

## Foundation repair: financeable for homeowners?

**In short** The Netherlands faces foundation-related challenges that are expected to intensify in the absence of effective measures. Nearly half a million private homeowners face a high risk of foundation issues or are living in properties with a potentially vulnerable foundation. The most acute risks affect more than 120,000 homeowners for whom foundation repair is deemed necessary. Such repairs are costly – averaging €92,000 – although individual costs vary substantially. More than 75,000 homeowners lack sufficient financial resources to cover these repair costs immediately from liquid assets. For over 25,000 homeowners, taking out a loan does not seem to constitute a responsible financing option. The AFM therefore emphasises the importance of timely identification of foundation risks and ensuring that repair costs can be financed in a responsible manner.



## Executive summary

**The Netherlands is confronted with foundation-related issues that are expected to increase in severity and scope in the absence of interventions or preventive measures, in part due to climate change.**

Foundation damage may initially manifest itself in relatively minor defects, such as wall cracks or doors that no longer close properly. However, it can also lead to significant structural complications, including moisture intrusion, misalignment of the building structure and – in extreme cases – the risk of collapse. These foundation issues pose substantial financial risks for private homeowners, as such damage is uninsurable and repair costs must, in principle, be borne by homeowners themselves.

**It is therefore important that foundation issues are identified and remediated in a timely manner and that homeowners are able to cover the costs of necessary repairs in a responsible manner.**

Postponement of repair measures may aggravate the situation due to rising construction costs, declining property values and increasing risks of residual debt. In addition, important questions arise regarding the extent to which homeowners possess sufficient financial capacity to pay for these repairs directly or to finance them through loans. To adequately assess both the financial implications of foundation issues and the associated financing burden for homeowners, a deeper understanding of the underlying foundation challenges is required.

**The AFM is committed to promoting sustainable financial well being in the Netherlands, and therefore, we focus specifically on the financial risks that foundation issues pose for private homeowners.**

We translate the foundation-related issues at the building level to the affected households living in owner occupied homes. In total, nearly half a million private homeowners face a high risk of foundation issues or are living in properties with potentially vulnerable foundations. The nature and urgency of these risks differ significantly between homes, partly due to uncertainties surrounding future groundwater levels.

**For each homeowner, we assess the extent to which the repair costs can be paid directly or financed through a loan.** Our analysis therefore concentrates exclusively on private homeowners residing in homes with the highest foundation risks, where repair is deemed necessary. Homeowners with potentially vulnerable foundations who may face risks in the longer term are not included in this analysis.

**Our findings show the scale of both the repair task and the corresponding financing challenge for homeowners for whom repair is necessary:**

- More than 120,000 homeowners face foundation issues requiring repair, representing a total estimated repair cost of €11 billion.
- Foundation repair costs vary substantially, with a median cost of €54,000 per homeowner. Due to significantly higher costs in certain cases, the average repair cost is €92,000.
- Over 75,000 homeowners lack sufficient liquid assets – including bank balances, savings and investments – to finance full foundation repair directly. The aggregate shortfall for this group is €6 billion.
- More than 25,000 homeowners fall outside the standard mortgage financing capacity for financing the portion of repair costs they cannot pay immediately. This group collectively faces a financing gap of €3 billion.

**Beyond the financing issue, the complexity of the foundation issue makes it unrealistic to place full responsibility for remediation solely on individual homeowners.** Collective action is therefore required.

Attention must also be paid to long term foundation risks. Preventive interventions – such as improved groundwater management – can prevent (further) foundation issues. The (financial) assessment of these risks consequently demands careful consideration.

**The AFM calls on relevant stakeholders to work collaboratively to ensure transparent and adequate information provision regarding foundation risks as well as responsible financing solutions.** Each party has a critical role in identifying risks, informing and activating homeowners and prospective buyers, preventing excessive lending and facilitating timely foundation repairs.

**To ensure that foundation risks are identified in a timely manner and that repair costs are financed responsibly, the AFM considers the following four actions to be important:**

1. Provide easily accessible, property specific and reliable information on foundation risks for homeowners. The Ministry of the Interior and Kingdom Relations (BZK), municipalities, estate agents and housing platforms play a key role here.
2. Ensure the availability of standardised foundation risk information during orientation, purchase, valuation and financing processes, for example by incorporating mandatory foundation risk components into property valuations or through a standardised foundation risk indicator. Relevant stakeholders include the Ministry of the Interior and Kingdom Relations, the Netherlands Register of Real Estate Valuers (NRVT), estate agents and housing platforms.
3. Examine how financing opportunities can be utilised more effectively or strengthened in a responsible manner. Here, mortgage lenders, the Dutch Banking Association (NVB), National Mortgage Guarantee (NHG) and policymakers play a central role.
4. Explore potential additional measures to reduce the financing gap. We see a role for mortgage lenders, the Sustainable Foundation Repair Fund and policymakers.

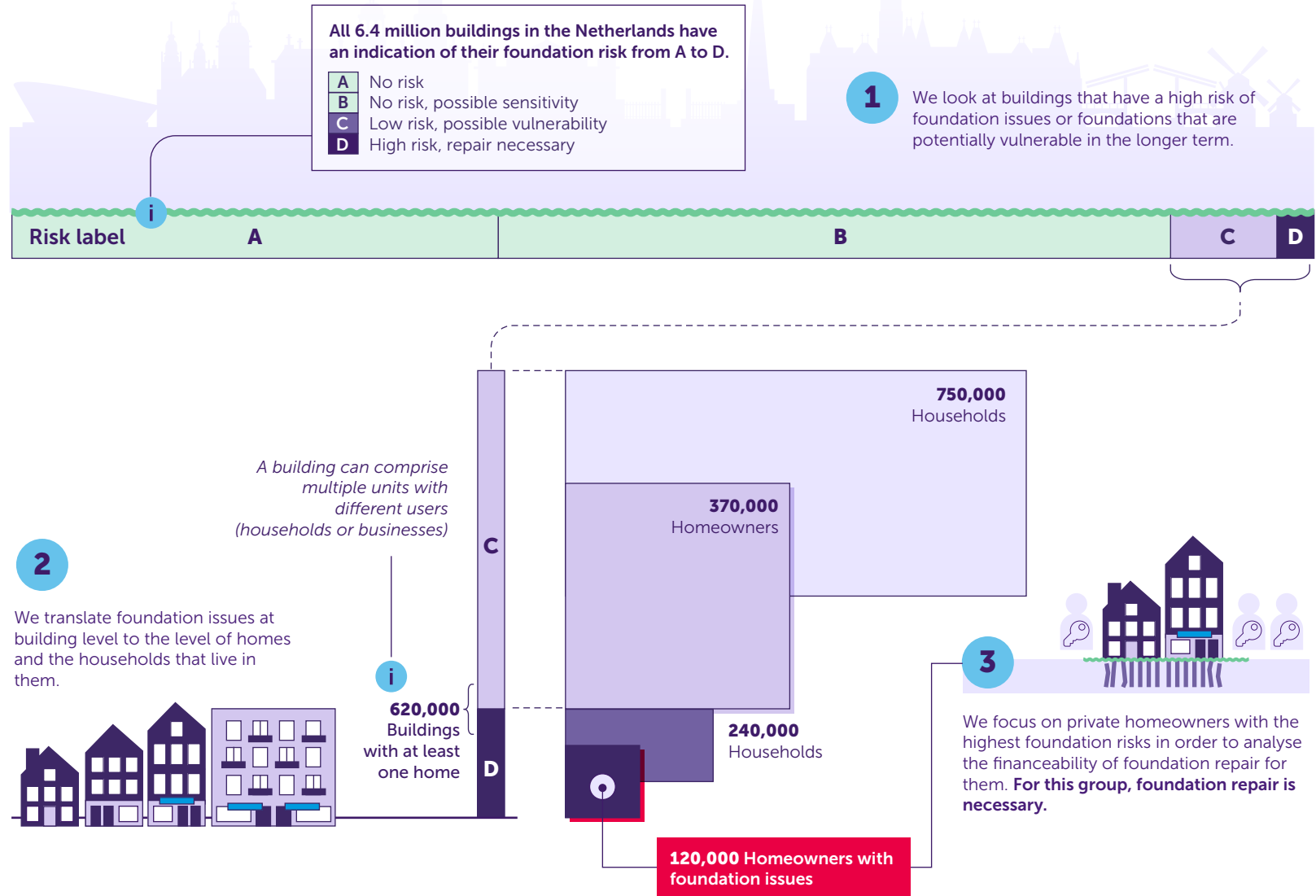
**The AFM urges the sector and stakeholders to collaborate on the basis of their respective roles and responsibilities in addressing both the foundation issue and the associated financing challenge.**

