

PENSION FUNDS LETTER

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Amundi
ASSET MANAGEMENT



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Investors on both sides of the Atlantic, having been preoccupied for several months, now have clarity on several fronts. The general perception is one of political risks having lifted; and we also note that the European economy is accelerating convincingly. But now certain underlying issues are returning to the forefront, impacting the management of Pension Funds assets in both tactical terms, and strategically.

So we see two over-arching themes return to the forefront for long-term investors : on the one hand, a normalized policy mix, and on the other a return to managing market risk. This return to fundamentals is logically reflected in the orientations of pension fund managers, or in the underlying portfolios, regarding monetary policies, asset performance drivers, and risk-free rates, among other factors.

First of all, the macro-economic and financial environment. A key feature of how markets evolve, particularly when driven by monetary policies, is price movements –whether inflation or deflation are occurring. Both have consequences in terms of capital preservation or future income. Over the last few months a certain number of new elements have appeared, showing not only the current inflation rates, but

also improving expectations. These are already causing the Fed to react, and later the ECB, followed by the bond markets both in terms of interest rate levels, and the shape of the yield curve.

Then, portfolio construction. Against a back-drop of creativity in monetary policies having run their course - but also, in some countries, of these policies beginning to have an effect, the notion of a « risk-free rate » is again becoming crucial for CIOs and trustees in charge of strategic asset allocations. And in some cases also for the modeling out of expected returns. As risk free becomes risky....

And finally, market tendencies: US rate expectations down, perception still seems to be ‘enough growth, benign inflation’ good for stocks, as measured by technical factors. Taking into account the current position in the equity cycle the call is clearly in favor of positive contribution of dividends to return.

And one must not forget the legal and regulatory framework within which Pension Funds must operate, for example in Germany: this brings us to an update on the Contractual Trust Agreement (CTA) structure. From the corporation’s standpoint, but also as viewed by employees, at a time when many «investment cases» are coming up, often involving cross-border European M&A.

All we have covered above allows us to better take into account the pension funds’ decision-making parameters, including both constraints and portfolio management objectives, in a still-unusual context regarding rates and the valuations vs volatility tradeoff in equities.

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A FUNDAMENTAL SHIFT IN THE ECB'S COMMUNICATION (1/2)



BASTIEN DRUT

Strategy and Economic Research

With the rise in inflation in recent months and the improvement of the economic environment, it has become more difficult for the European Central Bank (ECB) to justify its ultra-accommodative monetary policy (the deposit facility rate is currently at 0.40%, and the ECB will have purchased a total €780 bn in assets by the end of 2017). Indeed, the ECB is coming under increasing pressure from political leaders, representatives of banks and insurance companies, the media and even some of its own Governing Council members. While much has already been said about what the ECB could do in the future, it is worth highlighting to what extent and how the ECB's communication efforts have already shifted in the past several months.

Risks are seen to be weakening

The Introductory Statement from the most recent Governing Council meetings appear to be very clear on this message. Over the past several months, the communication surrounding perceived risks to growth prospects has shifted considerably. **Risks are now viewed as "less pronounced" and directly connected to global rather than domestic factors.**

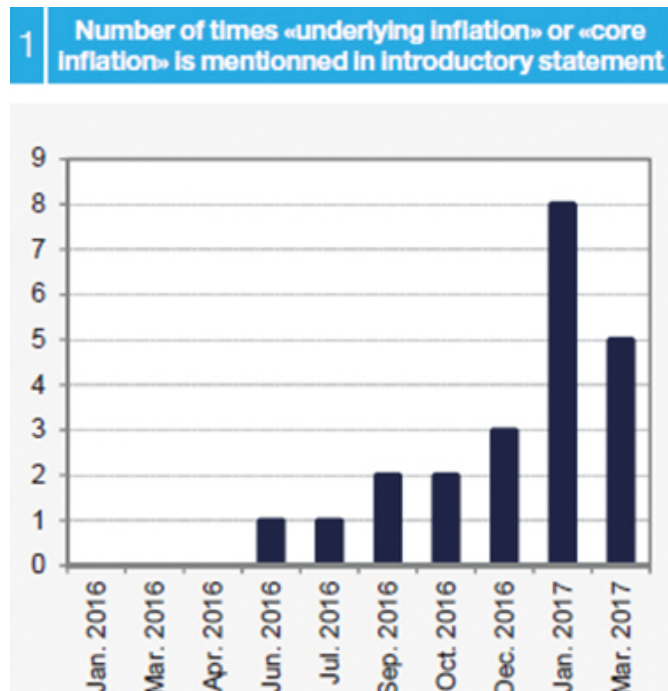
Confirmation that the sense of urgency has faded

