BeFrank Active Lifecycle

Q1 2022

Investing in a lifecycle

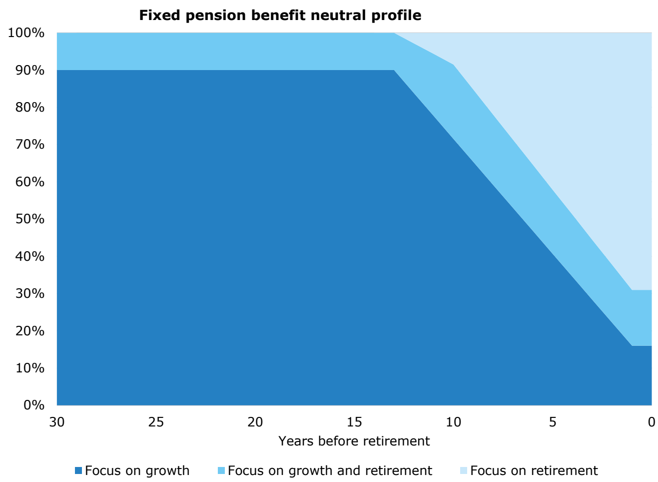
In lifecycle investing, the investment risk is automatically reduced as the retirement date approaches. We do this by gradually reducing the proportion of the pension money that we invest in risky investments (such as equities) and allocating more to low-risk investments such as government bonds.

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

- **Focus on growth**
  This part aims to generate 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 attractive returns and reducing the investment risk ready for retirement. In order to achieve this, we invest in 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 NN Liability Matching Funds 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 (NN Liability Matching Funds M, L, XL) that invest in European government bonds to do this. These bond funds reduce the risk associated with lower market interest rates.



Source: NN IP

Financial markets

Lifecycle returns depend on the performance of financial markets. How did markets perform over the last quarter?

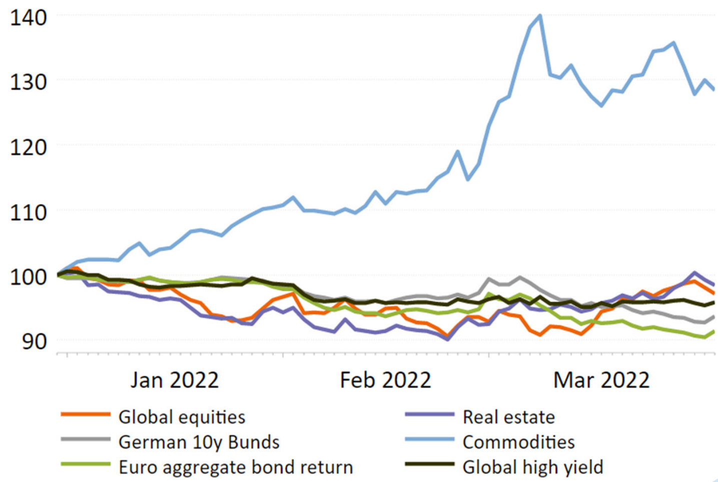
Focus on growth: difficult start for global equities

In the focus on growth category, equities account for the largest share of investments. To get an idea of how this category performed, we look towards the largest capital markets in the world, the United States and Europe.

- The first quarter was dominated by two major events. The first was a string of inflation data that surprised on the upside, followed by a brutal hawkish shift by central banks. They will raise policy rates more quickly. The second event that hit the markets was the Russian invasion of Ukraine. Equities fell sharply after that, although a recovery followed at the end of the quarter. On balance, global equities (according to the MSCI World index for all countries) lost 4.5% in local currency. This marked the second-worst start to the year since 2010, the corona-impacted first quarter of 2020 being the worst. From a regional perspective, the Eurozone lagged, declining 9.1%. The region's high vulnerability to economic sanctions and its heavy dependence on Russian energy supplies are having a big impact on the growth outlook. All in all, developments in the financial markets were unfavourable for the return fund.

