DYNAMIC CREDIT

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Dutch Housing Market Update 2023-Q1

Contact

Jasper Koops

Head of Portfolio Management

Dynamic Credit

Frederik Roeskestraat 97D

1076 EC Amsterdam

The Netherlands

Desk: + 31 20 794 60 58

jkoops@dynamiccredit.com

www.dynamiccredit.com

Dynamic Credit originates and manages tailored portfolios of Dutch residential and consumer BTL mortgage loans for institutional investors in an easy, cost-efficient and transparent way. As always, we welcome the opportunity to discuss the housing market or investing in Dutch mortgages.

"Rising interest rates have significantly transformed the Dutch mortgage market. The demand for long fixed-rate periods and refinancing has decreased, while portability usage has surged to 24% of offer volume in 2023-Q1, up from 0.10% in 2021. Moreover, a substantial interest rate divergence has emerged between the most competitive lenders and the largest banks offering lower rates. This divergence is primarily attributed to reduced price sensitivity among existing homeowners with lower mortgage rates, who are now incentivized to remain with their existing lender in case of relocation and port their mortgage combined with a further advance. Furthermore, house prices have decreased by 1.60% on average QoQ and general consumer confidence, although still negative, has improved during the quarter."

Jasper Koops,
Head of Portfolio Management

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1. Executive Summary

Ported mortgages and interest rate divergence: Portability increased to 24% of total mortgage volume, up from 0.1% in 2021. As of 2022, a substantial mortgage interest rate divergence observed between large banks with sizeable back books and the top six lowest interest rates in the market.

Case study solvency II: A revisit to a prior case study was done as interest rates increased substantially. Adding Dutch mortgages to an investment portfolio can have a positive impact on the Solvency II capital ratios, while improving risk-adjusted return.

Consumer confidence: The consumer confidence value of Vereniging Eigen Huis remained stable, while the CBS value increased. Both indices still show negative sentiment.

Mortgage rates: On average, residential mortgage interest rates increased by 5 bps QoQ. Rate increases were more pronounced for shorter fixed rate periods, leading to inverted interest rate curves for several lenders. Buy-to-let interest rates increased with an average of 31 bps QoQ.

Mortgage spreads: Residential mortgage spreads widened both QoQ and YoY, while QtD mortgage spreads tightened. The same holds for buy-to-let spreads. Overall, spreads remain volatile.

Housing prices: The Dutch House Price Index was down 1.60% QoQ and 0.70% YoY as of 2023-Q1. Prices have decreased over the past eight months, with the exception for January 2023.

Property transactions: The number of properties transferred in 2023-Q1 was approximately 40,000. This translates to a decrease of 21% QoQ and 8% YoY.

Newly built homes: Signals are starting to emerge from the market that the new housing target is in jeopardy, as leading indicator issued building permits is declining.

Carbon emissions: Monitoring and mitigating emission levels of investments have become key considerations for responsible investing. Data-driven insights can inform responsible actions to mitigate environmental impact and promote sustainability for a better future.

Energy Performance of Buildings Directive IV: The European Parliament voted in favor of a more ambitious Energy Performance of Buildings Directive, including a minimum energy label D ambition by 2033.

2. Dutch Housing Market Update

Ported mortgages and interest rate divergence

Portability is a market-standard feature of Dutch mortgages. This feature allows a borrower to port their existing mortgage loan conditions, including the applicable interest rate, to a new property when relocating. Often ported mortgages are combined with a further advance of which the interest rate is the prevailing market rate of the lender at that time. Due to steeply increasing interest rates during the past year, it is financially attractive for borrowers to port their existing loan with a lower rate rather than taking out a new loan when relocating to a new property. This development is evidenced by data from HDN in which the share of mortgage offers related to portability has increased to close to 24% of total mortgage volume, up from 0.1% in 2021, as shown in the Table below:

	2021	2022	2023 YTD
New mortgage loan	67.7%	66.6%	66.8%
Ported loans	0.1%	8.0%	23.7%
Further advances	2.6%	3.5%	3.8%
Refinancing	29.6%	21.9%	5.7%
Total	100%	100%	100%

Table 1: Mortgage offers by type, up to 21-04-2023. Source: Dynamic Credit, HDN. (2023)

Another important observation is that the market share of refinancing has dropped to 6% year to date from 22-30% during the past two years, as rate increases have generally made it unattractive for borrowers to refinance during their fixed rate period. However, it may still be attractive for borrowers to refinance their mortgage if their lender is less competitive at the moment of reset as rates have diverged. Due to the single rate policy, borrowers reaching the end of their fixed rate period must be offered the same rate as a new borrower with the same risk characteristics.

Divergence of interest rates

With the increased usage of portability and further advances, lenders with large back books relative to desired new origination levels have been able to increase their rate position compared to lenders with a smaller back book seeking higher new origination levels. Despite the higher market rate on the further advance, the blended rate combined with the existing mortgage is often well below the lowest refinancing rate available at a different lender. As such, existing borrowers are less price sensitive now that interest rates have increased. The chart below shows the delta between the largest banks in the Netherlands versus the top 6 lowest interest rates through time for mortgages with a fixed rate of 10 years and an LTV of 100%. Other LTV classes and fixed rate periods show similar patterns.

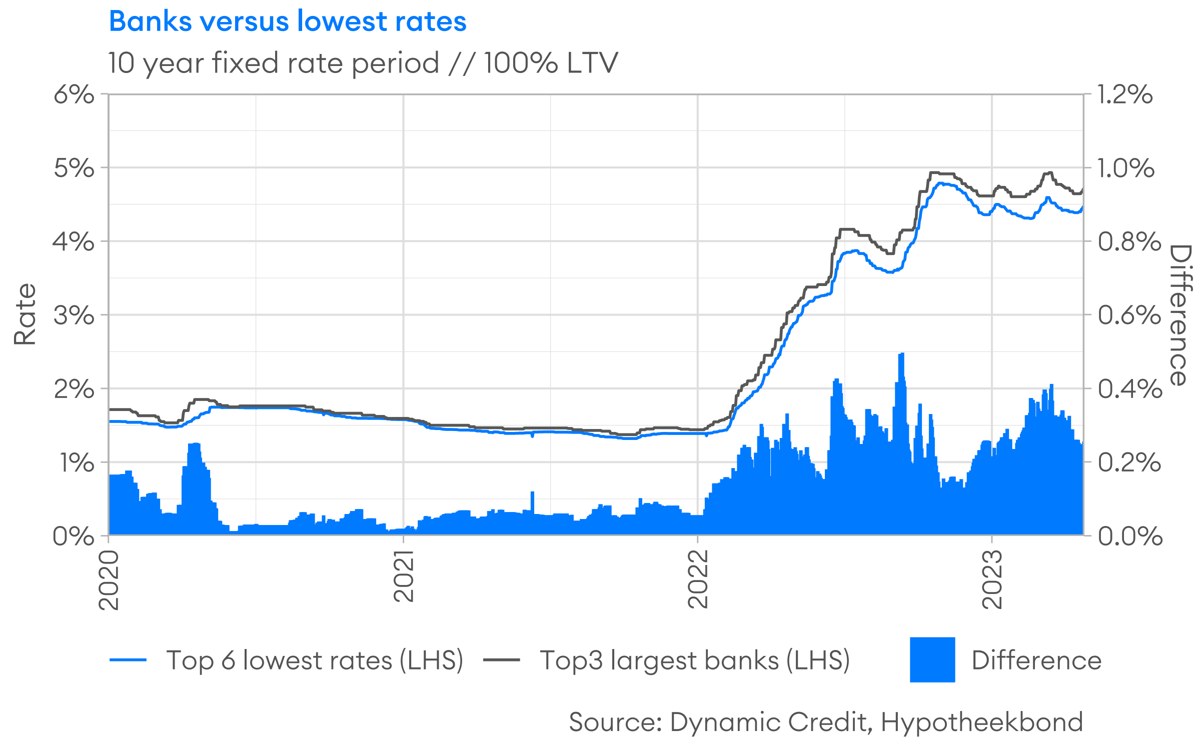

Figure 1: Average interest rates of the three largest banks (ABN AMRO, Rabobank, ING) versus the top 6 lower mortgage rates. Source: Dynamic Credit, Hypotheekbond. (2023)

As can be observed in the figure above, the difference between the lowest rates and the three largest banks typically has been below 10 bps. The exceptions are 2020 Q2 during the first COVID-19 lockdowns and since the start of 2022, when interest rates started to increase. We attribute a large part of the rate divergence starting in 2022 to lower price sensitivity of borrowers in the back book of these three banks, due to the portability option. Together the three banks have a majority of the outstanding Dutch mortgages on their balance sheet.

VEH Consumer confidence

Vereniging Eigen Huis ("VEH") measures consumer confidence in the Dutch housing market every month based on a questionnaire about interest rates, prices, and the general housing market[1]. The indicator can take values ranging from 0 to 200, with 100 indicating a neutral value. Higher values indicate positive consumer sentiment and lower values indicate negative sentiments.

Figure 2 displayed below shows the history of the VEH indicator. The indicator experienced a gradual decline from its peak of 121 in 2016-Q3 to the currently observed value of 73 by the end of 2023-Q1. In Q1 2023, the index finished at the same score it started the quarter with and the current value of 73 is indicating relatively low consumer sentiment. The VEH indicator considers consumers' views on a range of economic aspects but is focused on views on the housing market. The CBS consumer confidence index is primarily focused on the economy in general.

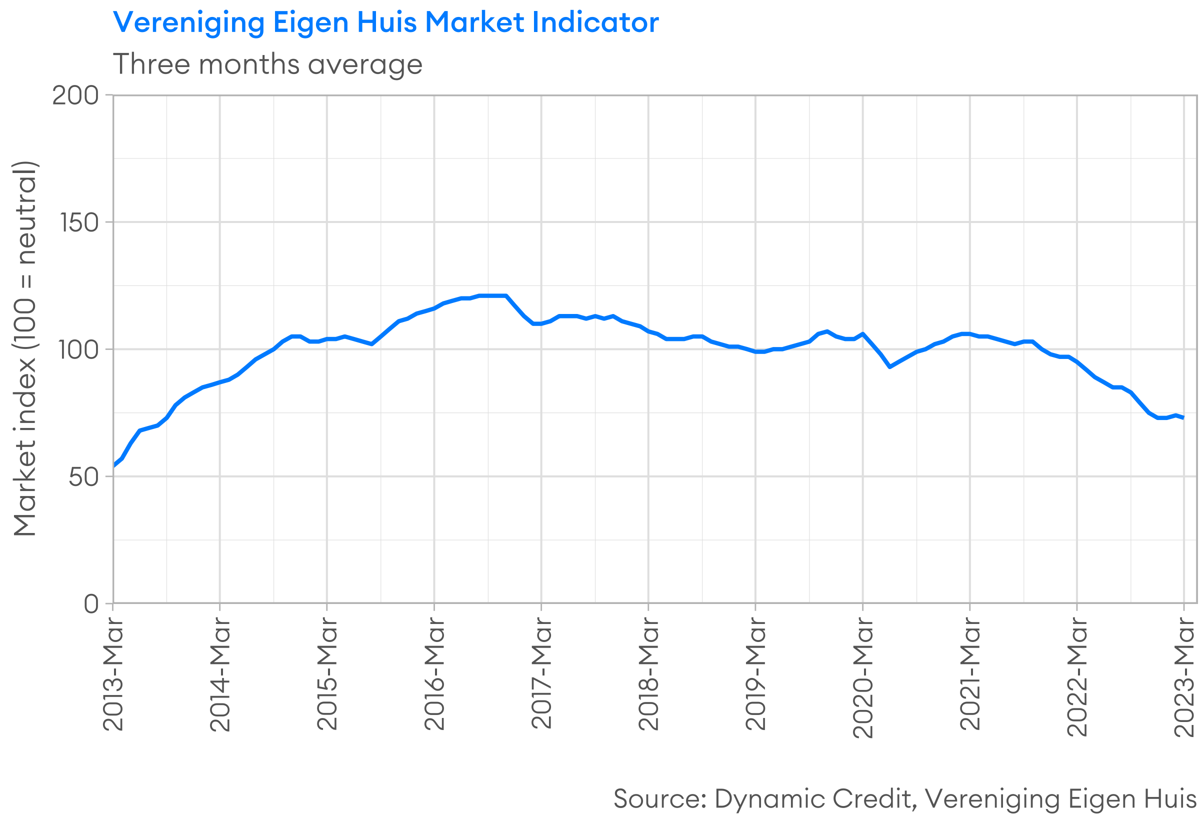

Figure 2: Vereniging Eigen Huis Market Indicator as of March 2023.

1 VEH - Eigen Huis Marktindicator

CBS Consumer confidence

Statistics Netherlands ("CBS")[1] tracks consumer confidence based on the views and expectations of consumers on topics such as the general economic environment, personal financial situation, and willingness to buy in the Netherlands. The indicator is measured as percentage points of negative or positive answering options and can reach values between –100 and 100, where a value of 0 indicates an equal amount of positive and negative responses.

According to a recent article from Statistics Netherlands ("CBS"), consumer sentiment in the Netherlands improved in the first months of 2023. The article highlights that consumers were less pessimistic about the economic situation and their own financial situation. The Consumer Confidence Indicator, which measures consumers' expectations about the economy, increased from -52 in December to -37 in April. Despite this improvement, consumers still expressed concerns about the economy and their own financial situation, with many indicating that this is not a favorable time to make major purchases. Overall, the article suggests that consumer sentiment in the Netherlands showed some signs of improvement in April, although concerns about the economy and personal finances persist.

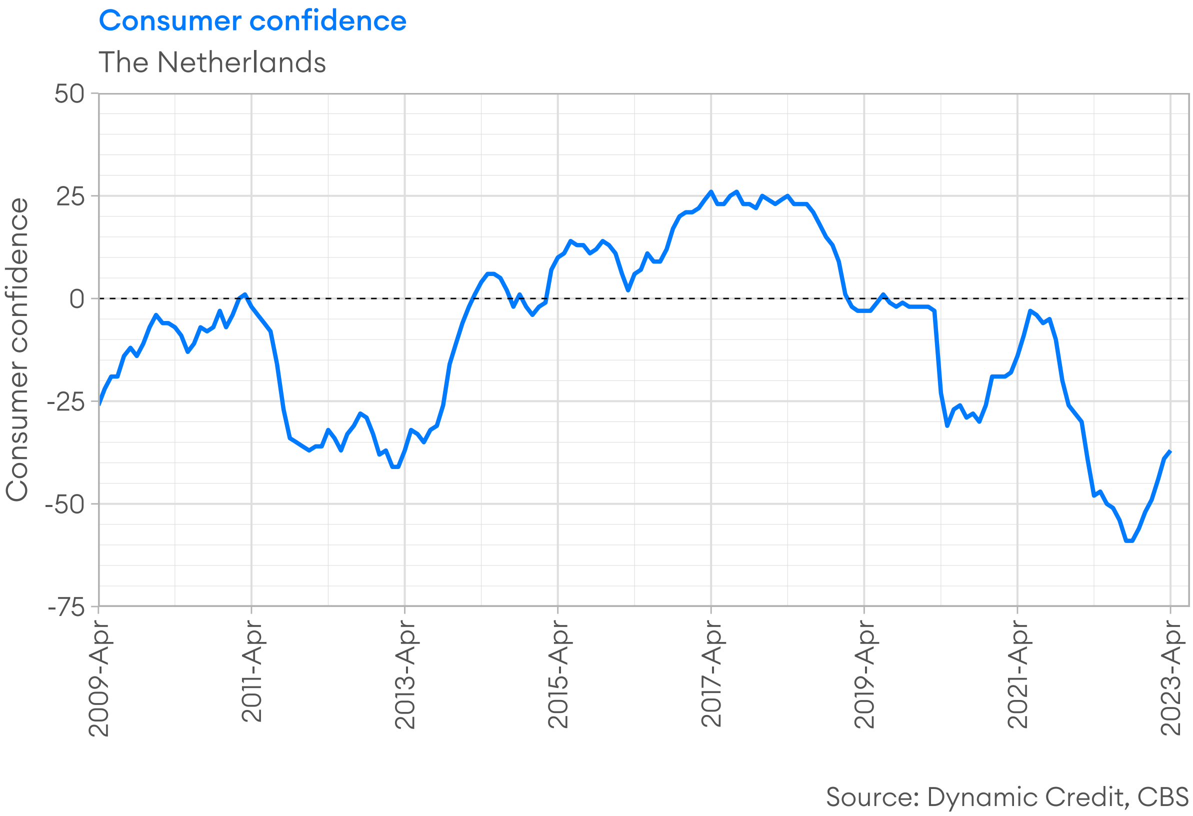

Figure 3: CBS total consumer confidence in the Netherlands as of April 2023.