At the Governing Council meeting of 9 March 2017, the declaration that the ECB was prepared to use "all the instruments available within its mandate" to achieve its objective of inflation below but close to 2% over the medium term was removed from the Introductory Statement. The message was clearly underlined in Mario Draghi's press conference when he explained that the removal signalled that the "sense of urgency" had faded in the ECB's judgement. Furthermore, a number of Governing Council members and Draghi himself have recently indicated that the risk of deflation had disappeared. **It was one of the first instances where ECB has said there would be no further expansion to its arsenal of monetary policy tools.**

ECB in "risk management" mode, still ready to step up its policy if necessary

While the ECB has said that it would not extend its monetary policy measures, it nonetheless seeks to retain the option of reinforcing its policy through the tools currently at its disposal (key interest rates and bond purchases). In March, the Introductory Statement still indicated that interest rates were expected to "remain at present or lower levels for an extended period of time, and well past the horizon of our net asset purchases." The ECB also stated that it stood ready to "increase [its] asset purchase programme in terms of size and/or duration".

Why would it choose to maintain this forward guidance? With labour markets still sluggish in several countries and a fair amount of political risk at play, the ECB does not want to close the door too soon. Mario Draghi acknowledged that this issue was debated at the 9 March Governing Council meeting, adding that although members had long believed that further rate cuts were no longer justified, the ECB wanted to keep this option open in case outlook deteriorates or financial conditions tighten excessively.



Source: ECB, Amundi Research

A FUNDAMENTAL SHIFT IN THE ECB'S COMMUNICATION (2/2)

Forward guidance increasingly linked explicitly to underlying inflation

The increase in headline inflation has pushed the ECB to clarify its stance with regard to inflation outlooks. While in October 2016 the ECB still confined itself to saying, without additional explanation, that inflation should continue to accelerate in the coming years thanks to its “monetary policy measures and the expected economic recovery”, underlying inflation is now the focal point of the ECB’s policy. And whereas underlying inflation was not even mentioned in the inaugural Introductory Statement of 2016, the use of the term has increased in subsequent Governing Council meetings. **The ECB now explicitly links its policy to trends in underlying inflation, which in turn are connected, according to the ECB, to the “gradual absorption of slack”, or in other words to the decline of unemployment. This aligns its stance more closely with the quantitative forward guidance approach adopted by the Fed and the Bank of England a few years ago.**

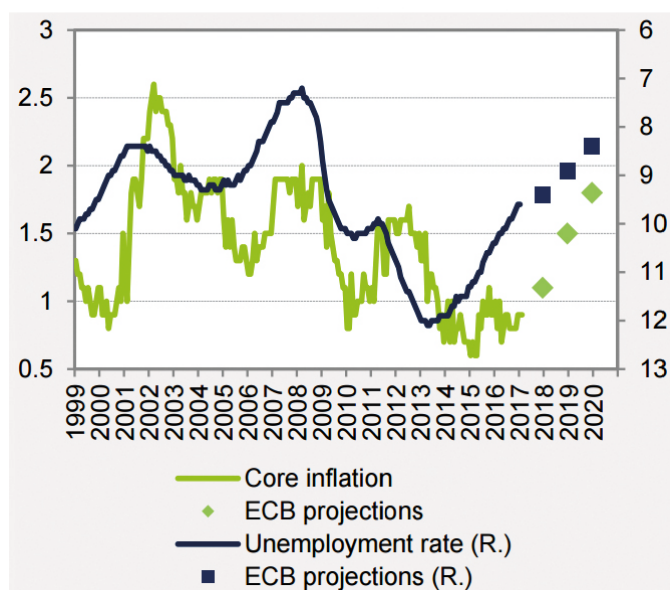
How will the unconventional monetary policy measures be phased out?