- Figure 1 clearly shows that commodities (blue line) performed by far the best amid all the turmoil. The commodity market confirmed its status as a good hedge against inflation and geopolitical risks. Moreover, demand increased, as corona restrictions have been lifted in many countries. Inventories remained tight and prices rose across the board. Riskier investments, such as global equities (orange line) and real estate (purple line), managed to recover at the end of the quarter, when the war in Ukraine did not escalate further. Bonds then lost further ground.

Figure 1: Performance asset classes (euros)



Sources: Refinitiv Datastream, NN IP

Focus on growth and retirement: higher interest rates unfavourable for corporate bonds

When looking at corporate bonds, the *credit spread* is the difference between the interest rate on a corporate bond and the corresponding *benchmark* loan (government bond with the same maturity). The *credit spread* indicates how much extra return the investment offers compared to other (safer) investments. This is also known as the risk premium.

- Because of all the uncertainty, interest rates have risen sharply, and *credit spreads* have widened. This was generally detrimental to corporate bonds, which had a difficult and volatile quarter.

- The Dutch housing and mortgage market had another good quarter. A record number of more than 191,000 mortgages were applied for. This was mainly driven by refinancers, in view of rising interest rates. The average selling price of an existing home was 428,000 euros; about 2% less than in the previous quarter, but still well above a year ago.

Focus on retirement: central bank policy shift pushes up interest rates

For the focus on retirement, interest rate movements are important. For this we look at the monetary policy of the US Federal Reserve (Fed) and the European Central Bank (ECB).

- Persistently high inflation caused a shift in the regimes of central banks. The Fed is expected to raise interest rates significantly this year and will also start reducing its balance sheet. The ECB followed suit by announcing an accelerated tapering process and keeping the door open to raising rates this year. The regime shift of the major central banks and fears of even higher inflation are still making investors nervous, as evidenced by the sharp rise in bond yields. The European benchmark, the yield on 10-year German government bonds, ended the quarter 69 basis points higher. The rise in interest rates is also reflected in the negative quarterly returns of the Liability Matching funds.

Outlook

- Market sentiment will be determined in the coming period by interest rate and inflation developments and geopolitical risks. The fallout of the armed conflict will also complicate monetary policy decisions. Will central banks revise their policy stance in view of the latest escalation and subsequent economic risks? For the time being it appears that inflation fears are bigger than growth fears. What seems clear is that the new policy regime will be less supportive than the previous one and that we must be prepared to live through a period of higher market volatility and less directionality. This will be reflected in lower valuation metrics as well as higher required risk premiums.

- In the near term, inflation risks are clearly to the upside as commodity prices remain the main driver of headline inflation rates. In the more medium term, however, the trajectory of underlying inflation has become even more uncertain than it already was. This is because the inflation spike acts as an additional drag on consumers' real disposable income while it also eats into the real profits of a considerable part of the business sector. Strong upward inflationary pressures increase the likelihood of a further rise in interest rates. For European interest rates, we wonder whether the increases that the market is currently expecting are justified. These expectations have caused German government bond yields to rise sharply. The two or even three rate hikes that the market is pricing in for this year seem exaggerated to us, as the growth outlook for Europe has become bleaker.

Net return by age group

Fixed pension benefit

Vey defensive

Return (%) (net)	3 months	year to date	1 year
35 years	-6.8	-6.8	6.9
45 years	-6.8	-6.8	6.9
55 years	-8.8	-8.8	0.1
67 years	-8.3	-8.3	-9.6

Defensive

Return (%) (net)	3 months	year to date	1 year
35 years	-6.9	-6.9	7.6
45 years	-6.9	-6.9	7.6
55 years	-7.7	-7.7	4.0
67 years	-9.0	-9.0	-8.2

Neutral

Return (%) (net)	3 months	year to date	1 year
35 years	-7.0	-7.0	8.3
45 years	-7.0	-7.0	8.3
55 years	-7.0	-7.0	8.3
67 years	-9.3	-9.3	-7.6

