Focus on...

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How French Institutional investors have invested over the last ten years?

Introduction

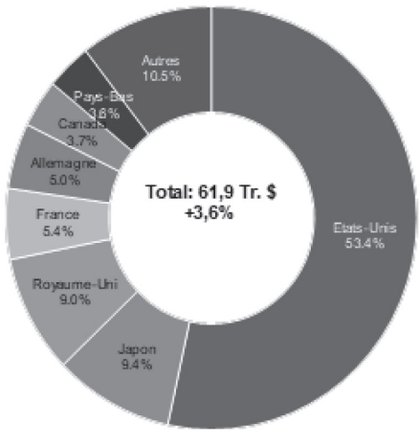
Institutional holdings have a major impact on national economies and global financial markets. Their amounts and their stability have a tremendous effect on the financing of firms and states alike. The preferences of institutionals weight on markets valuations and are tracked by many market participants, investment banks who issue securities for their clients and asset managers who manage specialized portfolios. Real assets allocations have grown over the last decade on both sides of the Atlantic, but may cause challenges on liquidity or simply knowledge for some investors. Moreover the influence of regulation may prove to be critical to these holdings. It is therefore particularly interesting to know and follow the asset allocation of institutional investors.

Literature on actual asset allocation of institutional investors is quite limited. Industry data bases are too rare to allow empirical work. Mutual fund management and efficiency is much more researched because many data bases have been build in the major developed markets. OECD gathers annually since 2009 national data on pensions and provides useful informations on average allocations per country. Yet their formats correspond to national frameworks that are not standardized. Recently J. Hooke and K. Yook (2018) analyzed the asset allocation of US public defined benefit pension funds and their evolutions since the beginning of the century. The shift towards alternative assets is quite dramatic and has accelerated after the great crisis. L.Santacruz (2016) looks at the methods used by Australian investors to build their asset allocations and shows that despite their knowledge of H. Markowitz optimization they are not really using it . M Papaioannou and al. showed that US institutional investors tend to behave pro cyclicly, notability during the crisis, which they consider not being the most effective way over the long run. But most of the literature is indeed describing what investors should do or should no do. Very few studies refer to what they actually do. Since Kahneman, we know some of the biases humans may have, that they do not necessarily behave rationally and there is ample empirical evidence that their financial decisions are prone to some of these biases. M. Statman (2018) has made many researches in the field of portfolio management and now considers "normal investors" instead of rational ones.

In a quite unique survey, Af2i, the French Institutional Investors Association, tracks asset allocation of its members since almost 20 years. A database covers the last ten years and enables to look in depth at the differences between nine different investors categories and sizes, providing a rare tool to analyse structural and temporal evolutions of the investment behavior of these large players. French market size is estimated to be around 3.2 bn euros at the end of 2018, the fourth market globally behind USA, Japan and the UK. See Graph 1.

The goal of this article is to analyse the main differences in asset allocations between categories of investors and their sizes between end of 2009 and end of 2018, a post crisis ten year period. Drawing on the outcomes of the survey, we will look at the evolutions of the average

Graph 1.



Source : OCDE

allocations and their dispersions. We want to check wether different liabilities influence the portfolio composition and if larger entities hold different proportions of asset classes than smaller ones.

We also will look at the changes in asset allocations during the last ten years, thus after the great crisis. In particular we will investigate the consequences of new regulation put in place, specifically Solvency 2, and the impact of the very loose monetary policy of the ECB.

The first section presents the French institutional market and the Af2i survey. The following section shows the asset allocation evolutions. The third one analyses the structural differences between the categories of investors and their sizes. The fourth section focuses on various noticeable evolutions during the period and the last one concludesj

I. French Institutional market and the Af2i survey

The French market has grown in size over the years thanks to a high saving rate among French people. The total amount estimate is 3.2 trillions € in market value and is dominated by insurers. Compared to other markets, it ranks second to the UK market in Europe. Most assets are managed under Solvency 2 regulation, making in French Insurance market one of the largest in terms of investments in Europe, and number two in relative terms to Malta where Insurance businesses dominate also the institutional landscape, but of course with much lower in amounts. On the other hand the French pension market is very small compared to GDP and to other European markets. In relative terms, it is the lowest in Europe.

Af2i was created 18 years ago to represent institutional investors interests to the market and to the French authorities. It developed a number of services for its members who are the asset owning institutions. Guides and workshops help provide the necessary information to institutional investors on various topics like asset classes, e.g. Private Equity, Investment vehicules, e.g. ETF, reporting, e.g. Article 173 reports, etc. Since the early days a survey was proposed to the members to know about their holdings, predominantly the asset allocation of their portfolios, benchmark them against peers and to know their requests as far as asset management is concerned. The answers of the survey are stored in a database since 2010, with the first data corresponding to the year end of 2009.

There are presently 82 members belonging to the association and 61 answered to the survey in 2019. The numbers have grown over the past and have stabilized, despite the concentration in the sector, to about three quarters of the members, which is quite large compared to other surveys. In term of amounts, 2100 bn € were reported in the last survey which account to roughly two third of the total size of the French institutional market. Table 1 below describes, for the 2019 survey, the breakdown in nine categories : three sizes (under 2 bn € ; between 2 and 20bn € ; above 20 bn €) and three type of institutions : insurers, pensions, others. As one can see the nine segments are sufficiently populated and have also been over the past, albeit with less respondents at the beginning of the period.

A few explanations may be useful to the non French readers. As many countries, France has specificities that have had a great influence on the shape of the institutional landscape. The first to be recalled, is that the pension

Table 1. Distribution of members and assets of AF2I survey

	Number of respondents	Average of assets possessed (M€)	Total of assets possessed (M€)	Part of assets possessed	Less than 2 Md€	From 2 to 20 Md€	More than 20 Md€
Pensions and providence	19	10 191	193 623	8,90%	5	11	3
Insurance companies	34	49 503	1 683 117	80,60%	6	11	17
Long term provisions	8	28 451	227 611	10,50%	3	2	3
TOTAL	61	34 498	2 104 351	100,00%	14	24	23

framework is predominantly pay as you go. It was a State decision made after WW2 to create a welfare system for French citizens and the pension system is part of it. The 42 schemes, that the Macron government wants now to reform, that were put in place then are almost all pay as you go. So first and second pillars pensions are almost not funded. That is the reason why the amounts invested by these institutions are so low compared to the Netherlands or the UK.

French people tend to be good savers with a saving rate around 15%. But they tend to favor products they understand, which we cannot blame them for. They thus have piled money into real estate, banking products, the "livret A" being the most popular, and in insurance products offering a guarantee on their invested capital. The "contrat en €" with more than 1.2 trillions € is a good example of such products. This life insurance product enables to save with a yearly bonus and a yearly guarantee on the accumulated wealth.