1 CBS - Consumer confidence

CBS household consumption

In addition to consumer confidence, Statistics Netherlands ("CBS")[1] reports that household consumption in the Netherlands increased by 2.6% in February 2023 compared to the same month in the previous year. This increase is already corrected for price changes. The article highlights that this growth in consumption is driven by increased spending on services. It is also mentioned that consumers spent more on recreation and culture, compared to February 2022. However, the article also notes that consumer spending on food and beverages declined slightly in February 2023 compared to the previous year consumed 5.2% less on other goods, such as natural gas. Households mainly cut back on energy consumption.

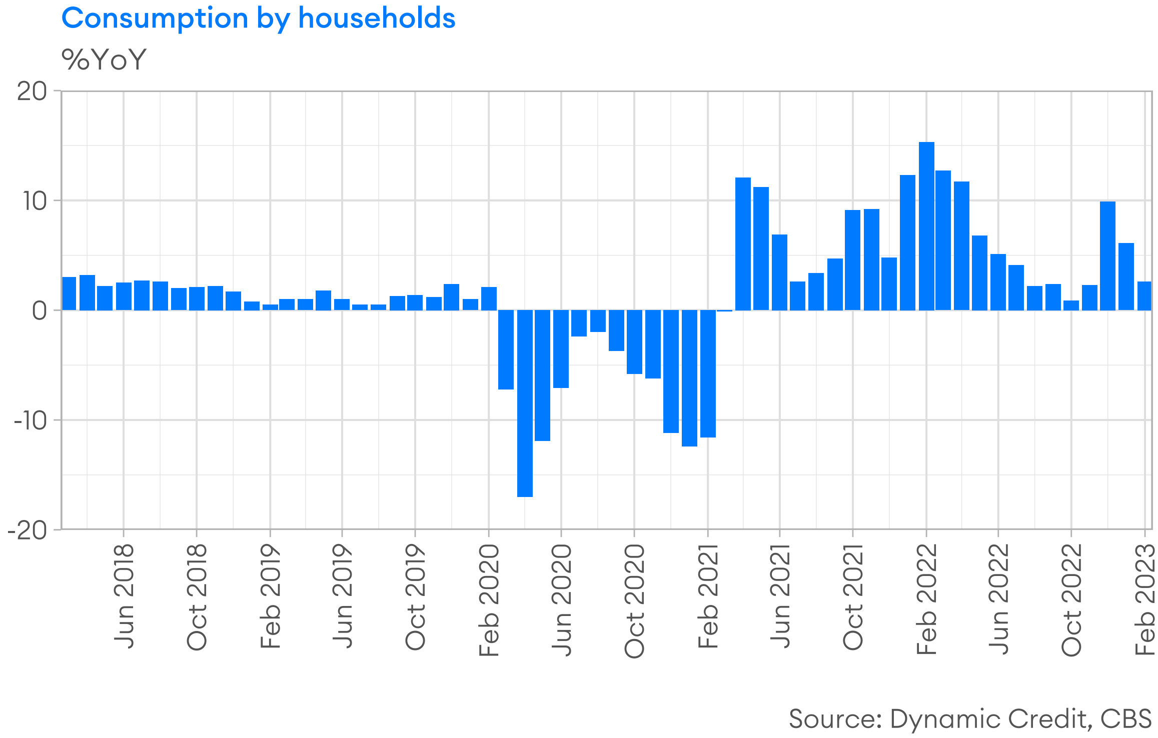

Figure 4: Percentual YoY domestic household consumption in the Netherlands adjusted for price changes up until February 2023.

1 CBS - Household consumption almost 3 percent up in February

Offer volumes

In 2023-Q1 Hypotheken Data Netwerk ("HDN", a provider of infrastructure for mortgage loan requests) reported a total of approximately 91,000 mortgage offer requests. This translates into a decrease of 52% YoY[1]. However, this is roughly equal to numbers seen in the first quarters of the years before the COVID-19 pandemic. In 2023-Q1, the number of offers for purchases totaled 56,000, which is a decrease of 22% YoY. Interestingly, in about 13,000 of these cases, borrowers made use of the portability option. The segment for refinances totaled to about 36,000, a decrease of approximately 70% YoY, as interest rates on new mortgages are now generally higher than interest rates on existing mortgages making it unattractive for borrowers to refinance during the fixed rate period.

In addition, there are several trends observed by HDN in 2023-Q1. The number of HDN offers for purchases in the NHG segment totaled approximately 27,000, an increase of about 42% YoY. The share of interest only in mortgage offers decreased from 68% to 33%, HDN attributes this to the increasing mortgage interest rates and the ineligibility of interest rate deductibility for tax purposes. Lastly, according to HDN the average LTV of mortgage offers is decreasing.

House prices and property sales

CBS reports on house price developments in the Netherlands through the Dutch House Price Index ("HPI"). This proxy for housing prices of existing domestic dwellings is reported on a monthly basis. Thus, in this article when referring to housing prices we are referring to HPI. As of 2023-Q1, housing prices have decreased by 1.60% QoQ and 0.70% YoY. For the past eight months, housing prices have decreased with the exception of January 2023, which saw a month-on-month increase of 1.50% which was largely due to a seasonal effect. Even though housing prices are now down when examining YoY changes, Figure 5 below shows that over a longer timeframe this is insubstantial as housing prices have increased steeply over the past decade: according to CBS when comparing the housing prices of March 2023 to June 2013 an increase of approximately 89% is observed[2].

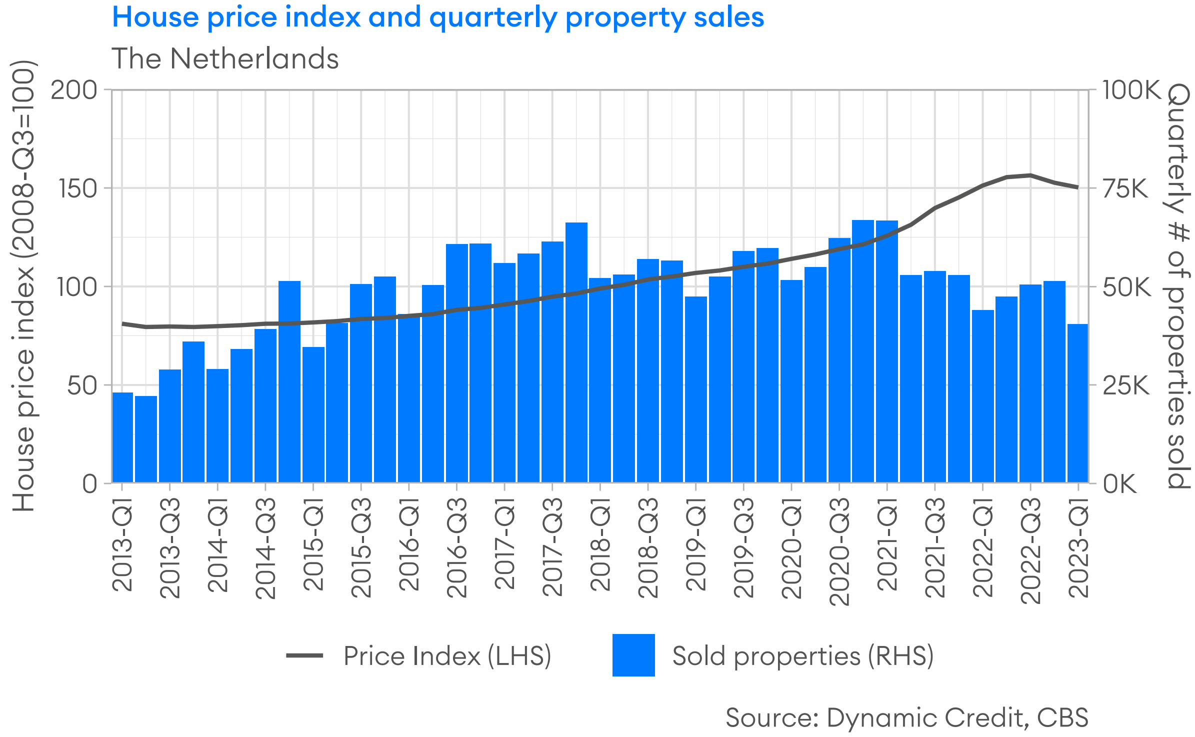

Figure 5: House Price Index of the Netherlands ("HPI") (2008-Q3 = 100) and monthly property sales. HPI until March 2023. Source: CBS, Dynamic Credit.

1 HDN - Kwartaaloverzicht 2023-Q1
2 CBS - House price decrease in March

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When examining the provincial scope, different developments are observed. The largest YoY increase has been realized in Zeeland, which saw housing prices increase by 2.30% YoY. The biggest change in HPI was observed in the province of Utrecht, with a 3% YoY decrease. With regards to property transfers, Utrecht was the only province where the number of transactions increased (0.90% YoY). The biggest decrease occurred in Friesland, where housing transactions decreased by 18.60% YoY.

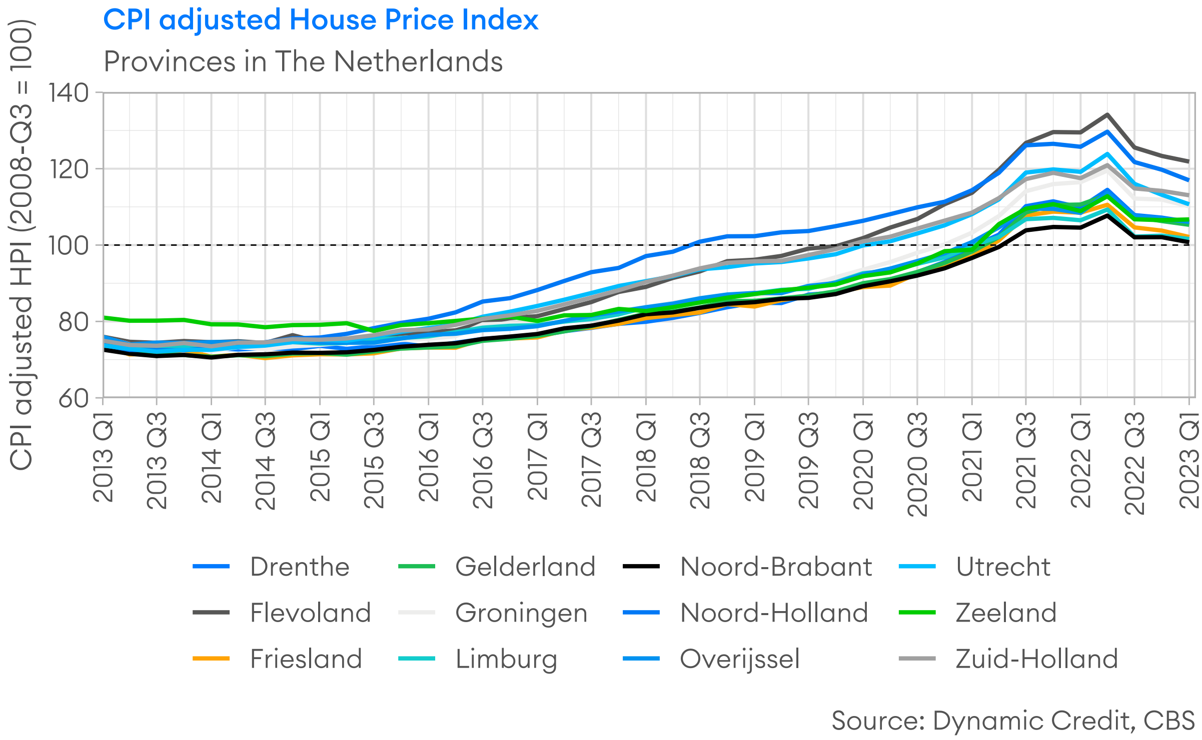


Figure 6: CPI Adjusted House price index per province in the Netherlands (2008-Q3=100). The data is indexed as of 2008-Q3 because this marks the pre-crisis high for the unadjusted House Price Index. (2023)

When examining the provincial scope, different developments are observed. The largest YoY increase has been realized in Zeeland, which saw housing prices increase by 2.30% YoY. The biggest change in HPI was observed in the province of Utrecht, with a 3% YoY decrease. With regards to property transfers, Utrecht was the only province where the number of transactions didn’t decrease and saw an increase of 0.90% YoY. The biggest decrease occurred in Friesland, where housing transactions decreased by 18.60% YoY.

With regards to municipal scope, the four largest municipalities saw decreases in both housing prices and property transactions. As of 2023-Q1, the largest decrease in housing prices occurred in the municipality of Utrecht, where housing prices decreased by 7.40% YoY. The municipality of Rotterdam saw a decrease of 0.30% YoY. Table 2 displayed below contains developments of housing prices and property sales for other Dutch provinces and municipalities as of 2023-Q1.

Area	Type	HPI (2008-Q3=100)	YoY Price %	QoQ Price %	Properties Sold in Quarter	QoQ Properties Sold %	YoY Properties Sold %
Nederland	Country	150.2	-0.7	-1.6	40437	-21.2	-7.9
Amsterdam	Municipality	179.2	-5.7	-2.2	2079	-22.9	-10.3
's-Gravenhage	Municipality	166.2	-2.5	-1.7	1223	-23.4	-16.0
Rotterdam	Municipality	186.2	-0.3	-1.2	1104	-28.8	-13.4
Utrecht	Municipality	177.9	-7.4	-2.7	956	-17.4	-4.0
Groningen	Province	152.1	-1.3	-1.8	1265	-30.6	-3.9
Friesland	Province	141.1	-1.7	-1.8	1338	-27.3	-18.6
Drenthe	Province	146.5	0.8	-1.2	1118	-26.4	-14.8
Overijssel	Province	146.5	2.1	-1.0	2503	-22.3	-7.3
Flevoland	Province	168.3	-1.7	-1.4	1168	-18.7	-14.7
Gelderland	Province	145.5	-0.6	-1.1	4896	-19.2	-1.6
Utrecht	Province	152.9	-3.0	-2.4	3537	-13.2	0.9
Noord-Holland	Province	161.6	-2.9	-2.5	6706	-21.9	-10.3
Zuid-Holland	Province	156.2	0.4	-1.2	8485	-20.0	-6.9
Zeeland	Province	147.4	2.3	0.0	974	-29.2	-14.3
Noord-Brabant	Province	139.2	0.6	-1.5	6117	-18.8	-7.9
Limburg	Province	140.3	-0.4	-1.0	2330	-28.7	-14.6

Table 2: House prices and number of property sales changes in Dutch provinces and major municipalities 2023-Q1 Source: CBS, Dynamic Credit.

