets, with higher levels of risk (i.e., stocks), which demands more from its management team. All fees charged by each fund selected by this study are presented on appendix B.

On tables 5 and 6, we analyze the influence on net returns of administrative fees, size and the "pure insurance company" effect, as outlined by equation 6.

Table 5: Multiple regression analysis for net returns of conservative funds, with administrative fee, neperian logarithm of the total net worth and a dummy variable representing the "pure insurance company" effect as independent variables.

	Estimate	t-value	P-value
Intercept	0.093	14.9	0.0%***
Administrative fee	-1.037	-12.3	0.0%***
Ln(Net worth)	0.001	2.6	1.0%***
Pure insurance company effect	0.008	3.6	0.1%***
Adjusted R2	67.7%		
F-stat	59.0		
P-value(F-stat)	0.0%***		

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*.

According to the results of table 5, there is a negative correlation between the administrative fees and net returns of conservative funds. This result is important because it suggests that higher administrative fees are not paying off. On its turn, there is a positive correlation between net returns and size, which suggests that larger conservative funds tend to deliver higher net returns. Another important result is that, on average, pure insurance companies deliver a premium return of 0.8% per year on top of the net return delivered by a company linked to a retail bank. This result confirmed the findings of table 1, even after controlling for the administrative fee charged and the size of the fund. The Adjusted R2 of 67.7% demonstrates the power of this model to explain the returns of conservative funds.

Table 6: Multiple regression analysis for net returns of aggressive funds, with administrative fee, neperian logarithm of the total net worth and a dummy variable representing the "pure insurance company" effect as independent variables.

	Estimate	t-value	P-value
Intercept	0.057	2.7	1.0%***
Administrative fee	-1.706	-7.1	0.0%***
Ln(Net worth)	0.002	2.0	5.7%*
Pure insurance company effect	0.010	2.4	2.4%**
Adjusted R2	54.3%		
F-stat	19.2		
P-value(F-stat)	0.0%***		

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*.

The results displayed on table 6 show a similar behavior as observed on table 5. It shows that there is a negative correlation between the administrative fees and net returns of aggressive funds, a positive correlation between size and net returns and a premium of 1% per year on top of the net return delivered by a companies linked to retail banks. This result confirmed the bias found on table 2. However, after controlling for the administrative fee charged and the size of the fund, the estimate became statistically significant. The model is also powerful in explaining the returns of aggressive funds, yielding a Adjusted R2 of 54.3%.

On tables 7 and 8, we analyze the influence of administrative fees, size and the "pure insurance company" effect on the standard deviation, as outlined by equation 7.

Table 7: Multiple regression analysis for annualized standard deviation of conservative funds, with annualized standard deviation as dependent variable and administrative fee, neperian logarithm of the total net worth and pure insurance company as independent variables.

	Estimate	t-value	P-value
Intercept	0.033	3.8	0.0%***
Administrative fee	-0.031	-0.3	79.5%
Ln(Net worth)	-0.001	-2.9	0.5%***
Pure insurance company effect	0.004	1.2	23.6%
Adjusted R2	7.9%		
F-stat	3.4		
P-value(F-stat)	2.3%**		

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*.

According to the results depicted on table 7, there is negative correlation between net worth and risk, which suggests that larger conservative funds tend to be less volatile than smaller funds. Since small funds are more agile to take positions, this result might indicate that large funds may opt to follow more stable strategies. On the other hand, it was not found statistically significant correlation between administrative fees and pure insurance company effect. The lack of evidence may be due to the fact that conservative funds tend to invest in products with similar (and low) risks. It is important to mention that the model yielded a low Adjusted R2, which is of 7.9%. This result shows that the model is poor in explaining the risk. In fact, only one variable was significant statistically.

Table 8: Multiple regression analysis for annualized standard deviation of aggressive funds, with annualized standard deviation as dependent variable and administrative fee, neperian logarithm of the total net worth and pure insurance company as independent variables.

	Estimate	t-value	P-value
Intercept	0.001	0.0	98.5%
Administrative fee	2.015	3.0	0.5%***
Ln(Net worth)	0.003	0.9	37.0%
Pure insurance company effect	-0.014	-1.1	26.8%
Adjusted R2	15.9%		
F-stat	3.9		
P-value(F-stat)	1.5%		

Source: Elaborated by the authors. Level of significance: 1% *** 5% ** 10%*.

The table 8 shows no statistically significant correlation between risk and net worth, and between risk and the pure insurance company effect for aggressive funds. However, there is a positive correlation between administrative fee and risk, which indicates that high administrative fees tend to be attached to more volatile funds. This result is expected due to the fact that high administrative fees are charged under the assumption of more active management. In other words, higher fees would be justified to cover higher costs due to more human capital needed to manage these funds. It is important notice that the model also yielded a low Adjusted R2, which in this case is of 15.9%. As stated before, the low Adjusted R2 found means that the regression is poor in explaining the risk for aggressive funds.

The table 9 summarizes all the results that favored pure insurance companies.

Table 9: Summary of all results that favored pure insurance companies.

	Funds	Total Returns	Net Returns
Section 5.1: Analysis of net returns	Conservative	Yes	Yes
	$_{ m Aggressive}$	Yes	No
Section 5.2: Sharpe Analysis	Conservative	Yes	No
	$_{ m Aggressive}$	No	No
Section 5.3: Jensen's Alpha Analysis	Conservative	No	No
	Aggressive	No	No
Section 5.4: Robustness Check	Conservative	Yes*	Yes*
	$_{ m Aggressive}$	Yes*	Yes*

^{*} It was used both returns (total and net) in the same regression

6 Conclusion

Our findings suggest evidences that pure insurance companies deliver, in general, higher net returns. The analysis carried out grouped the funds into two classes: conservative (fixed income) and aggressive (up to 49% invested in variable income): the results in both groups favored pure insurance companies.

Another important result was that it seems that any superior performance produced by funds' management is absorbed by the administrative fee for all types of funds. To illustrate this result, the vast majority of conservative funds under-performed the CDI benchmark, when considered net returns. Even when adjusting the performance to the risk taken by the fund, as according to Jensen's alpha analysis, the results are not positive to any kind of fund on any institution. All the funds yielded alphas which were either statistically not different from zero or, what is worse, statistically lower than zero.

Our analysis also investigated the "pure insurance company" effect when controlling the fund's size and its administrative fee. For both groups of funds, it was clear the negative effect of administrative fees. Higher administrative fees indicated, on average, lower net return to investors. The size effect showed up to be positive, which means that greater funds achieved, on average, better net returns: this is known in the literature as the scale effect. Finally, the "pure insurance company" effect was statistically significant, indicating an annual premium of 0.8% for conservative funds and of 1.0% for aggressive funds. When assessing the risk through a similar analysis, results were mixed and not so evident, as well as the "pure insurance company" effect was not statistically significant to neither conservative nor aggressive funds.

Despite the superior performance of pure insurers, it is difficult to tell investors that they should decide to invest with this type of institution for at least two reasons: future uncertainties and convenience. The performance analysis carried out here looked backward. Therefore, it is difficult to ascertain whether the extra performance of these institutions will be replicated in the future. Even if this was the case, some investors may consider other retail banking offerings (such as discounted fees or other conveniences) to be worth as a package when compared to the extra returns from pure insurance companies. Especially in a scenario where all sorts of institutions lose to simple benchmarks.

We believe that this article contributes to the discussion of PGBL and VGBL (as well as others) retirement funds performances with an additional original analysis separating funds

linked to large retail banks and, as we name in this study, pure insurance companies. The results shed lights not only on the poor performance of most of the funds in comparison with standard benchmarks, but also on the even worse performance of funds linked to large retail banks. This discussion is extremely important to preserve best performances for long horizon investors as well as to guarantee that the available retirement products (e.g., PGBL and VGBL) remain attractive to everyone.

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A Institutions and Funds Selected

 ${\bf Table\ 10:}\ {\bf Institutions\ selected\ after\ the\ filter.}$

Institutions selected	Type of institution
Bradesco	Insurance company linked to a retail bank
BrasilPrev (Banco do Brasil)	Insurance company linked to a retail bank
Caixa Econômica	Insurance company linked to a retail bank
Itaú	Insurance company linked to a retail bank
Santander	Insurance company linked to a retail bank
Icatu	Pure insurance company
Mapfre	Pure insurance company
Porto Seguro	Pure insurance company
Sulamérica Seguros	Pure insurance company

Table 11: Part 1 of the list of PGBL/VGBL funds, including: CNPJ of each fund, type of institution, style of investment, max investment in variable income products of each fund, day where the fund was created, differentiation between feeder funds, a column showing that all fund are non-master and a column identifying the number of plans of each fund selected.