Chapter 6 elaborates on these responsibilities in greater detail. Our aim is to ensure that the financial risks associated with foundation issues are manageable for private homeowners now and in the future. With this report, we explicitly place the financing of foundation repair on the public policy agenda, and in our capacity as supervisor we will actively engage with involved parties to seek effective solutions.

# Scope of the study

The Netherlands faces foundation-related issues that are expected to intensify in the absence of effective measures. In this study we focus on private homeowners with foundation issues.

We do this in three steps:



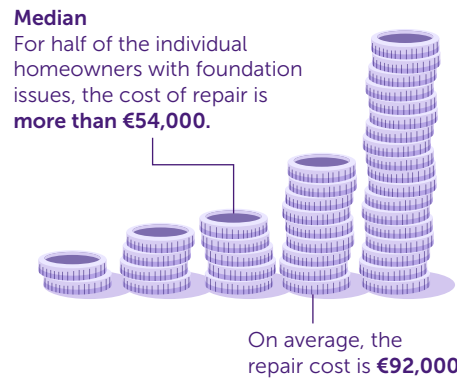
# Results financeability

## Figures



The estimate of the foundation repair task for these homeowners is **€11 billion**.

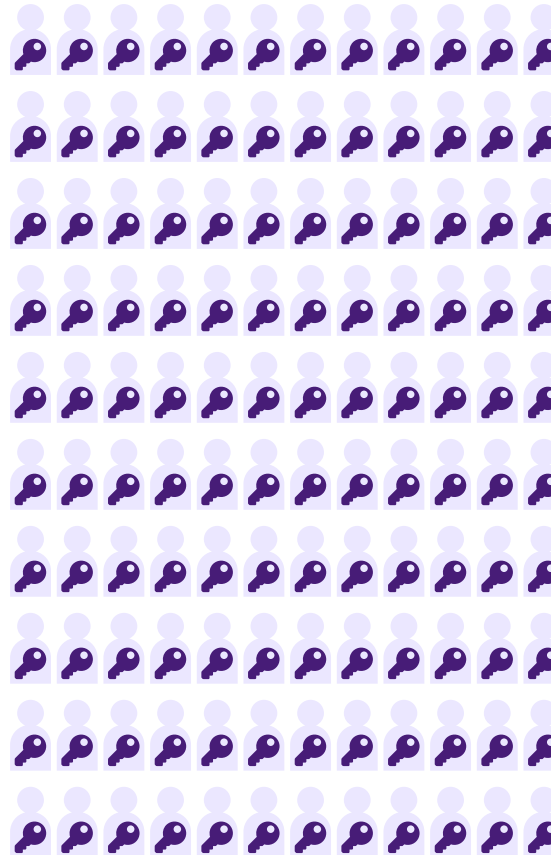
## Repair costs



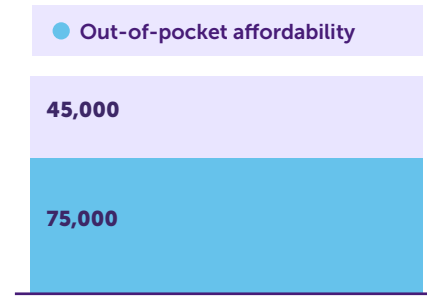
The repair costs vary substantially between homeowners

## Over 120,000

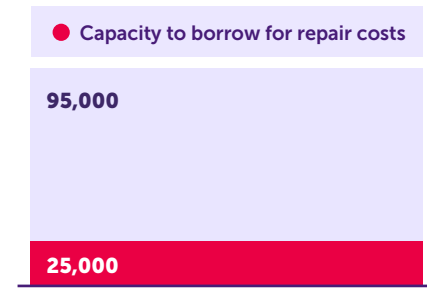
Homeowners with foundation issues



Homeowners with foundation issues x 1,000



Over 75,000 homeowners lack sufficient liquid assets – including bank balances, savings and investments – to finance full foundation repair directly.



Over 25,000 homeowners with foundation issues would fall outside the standard mortgage financing capacity if they borrowed the part of the repair cost they cannot pay out-of-pocket.

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# 1. Introduction

## 1.1 Background

**The Netherlands is facing foundation-related issues that are expected to increase in severity and scope in the absence of interventions and preventive measures, in part due to climate change.** Foundation damage may initially result in relatively minor issues, such as wall cracks or doors that no longer close properly, but can also develop into serious structural problems, including moisture intrusion, structural misalignment and – in extreme cases – the risk of collapse.

**Foundation repair is often highly costly and can therefore have substantial financial consequences for homeowners.** Moreover, foundation damage is uninsurable; homeowners are, in principle, responsible for covering these costs themselves. This raises the question of whether homeowners possess the financial capacity required to undertake such repairs. Delaying necessary interventions can further exacerbate the situation, leading to rising repair costs, declining property values and increased residual debt risks.

**The purpose of this study is to provide insights into both the scale of the foundation repair challenge and the corresponding financing task for homeowners.**

This research offers three contributions:

- We translate foundation issues observed at the building level into insights at the home and household level. This enables a more detailed and accurate understanding of the scope of the foundation issue compared with previous studies that reported only estimated numbers of buildings with foundation issues.
- We focus on the estimated repair costs rather than the potential damage associated with foundation issues. This approach provides a clearer and more substantiated view of what is required to address these issues effectively.