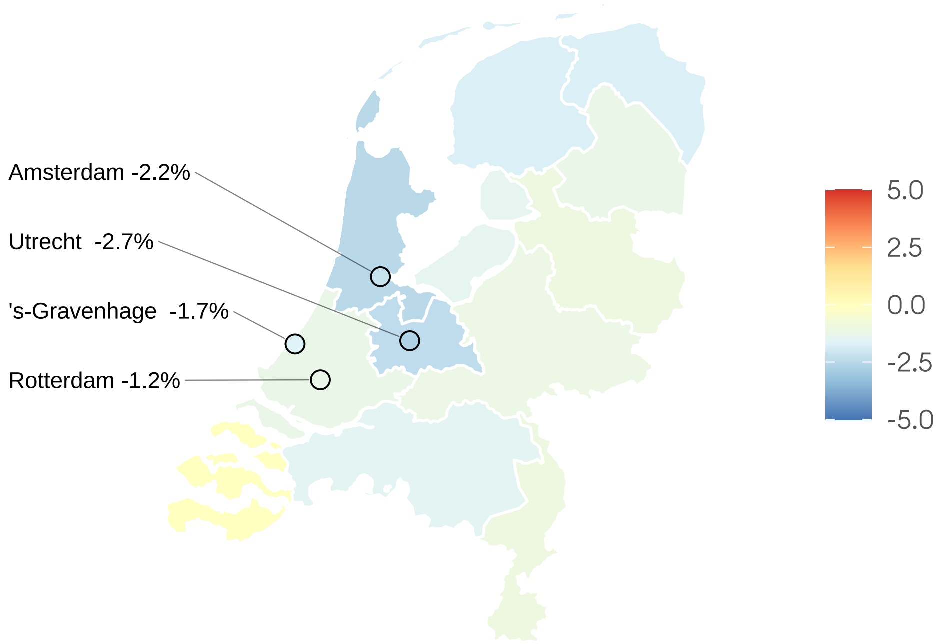
Starter subsidy

In February, the Minister of Housing and Spatial Planning informed the House of Representatives[1] of the details to the plan to subsidize purchases for starters on the owner-occupied market (Nationaal Fonds Betaalbare Koopwoningen[2]). The plan was approved in the House of Representatives in 2022 already. The budget will amount to EUR 40 million, and municipalities and developers can draw from it as long as they make an equal contribution. The idea is to help starters with an income up to two times the modal income with the purchase of newly built affordable housing (up to EUR 355,000). A subsidy of EUR 50,000 can be obtained. Further details will follow later this year.

1 Ministerie van Binnenlandse Zaken en Koninkrijksrelaties - Kabinet verbetert positie koopstarters

2 Het koopfonds - Nationaal Fonds Betaalbare Koopwoningen

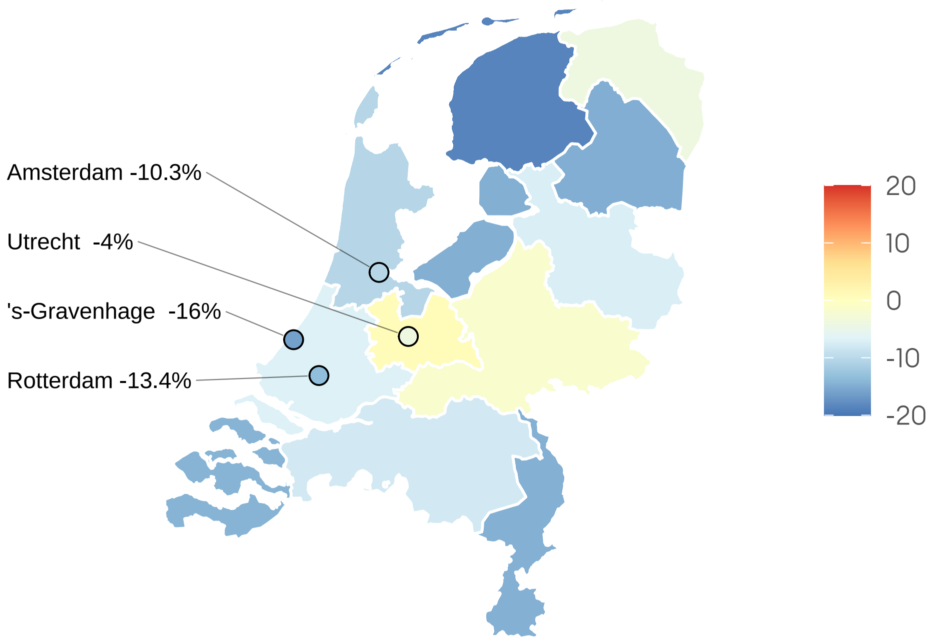
House Price Index QoQ change



Source: Dynamic Credit, CBS (2023 Q1)

Figure 7: Dutch House Price Index QoQ change in percentages. 2023-Q1.

Number of sold properties YoY change



Source: Dynamic Credit, CBS (2023 Q1)

Figure 8: Sold properties YoY change in percentages. 2023-Q1.

Expected house property sales developments

In the previous edition of this quarterly update[1], we did an elaborate update on the Dutch housing market expectations of several financial institutions together with a forecast comparison over 2022. As of 2023-Q1 most of the forecasts remain unchanged with respect to 2022-Q4 with some institutions that adjusted their expectations downwards. As of 2023-Q1, the average forecasted housing price developments are -4.86% and –1.96% for 2023 and 2024 respectively. Figure 9 displayed below is a visual representation of forecasts for up until 2024. Each colored dotted line represents the average forecast as made in different points in time. The next paragraph will elaborate on the aforementioned adjustments.

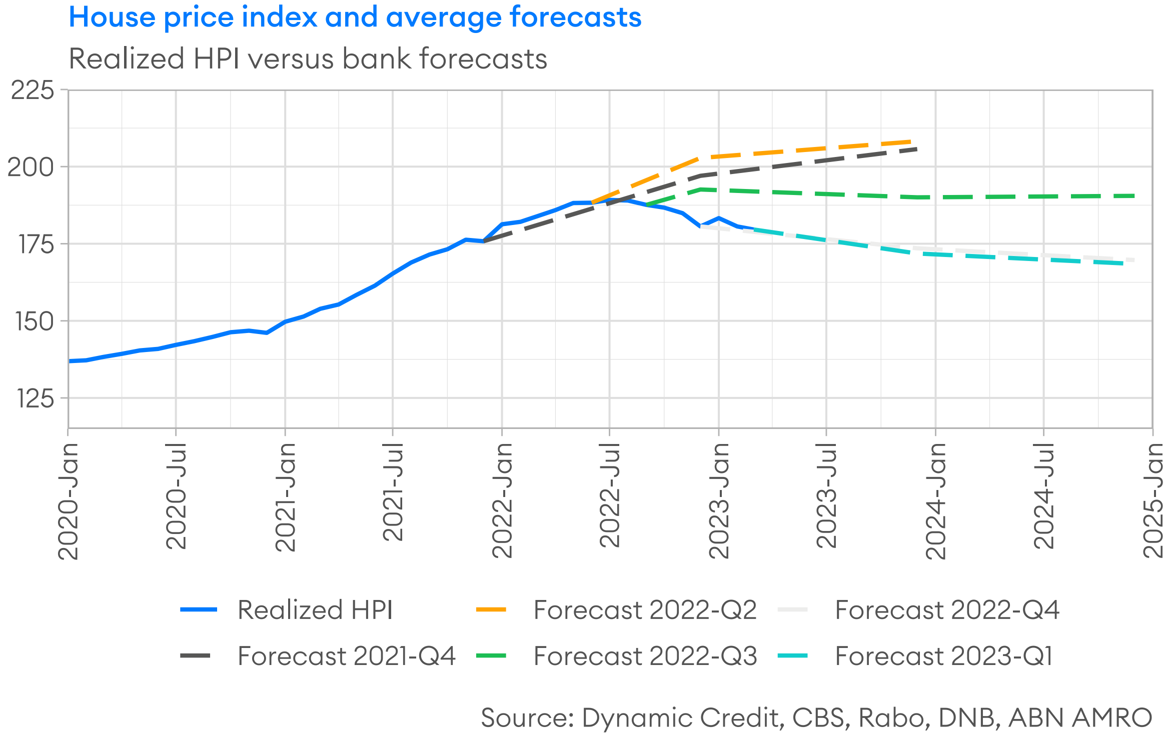


Figure 9: Realized house price index and average house price forecasts made at different points in time. Source: Dynamic Credit, CBS, Rabobank, DNB, ABN AMRO, ING, Fitch. (2023)

Firstly, the Rabobank readjusted their expectations for housing prices downwards[2]. Instead of the previously expected decrease of 3% over 2023 it now expects housing prices to decline by approximately 4.20%. For the year after, the Rabobank still expects housing prices to stabilize and show a mild decline of 1.50%. However, Rabobank does add that their expectations are heavily reliant on developments on the capital markets. With regards to housing transactions Rabobank is slightly more optimistic compared to their previous update. Rabobank now expects the number of housing transactions to total 183,000 in 2023 and 193,000 in 2024 compared to 179,000 and 184,000 respectively. This upward adjustment for 2023 and 2024 is due to their initial expectation that housing transactions would decrease more than realized so far. Moreover, ING[3] expects housing prices to decrease by approximately 6% in 2023 compared to their previously forecasted decrease of 2.50%. The year after, ING expects prices to stabilize and show a mild decrease of 1%. ING designated three factors that put housing prices under pressure, which are; increasing interest rates, less investor demand and high energy costs. With regards to the number of housing transactions, they forecast a total of 180,000 housing transactions for 2023.

1 Dynamic Credit - Newsroom
2 Rabobank - Bottom of housing market expected to be reached this year
3 ING - De Nederlandse woningmarkt

Newly built homes

As discussed extensively in previous editions of the Dynamic Credit Quarterly Update, the Dutch government aims for the construction of a mix of approximately 900,000 additional owner-occupied and rental properties before 2030 to combat the persisting housing shortage. Despite the good intentions of this ambitious target, signals are already starting to emerge from the market that the target is in jeopardy. A leading indicator for new construction in the upcoming years is the number of issued building permits. Currently, the number of issued building permits is declining as a result of the deteriorating business case for property developers caused by factors such as higher interest rates, labor costs and prices of construction materials and decreasing house prices[1].

Furthermore, higher interest rates substantially deteriorate housing affordability which contributes to pressure on demand for newly built homes[2]. In addition, CBS reports that the average price of a newly built residential property is considerably higher than an existing one; the prices are EUR 424,000 and EUR 468,000 respectively. The Economisch Instituut voor de Bouw ("EIB") expects production of newly built homes to decrease by 1.5% and 2% in 2023 and 2024 respectively[3]. A leading indicator for new construction in the upcoming years is the number of issued building permits.

Figure 10 below shows the total number of issued building permits per month and the percentual change in issued building permits with respect to the same period a year earlier.

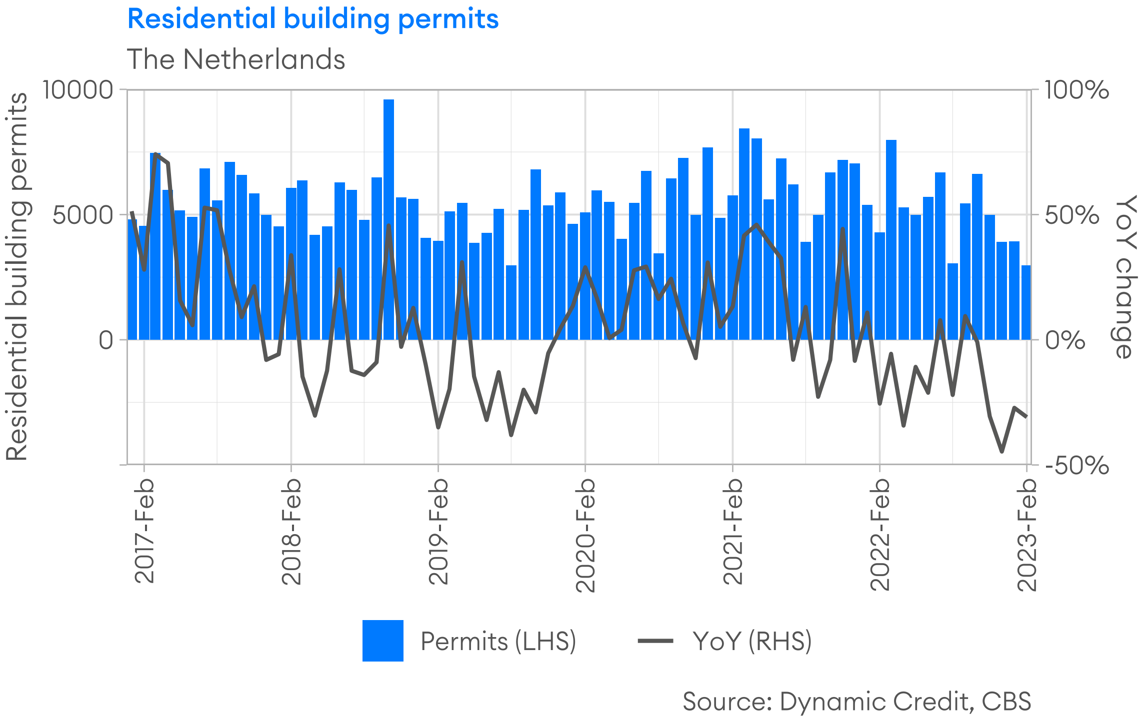


Figure 10: Number of issued building permits as of February 2023 and the percentual YoY change in the number of issued building permits excluding transformations i.e., repurposing office spaces to residential homes. Source: CBS, Dynamic Credit.

1 FD - Ruim 74,000 nieuwbouwhuizen in 2022 bouwdoel lijkt gehaald
2 FD - Verkoop nieuwbouwwoningen daalt met een derde
3 EIB - Verwachtingen bouwproductie en werkgelegenheid 2023

In addition, property developers see the sales of newly built homes slowing down. Property developers commonly begin actual construction when approximately 70% of the project has been sold. According to Bouwgarant, a property development insurer, a slowdown in sales of property developers might prompt them to change the project characteristics. For example, factors such as the number, size, price of houses in new developments are adjusted[1]. Woningborg, also a property development insurer, reported a decrease of 20% YoY in building plans in 2022. Building plans are commonly reported to property development insurers for the purpose of building completion guarantees. According to CBS, sales in newly built owner-occupied homes have been rapidly decreasing in the fourth quarter of 2022[2]. Total number of newly built owner-occupied homes in 2022-Q4 totaled 5,300, a decrease of approximately 50% YoY. This makes it the largest decrease since 2015, which is when CBS started measuring sales in newly built owner-occupied homes. The total number of sales of newly built owner-occupied homes was 25,000 over 2022, a YoY decrease of 27%.

Considering the above, market circumstances show unfavorable trends for the business case of property developers. This disincentivizes property developers to start new projects, which is shown by the decrease in issuance of building permits, a good indicator of the number of homes that will be realized in upcoming years. These developments paint a gloomy picture for the feasibility of the construction target of the government. The House of Representatives of the Netherlands as well as municipalities are examining fitting solutions to correctly incentivize construction of newly built homes. For example, the 'doorbouwgarantie' or completion guarantees in which the government partially guarantees completion of property developments or leniency towards building regulations with regards to sustainability[1].

1 FD - Nieuwbouw in het slop, moet het rijk ingrijpen?
2 CBS - Aantal verkochte nieuwbouwwoningen gehalveerd in vierde kwartaal van 2022

NHG

Stichting Waarborgfonds Eigen Woningen ("WEW"), a central, privatized entity, is responsible for the administration and granting of the Nationale Hypotheek Garantie ("NHG"). NHG covers the outstanding principal, accrued unpaid interest and disposal costs of mortgage loans. Irrespective of scheduled repayments and prepayments made on a mortgage loan, NHG is reduced on a monthly basis by an amount which is equal to the principal repayment part of the monthly instalment as if the mortgage loan were to be repaid on a thirty-year annuity basis. Financial support from the Dutch government is formalized in a backstop agreement, under which the State is responsible for providing interest-free loans in case of need.

New NHG guarantees

According to HDN, approximately 35,000 loans with an NHG guarantee were offered for a total of EUR 7.7 billion in 2023-Q1 (a similar level to 2022-Q1). This corresponds to an NHG market share of 36% in terms of mortgage loan balance. That is the highest NHG market share since 2015 and substantially higher than in 2022. For perspective, the market share was 18% in 2021 and 21% in 2022. Please refer to Figure 11 for a graphic description.