II. Asset allocations and their evolutions

This section presents the evolutions of main asset allocation items starting with equities, then analysis of interest rates instruments and finally looks at the development of alternative assets.

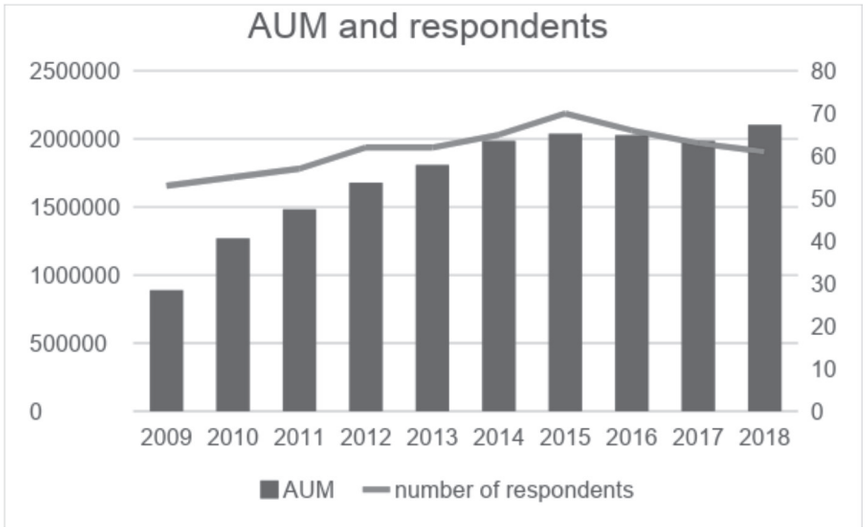
Graph 2 shows the evolutions of the number of respondents to the survey and the amount of assets, marked to market at year ends, as in the rest of the article. If a group respondent has several activities, it should split its portfolio into parts corresponding to the three categories. As can be seen, assets are growing thanks to more respondents, favorable pricing trends and inflows by the respondents.

Graph 3 depicts the time evolutions of the average equity allocations of the three types of institutions, along with the average of all categories weighted by the assets. The insurers are clearly the less exposed to equities, around 9% of their portfolios on average, and their allocations seem to decline somewhat over the period. We should analyse in the last section if this may be related to the enforcement of Solvency 2. The two other types of institutions tend to have much larger exposures to stocks, more than 20% and these allocations tend to drift over time specially for long term provisions. Their country sub allocations are quite stable, more than 75% in Eurozone markets, about 9% in the rest of European markets, 10% in US market and the rest in Japan (2%) and emerging markets (3%). The average over categories of institutions is dragged down given the size of the insurers portfolios.

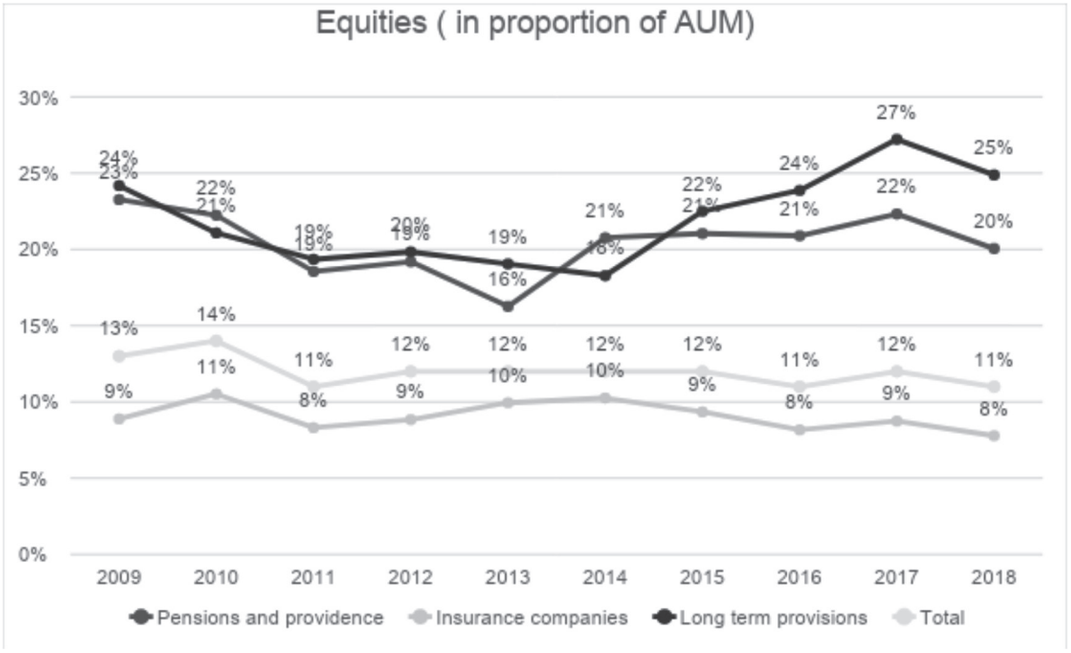
Graph 3

Allocations to bonds are much larger, as can be seen in Graph 4 where the time evolution of the average bond allocation is presented. Mirroring what was shown on equities, insurers allocations are larger than the others. It is largely because they need to guarantee the capital on the "euro contract" and also because of the capital charge imposed by Solvency 2. But there are probably some tactical element that we shall consider in the last section. But certainly the most striking feature on this evolution is the remarkable stability of the allocation, between 69% at the beginning of the period and 72.5% in the middle of the period. This can be interpreted by the liability driven approach most French investors follow. Given these liabilities don't evolved much over a decade the bond allocation don't move that much, specifically insurers allocation which weight more than the others on the average. This stability has a great advantage to the the economy that can rely on a constant financing stream from the institutional investors.