03.577.407 /0001-40 Brasilprev 07.919.9566/001-30 Brasilprev 06.081.47 /0001-54 Brasilprev 06.001.785 /0001-67 Brasilprev 04.118.672 /0001-80 Brasilprev 04.18.612 /0001-70 Brasilprev 04.18.612 /0001-90 Brasilprev 05.87.1745 /0001-10 Brasilprev 06.18.74001-90 Brasilprev 06.18.740001-10 Brasilprev 06.18.740001-10 Brasilprev 06.18.740001-10 Brasilprev 07.065.97 /0001-2 Brasilprev 07.065.97 /0001-3 Brasilprev 07.065.97 /0001-4 Brasilprev 07.065.97 /0001-4 Brasilprev 07.290.280 /0001-4 Brasilprev 04.794.886 /0001-4 Caixa Vida e Previdencia 04.794.886 /0001-4 Brasilprev 04.794.886 /0001-9 Caixa Vida e Previdencia 04.794.886 /0001-9 Brasilprev 04.794.886 /0001-9 Brasilprev 04.794.886 /0001-9 Brasilprev 04.51.489 /0001-9 Brasilprev 05.501.139 /0001-				Conservative Conse	000000000000000000000000000000000000000	22/08/2000 05/06/2006 06/09/2004 01/08/2007 19/06/2003 19/10/2000 08/03/2002 19/10/2000 19/10/2000 19/10/2000 19/10/2000 19/10/2000 31/06/2000 31/06/2000 31/06/2000 31/06/2000 31/06/2000 31/06/2000 31/06/2000 31/06/2000	ou saƙ saƙ saƙ saƙ saƙ saƙ saƙ saƙ	on on on on	R\$ 46,857,614,655.18 R\$ 44,053,828,880.52 R\$ 41,533,843,595.70 R\$ 39,270,214,191.25 R\$ 53,502,888.106.16	55 21.39 38.21 50 50 50 50 50 50 50 50 50 50 50 50 50
07.919.956 /0001-30 Brasilprev Conservative 06.00.1.785 /0001-54 Bradesco Asset Management Conservative 06.00.1.785 /0001-00 Brasilprev Conservative 06.00.1.78 /0001-00 Bradesco Asset Management Conservative 06.18.01.017 /0001-02 Bradesco Asset Management Conservative 06.15.7.745 /0001-18 Bradesco Asset Management Conservative 06.25.7.745 /0001-18 Bradesco Asset Management Conservative 06.25.7.745 /0001-19 Bradesco Asset Management Conservative 07.065.077 /0001-09 Bradesco Asset Management Conservative 07.250.200 /0001-01 Bradesco Asset Management Conservative 07.250.200 /0001-02 Caixa Vida e Previdencia Conservative 08.757.224 /0001-03 Caixa Vida e Previdencia Conservative 04.757.290 /0001-04 Bradesco Asset Management Conservative 04.757.291 /0001-05 Caixa Vida e Previdencia Conservative 04.757.290 /0001-06 Santander Brasil Asset Management Conservative 04.264.94 /00001-07 Bradesco Asset Management Conservative <td></td> <td></td> <td></td> <td>Conservative Conservative Conse</td> <td>000000000000000000000000000000000000000</td> <td>05/06/2006 06/09/2004 01/08/2003 12/05/2003 19/10/2000 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006</td> <td>ou ou ou ou ou ou ou ou ou ou</td> <td>on on on</td> <td>R\$ 44,053,828,880.52 R\$ 41,533,843,595.70 R\$ 39,270,214,191.25 R\$ 23,202,868,106,16</td> <td>39 38 40</td>				Conservative Conse	000000000000000000000000000000000000000	05/06/2006 06/09/2004 01/08/2003 12/05/2003 19/10/2000 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2004 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006 19/10/2006	ou	on on on	R\$ 44,053,828,880.52 R\$ 41,533,843,595.70 R\$ 39,270,214,191.25 R\$ 23,202,868,106,16	39 38 40
06.081.457 /0001-54 Bradesco Asset Management Conservative 06.001.755 /0001-00 Brasilprev Conservative 04.118.622 /0001-00 Brasilprev Conservative 04.118.622 /0001-00 Bradesco Asset Management Conservative 06.155.741 /0001-01 Bradesco Asset Management Conservative 06.155.741 /0001-01 Bradesco Asset Management Conservative 04.255.202 /0001-04 Bradesco Asset Management Conservative 04.255.202 /0001-04 Bradesco Asset Management Conservative 04.255.202 /0001-04 Bradesco Asset Management Conservative 04.255.202 /0001-05 Bradesco Asset Management Conservative 04.255.202 /0001-06 Bradesco Asset Management Conservative 04.255.202 /0001-07 Caixa Vida e Previdencia Conservative 04.794.886 /0001-03 Brasilprev Conservative 04.794.886 /0001-03 Bradesco Asset Management Conservative 04.504.936 /0001-03 Bradesco Asset Management Conservative 04.504.936 /0001-03 Bradesco Asset Management Conservative 04.50				Conservative Conse	000000000000000000000000000000000000000	06/09/2004 01/08/2007 12/05/2003 19/10/2000 08/03/2002 12/01/2000 19/10/2004 19/10/2004 31/08/1999 31/01/2006 31/01/2006 31/01/2006 31/01/2006 31/01/2006	yes on on on on	on on	R\$ 41,533,843,595.70 R\$ 39,270,214,191.25 R\$ 23 292 868 106 16	38 23
0.001.755 0.001-0.0 0.001.755 0.00				Conservative Conse	000000000000000000000000000000000000000	01/08/2007 12/05/2003 19/10/2000 08/03/2002 12/01/2000 19/10/2004 02/02/2005 30/08/2005 31/07/2001 31/07/2001 31/07/2001	no yes yes no	no	R\$ 39,270,214,191.25	38
05.06.1.21 (0000-67) Brasalprev Conservative 04.18.662/0001-86 Had Unibanco Conservative 04.80277 (0001-09) Bradesco Asset Management Conservative 05.571.745 (0001-10) Bradesco Asset Management Conservative 05.271.745 (0001-10) Bradesco Asset Management Conservative 05.202.737 (0001-04) Bradesco Asset Management Conservative 02.202.07 (0001-04) Bradesco Asset Management Conservative 03.926.431 (0001-7) Caixa Vida e Previdencia Conservative 03.577.224 (0001-7) Caixa Vida e Previdencia Conservative 03.577.229 (0001-6) Caixa Vida e Previdencia Conservative 04.745.85 (0001-10) Caixa Vida e Previdencia Conservative 04.572.293 (0001-6) Caixa Vida e Previdencia Conservative 04.572.903 (0001-0) Bradesco Asset Management Conservative 04.56.1490 (0001-3) Bradesco Asset Management Conservative 04.264.940 (0001-0) Bradesco Asset Management Conservative 04.264.940 (0001-0) Bradesco Asset Management Conservative				Conservative Conse	0000000000000000	12/05/2003 19/10/2000 08/03/2002 12/01/2004 02/02/2005 30/08/1999 31/07/2001 31/01/2006 22/09/2006	ou yes		B\$ 23 202 868 106 16	An
04.118.632/0000-86 Irad Unibanco Conservative 04.830.277/0001-00 Bradesco Asset Management Conservative 05.971.745/0001-11 Bradesco Asset Management Conservative 05.971.745/0001-11 Bradesco Asset Management Conservative 04.253.202/0001-04 Bradesco Asset Management Conservative 04.253.202/0001-04 Bradesco Asset Management Conservative 02.250.2543/0001-15 Caixa Vixla e Previdencia Conservative 02.250.2543/0001-15 Caixa Vixla e Previdencia Conservative 02.250.2543/0001-15 Caixa Vixla e Previdencia Conservative 02.250.2543/0001-15 Brasilprev Conservative 04.794.958/0001-16 Brasilprev Conservative 04.794.958/0001-03 Brasilprev Conservative 02.561.139/0001-03 Bradesco Asset Management Conservative 02.561.139/0001-03 Bradesco Asset Management Conservative 02.261.240/0001-03 Bradesco Asset Management Conservative 02.261.250/0001-17 Bradesco Asset Management Conservative 02.261.261.200/0001-18				Conservative Conse	00000000000000	19/10/2000 08/03/2002 12/01/2000 19/10/2004 02/02/2005 30/08/1999 31/01/2006 22/09/2000	yes yes no	no	110 40,432,000,100,10	Λ#.
04.80.277 (0001-00) Bradesco Asset Management Conservative 05.601.77 (0001-92) Bradesco Asset Management Conservative 05.971.745 (0001-1) Bradesco Asset Management Conservative 05.971.745 (0001-1) Bradesco Asset Management Conservative 07.096.907 (0001-4) Bradesco Asset Management Conservative 07.096.907 (0001-4) Bradesco Asset Management Conservative 07.096.907 (0001-4) Caixa Vida e Previdencia Conservative 08.577.224 (0001-6) Caixa Vida e Previdencia Conservative 04.794.886 (0001-4) Caixa Vida e Previdencia Conservative 04.794.886 (0001-6) Santander Brasil Asset Management Conservative 04.1264.90 (0001-6) Bradesco Asset Nanagement Conservative 04.1264.90 (0001-9) Bradesco Asset Management Conservative 02.201.00 (0001-3) Bradesco Asset Management Conservative 02.41.264.90 (0001-4) Irad Unibanco Conservative 02.41.887 (0001-4) Brasilprev Conservative 02.201.90 (0001-4) Santander Brasil Asset Management Conservative <				Conservative Conse	0000000000000	08/03/2002 12/01/2000 19/10/2004 02/02/2005 30/08/1999 31/01/2006 22/09/2000	ou	no	R\$ 14,843,403,231.89	126
03.601.017 (0001-92) Brasilprev Conservative 06.157.1.45 (0001-1) Bradesco Asset Management Conservative 05.271.7.45 (0001-1) Bradesco Asset Management Conservative 04.253.202 (0001-04) Bradesco Asset Management Conservative 07.250.253.002 (0001-04) Bradesco Asset Management Conservative 03.255.737 (0001-05) Bradesco Asset Management Conservative 03.255.737 (0001-06) Caixa Vida e Previdencia Conservative 03.757.224 (0001-07) Caixa Vida e Previdencia Conservative 03.757.225 (0001-06) Caixa Vida e Previdencia Conservative 04.757.290 (0001-07) Caixa Vida e Previdencia Conservative 04.757.290 (0001-08) Santander Brasil Asset Management Conservative 04.56.1.39 (0001-09) Bradesco Asset Management Conservative 04.264.94 (0001-00) Bradesco Asset Management Conservative 04.264.93 (0001-01) Bradesco Asset Management Conservative 04.118.885 (0001-1) Brasilprev Conservative 06.01.77 (0001-20) Brander Brasil Asset Management Conservative<				Conservative	000000000000	12/01/2000 19/10/2004 02/02/2005 30/08/1999 31/07/2001 31/01/2006 22/09/2000	no	no	R\$ 12,873,088,502.26	19
0.6.187.745 / 0001-11 Bradesco Asset Management Conservative 0.5291.745 / 0001-01 Bradesco Asset Management Conservative Bradesco Asset Management Conservative 0.4253.202 / 0001-04 Bradesco Asset Management Conservative 0.4259.202 / 0001-04 Bradesco Asset Management Conservative Conservative 0.4259.203 / 0001-04 Conservative Conservative Conservative Conservative 1.2250.2001-06 Caixa Vida e Previdencia Conservative Conservative 0.3757.224 / 0001-05 Caixa Vida e Previdencia Conservative Conservative 0.3757.229 / 0001-03 Caixa Vida e Previdencia Conservative Conservative Direction 0.001-03 Caixa Vida e Previdencia Conservative Conservative Direction 0.001-03 Brasilprev Conservative Conservative Conservative Paral Unibanco Conservative Conservative Paral Unibanco Conservative Conservative Direction 0.001-03 Bradesco Asset Management Conservative Conservative Conservative Direction 0.001-03 Bradesco Asset Management Conservative Conservative Conservative Direction 0.001-03 Bradesco Asset Management Conservative Conservative Direction 0.001-03 Bradesco Asset Management Conservative Conservative Conservative Direction 0.001-03 Brasilprev Conservative Conservative Conservative Direction 0.001-03 Brasilprev Conservative Conservative Conservative Direction 0.001-04 Brasilprev Conservative Conservative Conservative Direction 0.001-04 Brasilprev Conservative Conservative Conservative Direction 0.001-04 Brasilprev Conservative Conservative Conservative Conservative Direction 0.001-04 Bradesco Asset Management Conservative Cons				Conservative	00000000000	19/10/2004 02/02/2005 30/08/1999 31/07/2001 31/01/2006 22/09/2000		no	R\$ 10,623,874,339.54	75
0.5.971.745 (0000-11) Santander Braeil Asset Management Conservative 0.2256.727 (0001-8) Bradesco Asset Management Conservative 0.2256.727 (0001-4) 0.7.066.907 (0001-4) Bradesco Asset Management Conservative 0.2290.280 (0001-4) Chara Virla e Previdencia Conservative Conservative Conservative 0.250.250 (0001-4) 0.8.7.77.224 (0001-7) Caixa Virla e Previdencia Conservative Conservative D4.794.886 (0001-4) Caixa Virla e Previdencia Conservative Conservative D4.794.88 (0001-4) 0.4.794.88 (0001-4) Santander Brasil Asset Management Conservative Conservative D4.2561.39 (0001-4) Bradesco Asset Nanagement Conservative Conservative D4.2561.39 (0001-4) 0.2.501.130 (0001-4) Bradesco Asset Nanagement Conservative Conservative Brasil Asset Management Conservative Conservative D4.118.883 (0001-4) Conservative Conservative Conservative Conservative Brasil Asset Management Conservative Conservative D4.118.830 (0001-4) 0.4.108.833 (0001-4) Brasilprev Conservative Conservative Conservative Brasil Asset Management Conservative Conservative D4.118.833 (0001-4) Conservative Conservative Conservative Conservative Brasil Asset Management Conservative Conservative Brasil Asset Management Conservative D7.725.529 (0001-4) Bradesco Asset Management Conservative Conservative Brasil Asset Management Conservative Conservative Brasil Asset Management Conservative Conservative Bradesco Asset Management Conservative Conservative Conservative Bradesco Asset Management Conservative Conservative Conservative Conservative Bradesco Asset Management Conservative Conservative Conservative Conservative Conservative Conservative Conservat				Conservative	0000000000	02/02/2005 30/08/1999 31/07/2001 31/01/2006 22/09/2000	Nes	no	R\$ 10,188,802,909.51	13
03.256.797 (0000-8) Bracksco Asset Management onservative (14.253.202) (0001-04) Bracksco Asset Management onservative (25.202.202) (0001-07) Caixa Vide e Previdencia onservative (25.202.202) (0001-05) Caixa Vide e Previdencia onservative (25.202.202) (0001-06) Caixa Vide e Previdencia onservative (25.57.237) (0001-06) Caixa Vide e Previdencia onservative (25.57.237) (0001-06) Caixa Vide e Previdencia onservative (25.57.237) (0001-06) Caixa Vide e Previdencia onservative (25.501.39) (0001-07) Caixa Vide e Previdencia onservative (25.501.39) (0001-07) Caixa Vide e Previdencia onservative (25.501.39) (0001-07) Caixa Vide e Previdencia onservative (25.51.39) (0001-07) Caixa Vide e Previdencia onservative (25.51.39) (0001-07) Caixa Vide e Previdencia onservative (25.41.306) (0001-07) Caixa Vide e Previdencia onservative (25.52.20) (0001-07) Caixa Vide e Pr				Conservative	000000000	30/08/1999 31/07/2001 31/01/2006 22/09/2000	Sas	no	R\$ 8,080,506,587.47	63
04) 235,202 (000-04) Bradesco Asset Management Conservative 07,206,207 (0001-45) Caixa Vixla e Previdencia Conservative 02,226,233 (0001-45) Caixa Vixla e Previdencia Conservative 02,250,250 (0001-60) Brasilprev Conservative 03,757,224 (0001-70) Caixa Vixla e Previdencia Conservative 04,794,886 (0001-91) Santander Brasil Asset Management Conservative 04,794,886 (0001-03) Bradesco Asset Management Conservative 02,561,139 (0001-03) Bradesco Asset Management Conservative 02,561,130 (0001-03) Bradesco Asset Management Conservative 04,104,108,803 (0001-04) Irad Unibanco Conservative 04,118,883 (0001-09) Brasilprev Conservative 04,118,883 (0001-00) Brander Brasil Asset Management Conservative 07,64,177 (0001-05)				Conservative	000000000	31/07/2001 31/01/2006 22/09/2000	yes	no	R\$ 7,472,920,612.64	41
07.06.947 (0001-45) Irad Unibanco Conservative 08.29.24.31 (0001-71) Caixa Vida e Previdência Conservative 08.27.7.22.4 (0001-73) Caixa Vida e Previdência Conservative 08.77.7.22. (0001-80) Brasilprev Conservative 04.7.94.88 (0001-40) Caixa Vida e Previdência Conservative 04.7.94.88 (0001-43) Santander Brasil Asset Management Conservative 04.5.61.139 (0001-35) Bradesco Asset Management Conservative 02.5.61.139 (0001-40) Irad Unibanco Conservative 02.40.14.08 (0001-40) Irad Unibanco Conservative 02.248.190 (0001-4) Irad Unibanco Conservative 02.248.190 (0001-4) Irad Unibanco Conservative 02.248.190 (0001-4) Brasilprev Conservative 02.248.190 (0001-4) Santander Brasil Asset Managemen				Conservative	0000000	31/01/2006 22/09/2000	Sas	no	R\$ 5,865,364,978.39	19