Offensive

Return (%) (net)	3 months	year to date	1 year
35 years	-7.1	-7.1	8.9
45 years	-7.1	-7.1	8.9
55 years	-7.1	-7.1	8.9
67 years	-9.5	-9.5	-7.2

Vey offensive

Return (%) (net)	3 months	year to date	1 year
35 years	-7.2	-7.2	9.6
45 years	-7.2	-7.2	9.6
55 years	-7.2	-7.2	9.6
67 years	-9.6	-9.6	-6.9

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
35 years	-6.9	-6.9	7.6
45 years	-6.9	-6.9	7.6
55 years	-7.4	-7.4	4.5
67 years	-9.6	-9.6	-7.0

Neutral - reduced risk to 15%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.0	-7.0	8.3
45 years	-7.0	-7.0	8.3
55 years	-7.0	-7.0	8.3
67 years	-9.7	-9.7	-6.8

Offensive - reduced risk to 15%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.1	-7.1	8.9
45 years	-7.1	-7.1	8.9
55 years	-7.1	-7.1	8.9
67 years	-9.7	-9.7	-6.7

Very offensive - reduced risk to 15%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.2	-7.2	9.6
45 years	-7.2	-7.2	9.6
55 years	-7.2	-7.2	9.6
67 years	-9.8	-9.8	-6.5

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
35 years	-7.0	-7.0	8.3
45 years	-7.0	-7.0	8.3
55 years	-7.0	-7.0	8.3
67 years	-9.7	-9.7	-4.2

Offensive - reduced risk to 30%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.1	-7.1	8.9
45 years	-7.1	-7.1	8.9
55 years	-7.1	-7.1	8.9
67 years	-9.8	-9.8	-4.1

Vey offensive - reduced risk to 30%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.2	-7.2	9.6
45 years	-7.2	-7.2	9.6
55 years	-7.2	-7.2	9.6
67 years	-9.8	-9.8	-3.9

Variable pension benefit reduced risk to 45%

Offensive - reduced risk to 45%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.1	-7.1	8.9
45 years	-7.1	-7.1	8.9
55 years	-7.1	-7.1	8.9
67 years	-10.2	-10.2	-1.7

Vey offensive - reduced risk to 45%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.2	-7.2	9.6
45 years	-7.2	-7.2	9.6
55 years	-7.2	-7.2	9.6
67 years	-10.2	-10.2	-1.6

Variable pension benefit reduced risk to 60%

Vedy offensive - reduced risk to 60%

Return (%) (net)	3 months	year to date	1 year
35 years	-7.2	-7.2	9.6
45 years	-7.2	-7.2	9.6
55 years	-7.2	-7.2	9.6
67 years	-10.5	-10.5	0.9

Developments in sustainable investing

Responsible investing – our milestones of 2021
NN Investment Partners (NN IP), the lifecycle investment manager, strongly believes in responsible investing. NN IP is convinced that responsible investing contributes to a sustainable future and an attractive return.

NN IP considers it essential to report transparently. Our Responsible Investing Report 2021 explains why we put responsible investing at the core of our approach. It also shows what we achieved last year on central sustainability themes such as climate impact, biodiversity, and social progress. Below we share the most important points from the report.

Higher percentage of ESG integrated investments
First, we have further increased the integration of ESG (environmental, social, and governance) criteria into our investments in 2021. ESG criteria were integrated into 91% of our investments at the end of last year, compared to 74% a year earlier.

Significant steps in climate ambitions
We have also taken significant steps regarding our climate ambitions in 2021. For example, we have set interim emission reduction targets for our portfolios. In this way, we are working towards net-zero emissions in 2050. We are well on our way and currently manage 37% of our investments according to the ‘Net Zero Paris Aligned target’. Our investments have 47% less CO2 emissions, 33% less water consumption, and 82% less waste production compared to the benchmark.

We are also a signatory to the ‘Finance for Biodiversity Pledge’, which focuses on the conservation and restoration of biodiversity. Through this pledge, we commit ourselves to map our impact on biodiversity by 2024 at the latest, linking goals to them and reporting on them.

