BeFrank Active Lifecycle

Q3 2023

Investing in a lifecycle

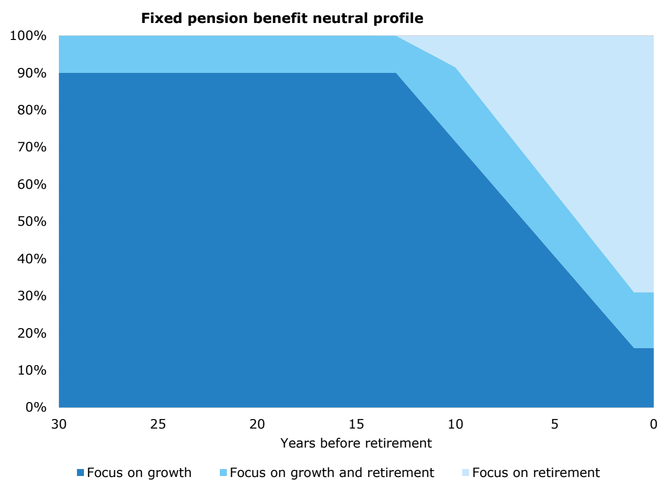
In lifecycle investing, the investment risk is automatically reduced as the retirement date approaches. We do this by gradually reducing the proportion of the pension money that we invest in risky investments (such as equities) and allocating more to low-risk investments such as government bonds.

The lifecycle consists of three parts, also called building blocks:

- **Focus on growth**
  This part aims to generate potentially attractive returns. To accomplish this, we invest in the BeFrank First Class Return Fund, which allocates the majority of its assets to global equities, but also invests in other riskier asset classes such as high-yield corporate bonds and emerging market government bonds.

- **Focus on growth and retirement**
  This part combines generating potentially attractive returns and reducing the investment risk ready for retirement. In order to achieve this, we invest in potentially less risky investment asset classes such as green and corporate bonds with a high credit rating and Dutch mortgages (Hybrid Fund).

- **Focus on retirement**
  This part is intended to reduce interest rate risk. On retirement date, a benefit is purchased with the pension capital. The size of the pension benefit depends on a number of factors including the market interest rate at the time. If interest rates are low, more money is needed to buy the same pension benefit than when interest rates are high. The Liability Matching Funds (NL) reduce this interest rate risk. If interest rates fall, the returns generated by these funds increase. The reverse also applies. If interest rates rise, the value of investments decreases, but because interest rates are higher, less money is required to purchase the same pension benefit. This is how we try to 'match' the purchase of pensions with interest rate movements. We use three bond funds with different interest rate sensitivity profiles (Liability Matching Funds M, L, XL (NL)) that invest in European government bonds to do this. These bond funds reduce the risk associated with lower market interest rates.



Source: Goldman Sachs Asset Management. Data as of 01/01/2023.

Financial markets

Lifecycle returns depend on what's going on in the financial markets. So how did the markets perform last quarter?

Focus on growth

Equities account for the largest share of the investments in the focus on growth category. To get an idea of how this category performed, we consider what went on in the world's biggest stock markets – those of the United States and Europe.

Global developed-market equities fell by 0.4% in the third quarter, while emerging-market equities rose by 0.2%. Japan was the best-performing market over the quarter, rising by 1.6%, with the UK not far behind, up by 1.5%. Eurozone equities were the worst performers, falling by 4.3%, while US equities were little changed, down by 0.1%. There was considerable dispersion at the sector level over the quarter. Energy was the best performer from a sector perspective, gaining 15%, followed by communication services, which rose by 4.7%. Utilities posted the worst return, losing 6.3%, while consumer staples was down by 3.4% and IT by 3.2%. All of these figures are in euro terms.

Focus on growth and retirement

When looking at corporate bonds, the credit spread is the difference between the yield provided by a corporate bond and the corresponding government bond with the same maturity. The credit spread indicates how much extra return the investment offers compared with safer investments.