03.95.431 (0001-71) Caixa Vida e Previdencia Conservative 02.290.2800 (0001-61) Caixa Vida e Previdencia Conservative 03.57.722 (0001-62) Caixa Vida e Previdencia Conservative 03.77.222 (0001-63) Brasilprev Conservative 04.745.866 (0001-43) Santander Brasil Asset Management Conservative 04.561.39 (0001-06) Santander Brasil Asset Management Conservative 04.264.940 (0001-35) Bradexo Asset Management Conservative 04.264.940 (0001-40) Bradexo Asset Management Conservative 04.264.940 (0001-40) Bradexo Asset Management Conservative 04.264.940 (0001-40) Brasilprev Conservative 04.118.853 (0001-90) Brasilprev Conservative 04.118.853 (0001-91) Brasilprev Conservative 06.01.77 (0001-52 Brasilprev Conservative 06.01.77 (0001-53) Santander Brasil Asset Management Conservative 07.647.725 (0001-60) Santander Brasil Asset Management Conservative 07.647.725 (0001-60) Santander Brasil Asset Management Conservative				Conservative Conservative Conservative Conservative Conservative Conservative Conservative Conservative Conservative	000000	22/09/2000	yes	no	R\$ 5,727,511,055.42	41
12.290.280 1000-145 1000-159 1000-15				Conservative Conservative Conservative Conservative Conservative Conservative Conservative Conservative	000000	0001/01/00	yes	no	R\$ 5,719,790,379.55	30
03.737.224 (0001-79) Caixa Vida e Previdencia Conservative 03.537.222 (0001-63) Brasilprev Conservative 04.794.886 (0001-43) Caixa Vida e Previdencia Conservative 04.794.887 (0001-33) Santander Brasil Asset Management Conservative 03.501.000 (0001-33) Bradesco Asset Management Conservative 02.551.139 (0001-30) Bradesco Asset Management Conservative 02.454.056 (0001-49) Irad Unibanco Conservative 02.501.1468 (0001-40) Irad Unibanco Conservative 02.501.1468 (0001-40) Brasilprev Conservative 04.118.883 (0001-30) Brasilprev Conservative 04.118.883 (0001-40) Irad Unibanco Conservative 02.2408.190 (0001-44) Brasilprev Conservative 02.2483.190 (0001-44) Santander Brasil Asset Management Conservative 02.250.340 (0001-66) Bradesco Asset Management Conservative 07.647.775 (0001-80) Bradesco Asset Management Conservative 07.77.25.529 (0001-11) MAPPRE Investimentos Conservative 06.081.503 (0001-12) <td></td> <td></td> <td></td> <td>Conservative Conservative Conservative Conservative Conservative Conservative</td> <td>00000</td> <td>07/12/1998</td> <td>sas</td> <td>по</td> <td>R\$ 5,593,204,783.26</td> <td>72</td>				Conservative Conservative Conservative Conservative Conservative Conservative	00000	07/12/1998	sas	по	R\$ 5,593,204,783.26	72
03.57.322/0001-61 Brasilprev Conservative 03.75.222/0001-80 Caixa Vize Previdencia Conservative 04.75.220/0001-80 Santander Brasil Asset Management Conservative 04.57.2903/0001-00 Santander Brasil Asset Management Conservative 02.501.130/0001-30 Bracksoo Asset Management Conservative 02.201.130/0001-40 Bracksoo Asset Management Conservative 02.21.90/0001-40 Bracksoo Asset Management Conservative 03.541.906/0001-90 Santander Brasil Asset Management Conservative 04.118.853/0001-90 Faul Unibatoo Conservative 06.01.77/0001-29 Brasilprev Conservative 06.2498.190/0001-41 Santander Brasil Asset Management Conservative 06.2498.190/0001-41 Santander Brasil Asset Management Conservative 06.01.77/0001-29 Santander Brasil Asset Management Conservative 07.647.725.20/001-60 Santander Brasil Asset Management Conservative 07.725.529/0001-11 MAPPRE Investimentos Conservative 06.081.003/0001-12 MAPPRE Investimentos Conservative				Conservative Conservative Conservative Conservative Conservative	0000	05/06/2003	yes	no	R\$ 5,464,041,192.67	15
04.72.22 (0008) Caixa Vida e Previdencia Conservative 04.72.93 (0001-3) Santander Brasil Asset Management Conservative 04.52.903 (0001-0) Santander Brasil Asset Management Conservative 02.56.1.30 (0001-3) Bradeso Asset Management Conservative 02.56.1.30 (0001-3) Bradeso Asset Management Conservative 02.91.1.48 (0001-4) Irad Unibanco Conservative 03.50.957 (0001-3) Brasilprev Conservative 04.118.883 (0001-4) Brasilprev Conservative 04.118.883 (0001-9) Brasilprev Conservative 04.118.883 (0001-9) Brasilprev Conservative 04.118.883 (0001-9) Brasilprev Conservative 02.290.340 (0001-6) Brasilprev Conservative 02.280.340 (0001-6) Santander Brasil Asset Management Conservative 07.57.25.529 (0001-6) Santander Brasil Asset Management Conservative 07.72.55.29 (0001-6) Santander Brasil Asset Management Conservative 07.72.55.29 (0001-6) Santander Brasil Asset Management Conservative 07.72.55.29 (0001-				Conservative Conservative Conservative Conservative	0000	08/02/2000	по	по	R\$ 4,736,627,317.78	37
047791886 (0000-43) Santander Brasil Asset Management Conservative 04.572903 (0001-06) Brasilarev Conservative 02.561.139 (0001-30) Bradesco Asset Management Conservative 04.264.90 (0001-40) Irad Unibatro Conservative 02.511.408 (0001-40) Irad Unibatro Conservative 03.501.936 (0001-30) Santander Brasil Asset Management Conservative 04.118.883 (0001-30) Irad Unibatro Conservative 06.01.77 (0001-32) Brasilprev Conservative 02.249.190 (0001-44) Santander Brasil Asset Management Conservative 02.250.304 (0001-66) Brasilprev Conservative 04.684.467 (0001-56) Santander Brasil Asset Management Conservative 07.647.725, 5001-69 Santander Brasil Asset Management Conservative 07.7.25, 529 (0001-1) MAPPRE Investimentos Conservative 07.7.25, 529 (0001-1) Bradesco Asset Management Conservative 07.192.988 (0001-66) Santander Brasil Asset Management Conservative 07.525, 529 (0001-1) Bradesco Asset Management Conservative <t< td=""><td></td><td></td><td></td><td>Conservative Conservative Conservative</td><td>000</td><td>04/07/2007</td><td>yes</td><td>no</td><td>R\$ 4,728,640,643.51</td><td>10</td></t<>				Conservative Conservative Conservative	000	04/07/2007	yes	no	R\$ 4,728,640,643.51	10
04.572.903 (0000-06 Santander Brasil Asset Management Conservative 02.661.130 (0001-35 Bracksco Asset Management Conservative 02.261.130 (0001-39) 04.264.940 (0001-40 Had Unibatoro Conservative Conservative Had Unibatoro Conservative Brasil Asset Management Conservative D.3.541.956 (0001-9) Conservative Conservative Conservative D.3.541.956 (0001-9) 04.118.853 (0001-73 Brasilprev Conservative Conservative Brasil Asset Management Conservative D.2.293.0001-4 Santander Brasil Asset Management Conservative Conservative Had Unibatoro Conservative Conservative Had Unibatoro Conservative Conservative Had Unibatoro Conservative Conservative D.3.25.25 (0001-7) Conservative Conservative Conservative Brasil Asset Management Conservative Conservative Conservative D.3.25.25 (0001-1) 07.72.52.52 (0001-6) Bradexo Asset Management Conservative Conservative Conservative D.3.25.25 (0001-1) Conservative Conservative Conservative Conservative Conservative Bradexo Asset Management Conservative Conservative D.3.25.25 (0001-1) 07.72.52.52 (0001-6) Bradexo Asset Management Conservative Conser				Conservative Conservative	0	19/12/2001	sas	по	R\$ 4,410,229,073.40	77
December 2017 Brackero Asset Management Conservative Conse		1.000/0001-35 1.139/0001-30		Conservative	0	30/11/2001	yes	ou	R\$ 4,302,425,386.13	98
(0.2.56.1.38) (0.001-3) Bradesco Asset Management Conservative (0.4.264.04) (0.001-49) Hard Unibanco Conservative (0.2.534.936) (0.001-90) Santander Brasil Asset Management Conservative (0.3.534.936) (0.001-90) Brasilprev Conservative (0.01.757) (0.001-28) Brasilprev Conservative (0.2.498.190) (0.001-44) Santander Brasil Asset Management Conservative (0.2.498.190) (0.001-44) Santander Brasil Asset Management Conservative (0.2.498.190) (0.001-46) Santander Brasil Asset Management Conservative (0.4.684.777 (0.001-69) Santander Brasil Asset Management Conservative (0.7.725.529) (0.001-1) MAPPRE Investimentos Conservative (0.7.725.529) (0.001-1) MAPPRE Investimentos Conservative (0.7.155.529) (0.001-1) MAPPRE Investimentos Conservative (0.7.155.529) (0.001-1) MAPPRE Investimentos Conservative (0.5.15.03) (0.001-2) Bradesco Asset Management Conservative		1.139/0001-30			ο .	02/07/2001	no	no	R\$ 4,207,846,594.94	40
04)264,9000-149 Irad Unibanco Conservative 03,541,956 /0001-90 Santander Brasil Asset Management Conservative 03,600,957 /0001-73 Brasilprev Conservative 04-118,853 /0001-90 Frad Unibanco Conservative 04-12,498,190 /0001-44 Santander Brasil Asset Management Conservative 02,2498,190 /0001-44 Santander Brasil Asset Management Conservative 04,684,467 /0001-59 Santander Brasil Asset Management Conservative 07,647,772 /0001-59 Santander Brasil Asset Management Conservative 07,742,529 /0001-10 Santander Brasil Asset Management Conservative 07,725,529 /0001-11 MAPPRE Investimentos Conservative 07,719,2001-69 Santander Brasil Asset Management Conservative 07,725,529 /0001-13 MAPPRE Investimentos Conservative 06,081,503 /0001-13 Bradesco Asset Management Conservative 06,081,503 /0001-21 Bradesco Asset Management Conservative				Conservative	0	10/05/1999	Sas	no	R\$ 3,374,793,403.66	30
12.291.436 0.001-90 Santander Brasil Unibanco Conservative 03.534.936 0.001-90 Santander Brasil Asset Management Conservative 03.600.937 0.001-30 Brasilprev Conservative 0.401.18.883 0.001-90 Brasilprev Conservative 0.2269.340 0.001-61 Brasil Asset Management Conservative 0.2269.340 0.001-61 Brasil Asset Management Conservative 0.5249.326 0.001-71 Ital Unibanco Conservative 0.544.477 0.001-63 Santander Brasil Asset Management Conservative 0.7542.725 0.001-69 Santander Brasil Asset Management Conservative 0.7525.29 0.001-61 MAPFRE Investimentos Conservative 0.7725.529 0.001-61 Bradexo Asset Management Conservative 0.7725.529 0.001-69 Santander Brasil Asset Management Conservative 0.7725.529 0.001-61 Bradexo Asset Management Conservative 0.7525.20 0.001-60 Santander Brasil Asset Management Conservative 0.7525.20 0.001-61 Conservative 0.7525.20 0.001-61 Conservative 0.7525.20 0.001-61 Conservative 0.7525.20 0.001-61 Conservative 0.2525.20 0.001-		4.940/0001-49		Conservative	0	06/02/2001	no	no	R\$ 2,850,121,036.69	63
03.561.936 (0001-90) Santander Brasil Asset Management Conservative 03.600.937 (0001-73 Brasilprev Conservative 04.118.883 (0001-9 Farit Unibanco Aggressive 02.2482 190 (0001-44 Santander Brasil Asset Management Conservative 02.543.295 (0001-77 Farit Unibanco Conservative 04.684467 (0001-56) Santander Brasil Asset Management Conservative 07.647-772 (0001-69) Santander Brasil Asset Management Conservative 07.725.529 (0001-11 MAPPRE Investimentos Conservative 07.192-280 (0001-13 MAPPRE Investimentos Conservative 06.081.503 (0001-13 MAPPRE Investimentos Conservative 06.081.503 (0001-13 Bradesco Asset Management Conservative 06.081.503 (0001-13 Bradesco Asset Management Conservative				Conservative	0	11/08/1999	Sas	no	R\$ 2,633,827,342.13	99
9.15.60.937 (2001-73) Brasilprev (Conservative Diable Conservative Conservative Diable Conservative Diable Conservative Diable Conservative Diable Conservative Diable Conservative Conservative Diable Conservative Diable Conservative Conservative Diable Conservative				Conservative	0	21/09/2000	yes	по	R\$ 2,352,261,647.14	97
44-118-88 70001-29		0.987/0001-73		Conservative	0	12/01/2000	по	по	R\$ 1,889,374,181.28	41
Conservative Cons		8.883/0001-90	Itaú Unibanco	Conservative	0	09/08/2001	yes	no	R\$ 1,748,450,957.93	9
02.488.190/0001-44 Santander Brail Asset Management 02.290.39d/0001-66 Iraú Unibanco 05.543.26/0001-76 Hatú Unibanco 04.684.467/0001-59 Santander Brasil Asset Management 07.47.72/0001-69 Santander Brasil Asset Management 07.725.529/0001-11 MAPPRE Investimentos 07.1828.528/0001-15 Santander Brasil Asset Management 07.1828.528/0001-16 MAPPRE Investimentos 02.998.253/0001-15 Bradesco Asset Management 02.998.253/0001-12 Bradesco Asset Management				Aggressive	49	01/08/2007	no	no	R\$ 1,540,235,058.31	112
02.293.94/0001-66 Irad Unibanco 08.543.29.390/001-77 Irad Unibanco 04.684.467/0001-59 Santander Brasil Asset Management 07.6477/20001-69 Santander Brasil Asset Management 07.725.529/0001-10 Bradesco Asset Management 07.725.529/0001-10 MAPPRE Investimentos 07.958.253/0001-15 Bradesco Asset Management 07.958.253/0001-15 Bradesco Asset Management 07.958.253/0001-15 Bradesco Asset Management 02.998.253/0001-12 Bradesco Asset Management				Conservative	0	30/03/1999	sas	по	R\$ 1,452,436,273.48	78
98.543.326 0001-77 (14ad Unibanco) (96.544.67) (2001-59 Santander Brasil Asset Management 07.647.772) (2001-69 Santander Brasil Asset Management 07.325.529) (2001-11 MAPPRE Investimentos 07.199.289) (2001-69 Santander Brasil Asset Management 06.081.505) (2001-15) (2		0.304/0001-66		Conservative	0	17/12/1997	sas	по	R\$ 1,303,857,938.38	30
94.684.467/0001-59 Santander Brasil Asset Management 07.647.772/0001-69 Barbander Brasil Asset Management 07.725.529/0001-11 MAPFRE Investmentos 07.129.289/00001-15 MAPFRE Investmentos 06.081.503/0001-15 Bradesco Asset Management 06.081.503/0001-12 Bradesco Asset Management 02.998.253/0001-21 Bradesco Asset Management			-	Conservative	0	20/06/2007	yes	no	R\$ 1,176,966,988.60	48
07-64772 (2001-69) Santander Braisi Asset Management 07-725-529/0001-62 Brackesco Asset Management 07-725-529/0001-10 MAPFRE Investimentos 07-19-2829 (2001-69) Santander Braisi Asset Management 06-081-507 (2001-15) Bradesco Asset Management 02-998-253/0001-21 Bradesco Asset Management 02-098-253/0001-21	_		-	Conservative	0	19/10/2001	sas	по	R\$ 1,148,953,495.02	29
01.392.021 (0001-62 Brackesco Asset Management 07.725.29 (0001-11 MAPFRE Investimentos 07.199.289 (0001-6) Santander Brasil Asset Management 06.081.503 (0001-15 MAPFRE Investimentos 02.998.253 (0001-21 Brackesco Asset Management 0	_		-	Conservative	0	11/09/2006	sas	по	R\$ 1,146,355,020.72	64
07.725,59/0001-11 MAPPRE Investimentos 07.792,89/0001-69 Santander Brasil Asset Management 06.081,503/0001-15 MAPPRE Investimentos 02.998.253/0001-21 Bradesco Asset Management	irvative	2.021/0001-62	-	Conservative	0	23/10/1996	по	no	R\$ 1,027,252,941.01	40
07.199.289/0001-69 Santander Brasil Asset Management 06.081.503/0001-15 MAPFRE Investimentos 02.998.253/0001-21 Bradesco Asset Management			-	Conservative	0	04/05/2006	ses	no	R\$1,024,603,080.79	41
06.081.503/0001-15 MAPFRE Investimentos 02.998.253/0001-21 Bradesco Asset Management 0				Conservative	0	17/05/2005	yes	по	R\$ 1,011,413,548.76	16
02.998.253/0001-21 Bradesco Asset Management		1.503/0001-15	-	Conservative	0	26/05/2004	ou	no	R\$ 995,418,236.14	72
		8.253/0001-21		Conservative	0	01/09/1999	Sas	no	R\$ 980,741,789.30	24
VIDENCIARIO 02.924.262/0001-78 Porto Seguro Investimentos	VIDENCIÁRIO			Conservative	0	29/10/1999	no	no	R\$ 964,257,661.32	29
OTTO PRIVADO				Conservative	0	19/10/2001	Sas	no	R\$ 908,379,361.92	24
ITAÚ FLEXPREV XV A FIC Conservative 05.592.103/0001-01 Itaú Unibanco Conservative 0		2.103/0001-01	Itaú Unibanco	Conservative	0	07/02/2006	yes	no	R\$ 888,698,072.52	œ
ttive CRÉDITO PRIVADO 05.326.919/0001-93		5.919/0001-93	-	Conservative	0	31/10/2002	no	no	R\$ 840,199,100.74	73
SULAMÉRICA FIX 100 V FI Conservative 03.077.322/0001-27 SulAmérica Investimentos Conservative 0		7.322/0001-27		Conservative	0	09/08/1999	по	no	R\$ 783,564,351.66	99