Dialogue and voting rights
In 2021, we continued to use our influence as a committed and active investor to steer companies and governments in our portfolios toward more sustainable strategies. In 2021, we engaged with 541 companies and 18 governments. We also brought our influence to bear by exercising our voting rights, for example, through 568 ESG shareholder resolutions.

NN IP is affiliated with Climate Action 100+, an investor-led initiative to ensure that the world’s largest emitters of greenhouse gases take the necessary measures against climate change. By 2021, NN IP supported 100% of all shareholder proposals of Climate Action 100+.

Stricter restrictions and more excellent supply
We have also tightened our investment restrictions in key areas and expanded our responsible investment offering. For example, we now have a stricter exclusion policy for thermal coal. We exclude companies that generate more than 20% of their turnover from the extraction of this polluting form of energy, where it was previously 30%. Finally, we have expanded our product offering with a new investment strategy for green government bonds. This strategy strives for a positive environmental impact through the projects it finances.

All these milestones have contributed to our mission: to contribute to the transition to a sustainable future and achieve consistent, attractive financial returns.

Would you like to read more about our responsible investing philosophy and results in 2021? Download our Responsible Investment Report 2021 at:
https://www.nnip.com/en-INT/professional/insights/specials/responsible-investing-report-2021

Funds BeFrank Active Lifecycle

BeFrank First Class Return Fund

The fund ended the first quarter with a negative return. This was mainly due to the market turmoil, partly because of the uncertain situation in Ukraine, the turn in the policy of central banks and the pressure on the growth outlook.

Selection effect
On average, the funds in which we invest failed to beat their benchmarks. This was mainly due to the sustainable equity funds that are more growth oriented. In January and February, companies with a focus on growth had a very difficult time. Some recovery followed in March, but this was not enough to make up for the earlier underperformance. All in all, the choices of the various portfolio managers made a negative contribution to the total return during the first quarter.

Tactical asset allocation (TAA)
In addition, tactical investment decisions made a positive contribution to the total return, approximately 0.3% in the first quarter. We make active choices to invest more or less amounts in shares and, within those shares, in regions, for example. But we also decide whether we want to take positions in commodities or positions where we expect, for instance, interest rates to rise or fall. We ended the quarter with an underweight position in equities, with an increased weight to value stocks at the expense of growth stocks and a preference for the United States over Europe. In addition, we were underweight in duration in order to respond to an expected interest rate rise, and a position in commodities as a hedge against inflation risks and geopolitical risks.

Return (%) (net)	3 months	year to date	1 year
BeFrank First Class Return Fund	-7.2	-7.2	9.6

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

Positioning

Source: NN IP, all figures are as of 31/03/2022.

Performance

BeFrank First Class Return Fund

Return (%) (gross) Equities	3 months	year to date	1 year	3 years (ann)	5 years (ann)	Weight**
NN Duurzaam Aandelen Fonds	-9.8	-9.8	15.5	22.4	16.2	65.0
MSCI World (NR)	-3.1	-3.1	16.3	15.3	11.5	
NN Enhanced Index Sustainable EM Equity Fund	-5.6	-5.6	-7.8	5.8	6.5	15.0
MSCI Emerging Markets (NR)	-4.9	-4.9	-6.4	5.3	5.1	
Real Estate						
NN Global Real Estate	-1.0	-1.0	22.7	6.5	6.3	5.0
GPR 250 Global 10/40 (NR)	-1.6	-1.6	22.5	6.4	5.8	
Multi Asset						
NN (L) Multi Asset Factor Opportunities	2.1	2.1	2.5	-0.8	-0.6	5.0
Euribor 1-month	0.0	0.0	-0.6	-0.5	-0.5	
Fixed Income						
NN (L) Global High Yield	-3.1	-3.1				5.0
Bloomberg Barclays 70% US 30% Pan-European ex Fin Subord 2% Issuer Capped High Yield EUR (unhedged)	-3.1	-3.1				
NN (L) Emerging Markets Debt HC	-9.6	-9.6	-8.2	-1.1	0.1	2.5
J.P. Morgan Emerging Market Bond (EMBI) Global Diversified EUR (hedged)	-10.3	-10.3	-8.4	-1.7	-0.4	
NN (L) Emerging Markets Debt LB	-5.7	-5.7	-5.9	-1.8	-1.6	2.5
J.P. Morgan Government Bond-Emerging Market (GBI-EM) Global Diversified	-6.4	-6.4	-7.1	-1.8	-1.2	

* These are the gross 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: NN IP, all figures are as of 31/03/2022.