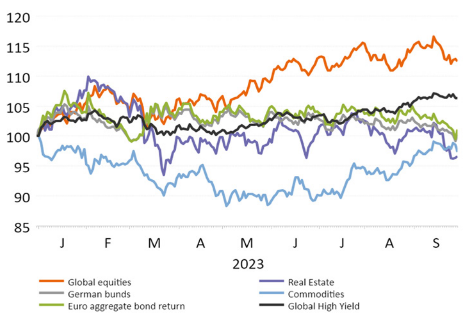
Bond performance was mixed in July. The US 10-year yield rose by 15 bps even though inflation was down, as strong activity data pushed yields higher. In the UK, the 10-year yield fell by 12 bps on the back of lower-than-expected inflation, while the German 10-year yield rose by a modest 6 bps. At the short end, the US two-year yield was flat. August was quite a volatile month for bonds, especially in the US, where they were relentlessly sold off, resulting in yields hitting their highest level in years. The US 10-year yield hit an intra-day peak of 4.36% on 22 August – its highest level since 2007. However, it moderated somewhat towards the end of the month, ending August up 13 bps. It was a similar story in the UK, where the 10-year yield was up 40 bps at one point but finished the month up just 5 bps. German and Japanese 10-year yields were essentially flat. Short-end rates were much less volatile, with the US two-year flat. In September, the US 10-year yield rose by 50 bps due to the Federal Reserve's higher-for-longer stance, while German 10-year yields were up by 40 bps. Japanese and UK 10-year yields moved up more modestly – by 13 bps and 5 bps respectively – as their central banks were less hawkish than the Fed. The US two-year yield rose by 20 bps.

Focus on retirement

Interest rate movements are important for the focus on retirement building block, so here we take a look at the monetary policy of the Federal Reserve (Fed) and the European Central Bank (ECB).

Both the Federal Reserve and European Central Bank (ECB) hiked rates by 25 basis points (bps) in July, in line with market expectations. Interestingly, both central banks avoided providing forward guidance, stating that further policy action would be data-dependent. The Bank of Japan kept its target for 10-year Japanese

Figure 1: performance of asset classes (euros)



Sources: LSEG Datastream, Goldman Sachs Asset Management.
Data as of 30/09/2023.

government bond yields at 0%, but effectively increased the maximum level they can reach from 0.5% to 1.0%. This change was seen as an initial step towards policy normalization in Japan, although Bank of Japan Governor Kazuo Ueda said he did not expect long-term yields to actually rise to 1%. The Jackson Hole Economic Symposium was the most eagerly anticipated event in August, but Fed Chair Jerome Powell struck a balanced tone, stating his intent to continue to follow a data-dependent approach to monetary policy. The People's Bank of China surprised the markets by cutting interest rates in August, lowering the one-year medium-term lending facility by 15 bps and the seven-day reverse repo rate by 10 bps. These cuts were followed up with a 10 bps cut to the one-year loan prime rate. At its September meeting, the Federal Reserve kept policy rates unchanged, as expected, but revised its median forecast for the policy rate at the end of 2024 up by 50 bps. The ECB increased interest rates by 25 bps, in line with market expectations, while the Bank of England surprised the market by keeping rates on hold when a 25 bps raise had been expected. In Asia, both the People's Bank of China and the Bank of Japan kept their monetary policy unchanged.

Net return by age group

Fixed pension benefit

Very defensive

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.1	2.8	5.0	4.2
45 years	-2.1	2.8	5.0	4.2
55 years	-4.9	-2.0	-0.9	-4.5
67 years	-4.2	-2.8	-3.4	-11.4

Defensive

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.3	2.9	5.2	4.7
45 years	-2.3	2.9	5.2	4.7
55 years	-3.4	0.5	2.1	0.0
67 years	-4.6	-2.5	-2.8	-10.7

Neutral

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.4	2.9	5.4	5.2
45 years	-2.4	2.9	5.4	5.2
55 years	-2.4	2.9	5.4	5.0
67 years	-4.9	-2.5	-2.5	-10.4

Offensive

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.5	3.0	5.7	5.7
45 years	-2.5	3.0	5.7	5.7
55 years	-2.5	3.0	5.7	5.7
67 years	-5.0	-2.6	-2.5	-10.2

Very offensive

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.6	3.0	5.9	6.2
45 years	-2.6	3.0	5.9	6.2
55 years	-2.6	3.0	5.9	6.2
67 years	-5.1	-2.6	-2.4	-10.1

Net return by age group

Variable pension benefit reduced risk to 15%

Defensive - reduced risk to 15%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.3	2.9	5.2	4.7
45 years	-2.3	2.9	5.2	4.7
55 years	-2.9	1.2	3.0	1.0
67 years	-5.1	-2.5	-2.3	-10.1

Neutral - reduced risk to 15%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.4	2.9	5.4	5.2
45 years	-2.4	2.9	5.4	5.2
55 years	-2.4	2.9	5.4	5.0
67 years	-5.2	-2.5	-2.2	-10.0

