

Private Credit in DC

A multipurpose asset class offering improved risk-adjusted outcomes

Recent years have seen increasing interest in private markets allocations within Defined Contribution (DC) glidepath solutions. This is now gaining traction with several announcements of new allocations and the launch of Long Term Asset Funds (LTAFs). Private credit forms an important component of this trend and has some particularly attractive investment characteristics. In this paper, we make the case for including private credit in DC and present Aegon Asset Management's Private Credit expertise.

Executive summary

Private credit can bring considerable benefits to DC glidepaths

- Added diversification, complementing traditional assets and other alternatives
- Added return potential versus comparable traditional fixed income categories
- Added downside protection via loan-specific covenants, collateral and insurance
- Added sustainability and impact potential

Using a large data set of potential economic scenarios, we find that allocating to private credit can offer added value across a glidepath's various phases

- During the growth phase, as a moderate allocation complementing equities and offering better risk-adjusted outcomes for most member risk preferences
- During the de-risking phase, as a complement for government bonds and investment grade credits, proving diversification and a yield pick-up
- During decumulation, in helping generate an attractive pension income with a yield pick-up, regular and steady income, low volatility and downside protection

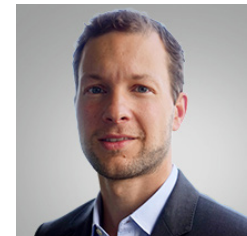
Aegon Asset Management has a long history investing in private credit strategies. These strategies can be accessed as single sleeves but we can also offer combined diversified private credit strategies to meet different clients' needs.

For more information about Aegon AM's services and solutions for pension funds, please contact your usual client representative or visit [aegonam.com](https://www.aegonam.com)



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Private Credit: a diverse asset class offering exposure to varied return drivers

Private credit is a deep and varied asset class with sub-classes covering different risk characteristics, borrower types and regions.

Added return drivers

The borrowers of private loans are a wide and diverse group. The asset class offers exposure to institutions and sectors of the global economy to which investors may well have little or no existing exposure:



Private companies

Whether owned by private equity investors, by families, or by other institutions, privately-owned companies often use private debt instruments rather than issuing tradeable corporate bonds.



Small- and mid-cap businesses

Small- and mid-cap businesses represent an important driver of economic growth in many countries but will be very much under-represented in mainstream corporate bond indices where large companies, particularly those with high debt levels, will dominate. Lending to these businesses, often in conjunction with their banking partners, offers diversification and exposure to an often underrepresented growth driver.



Infrastructure

Infrastructure projects and installations are an important issuer of private debt instruments. Aside from corporate bonds issued by listed infrastructure companies, many investors will have very limited exposure. Given the importance of infrastructure to future economic development and to the energy transition, private credit offers investors exposure to an important global and national economic driver.



Emerging markets

Investors may well have exposure to emerging markets via sovereign market debt (hard or local currency) and via corporate bonds. However, private loans are also used widely in emerging economies, particularly for infrastructure projects which help development and can materially improve the quality of life in these countries. Examples might include renewable energy infrastructure projects or the construction of schools and hospitals.



Consumers

Categories such as Asset-Backed Securities offer direct exposure to wide pools of individual consumers. This offers diversification and exposure to alternative return drivers which traditional fixed income categories do not necessarily offer.

Added return potential

A large part of the private credit universe is less liquid than Core Fixed Income categories. Investors expect to be rewarded for this illiquidity in terms of an additional return, the illiquidity premium. The level of premium available will vary by asset class and should broadly correlate to how illiquid the specific investments are.

Investing to provide a DC pension means investing over long time horizons. Even in retirement, a pension income is required but that need does not mean selling assets regularly, particularly if a high natural income can be generated. A fully liquid portfolio is therefore, in most cases, not required. DC pension schemes have historically not invested meaningfully in illiquid categories such as private markets but this has generally been for administrative rather than investment reasons.



Added downside protection

Protection against defaults on private loans can come in several different forms. Three important examples are as follows:

Covenants:	Private loans have various covenants designed to protect investors against borrower defaults. Strong covenants are often preventative, ensuring that companies do not take on too much debt and ensuring that the private loan investors retain their position in the creditor hierarchy.
Collateral:	Many private loans offer high quality collateral which protects investors in cases of default. This can include companies' tangible assets such as real estate, factories or machinery, but may also be investments owned by the company or guarantees from a parent company. Higher ranking loans will generally have more or better collateral available.
Insurance:	A strong market exists for insuring private loans against default with many insurers participating. This enables investors to invest in interesting but relatively risky loans – examples might include emerging market development loans for renewable infrastructure or private company loans to invest in a new technology – and insure the exposure (for a premium) with AA and A-rated insurers. The net (after insurance) yields of such loans are still very attractive compared to equivalent-rated bonds.