- We assess both the immediate affordability and the financeability of repair costs for homeowners facing actual foundation damage or a high risk of such damage. We begin by comparing required repair costs with homeowners' available financial resources to determine the extent to which costs can be paid directly. We then assess whether homeowners could borrow what they cannot pay directly within the boundaries of standard mortgage financing. This analysis clarifies – at the level of the individual homeowner – the scale and financial impact of the foundation issue.

**The AFM has previously highlighted the negative financial consequences associated with insufficient recognition or incorporation into house prices of climate-related risks for homebuyers and homeowners (see [AFM, 2023](#)). These include:**

- Homebuyers potentially paying an excessively high purchase price and taking out disproportionately high loans for properties affected by foundation or flood risks;
- Homeowners encountering financial difficulties if they lack the capacity to prevent or repair climate-related damage to their homes;
- Homebuyers being exposed to housing stress and health and safety risks linked to climate hazards;
- Limited access to information, leaving both buyers and owners without clear scope for action, hindering their ability to take appropriate preventive measures.

## 1.2 Problem analysis

Since the publication of the advisory report by the Council for the Environment and Infrastructure (Rli, 2024) and the government's subsequent response, the foundation issue has been placed firmly on the public agenda. The Rli report outlines the nature and scale of the foundation issue, identifies its underlying causes and presents possible solutions. Foundation damage arises from factors such as low groundwater levels, soil subsidence and soil expansion. These conditions are further aggravated by more frequent dry periods resulting from climate change.

However, necessary foundation repairs by homeowners are often delayed due to a lack of: i) information about whether they are currently facing or will face foundation issues, and ii) scope for action, particularly when homeowners lack the financial means to undertake repairs. In addition, repair efforts are hindered by other constraints, including limited implementation capacity. Failure to address foundation issues in a timely manner results in significant negative consequences, such as further structural deterioration, increased risk of damage, higher repair costs, declining property values and unsafe living conditions – including the risk of collapse.

### Lack of information

A central issue is the lack of reliable foundation risk information available to current and prospective homeowners, as well as to stakeholders involved in property transactions. Although awareness of foundation issues has grown in recent years, no structural or standardised information framework exists. As a result, foundation risks are barely reflected in housing market pricing (AFM, 2023). The absence of clear information also limits the ability of current homeowners to take action: they cannot respond when they do not know whether a problem exists, what the exact issue is or how urgent it may be. Moreover, risks and associated costs may be transferred to buyers, who – particularly first-time buyers – may lack the necessary financial buffers.

Homeowners also often lack clarity about who bears responsibility for the costs of foundation repair and how high these costs are. Nearly half of homeowners do not know who is responsible for covering repair expenses in the event of subsidence or other foundation issues, or they incorrectly assume that insurers or government authorities will pay (AFM Consumer Monitor, 2025). More than half recognise that they are (partly) responsible for repairs, either individually or through the homeowners' association (VvE). Furthermore, four in ten homeowners have no understanding of the likely costs of foundation repair (AFM Consumer Monitor, 2025). In the absence of reliable financial information, homeowners are unable to make informed decisions about whether, when and how to undertake repairs.

The knowledge gap regarding foundation condition and risk is further demonstrated by the AFM Consumer Monitor 2025: only one in six mortgage holders has a full understanding of their home's foundation type, soil conditions, area characteristics and construction period. Although the construction period is often known, it provides limited insight into the specific foundation type. Mortgage holders tend to assess risks based on personal judgment or visible signs of damage, while fewer than one in ten has ever had a professional foundation inspection conducted.

Research by the Homeowners' Association indicates that 85% of buyers of homes with a real risk of foundation damage were unaware of this risk at the time of purchase (Rli, 2024). Housing listings rarely include foundation condition information. Sellers have limited financial incentives to disclose foundation issues, as research shows that reported foundation damage leads to substantial price discounts, while disclosure of repaired foundations results in slight price increases (Hommes et al., 2023).

## Lack of scope for action

**There are numerous practical barriers that prevent homeowners from undertaking foundation repair.** In apartment complexes, repairs require coordination within the homeowners' association (VvE) or with adjacent property owners. Ineffective cooperation, inactive VvEs and an emphasis on legal responsibility can obstruct an adequate response (Rli, 2024). In some situations, individual homeowners have no scope for action whatsoever, particularly when the necessary intervention relates to broader measures – such as groundwater management – beyond their control.

### High repair costs constitute another major barrier, especially for homeowners with insufficient savings or borrowing capacity.

Until now, it has been widely assumed – but not empirically verified – that these costs are either unaffordable for many homeowners or, alternatively, that homeowners generally would have sufficient borrowing capacity. Rough estimates of repair costs do exist and suggest that approximately 25% of buildings require 'very extensive work' (estimated at €120,000), 35% require 'major work' (estimated at €60,000) and 40% require 'limited work' (estimated at €30,000) (Rli & Deltares, 2024).

- Which households are affected by foundation issues? Are the occupants homeowners or tenants?
- What is the financial position of homeowners with foundation issues, and what are the characteristics of this group?
- What are the estimated foundation repair costs for each homeowner's property?
- How many homeowners have sufficient financial resources to pay the repair costs directly themselves, and what are the characteristics of this group?
- What is the impact of incorporating the repair costs on homeowners' mortgage financing capacity, in terms of both loan to value and loan to income requirements? What characterises the group of homeowners who fall outside the standard mortgage financing limits?

## 1.3 Research questions

**This study provides insight into exactly which homeowners are facing foundation issues, what the repair costs are at the home level and to what extent these costs can be borne by the affected homeowners.** The research addresses the following main question and accompanying sub questions.

To what extent are owners of homes with foundation issues able to bear the associated repair costs?

- What is the extent of the foundation issue when examined by building type (i.e. residential or commercial properties)? What is the value at risk – including the property value determined by the municipality (WOZ value) and outstanding mortgage debts – of the residential properties affected by foundation issues?

## 2. Research methodology

### 2.1 Research design and data

**This study combines building-specific foundation data from the FunderMaps application of the Knowledge Centre for Tackling Foundation Issues (KCAF) with detailed administrative household data from Statistics Netherlands (CBS Microdata).** The objective is to identify homeowners who face foundation risks and to assess the extent to which they can bear the associated repair costs. The FunderMaps risk model provides information on the foundation risk level for every building in the Netherlands, along with an estimate of the required repair costs. By linking this dataset to CBS Microdata on household income and wealth, we determine which households occupy these buildings and evaluate both their financial capacity and borrowing capacity.<sup>1</sup> A separate technical appendix provides a detailed description of the research design and underlying data sources.