Assuming economic conditions remain favourable, the question of how to phase out unconventional monetary policies ultimately arises. **If this does indeed occur,**

what steps will the ECB take toward normalisation? What will it change first: forward guidance, QE (quantitative easing) or key interest rates? Currently, the ECB is indicating that key interest rates will remain at present or lower levels “well past the horizon of [its] net asset purchases”. However, statements made by several Governing Council members have thrown this sequence into doubt:

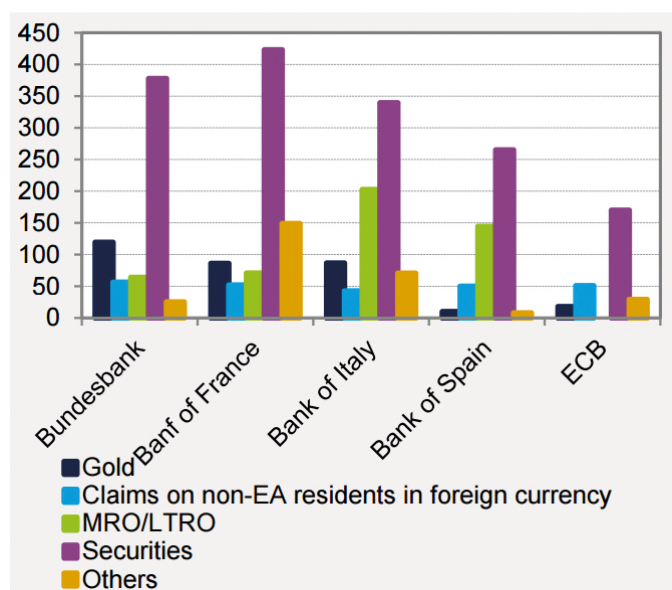
- Yves Mersch, a member of the ECB’s Executive Board, has stated the ECB should adjust its forward guidance without delay (10 February).
- Jens Weidmann, President of Germany’s Bundesbank, declared that anticipations of an interest rate increase in 2019 was “not absurd” (23 February).
- Ewald Nowotny, Governor of the National Bank of Austria, has stated the ECB could raise its deposit rate before its main refinancing rate, and that this could occur before the conclusion of its asset purchase programme.
- Ignazio Visco, Governor of the Bank of Italy, has indicated that it is conceivable that key interest rates could go up shortly after the end of QE. He also stressed that QE, negative rates and forward guidance were “parts of a single policy package” (20 March).

2 Eurozone: unemployment rate & core inflation (and ECB projections)



Source: Datastream, Amundi Research

3 Central banks' assets (€bn, ex TARGET2 assets)



Source: ECB, Amundi Research

“RISK-FREE ASSET”, A MATTER OF PERSPECTIVE

Why this question?

When building a strategic allocation over the long term, investors assess an asset’s appeal according to its risk-return trade-off. To do so, they often reason in terms of its **expected return in excess of a “risk-free” investment**. One could, therefore, be forgiven for thinking that risk premiums on assets are the only thing that matter and that the risk-free rate is of little importance. This is not, however, always the case since long-term solvency forecasts or accurate simulations for a product or portfolio very often require a hypothesis in terms of cash returns which is then used as a basis in determining the profitability of assets by adding a risk premium.