Glidepath solutions are often used as the main investment option (or options) for members, and are consequently where many members will invest their contributions.

The characteristics set out above, amongst others, mean private credit looks particularly appealing for many institutional investors with a suitable governance budget and investment horizon. Given the individualised nature of private loans, portfolios will normally require bespoke active management but recent years have seen private credit arrangements develop which particularly suit DC investors. For example, fund structures such as Long Term Asset Funds (LTAFs) created specifically for DC investors, and lower fixed fees (with lower or no performance fees). In the next section we look in more detail at how private credit could be used within a DC pension scheme's glidepath (or Target Date Funds) arrangement. Glidepath solutions are often used as the main investment option (or options) for members, and are consequently where many members will invest their contributions.



Added sustainability and impact opportunities

Just as for liquid fixed income, environmental, social & governance (ESG) screens and criteria can be applied to private credit mandates. This can include an exclusion approach and/or a minimum standards approach. One difference is that a minimum standards approach will usually have to be bespoke and implemented by the investor and/or their investment manager, given ESG data for private markets from the large data providers is more limited.

In addition to ESG screening, private credit offers many opportunities to invest specifically in sustainable and impact investments. For example, many private finance projects are focused on infrastructure which support the climate transition, help emerging economies improve living standards, or new technology which will improve ESG-focussed criteria.

A multi-purpose asset class for DC

Glidepath solutions can typically be distributed into three main phases and private credit can play a valuable role in each.

Table 1: Applications of private credit within glidepath phases

Phase	Phase purpose	Private Credit function
Growth	Early career period, focused on relatively higher return (and consequently higher risk) asset classes such as equities.	<ul style="list-style-type: none"> • Relatively high absolute returns • Strong diversification complementing growth assets such as listed equities
De-risking	The years approaching retirement where risk is reduced (at the cost of potential return) as pension becomes a larger part of future income.	<ul style="list-style-type: none"> • Continued diversification versus other growth assets with lower short-term downside risk than equities. • A potential return premium and diversification benefits versus de-risking assets such as government bonds and investment grade credits.
Decumulation	Through retirement when an income is paid to the retired member (assuming an insured annuity is not purchased).	<ul style="list-style-type: none"> • All of the above • Plus a relatively stable and high income payable

Source: Aegon Asset Management.

To demonstrate the benefits and considerations to DC pension scheme members of adding private credit to a glidepath strategy, we have carried out analysis on a data set of 2,000 potential economic scenarios. Details are provided in the appendix.

Growth phase

We begin by looking at the growth phase and how adding a moderate private credit allocation to complement listed equities could maintain expected member outcomes and improve member outcomes on a risk-adjusted basis. We take a young member with 30 years before de-risking begins and compare outcomes (pension capital in real terms accounting for inflation in each economic scenario) at 5-year intervals with asset allocations of 100% global listed equities, 90% equities and 10% private credit, and 80% equities and 20% private credit assumed. Details of the example member are provided in the appendix.

We can see from Table 2 that including private credit in the allocation offers considerable downside protection and actually slightly improves expected outcomes over most horizons. This may be unexpected as private credit generally has a lower long-term expected return than equities. However, there are benefits to its inclusion, firstly by offering better outcomes when equities underperform, and also from the diversification effect as allocations are periodically rebalanced – high volatility equities mean that investing in complementary categories such as private credit, with relatively high expected returns and low equity correlations, can lead to better outcomes when equity trends reverse.

Table 2: Pension capital outcomes in real terms during the growth phase.