**FunderMaps assigns each building in the Netherlands a foundation risk label and provides estimated repair costs for buildings with the highest risk levels.** These estimates are generated through a risk model that draws on historical and current data on subsoil characteristics, foundation type, groundwater levels, archival documentation and – where available – technical foundation assessments. Although comprehensive national foundation data are not yet available, this model attempts to provide the best possible approximation of the current situation. Repair cost estimates at the building level are based on the foundation type, building surface area and regional cost benchmarks for foundation repair. It is worth noting that this concerns repair costs to fully restore the foundation. In some cases, it may be possible to extend the lifespan of the foundation through cheaper measures, without fully restoring it, but in that case the risk may reappear in the long run. For buildings comprising multiple residential units or a mix of residential and commercial units, we convert the total repair costs at the building level into repair costs per homeowner. We

assume that all (types of) users within a building share the costs of foundation repair equally. For example, in a building containing seven ‘units’ (two shops, three rental properties and two owner occupied homes), each unit is assumed to be responsible for one seventh of the total repair costs. Consequently, each of the two owners of the owner occupied homes must bear one seventh of the building’s overall repair costs. In practice, this highlights an important bottleneck: the remaining five sevenths of the repair costs must also be financed to enable foundation repair of the entire building.

### 2.2 Risk interpretation and scope

**The FunderMaps risk labels account for both the likelihood of foundation damage and the timeframe within which intervention is required.** The basis is an overarching risk classification that consolidates all available foundation-related risk indicators. These include the risk of fungal deterioration of wooden foundation piles resulting from persistently low groundwater levels, as well as risks associated with groundwater levels that are structurally too high relative to floor and foundation levels. A detailed explanation of the FunderMaps risk labels is provided in the separate technical appendix. Buildings are assigned a risk label ranging from A (no risk) to D (high risk). Buildings classified as risk label A or B face no or negligible foundation risks. Buildings with a C label exhibit increased vulnerability due to their foundation type, soil composition, groundwater conditions and construction period, but currently show no or only limited indicators of damage. For these buildings, no active damage process is underway and foundation repair is not yet necessary. Up to 2050, preventive measures – such as stabilising groundwater levels or improving drainage around the building – remain feasible for this category. Without preventive action and under the influence of climate change, foundation issues in C label buildings may develop from 2050 onwards to a degree that warrants reclassification to risk label D.

<sup>1</sup> We use the data from 2023. For a small part of the study population, data on repair costs, the property’s assessed value (WOZ), or assets are missing. As a result, these homeowners are excluded from certain analyses in Chapters 3–5.

**For buildings with risk label D, the damage process has already commenced, although the stage and severity of deterioration may vary.** These buildings exhibit consistent indicators of foundation issues, such as abnormal subsidence patterns, visible damage signals or issues confirmed in adjacent buildings or through dedicated foundation inspections. Foundation issues in this category should be regarded as an ongoing or latent process: for example, wooden piles may be positioned above groundwater levels, creating a real risk of pile rot. In some cases, the situation is acute, with severe or prolonged subsidence or moisture problems rendering the home uninhabitable. In others, the damage process is actively progressing underground, while the property remains habitable because the consequences are not yet fully visible or only partially manifest, e.g. through moisture issues or cracks. This damage process is expected to progress over the next 25 years to the point where foundation repair becomes unavoidable. Depending on the stage of deterioration, the advised timeframe for preparation and intervention ranges from immediate action to a period of five to 10 years. For these buildings, the scope for preventive measures is limited.

**The analyses in this study focus exclusively on homeowners residing in homes with a D risk label.** This includes only owner-occupied homes; rental properties, commercial units and business premises fall outside the scope of this research, as the dynamics of affordability are quite different here. Owners of C label homes are also excluded, as their risks concern the longer term, rendering their current financial position less relevant. Moreover, for C label buildings, preventive measures remain viable alternatives to full foundation reconstruction. Such preventive interventions should typically be handled by municipalities and water boards rather than individual homeowners.

**Due to increased data availability, methodological differences, varying definitions and differing risk assessment periods, multiple estimates are circulating regarding the scale of the foundation issue.** With its narrower focus on D label buildings, foundation issues in this report may seem smaller than in other studies. Nonetheless, it remains essential to monitor owner-occupied homes with a C label, as these homes may face the same challenges in the long term if no action is taken. The separate technical appendix provides an overview of the explanations behind the differing estimates of the scale of the foundation issue.

### 3. Extent of foundation issues

#### 3.1 From building to home (and homeowner)

**Approximately 177,000 buildings in the Netherlands have foundation issues (risk label D).** In addition, more than 522,000 buildings show increased vulnerability to foundation issues, although they currently exhibit no or only limited damage indicators. For these buildings with a C label, it remains uncertain whether foundation issues will ultimately materialise. Table 1 explains how we translate buildings into homes owned by private homeowners. Among all D label buildings, 11% are commercial properties, while 89% consist of buildings that contain at least one residential unit. Within these buildings, various types of residential and commercial units may be present, such as homes and business premises.

**Based on this classification, we estimate a total of nearly 220,000 homes affected by foundation issues (risk label D), inhabited by approximately 240,000 households, including both tenants and homeowners.** While D label homes share many characteristics with homes in other risk categories, several important differences stand out. Homes with a D label are typically older, more often built before 1970. This is consistent with the fact that newer homes generally

rely on concrete pile foundations, which are not prone to pile rot or shallow foundation risks (KCAF, 2025). Additionally, D label homes are more frequently part of multi-household buildings, such as apartment blocks, ground-floor and upstairs units or homes located above commercial premises. They are also more often rental properties, either privately rented or owned by housing associations.

**Focusing specifically on owner-occupied homes, more than 120,000 homeowners are confronted with foundation issues.**

Given the objective of assessing both the immediate affordability and financeability of foundation repair costs, this is the group on which the remainder of this study concentrates. This analysis therefore excludes the approximately 370,000 homeowners living in homes with only an increased vulnerability to foundation issues (risk label C).<sup>2</sup> For approximately one in five homeowners with a D label, the building in which their home is located contains multiple users – such as several residential units or a combination of homes and business premises. In these cases, foundation repair requires coordination among all users, for example within an owners’ association (VvE), which may further complicate the repair process.

Table 1: Number of buildings and homes by risk label

	Risk label A	Risk label B	Risk label C	Risk label D	Unknown	Total
<b>Buildings</b>	<b>2,383,345</b>	<b>3,295,981</b>	<b>522,653</b>	<b>177,200</b>	<b>11,893</b>	<b>6,391,072</b>
Commercial properties	414,725	480,129	62,095	18,862	3,970	979,781
Residential properties	1,968,620	2,815,852	460,558	158,338	7,923	5,411,291
<b>Homes</b>	<b>3,471,584</b>	<b>3,236,824</b>	<b>680,495</b>	<b>219,799</b>	<b>9,652</b>	<b>7,618,354</b>
Households	3,633,362	3,414,256	752,424	241,310	10,656	8,052,008
Homeowners	1,845,090	2,145,600	366,896	121,133	6,343	4,485,062

Source: Results based on calculations by AFM in project number 3137 based on non-public microdata from Statistics Netherlands, in combination with FunderMaps data

<sup>2</sup> Taking into account model uncertainty, foundation issues will actually materialise for 95% of homeowners with risk label D (115,000 homeowners). For an expected 65% of homeowners with risk label C (240,000 homeowners), the increased vulnerability will lead to foundation issues in the long term.