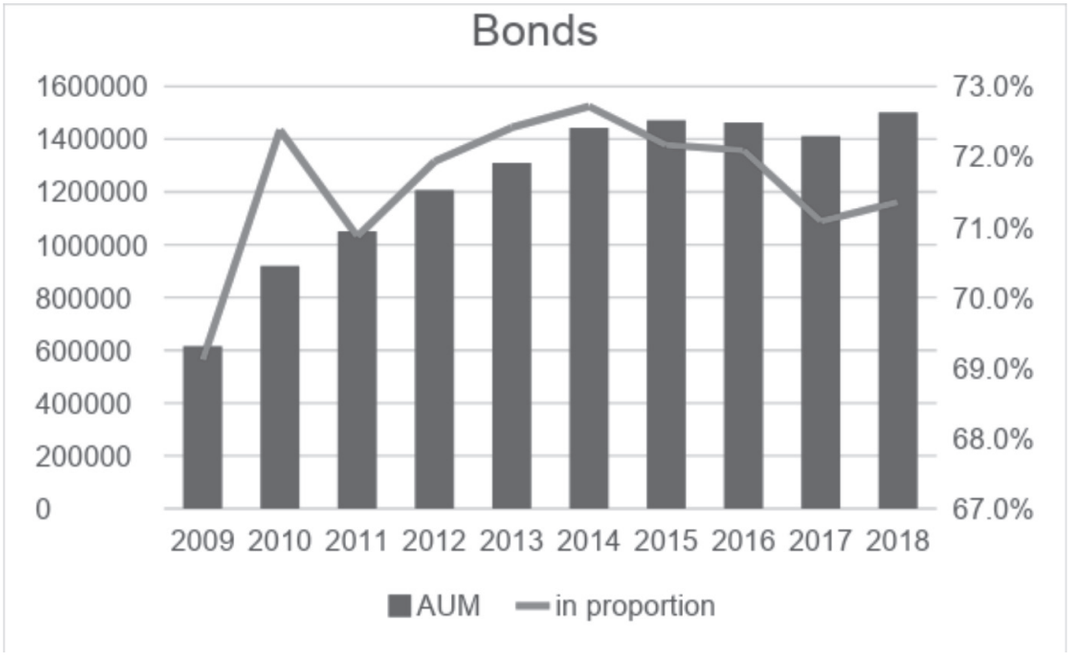
Graph 2.



Graph 3.

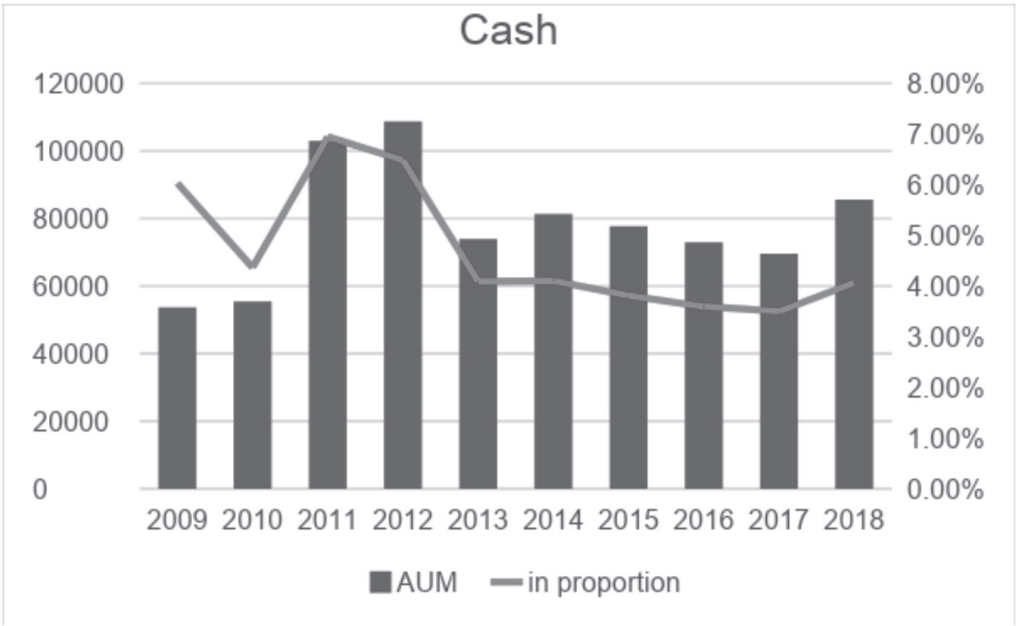


Graph 4.



Average cash holdings are presented in Graph 5 and fluctuated around 4% over the period. At the beginning, due to the consequences of the great crisis, liquidity was quite limited. The euro debt crisis pushed a number of investors to increase their cash holdings which went down afterwards given the ultra loose monetary policy of the ECB. Cash increases again at the end of the period probably because the long term rates and prospects of

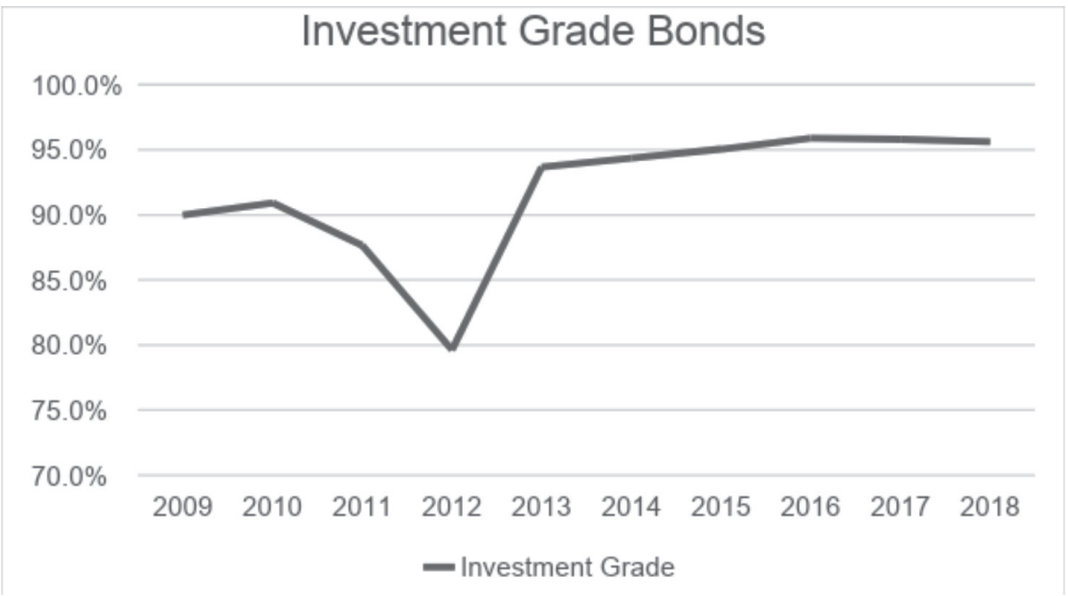
Graph 5.