Table 12: Part 2 of the list of PGBL/VGBL funds, including: CNPJ of each fund, type of institution, style of investment, max investment in variable income products of each fund, day where the fund was created, differentiation between feeder funds, a column showing that all fund are non-master and a column identifying the number of plans of each fund selected.

FIC Cresewative	FIE	CNPJ	Institution	Style	Max investment in variable income	Date of birth	Feeder	Master	Total net worth	Number of plans
Statistics (1001-24) Inchigation Conservative 0 13(3) 2000 yes DR SS (111, 15,202) 04.05.13.77 (2001-24) Brackletov and Amagement Conservative 0 0 1/1, 12,002 n DR SS (1247, 2001-25) 04.05.13.77 (2001-24) Shahufe'ra Investinations Conservative 0 0 1/1, 12,002 n DR SS (1247, 2001-24) 05.23.14.07 (2001-24) Shahufe'ra Investinations Conservative 0 0 1/1, 12,002 n DR SS (1247, 2001-24) 05.23.14.07 (2001-24) Brackliptor Aggressive Q 0 0.1/8, 2007 n DR SS (1247, 2001-24) 05.23.14.08 (2001-24) Brackliptor Aggressive Q 0 0.1/8, 2007 n DR SS (1247, 2001-24) 05.23.14.08 (2001-24) Brackliptor Aggressive Q 0 0.1/8, 2007 n DR SS (1247, 2001-24) 05.23.14.08 (2001-24) Brackliptor Aggressive Q 0 0.1/8, 2007 n DR SS (1247, 2001-24) 05.23.14.08 (2001-24) Brackliptor Aggressive Q 0 0.1/8, 2007 <			antander Brasil Asset Management	Conservative	0	19/10/2001	yes	ot		4
65.22.17 (2010-14) Br. Bernellarve Aggressive 49 01/88/2017 in DR 86/17/17/82/19/25 66.13.7.7.1 (2010-14) Br. Bernellarve Chernerative 0 0 1/18/2017 in DR 86/17/17/82/19/25 62.22.14 (2010-14) Brack in the interpretation of Conservative 0 0 1/18/2017 in DR 86/17/17/82/19/25 DR 86/17/17/82/19/25 65.72.14.55 (2010-14) Intit Utilsham Conservative 0 0 1/18/20/17/17/82/19/25 DR 86/17/18/25/25/25/25/25/25/25/25/25/25/25/25/25/	UNIBANCO PREVER I FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC Conservative	03.507.865/0001-37	Itaú Unibanco	Conservative	0	13/03/2000	yes	OII		24
2011/13/10/2012 Bracketov Rew Management Conservative 0 11/11/2012 n DR 86/10/17/2014 2012/2016/10/2012 SalAndiréra Investitation Conservative 0 0 10/13/2014 n DR 86/10/17/2014 20.22/4/0/2012/2016 SalAndiréra Investitation Conservative 0 0 10/18/2017 n DR 86/10/17/2014 65.22/4/2016/10/22 Brachiprov Aggressive 0 0 0 10/18/2017 n DR 86/11/20/2014 65.22/0/3/4/2016/10/22 Brachiprov Aggressive 0	BRASILPREV DIVIDENDOS I FICMULTIMERCADO	05.824.217/0001-30	Brasilprev	Aggressive	49	01/08/2007	. 8	OH		86
Other Carlotte Conservative O Other Carlotte O Other Carlotte O Other Carlotte Other Carlo		05.113.771/0001-09	Bradesco Asset Management	Conservative	0	11/11/2002	OI	91	R\$ 667,077,893.68	16
6.82.19.57 (0.001-4) Inail DITYM Aggressive 40 27/12/2000 n 18 58/15/2001-3 6.5.19.55 (0.01-2) Ibrailphov Aggressive 40 0.10/8-2007 n n 18 57/15/66/24.3 6.5.19.25 (0.01-2) Ibrailphov Aggressive 40 0.10/8-2007 n n 18 57/15/66/24.3 6.5.12.28.66 (0.01-2) Ibrail Unibanzo Conercavity 0 0.10/8-2007 n n 18 57/15/66/24.3 6.5.12.28.66 (0.01-2) Brailphov Conercavity 0 0.10/8-2007 n n 18 57/15/66/24.3 6.5.12.28.66 (0.01-2) Brailphov Conercavity 0 0.10/8-2007 n n 18 57/15/66/24.3 6.5.12.28.66 (0.01-2) Brail Unibanzo Conercavity 0 0.10/8-2002 n n 18 57/15/66/24.3 6.5.12.28.66 (0.01-2) Brain Unibanzo Conercavity 0 0.10/8-2002 n 18 58/15/66/24.2 6.5.12.2.6.5 (0.01-2) Brain Unibanzo Conercavity 0 0.10/8-2002 n 18 58/15/67	SULAMÉRICA FIX 100 IV FI Conservative	04.056.135/0001-20	SulAmérica Investimentos	Conservative	0	01/08/2001	OII	OH	R\$ 624,987,599.70	59
R. S. 2002 (1) Problem (2)		03.821.440/0001-06	Itaú Unibanco	Conservative	0	30/07/2004	yes	OH	R\$ 614,936,917.78	4
Co.774.750 (10.12) Brasilprov Oggessive 40 0.108.2007 n DB 571,565.5421 Co.774.750 (10.12) Frant Vinggards Oggessive 0 0.010.2003 vs n BS 571,565.560.24 Co.774.250 (10.12) Brasilprov Conservative 0 0 0.010.2003 vs n BS 571,565.560.24 Co.119.75 (10.12) Brasilprov Conservative 0 0 0.010.2003 vs n BS 571,555.560.24 Co.119.75 (10.12) Brasilprov Conservative 0 0 0.010.200 n BS 571,559.20 n BS 561,555.56.07 Co.119.75 (10.12) Brasilprov Conservative 0 0.010.20 n BS 571,555.20 n BS 561,555.56.07 N BS 561,555.56.07 N BS 561,555.56.07 N BS 561,555.50.07 N SS 561,555.50.07 N SS		08.389.857/0001-57	Itaú DTVM	Aggressive	49	27/12/2006	OII	OII	R\$ 589,638,163.34	2
Constractive One (10, 2012) NR 50, 11, 55, 62, 47. Constractive One (10, 2012) NR 50, 11, 55, 62, 47. Constractive Operation Operation NR 50, 11, 55, 62, 47. Co. 12, 22, 22, 60, 00.01-36 Brealphere Casesvaritive Operation Operation Co. 12, 22, 22, 60, 00.01-36 Brealphere Casesvaritive Operation Operation Operation Co. 12, 22, 24, 00.001-30 Brealphere Aggressive 40 0 (10, 52, 2012) NR NR 12, 27, 27, 27 Co. 12, 22, 24, (00.01-20) Ind. Univarion Conservative 0 0 (10, 20, 20) NR NR RS 32, 47, 24, 47 Co. 12, 22, 24, (00.01-20) Ind. Univarion Conservative 0 0 (10, 20, 20) NR NR<	BRASILPREV RENDA TOTAL CICLO DE VIDA 2040 FIC MULTIMERCADO	05.764.785/0001-92	Brasilprev	Aggressive	49	01/08/2007	OI	91	R\$ 574,096,483.06	118
Ch. 22.2.86 (0.01)-22 Incl. Unihanco Conservative 0 20/2(1907) n n R8 4614(16):65:00.14 Ch. 22.2.86 (0.01)-36 Brealphere Conservative 0 0 0(16):2027 n n R8 4614(16):65:00.14 Ch. 12.2.2.86 (0.01)-36 Brealphere Conservative 0 0 0(16):2027 n n R8 4614(16):65:00.24 Ch. 12.2.2.89 (0.01)-30 Breal Linda Conservative 0 0 0(16):00.202 n 18 58:05:23.48 Ch. 12.2.2.89 (0.001-2) Breal Linda Conservative 0	ICATU SEG CLASSIC FIC Conservative	05.200.914/0001-10	Icatu Vanguarda	Conservative	0	06/02/2003	yes	91	R\$ 571,595,824.71	35
66.219.266 (001-86) Brasilprov Aggressive 49 0.106/2007 n 18 S.224.15.5 s.4.0.7 C2.51.10.4.10.00-86 Hand Linialano Conservative 0 0.06/2007 n 18 S.224.15.5 s.4.0.7 C2.51.10.24.000-1.00 Hand Linialano Conservative 0 0.07/2002 n 18 S.224.15.5 s.4.0.7 C1.21.2.6.9.000-1.00 Hand Linialano Conservative 0 0.07/2002 n 18 S.24.12.8.5 s.4.0.7 C1.21.2.6.9.000-1.01 Hand Linialano Conservative 0 0.07/2002 n 18 S.24.12.8.5 s.4.0.1 C2.27.1.0.9.000-1.02 Brakeso, Asset Almagement Conservative 0 0.07/2000 n 18 S.24.12.8.5 s.4.1.2.8 C1.4.7.6.1.5.0.000-1.02 Brakeso, Asset Almagement Conservative 0 0.07/2000 n 18 S.24.12.8.5 s.4.1.2.8 C1.4.7.6.5.1.0.000-1.02 Salvandera Investinentus Conservative 0 0.07/2000 n 18 S.24.12.8.5 s.4.1.2.8 C1.4.7.6.1.0.000-1.02 Salvandera Investinentus Conservative 0 0.07/10.000 n 18 S.24.1.2.8.9 <td>UNIBANCO PREVER IV FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC Conservative</td> <td>03.374.369/0001-52</td> <td>Itaú Unibanco</td> <td>Conservative</td> <td>0</td> <td>29/12/1999</td> <td>yes</td> <td>91</td> <td>R\$ 551,195,560.24</td> <td>41</td>	UNIBANCO PREVER IV FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC Conservative	03.374.369/0001-52	Itaú Unibanco	Conservative	0	29/12/1999	yes	91	R\$ 551,195,560.24	41
CS.11.24.9 (2011.29) Brackliptov Conservative 0 0.508/2002 pp. B8 202-555-556-507 CS.11.24.9 (2011.29) Brack (1bilation) Conservative 0 0.1/08/2002 ys. pp. B8 208-573-247-53 0.5.12.2.24.9 (2001.20) Santander Bracil Asea Management Conservative 0 0.1/08/2002 ys. pp. B8 208-573-247-53 0.5.12.2.2.9.4 (2001.20) Santander Bracil Asea Management Conservative 0 0 27/12/1999 ys. pp. B8 208-541-53 0.5.2.2.0.7.2.9.5 (2001.20) Santander Bracil Asea Management Conservative 0 0 27/12/1999 ys. pp. B8 208-541-52 0.2.2.0.7.2.9.5 (2001.20) Santander Bracil Asea Management Conservative 0 0 27/12/1999 ys. pp. B8 208-14-12-24 0.2.0.7.2.9.6 (2001.20) Santander Bracil Asea Management Aspersave 49 0 0 10,02/2000 ys. pp. B8 208-14-12-24 0.4.1.2.8.6 (2001.20) Santander Bracil Asea Management Conservative 0 0 10,02/2000 ys. pp. B8 208-14-12-24 0.4.1.2.8.6 (2001.20) Santander Bracil Asea Management Conservative 0 <td></td> <td>05.132.896/0001-86</td> <td>Brasilprev</td> <td>Aggressive</td> <td>49</td> <td>01/08/2007</td> <td>OI</td> <td>91</td> <td>R\$ 549,145,097.58</td> <td>118</td>		05.132.896/0001-86	Brasilprev	Aggressive	49	01/08/2007	OI	91	R\$ 549,145,097.58	118
CLSS.0.29 (000-15) Indit Unibanco Conservative 0 50 (0.1999) n 18 380-847-247.53 0.4.26.29 (000-15) Sannated Brash Asset Management Conservative 0 0.0 (0.2902) n n 18 378-352-148 0.4.26.29 (000-15) Ind [unibanco Conservative 0 0.0 (0.2902) n n 18 378-352-148 0.2.29.7.28 (000-14) Barbardee Brash Asset Management Conservative 0 0.0 (2.2003) n 18 371-352-17.33 0.2.29.7.28 (000-14) Barbaree Asset Management Conservative 0 0.0 (2.2003) n 18 300-354-17.39 0.2.20.7.28 (000-14) Barbaree Asset Management Conservative 0 0.0 (2.000) n 18 300-354-17.39 0.4.3.1.2.8 (000-14) Barbaree Asset Management Conservative 0 0.0 (6.000) n 18 300-354-17.39 0.4.3.1.2.8 (000-14) Barbaree Asset Management Aggressive 40 0.0 (6.000) n 18 300-354-17.39 0.4.3.1.2. (100-14) Barbaree Asset Management Aggressive 40 0.0 (1.2001)	BRASILPREV RT FIX A FIC Conservative	05.119.745/0001-98	Brasilprev	Conservative	0	02/08/2002	OI	91	R\$ 422,455,845.07	18
0.5.12.6.39 (000-1) Suntander Breal, Asset Management Conservative 0 0 (10 /2002) vs. n n 18 385-354-324.36 0.5.12.6.394 (000-1) Indi Unibano Conservative 0 0 (10 /2002) vs. n n R3 55-354-34.46 0.2.7.12.454 (000-1) Brancher Breal, Asset Management Conservative 0 27 12/1999 vs. n n R3 57-354-34.40 0.2.7.12.456 (000-1) Branchero Asset Management Conservative 0 20 (17/2001) vs. n n R3 57-354-34.40 0.7.056.135 (000-1-3) Branchero Asset Management Conservative 0 20 (17/2001) vs. n n R3 57-354-34.40 0.7.056.135 (000-1-3) Radhuréro Investimentos Conservative 0 0 0 (17/2004) vs. n R3 52-384,172.35 0.4.7.35 (000-1-3) Sald-méro-in Investimentos Aggressive 40 0 (17/2004) vs. n R3 53-44,172.35 0.4.7.35 (000-1-3) Sald-méro-in Investimentos Aggressive 40 0 (17/2004) vs. n R3 53-354,17.28 0.5.35 (000-1-3) <t< td=""><td>ITAÚ FLEXPREV CORPORATE II FIC Conservative</td><td>02.851.024/0001-80</td><td>Itaú Unibanco</td><td>Conservative</td><td>0</td><td>25/03/1999</td><td>OII</td><td>OII</td><td>R\$ 390,877,247.53</td><td>20</td></t<>	ITAÚ FLEXPREV CORPORATE II FIC Conservative	02.851.024/0001-80	Itaú Unibanco	Conservative	0	25/03/1999	OII	OII	R\$ 390,877,247.53	20
03.22.29.0.001-70 Intel Unibation Aggressive 49 06/02/2002 n 18 374.234.13.5 03.27.4.25.0001-04 Intel Unibation Conservative 0 27/12/1099 n n R3 501.553.94.2 02.297.3.09.001-14 Brackers Asset Management Conservative 0 22/07.200 n n R3 501.553.94.2 0.45.1.2.85 0001-20 Leatu Management Conservative 0 20/07.200 n n R3 501.553.94.2 0.45.1.2.85 0001-20 Leatu Management Conservative 0 0 00/07.200 n R8 501.553.94.2 0.45.1.2.85 0001-20 Leatu Management Conservative 0 0 00/07.200 n R8 205.257.59.20.2 0.45.1.2.85 0001-20 Leatu Management Conservative 0 <td< td=""><td></td><td></td><td>antander Brasil Asset Management</td><td>Conservative</td><td>0</td><td>01/08/2002</td><td>yes</td><td>91</td><td>R\$ 388,847,800.58</td><td>65</td></td<>			antander Brasil Asset Management	Conservative	0	01/08/2002	yes	91	R\$ 388,847,800.58	65
Constration of the control o		04 342 594/0001-70	Itaú Unibanco	Aggressive	49	06/02/2002	OH.	91	R\$ 378,363,324.98	54
20.3271.099/0001-54 Standard Paralle Asset Management Conservative 0 10/02/2000 vs n R8 301.363.94.34 0.2057.0.89/0001-57 MAPPRE Investimentos Aggressive 40 24/04/1999 n n R8 206.151.025.34 0.2057.0.89/0001-20 RAPPRE Investimentos Conservative 40 0.0/05/2003 n n R8 206.151.025.34 0.47.88.1.95/0001-20 ScalAnnérez Investimentos Conservative 0 0 0.0/05/2003 n n R8 206.151.025.3 0.47.78.1.95/0001-20 ScalAnnérez Investimentos Conservative 0 0 0.0/05/2003 n n R8 206.151.02.53 0.5.0.1.4.78.1.95/0001-20 Brasilprev Aggressive 49 0.0/11/2004 n n R8 206.151.02.53 0.5.0.2.4.4.5.//2001-12 Pina Unisanco Conservative 49 0.0/11/2004 n n R8 18.346.22.53 0.5.0.2.4.4.5.//2001-12 Pina Unisanco Conservative 49 0.0/11/2004 n n R8 18.366.23.43 0.5.0.1.4.5.//2001		03.374.465/0001-09	Itaú Unibanco	Conservative	0	27/12/1999	yes	OII	R\$ 374,133,171.53	40
02.907.508 (001)-01 Brackso Asset Management Conservative 0 23 04/1999 n n ps 300.504.505 04.15.286 (0001)-02 MAPTRE Investiments Aggressive 49 0.204/2005 yss n ps 202.81.17.25 04.17.286 (0001)-02 SalAmérica Investimentos Conservative 0 0.006/2006 n n ps 20.007.50 04.77.381 (0001-22) SalAmérica Investimentos Conservative 0 0 0.006/2006 n ps 20.007.50 05.56.44.45 (0001-22) SalAmérica Investimentos Aggressive 49 0.006/2006 n ps 20.007.50 05.59.44.85 (0001-22) Mari Unibanco Conservative 0 0.006/2006 n ps 20.10/2004 ps 20.10/2004 n ps 20.10/2004 ps 20.10/2004 n ps 20.10/2004 n ps 20.50/3005 n ps 20.50/3005 ps 20.50/3005 n ps 20.50/3005 <td></td> <td></td> <td>antander Brasil Asset Management</td> <td>Conservative</td> <td>0</td> <td>10/02/2000</td> <td>yes</td> <td>OH</td> <td>R\$ 361,635,943.40</td> <td>13</td>			antander Brasil Asset Management	Conservative	0	10/02/2000	yes	OH	R\$ 361,635,943.40	13
Of 508.138/1001-57 MAPPRE Investmentos Aggressive 49 Q/0/2005 vs n R8 202,120.3 04,511.286/0001-20 SulAmérica Investimentos Conservative 0 13/0/2003 n n R8 203,275,275,34 04,751.1286/0001-20 SulAmérica Investimentos Conservative 0 0 0/08/1999 n n R8 203,277,142.89 05,74,00.583/0001-1 Irad Unibanco Conservative 0 0 0/06/1000 n R8 203,077,143.60 05,924,246/0001-1 Irad Unibanco Conservative 0 0 0/06/1000 n R8 194,122.89 05,924,246/0001-2 Irad Unibanco Conservative 0 0 0/07/2004 n R8 194,122.89 05,924,246/0001-6 Bradesco Asset Management Aggressive 49 0 0/07/2004 n R8 134,462.20 05,924,248/0001-6 Bradesco Asset Management Conservative 0 0 0/17/2004 n R8 134,462.20 05,001,001-1 Bradesco Asset Management Conservative		02.907.508/0001-01	Bradesco Asset Management	Conservative	0	23/04/1999	OII	OII	R\$ 310,936,194.50	26