Offensive - reduced risk to 15%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.5	3.0	5.7	5.7
45 years	-2.5	3.0	5.7	5.7
55 years	-2.5	3.0	5.7	5.7
67 years	-5.3	-2.5	-2.2	-9.9

Very offensive - reduced risk to 15%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.6	3.0	5.9	6.2
45 years	-2.6	3.0	5.9	6.2
55 years	-2.6	3.0	5.9	6.2
67 years	-5.4	-2.5	-2.2	-9.9

Net return by age group

Variable pension benefit reduced risk to 30%

Neutral - reduced risk to 30%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.4	2.9	5.4	5.2
45 years	-2.4	2.9	5.4	5.2
55 years	-2.4	2.9	5.4	5.1
67 years	-5.8	-3.4	-2.8	-8.7

Offensive - reduced risk to 30%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.5	3.0	5.7	5.7
45 years	-2.5	3.0	5.7	5.7
55 years	-2.5	3.0	5.7	5.7
67 years	-5.8	-3.4	-2.8	-8.6

Very offensive - reduced risk to 30%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.6	3.0	5.9	6.2
45 years	-2.6	3.0	5.9	6.2
55 years	-2.6	3.0	5.9	6.2
67 years	-5.9	-3.5	-2.8	-8.5

Variable pension benefit reduced risk to 45%

Offensive - reduced risk to 45%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.5	3.0	5.7	5.7
45 years	-2.5	3.0	5.7	5.7
55 years	-2.5	3.0	5.7	5.7
67 years	-6.4	-3.7	-2.7	-7.5

Very offensive - reduced risk to 45%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.6	3.0	5.9	6.2
45 years	-2.6	3.0	5.9	6.2
55 years	-2.6	3.0	5.9	6.2
67 years	-6.5	-3.8	-2.7	-7.4

Variable pension benefit reduced risk to 60%

Very offensive - reduced risk to 60%

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
35 years	-2.6	3.0	5.9	6.2
45 years	-2.6	3.0	5.9	6.2
55 years	-2.6	3.0	5.9	6.2
67 years	-7.1	-4.3	-2.9	-6.3

Developments in sustainable investing

Green Bonds: Reducing greenhouse gas emissions

For investors committed to advancing the transition to a low-carbon, more inclusive economy, 2022 delivered a reality check. Last year's market volatility, inflationary pressures, rising interest rates and energy supply concerns revealed the challenges of navigating the climate transition that is transforming the global economy. These macro factors dragged on investment strategies focused on environmental, social and governance (ESG) issues, interrupting a decade of rapid expansion for the sustainable investing theme. In fixed income, monetary policy tightening, and high inflation rates weighed on most asset types, and green bonds were not immune.

Green bonds only finance projects or activities with a specific environmental purpose such as renewable energy, clean transportation, sustainable water and energy efficiency. While 2022 was a tough year for many ESG investors, that is no reason to change course. Goldman Sachs Asset Management, the manager of the lifecycle investments, believes that investing in green bonds can make a positive environmental impact without sacrificing liquidity or returns.

Among green bond issuers such as companies and governments, annual greenhouse gas (GHG) emissions avoided is the most frequently reported green bond metric. It is measured in metric tons of carbon dioxide equivalent (CO2e)[1]. Avoiding these emissions can be achieved through a range of projects, such as renewable energy plants that help reduce demand for traditional energy and public transportation that allows people to travel less in private cars. Other projects that fall into this category include installing optical fibre to improve energy efficiency and financing green buildings that use energy and water more efficiently.

Companies and governments that issue green bonds provide data on avoided GHG emissions to investment managers such as Goldman Sachs Asset Management. Goldman Sachs collects the available data reported by issuers of bonds held in the portfolios, then prorates the numbers by the amount of investment to calculate an aggregate expected impact number for the green bond investment strategy[2]. By applying this methodology, the investment manager can aggregate annual greenhouse gas emissions avoided. For the Goldman Sachs Corporate Green Bond fund this is expected to add up to 246,878 metric tons of CO2e avoided in 2022[3].

1 Not all greenhouse gases warm the atmosphere equally. For this reason, the term CO2e is used to provide a uniform means of measuring emissions. In calculating CO2e, greenhouse gases such as methane are converted to the equivalent amount of carbon dioxide based on their relative contribution to global warming.
2 Goldman Sachs Asset Management Green & Social Bond Funds Impact Report 2022. For a more detailed explanation, see the Impact Calculation Methodology section of the report.
3 Goldman Sachs Asset Management Green & Social Bond Funds Impact Report 2022. Data Provided by Issuers. As of December 31, 2022.