Outcome	Global equities allocation	Private Credit allocation	Pension capital in real terms after					
			5 years	10 years	15 years	20 years	25 years	30 years
Downside (5th percentile)	100%	0%	£ 9,739	£ 18,410	£ 26,895	£ 38,360	£ 50,237	£ 61,579
	90%	10%	£ 10,061	£ 19,232	£ 28,981	£ 41,204	£ 54,071	£ 67,748
	80%	20%	£ 10,374	£ 20,299	£ 30,879	£ 44,174	£ 57,787	£ 73,215
Expected (Median)	100%	0%	£ 14,359	£ 32,365	£ 55,275	£ 82,799	£ 121,469	£ 166,591
	90%	10%	£ 14,312	£ 32,397	£ 55,467	£ 83,509	£ 121,646	£ 168,331
	80%	20%	£ 14,236	£ 32,385	£ 55,487	£ 83,632	£ 121,901	£ 167,507
Upside (95th percentile)	100%	0%	£ 20,387	£ 55,023	£ 108,830	£ 194,822	£ 308,122	£ 494,836
	90%	10%	£ 19,657	£ 52,267	£ 102,503	£ 180,447	£ 285,056	£ 452,843
	80%	20%	£ 18,992	£ 49,755	£ 97,268	£ 168,011	£ 265,861	£ 411,495

Source: Aegon Asset Management.

In the upside scenarios, where equities will have significantly outperformed, we see that a private credit allocation will soften the member outcomes. This is to be expected as equities have greater upside potential than fixed income assets. However, in the upside scenarios, members will (of course) have significantly more capital than originally expected.

This therefore raises the question of how to determine the extent to which private credit can improve members' interests. One way to answer this is to calculate certainty equivalents for members with various levels of risk aversion.

Utility functions and certainty equivalents

By converting real capital values to utility values, we can place greater or lesser relative value on different outcomes than their relative values in absolute sterling terms. More risk averse members will place more value on higher downside outcomes than higher upside outcomes and so an extra pound of capital in a positive scenario is valued less than an extra pound in a negative scenario.

The standard power utility function is expressed by the following equation, where γ is the risk aversion parameter and x is the real capital (in this context). A value of γ less than 0 would represent a risk-seeking individual; equal to 0, risk-neutral; and greater than 0, risk-averse.

$$U(x) = \frac{x^{1-\gamma} - 1}{1 - \gamma}$$

There have been many studies attempting to ascertain the range of γ reflecting risk aversion in various populations. In the context of pension savings, where having too little income after retirement would have severe consequences for quality of life, we believe a broad range of around 0 to 5 might represent most of a typical UK DC pension scheme population¹. In this article we have taken $\gamma = 1, 2.5$ and 4 to broadly represent members with higher, medium and lower risk preferences.

Once pension outcomes are converted to utility values, an average utility can be calculated. In theory, a higher average utility means a better average outcome for a member with the relevant risk aversion level. We can also convert back from that average utility to an equivalent pension outcome, the "certainty equivalent". This is the pension capital which a member with that risk preference would, in theory, be happy to accept with certainty in place of the range of potential outcomes.

We can see from Table 3 that, apart from for the higher risk preference member over the first 10 years, adding private credit increases the certainty equivalents, meaning that, based upon the range of potential outcomes implied by the economic scenarios, members would, on average, have a preference for its inclusion in the asset allocation of a glidepath's growth phase.

We note here that clearly this is not an asset allocation choice of only listed equities and private credit. Other asset classes could also add value – high yield and emerging market debt are commonly held and increasingly DC pension schemes are including other alternatives such as private equity, infrastructure and real estate. We have also analysed including a moderate allocation to private credit alongside such asset classes and see similar conclusions: that its addition can add value in absolute terms but even more so in terms of certainty equivalents for the risk aversion preferences considered.

Table 3: Comparison of risk-adjusted pension capital outcomes.