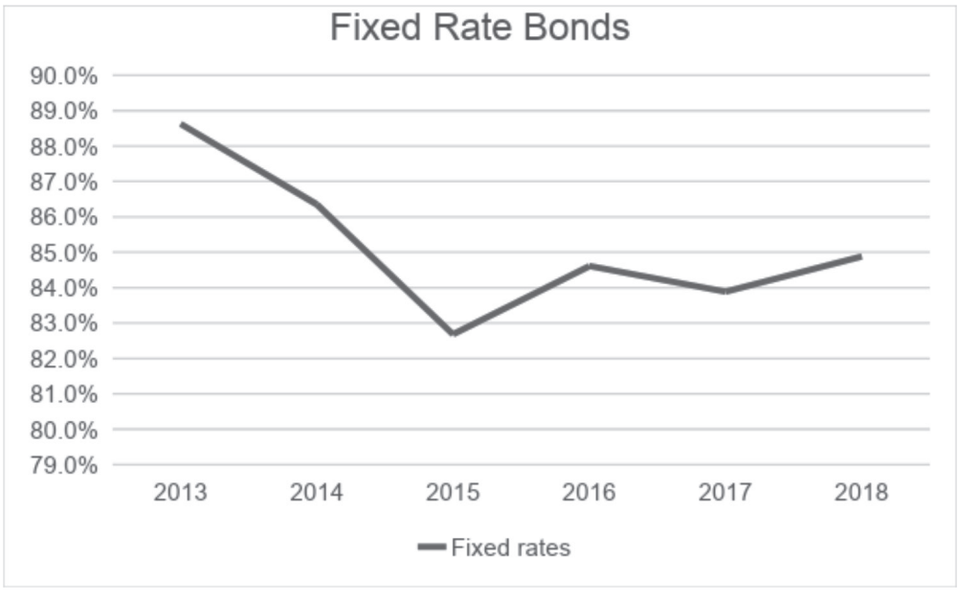
their evolutions have deterred investors to take interest rate risk, or because they hold cash in waiting for an allocation to alternative assets.

Given the large exposure to bonds, it is useful to analyse the content of the portfolios in term of credit quality, type and maturity of the bonds held. Graph 6 shows that more than three quarter of the liquid bond portfolio is investment grade. The spike in non investment grade in late 2012 rapidly disappeared and investment grade allocation went up to slightly more than 95% at the end of the period. Bonds held are predominantly fixed rate (more than 80% as the Graph 7 shows) but ECB monetary policy has had a visible impact. This is also clear on Graph 8 that shows the average maturities of these bonds. Although they remain quite stable there is a downward trend at the end of the period.

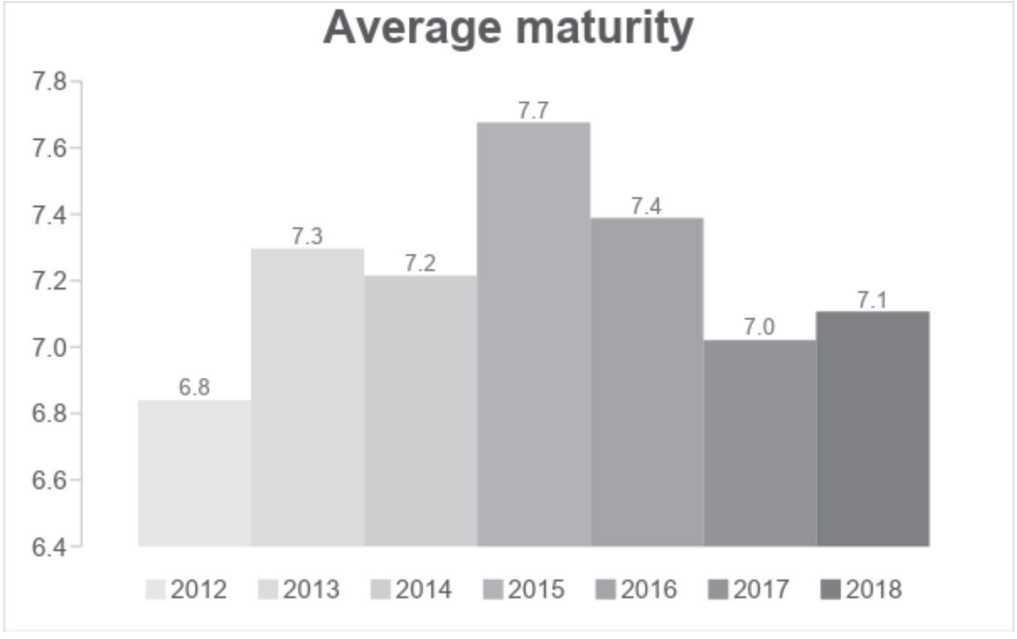
Graph 6.



Graph 7.



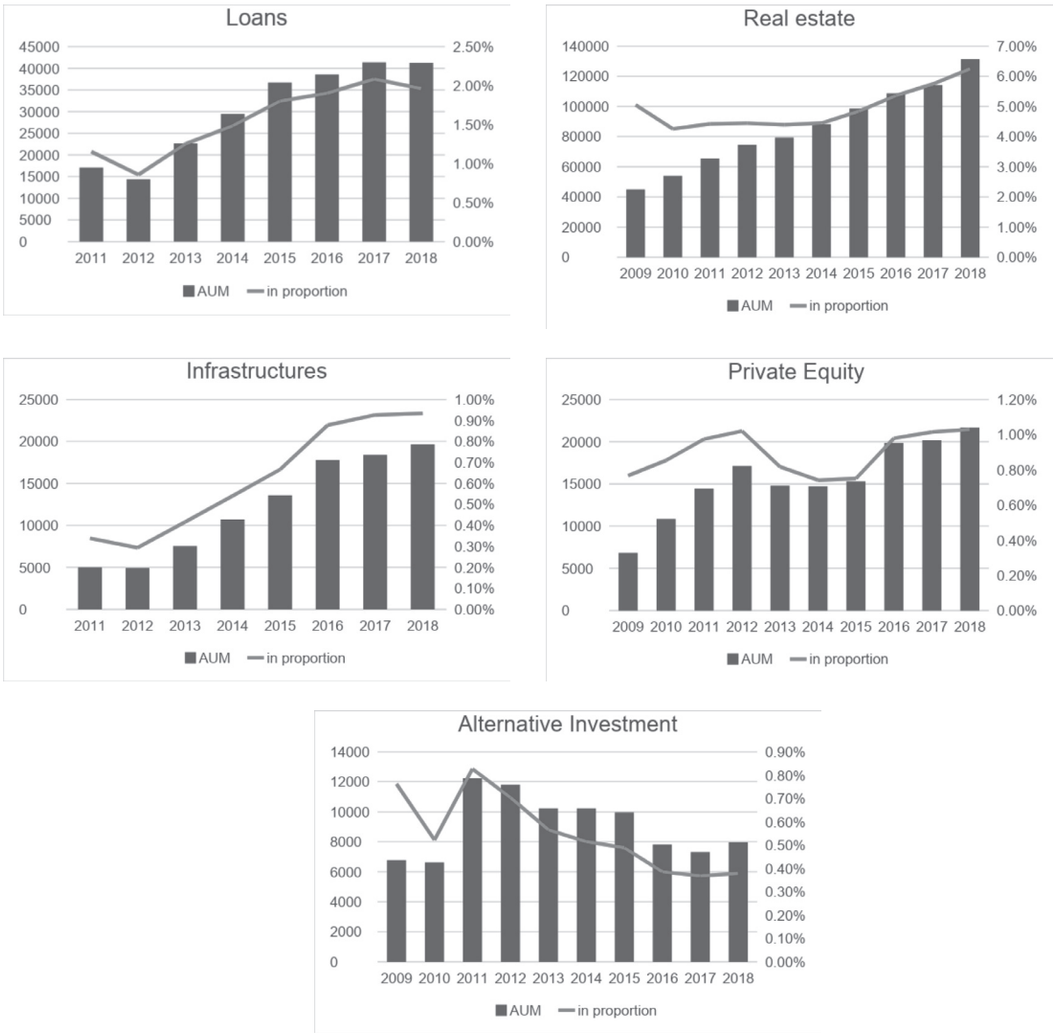
Graph 8.