Sustainability impact

The sustainability of an investment fund is determined by several factors. We request data on CO2 emissions, water consumption and waste generation from our (underlying) investment funds and their benchmarks. In the benchmark, sustainability criteria are not considered. Comparing these data provides insight into the savings of CO2 emissions, water consumption and waste production of our sustainable funds compared to the benchmark. Note: these are factors that say something about sustainability, but the impact on sustainability is also determined by other factors such as the exclusion of certain sectors or companies. The overview below shows the savings per million EUR invested in the BeFrank First Class Return Fund, based on figures as of 30/06/2023. Participants can find the savings associated with the value of their investments on their BeFrank personal pension page.

39 tons	**829** m³	**121** tons
CO2 emissons	water consumption	waste
You can compare that with **357,798** kilometres driven	You can compare that with showering **13,222** times	You can compare that with **12,100** garbage bags

Source: BeFrank

Funds BeFrank Active Lifecycle

BeFrank First Class Return Fund

The fund posted a negative net quarterly return, most of which were generated by equity investments. This was partly due to their relatively large weighting, 83.1% at the end of the quarter, within the fund. Investments suffered from the poor equity climate on the one hand. Sustainable equity investments in particular lagged significantly behind its relevant equity benchmark on the other.

Fixed-income funds made a marginally positive contribution and were a mixed bag. High-yield, riskier corporate bonds had a good quarter and contributed positively to returns. This was partly the result of the high-yield investment fund beating its relevant benchmark. Emerging market bonds, however, strongly lagged and posted negative returns.

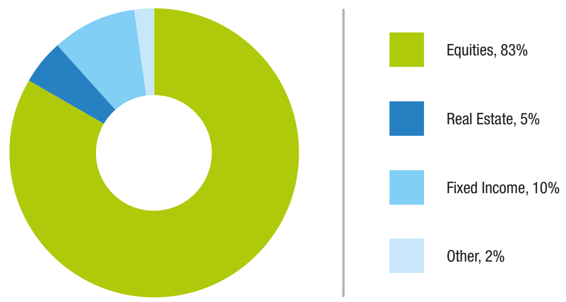
Listed real estate investments also had a disappointing quarter and generated a negative contribution.

Tactical investment decisions impacted returns negatively as well this quarter, which was mainly the result of the overweight exposure to government debt. The overweight duration position in the US in particular depressed returns. The overweight position in equities also hurt returns, but the impact was smaller than the overweight fixed income position.

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
BeFrank First Class Return Fund	-2.6	3.0	5.9	6.2

Statistics	
ISIN code	NL0013019219
Inception date	January 2019
Ongoing charges	0.20%

Positioning



Source: Goldman Sachs Asset Management, all figures are as of 30/09/2023.

Performance

BeFrank First Class Return Fund*

Return (%) (net) Equities	3 months	year to date	1 year	3 years (ann.)	5 years (ann.)	weight**
Global Sustainable Equity Sleeve	-3.1	8.0				63.5
MSCI World (NR)	-0.5	12.0				
Enhanced Index Sustainable Global Small Caps Equity Fund	-1.3	2.7	5.1			4.9
MSCI World Small Cap Index (NR)	-1.5	3.7	5.5			
GS Enhanced Index Sustainable EM Equity Fund	-0.5	1.3	2.2	1.3	2.2	14.7
MSCI Emerging Markets (NR)	0.0	2.6	3.4	1.7	2.4	
Real Estate						
GS Global Real Estate	-2.2	-2.7	-5.1	3.8	1.5	5.0
GPR 250 Global 10/40 (NR)	-2.4	-4.0	-6.2	4.3	1.0	
Fixed Income						
GS Global High Yield	3.4	5.6	5.2			4.7
Bloomberg Barclays 70% US 30% Pan-European ex Fin Subord 2% Issuer Capped High Yield EUR (unhedged)	3.0	6.8	5.0			
GS Emerging Markets Debt HC	-2.3	0.5	10.3	-5.8	-2.0	2.4
J.P. Morgan Emerging Market Bond (EMBI) Global Diversified EUR (hedged)	-2.8	-0.1	7.0	-6.5	-2.6	
GS Emerging Markets Debt LB	-0.1	5.8	5.1	1.1	1.9	2.4
J.P. Morgan Government Bond-Emerging Market (GBI-EM) Global Diversified	-0.3	5.1	4.6	0.7	1.9	

* These are the net returns of the underlying strategies of the BeFrank First Class Return Fund. The fund costs (ongoing charges) are only charged in the BeFrank First Class Return Fund.