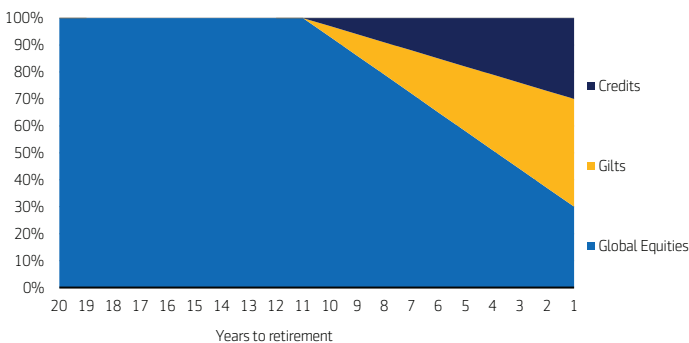
Gamma (γ)	Global equities allocation	Private Credit allocation	Certainty equivalent pension capital in real terms after					
			5 years	10 years	15 years	20 years	25 years	30 years
$\gamma = 1$ Higher risk preference	100%	0%	£ 14,218	£ 32,054	£ 55,305	£ 84,042	£ 121,562	£ 168,532
	90%	10%	£ 14,171	£ 32,043	£ 55,402	£ 84,302	£ 121,909	£ 169,209
	80%	20%	£ 14,119	£ 32,000	£ 55,421	£ 84,403	£ 121,965	£ 169,385
$\gamma = 2.5$ Medium risk preference	100%	0%	£ 13,679	£ 29,461	£ 48,238	£ 70,477	£ 96,877	£ 127,369
	90%	10%	£ 13,726	£ 29,882	£ 49,468	£ 72,785	£ 100,870	£ 133,720
	80%	20%	£ 13,756	£ 30,224	£ 50,518	£ 74,786	£ 104,344	£ 139,317
$\gamma = 4$ Lower risk preference	100%	0%	£ 13,133	£ 26,984	£ 41,893	£ 59,787	£ 77,602	£ 99,228
	90%	10%	£ 13,276	£ 27,791	£ 44,012	£ 63,339	£ 83,778	£ 108,041
	80%	20%	£ 13,390	£ 28,485	£ 45,916	£ 66,589	£ 89,478	£ 116,414

Source: Aegon Asset Management.

De-risking phase

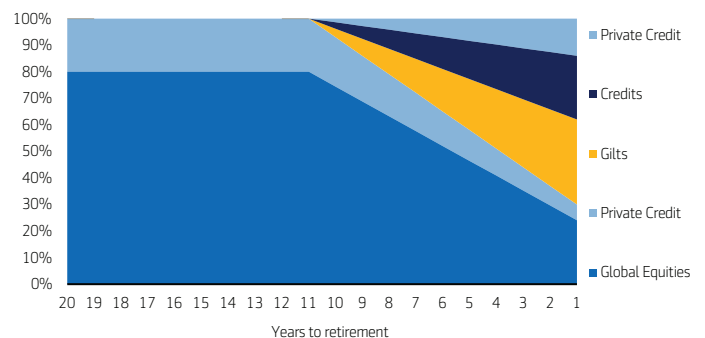
Most DC pension solutions reduce risk as retirement approaches. The period over which the de-risking occurs can range from around 5 to over 25 years and the extent of the de-risking can also vary considerably per provider and according to whether the purpose of the solution is to purchase an annuity, enter drawdown or cash in the pension pot at retirement. We take, as an example, a de-risking period of 10 years with a final allocation of 30% equities, 30% IG credits (15% sterling and 15% global) and 40% gilts (20% nominal and 20% index-linked) but note that similar conclusions could be drawn for other de-risking patterns.

Figure 1: Glidepath example.



Source: Aegon Asset Management.

Figure 2: Glidepath example with private credit replacing 20% of both fixed income and equity allocations.



To illustrate the potential impact of including Private Credit in the de-risking phase, we take the straightforward example of replacing 20% of both the gilts and credits allocation with Private Credit as well as the 20% of equities already considered – see Figure 2. To analyse the impact, we consider a member 40 years from retirement and look at the real capital (i.e. corrected for the assumed inflation in each economic scenario) after 40 years i.e. at the assumed retirement age. Further details of the example member are given in the appendix.

Table 4: Real pension capital outcomes at retirement for a member 40 years before retirement following the glidepaths in Figures 1 & 2.

Certainty equivalent pension capital (in real terms) at retirement		
$\gamma = 1$ Higher risk preference	No Private Credit (Fig. 1)	£ 286,405
	With Private Credit (Fig. 2)	£ 288,369 (+0.7%)
$\gamma = 2.5$ Medium risk preference	No Private Credit	£ 214,485
	With Private Credit	£ 232,088 (+8.2%)
$\gamma = 4$ Lower risk preference	No Private Credit	£ 168,002
	With Private Credit	£ 191,662 (+14.1%)

Source: Aegon Asset Management. Risk-adjusted using standard power utility functions with the stated risk aversion parameters.

We can see that when private credit is included in both the growth and de-risking phases of glidepaths, it can offer considerable improvements in member outcomes. As expected, the improvement is greater the more risk-averse the member, but even for a relatively risk-seeking member with $\gamma = 1$, we see an improvement.