Determining whether or not cash is entirely risk-free **depends on the investment horizon and instruments** in play, and should prompt us to question the notion of risk itself which can take a number of forms over a long investment period. Over the long term, volatility is not the only source of risk. There is also the risk of erosion via inflation, the risk of default, systematic risk and, even in the absence of these elements, the uncertainty linked to the future level of rates means there is a risk of opportunity at the time of the reinvestment of coupons, dividends, or repayments.

There is no risk-free asset over the long-term

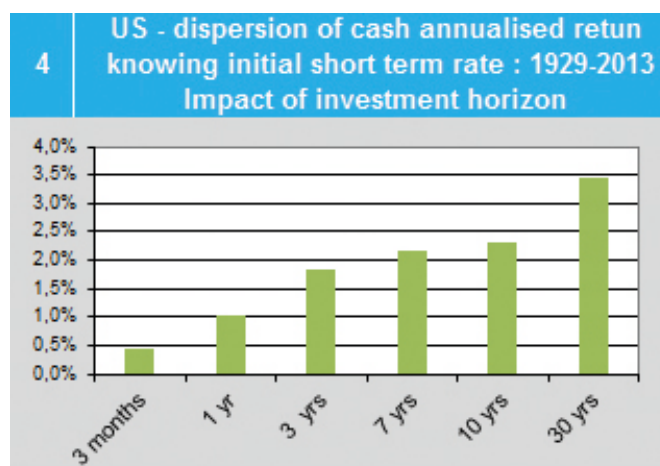
Ours studies suggest that there are actually no risk free asset over the long term and cash can only be considered without risk over the short term.

What can we infer from theory and observation?

Forecasts based on the initial short rate alone are not very credible, except over short horizons. Using the initial long rate on its own is useful but globally overestimates the future return on cash, all the more so when the slope is steep and the volatility is high. This is to some extent consistent with predictions of rational expectations and arbitrage pricing theory. **Mitigating the short rate with inflation means** we can improve the forecast as we avoid having to extrapolate a short rate level, distorted due to a very restrictive or accommodating monetary policy, which, in the long term, is not consistent with the fundamentals.

In order to marry operational simplicity and coherence with theory and observation, we recommend using a weighted combination of short rates (25%), inflation (25%) and zero-coupon long rates (50%) over the horizon as **a normative forecast** for returns on short-term investment.

> *To go further, see page 11.*



Source: Amundi

“ALTERNATIVE RISK PREMIUM”, WHAT DO WE KNOW?

The concept of alternative risk premia is an extension of the factor investing approach

In a challenging low yield environment, rethinking traditional asset allocation strategies is a common challenge for investors and asset owners in order to diversify their portfolio and capture new sources of returns.

The concept of Alternative Risk Premia (ARP) is an extension of the Factor Investing approach found in equities and both concepts participate in a better understanding of what portfolio diversification means.

In an academic article, Thierry Roncalli, Co-Head of Quantitative Research, provides insight on a key current topic of interest for large sovereign entities (see page 11).

The concept of alternative risk premia is an extension of the factor investing approach. Factor investing consists in building long-only equity portfolios, which are directly exposed to common risk factors like size, value or momentum. Alternative risk premia designate nontraditional risk premia other than a long exposure to equities and bonds.

They may involve equities, rates, credit, currencies or commodities and correspond to long/short portfolios. However, contrary to traditional risk premia, it is more difficult to define alternative risk premia and which risk premia really matter. In fact, the term “alternative risk premia” encompasses two different types of systematic risk factor: skewness risk premia and market anomalies. For example, the most frequent alternative risk premia are carry and momentum, which are respectively a skewness risk premium and a market anomaly. Because the returns of alternative risk premia exhibit heterogeneous patterns in terms of statistical properties, option profile and drawdown, asset allocation is more complex than with traditional risk premia.

In this context, risk diversification cannot be reduced to volatility diversification and skewness risk becomes a key component of portfolio optimization. Understanding these different concepts and how they interconnect is essential for improving multi-asset allocation.

Key Points

A risk premium is a source of return that compensates for taking an investment risk in bad times.

ARP are assumed to be independent from traditional risk premia, ie, a long exposure to equities and a long exposure to bonds.