** The figures shown in the weighting column are based on the model weighting. This means that the returns shown cannot be traced back to this report.
Source: Goldman Sachs Asset Management, all figures are as of 30/09/2023.

Hybrid Fund

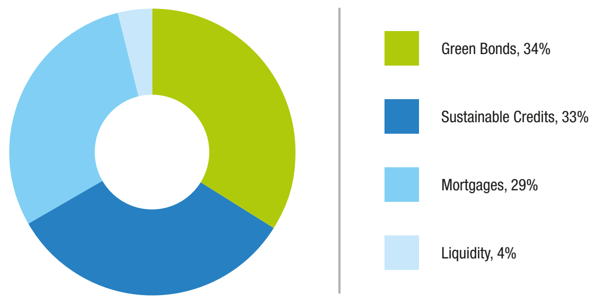
The fund posted a negative net quarterly return.

The sustainable credit and green bond credit portfolios made a positive contribution to total returns and performed in line with the benchmark. The mortgage portfolio, however, had a negative quarter and dragged down total returns.

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
Hybrid Fund	-0.1	2.2	1.7	-4.2

Statistics	
ISIN code	NL0013696354
Inception date	November 2019
Ongoing charges	0.21%

Positioning



Source: Goldman Sachs Asset Management, all figures are as of 30/09/2023.

Liability Matching funds

The three Liability Matching funds have different interest rate sensitivity profiles (Liability Matching Fund (M) (NL), Liability Matching Fund (L) (NL) and Liability Matching Fund (XL) (NL)). They invest in a combination of euro-denominated interest rate swaps, high-quality money market funds, high-quality government bonds and cash. The interest rate sensitivity of the funds is enhanced with interest rate swaps and bond futures.

The Liability Matching Fund (M) (NL) strives for an interest rate sensitivity of about 4 years and (L) (NL) and (XL) (NL) of approximately 20 and 40 years, respectively. The three Liability Matching funds have different interest rate profiles that are composed in such a way that, used in combination, they can offer the best possible match in the period leading up to retirement.

What did the interest rates do?
In the recent quarter, the 10-year German government bond yield rose by 0.45% to 2.84%. One of the reasons for this is persistent inflation, which is expected to remain at relatively high levels for longer than initially priced in. The increase for government bonds with a longer maturity was higher. The longer the duration of a fund, the higher the effect of interest rate rise on a fund. As a result, the Liability Matching Fund (XL) (NL) showed the most negative return over the past quarter. Because these funds have been set up to hedge the risk of an interest rate increase or decrease on the pension to be purchased at retirement, a negative return for a 67-year-old is not necessarily disadvantageous. The pension to be purchased has also become cheaper. Looking ahead, we expect the ECB to maintain its current policy rate into 2024.

Performance

Liability Matching Fund (M) (NL) - T

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
Liability Matching Fund (M) (NL) - T	0.0	0.9	0.1	-4.7
Bloomberg Barclays Euro Treasury AAA 1-3 Yr Downgrade Maturity Tolerant, incl derivatives to increase duration (M)	0.0	0.5	-0.6	-5.0

Statistics	
ISIN code	NL0013040348
Inception date	November 2018
Ongoing charges	0.15%

Liability Matching Fund (L) (NL) - T

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
Liability Matching Fund (L) (NL) - T	-9.5	-7.5	-8.0	-19.7
Bloomberg Barclays Euro Treasury AAA 1-3 Yr Downgrade Maturity Tolerant, incl derivatives to increase duration (L)	-9.5	-7.6	-8.6	-20.1

Statistics	
ISIN code	NL0013040355
Inception date	November 2018
Ongoing charges	0.15%

Liability Matching Fund (XL) (NL) - T

Return (%) (net)	3 months	year to date	1 year	3 years (ann.)
Liability Matching Fund (XL) (NL) - T	-18.1	-21.2	-23.2	-31.5
Bloomberg Barclays Euro Treasury AAA 1-3 Yr Downgrade Maturity Tolerant, incl derivatives to increase duration (XL)	-17.9	-20.9	-22.9	-31.6

Statistics	
ISIN code	NL0013040363
Inception date	November 2018
Ongoing charges	0.15%

Source: Goldman Sachs Asset Management, all figures are as of 30/09/2023.

Disclaimer

The purpose of this report is to provide insight into the investments within the lifecycle of BeFrank and is not an investment advice. The performance overview has been compiled with care by BeFrank. No rights can be derived from this information. The returns in the report are after deduction of the fund costs but exclude the management costs charged by BeFrank.

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