04.512.86/0001-20 Reath Vangaarda Conservative 0 24/07/2001 n n R8 262,772.89 04.712.86/0001-20 SudAmérea Investimentos Conservative 0 0 06/2006 n n R8 263,772.89 05.50.4445/0001-20 Balamérea Investimentos Canservative 0 0 00/08/1999 n n R8 263,773.80 05.50.4445/0001-21 Had Unibanzo Canservative 0 0 05/01/2004 n R8 263,275.90 05.50.4445/0001-24 Had Unibanzo Canservative 0 0 05/01/2004 n R8 141,45,20 05.20.4248/0001-65 Had Unibanzo Canservative 0		07.058.135/0001-57	MAPFRE Investimentos	Aggressive	49	02/02/2005	yes	OH	R\$ 269,151,025.32	63
04,778,195,0001-22 SuldAmeira Investimentos Conservative 0 13/02/2003 n n R8 233,647,527.54 03,077,330,0001-73 SuldAmeira Investimentos Aggresive 49 30/06/2006 n n R8 233,647,527.54 05,594,445,0001-24 Brasilprev Aggresive 49 50/01/2004 n R8 194,134,022.08 05,594,445,0001-24 Brasilprev Aggresive 49 50/01/2004 n R8 194,134,022.08 05,594,445,0001-45 Brasilprev Aggresive 49 50/01/2004 n R8 194,134,022.08 05,594,445,0001-40 Brasilprev Aggresive 49 50/01/2004 n R8 194,134,022.08 05,594,445,0001-40 Brasilprev Aggresive 49 50/01/2004 n R8 184,134,022.08 05,594,445,0001-40 Brasilprev Conservative 0 0 0/1/2004 n R8 18,336,536,53 04,778,2001-40 Brasilprev Conservative 0 0 0/1/2004 n R8 18,134,622,08 04,778,2001-1 </td <td>ICATU SEG DURATION FI Conservative</td> <td>04.511.286/0001-20</td> <td>Icatu Vanguarda</td> <td>Conservative</td> <td>0</td> <td>24/07/2001</td> <td>OII</td> <td>OII</td> <td>R\$ 262,884,172.89</td> <td>38</td>	ICATU SEG DURATION FI Conservative	04.511.286/0001-20	Icatu Vanguarda	Conservative	0	24/07/2001	OII	OII	R\$ 262,884,172.89	38
03.07.73.8.0.001-7. SulAmérica Investimentos Conservative 0 09/06/1909 n n R8 233.47/27.54 05.29.24.28/0001-10 Hard Unibanco Aggresive 49 90/06/2006 n n R8 203.267/14.55 05.93.44.5/0001-24 Hard Unibanco Conservative 0 19/11/2007 vs n R8 194.346.22.08 05.93.4.5/0001-24 Hard Unibanco Conservative 0 0 10/11/2007 vs n R8 194.346.22.08 05.93.4.28/0001-56 Hard Unibanco Conservative 0 0 0/11/2007 vs n R8 153.66.27.03 05.93.2.107/0001-65 Hard Unibanco Conservative 0 0 0/11/2007 vs n R8 152.28.34.18 02.7.0.116/0001-0 Brackeco Asset Management Conservative 0 0 0/11/2007 vs n R8 152.28.34.18 02.7.0.116/0001-0 Brackeco Asset Management Conservative 0 0 0/11/2007 vs n R8 16.477.46.18 05.15.3.4.10/0001-	Ve.	04 738 195/0001-22	SulAmérica Investimentos	Conservative	0	13/02/2003	OII	OII	R\$ 235,275,950.22	11
OF-2005-SS 0001-10 Inat Unibanco Aggresive 49 50/06/2006 n n RS 203-364-16.56 OS-504-44/0001-24 Brasilprev Aggresive 49 50/01/2004 n n RS 203-367-14.36 OS-505-44-1/0001-24 Irad Unibanco Christian 49 50/01/2004 n n RS 100-23-34-34.18 OS-292-12-18/0001-65 Irad Unibanco Christian 0 0 0/11/2007 n RS 105-365-20.01 OS-30-10-15 Irad Unibanco Christian 0 0 0/11/2004 n RS 105-365-20.01 OS-30-10-16 Irad Unibanco Christian 0 0/17/2004 n n RS 182-365-365-37 OS-30-10-16 Brackeco Aset Management Christian 0 0/17/2004 n n RS 182-112-14.56 OS-10-15/16 (0001-4) Sharkméra Investimentos Christian 0 0 0/17/200 n n RS 182-112-14.56 OS-10-15/16 (0001-4) Bradesco Aset Management Acgressive 0 0 0		03.077.330/0001-73	SulAmérica Investimentos	Conservative	0	09/08/1999	OII	OII	R\$ 233,647,627.54	17
0.5.954445 (0001-24) Brasilprey Aggressive 40 15/11/2004 n R8 203.367,143.56 0.5.954448 (0001-12) Irad Unibanco Conservative 40 29/11/2004 n R8 194134,622.08 0.2.95.248 (0001-12) Brasilprev Aggressive 40 29/10/1999 n R8 194134,622.08 0.5.95.448 (0001-65) Brasilprev Aggressive 40 50/10/1999 n R8 184134,622.08 0.5.95.448 (0001-65) Brasilprev Conservative 0 0 0/10/12004 n R8 182,738.509.57 0.2.70.10 (0001-40) Brasilprev Conservative 0 0 0/10/12004 n R8 182,738.509.57 0.2.710.10 (0011-40) Brasilprev Conservative 0 0 0 0/10/12004 n R8 182,738.509.53 0.2.9.11.5 (0010-40) Brasilprev Conservative 0 0 0 0 1/10/1200 n R8 18,553.98.53.38 0.2.9.11.5 (0.01-14) Brasilprev Conservative 0 0 0 0		07.400.588/0001-10	Itaú Unibanco	Aggressive	49	30/06/2006	91	OH	R\$ 209,349,066.90	9/
08.939.962/0001-12 Inat Unibanco Conservative 0 19/11/2007 yys n R8 1941/22.08 08.939.962/0001-12 Perto Seguro Investimentos Aggresive 49 29/10/1999 n n R8 183,022.08 08.939.965/0001-56 Inal Unibanco Conservative 0 0/11/2007 ys n R8 183,062.05 08.739.107/0001-61 Bradesco Asset Management Conservative 0 0/11/2007 ys n R8 182,728,500.57 02.710.116/0001-01 Statemeter Brasil Asset Management Conservative 0 0 0/11/2007 ys n R8 182,728,500.57 02.710.116/0001-01 Statemeter Brasil Asset Management Conservative 0 0 0 0 R8 18,717.20 N R8 16,579.80 R8 16,477.40.18 R8 16,579.80 R8 16,477.40.18 R8 16,579.80 R8 16,477.40.18 R8 16,477.40.18 R8 16,477.80 R8 16,477.80		05.954.445/0001-24	Brasilprev	Aggressive	49	05/01/2004	OII	OH	R\$ 203,267,143.56	91
0.2.924.248/0001-76 Potro Seguo Investimentos Aggresive 49 52/01/1909 no no R8 180,062.738.418.18 0.5.92.42.87/0001-65 Irad Unibarzo Conservative 0 0/7/12004 no no <td></td> <td>08.939.962/0001-12</td> <td>Itaú Unibanco</td> <td>Conservative</td> <td>0</td> <td>19/11/2007</td> <td>yes</td> <td>OH</td> <td>R\$ 194,134,622.08</td> <td>9</td>		08.939.962/0001-12	Itaú Unibanco	Conservative	0	19/11/2007	yes	OH	R\$ 194,134,622.08	9
Basilprec Aggressive 49 55/1004 no no R8 185/005/005		02.924.248/0001-74	Porto Seguro Investimentos	Aggressive	49	29/10/1999	OU	OII	R\$ 190,524,384.18	20
08.939.965/001-56 Inat Unibanco Conservative 0 0/11/2007 vs n R8 183.283.663.65 02.710.116/0001-05 Bradesco Asset Management Conservative 0 0 0/11/2004 n n R8 182.728,509.57 02.710.116/0001-01 Stathackezo Asset Management Conservative 0 0 1/107/2004 n n R8 177,122,553.05 05.103.131/0001-01 Stathackezo Havestimentos Conservative 0 0 1/107/2004 n R8 177,122,553.05 05.103.131/0001-01 Stathacker Management Aggressive 49 27/10/2000 n n R8 165,559.87.83 05.231.0564/0001-1 Irad Unibanco Conservative 0 2/10/2000 n n R8 166,477,450.18 05.130.746/0001-2 Irad Unibanco Conservative 49 2/10/2000 n R8 166,559.88 R8 165,559.88 07.130.746/0001-2 Irad Unibanco Conservative 49 2/10/2007 n R8 164,77,450.18 R8 166,477,450.18 07.130.746/0001-2 <td< td=""><td></td><td>05.954.487/0001-65</td><td>Brasilprev</td><td>Aggressive</td><td>49</td><td>05/01/2004</td><td>OU</td><td>OII</td><td>R\$ 185,066,270.61</td><td>24</td></td<>		05.954.487/0001-65	Brasilprev	Aggressive	49	05/01/2004	OU	OII	R\$ 185,066,270.61	24
02.70.10.16 Bradesco Aset Management Conservative 0 01/07/2004 n n R8 18.12/2005 02.70.10.16 (0001-d) Bradesco Aset Management Conservative 0 17/03/1999 n n R8 150.132/43.83 04.778.20.1 (0001-d) Shalmeiva Investimentos Conservative 0 27/09/2004 n n R8 162.112.74.13 05.163.13.13.0 (0001-d) Bradiphov Conservative 0 27/09/2002 n n R8 165.23.83 05.163.13.10 (0001-d) Bradiphov Conservative 0 27/10/2000 n n R8 165.477.450.18 07.10.24.10.2 Infa Unibatro Conservative 0 27/10/2000 n n R8 117.00.20 07.10.24.16.0 MAPPRE Investimentos Aggresive 49 27/12/2007 vs n R8 117.70.04 08.883.16.9 MAPPRE Investimentos Aggresive 49 07/12/2007 vs n R8 19.85.99.13.73 08.00.12.20.1 Caixa Vida e Previdencia Aggresive 49 05/11/2007 </td <td></td> <td>08.939.965/0001-56</td> <td>Itaú Unibanco</td> <td>Conservative</td> <td>0</td> <td>07/11/2007</td> <td>yes</td> <td>OII</td> <td>R\$ 183,360,865.63</td> <td>9</td>		08.939.965/0001-56	Itaú Unibanco	Conservative	0	07/11/2007	yes	OII	R\$ 183,360,865.63	9
OL.750.16, 0001-0. Brack-ox Asset Management Conservative 0 17/81/1999 no no R8 17/132,653.08 04.758.201/0001-1 SulAmérica Investimentos Conservative 0 23/09/2004 no no R8 145,219.741.81 05.103.13/10001-03 Brasilprev Conservative 0 0 23/09/2004 no no R8 145,520.82 05.103.13/10001-03 Brasilprev Conservative 0 0 27/10/2000 no R8 147,450.18 05.103.14/0001-03 Irad Unibanco Conservative 0 0 20/11/2006 no R8 147,450.18 07.100.746/0001-0 Irad Unibanco Conservative 0 0 20/11/2006 no R8 147,450.18 07.100.746/0001-0 Irad Unibanco Conservative 40 07/12/2006 no R8 147,540.18 08.583.169/0001-0 Irad Unibanco Aggressive 49 15/12/2005 no R8 147,540.18 08.798.832/0001-0 Aurita Segues 49 15/12/2007 yes no R		03.821.078/0001-65	Itaú Unibanco	Conservative	0	01/07/2004	OII	OII	R\$ 182,728,509.57	ល
04,738.201,0001-41 SulAmérica Investimentos Conservative 0 12/09/2004 no m R8 124,741.81 R8 124,559.87 SS 05,534.339 0001-24 Santander Brasil Asset Management Aggressive 49 27/10/2000 no m R8 124,774.50.18 R8 124,574.50.18 Conservative 0 22,91.564,0001-10 Inat Unibanco Conservative 0 20,111/2006 no m R8 134,174.700.200 CONSERVAÇÃE CONSERVAÇ	/VGBL FI Conservative	02.710.116/0001-40	Bradesco Asset Management	Conservative	0	17/03/1999	9	9	R\$ 170,132,653.08	9
10/12/2002 Brasila Asset Management Conservative 0 0 17/2/2002 D D R\$ 145,477,450.18		04.738.201/0001-41	SulAmérica Investimentos	Conservative	0	23/09/2004	OH.	9	R\$ 152,112,741.81	22
02.91.458/9001-24 Santander Brasil Asset Management Aggressive 49 27/10/2000 no no 18 1.64/74.450.18 02.91.458/9001-15 Irad Unibanco Conservative 0 28/04/1999 no no 18 1.64/74.450.18 07.190.7400 Irad Unibanco Conservative 0 28/04/1999 no no 18 1.17/3006 07.190.740 Irad Unibanco Conservative 0 20/11/2006 no no 18 11/3006 07.190.740 MAPPRE Investimentos Aggressive 49 07/112/2007 no no 18 11/3004 08.070.833/0001-9 Caixa Vida e Previdenta Aggressive 49 18/11/2007 no 18 7.324/1908 08.070.833/001-9 Caixa Vida e Previdenta Aggressive 49 65/11/2007 no 18 7.324/1909 08.201.2015 Alamérica Investimentos Aggressive 49 66/11/2007 no 18 7.324/1909 07.110.1501 Suldander Brasil Asset Management Aggressive 49 66/11/2007 no 18 7.325/1909 <td></td> <td></td> <td>Brasilprev</td> <td>Conservative</td> <td>0</td> <td>10/12/2002</td> <td>00</td> <td>OH</td> <td>R\$ 146,559,387.98</td> <td>4</td>			Brasilprev	Conservative	0	10/12/2002	00	OH	R\$ 146,559,387.98	4
C2.911.564/0001-01 Iria Unibanco Conservative 0 25/04/1999 no no R8 133.17.902.00			antander Brasil Asset Management	Aggressive	49	27/10/2000	9	110	R\$ 146,477,450.18	86
The control of the		02.911.564/0001-01	Itaú Unibanco	Conservative	0	28/09/1999	OH.	9	R\$ 133,117,002.00	4
OO 07.101/76 (0011-54) Textu Vauguarda Aggressive 49 29/12/2005 n n R8 104,137,709.47 OC 72.04.418 (0001-20) MAPPRE Investmentos Aggressive 49 07/112/2005 n n R8 102,338.028.65 OZ 750.4418 (0001-09) Letan Seguros Aggressive 49 18/12/1998 n n R8 5804,190.35 OS 90.8383/2001-49 Caixa Vida e Previdenta Aggressive 49 05/11/2007 yss n R8 74,255,519.93 PRIVADO 08.305.650 (001-95) Atta Devidenta Aggressive 49 05/11/2007 yss n R8 74,255,519.93 OZ S11.681 (0001-01) Submérica Investimentos Aggressive 49 05/01/2007 n n R8 74,255,519.93 OC 57.190.1999 (0.00-00) Caixa Marker Brasil Asset Management Aggressive 49 05/01/2007 n n R8 74,255,519.93 Aggressive 49 OC 50/1,2005 n n R8 04,600.47 n n R8 04,600.47 n Aggressive <td></td> <td>07.644.989/0001-15</td> <td>Itaú Unibanco</td> <td>Conservative</td> <td>0</td> <td>20/11/2006</td> <td>yes</td> <td>OH</td> <td>RS 117,984,652.89</td> <td>2</td>		07.644.989/0001-15	Itaú Unibanco	Conservative	0	20/11/2006	yes	OH	RS 117,984,652.89	2
OS 833.169/0001-20 MAPPRE Investmentos Aggressive 49 18/12/10967 vs. p. p. 18/102338 D38.65 D3.65 D3	RCADO	07.190.746/0001-54	Icatu Vanguarda	Aggressive	49	29/12/2005	OU	OII	R\$ 104,157,709.47	27
O2.754.418 (0001-09 Icatu Segmes Aggressive 49 IS/1/1998 In PR 59.8801,100.35	MAPFRE CORPORATE PLUS PREV FIC MULTIMERCADO	08.893.169/0001-20	MAPFRE Investimentos	Aggressive	49	07/12/2007	yes	OH	R\$ 102,338,028.65	53
Control of State Control of Santander Brasil Asset Annagement Aggressive 49 65/11/2007 yes Dr. R5/324,794,78.			Icatu Seguros	Aggressive	49	18/12/1998	91	OH	R\$ 98,890,190.35	33
EVIDENCIARIO 68.070.830 Caixa Vide Previdentia Aggressive 49 08/11/2007 yrs no RS 74,456.947 ST 70 PRIVADO 68.395.65.000-59 Laa DTVM Aggressive 49 08/01/2007 no no RS 70,576.547.87 C2.811.681/0001-78 Santanether Paral Asser Management Aggressive 49 17/05/2005 no no RS 70,976.547.87 Aggressive 49 17/05/2005 no no RS 64,656.337.11			antander Brasil Asset Management	Aggressive	49	05/11/2007	yes	OH	R\$ 73,924,791.78	61
TO PRIVADO 08.305.65/0.0001-35 Itań DTVM Aggressive 49 08/01/2007 no no R8 73,544,060.47 (2.811.681,0001-01 SulAmérica Investimentos Aggressive 49 07(1.991.99 no no R8 70,5547.87 (2.190.490.001-78 Santander Basal Asset Management Aggressive 49 17(65/2005 no no R8 64,465,455.71 (2.190.001.98 Leatu Aggressive 49 07(1.990.201.001.001.88 Leatu Aggressive 49 07(1.900.201.001.001.88 Aggressive 49 07(1.900.201.001.88 Aggressive 49 07(1.900.201.88 Ag	0	08.070.833/0001-30	Caixa Vida e Previdência	Aggressive	49	08/11/2007	yes	01		12
0.2.811.65/10001-01 StabAnderica Investimentos Aggresive 49 0.09/08/1999 no no R8 70.975-547.87 and 0.2.7190.1990 no no R8 70.975-547.87 and 0.2.7190.1990.001-78 Santander Braial Asset Management Aggresive 49 17/06/2005 no no R8 64,65,455.71 and 0.2.7190.2006 no no R8 69.696.256.33 and 0.2.7190.2006 no no R8 69.696.256.33	MERCADO CRÉDITO PRIVADO	08.395.650/0001-95	Itaú DTVM	Aggressive	49	08/01/2007	91	OH		2
07.199.199/0001-78 Santander Brasil Asset Management Aggressive 49 17/05/2005 no no Ft8 64,465,455.71 ADO 07.190.624/0001-68 Iratu Vangrarda Aggressive 49 02/01/2006 no no Ft8 59,699,256.33		02.811.681/0001-01	SulAmérica Investimentos	Aggressive	49	09/08/1999	OII	OII	R\$ 70,976,547.87	56
07.190.624/0001-68 Icatu Vanguarda Aggressiye 49 02/01/2006 no no R\$ 59.699.256.33			antander Brasil Asset Management	Aggressive	49	17/05/2005	OII	OII		ល
	ICATU SEG MINHA APOSENTADORIA 2020 FIC MULTIMERCADO	07.190.624/0001-68	Icatu Vanguarda	Aggressive	49	02/01/2006	OH	OH	R\$ 59,699,256.33	25