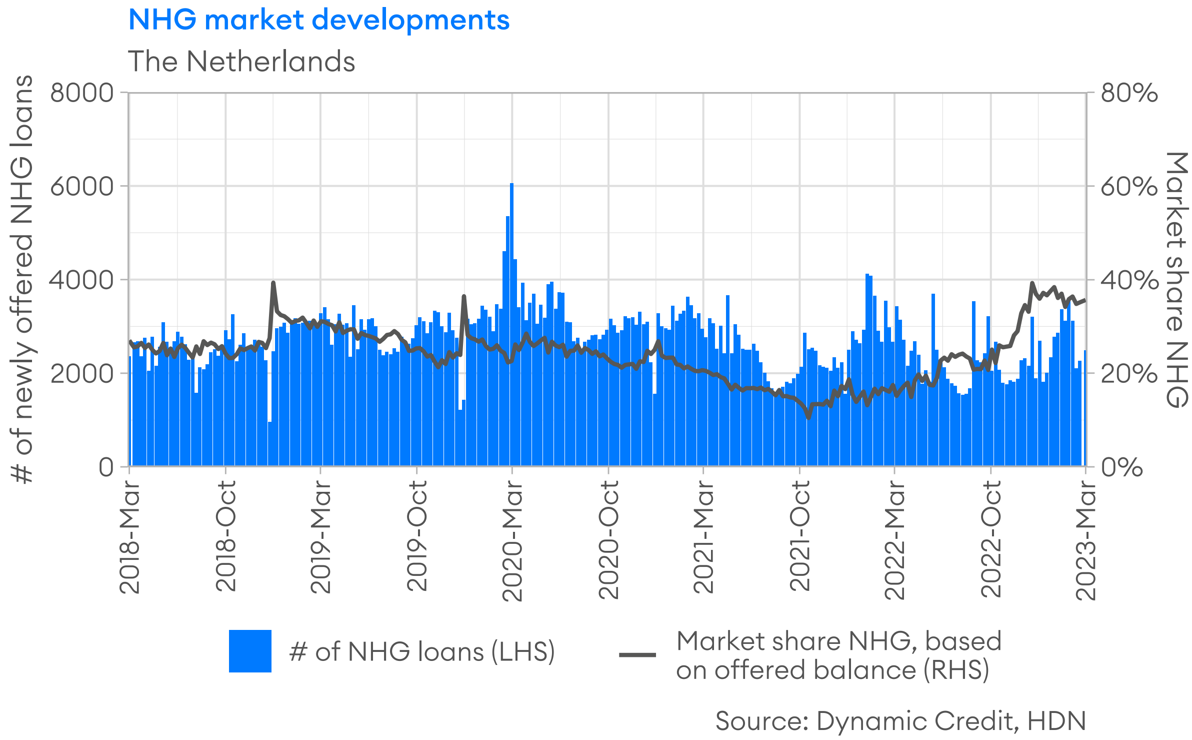


Figure 11: Number of new NHG guarantees and market share of NHG loans as a percentage of total originated balance through time. The x-axis refers to year and month. (2023)

The most obvious reason why the NHG market share has increased is that the delta between the average purchase price and the NHG costs limit has been decreasing since the second half of 2022, making more homes eligible for an NHG guarantee. The effect was driven by both factors, purchase prices decreased by roughly EUR 35,000 (between July 2022 and February 2023) and the costs limit increased by EUR 50,000 in January 2023. An illustration of the development is printed in Figure 12.

Price development

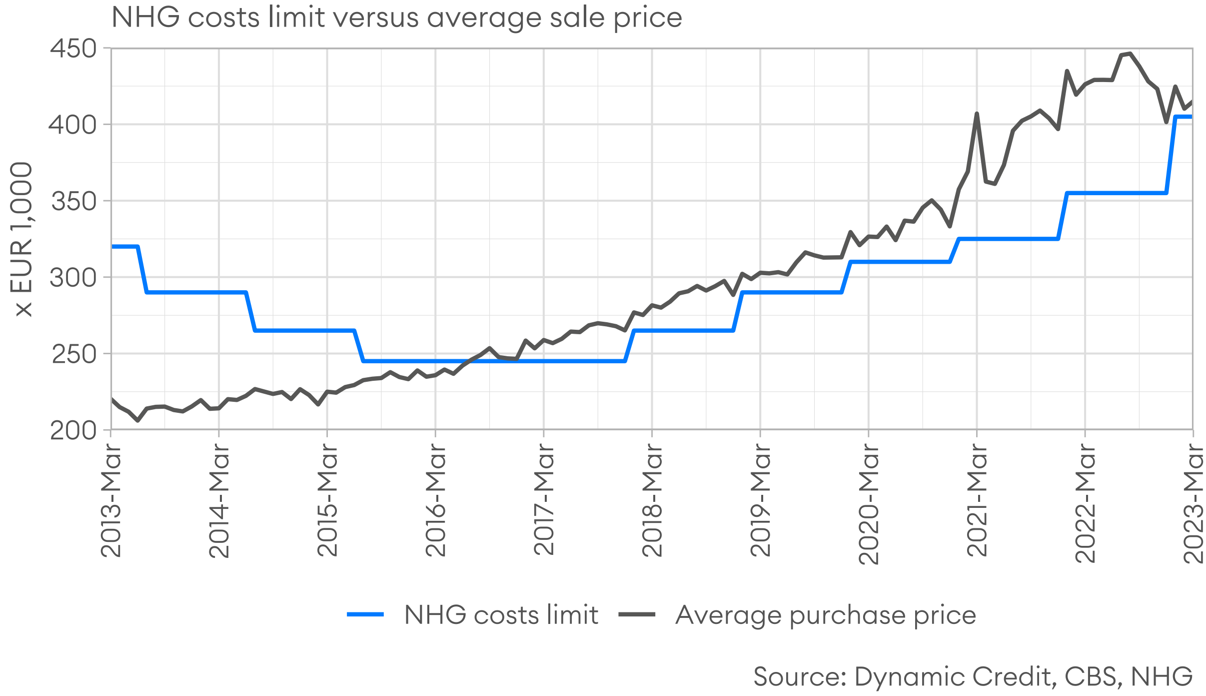


Figure 12: This figure shows the historic development of the NHG cost limit and the average purchase price throughout time as of March 2023.

Loss declarations[1]

In the fourth quarter there were again only two loss declarations made under the NHG Guarantee. The payout ratio was 100% and the total payout was EUR 30,000. According to WEW the low number of declarations and losses are due to high housing prices and increased collaboration between NHG and the lender of record to come to borrower focused solutions rather than selling the property.

Governmental affordability limit[2]

The government has set the goal to realize 900,000 new houses before 2030, of which two thirds should be affordable. To determine whether a property is affordable, the affordability limit ("Betaalbaarheidsgrens") has been introduced. Historically, this limit has moved in parallel with the NHG cost limit. But this year it didn't as the income of borrowers has not increased as strongly as the NHG limit. Therefore, the government decided to keep the affordability limit at EUR 355,000 instead of increasing it to EUR 405,000.

1 NHG - Kwartaalcijfers 4e kwartaal 2022

2 Rijksoverheid - NHG-kostengrens stijgt naar € 405.000 in 2023, NHG-premie blijft 0,6%

3. Owner-Occupied Mortgages

Mortgage rate developments

In the first quarter of 2023 mortgage rates and spreads remained relatively stable compared to the tumultuous year 2022. Across all risk classes and fixed rate periods, the average top six most competitive rates decreased by 5 bps in 2023-Q1, yet it increased by about two percentage points YoY. Moreover, mortgage rate developments differed substantially over fixed rate periods. Across risk classes, mortgage rates increased by 4 bps in 2023-Q1 for fixed rate periods 5 and 10 years. However, for 20 and 30 years fixed rates, mortgage rates decreased by 14 bps. This could partially be attributed to smaller decreases in swap rates for shorter tenures during 2023-Q1. For several mortgage lenders this has resulted in inverted interest rate curves. Mortgage rate volatility going forward primarily depends on ECB policy, as further discussed in section 6. QtD mortgage rates remained relatively flat and changed by 1 bp on average across all risk classes and fixed rate periods.

The table below contains an overview of the interest rate developments.

Mortgage rate development for average of top 6 mortgage rates								
Fixed rate period	Risk class	2022-03-31	2022-12-31	2023-03-31	2023-04-24	QoQ	YoY	QtD
5-year	NHG	1.60%	3.90%	3.98%	4.00%	0.08%	2.38%	0.02%
	60% LTMV (non-NHG)	1.66%	4.03%	4.10%	4.11%	0.07%	2.44%	0.00%
	80% LTMV (non-NHG)	1.73%	4.14%	4.23%	4.26%	0.10%	2.50%	0.02%
	100% LTMV (non-NHG)	2.01%	4.36%	4.46%	4.53%	0.10%	2.45%	0.06%
10-year	NHG	1.89%	3.93%	3.94%	3.95%	0.01%	2.04%	0.02%
	60% LTMV (non-NHG)	1.92%	4.09%	4.05%	4.04%	-0.05%	2.13%	0.00%
	80% LTMV (non-NHG)	2.01%	4.20%	4.21%	4.21%	0.01%	2.20%	0.00%
	100% LTMV (non-NHG)	2.29%	4.40%	4.42%	4.47%	0.02%	2.13%	0.04%
20-year	NHG	2.26%	4.10%	4.06%	4.11%	-0.04%	1.80%	0.05%
	60% LTMV (non-NHG)	2.41%	4.33%	4.24%	4.23%	-0.09%	1.84%	-0.02%
	80% LTMV (non-NHG)	2.52%	4.46%	4.35%	4.34%	-0.10%	1.83%	-0.02%
	100% LTMV (non-NHG)	2.72%	4.69%	4.55%	4.58%	-0.14%	1.83%	0.03%
30-year	NHG	2.33%	4.32%	4.12%	4.12%	-0.20%	1.79%	0.00%
	60% LTMV (non-NHG)	2.55%	4.42%	4.29%	4.25%	-0.13%	1.75%	-0.04%
	80% LTMV (non-NHG)	2.65%	4.55%	4.38%	4.36%	-0.17%	1.73%	-0.01%
	100% LTMV (non-NHG)	2.83%	4.79%	4.59%	4.60%	-0.20%	1.77%	0.00%

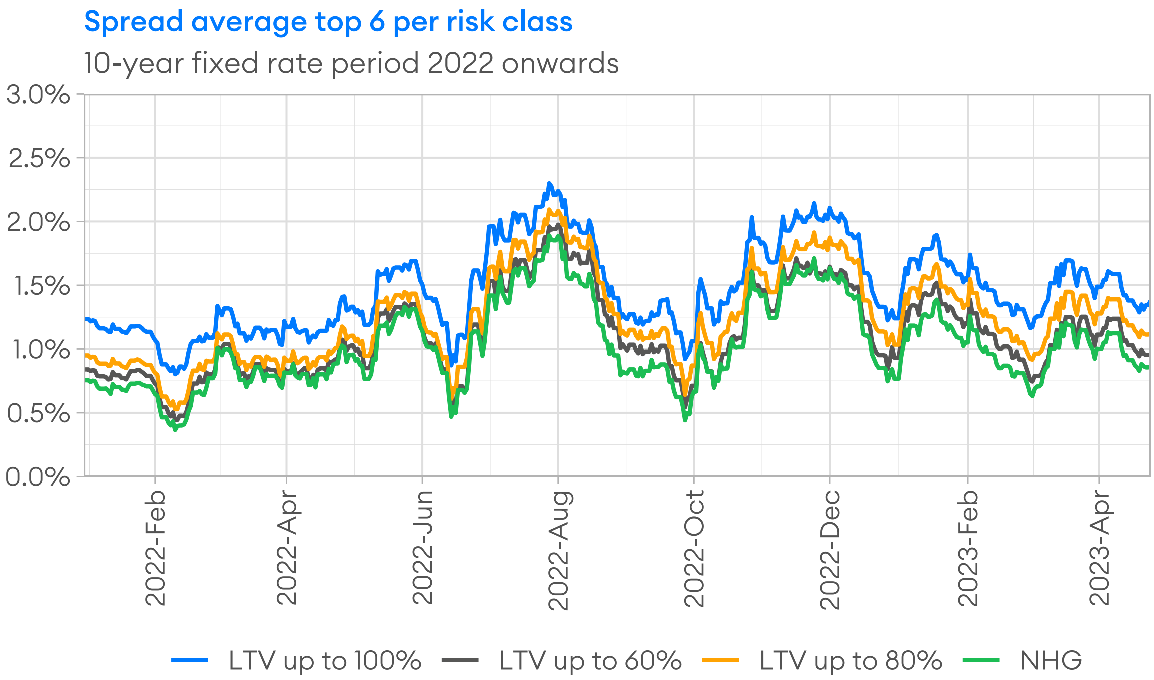
Table 4: Average top-6 mortgage rates (excluding action rates) for mortgage loans with different fixed rate periods for four risk classes. Source: Dynamic Credit, Hypotheekbond. Reference date is 2023-04-24.

Spread developments[1]

Mortgage spreads have widened by an average of 15 bps QoQ and 18 bps YoY as of 2023-Q1 across all risk classes and fixed rate periods. Similar to mortgage rate movements, spread developments were more pronounced in the shorter fixed rate periods. For example, across all risk classes mortgage spreads on average increased by 24 bps QoQ for fixed rate periods 5 and 10 years, whereas a 5 bps increase was observed for fixed rate periods 20 and 30 years. After 2023-Q1 ended, mortgage spreads decreased by an average of 15 bps.

In addition to the spread developments mentioned above, Figure 13 below visually displays the mortgage spread developments of the average top 6 mortgage rates with a 10-year fixed rate period for multiple risk classes since the beginning of 2022. Over this period spreads have been substantially more volatile than in years before. A key factor in this volatility is that central banks have been raising policy rates in response to high inflation. Thus, with this in mind it is important to also consider the developments over time in addition to the snapshots discussed in the previous paragraphs as the QoQ and QtD in Tables 3 and 4 can differ substantially per week. For examples with a larger time window, please consider Figures A1 to A4 in the Appendix.

1 The EUSWxV3 swap is used, which uses quarterly resets and the floating leg is 3-month EURIBOR.



Source: Dynamic Credit, Hypotheekbond (2023-04-24)

Figure 13 : Spread of the average top-6 price leader mortgage rates (excluding action rates) for mortgage loans with a 10-year fixed rate period for four risk classes. Starting January 2022 up to and including April 2023.

For a broader overview of the spread developments, see Table 5 as displayed below. In addition, the information in Table 5 should be interpreted as representative gross spread for newly originated Dutch residential mortgage loans over time.

Spread development for average of top 6 mortgage rates								
Fixed rate period	Risk class	2022-03-31	2022-12-31	2023-03-31	2023-04-24	QoQ	YoY	Qtd
5-year	NHG	0.70%	0.72%	0.97%	0.82%	0.25%	0.27%	-0.15%
	60% LTV (non-NHG)	0.76%	0.85%	1.10%	0.93%	0.24%	0.34%	-0.17%
	80% LTV (non-NHG)	0.83%	0.96%	1.23%	1.08%	0.27%	0.39%	-0.15%
	100% LTV (non-NHG)	1.11%	1.18%	1.46%	1.35%	0.27%	0.34%	-0.11%
10-year	NHG	0.82%	0.77%	1.00%	0.86%	0.24%	0.19%	-0.14%
	60% LTV (non-NHG)	0.84%	0.93%	1.11%	0.95%	0.18%	0.27%	-0.16%
	80% LTV (non-NHG)	0.93%	1.03%	1.28%	1.12%	0.25%	0.35%	-0.16%
	100% LTV (non-NHG)	1.22%	1.24%	1.49%	1.38%	0.25%	0.27%	-0.11%
20-year	NHG	1.00%	0.91%	1.06%	0.96%	0.15%	0.06%	-0.11%
	60% LTV (non-NHG)	1.15%	1.14%	1.25%	1.08%	0.12%	0.10%	-0.17%
	80% LTV (non-NHG)	1.27%	1.26%	1.37%	1.19%	0.10%	0.10%	-0.18%
	100% LTV (non-NHG)	1.47%	1.50%	1.57%	1.43%	0.07%	0.10%	-0.14%
30-year	NHG	1.05%	1.15%	1.11%	0.98%	-0.03%	0.06%	-0.14%
	60% LTV (non-NHG)	1.28%	1.25%	1.29%	1.11%	0.04%	0.01%	-0.18%
	80% LTV (non-NHG)	1.38%	1.37%	1.37%	1.21%	0.00%	-0.01%	-0.16%
	100% LTV (non-NHG)	1.56%	1.61%	1.59%	1.45%	-0.02%	0.03%	-0.14%

Table 5: Spread of the average top-6 mortgage rates (excluding action rates) over duration matched swap rates for four risk classes. Source: Dynamic Credit, Hypotheekbond. Reference date is 2023-04-24.