The remaining part of the portfolios are invested in alternative assets. The evolutions of holdings in Private Debt, Real Estate, Infrastructure, Private Equity and Hedge Funds are shown in Graph 9.

They are increasing quite sharply for the first three whereas they tend to fluctuate for PE and decrease for hedge funds. The latest movement is probably linked to the bad reputation of hedge funds after the crisis. PE exposures have probably suffered after the crisis but have recovered recently on a more positive trend. The total exposures to alternative assets have risen from 8% to 10,5% which indicates more appetite for yield and risks but remains quite a long way from other foreign institutions also buying into the Eurozone.

Graph 9.



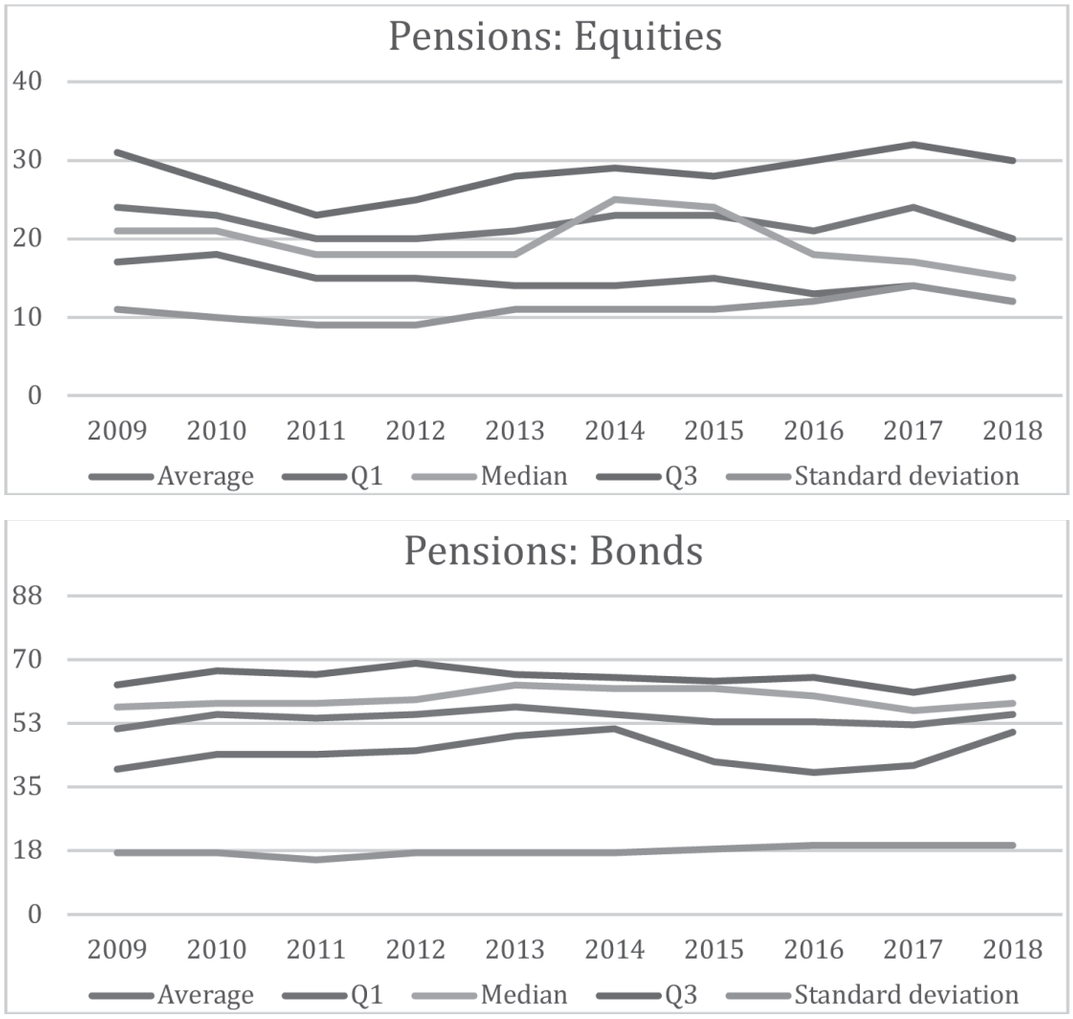
III. Critical differences between institutions

Are differences between portfolios linked to the nature of entities or to their size is what we would like to look here. Insurers and pensions categories are rather homogeneous in their activities whereas the third category is more diverse, since it encompasses government bodies, corporates and institutions with a great variety of horizons. We shall thus only discuss the results for he first two categories. We choose to look first at the time evolution of the main components of their portfolio, stocks and bonds, by categories of institutions. In each case we shall consider the median, first and third quartiles and the standard deviations. Then we shall analyse the dispersion of asset allocation with the size, for insurers and pensions.

Let us start with the evolution of the distribution of asset allocations within pensions. Graph 10a presents their equity allocation during the period and 10b their bond allocations. Average equity allocation fluctuated around 20% .Standard deviation are around 10% for equities and 20% for bonds. The spread between Q3 and Q1 tends to grow over time for equities showings the investment policies have been quite different from one institution to another. Conversely the spread between Q3 and Q1 for bonds have reduced.

Graph 11a and b shows the equivalent asset allocation evolutions for insurers. The allocations to stocks are much lower than for pensions, around 9% with a tendency to decline. Standard deviations are also much lower between 4 and 6% over the period. Accordingly the spread between Q3 and Q1 is quite small, a little 4% and tends to reduce slightly over time. As far as bonds are concerned, average allocation is remarkably stable at

Graph 10.