Table 13: Part 3 of the list of PGBL/VGBL funds, including: CNPJ of each fund, type of institution, style of investment, max investment in variable income products of each fund, day where the fund was created, differentiation between feeder funds, a column showing that all fund are non-master and a column identifying the number of plans of each fund selected.

EIE	CNPJ	Institution	Style	Max investment in variable income	Date of birth	Feeder	Master	Total net worth	Number of plans
ITAÚ FLEXPREV PLUS V40 FIC MULTIMERCADO	04.699.650/0001-28	Itaú Unibanco	Aggressive	49	19/12/2003	N _o	No	R\$ 59,085,859.42	17
ICATU SEG MINHA APOSENTADORIA 2040 FIC MULTIMERCADO	07.190.735/0001-74	Icatu Vanguarda	Aggressive	49	20/12/2005	No	No	R\$ 57,656,734.89	25
BRADESCO PGBL HIPERPREV FIC Conservative	04.103.102/0001-93	Bradesco Asset Management	Conservative	0	03/11/2000	yes	N_0	R\$ 56,971,708.68	4
PACK FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC Conservative	04.709.080/0001-00	Itaú Unibanco	Conservative	0	13/12/2001	yes	N_0	R\$ 56,186,903.97	4
PORTO SEGURO RUBI PLUS FIC MULTIMERCADO PREVIDENCIÁRIO	08.747.753/0001-77	Porto Seguro Investimentos	Aggressive	49	18/12/2007	N_0	N_0	R\$ 52,681,146.85	63
BRADESCO H PGBL/VGBL CLASSIC FI Conservative	07.985.878/0001-72	Bradesco Asset Management	Conservative	0	30/11/2006	No	No	R\$ 52,235,487.13	
SANTANDER PREV RFA FIC Conservative CRÉDITO PRIVADO	03.565.131/0001-04	Santander Brasil Asset Management	Conservative	0	01/09/2000	yes	No	R\$ 51,727,034.04	
SANTANDER PREV SUPERIOR FIC MULTIMERCADO CRÉDITO PRIVADO	08.918.379/0001-25	Santander Brasil Asset Management	Aggressive	49	05/11/2007	yes	No	R\$ 50,930,709.71	02
MAPFRE INVERSION FI MULTIMERCADO	07.187.591/0001-05	MAPFRE Investimentos	Conservative	0	09/01/2006	No	$^{ m o}$	R\$ 46,869,747.41	2
BRASILPREV RENDA TOTAL RI FIC MULTIMERCADO	05.132.916/0001-19	Brasilprev	Aggressive	49	01/08/2007	No	No	R\$ 45,187,435.22	2
BRADESCO H PGBL/VGBL POTENCIAL FIC MULTIMERCADO	08.773.281/0001-27	Bradesco Asset Management	Aggressive	49	25/09/2007	No	No	R\$ 45,163,105.91	∞
SULAMÉRICA MIX 49 I FI MULTIMERCADO	04.616.035/0001-00	SulAmérica Investimentos	Aggressive	49	26/09/2003	No	No	R\$ 42,392,354.93	64
ITAÚ FLEXPREV I V40 FIC MULTIMERCADO	04.701.172/0001-43	Itaú Unibanco	Aggressive	49	04/09/2002	по	OII	R\$ 41,677,226.49	6
ITAÚ FLEXPREV INVESTORS V40 FIC MULTIMERCADO	08.435.270/0001-37	Itaú Unibanco	Aggressive	49	26/09/2007	no	OII	R\$ 40,877,003.32	21
ICATU SEG Aggressive 49B FIC MULTIMERCADO	02.764.434/0001-93	Icatu Seguros	Aggressive	49	19/10/1999	ou	OII	R\$ 38,620,476.17	21
ITAÚ PRIVATE PREV V45 FIC MULTIMERCADO	08.417.967/0001-85	Itaú DTVM	Aggressive	49	30/08/2007	no	OII	R\$ 33,335,976.71	
BRADESCO PGBL/VGBL FUTURE Aggressive III FIC MULTIMERCADO	01.392.020/0001-18	Bradesco Asset Management	Aggressive	49	30/09/1996	110	OH	R\$ 31,882,136.75	37
ITAUPREV PREVISÃO FIC Conservative	04.841.814/0001-00	Itaú Unibanco	Aggressive	49	20/11/2002	yes	OII	R\$ 31,871,216.84	2
ITAUPREV ANNUITY V30 FIC MULTIMERCADO	02.668.765/0001-20	Itaú Unibanco	Aggressive	49	17/08/1998	110	OH	R\$ 30,717,102.25	12
ITAŬ FLEXPREV PRIVATE V45 FIC MULTIMER CADO	08.417.908/0001-07	Itaú DTVM	Aggressive	49	10/08/2007	110	OH	R\$ 28,718,884.77	10
ITAŬ FLEXPREV XI A V40 FIC MULTIMERCADO	08.820.430/0001-61	Itaú Unibanco	Aggressive	49	17/08/2007	no	OII	R\$ 26,068,201.22	2
SANTANDER X FIC Conservative CRÉDITO PRIVADO	08.629.012/0001-91	Santander Brasil Asset Management	Conservative	0	30/10/2007	yes	OH	R\$ 23,961,047.28	10
MAPFRE CORPORATE GOVERNANCE Aggressive FIC MULTIMERCADO	07.727.582/0001-51	MAPFRE Investimentos	Aggressive	49	30/06/2006	yes	OII	R\$ 20,541,515.41	55
BRADESCO H PGBL/VGBL EMPRESARIAL CONSERVADOR FI Conservative	03.824.230/0001-63	Bradesco Asset Management	Conservative	0	31/05/2000	110	OH	R\$ 18,436,954.30	18
SANTANDER VII FIC Conservative CRÉDITO PRIVADO	03.069.107/0001-84	Santander Brasil Asset Management	Conservative	0	21/10/1999	yes	OII	R\$ 17,109,268.90	2
SANTANDER 49 FIC MULTIMERCADO CRÉDITO PRIVADO	08.628.945/0001-64	Santander Brasil Asset Management	Aggressive	49	11/10/2007	110	OH	R\$ 16,687,652.36	62
ITAÚ FLEXPREV CORPORATE PREMIUM FIC Conservative	06.008.952/0001-38	Itaú Unibanco	Conservative	0	30/01/2004	no	OII	R\$ 16,311,397.12	4
SANTANDER PREV RFB FIC Conservative CREDITO PRIVADO	03.565.192/0001-71	Santander Brasil Asset Management	Conservative	0	29/09/2000	yes	OU	R\$ 15,242,963.35	
BRADESCO H PGBL/VGBL VALOR FIC MULTIMERCADO	08.757.682/0001-93	Bradesco Asset Management	Aggressive	49	25/09/2007	no	OU	R\$ 13,348,226.23	9
ITAŬ FLEXPREV DOURADO FIC MULTIMERCADO	08.434.498/0001-02	Itaú DTVM	Aggressive	49	16/01/2007	010	9	R\$ 11,417,715.62	2
BRADESCO PRGP VRGP 30 FI Conservative	07.058.194/0001-25	Bradesco Asset Management	Conservative	0	23/12/2004	010	9	R\$ 10,877,234.25	
SANTANDER XIV FIC Conservative CREDITO PRIVADO	04.684.499/0001-54	Santander Brasil Asset Management	Conservative	0	19/10/2001	yes	9	R\$ 10,230,470.48	10
SADIA ESPECIALMENTE CONSTITUTIOS FIC Conservative	05.431.584/0001-73	Itaú Unibanco	Conservative	0	28/04/2003	yes	9	R\$ 5,389,606.54	2
BRADESCO PGBL CAEMI F 15 FIC Conservative	03.958.330/0001-82	Bradesco Asset Management	Conservative	0 !	06/12/2000	yes	OH	R\$ 4,803,176.98	 .
UNICLASS PREVER RV 49 I ESPECIALMENTE CONSTITUIDOS FIC MULTIMERCADO	08.939.984/0001-82	Itaú Unibanco	Aggressive	49	07/11/2007	no	9	R\$ 4,221,906.57	9
ICATU SEG Aggressive I FIC MULTIMERCADO	03.644.263/0001-21	Icatu Vanguarda	Aggressive	49	30/03/2000	010	9	R\$ 3,555,707.17	4
UNIBANCO PREVER III FIX 100 ESPECIALMENTE CONSTITUIDOS FIC Conservative	05.535.883/0001-58	Itaú Unibanco	Conservative	0	13/06/2003	yes	OII	R\$ 3,249,903.47	2
SANTANDER FUTURE FI MULTIMERCADO	04.299.727/0001-72	Santander Brasil Asset Management	Aggressive	49	09/11/2001	no	OII	R\$ 3,046,611.77	2
ITAU FLEXPREV VIII B FIC Conservative	04.701.235/0001-61	Itaú Unibanco	Conservative	0	04/10/2006	yes	OII	R\$ 2,776,696.65	18
SANTANDER PREV TOP SELECT FIC MULTIMERCADO CRÉDITO PRIVADO	03.565.187/0001-69	Santander Brasil Asset Management	Aggressive	49	18/10/2000	no	OU	R\$ 2,710,369.62	12
SANTANDER PREV XX FIC Conservative CREDITO PRIVADO	08.629.018/0001-69	Santander Brasil Asset Management	Conservative	0	06/06/2007	yes	9	R\$ 2,692,829.30	2
ICATU SEG MINHA APOSENTADORIA 2010 FIC MULTIMERCADO	07.190.444/0001-86	Icatu Vanguarda	Aggressive	49	29/12/2005	010	9	R\$ 2,368,022.17	រោ
SANTANDER XI FI Conservative CREDITO PRIVADO	04.684.457/0001-13	Santander Brasil Asset Management	Conservative	0	19/10/2001	010	9	R\$ 1,687,014.16	2
UNICLASS PREVER RV 49 II ESPECIALMENTE CONSTITUIDOS FIC MULTIMERCADO	08.939.994/0001-18	Itaú Unibanco	Aggressive	49	09/11/2007	010	9	R\$ 156,976.15	រោ
Source: Quantum Finance.									

B Administrative Fee Charged per Fund

Table 14: Part 1 of the table containing: the name of the fund, the correspondent CNPJ and the administrative fee charged by the fund.

FIE	CNPJ	Administrative fee
UNICLASS PREVER RV 49 II ESPECIALMENTE CONSTITUÍDOS FIC MULTIMERCADO	08.939.994/0001-18	1.50%
UNICLASS PREVER RV 49 I ESPECIALMENTE CONSTITUÍDOS FIC MULTIMERCADO	08.939.984/0001-82	2.00%
UNICLASS PREVER RF II ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	08.939.965/0001-56	1.00%
UNICLASS PREVER RF I ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	08.939.962/0001-12	1.50%
UNIBANCO PREVER IV FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	03.374.369/0001-52	2.00%
UNIBANCO PREVER III FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	05.535.883/0001-58	2.50%
UNIBANCO PREVER I FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	03.507.865/0001-37	3.50%
TOPÁZIO AZUL PGBL ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	03.821.078/0001-65	1.00%
SULAMÉRICA MIX 49 FI MULTIMERCADO	02.811.681/0001-01	2.00%
SULAMÉRICA FIX 100 VI FI RENDA FIXA	04.738.201/0001-41	2.00%
SULAMÉRICA FIX 100 IV FI RENDA FIXA	04.056.135/0001-20	1.50%
SULAMÉRICA FIX 100 II FI RENDA FIXA	04.738.195/0001-22	2.50%
SULAMÉRICA MIX 49 I FI MULTIMERCADO	04.616.035/0001-00	1.00%
SULAMÉRICA FIX 100 V FI RENDA FIXA	03.077.322/0001-27	1.00%
SULAMÉRICA FIX 100 FI RENDA FIXA	03.077.330/0001-73	2.50%
SANTANDER XIV FIC RENDA FIXA CRÉDITO PRIVADO	04.684.499/0001-54	1.80%
SANTANDER XIII FIC RENDA FIXA CRÉDITO PRIVADO	04.684.453/0001-35	0.70%
SANTANDER XI FI RENDA FIXA CRÉDITO PRIVADO	04.684.457/000113	3.00%
SANTANDER X FIC RENDA FIXA CRÉDITO PRIVADO	08.629.012/0001-91	0.90%
SANTANDER VIII FIC RENDA FIXA CRÉDITO PRIVADO	03.271.099/0001-54	2.50%
SANTANDER VII FIC RENDA FIXA CRÉDITO PRIVADO	03.069.107/0001-84	3.00%
SANTANDER VI FIC RENDA FIXA CRÉDITO PRIVADO	$04.684.515/0001\hbox{-}09$	3.00%
SANTANDER V FIC RENDA FIXA CRÉDITO PRIVADO	05.112.439/0001-20	3.00%
SANTANDER PREV XX FIC RENDA FIXA CRÉDITO PRIVADO	08.629.018/0001-69	0.60%
SANTANDER PREV TOP SELECT FIC MULTIMERCADO CRÉDITO PRIVADO	03.565.187/0001-69	2.00%
SANTANDER PREV SUPERIOR FIC MULTIMERCADO CRÉDITO PRIVADO	$08.918.379/0001\hbox{-}25$	2.00%
SANTANDER PREV RFB FIC RENDA FIXA CRÉDITO PRIVADO	03.565.192/0001-71	1.25%
SANTANDER PREV RFA FIC RENDA FIXA CRÉDITO PRIVADO	$03.565.131/0001\hbox{-}04$	2.00%
SANTANDER PREV FIX SUPERIOR FIC RENDA FIXA CRÉDITO PRIVADO	07.647.772/0001-69	2.00%
SANTANDER PREV FIX FIC RENDA FIXA CRÉDITO PRIVADO	02.498.190/0001-44	3.00%
SANTANDER PREV FIX EXECUTIVO FIC RENDA FIXA CRÉDITO PRIVADO	03.534.936/0001-90	1.50%
SANTANDER PREV FIX EXCLUSIVO FIC RENDA FIXA CRÉDITO PRIVADO	04.572.903/0001-06	1.00%
SANTANDER PREV FIC MULTIMERCADO CRÉDITO PRIVADO	08.918.382/0001-49	3.00%
SANTANDER PREV AGRESSIVO SUPERIOR FIC MULTIMERCADO CRÉDITO PRIVADO	$03.534.939/0001\hbox{-}24$	2.00%
SANTANDER IV FIC RENDA FIXA CRÉDITO PRIVADO	05.971.745/0001-11	0.90%
SANTANDER III FIC RENDA FIXA CRÉDITO PRIVADO	04.794.886/0001-43	1.20%

Table 15: Part 2 of the table containing: the name of the fund, the correspondent CNPJ and the administrative fee charged by the fund.