Case Study Update: Dutch Mortgages under Solvency II

Dutch Mortgages as risk-adjusted return enhancers

Not all asset classes are attractive for insurance companies. The Solvency II regulation is strict, and the capital requirements can be stringent. Yet, the capital treatment of Dutch mortgages is relatively lenient as Dutch mortgages have shown consistent outperformance versus alternatives such as covered bonds and government bonds. In this case study we investigate the impact on the risk-return profile and solvency capital requirement (SCR) for a typical insurance company using the standardized approach when allocating 10% to Dutch mortgages. This article is essentially a revisit to a case study we did in an earlier Dynamic Credit quarterly update initiated by a substantial change in the economic market environment.

Solvency II: Counterparty Default Risk Module

For mortgage loans to be treated under the counterparty default risk module, they need to satisfy the criteria listed under Article 191[1]. The criteria state that the mortgage loans must be granted to natural persons or SMEs, the portfolio must consist of many loans with similar characteristics, each loan has a maximum exposure of EUR 1 million and several legal requirements have to be met.

For owner-occupied mortgages these criteria are generally met. In case of consumer buy-to-let loans, the following requirement deserves more attention as in certain cases rental income plays a role in the underwriting of the mortgage loan: “the repayment of the facility does not materially depend on any cash flow generated by the underlying property serving as collateral”.

Assuming that the criteria listed in Article 191 are met, the exposure classifies as type 2 exposure under the counterparty default risk module. Otherwise, the spread module needs to be applied instead. The SCR under the counterparty default risk module depends on the loan-to-value (LTV) of the mortgage loans as shown in Figure 16. Up to 60% LTV the SCR is 0. NHG does not yet qualify as a guarantee for the purpose of the SCR calculations. EIOPA (European Insurance and Occupational Pensions Authority) has proposed in consultation to the 2020 Solvency II review to adjust the criteria such that NHG would also qualify as a guarantee. The adjustments are subject to approval by the European Parliament and Council and could yet be modified as a result of the negotiations. Final passage into local law is not expected before 2024[2].

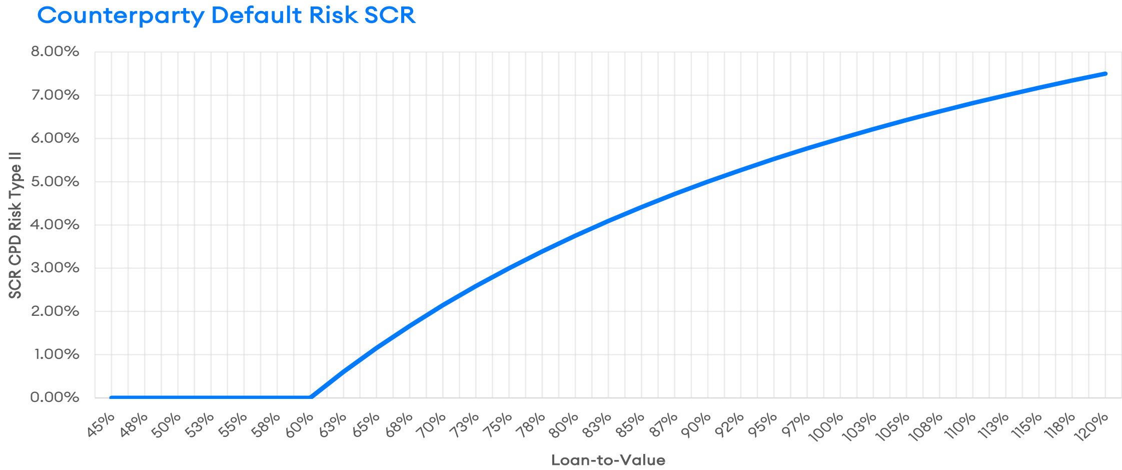


Figure 16: Source: Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)

1 Publications Office of the EU - Directive 2009/138/EC of the European Parliament

2 BNP Paribas Asset Management - Solvency II review Adjusting the dial

Solvency II: Interest Rate Risk Module

The other module that is relevant for the calculation of the SCR of Dutch mortgages is the interest rate risk module. The impact of the interest rate risk module on the SCR is determined by calculating the impact on the fair value of the mortgage loan portfolio by applying an upward and a downward shock to the risk-free curve, as shown in Figure 17.

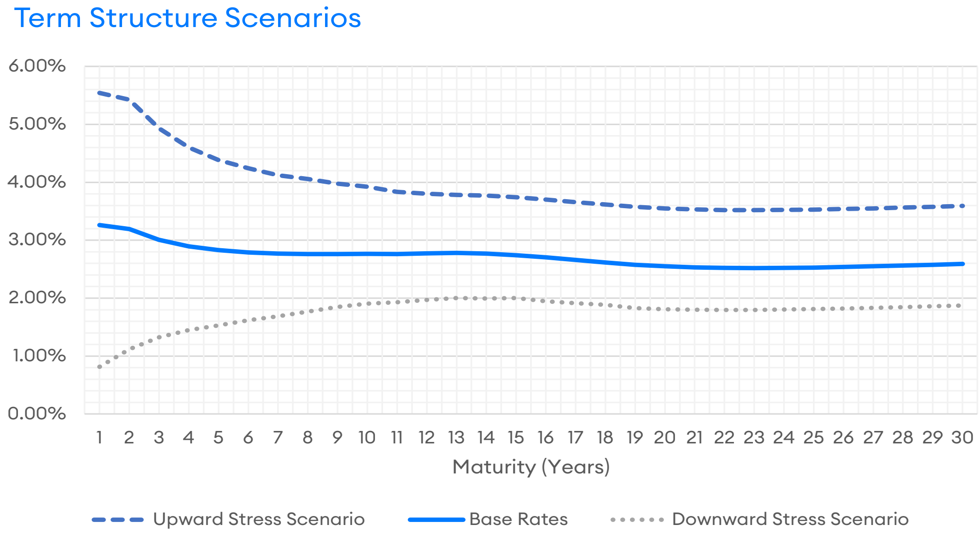


Figure 17: Base term structure and after the upward and down stress. Source: Dynamic Credit, EIOPA, as of 2023-03-31.

The interest rate risk module is currently under review. EIOPA and the European Commission propose to adjust the calculation of the upward and downward stress scenarios with the aim of bringing this SCR module more in line with current market conditions. Part of this proposal is adding an absolute percentage shock to the relative shocks currently in place. An increase in SCR is expected for insurers with a duration mismatch.

Case Study

In this case study we use a typical asset allocation for an insurance company as the base case. Subsequently we add an allocation of 10% to Dutch mortgages with an LTV of 67% and 10-year fixed rate period, while reducing the allocation to other asset classes as follows:

• Case 1: reduction in covered bonds and sovereign bonds

• Case 2: reduction in covered bonds, sovereign bonds and investment grade

• Case 3: reduction in covered bonds, sovereign bonds, investment grade and return-seeking assets.

Table 6 below displays the exact asset mix per scenario.

	Base Case	Case 1	Case 2	Case 3
Bond EUR Covered	44%	-5.0 p.p	-3.5 p.p	-2.0 p.p
Bond EUR Sovereign	20%	-5.0 p.p	-3.5 p.p	-2.0 p.p
Bond EUR Investment Grade	13%		-3.0 p.p	-3.0 p.p
Bond EUR High Yield	4%			-1.0 p.p
Bond EMD HC Sov Global	4%			-1.0 p.p
Dutch Mortgages	0%	10.0 p.p	10.0 p.p	10.0 p.p
Equity Global Developed Countries	10%			-1.0 p.p
Unlisted Equity Real Estate Pan-Europe	5%			

: Impact on the expected return and standard deviation after allocation to Dutch mortgages. Source: BNP Paribas Asset Management. (2023)

From an economic perspective, we observe that in all cases the risk-adjusted return of the investment portfolio improves. In other words, Dutch mortgages let the insurance company increase the expected portfolio return by swapping low yielding assets for Dutch mortgages, while keeping the risk at similar levels (Case 1 and Case 2). Additionally, the base case expected return can be slightly increased whilst also reducing the overall portfolio risk (Case 3).

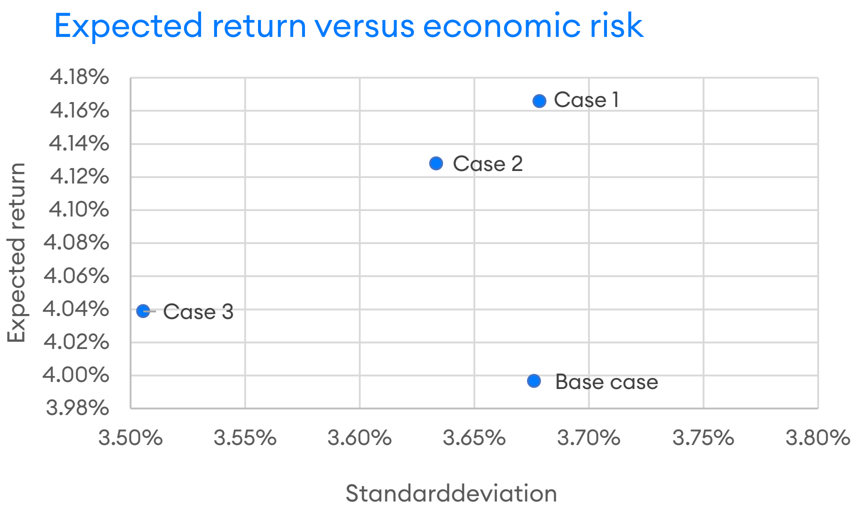


Figure 18: Impact on the expected return and standard deviation after allocation to Dutch mortgages of 10%. Source: BNPP AM

	Base case	Case 1	Case 2	Case 3
Expected return [ER]	4.0%	0.2 p.p.	0.1 p.p.	0 p.p.
Standarddeviation [SD]	3.7%	0 p.p.	0 p.p.	-0.2 p.p.
Risk adjusted return [ER/SD]	64.2%	4.5 p.p.	4.3 p.p.	4.3 p.p.

Table 6: Changes in asset allocation to include 10% of Dutch mortgages for each case. Source: BNP Paribas Asset Management. (2023)

From an SCR perspective the outcomes are similar: an allocation to Dutch mortgages improves the SCR-adjusted return of the insurance company in this case study and the insurance can choose to keep the SCR at a similar level or reduce the SCR.

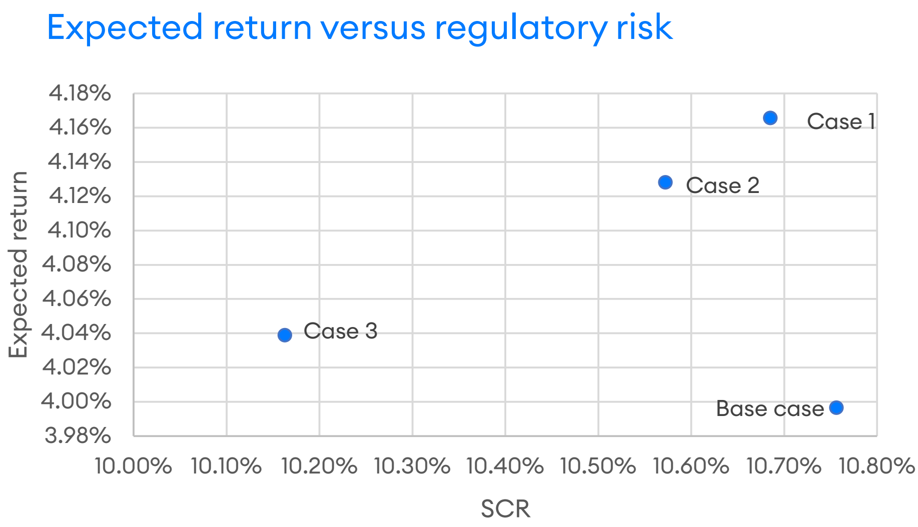


Figure 21: Impact on the expected return and SCR after allocation to Dutch mortgages of 10%. Source: BNP Paribas Asset Management.

	Base case	Case 1	Case 2	Case 3
Expected return [ER]	4.0%	0.2 p.p.	0.1 p.p.	0 p.p.
SCR - Market+Default [SCR]	10.8%	-0.1 p.p.	-0.2 p.p.	-0.6 p.p.
SCR adjusted return [ER/SCR]	37.2%	1.8 p.p.	1.9 p.p.	2.6 p.p.

Table 7: Impact on the expected return and SCR after allocation to Dutch mortgages. Source: BNP Paribas Asset Management. (2023)

DYNAMIC

4. Funding Update

The total issuance for Dutch RMBS seems to be very high at first glance with EUR 9.3 billion. Yet after excluding the EUR 7 billion retained issue from De Volksbank in its Lowlands Mortgage Backed programme the volume remains modest. Spreads on the senior notes have come down from high 58 by the end of 2022 to 39 bps by the end of the quarter.

In contrast to RMBS issuance, covered bond issuance was EUR 7 billion in the first quarter already, compared to EUR 11 billion in the year 2022. This could indicate that banks are using alternative ways to attract funding. Over the first quarter, covered bond spreads have slightly increased from 16 bps by the end of 2022 to 18 bps by the end of the first quarter.

Owner occupied

In the RMBS category, only Obvion issued a new deal in its Green Storm programme. The pool consists of roughly EUR 600 million loans collateralized with the most energy efficient homes (A+ or better). The latter part of the pool is non-NHG. Only the class A notes were publicly placed (priced at par).

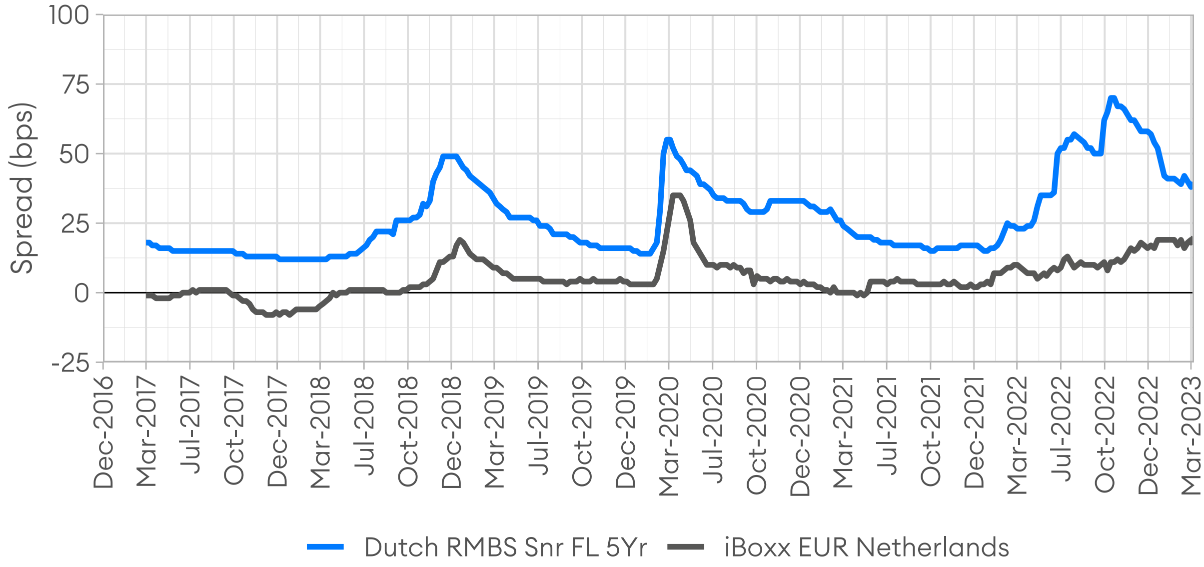
BTL

In the buy-to-let space there were issues from RNHB in the Dutch Property Finance ("DPF") programme and Domivest.