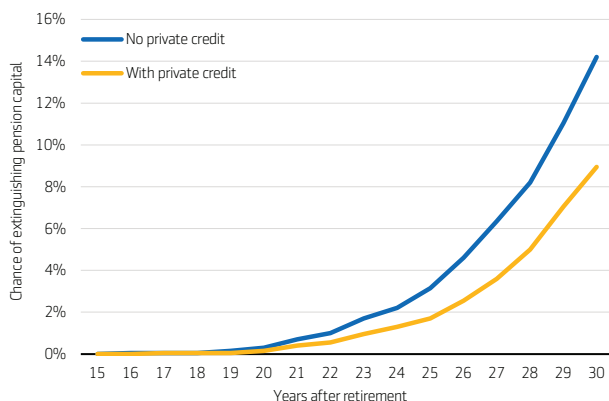
These conclusions reflect, of course, the assumptions in the risk aversion of members, the data set used, annual rebalancing of investments, the exact private credit strategies chosen, other asset categories which might be included in the relevant glidepath, and also on the market conditions at the time of investment.

Decumulation phase

In the UK, pension drawdown (taking regular income from investments and/or making regular disinvestments to provide a pension income) is currently the most common form of decumulation. If this is the chosen manner to realise a pension from the pension capital, then there are good reasons why a private credit allocation can continue to be held during retirement.

To consider this, we continue the glidepaths shown in Figures 1 & 2 into retirement (with the same at-retirement allocations held throughout retirement) and consider a member following the well-known 4% rule i.e. drawing a pension income of 4% of initial pension capital at retirement and increasing with inflation each year. In this case, we are taking this purely as an example of a drawdown strategy with which to compare two potential asset allocations (not as a recommendation of this drawdown strategy). We then look at the proportion of scenarios under which a member pursuing this strategy would have extinguished all their pension capital by each year after retirement.

Figure 3: Chance of extinguishing pension capital during retirement



Source: Aegon Asset Management.

In the UK, pension drawdown (taking regular income from investments and/or making regular disinvestments to provide a pension income) is currently the most common form of decumulation.

We can see from Figure 3 that over a 30-year retirement a member including private credit (20% of their assets) in place of some of the equities and fixed income in their asset allocation would have fared considerably better, with many fewer scenarios where their pension capital would have been extinguished.

This reflects the higher average expected return on the portfolio with private credit (4.9% versus 4.7% p.a.) but also greater protection in the critical downside scenarios (e.g. equity crashes) which will prevent selling assets at very low valuations.

Aegon Asset Management's Private Credit strategies

At Aegon Asset Management, we have a long history of private credit investing. Over the past decade we have grown our alternative fixed income assets from £5 billion to ca. £60 billion*, managed by a team of 60-strong investment professionals*. Today, Aegon AM is one of the largest Alternative Fixed income asset managers in Europe, offering a diversified platform of strategies across the credit, ESG and liquidity spectrum to meet the needs of insitutional investors.

We offer "single-category" investment funds or mandates but are also planning to launch a combined strategy in early 2025, allowing UK defined contribution pension schemes to access a wide variety of private credit strategies in one solution. We are also pleased to work with pension providers and their advisors on developing "wrapped" solutions which would combine private credit strategies with other (liquid) asset classes held by DC schemes, allowing them to more easily administer their solutions.

We focus on strategies where we can add value as a market specialist and which are generally on the lower side of the private credit risk spectrum – our lending strategies are investment grade or highly rated sub-investment grade and focus on lower leveraged opportunities than many private debt strategies, for example. All our strategies have, as standard, no performance fees applicable. Below we highlight some of the strategies which we believe are of most interest to UK DC investors and will be included initially in the combined private credit strategy we plan to launch.