ARP approach challenges the usual stock-bond asset mix policy.

Just like Factor Investing, ARP is a key area of development for the asset management industry as it highlights the growing convergence between traditional active management and alternative management.

> *To go further, see page 11.*



“DIVIDENDS”, THE NEW ENGINE OF EQUITY GROWTH?

Dividends: key source of positive return

MSCI recently published a breakdown of their index returns over the last twenty years out of which two key messages for long term investors have to be highlighted. Firstly, the study reminds that equity returns are made up of 3 principal components: dividend yield, **dividend growth and changing valuations**. Secondly, whilst valuation is the component investors tend to primarily stress about, the most important component over the long-run of equity return is dividends.

If investors are used to cyclical equity behaviour, they are far less aware that the contributions from dividend and valuation components also tend to be cyclical. While valuation adjustment is clearly the least important component of equity performance over the long-run, there can be, of course, shorter periods when it dominates. And when market returns are dominated by rising valuations, most of the time periods of falling valuations are following.

So where are we in the cycle now?

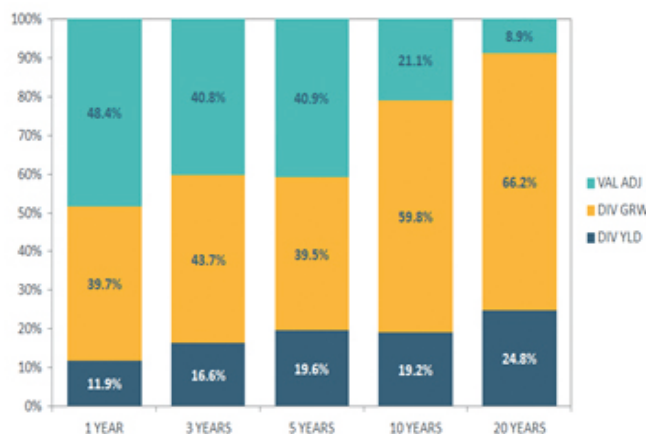
Since the financial crisis in 2008, equity returns have been disproportionately driven by an increase in the valuation multiple, while profits have been flat to negative when compared to the average 5-year period over the last 20 years. The main reason for the outsized contribution from prices has been the aggressive reduction in interest rates and the increase in monetary supply (Quantitative Easing) since the financial crisis. Everything else being equal, the lower the rate, the higher the value and vice versa.

We believe it is timely to highlight this possible major turning point in the environment for equity investors.

Falling valuations have many implications but the key ones are (1) lower returns (2) as investors are less comfortable when prices are falling, volatility tends to move upwards (3) Dividends dominate and become the key source of positive return (4) growth stocks get hurt the most.

A complementary way of thinking about this phenomenon is to consider major periods of rising interest rates in the last century and the tendency that dividend contribution to total returns had to increase during those times.

5 MSCI World Index
Average Absolute Return Contribution (%)



Source: Datastream and MSCI Research, decomposition of MSCI World Index total return, analysis over period Dec 2000 to Dec 2016



VIEWPOINT, THE IMPACT OF US WITHDRAWAL FROM PARIS AGREEMENT ^(1/2)

Executive Summary

- Paris agreement is aimed at tackling global warming by cutting carbon dioxide emissions. Signed by 195 countries, the agreement is seen as the most important global collective effort to address climate change
- On June 1, 2017, the US President Donald Trump announced the withdrawal from the deal, claiming that participation in the agreement harms US economy
- However, the impact of the US withdrawal from the Paris deal on the global climate policy is expected to be limited. The most significant impact will be felt on the foreign relations
- Sustainable solutions and green bond funds remain compelling investment opportunities