The DPF pool size is EUR 744 million and consists of buy-to-let and some CRE properties in The Netherlands and the pool characteristics are similar to previous issues. Key aspects are the longer WA seasoning of 3.4 years and low interest only proportion of 31%. The notes on the DPF deal were priced under par with spreads of 135, 235, 300 and 430 bps on the A, B, C and D notes respectively.

The Domi pool size is EUR 278 million and consists of newly originated buy-to-let loans. The seasoning is roughly 7 months so slightly older than in previous issues. Notably 98.9%(!) of the pool consists of interest only loan parts, and only 1.1% of the linear type. That percentage increased substantially compared to the previous deals. The A, B and C notes were priced at par with spreads of 112, 170, and 250 bps respectively.

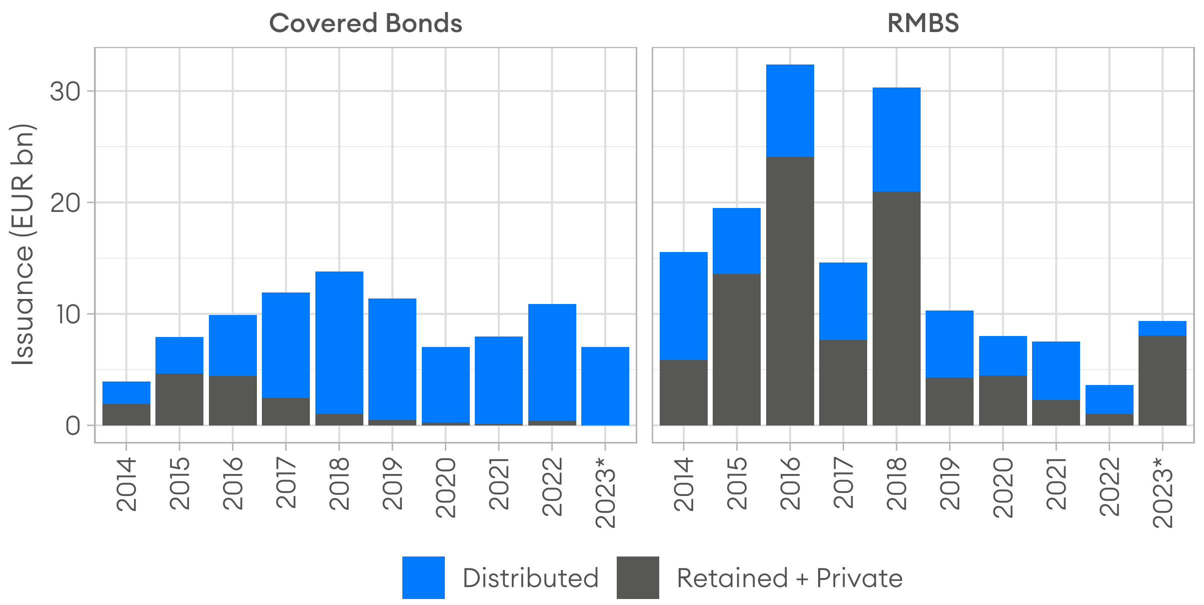
Mortgage funding spreads



Source: Dynamic Credit, JP Morgan

Figure 22: RMBS spread refers to indicative mid spread (DM) for representative generic RMBS bonds. iBoxx EUR Netherlands spread refers to spread versus mid swap rates. The data is as of 2023-Q1.

Mortgage funding issuance



* Data up to Q1
Source: Dynamic Credit, JP Morgan

Figure 23: Issuance of Dutch RMBS and covered bonds. The data is as of 2023-Q1.

Dutch RMBS market: Priced Dutch prime RMBS and BTL deals

Date	Issuer	Series	Seller	Class	Euro Amount	Life	FXFL	Spread	DM	Benchmark	M	SP	F	DBR	Retained	Comments
2023-04-14	Lowland Mortgage Backed BV	7	de Volksbank	A	7560	5.0	FX				Aaa		AAA		Y	
				B	156	5.0	FX				Aa3		AA+		Y	
				C	120	5.0	FX				A1		AA-		Y	
				D	104	5.0	FX				Baa1		A-		Y	
				E	60	5.0	FX				B2		B-		Y	
2023-03-03	Green Storm BV	2023-1	Obvion	A	500	4.9	FL	38		3 Mo. Euribor	Aaa		AAA		N	
				B	26	4.9	FX								Y	
				C	5	1.1	FX								Y	
2023-02-17	Domi BV	2023-1	Domivest BV	A	242	3.2	FL	112	112	3 Mo. Euribor	Aaa	AAA			N	
				B	10	5.1	FL	170	185	3 Mo. Euribor	Aa1	AA+			N	
				C	10	5.1	FL	250	250	3 Mo. Euribor	Aa3	AA-			N	
				D	7	5.1	FL	375	405	3 Mo. Euribor	Baa1	BBB+			N	
				E	10	5.1	FL								N	
				Z	0		FX								Y	
2023-01-25	Dutch Property Finance BV	2023-1	RNHB BV	A	424	3.1	FL	90	135	3 Mo. Euribor		AAA		AAA	N	
				B	30	5.1	FL	170	235	3 Mo. Euribor		AA		AAL	N	
				C	16	5.1	FL	250	300	3 Mo. Euribor		A		AL	N	
				D	15	5.1	FL	380	430	3 Mo. Euribor		BBB-		BBB	N	
				E	15		FL	480		3 Mo. Euribor		NR		NR	Y	
				F	10		FL	580		3 Mo. Euribor		NR		NR	Y	
				X	13		FL	580		3 Mo. Euribor		NR		NR	Y	
				R	0		FX					NR		NR	Y	

Table 8: Priced Dutch RMBS and BTL Deals in 2023-Q1. Source: Dynamic Credit, JP Morgan.

5. Buy-to-let Mortgages

Regulation

In March, there was a legislative proposal[1] from members of the House of Representatives Nijboer (PvdA) and Grinwis (CU) to limit the use of temporary rental contracts. Under the proposal temporary rental contracts would be limited in most cases but exceptions exist for certain groups and situations. The Minister for Housing and Spatial Planning De Jonge does not support the proposal and he believes that imposing the cap on rents sufficiently curtails the attractiveness to relet after a temporary rental contract ends. The proposal is still under discussion.

Sales

There have been several publications in news outlets23 that buy-to-let investors are selling their properties. The Volkskrant article is the most relevant and complete in the sense of supporting data, with references to data from the Kadaster. It states that in the country overall, 3.5% of all transactions result from buy-to-let investors selling to owner-occupants in 2022-Q4. From 2009 to 2020 the average was around 2.5%, only in 2021 it reached a level above 3%. In the four largest municipalities, this is much more pronounced and 7% of all sales fall in that category. Within municipalities there is differentiation, Amsterdam is highest with 9% and thereafter The Hague with 7.3%. These levels are well above their long-term averages. Overall, in 2022 private investors sold 1,700 properties in the four largest municipalities. For further background please refer to the linked article.

Rent developments

According to Pararius[2], the average rental prices in the four largest municipalities Amsterdam, Utrecht, Rotterdam, and The Hague have continued to rise due to the scarcity of rental properties. In the first quarter of 2023, the average year-on-year rental price per square meter in Amsterdam increased by 5.8% to EUR 25.68, while in Utrecht, it increased by 1.4% to EUR 19.83. Rotterdam saw a 4.8% increase to EUR 17.91 per square meter and in The Hague 6.4% to EUR 18.19 per square meter.

Pararius reports that the number of rental houses that came on the market in the four largest municipalities and Eindhoven has been steadily decreasing for several quarters. For example, in Amsterdam it decreased from about 6,700 in 2021-Q1 to 2,600 in 2023-Q1 and in The Hague from 2,100 to 1,200. The other cities show similar patterns. This limited supply could result in further rental price increases in the large municipalities going forward.

1 Tweede Kamerr - Initiatiefwetsvoorstel vaste huurcontracten

2 Pararius - Average rental prices rise in large cities in the Netherlands due to scarce rental offering

Rate and spread development

In the first quarter of 2023, the interest rates for buy-to-let mortgages increased significantly, with an average increase of 31 bps across different fixed rate periods and risk segments. The increase was more pronounced for shorter fixed rate periods shorter than 10-years, and the increase was also higher for 20-year terms although that market is very thin nowadays. In the first weeks of April, mortgage rates remained largely unchanged, except for 1-year rates.

The increase in buy-to-let mortgage rates was accompanied by a slight decline in swap rates, resulting in widening spreads in Q1. However, some of the spread increase was offset by rising swap rates in the first weeks of April. The average spread difference compared to end of last year remained positive by approximately 26 bps on average.

BTL spreads more attractive in recent months; average increase of 26 bps

It should be noted that Dynamic Credit is the only active lender in the high LTV (>85%) segment.

Market rate and spread development for consumer buy-to-let rates											
		BTL rates					Spreads				
Fixed rate period	LTV	2022-12-31	2023-03-31	2023-04-19	QoQ	QtD	2022-12-31	2023-03-31	2023-04-19	QoQ	QtD
1-year	50%	4.94%	5.38%	5.43%	0.44%	0.05%	1.67%	1.93%	1.80%	0.26%	-0.13%
	60%	5.04%	5.49%	5.53%	0.45%	0.04%	1.77%	2.05%	1.90%	0.28%	-0.15%
	70%	5.08%	5.51%	5.55%	0.43%	0.04%	1.82%	2.06%	1.92%	0.24%	-0.14%
	80%	5.23%	5.80%	5.94%	0.57%	0.14%	1.97%	2.35%	2.30%	0.38%	-0.05%
	90%	5.05%	5.65%	5.65%	0.60%	0.00%	1.79%	2.21%	2.02%	0.42%	-0.19%
5-year	50%	5.01%	5.26%	5.31%	0.25%	0.05%	1.83%	2.25%	2.15%	0.42%	-0.10%
	60%	5.13%	5.39%	5.39%	0.26%	0.00%	1.95%	2.37%	2.23%	0.42%	-0.14%
	70%	5.18%	5.42%	5.44%	0.24%	0.02%	2.00%	2.40%	2.28%	0.40%	-0.12%
	80%	5.34%	5.61%	5.61%	0.27%	0.00%	2.16%	2.59%	2.44%	0.43%	-0.15%
	90%	5.25%	5.55%	5.55%	0.30%	0.00%	2.07%	2.54%	2.39%	0.47%	-0.15%
10-year	50%	5.20%	5.35%	5.34%	0.15%	-0.01%	2.04%	2.42%	2.28%	0.38%	-0.14%
	60%	5.31%	5.46%	5.43%	0.15%	-0.03%	2.15%	2.53%	2.36%	0.38%	-0.17%
	70%	5.34%	5.49%	5.46%	0.15%	-0.03%	2.18%	2.56%	2.40%	0.38%	-0.16%
	80%	5.48%	5.63%	5.62%	0.15%	-0.01%	2.32%	2.70%	2.56%	0.38%	-0.14%
	90%	5.45%	5.65%	5.65%	0.20%	0.00%	2.29%	2.72%	2.59%	0.43%	-0.13%
20-year	50%	5.42%	5.76%	5.77%	0.34%	0.01%	2.22%	2.77%	2.67%	0.55%	-0.10%
	60%	5.50%	5.86%	5.87%	0.36%	0.01%	2.30%	2.87%	2.77%	0.57%	-0.10%
	70%	5.56%	5.91%	5.92%	0.35%	0.01%	2.36%	2.92%	2.82%	0.56%	-0.10%
	80%	5.60%	5.82%	5.89%	0.22%	0.07%	2.40%	2.84%	2.78%	0.44%	-0.06%
	90%	5.55%	5.85%	5.85%	0.30%	0.00%	2.35%	2.87%	2.74%	0.52%	-0.13%

Table 9: Interest rate and spread development for buy-to-let rates in the Netherlands. Source: Dynamic Credit, Hypotheekbond. Reference date is 2023-04-21. Note that the overview shows rates for consumer buy-to-let products, it excludes products that are targeted to professionals.

6. News

The following sections provide an update on the (macro)economic environment.

Monetary policy

At the monetary policy meeting of the ECB in March[1] it was decided to raise policy interest rates by 50 bps effective as of 22nd of March 2023. For the three key policy rates, this means the following; the refinancing operations rate is 3.50%, the marginal lending facility rate is 3.75% and the deposit facility rate is 3%. The primary reason for the hike was that projected inflation will remain too high for too long of a period. The next ECB policy rate decision meeting will be held in May 2023. In an interview with Reuters[2], Philip Lane (a member of the ECB's executive board) said that current data suggests that policy rates will have to be increased again at the Governing Council meeting in May. However, the size of the rate hike is still up for debate.

Inflation and Harmonized Index of Consumer Prices[3]

Starting with inflation in the Netherlands, as of March 2023 consumer goods and services were 4.40% higher than the same period a year earlier, compared to 8.10% in February. In addition, core inflation (which excludes gas, electricity and district heating) stayed at 8.10% YoY, with respect to core inflation in February. According to CBS, the steep decline in headline inflation was primarily caused by a decrease in energy and motor fuel prices, which saw their prices decrease by 36.50% YoY and 20.80% YoY respectively. With respect to European harmonized inflation or HICP, as of March this was 4.50% YoY for the Netherlands and 6.90% YoY for the Eurozone respectively.

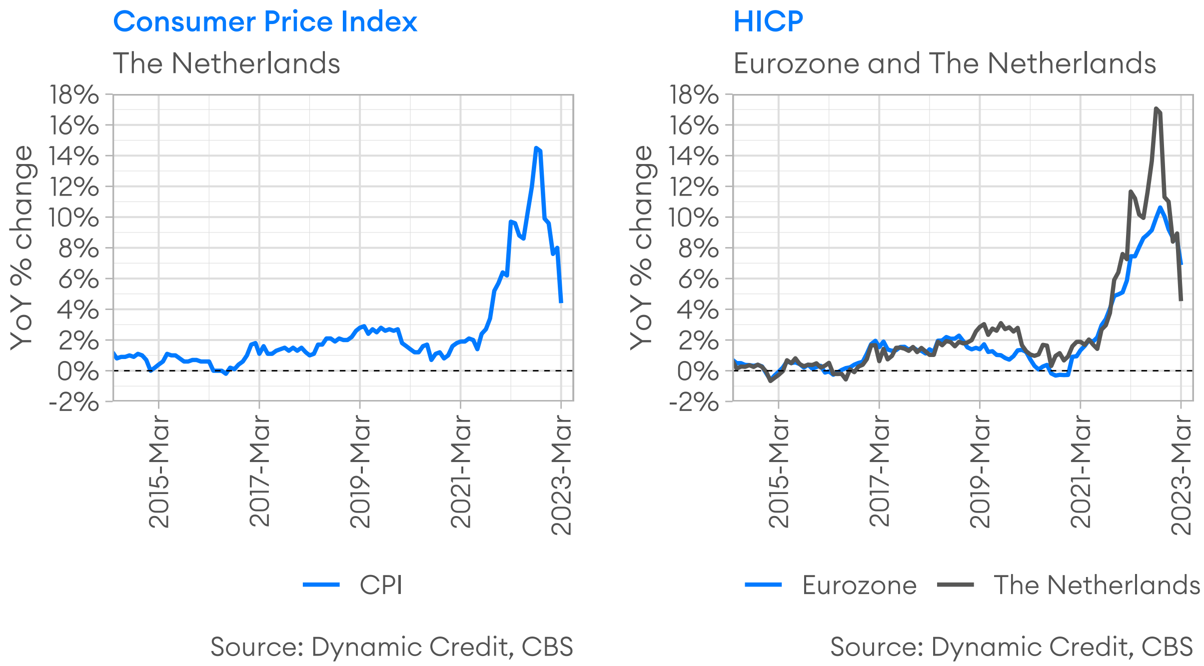


Figure 24: The consumer price Index in the Netherlands (left) and the Harmonized Index of Consumer Prices ("HICP") (right) both as of March-2023.