**A substantial proportion of foundation issues are highly concentrated in specific regions.** The vast majority of homeowners with a D label live in the provinces of South Holland, Overijssel, North Holland and Friesland. Within these provinces, several municipalities with well-known foundation issues stand out: more than one-third of all homeowners with foundation issues reside in Rotterdam, Haarlem or Dordrecht. With regard to other socioeconomic or demographic characteristics, homeowners with foundation issues largely resemble the broader population of homeowners.

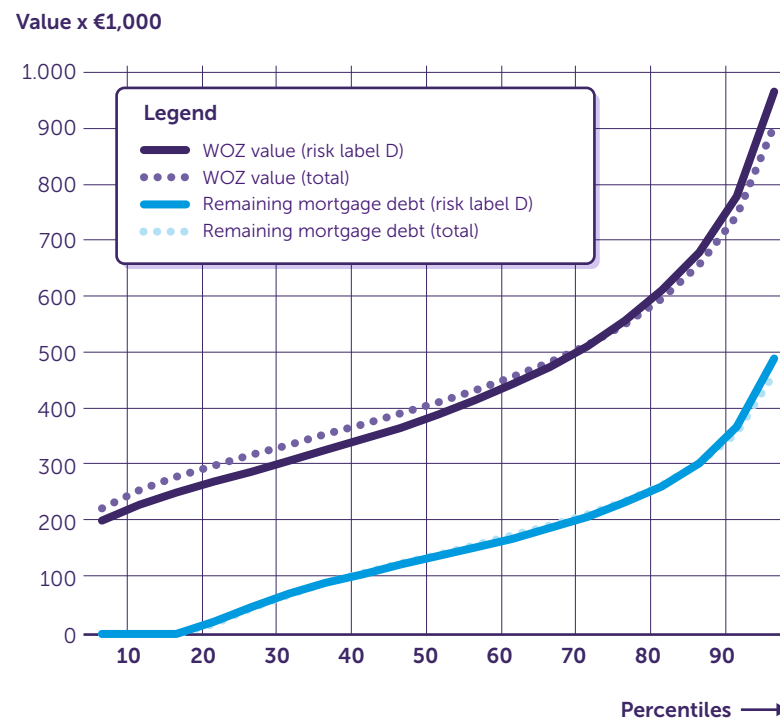
### 3.2 Value-at-risk

**The total value-at-risk for homeowners with a D label amounts to €52 billion, representing the combined WOZ values of their homes.**<sup>3</sup>

The WOZ values vary substantially across homeowners, as illustrated in Figure 1. Within the D label group, the average WOZ value is €458,000, while the median is €385,000. This median value is slightly below the national median home value among all homeowners (€407,000). Overall, we observe only minor differences in WOZ values between homes with a D label and the broader population of owner-occupied homes. Other determinants – such as location, neighbourhood characteristics and home type – are more strongly correlated with home value.

**The total outstanding mortgage debt associated with D label homes amounts to €20 billion.** This figure, together with the value-at-risk, represents the relevant size of the mortgage portfolio linked to these properties. The fact that outstanding mortgage debt is considerably lower than the total value-at-risk reflects both mortgage repayments already made by homeowners and increases in home values since their purchase. As with WOZ values, we observe no meaningful differences in outstanding mortgage debts between homeowners with D label homes and the overall homeowner population.

Figure 1: Distribution of WOZ value and remaining mortgage debt of homes of homeowners (risk label D versus total)



Source: FunderMaps and CBS Microdata, processed by AFM (2026)

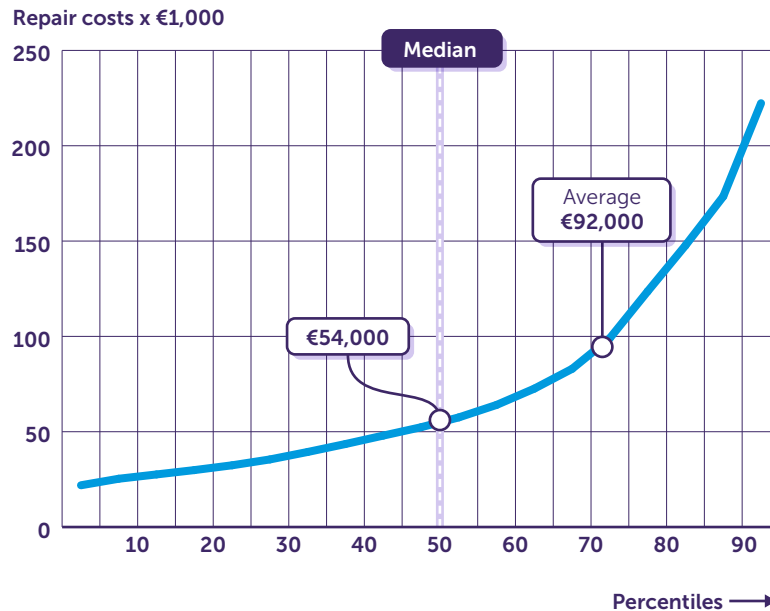
<sup>3</sup> From the CBS Microdata, we only have access to the WOZ value as the home value. In practice, this value may be different from the appraisal and/or market value.

### 3.3 Repair costs

The costs of full foundation repair for homeowners with a D label correspond to an average of 21% of the home value, resulting in a total repair task of €11 billion. After converting the building level repair costs to the share attributable to each homeowner, the average repair cost amounts to €92,000 per homeowner with a D label. However, repair costs vary substantially across homeowners. As shown in Figure 2, the distribution of repair costs is highly skewed. For half of homeowners, the repair costs amount to €54,000 or more, while approximately 10% face repair costs exceeding €200,000. For 1% of homeowners, the estimated repair costs are higher than the value of the home itself. When extending the scope to include all homes (owner-occupied and rental) and all buildings (including commercial premises) with a D label, the total repair task increases to €25 billion.

Consumers appear to have difficulty accurately estimating the costs of foundation repair. In the AFM's most recent Consumer Monitor for Mortgage Holders (AFM, 2025), a representative group of homeowners was asked to estimate typical foundation repair costs. Four in ten homeowners indicated that they were unable to provide any estimate at all. Among those who did provide an estimate, the costs were generally underestimated. One in ten homeowners who attempted an estimate believed that repair costs would be below €20,000, whereas FunderMaps data show that this is the case for only 3% of homeowners with foundation issues. Conversely, FunderMaps indicates that one in four homeowners faces repair costs exceeding €100,000, while only one in five homeowners estimated costs in this range.