70% and the standard deviations are ranging between a little less than 20% at the beginning of the period and 10% at the end. Despite the large size of their portfolios it thus seems that insurers tend to have more common asset allocations than pension funds.

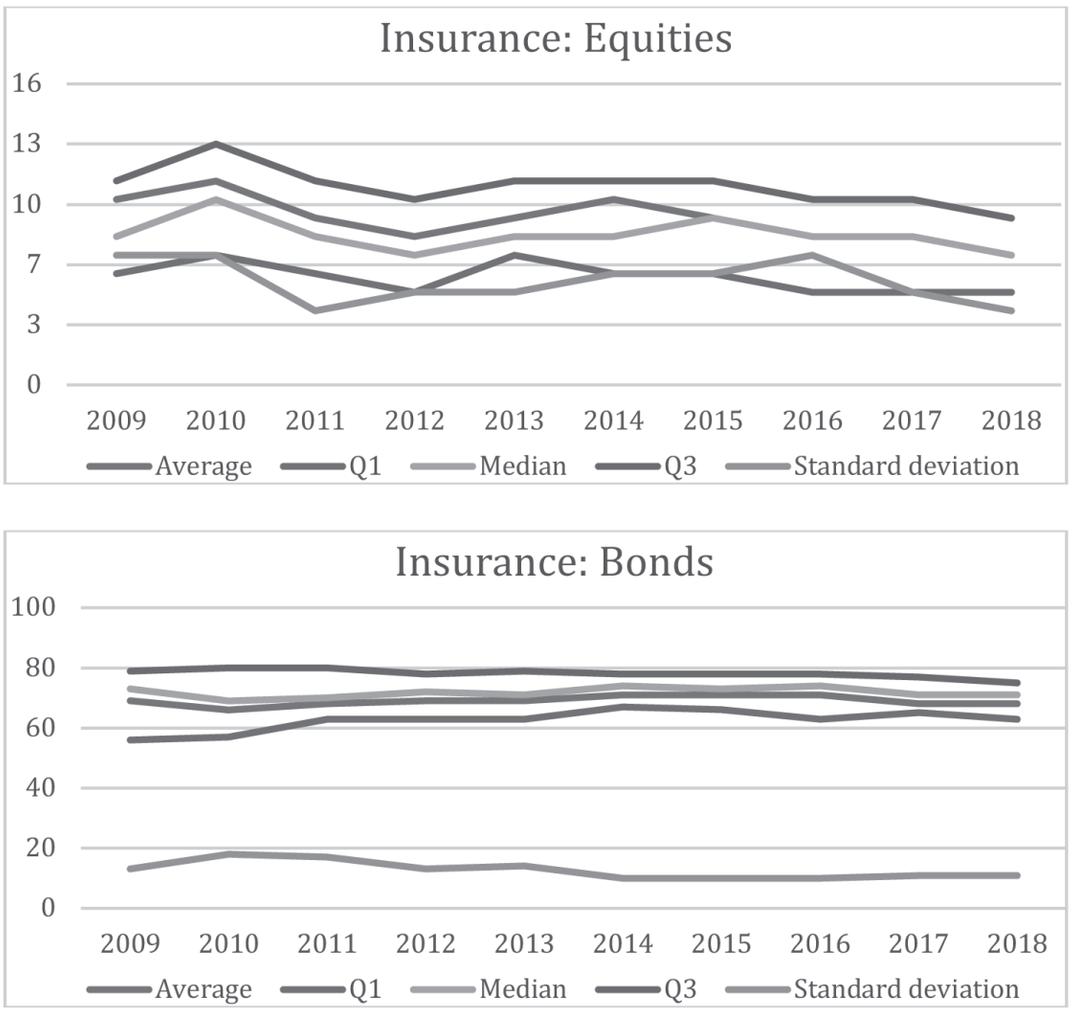
Finally we would like to emphasize the effect of size of the institutions to their asset allocations. Graph 11 a and b present the dispersions of stocks allocations (a) and bonds allocations (b) for pensions and insurers given the three size buckets considered in the survey (portfolios less than 2bn, between 2 and 20bn and larger than 20bn). The data considered here are those of the latest survey. The average allocation to stocks seems similar whatever the sizes. But their dispersion is far greater, two to three times, inside the small size segment. When it comes to bonds, the average allocations tend to increase with the size, for pensions and insurers alike. As for allocations to equities, the dispersion of bonds allocations are much larger for smaller institutions.

It seems not only insurers tend to follow similar investment strategies but that the larger they are the closer their allocations. Is this due to competition or size of the financial market they operate in or for governance reason. More analysis of their balance sheet management, notability capital allocations, and their shareholders structure might be useful. The diversity within the group of smaller institutions may illustrate the specialized nature of these smaller entities. The competition might be less of a issue for regional or sectoral players.

IV. Impacts of major evolutions on portfolios

The decade after the great financial crisis has witnessed a number of major changes which may have an influence on the asset allocation of investors. As regulation is critical to institutions we shall first have a look at the

Graph 11.