Paris Agreement Overview

- Finalized in December 2015 in Paris as a collective effort to tackle global warming
- Sets to limit global temperature rise to under 2°C until 2030 comparing to pre-industrials levels by cutting carbon dioxide emissions
- Signed by 195 countries
- Entered into force in November 2016, after enough countries, including China and the US ratified the agreement
- Non-binding - each country sets its voluntary targets on carbon emissions reduction
- Countries will evaluate progress toward their goals in 2018 and, beginning in 2020, will submit updated carbon reduction plans every five years
- Countries are not penalized for failing to meet their CO₂ emission targets
- Only Syria and Nicaragua have failed to sign the agreement

Impact of the US withdrawal from Paris Agreement is expected to be limited due to the following reasons

- Lengthy withdrawal process: According to article 28, the US can trigger formal withdrawal only three years after the agreement entered into force - in November 2019. The actual withdrawal can occur

only one year after the withdrawal was triggered - in November 2020. At that time, new presidential elections will be due.

- Lack of support by business community. Large US energy companies like Exxon Mobile and Chevron support the deal and maintain their energy transition plans underway. Many companies have started to develop and implement their long-term green plants, which are unlikely to unwind.
- The situation has greatly evolved in the past few years, with the US not being the driving force behind international mobilization against climate change anyways. Pope Francis, Mark Carney (Gov. of Bank of England) have expressed their support for climate change. China is taking responsibility and leadership in climate change: the G20 meeting held in Hangzhou was the first one to add Green Finance to the agenda. Low-carbon investing has become a normal activity, and is on its way to becoming mainstream. There is a lack of green financing solutions, so innovative financial innovations see their demand increase in order to fill this gap.
- US states and cities undertook the function of clean energy promotion. 34 states, led by California and New York, have undertaken their own ambitious carbon reduction plans. Some local governments have pledged to redouble their efforts to make up for a lack of US federal action.
- US renewable energy production is expected to stay on the rise. Renewable energy industry already employs more than 750 thousands Americans. Solar in the US now employs more than oil, coal and gas combined. Another 2.2 million Americans work in the design, manufacturing, or installation of energy efficiency products and services.
- Demand for green bonds is expected to stay strong. ETFs tracking green bond indices were unaffected by the announcement.
- The US disinvolvement in the deal is expected to be replaced by enhanced participation of other countries. Indications are emerging that China is forging a new alliance with the European Union to advance common climate policies without the United States. France, Germany and Italy indicated that they will increase their efforts to address climate change.



VIEWPOINT, THE IMPACT OF US WITHDRAWAL FROM PARIS AGREEMENT ^(2/2)

- The real impact of Trump's decision will be felt most strongly in the arena of foreign relations. World leaders have expressed their concern and disapproval of US withdrawal decision. US puts itself on the periphery of a formation of a global climate policy, an uncommon position for a large geopolitical force.
- The withdrawal from the climate deal can also undermine US long-term economy development. Laxer regulations regarding climate change will

remove an incentive for American firms to innovate. Lack of innovation will result in competitive disadvantage, leaving lowering prices as the main tool to compete. A vibrant business sector is not enough to innovate and sustain higher productivity gains - state regulations are needed to channel innovations and facilitate their widespread dissemination. Regulations designed to limit carbon emissions in countries such as Japan, Germany, Sweden and Denmark have made their domestic manufacturers the leaders in energy efficiency.

THE CONTRACTUAL TRUST AGREEMENTS

- THE GERMAN CASE ^(1/2)

A CTA is a contractual trust structure used in Germany for the insolvency-proof financing of pension obligations. It is also often used for the financing and protection against insolvency of working time accounts pursuant to Sec. 7e of the German Social Security Code Book IV (Sozialgesetzbuch, SGB IV) or partial retirement time credits pursuant to Sec. 8a of the German Partial Retirement Act (AltTZG).

The following statement, however, exclusively focuses on the financing of pension obligations under company pension schemes.

Legal Structure

A separate trust company (“CTA”) is established to which the pension obligations and according assets are transferred. The trust company can have the legal form of a German limited liability company (GmbH), a foundation or a registered association. The legally and financially independent organisation assumes the function of a trust. This CTA manages the respective assets and must not use them for any purpose other than fulfilling the pension obligations.