FIE	CNPJ	Administrative fee
SANTANDER II FIC RENDA FIXA CRÉDITO PRIVADO	04.684.467/0001-59	2.00%
SANTANDER I FIC RENDA FIXA CRÉDITO PRIVADO	07.199.289/0001-69	3.20%
SANTANDER FUTURE FI MULTIMERCADO	04.299.727/0001-72	0.70%
SANTANDER 49 I FIC MULTIMERCADO CRÉDITO PRIVADO	07.199.199/0001-78	2.00%
SANTANDER 49 FIC MULTIMERCADO CRÉDITO PRIVADO	08.628.945/0001-64	1.50%
SADIA ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	05.431.584/0001-73	0.98%
PRALEX I ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	07.644.989/0001-15	0.50%
PORTO SEGURO RUBI PREMIUM FIC RENDA FIXA PREVIDENCIÁRIO	02.924.262/0001-78	1.50%
PORTO SEGURO RUBI PLUS FIC MULTIMERCADO PREVIDENCIÁRIO	08.747.753/0001-77	2.50%
PORTO SEGURO COMPOSTO FIC MULTIMERCADO PREVIDENCIÁRIO	02.924.248/000174	2.00%
PLANO ACCOR DE PREVIDÊNCIA PGBL/VGBL FI RENDA FIXA	02.710.116/0001-40	0.79%
PACK FIX 100 ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	04.709.080/0001-00	0.90%
MAPFRE PREVISION PREV FIC RENDA FIXA	07.725.529/0001-11	0.80%
MAPFRE INVERSION FI MULTIMERCADO	07.187.591/0001-05	2.00%
MAPFRE CORPORATE PREV FIC MULTIMERCADO	07.058.135/0001-57	1.40%
MAPFRE CORPORATE PREV FI RENDA FIXA	06.081.503/0001-15	1.00%
MAPFRE CORPORATE PLUS PREV FIC MULTIMERCADO	08.893.169/0001-20	1.90%
MAPFRE CORPORATE GOVERNANCE COMPOSTO FIC MULTIMERCADO	07.727.582/0001- 51	2.60%
ITAUPREV PREVISÃO FIC RENDA FIXA	04.841.814/0001-00	0.90%
ITAUPREV ANNUITY V30 FIC MULTIMERCADO	02.668.765/000120	3.50%
ITAÚ PRIVATE PREV V45 FIC MULTIMERCADO	08.417.967/0001-85	1.25%
ITAÚ FLEXPREV XVI PREMIUM FIC RENDA FIXA	02.911.564/0001- 01	0.90%
ITAÚ FLEXPREV XVI FIC RENDA FIXA	08.543.326/0001-77	0.90%
ITAÚ FLEXPREV XV A FIC RENDA FIXA	05.592.103/0001-01	0.38%
ITAÚ FLEXPREV XII A FIC RENDA FIXA	04.118.883/0001-90	0.98%
ITAÚ FLEXPREV XI A V40 FIC MULTIMERCADO	08.820.430/0001-61	0.50%
ITAÚ FLEXPREV VIII B FIC RENDA FIXA	04.701.235/0001-61	1.80%
ITAÚ FLEXPREV TRICOLOR FIC MULTIMERCADO CRÉDITO PRIVADO	08.389.857/0001-57	0.25%
ITAÚ FLEXPREV SPECIAL II FIC RENDA FIXA	02.290.304/0001-66	2.80%
ITAÚ FLEXPREV PRIVATE V45 FIC MULTIMERCADO	08.417.908/0001- 07	1.25%
ITAÚ FLEXPREV PREMIUM V40 FIC MULTIMERCADO	07.400.588/0001-10	1.80%

Table 16: Part 3 of the table containing: the name of the fund, the correspondent CNPJ and the administrative fee charged by the fund.

FIE	CNPJ	Administrative fee
ITAÚ FLEXPREV PREMIUM FIC RENDA FIXA	04.118.652/0001-86	1.00%
ITAÚ FLEXPREV PLUS V40 FIC MULTIMERCADO	04.699.650/0001-28	3.00%
ITAÚ FLEXPREV PLUS FIC RENDA FIXA	02.290.280/0001-45	2.20%
ITAÚ FLEXPREV JEQUITIBÁ I FIC MULTIMERCADO CRÉDITO PRIVADO	08.395.650/0001-95	0.50%
ITAÚ FLEXPREV INVESTORS V40 FIC MULTIMERCADO	08.435.270/0001-37	2.50%
ITAÚ FLEXPREV INVESTORS FIC RENDA FIXA	07.096.907/0001-45	1.75%
ITAÚ FLEXPREV I V40 FIC MULTIMERCADO	04.701.172/0001-43	4.00%
ITAÚ FLEXPREV I FIC RENDA FIXA	02.911.408/0001-40	3.20%
ITAÚ FLEXPREV DOURADO FIC MULTIMERCADO	08.434.498/0001- 02	0.85%
ITAÚ FLEXPREV CORPORATE PREMIUM FIC RENDA FIXA	06.008.952/0001-38	0.80%
ITAÚ FLEXPREV CORPORATE PLATINUM RV49 FIC MULTIMERCADO	04.342.594/0001-70	1.25%
ITAÚ FLEXPREV CORPORATE IV FIC RENDA FIXA	03.374.465/0001-09	1.50%
ITAÚ FLEXPREV CORPORATE II FIC RENDA FIXA	02.851.024/0001-80	1.25%
ITAÚ FLEXPREV CORPORATE I FIC RENDA FIXA	04.264.940/0001-49	1.00%
ICATU SEG MINHA APOSENTADORIA 2040 FIC MULTIMERCADO	07.190.735/0001-74	1.75%
FIAT PREVI ESPECIALMENTE CONSTITUÍDOS FIC RENDA FIXA	03.821.440/0001-06	0.50%
CAIXA RENDA VARIÁVEL $0/49~300~{ m FIC}$ MULTIMERCADO PREVIDENCIÁRIO	08.070.833/0001-30	3.00%
CAIXA 300 FIC RENDA FIXA PREVIDENCIÁRIO	03.926.431/000171	3.00%
CAIXA 200 FIC RENDA FIXA PREVIDENCIÁRIO	03.737.222/0001-80	2.00%
CAIXA 100 FIC RENDA FIXA PREVIDENCIÁRIO	03.737.224/0001-79	1.00%
BRASILPREV RT FIX Z FI RENDA FIXA	05.163.131/0001- 03	0.70%
BRASILPREV RT FIX VII FIC RENDA FIXA	06.001.785/0001-01	0.80%
BRASILPREV RT FIX VI FIC RENDA FIXA	07.919.956/0001-30	1.25%
BRASILPREV RT FIX V FIC RENDA FIXA	$03.601.017/0001\hbox{-} 92$	2.00%
BRASILPREV RT FIX IV FIC RENDA FIXA	03.600.987/0001-73	2.50%
BRASILPREV RT FIX III FIC RENDA FIXA	03.601.000/0001-35	3.00%
BRASILPREV RT FIX II FIC RENDA FIXA	03.537.407/0001-40	1.50%
BRASILPREV RT FIX FIC RENDA FIXA	03.537.379/0001-61	3.40%
BRASILPREV RT FIX C FIC RENDA FIXA	05.061.121/0001-67	1.00%
BRASILPREV RT FIX A FIC RENDA FIXA	05.119.745/0001-98	0.95%
BRASILPREV RENDA TOTAL RI FIC MULTIMERCADO	05.132.916/0001-19	0.40%
BRASILPREV RENDA TOTAL CICLO DE VIDA 2040 FIC MULTIMERCADO	05.764.785/0001-92	2.00%
BRASILPREV RENDA TOTAL CICLO DE VIDA 2030 FIC MULTIMERCADO	05.132.896/0001-86	2.00%
BRASILPREV RENDA TOTAL CICLO DE VIDA 2020 FIC MULTIMERCADO	06.001.797/0001-28	2.00%
BRASILPREV MULTIESTRATÉGIA II FIC MULTIMERCADO	05.954.445/0001-24	2.00%
BRASILPREV MULTIESTRATÉGIA I FIC MULTIMERCADO	05.954.487/0001-65	3.00%
BRASILPREV FIX ANNUITY FI RENDA FIXA CRÉDITO PRIVADO	05.326.919/0001-93	1.00%

Table 17: Part 4 of the table containing: the name of the fund, the correspondent CNPJ and the administrative fee charged by the fund.

FIE	CNPJ	Administrative fee
ICATU SEG MINHA APOSENTADORIA 2030 FIC MULTIMERCADO	07.190.746/0001-54	1.75%
ICATU SEG MINHA APOSENTADORIA 2020 FIC MULTIMERCADO	07.190.624/0001-68	1.75%
ICATU SEG MINHA APOSENTADORIA 2010 FIC MULTIMERCADO	07.190.444/0001-86	1.75%
ICATU SEG DURATION FI RENDA FIXA	04.511.286/0001-20	1.50%
ICATU SEG COMPOSTO I FIC MULTIMERCADO	03.644.263/0001-21	1.00%
ICATU SEG COMPOSTO 49C FIC MULTIMERCADO	$02.764.418/0001\hbox{-}09$	2.00%
ICATU SEG COMPOSTO 49B FIC MULTIMERCADO	02.764.434/0001-93	3.00%
ICATU SEG CLASSIC FIC RENDA FIXA	05.200.914/000110	1.00%
BRASILPREV DIVIDENDOS I FIC MULTIMERCADO	05.824.217/000130	2.00%
BRADESCO VGBL FIX FIC RENDA FIXA	04.830.277/0001-00	3.00%
BRADESCO VGBL F15 FIC RENDA FIXA	06.185.741/0001-70	1.50%
BRADESCO VGBL F10 FIC RENDA FIXA	06.081.457/0001-54	1.00%
BRADESCO PRGP VRGP 30 FI RENDA FIXA	07.058.194/0001-25	3.00%
BRADESCO PREV FÁCIL PGBL FIX FIC RENDA FIXA	02.561.139/0001-30	3.00%
BRADESCO PGBL/VGBL FUTURE COMPOSTO III FIC MULTIMERCADO	01.392.020/0001-18	2.00%
BRADESCO PGBL/VGBL FIX PLUS FIC RENDA FIXA	04.253.202/0001- 04	0.35%
BRADESCO PGBL HIPERPREV FIC RENDA FIXA	04.103.102/0001-93	2.00%
BRADESCO PGBL F 15 FIC RENDA FIXA	02.998.253/0001-21	1.50%
BRADESCO PGBL F 10 FIC RENDA FIXA	03.256.797/000180	1.00%
BRADESCO PGBL CAEMI F 15 FIC RENDA FIXA	03.958.330/000182	1.50%
BRADESCO H VGBL CONSERVADOR FI RENDA FIXA	05.113.771/0001-09	3.00%
BRADESCO H PGBL/VGBL VALOR FIC MULTIMERCADO	08.757.682/0001-93	3.00%
BRADESCO H PGBL/VGBL POTENCIAL FIC MULTIMERCADO	08.773.281/0001-27	3.00%
BRADESCO H PGBL/VGBL FUTURE FI RENDA FIXA	01.392.021/0001-62	1.00%
BRADESCO H PGBL/VGBL EMPRESARIAL CONSERVADOR FI RENDA FIXA	03.824.230/0001-63	1.50%
BRADESCO H PGBL/VGBL CLASSIC FI RENDA FIXA	07.985.878/0001-72	0.68%
BRADESCO H PGBL CONSERVADOR FI RENDA FIXA	02.907.508/0001-01	3.00%

C Jensen's Alpha Analysis for Aggressive and Conservative Funds

Table 18: Jensen's Alpha analysis for conservative funds part 1.

			Total returns of	conservative f	unds			Net returns of	conservative fu	mds	
Number	Type of institution	Alpha (annualized)	P-value (Alpha)	Adjusted R2	F-Stat	P-value (F-Stat)	Alpha (annualized)	P-value (Alpha)	Adjusted R2	F-Stat	P-value(F-Stat
1	Pure insurance company	0.22%	18%**	0.3%	4.2	1.6%**	40.77%	0.0%***	0.3%	4.2	1.6%**
2	Pure insurance company	-6.71%	0.0%***	72.6%	3,267.1	0.0%***	-8.10 %	в я %***	72.6%	3,267.1	0 JI % ***
3	Pure insurance company	1.42 %	0.1%***	1.2 %	16.6	0.0 %***	0.61%	13.5 %	1.2%	16.6	0.0%***
4	Pure insurance company	1.23%	0 % ***	1.0 %	13.1	0.0%***	0.23%	51.6 %	1.0%	13.1	8.8 % ***
5	Pure insurance company	-0.86 %	29.1%	14.2%	206.0	0.0%***	-2.83 %	в я %***	14.2 %	206.0	0 JI % ***
6	Pure insurance company	0.42 %	116%	0.1%	2.1	12.4 %	-1.07%	в я %***	0.1%	2.1	12.4%
7	Pure insurance company	0.17%	42.8 %	0.4%	6.1	0.2%***	-0.82 %	в я %***	0.4%	6.1	8.2 % ***
8	Pure insurance company	0.20%	29.5 %	0.5 %	7.1	0.1%***	-1.29 %	в я %***	0.5%	7.1	0.1%***
9	Pure insurance company	0.22%	19.7%	8 8 8	8.0	0.0%***	-2.26 %	в я %***	0.6%	8.0	0 JI % ***
10	Pure insurance company	0.23%	16.2 %	0.5 %	7.4	0.1%***	-2.24 %	вя%***	0.5%	7.4	0.1%***
11	Pure insurance company	0.15%	38.3 %	0.7%	9.4	0.0 %***	-1.84 %	вя%***	0.7%	9.4	0.0 % ***
12	Insurance company linked to a retail bank	0.25%	18.1%	0.1%	2.2	11.5 %	-0.74 %	вя%***	0.1%	2.2	11.5%
13	Insurance company linked to a retail bank	0.33%	0.0%***	0.0 %	1.6	20.4%	-2.63 %	вя%***	0.0%	1.6	20.4%
14	Insurance company linked to a retail bank	0.26%	17.8 %	0.1%	2.2	11.5 %	-1.24 %	вя%***	0.1%	2.2	11.5%
15	Insurance company linked to a retail bank	0.45%	3 2 %**	8 B B	1.2	31.0%	-0.55 %	0.9%***	0.0%	1.2	31.0%
16	Insurance company linked to a retail bank	0.25%	18.9 %	0.1%	2.2	11.5 %	-0.10 %	59 JI %	0.1%	2.2	11.5%
17	Insurance company linked to a retail bank	0.33%	0.0%***	0.1%	1.7	18.7%	-2.63 %	вл≪***	0.1%	1.7	18.7%
18	Insurance company linked to a retail bank	0.27%	15.5 %	8 B B	1.3	27.1%	-0.73 %	вл≪***	0.0%	1.3	27.1%
19	Insurance company linked to a retail bank	0.25%	18.6 %	0.1%	2.2	11.5 %	-1.24 %	вл≪***	0.1%	2.2	11.5%
20	Insurance company linked to a retail bank	0.26%	17.0%	8 B B	1.3	26.5 %	-2.70 %	вл≪***	0.0%	1.3	26.5%
21	Insurance company linked to a retail bank	0.27%	15.4%	8 B B	1.3	27.5 %	-2.69 %	вл≪***	0.0%	1.3	27.5%
22	Insurance company linked to a retail bank	0.15%	42.5 %	0.0%	1.3	26.3 %	-0.64%	0.1%***	0.0%	1.3	26.3%
23	Insurance company linked to a retail bank	0.28%	0.2 %***	0.0%	1.6	20.4%	-1.71%	0.0%***	0.0%	1.6	20.4%
24	Insurance company linked to a retail bank	0.13%	49.1%	0.0 %	1.3	28.3 %	41.55 %	0.4%***	8.8%	1.3	28.3%
25	Insurance company linked to a retail bank	0.11%	56.4%	0.0%	1.5	21.5 %	-1.38 %	0.0%***	0.0%	1.5	21.5%
26	Insurance company linked to a retail bank	-0.19 %	0.0%***	0.1%	0.1	88.6%	-3.14 %	0.0%***	-0.1%	0.1	88.6%
27	Insurance company linked to a retail bank	0.03%	87.1%	0.1%	2.2	11.4%	-1.46 %	0.0%***	0.1%	2.2	11.4%
28	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,641.3	n n %***	-2.77%	0.0%***	86.1%	7,641.3	0.0%***
29	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,641.0	8 JI %***	-2.53 %	вл≪***	86.1%	7,641.0	0.0 % ***
30	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,640.7	өл%***	-2.09 %	пл≪***	86.1%	7,640.7	0.0%***
31	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,640.1	n n %***	-2.28 %	0.0%***	86.1%	7,640.0	0.0%***
32	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,6 42 6	өл%***	-3.25 %	пл≪***	86.1%	7,642.5	0.0%***
33	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,6 44 .4	n n %***	-4.60 %	0.0%***	86.1%	7,644.3	0.0%***
34	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,6 44 2	n n %***	-4.22 %	0.0%***	86.1%	7,644.1	0.0%***
35	Insurance company linked to a retail bank	-1.30 %	0.0%***	86.1%	7,6 42 9	n n %***	-3.74%	0.0%***	86.1%	7,642.8	0.0%***
36	Insurance company linked to a retail bank	121%	0.0%***	43.6%	955.5	n n %***	0.20%	45.8 %	43.6%	955.5	0.0%***
37	Insurance company linked to a retail bank	-1.32 %	0.0%***	86.1%	7,640.0	өл%***	-2.25 %	пл≪***	86.1%	7,640.0	0.0%***
38	Insurance company linked to a retail bank	-1.28 %	0.0%***	75.5%	3,795.1	пл%***	-1.97%	0.0%***	75.5%	3,795.1	8.8 % ***
39	Insurance company linked to a retail bank	0.36%	1.6 %***	0.1%	2.1	12.3 %	-2.61%	0.0%***	0.1%	2.1	12.3%
40	Insurance company linked to a retail bank	0.34%	2 2 %**	0.1%	2.1	11.9 %	-0.65 %	BB%***	0.1%	2.1	11.9%
41	Insurance company linked to a retail bank	0.35%	2.0%**	0.1%	2.1	11.8 %	-1.64 %	8 B %***	0.1%	2.1	11.8%