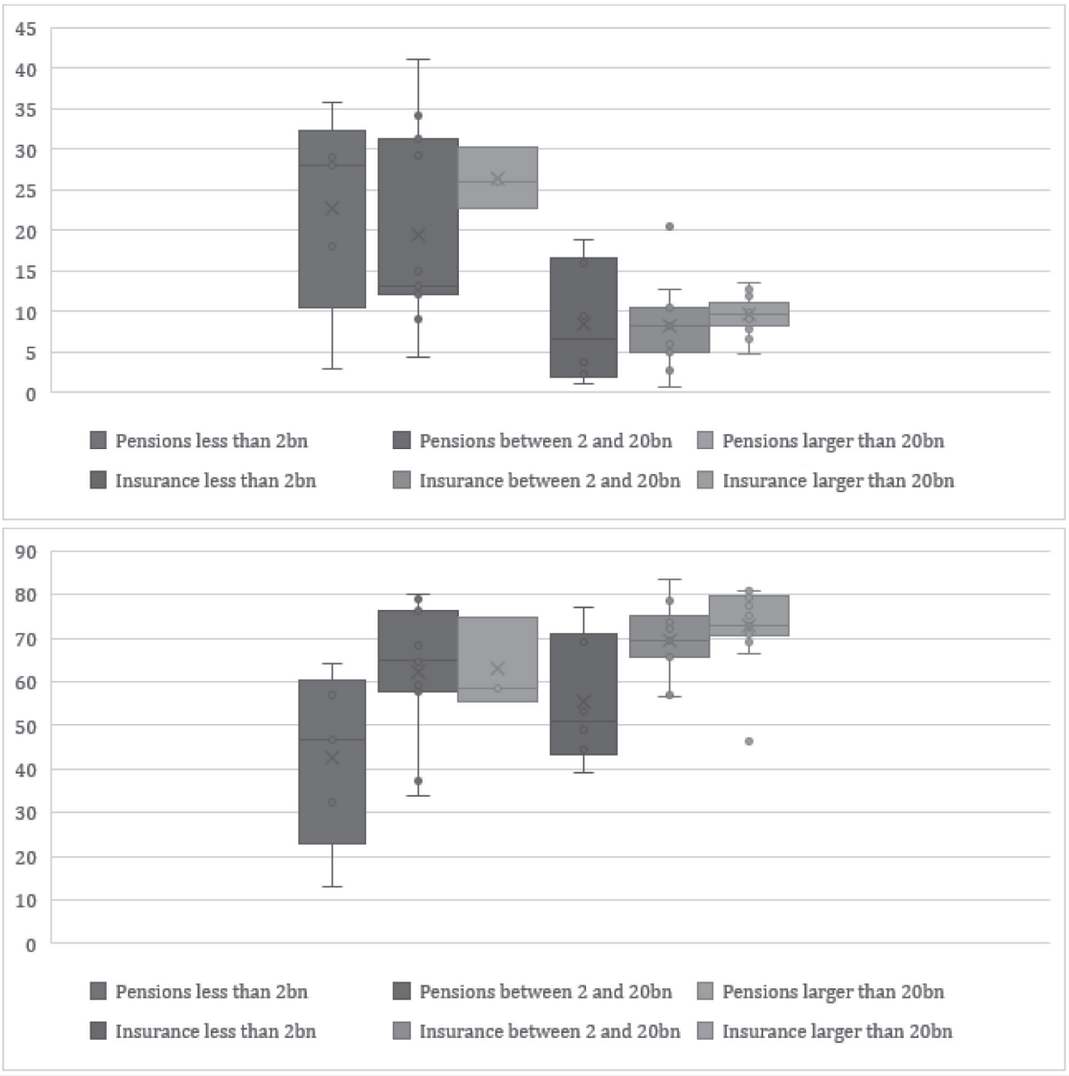
effect of the implementation of Solvency 2 on the insurers portfolios. Then we shall then analyse the impact of the ultra low interest rate policy, that started with the announcement of quantitative easing by the ECB, on all institutional investors.

In each case we use the same statistical approach : we split the whole sample of respondents under review in two parts, before and after the event. We then test if the population of answers are statistically different using a Wilcoxon test. We have also looked at the change during the very year the events occurred but the test are much less powerful given the size of the corresponding samples and did not change the outcomes.

Let's start with the changes in asset allocation around 2015 when Solvency 2 was enforced. Graphs 13a,b present the dispersion before and after of the asset allocations into stocks (13a), bonds (13b) of insurers portfolios. As one can see, there is very little difference between the distributions before and after. The Wilcoxon test on median confirms this with p-values of 0.133 in case of stock allocations and 0.943 in case of bonds. This negative result might seem surprising but can be related to the long preparation of that major regulatory change. Indeed the discussions around Solvency 2 started at the beginning of the century. There have been many tests before the real implementation. Markets and insurers knew that the complex regulation would have an impact and investment teams probably changed their portfolio allocation much before the set date. Moreover the great financial crisis had such an impact on valuations and thus on allocations that many insurers made probably their allocation adjustments after the crisis which may have been the catalyst for the adaptation.

Turning now to the influence of ECB monetary policy on asset allocations, we shall look at pensions portfolios insurers, and other institutions portfolios before and after 2014, when the QE was put into place. We consider bonds and cash allocations. In Graphs 14 a,b and we show the

Graph 12.



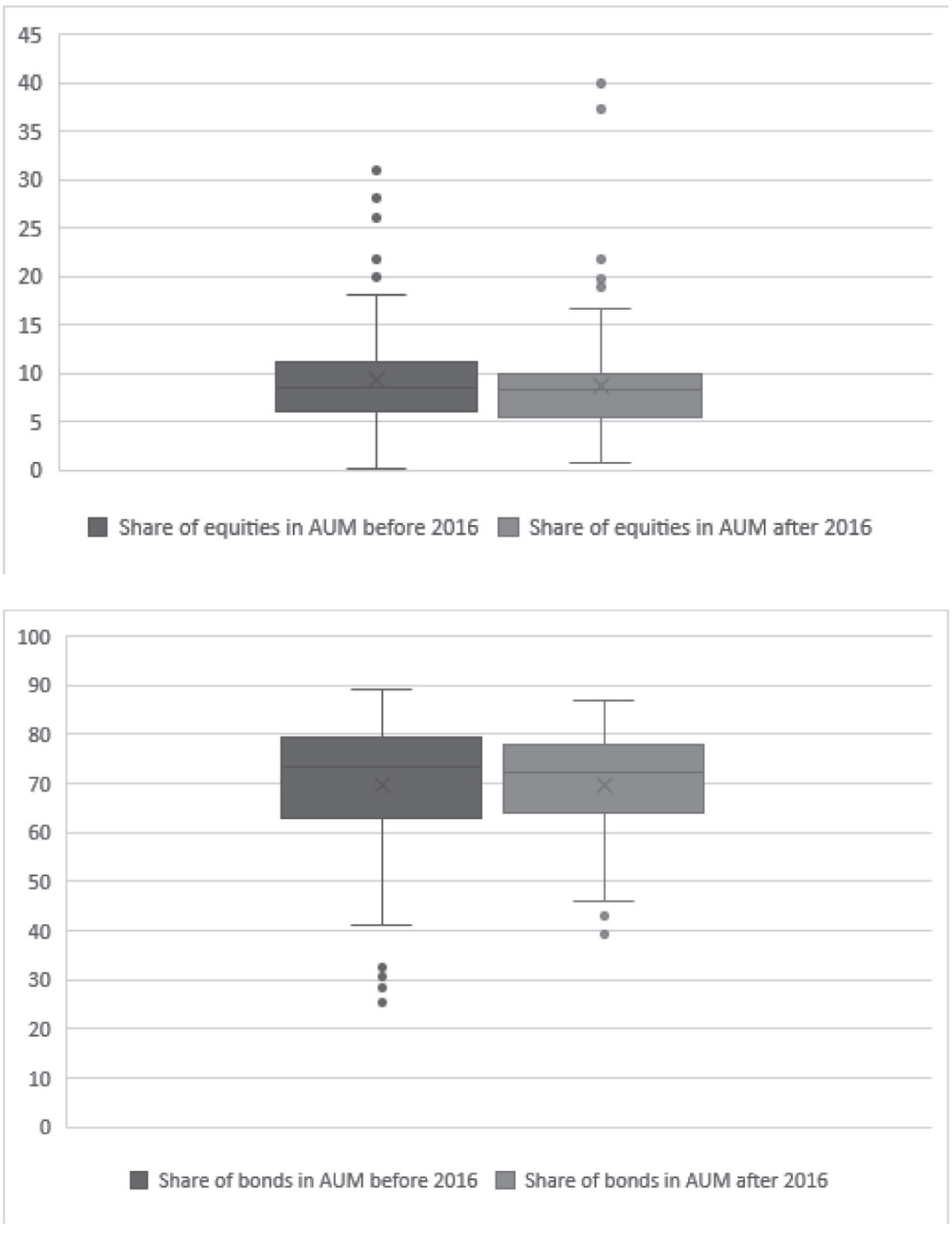
distributions of bonds and cash allocations before and after QE first for pensions (14a) then for insurers (14b) and other institutions (14c). None of the medians are significantly different at a 10% probability level according to the Wilcoxon test. We also looked if there were differences when sizes are concerned, but again no significant changes occurred. Only large institutions have increased significantly (at 5% probability level) their real estate allocations after QE. These results are again somewhat surprising and show how stable the asset allocations distributions remain even when monetary policy evolves dramatically, which arguably is the most important trigger for interest rate sensitive instruments.