Hybrid Fund

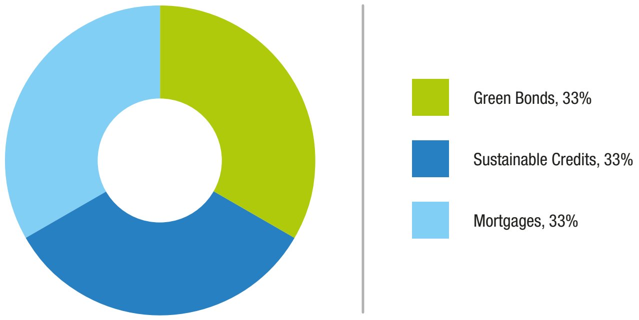
The fund ended the quarter with a negative return. Central banks reacted to high inflation rates and charted a path for tighter monetary policy. As a result, bond yields rose. Even after the Russian invasion of Ukraine, fears of inflation soon prevailed, and interest rates rose again.

Selection effect
The sustainable corporate bond portfolio and the green bond portfolio both showed negative returns this quarter, with the former contributing slightly less to the negative total return. The portfolio managers of both strategies failed to beat the bench-marks; they performed more or less in line with these bench-marks. The mortgage portfolio contributed negatively to the total return.

Return (%) (net)	3 months	year to date	1 year
Hybrid Fund	-5.3	-5.3	-5.1

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

Positioning



Source: NN IP, all figures are as of 31/03/2022.

NN Liability Matching funds

The three Liability Matching funds have different interest rate sensitivity profiles (NN Liability Matching Fund M, L and XL). 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 can be increased using interest rate swaps and bond futures. The NN Liability Matching Fund M strives for an interest rate sensitivity of approximately 4 years and L and XL of approximately 20 and 40 years, respectively.

The three NN 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 rate do?
Due to fears of higher inflation and the policy change of central banks, long-term interest rates rose in the first quarter. For example, the yield on ten-year German government bonds rose by 69 basis points. The 10-year U.S. Treasury yield rose even more sharply, by 83 basis points. The longer the duration of a fund, the greater the effect on a fund. As a result, the XL fund in particular showed a strong negative return over the past quarter. Because these funds are set up to cover the risk of an interest rate rise or fall on the pension to be purchased in retirement, a negative return for a 67-year-old is not necessarily disadvantageous because the pension to be purchased has also become cheaper.

Performance

NN Liability Matching Fonds M-T

Return (%) (net)	3 months	year to date	1 year
NN Liability Matching Fund M - T	-4.1	-4.1	-5.4
Bloomberg Barclays Euro Treasury AAA 1-3 Yr Downgrade Maturity Tolerant, incl derivatives to increase duration (M)	-4.0	-4.0	-5.5

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

NN Liability Matching Fonds L-T

Return (%) (net)	3 months	year to date	1 year
NN Liability Matching Fund L - T	-13.3	-13.3	-14.5
Bloomberg Barclays Euro Treasury AAA 1-3 Yr Downgrade Maturity Tolerant, incl derivatives to increase duration (L)	-13.3	-13.3	-15.0

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

NN Liability Matching Fonds XL-T

Return (%) (net)	3 months	year to date	1 year
NN Liability Matching Fund XL - T	-17.4	-17.4	-16.2
Bloomberg Barclays Euro Treasury AAA 1-3 Yr Downgrade Maturity Tolerant, incl derivatives to increase duration (XL)	-17.3	-17.3	-16.5

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

Source: NN IP, all figures are as of 31/03/2022.

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.