Figure 2: Distribution of repair costs of homes of homeowners with D risk label



Source: FunderMaps and CBS Microdata, processed by AFM (2026)

## 4. Out-of-pocket affordability of repair costs

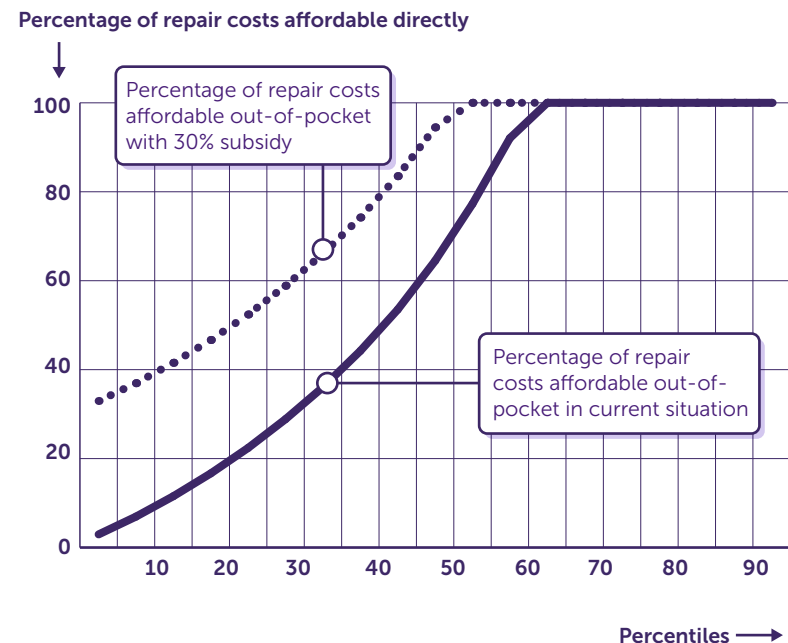
To assess the immediate affordability of foundation repair, we compare the repair costs for the group of 120,000 homeowners with a D label to their available financial capacity. In doing so, we assume that homeowners confronted with repair obligations would allocate all available liquid assets to covering the costs. Liquid assets include all bank and savings balances as well as the value of investment holdings in box 3. We assume that investment portfolios can be fully liquidated in situations of financial necessity. No financial buffer is included in this baseline assessment, as we assume that homeowners would fully exhaust their liquid assets for foundation repair.

**More than 75,000 homeowners with foundation issues are unable to pay the repair costs out of pocket (see Figure 3).** Approximately 45,000 homeowners are able to do so. These figures do not include additional costs associated with foundation repair, such as temporary accommodation during construction work. When including a buffer equal to three months of disposable income, immediate affordability deteriorates further: the number of homeowners unable to pay increases to 86,000. At least one-quarter of the 120,000 homeowners with foundation issues do not have this minimal buffer.

**Homeowners who lack the financial means to pay repair costs out of pocket face substantial shortfalls.** Among this group, half are short by €36,000 or more (median). Due to the highly skewed distribution of repair costs, the average shortfall among homeowners unable to pay immediately is €80,000. In total, this group faces a combined funding gap of €6 billion to cover foundation repair costs directly.

Even if 30% of repair costs were subsidised, as proposed by Rli (2024), the majority of affected homeowners – approximately 64,000 – would still be unable to pay the repair costs immediately (see Figure 3). This clearly illustrates the need for additional or alternative financing mechanisms, provided these remain responsible and sustainable for homeowners. Approximately 11,000 additional homeowners would have sufficient financial capacity to cover repair costs directly under such a subsidy arrangement.

Figure 3: The share of the repair costs that homeowners can pay out-of-pocket, both in the current situation and with a 30 percent subsidy



Source: FunderMaps and CBS Microdata, processed by AFM (2026)

**The group of homeowners who cannot fully bear the foundation repair costs is relatively young and has higher loan-to-value (LTV) and loan-to-income (LTI) ratios.** Among homeowners unable to cover the repair costs, 16% are younger than 35, whereas this proportion is only 8% within the group that can afford the repair costs. These younger homeowners are likely to be individuals who have recently purchased their first home. This group also has relatively high fixed housing costs in relation to their income. By contrast, homeowners who can bear the repair costs are more often older or already retired, and they are more likely to have repaid their mortgage. With regard to home values, a notable difference appears: homeowners who cannot pay repair costs immediately are more likely to live in lower value homes (below €350,000) compared to homeowners who are able to cover the repair costs directly.

## 5. Capacity to borrow for repair costs

**Because most homeowners cannot pay the foundation repair costs out of pocket, we assess the feasibility of financing repairs through a loan within the standard mortgage financing capacity available to homeowners.** To do this, we examine the impact of borrowing the repair costs on both the loan-to-value (LTV) and loan-to-income (LTI) ratios. Two scenarios are analysed: i) a scenario in which homeowners borrow the full amount of the repair costs; and ii) a scenario in which homeowners borrow only the portion they cannot pay directly. A loan may also be a suitable financing option for homeowners who are not strictly required to borrow. This is particularly relevant because our baseline assessment does not include a financial buffer. Taking out a loan could therefore enhance the financial resilience of some homeowners. In this analysis, we assume that foundation repair is necessary to maintain the current home value. While foundation repair may lead to higher home values in the long term – particularly if transparency and pricing of foundation risks improve – current evidence suggests that such effects remain limited (Hommes et al., 2023). For this reason, we do not incorporate this in our analyses.

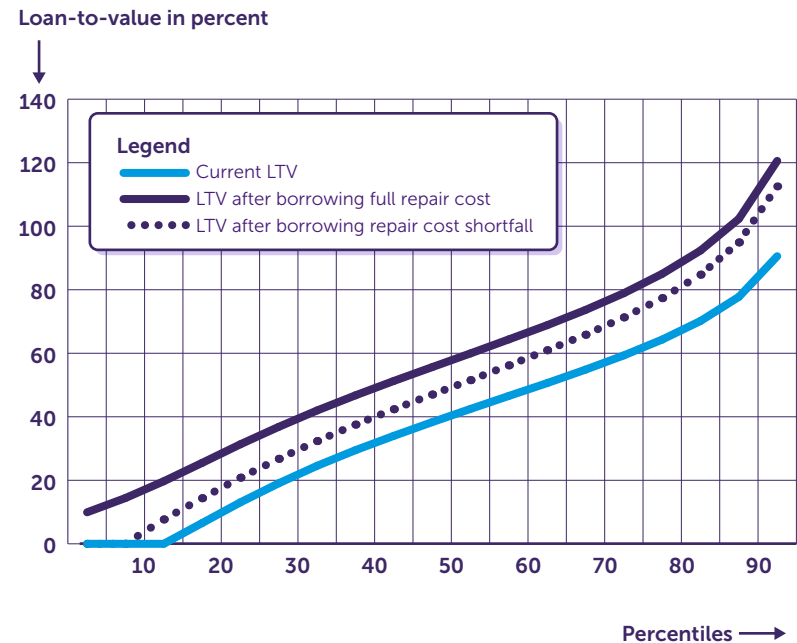
**In addition, homeowners must have sufficient mortgage financing capacity to safely take on a loan for the repair costs (AFM, 2023).** We therefore examine the extent to which borrowing the repair costs fits within homeowners' current income levels and the maximum mortgage permitted under LTI limits.