Conclusions and future work

A better knowledge and understanding of institutional investors asset allocation is critical for many reasons. It allows to better reflect on potential outcomes for users and clients. It provides some clues on the financing of the economy by the market, a channel which has grown in importance over the years in Europe. Behavior of institutional investors during a decade gives also some indications on how they adapt to a changing environment.

A few conclusions can be drawn from the analysis of the Af2i survey over the last 10 years. The allocations to bonds dominate, specially in insurers portfolios. The average allocations remain very stable over the years and even Solvency 2, for insurers, or QE for all respondents, have had very little effects on their portfolio structure. Only average allocations to real estate for large institutions proved to increase after the QE. There are clear differences in asset allocations between the various types of institutions and also some variation when it comes to their sizes. The most notable difference being a much larger dispersion of portfolios allocations for smaller institutions than for larger ones.

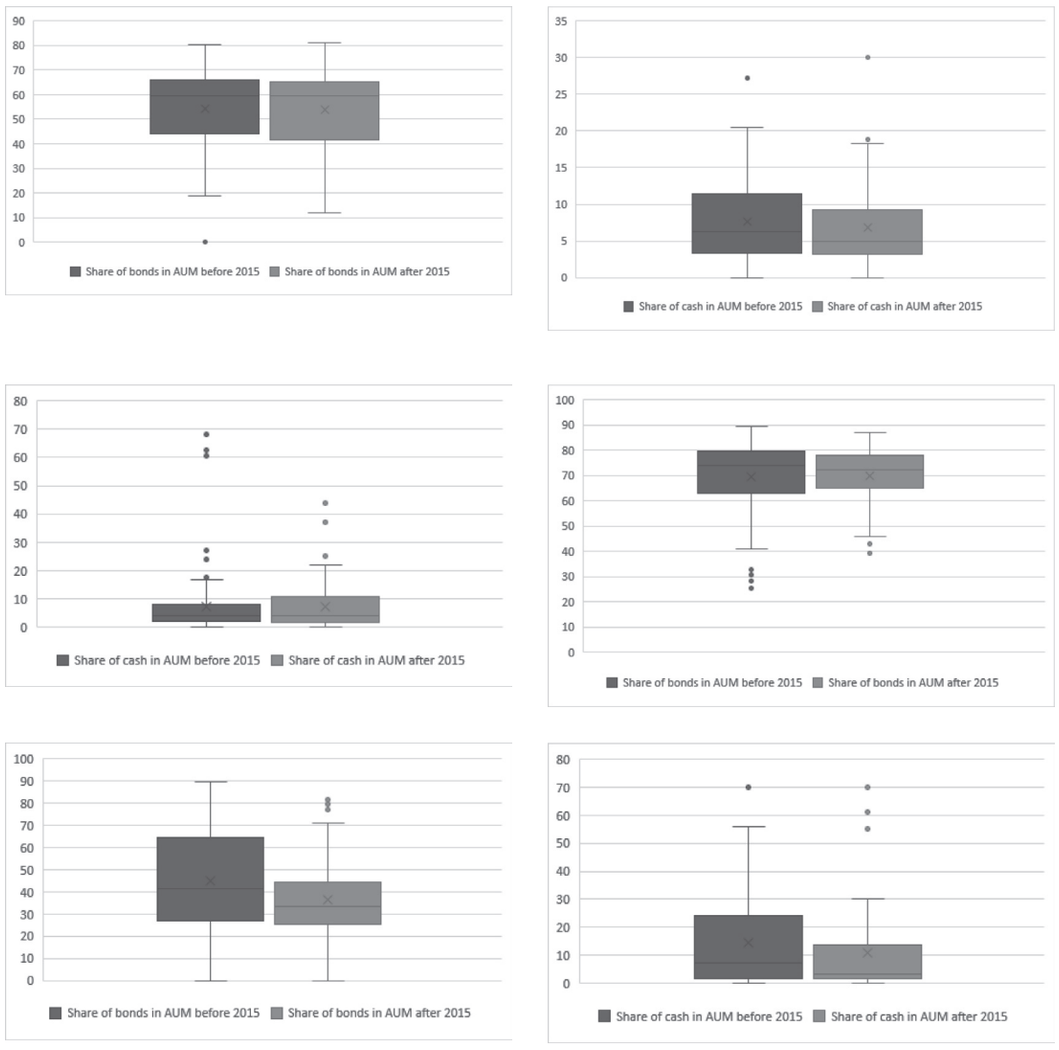
Graph 13.



These results depend on the quality and stability of the responses to the Af2i survey. Some respondents did not always participate to the survey. Some respondents may have change the way they answered. All this may have had some consequences. Nevertheless the outcomes of the study would not have changed in our opinion. Only their reliability could improve, which is a constant goal of the managers of the survey.

The stability of investment policies shows the critical importance of the goals and the liabilities of institutional investors. Tactical choices may exist but are not visible on the averages. It would be of course useful to dig more into

Graph 14.



the details. For instance, greater attention to the effects of QE on the bond portfolios, their credit quality, their sensitivities etc. As for alternative assets are concerned, an in depth analysis of the evolutions would also prove useful. Others characteristics of the institutional investors would be of interest : their shareholders, their governance set up, the amount delegated to asset managers , the influence of potential advisers, like consultants. Also competition could be considered specially for life and savings. Comparison with other European markets would also shed light on specific aspects of the French institutions and show the commonalities accross the continent.

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Note

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