Corporate lending	<p>Our focus in this area is on direct lending to European small- and mid-cap businesses via diversified portfolios of company- and loan-types. We have a team of over 20 professionals focused on direct lending and have been operating in this space since 2015. Our sourcing network includes over 200 debt advisors, private equity firms, and banks.</p> <p>Loans in our strategies are typically below £50 million ticket-size and have tenors of around 5-8 years. Credit quality is on average BB/B equivalent with various different covenants applied to the borrowers to mitigate default risk. Loan terms range from 5 to 8 years and can be floating or fixed rate with amortising principal amounts a common structure. Yields compare very favourably with tradeable high yield loans to similarly rated companies, earning investors an attractive illiquidity premium.</p>
NAV fund financing	<p>This category is focused on senior loans to private equity and private markets funds, usually collateralised by the investments in the funds. Most private markets funds require borrowing facilities and will typically borrow 10-30% of the fund's value. Loans are typically 3-6 years' tenor with a credit risk equivalent to BBB/A. Exposure is global, including to Europe, North America, and Asia-Pacific.</p> <p>Aegon Asset Management focusses on lower risk loans (typically with 10-20% loan-to-value ratios and protection through covenants and collateral. Credit risk is typically investment grade equivalent (BBB or A-rated) with a strong yield pick-up over similarly rated corporate bonds.</p>
Insured credit	<p>This category invests in private loans to various types of institutions and countries, including development loans to emerging markets, infrastructure project loans and corporate loans amongst others. In return for a premium, the credit risk of the loans is then insured by AA and A-rated insurance companies. Investors therefore have recourse to two parties – the borrower and the insurance company in the case the borrower defaults. The net yields available are very attractive compared to equivalent-rated traditional credit.</p> <p>Aegon Asset Management is one of the few asset managers offering this specialised asset class. We have strong relationships with the originators – generally development banks or commercial banks – and with the insurers operating in this market.</p>
Renewables lending	<p>Aegon Asset Management invests in a wide portfolio of senior project finance loans focused on the generation, transportation and storage of renewable energy. The strategy is managed for over eight years by a stable team of investment professionals who have developed an extensive network of strategic sourcing partners comprising top tier infrastructure sponsors and leading project finance banks.</p> <p>The aim of Aegon Asset Management's renewable strategy is to deliver an attractive return – the loans in which we invest are relatively low risk with average equivalent credit ratings of A/BBB but with an illiquidity premium over comparable core fixed income bonds – whilst making a scalable contribution to the energy transition theme. Given the relatively large size of the UK renewable energy sector, there is also considerable direct and indirect exposure to the UK economy.</p>
Asset-backed securities	<p>Asset-backed securities (ABS) represent securities backed by specific collateral, with the largest sectors being residential mortgages (RMBS), consumer ABS and auto loan ABS. Approximately 75% of the universe consists of ABS that are exposed to consumer risk and therefore offer a diversifier in any investment portfolio as they mostly consist of exposure to government or corporate risk.</p> <p>Aegon Asset Management has been investing in European ABS since 2001, in US ABS since the 1980s, and has one of the largest dedicated ABS management teams in Europe.</p>

*Source: Aegon AM, as at 31 March 2024.

Appendix & references

Summary statistics of long-term economic scenarios

Asset class	Average return p.a.	Standard deviation p.a.	Correlations									
			Eqs.	Gilts	IL gilts	£ IG	Gbl. IG	EMD	GHY	Cash	PC	
Global Equities	5.7%	17.0%	1.00									
Gilts	3.9%	9.1%	-0.02	1.00								
Index-Linked Gilts	3.3%	9.1%	0.07	0.59	1.00							
Sterling IG Credit	4.6%	7.7%	0.22	0.64	0.46	1.00						
Global IG Credit	4.2%	5.6%	0.30	0.15	0.22	0.59	1.00					
Emerging Market Debt	5.4%	11.3%	0.26	0.18	0.19	0.37	0.55	1.00				
Global High Yield	5.0%	12.7%	0.39	0.06	0.15	0.45	0.62	0.54	1.00			
Cash	2.5%	1.9%	-0.09	0.19	0.14	0.18	0.19	0.12	0.02	1.00		
Private Credit	5.4%	6.0%	0.36	0.11	0.17	0.47	0.65	0.49	0.85	0.18	1.00	
Inflation	2.2%	2.5%										
Wage inflation	2.9%	3.1%										

Example member details: Initial pensionable salary of £25,000 p.a., increasing annually with wage inflation and with an additional 1% p.a. for promotions. No initial pension capital assumed. 10% of pensionable salary in total (employee and employer) contributions.

1. Risk aversion parameter ranges based, among other sources, upon the following research:

Measuring latent risk preferences: minimizing measurement biases, Gosse AG Alserda, Journal of Risk 21(5), 1–21, June 2018.

Risk Aversion at the Country Level, Néstor Gandelman and Rubén Hernández-Murillo, Federal Reserve Bank of St. Louis, February 2014



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