### 5.1 Loan-to-value

**If homeowners with foundation issues were to borrow the portion of the repair costs that they cannot pay immediately, approximately 9,700 homeowners would exceed the lending standard of 100% loan-to-value (LTV).** The LTV reflects the ratio between the outstanding mortgage debt and the value of the home. As long as the LTV remains below 100%, the homeowner retains equity and may have additional borrowing capacity. However, when part of the

required repair costs is added to the outstanding mortgage debt – while the denominator (the WOZ value) remains unchanged – the LTV deteriorates. Under this scenario, the average LTV increases from 40% to 52% (see Figure 4). If homeowners were to borrow the full repair costs, the average LTV would rise further to 61%. This is consistent with the earlier finding that the repair costs represent, on average, 21% of the value of the home.

Figure 4: Effect of repair costs on LTV position



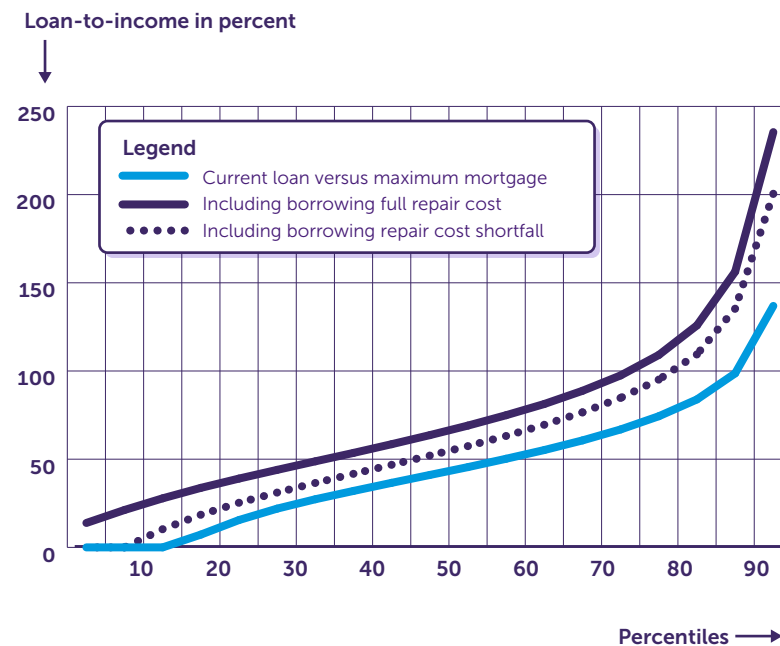
Source: FunderMaps and CBS Microdata, processed by AFM (2026)

## 5.2 Loan-to-income and maximum mortgage

To assess whether homeowners have sufficient financing capacity to borrow all or part of the foundation repair costs, we compare their current mortgage loan with the maximum mortgage permitted under the standard lending framework. The maximum mortgage is calculated based on the loan-to-income norms established for both AOW households (i.e. those receiving a state pension) and non-AOW households, see Nibud (2023). In this calculation, we use the homeowner's relevant income (loan basis) and assume an interest rate of 5% and a 30-year annuity mortgage. This approach may overestimate the maximum mortgage because it does not take into account other financial obligations such as consumer loans or student debt. As a consequence, the results present a conservative estimate: in reality, the impact of repair costs on compliance with lending standards may be more severe. Conversely, our assumption does not reflect the fact that the current market interest rate is lower than the notional rate, nor does it consider the possibility of more favourable interest rates for loans intended specifically for foundation repair. Lower interest rates would increase financing capacity.

**Borrowing all or part of the repair costs leads to a deterioration in the loan-to-income (LTI) position (see Figure 5).** If homeowners borrowed only the portion of repair costs they could not cover immediately, 21,000 homeowners with foundation issues would exceed the maximum mortgage limits allowed under the standard lending framework.

Figure 5: Effect of repair costs on LTI (loan versus maximum mortgage)



Source: FunderMaps, CBS Microdata and Nibud, processed by AFM (2026)

### 5.3 Mortgage financing capacity

**To assess the extent to which homeowners would remain within the standard mortgage financing capacity if they were to borrow the portion of the foundation repair costs they could not pay immediately, we evaluate both loan-to-value (LTV) and loan-to-income (LTI) outcomes (see Figure 6).** The standard mortgage financing capacity is defined as an LTV below 100% and a loan within the maximum mortgage under the standard lending framework (LTI below 100%). In these assessments, we do not take into account legal exceptions or customised arrangements that could expand mortgage financing capacity.

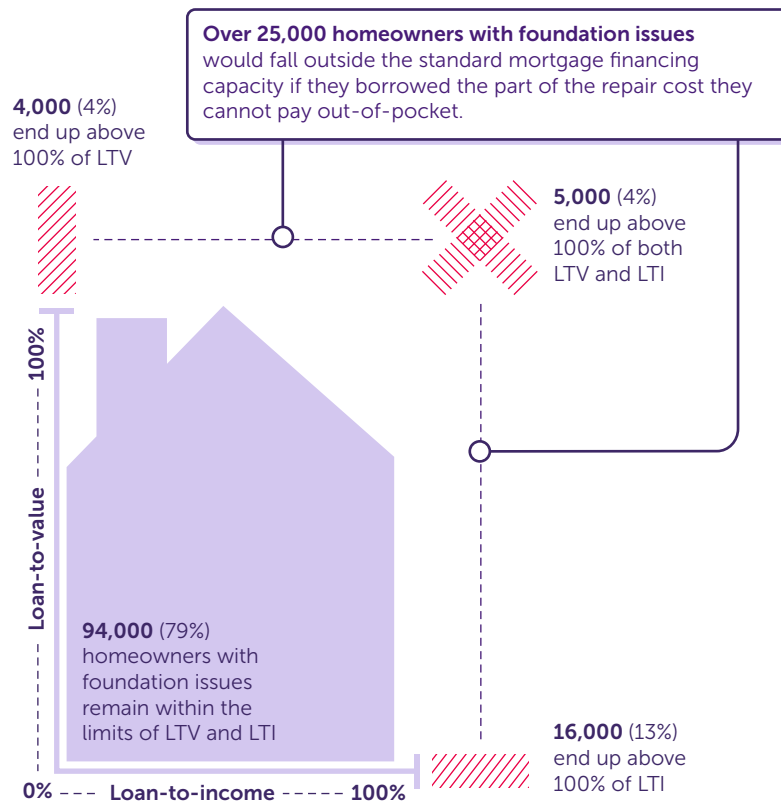
**In total, more than 25,000 homeowners with foundation issues would fall outside the standard mortgage financing capacity if they were to borrow their remaining shortfall.** These homeowners would exceed the 100% threshold for LTV, LTI or both. Under this scenario, 4% of homeowners with foundation issues would exceed 100% of LTV, while 13% would exceed 100% of LTI. A further 4% would exceed both the LTV and LTI limits simultaneously.