The CTA structure is based on a trust agreement - the administrative trusteeship - between the company/ employer and the CTA. There is a security trust relationship between the CTA and the employee which ensures that, in the event of a default, the employee has a separate claim for payment against the CTA.

In principle, there are two different CTAs:

- the inter-company CTA (also referred to as individual CTA) which are established for individual large companies or groups,
- while the industry-wide or “market” CTAs (also referred to as collective CTAs) which are available to all companies irrespective of their scope of obligations, group affiliation or size.

Assets and Balance Sheets

In legal terms, the CTA is the new owner of the assets. If a company has, for example, concluded employer’s pension liability insurance contracts for the financing of pension scheme obligations, the policy holder changes. The CTA becomes the new policy holder.

Following this, the company only has very limited influence on the transferred assets. This is the actual

purpose of the CTA model, i.e. the invested assets are bound and can no longer be used for any non-pension scheme-related purposes. Within the framework of the trust agreement, the CTA undertakes to invest the transferred assets on behalf of the employer for the purpose of fulfilling the pension obligations from the direct commitment.

The original form of the company pension scheme, i.e. the direct commitment, remains unchanged. This is why pension provisions are still required also e.g. within the tax balance sheet. In fact, the main objective is to bind company assets in the CTA for the purpose of the company pension scheme.

Pension obligations can be balanced with the CTAs assets within international accounting rules IFRS, US-GAAP, and German Commercial Code (Handelsgesetzbuch, HGB). Such netting-off requires that the transferred funds are recognised as plan assets or covered funds by the company’s auditor.

Employment and Pension Law Aspects

As the original form of the company pension scheme remains unaffected, no employee consent is required. Neither does the set-up of the CTA require any employee representatives, works council, or union, approval.

Insolvency Protection

Direct pension promises must be law by protected against insolvency by employer’s contributions to the Pension Security Association (Pensionssicherungsverein, PSV), which pays the pension instead of the insolvent employer. This statutory insolvency protection remains unaffected by the establishment of a CTA.

In case of an insolvency, there is generally no possibility for the PSV to assert any claims against the CTA. Equally, creditors have generally no access to the CTA’s assets.

Comparison of Individual and Collective CTAs

The main differences are therefore the possibility of influencing the investment strategy on the one hand, against the hassle-free benefit of a professional investor on the other hand.

THE CONTRACTUAL TRUST AGREEMENTS

- THE GERMAN CASE (2/2)

Advantages and disadvantages of a CTA

	Advantages of a CTA	Disadvantages of a CTA
Pension Liability	None.	The liability towards the employees remains unaffected. The employees are not obliged to limit their claims to those against the CTA. Should the trust assets not suffice to fulfil the liabilities, the company is obliged to provide additional funds.
Insolvency Protection	Additional protection against insolvency is created as the transferred assets exclusively serve the purpose of financing the claims of the eligible employees, are held legally independently of the company, and are not accessible by the company's creditors even in case of an insolvency.	The obligation to pay contributions to the Pension Security Association remains unaffected.
Asset and Balance Sheets	The international balance sheet of the company is reduced which results in an improvement of the operating performance figures. This can lead to an improvement of the company's credit rating.	The financial resources used for the financing of the CTA are no longer available for the internal financing of the company.
Investment	Investment strategies can be structured in many ways as there are no restrictions with respect to capital investment.	An employer who manages assets and obligations himself is not limited in his investment strategies either, but he is solely liable for any shortcomings of the DB liabilities, which is not convenient for non-professional investment companies.
Supervision	There is no supervision or control by a public authority.	None, but see above re non-professional investors.

Source: Amundi



TO GO FURTHER: AMUNDI'S RESEARCH CENTER

Research center

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 <p>Risk Free Asset: Discussion paper Full article by S. de Laguiche</p>	 <p>Alternative Risk Premia Full article by Th. Roncalli</p>	 <p>Cross Asset June 2017</p>
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