1 ECB - Monetary policy decisions
2 Reuters - ECB will have to raise rates again on May 4
3 CBS - Inflation rate down to 4.4 percent in March

Real GDP

CBS reports on the economic growth in the Netherlands[1]. In the fourth quarter of 2022, the Dutch economy expanded by 0.60% QoQ. When comparing to the same period a year earlier, Dutch GDP increased by approximately 3.20%. In total, the Dutch economy grew 4.50% in 2022. The largest positive contribution came from higher household consumption, but factors such as trade balance, investments and public consumption also contributed positively.

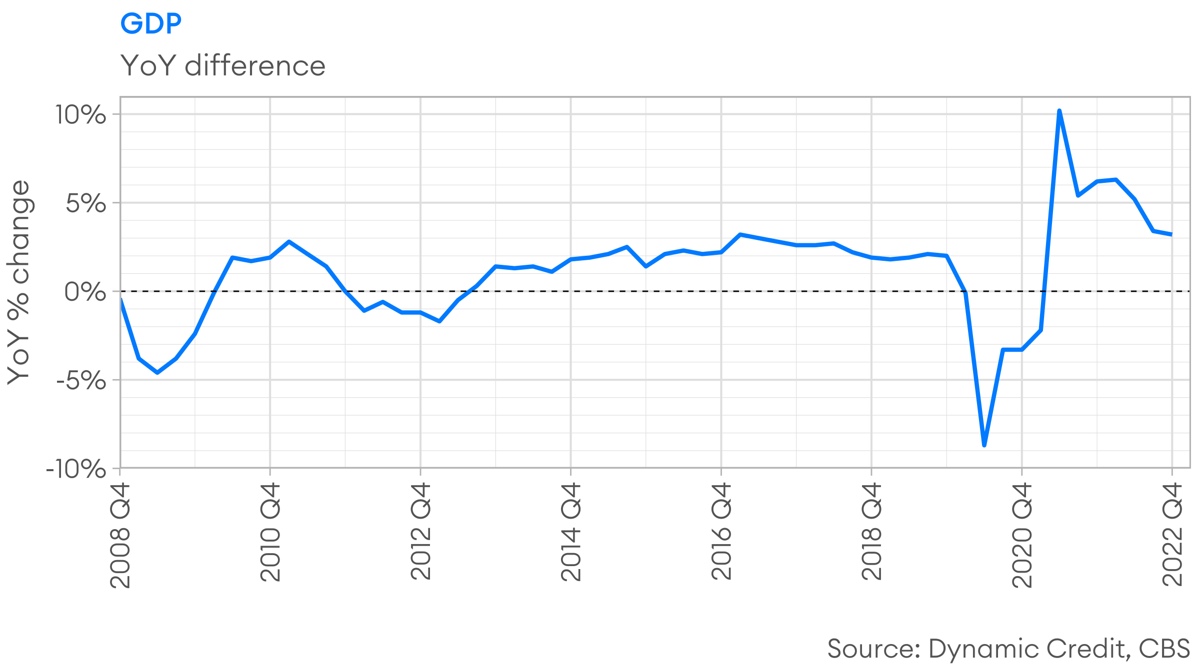
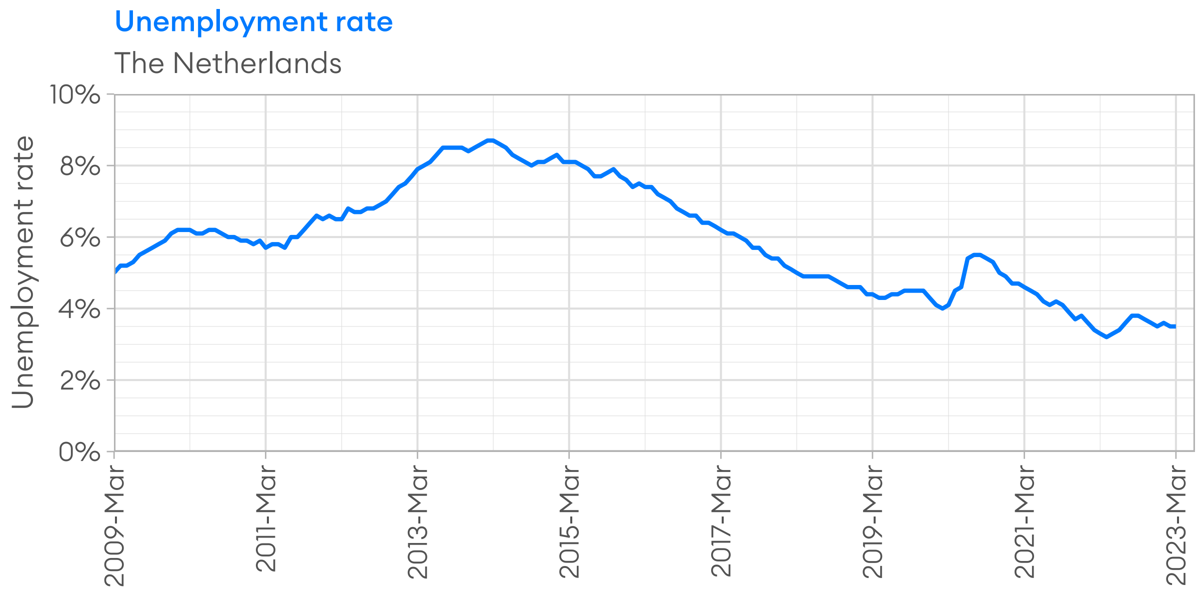


Figure 25: YoY GDP growth in The Netherlands as of 2022-Q4.

Unemployment

As of March 2023, CBS reported that unemployment remained relatively unchanged throughout the first quarter of 2023[2]. The current unemployment rate is 3.50%, which is equal to the unemployment rate in December 2022. This translates to roughly 360,000 people that are looking for work but are unemployed. Notably, unemployment among young people (aged 15-24) is the highest. This group currently has an unemployment rate of 8%.

1 CBS - Economic growth of 0.6 percent in Q4 2022
2 CBS - Unemployment virtually unchanged in March

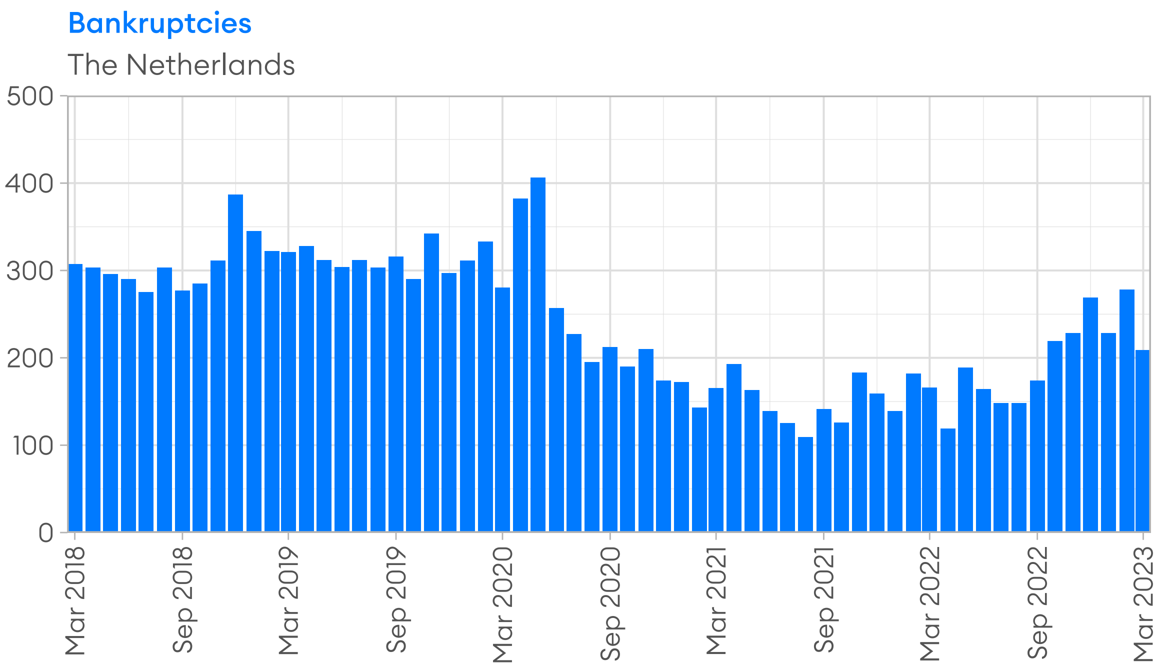


Source: Dynamic Credit, CBS

Figure 26: Unemployment rate in The Netherlands as of March 2023.

Bankruptcies

According to CBS[1], in March 2023 bankruptcies decreased by 25% relative to the prior month. In numbers, this meant 69 fewer bankruptcies, which brought the total number of bankruptcies to 209 for March 2023. Since the third quarter of 2022, bankruptcies have experienced an increasing trend. However, Figure 27 below shows that this is still substantially below the long-term average, which is about 330 per month. When examining the composition of monthly bankruptcies, we see the following; the trade, manufacturing and construction sectors saw the most bankruptcies in descending order. Notably, the trade sector is also the sector with the greatest number of businesses.



Source: Dynamic Credit, CBS

Figure 27: Monthly bankruptcies in The Netherlands as of March 2023.

1 CBS - Fewer bankruptcies in March

7. Sustainability Update

Ambitious New Energy Performance of Buildings Directive

The European Parliament[1] recently voted in favor of a new Energy Performance of Buildings Directive (EPBD IV) that aims to enhance the energy efficiency of buildings across the European Union (EU). This ambitious directive is a significant development in the ongoing efforts to combat climate change and transition to a more sustainable future. With a special focus on energy labels, including the minimum energy label ambition, the EPBD IV sets the stage for substantial improvements in the energy performance of buildings, which play a crucial role in reducing greenhouse gas emissions and achieving the EU's climate and energy goals.

Impacts and Benefits

The new EPBD IV is expected to have significant impacts and benefits. Firstly, it will contribute to the EU's climate and energy goals by requiring better energy performance for buildings. Achieving the minimum energy label D by 2033 will result in lower energy consumption and decreased greenhouse gas emissions. Additionally, the validity of energy labels will change, with labels of class C and above remaining to be valid for 10 years while labels of class D and below will be valid for 5 years.

Secondly, the Directive emphasizes digitalization and smart technologies to enable better monitoring and management of energy performance. That should lead to better operational efficiency, less energy waste, and cost savings for owners and occupants. The availability of more informative and user-friendly energy labels will also empower consumers to make more sustainable choices when it comes to buying or renting properties. That could drive demand for energy-efficient buildings which in turn should encourage the construction and renovation of such buildings.

Thirdly, the EPBD IV is expected to stimulate innovation and investment in the energy efficiency sector, creating business opportunities and driving economic growth. The minimum energy label ambition will require significant upgrades of existing buildings and the construction of new buildings, creating demand for energy-efficient materials, technologies and services. This will generate new jobs and stimulate investment in research and development of innovative energy-efficient solutions, which will contribute to the growth of the green economy.

The new Energy Performance of Buildings Directive (EPBD IV) approved by the European Parliament represents a significant step towards a more sustainable future for the EU. The directive is expected to have far-reaching impacts, including environmental, economic, and social benefits, and will play a crucial role in helping the EU to achieve its goals. It's now up to member states to implement EPBD IV into national legislation, which will take place in the coming years.

Ambitious New Energy Performance of Buildings Directive

As the effects of climate change continue to manifest in the Netherlands, the Dutch Central Bank[2] has issued a warning about the risks posed to vulnerable households. In a recent report, the bank highlighted the physical impacts of climate change, as well as the health risks that households face. In our last quarterly an article[3] was included that addresses physical climate risks in a mortgage portfolio context.

According to the Dutch Central Bank's findings, approximately 18% of households in the Netherlands are exposed to extreme heat, with older people and those living in poorly insulated homes at higher risk of health issues. One-quarter of households are also at risk of flooding, and 17% are expected to experience waterlogging due to extreme rainfall. Some households are vulnerable to multiple climate risks, facing challenges such as extreme heat, flooding and waterlogging simultaneously.

1 European Parliament - Energy performance of buildings

2 DNB - Kwetsbaarheid en veerkracht van Nederlandse huishoudens

3 Dynamic Credit – Quartely update 2022-Q4

The report underscores that vulnerable populations, such as the elderly and those with pre-existing health conditions, are particularly exposed to the health risks associated with climate change. Heat stress can lead to various health issues, and changes in air quality can worsen respiratory conditions, posing significant challenges to households' health and well-being.

In conclusion, the report serves as a crucial reminder of the urgent need to address the impacts of climate change on households in the Netherlands. By taking proactive measures to mitigate the physical, financial, and health risks, the country can work towards a more resilient and sustainable future. The Dutch Central Bank's call to action underscores the importance of collaborative efforts to safeguard vulnerable households and build a climate-resilient society for generations to come.

Carbon Emissions

The pressing global issue of carbon emissions has acquired widespread attention, with the growing consensus among scientists and experts that human activities are the primary cause of climate change. Reducing carbon emissions has thus become an urgent priority, also within the investment industry. Monitoring and mitigating emission levels of investments have become key considerations for responsible investing. Notably, recent data from Statistics Netherlands ("CBS")[1] revealed a significant 21% decrease in emissions from buildings compared to the previous year, primarily attributed to higher energy prices and mild weather in 2022. Against this backdrop, this article presents two methodologies to estimate the carbon emissions of a mortgage portfolio.

Carbon Emissions

The analysis will be done on data from the bijBouwe label, a mortgage label of Dynamic Credit. Two methodologies will be used to estimate the carbon emissions: the energy label method and the PCAF method. These methods will be further explained in the following paragraphs.

In the energy label method, average emission figures for each energy label are utilized, drawing from WoonOnderzoek 2018[2] data indexed to 2022 with Statistics Netherlands ("CBS") data. House-by-house energy labels are drawn from the EP Online database, managed by the Netherlands Enterprise Agency. Forapproximately 35% of the portfolio without an available energy label, the same distribution as for the known part is used for estimation. However, a drawback of this approach is that the portion with no energy label may have a different and more negative energy label distribution.

The PCAF method aligns with the industry-standard methodology and utilizes realized energy consumption data from the largest grid operators in the Netherlands, which is publicly available at the zip code level. The vast majority, more than 99%, can be linked to consumer data in this way. While this provides an estimate of consumption at the property level, it may not capture exact consumption due to variations among buildings within zip codes and potential inclusion of small businesses and farms' energy consumption data.