Source: Elaborated by the authors, Level of significance: 1% *** 1% ** 9%

 ${\bf Table\ 19:\ Jensen's\ alpha\ analysis\ for\ conservative\ funds\ part\ 2.}$

			Total returns of	conservative fi	inds			Net returns of	conservative fu	nds	
Number	Type of institution	Alpha (annualized)	P-value (Alpha)	Adjusted R2	F-Stat	P-value(F-Stat)	Alpha (annualized)	P-value (Alpha)	Adjusted R2	F-Stat	P-value(F-Stat
42	Insurance company linked to a retail bank	0.31%	9.9%*	0.0%	0.6	55.4 %	-0.69 %	0.0%***	0.0 %	59.1%	55.4%
43	Insurance company linked to a retail bank	0.32 %	9.6%*	0.0%	0.6	55.3 %	-1.43 %	ол≪***	0.0%	59.3 %	55.3%
44	Insurance company linked to a retail bank	0.33 %	8.6%*	0.0%	0.6	55.4 %	-1.86 %	пл≪***	0.0%	59 ∄ %	55.4%
45	Insurance company linked to a retail bank	0.22 %	2 %**	-0.1%	0.3	72.8 %	-0.78 %	пл≪***	-0.1%	31.7%	72.8%
46	Insurance company linked to a retail bank	0.34%	7.4%*	0.0%	0.6	55.8 %	-2.82 %	пл%***	0.0%	58.4 %	55.8%
47	Insurance company linked to a retail bank	0.23 %	20.9 %	0.0%	0.9	39.9 %	0.75 %	8.8 %***	0.0%	91.9 %	39.9%
48	Insurance company linked to a retail bank	0.32 %	8.8%*	0.0%	0.6	55.4 %	-2.45 %	пл%***	0.0%	59.1%	55.4%
49	Insurance company linked to a retail bank	0.30 %	11.2 %	0.0%	0.6	55.1 %	-0.60 %	0.2%***	0.0%	59 6 %	55.1%
50	Insurance company linked to a retail bank	0.33 %	6.2%*	0.0%	0.8	45.5 %	-0.05 %	79 JJ %	0.0%	78.8 %	45.5%
51	Insurance company linked to a retail bank	0.23 %	21.2 %	0.0%	1.5	22.7%	-3.22 %	в в %***	0.0%	148.5 %	22.7%
52	Insurance company linked to a retail bank	-0.02%	88.3 %	0.0%	0.7	50.7%	-0.52 %	0.1%***	0.0%	68 JI %	50.7%
53	Insurance company linked to a retail bank	0.22 %	22.7%	0.0%	1.5	22.7%	-1.76 %	пл≪***	0.0%	148.2 %	22.7%
54	Insurance company linked to a retail bank	0.36 %	1.2 % **	-0.1%	0.1	94.8 %	-0.89 %	пл≪***	41.1%	5.4%	94.8%
55	Insurance company linked to a retail bank	0.21%	31.0%	0.0%	0.6	52.9 %	-1.28 %	0.0%***	0.0%	63.6 %	52.9%
56	Insurance company linked to a retail bank	0.21%	25.9 %	0.0%	1.3	28.1 %	-1.28 %	0.0%***	0.0%	127.1%	28.1%
57	Insurance company linked to a retail bank	0.21%	27.1%	0.0%	1.3	28.2 %	-0.79 %	0.0%***	0.0%	126.6 %	28.2%
58	Insurance company linked to a retail bank	0.11%	45.6 %	0.0%	0.7	50.2 %	-0.89 %	0.0%***	0.0%	68.9 %	50.2%
59	Insurance company linked to a retail bank	-1.28%	4%**	10.5%	145.4	0%***	-2.09 %	0.0%***	10.5%	14539.0%	
60	Insurance company linked to a retail bank	0.18 %	33.1%	0.0%	1.3	28.4%	-0.32 %	8.8%	0.0%	126.0%	28.4%
61	Insurance company linked to a retail bank	0.16%	40.3 %	0.0%	1.0	36.0 %	-0.74%	0.0%***	0.0%	102.3 %	36.0%
						8%***		0.4%***			
62 63	Insurance company linked to a retail bank	-1.01%	10.4 %	22.0% 0.0%	350.1	33.2 %	-1.80 %	0.4%***	22.0% 0.0%	35006.1%	
64	Insurance company linked to a retail bank	-0.11% -0.22%	54.6 % 22.2 %	0.0%	1.1	20.3 %	-1.09 % -2.69 %	0.0%***	0.0%	159.5%	33.2% 20.3%
	Insurance company linked to a retail bank										
65	Insurance company linked to a retail bank	-1.55%	10.6 %	0.8%	10.7	8%***	-3.31 %	0.1%***	0.8%	1865.5%	0.0%***
66	Insurance company linked to a retail bank	0.19 %	31.2 %	0.3%	4.6	1%***	-2.77%	0.0%***	0.3 %	456.6%	1.0%***
67	Insurance company linked to a retail bank	0.07%	71.3 %	0.3%	4.3	1.4%**	-1.17%	0.0%***	0.3 %	426.5 %	1.4%**
68	Insurance company linked to a retail bank	0.13 %	51.1%	0.3%	4.5	1.1%**	-1.86 %	0.0%***	0.3 %	451.3 %	1.1%**
69	Insurance company linked to a retail bank	0.19 %	31.8 %	0.3%	4.3	1.3 % **	-1.30 %	0.0%***	0.3 %	434.7%	1.3 % **
70	Insurance company linked to a retail bank	0.06%	77.3 %	0.2%	3.3	3.5%**	-2.90 %	ол≪***	0.2 %	334.4%	3.5 % **
71	Insurance company linked to a retail bank	86.8	61.0 %	0.0%	1.4	25.3 %	-2.12 %	20.2 %	8.0.0	137.5%	25.3%
72	Insurance company linked to a retail bank	2.27%	15 2 %	4.0 %	51.9	8%***	1.56%	32.5 %	4.0 %	5185.1%	0.0 % ***
73	Insurance company linked to a retail bank	1,60 %	28.7%	4.0%	52.1	0 % * * *	-0.21 %	88.9 %	4.0 %	5214.0%	*** 20.0
74	Insurance company linked to a retail bank	0.17%	39.8 %	0.2%	3.2	4%**	-2.79 %	0.0%***	0.2 %	321.5%	4.0 % **
75	Insurance company linked to a retail bank	0.18 %	37.9 %	0.2%	3.1	4.4%**	-1.80 %	в в %***	0.2 %	3 12 3 %	4.4%**
76	Insurance company linked to a retail bank	-1.00%	0 % ***	0.3%	5.2	0.6%***	-3.45 %	0.0 %***	0.3 %	518.1%	8.6%***
77	Insurance company linked to a retail bank	0.18 %	32.9 %	0.3%	4.3	1.4%**	-0.81%	пл≪***	0.3 %	430.8 %	1.4%**
78	Insurance company linked to a retail bank	0.18 %	37.6 %	0.2%	3.0	5.1%*	-1.02 %	8.8 %***	0.2 %	298 ₪ %	5.1%*
79	Insurance company linked to a retail bank	0.18 %	38.4 %	0.2%	3.0	4.9 % **	-0.72 %	8.8 %***	0.2 %	3 02 .4 %	4.9 % **
80	Insurance company linked to a retail bank	0.18 %	33.6 %	0.3%	4.3	1.3%**	-1.80 %	ол≪***	0.3 %	431.8 %	1.3%**
81	Insurance company linked to a retail bank	0.17%	41.9 %	0.2%	3.1	4.5 % **	-2.80 %	ол≪***	0.2 %	310.3%	4.5 % **
82	Insurance company linked to a retail bank	-0.31%	11.8%	0.2%	3.3	3.6%**	-0.91%	ол≪***	0.2 %	331.9%	3.6%**
83	Insurance company linked to a retail bank	0.19 %	36.9 %	0.2%	3.1	4.6 % **	-2.97%	пл%***	0.2 %	3872%	4.6 % **
84	Insurance company linked to a retail bank	0.12 %	60.9 %	0.2%	2.9	5.4%*	-0.78 %	0.1%***	0.2 %	293.0%	5.4%*

Source: Elaborated by the authors. Level of significance: 1% *** 1% ** 10%*

Table 20: Jensen's alpha analysis for aggressive funds.

			Total returns o	f aggressive fu	nds			Net returns o	f aggressive fun	ıds	
Number	Type of institution	Alpha (annualized)	P-value (Alpha)	Adjusted R2	F-Stat	P-value (F-Stat)	Alpha (annualized)	P-value (Alpha)	Adjusted R2	F-Stat	P-value(F-Stat
1	Pure insurance company	-3.90 %	0.2 %***	83.3%	2,057.1	0.0%***	-5.57%	0.0%***	83.3%	2,057.1	0.0%***
2	Pure insurance company	-1.48 %	33.9 %	86.7%	2,683.3	n n %***	-3.43 %	2.5 % **	86.7%	2,683,3	0.0%***
3	Pure insurance company	-1.38 %	* № 8.	68.4%	892.6	0.0 %***	-3.09 %	пл%***	68.4%	892.6	0 JI % ***
4	Pure insurance company	-4.29 %	0.4%***	8 7.4%	2,863.5	0.0 %***	-5.95 %	пл≪***	8 7.4%	2,863.5	0.0%***
5	Pure insurance company	-1.58 %	30.6%	86.7%	2,692.2	0.0 %***	-4.49 %	0.3%***	86.7%	2 692 2	0.0%***
6	Pure insurance company	-0.18 %	57.0%	85,3%	2,396.5	0.0 %***	-1.17%	пл≪***	85.3%	2,396.5	өл≪***
7	Pure insurance company	-1.97%	0.0%***	58.9%	590.9	0.0 %***	-3.67%	ол≪***	58.9%	590.9	0.0%***
8	Pure insurance company	1.64%	16%**	0.4%	2.5	2.2%**	0.23%	73 .7 %	0.4%	2.5	2.2%**
9	Pure insurance company	1.81%	3 9 %**	0.0%	0.9	47.0 %	40.11%	89.7%	0.0%	0.9	47.0%
10	Pure insurance company	0.42%	87.8%	2.1%	9.9	0.0 %***	-2.15 %	42.9 %	2.1%	9.9	0%***
11	Pure insurance company	-0.01%	99.2 %	5.3 %	23.8	0.0 %***	-2.00 %	16.8 %	5.3%	23.8	0%***
12	Pure insurance company	-0.33 %	93.6%	5.3 %	24.1	0.0 %***	-2.79 %	49.7%	5.3%	24.1	8%***
13	Pure insurance company	-1.06 %	53.0%	82.3%	1,908.4	0.0 %***	-3.02 %	7.1%*	82.3%	1,988.4	8%***
14	Pure insurance company	-1.27%	45.2 %	82.3%	1,916.8	0.0 %***	-2.25 %	18 JI %	82.3%	1,916.8	8%***
15	Insurance company linked to a retail bank	2.09%	48.0 %	4.4%	20.1	0.0 %***	-0.93 %	75 .1 %	4.4%	20.1	8%***
16	Insurance company linked to a retail bank	-0.12 %	975%	4.3 %	19.5	0.0 %***	-2.09 %	57.7%	4.3%	19.5	8%***
17	Insurance company linked to a retail bank	0.06%	98.8%	4.1%	18.6	0.0 %***	-2.90 %	44.2 %	4.1%	18.6	8%***
18	Insurance company linked to a retail bank	-2.42 %	6.1%*	80.9%	1,744.4	0.0 %***	-4.36 %	0.1%***	80.9%	1,744.4	8%***
19	Insurance company linked to a retail bank	-3.40 %	1.5 %**	81.9%	1,859.9	0.0 %***	-5.31%	0 % ***	81.9%	1,859.9	8%***
20	Insurance company linked to a retail bank	-6.47%	0.0%***	91.9%	4,661.0	0.0 %***	-8.32 %	B % ***	91.9%	4,661.0	8%***
21	Insurance company linked to a retail bank	-5.87%	0.0%***	91.3%	4,320.0	0.0 %***	-7.73 %	0 % ***	91.3%	4,320.0	0%***
22	Insurance company linked to a retail bank	-1.50 %	19.2 %	89.1%	3,366 J	n n %***	-3.45 %	0.2 %***	89.1%	3,366.0	8%***
23	Insurance company linked to a retail bank	-1.50 %	19.2 %	89.1%	3,366.2	n n %***	-4.41 %	n % ** *	89.1%	3,366.2	8%***
24	Insurance company linked to a retail bank	-1.42 %	0.0%***	66.5%	816.4	n n %***	-1.82 %	n % ** *	66.5%	816.4	8%***
25	Insurance company linked to a retail bank	0.74%	84.7%	3.1%	14.3	0.0%***	-2.24 %	55 £ %	3.1%	14.3	8%***
26	Insurance company linked to a retail bank	-0.85 %	47.0%	73.4%	1,135.0	0.0 %***	-1.10 %	35 Ji %	73.4%	1,135.0	0%***
27	Insurance company linked to a retail bank	0.58%	71.4%	85.5%	2,418.0	0.0%***	-0.67%	67.1%	85.5%	2,418.0	8%***
28	Insurance company linked to a retail bank	-0.55 %	47.1%	95.7%	9,071.0	0.0%***	-2.33 %	0.2%***	95.7%	9,071.0	0%***
29	Insurance company linked to a retail bank	0.14%	85.4%	64.0%	732.5	0.0 %***	-0.36 %	64.0 %	64.0%	73 2 .5	8%***
30	Insurance company linked to a retail bank	-0.66 %	39.5 %	95.6%	8,918.3	0.0%***	-3.59 %	0%***	95.6%	8,918.3	8%***
31	Insurance company linked to a retail bank	-0.62 %	41.9 %	95.6%	8,869.3	0.0%***	-4.52 %	0%***	95.6%	8,869.3	8%***
32	Insurance company linked to a retail bank	-0.74%	33.5 %	95.6%	9,033.5	8.8 %***	-3.19 %	056***	95.6%	9,033,5	8%***
33	Insurance company linked to a retail bank	-1.79 %	5.1%*	94.9%	7,716.8	0.0%***	-3.01%	0.1%***	94.9%	7,716.8	0%***
34	Insurance company linked to a retail bank	-0.23 %	10.1%	3 7.1%	243.5	0.0%***	-1.13 %	0%***	3 7.1%	243.5	0%***
35	Insurance company linked to a retail bank	-0.55 %	35.1%	95.5%	8,710.8	0.0%***	-3.97%	0%***	95.5%	8,710.8	0%***
36	Insurance company linked to a retail bank	-2.98 %	0.3 %***	91.3%	4,318.4	0.0%***	-4.18 %	0%***	91.3%	4,318.4	0%***
37	Insurance company linked to a retail bank	-0.79 %	38.3%	95.5%	8,810.4	8.8 %***	-1.29 %	9.3%*	95.5%	8,810.4	8%***
38	Insurance company linked to a retail bank	0.04%	85.6%	65.2%	772.2	0.0%***	-0.81%	0%***	65.2%	772.2	8%***
39	Insurance company linked to a retail bank	0.73%	65.6%	84.8%	2,300.9	0.0%***	-1.27%	43.2 %	84.8%	2,300.9	8%***
40	Insurance company linked to a retail bank	-0.38 %	82.9 %	82.7%	1,9 74.6	8.8 %***	-1.87%	28.8 %	82.7%	1,974.6	8%***
41	Insurance company linked to a retail bank	-1.92 %	12.9 %	8 7.5 %	2,878.4	0.0%***	-3.86 %	0.2%***	8 7.5 %	2,878.4	0%***
42	Insurance company linked to a retail bank	-1.01%	44.4%	8 7.4%	2,850.9	0.0 %***	-2.97%	2.3 % **	8 7.4%	2,850.9	0%***
43	Insurance company linked to a retail bank	-0.25 %	0.0%***	2.3 %	10.8	0.0 %***	-0.94%	056***	2.3%	10.8	0%***
44	Insurance company linked to a retail bank	3.44%	5%**	40.8%	284.4	0.0 %***	0.38%	82.5 %	40.8%	28 4.4	0%***
45	Insurance company linked to a retail bank	3.43%	5.1%*	48.8%	284.5	B B %***	1.38%	42.7%	40.8%	28 4.5	0%***
46	Insurance company linked to a retail bank	-0.54%	70.4%	85.6%	2,442.1	n n %***	-2.02 %	15.2 %	85.6%	2,442.1	0%***
47	Insurance company linked to a retail bank	-1.00 %	48.6%	85.6%	2.446.3	0.0%***	-2.96 %	3.7%**	85.6%	2 4 46 3	0%***

Source: Elaborated by the authors. Level of significance: 150 *** 550 ** 1000 *