**These results confirm that part of the current homeowners may face financial risks, as they would be unable to pay the foundation repair costs directly and could not finance them through borrowing.** Despite having equity in their home, the repair costs for this group seem to be unfinanceable in a responsible manner. On average, these 25,000 homeowners face a shortfall of €115,000, indicating that their required repair costs are relatively high compared to the average. In total, this group faces a combined financing gap of €3 billion.

**As a result of these financing constraints, foundation repair may not occur, leaving homeowners with two options: continue living in the home without repair or sell the home.** The first option entails escalating risks: worsening structural damage, heightened safety concerns (including the risk of collapse) and the further postponement of unavoidable repair. The second option, assuming full transparency and accurate pricing of foundation issues, results in a lower sale price and may lead to residual debt. For homeowners who would exceed 100% of LTV, a sale necessarily results in residual debt. For homeowners who would exceed only the LTI limit, a sale without repair does not automatically lead to residual debt: 15,000 of the 16,000 homeowners in this group would still retain equity even with a discounted sale price, while approximately 1,000 homeowners would incur at least limited residual debt.

**Younger homeowners – with lower financial capacity and more limited income – are particularly vulnerable if they have to borrow the portion of repair costs they cannot cover immediately.** This is consistent with the characteristics identified earlier in Chapter 4. Among homeowners under 35 years old with foundation issues, 33% fall outside the standard mortgage financing capacity, compared to 16% of homeowners aged 67 or above. Homeowners with low assets, low incomes or high housing costs relative to income are also significantly more likely to fall outside the standard mortgage financing capacity.

Figure 6: Interaction between LTV and LTI and the effect of borrowing the shortfall



Source: FunderMaps, CBS Microdata and Nibud, processed by AFM (2026)

**Even in the current situation – before we include the repair costs – some of the homeowners with foundation issues (13,000) are already outside the standard mortgage financing capacity.** This also includes about 3,000 homeowners who can currently pay the repair costs directly. There are several reasons why homeowners are already outside the standard mortgage financing capacity in the

current situation. For example, in addition to the standard mortgage financing capacity, the legal lending standard also has exceptions and customisation options that would allow homeowners – if applicable – to have more financing capacity than the standard.<sup>4</sup> This is the case, for example, if the costs of energy-saving facilities are co-financed. Furthermore, it is possible that the current income used in the analysis is lower than the income at the time the mortgage was taken out, for example due to job loss, which results in a higher LTI. There may also be data-related reasons: for example, the appraisal value may be higher than the WOZ value used in the analysis, causing us to overestimate the actual LTV.

4 See: <https://www.volkshuisvestingnederland.nl/onderwerpen/huren-en-wonen/tijdelijke-regeling-hypotheek-krediet/maximale-hypotheek-op-basis-van-woningwaarde-ltv>.

## 6. Conclusion

**This research demonstrates that for a substantial proportion of homeowners with foundation issues the costs of repair are currently neither immediately affordable nor financeable.** Of the approximately 120,000 homeowners with such issues, more than 75,000 cannot pay the repair costs directly from their available liquid assets (bank and savings balances and investments). For more than 25,000 homeowners, borrowing all or part of the repair costs would exceed their standard mortgage financing capacity.

**Addressing the financing challenge requires a careful balance between limiting the progression of foundation damage and avoiding residual debt on the one hand and ensuring responsible lending on the other.** The Sustainable Foundation Repair Fund provides financing opportunities for homeowners facing foundation issues. However, important questions remain as to whether the fund sufficiently meets the needs of all affected groups and whether its scale is adequate relative to the total repair task.

**The nature of the foundation issue is complex and necessitates collective action.** Without a coordinated approach, foundation issues risk worsening and being transferred to future buyers. This is particularly problematic for first-time buyers, who typically have limited financial reserves. Additionally, foundation repair often has to be carried out at block level or within an owners' association (VvE). As a result, responsibility for initiating and financing repairs does not always rest with individual homeowners and collective decision-making is required. Furthermore, the availability of reliable and home-specific foundation risk information is essential for effectively incorporating foundation risks in house prices, preventing excessive lending and limiting the financial risks borne by consumers.

**Long-term foundation risks also warrant attention.** Preventive measures can mitigate or prevent future foundation issues. However, such measures – such as groundwater management and improved drainage – lie beyond the capacity of individual homeowners and require coordinated action by municipalities and water boards. The incorporation of uncertain, long-term risks in house prices must therefore be approached with care: given the availability of preventive options, it is neither logical nor desirable to incorporate the full costs of foundation repair into the price prematurely. Excessively early, rough or strict pricing can generate unnecessary uncertainty among homeowners and potential buyers and may also place undue pressure on home values.

**The AFM calls on relevant stakeholders to work collaboratively to ensure transparent and adequate information provision regarding foundation risks as well as responsible financing solutions.** Each party has a critical role in identifying risks, informing and activating homeowners and prospective buyers, preventing excessive lending and facilitating timely foundation repairs.

**To ensure that foundation risks are identified in a timely manner and that repair costs are financed responsibly, the AFM considers the following four actions to be important:**

1. Provide easily accessible, property-specific and reliable information on foundation risks for homeowners.
  - The Ministry of the Interior and Kingdom Relations (BZK) coordinates the National Approach to Foundation Issues and is well placed to enforce national consistency and direction.
  - Municipalities play a key role in housing policy, area-specific tasks and local information provision.
  - Real estate agents and housing platforms are crucial in retrieving and disclosing foundation information to buyers and sellers.
2. Ensure the availability of standardised foundation risk information during orientation, purchase, valuation and financing processes, for example by incorporating mandatory foundation risk components

- in property valuations or through a standardised foundation risk indicator.
- BZK explores with stakeholders which foundation risk information is required to ensure this.
  - Valuers handle foundation-risk information appropriately using the updated Residential Property Valuation Report, and the Netherlands Register of Real Estate Valuers (NRVT) should supervise this.
  - Real estate agents and housing platforms contribute to this given their role in the transaction processes.
3. Examine how financing opportunities can be utilised more effectively or strengthened in a responsible manner.
    - Mortgage providers and industry associations explore responsible financing solutions, analyse their portfolios for foundation risk exposure and assess implications.
    - The National Mortgage Guarantee (NHG) can help remove financing barriers through its guarantee, standardisation, expertise and network.
    - Policymakers may identify and remove obstacles and create the conditions necessary for innovative solutions and faster foundation repair.
  4. Explore potential additional measures to reduce the financing gap.
    - Lenders could contribute ideas and help develop new, responsible financing forms.
    - The Sustainable Foundation Repair Fund could play a more prominent role for households facing acute problems.
    - Policymakers could consider responsible, alternative financing options – such as fiscal options, subsidies or funds – and determine the conditions required to implement them.

**The AFM urges the sector and stakeholders to collaborate on the basis of their respective roles and responsibilities in addressing both the foundation issue and the associated financing challenge.** Our aim is to ensure that the financial risks associated with foundation issues are manageable for private homeowners now and in the future. With this report, we explicitly place the financing of foundation repair on the public policy agenda, and in our capacity as supervisor we will actively engage with involved parties to seek effective solutions.

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