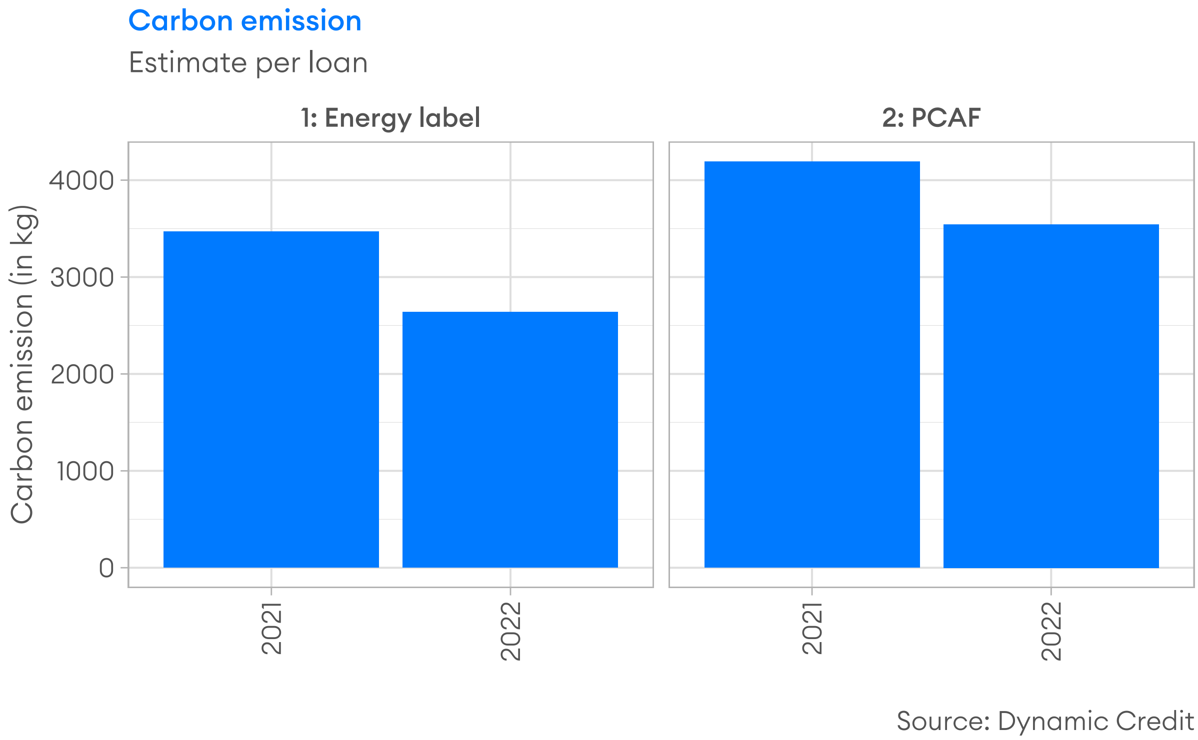


Figure 28: Carbon emission estimate per loan and method. Source: CBS, Dynamic Credit. (2023)

1 CBS - Greenhouse gas emissions 9 percent lower in 2022
2 Rijksoverheid - WoonOnderzoek 2018

Results

The emissions for both methodologies in 2021 and 2022 are illustrated in Figure 28, showing a decline in emissions per loan for both methods over the past year. Methodology 1 reflects a substantial decrease of 24%, while methodology 2 shows a reduction of over 15%. The 20% decrease reported by Statistics Netherlands falls within the results of both methods. However, it remains uncertain if this decline will be sustained when energy prices normalize and consumer incentives to reduce consumption diminish. Further efforts to make homes more sustainable will be crucial in driving down carbon emissions in the long term.

By employing rigorous methodologies to estimate carbon emissions in mortgage portfolios, these findings underscore the importance of addressing carbon reduction in the housing sector. As the world continues to confront the challenges of carbon emissions and climate change, data-driven insights can inform responsible actions to mitigate environmental impact and promote sustainability for a better future.

Appendix

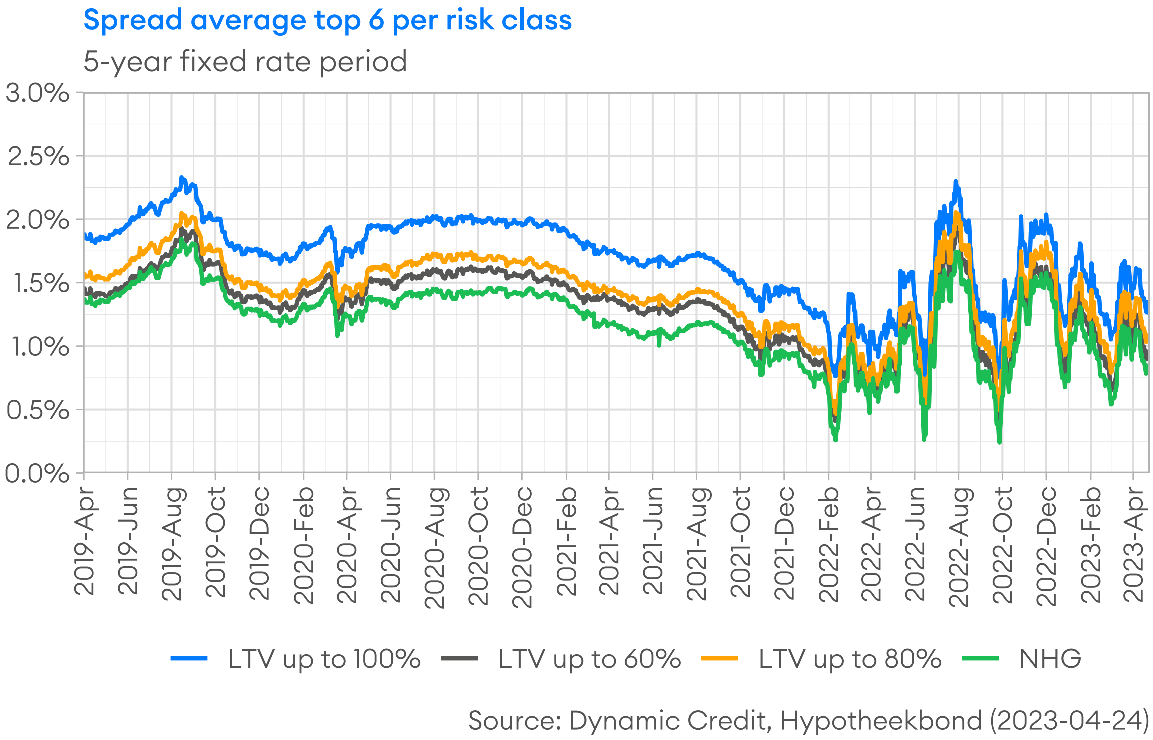


Figure A1: Spread of the average top-6 price leader mortgage rates (excluding action rates) for mortgage loans with a 5-year fixed rate period for four risk classes. Up to and including April 2023.

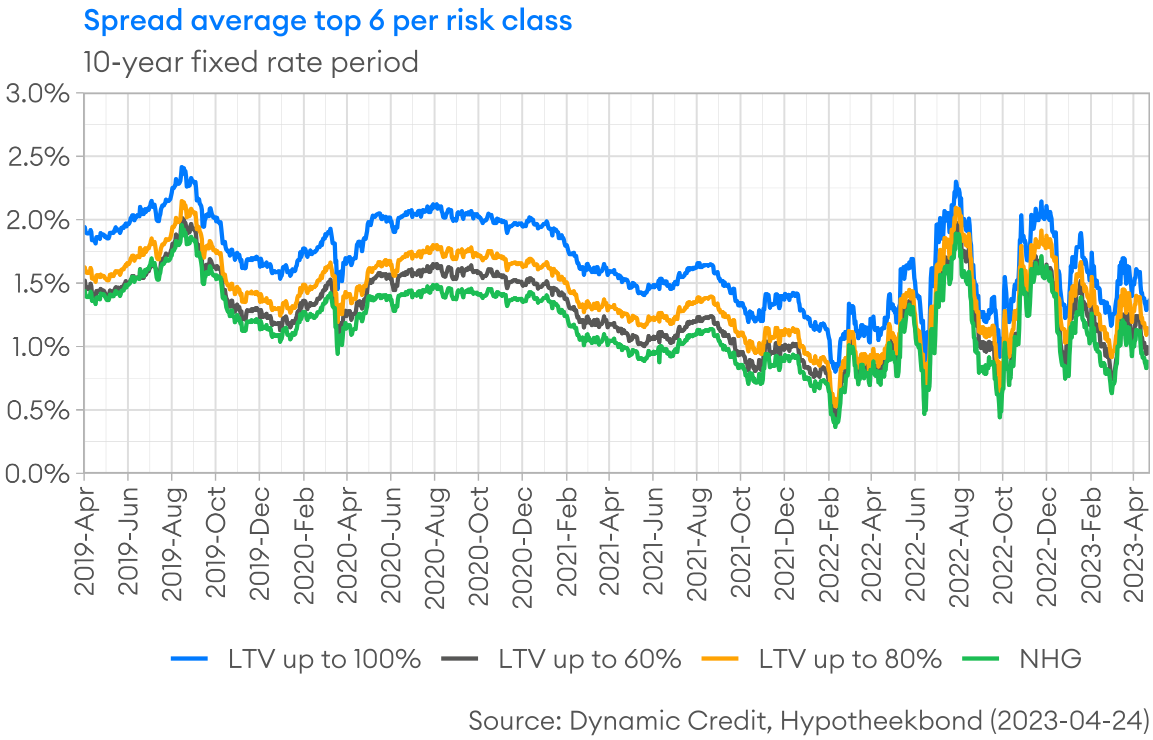


Figure A2: Spread of the average top-6 price leader mortgage rates (excluding action rates) for mortgage loans with a 10-year fixed rate period for four risk classes. Up to and including April 2023.

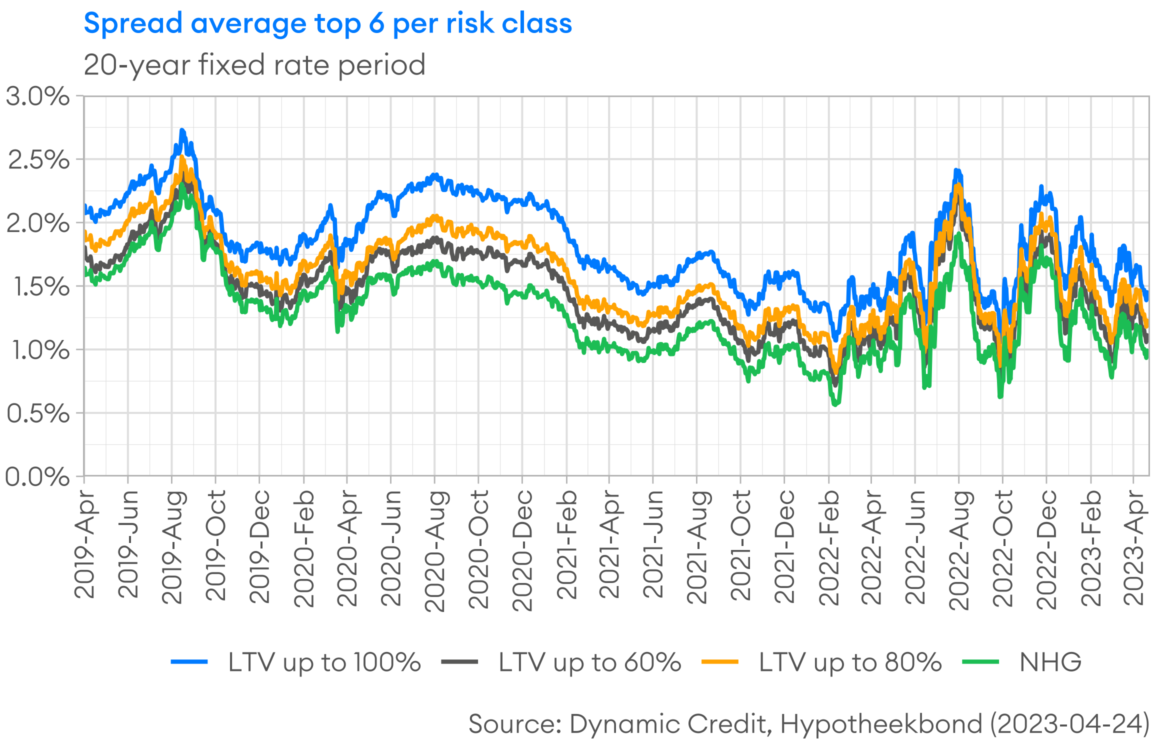


Figure A3: Spread of the average top-6 price leader mortgage rates (excluding action rates) for mortgage loans with a 20-year fixed rate period for four risk classes. Up to and including April 2023.

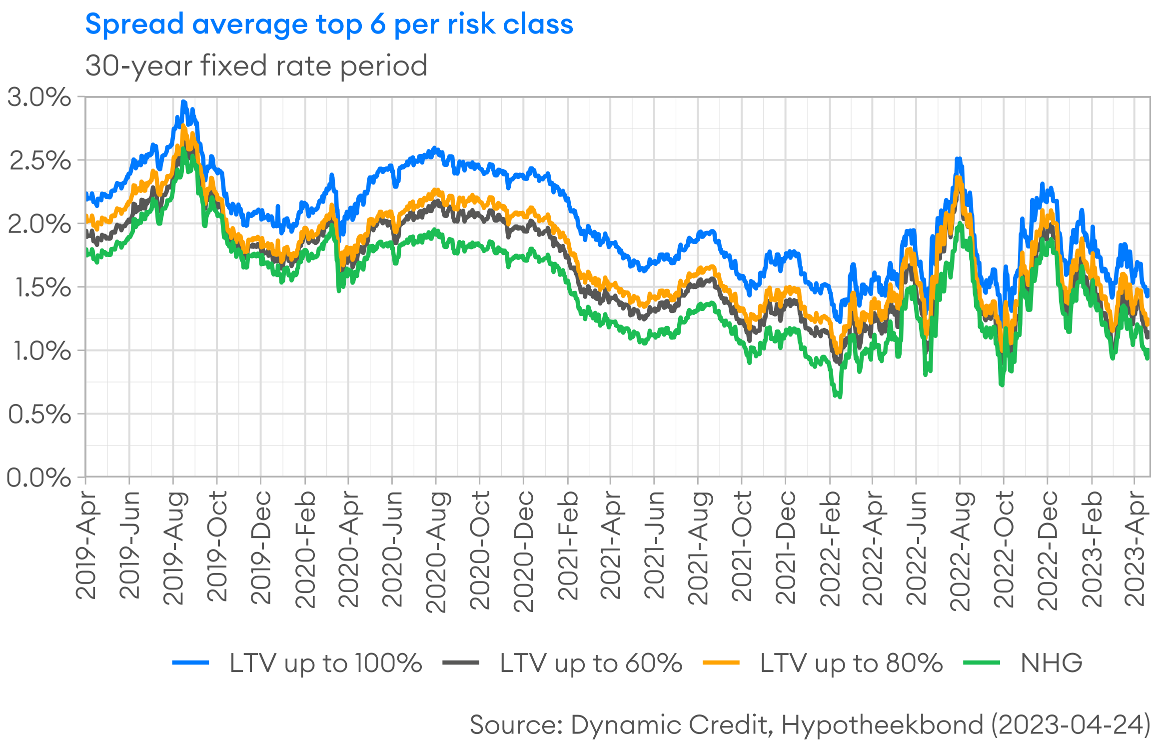


Figure A4: Spread of the average top-6 price leader mortgage rates (excluding action rates) for mortgage loans with a 30-year fixed rate period for four risk classes. Up to and including April 2023.

Contact details

Portfolio Management Team Members

Jasper Koops

Head of Portfolio Management

T: + 31 20 794 6058

jkoops@dynamiccredit.com

Allard Vollering

Portfolio Manager

T: +31 20 235 8895

avollering@dynamiccredit.com

Anne Koens

VP Legal & Regulatory Affairs

T: +31 20 280 7104

akoens@dynamiccredit.com

Pim Ligtvoet

Portfolio Manager

T: +31 20 280 7100

pligtvoet@dynamiccredit.com

Anastasia Teunissen

Underwriting & Fraud Specialist

T: +31 20 798 1382

ateunissen@dynamiccredit.com

Koray Sanli

Analyst

T: +31 20 280 7100

ksanli@dynamiccredit.com

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Revealing Opportunities.

Contact
Jasper Koops
Portfolio Management Team
Dynamic Credit Partners Europe

Frederik Roeskestraat 97D
1076 EC Amsterdam
The Netherlands

Desk: + 31 20 794 60 58
jkoops@dynamiccredit.com
www.dynamiccredit.com

www.dynamiccredit.com

Amsterdam
Frederik Roeskestraat 97D
1076 EC Amsterdam
The Netherlands

Phone: +31 20 770 4876

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