

The Hidden Costs of Flooding

A Cebr report for Zurich

February 2026

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London, February 2026

Executive summary

Cebr is pleased to present the following report to Zurich analysing the hidden costs of flooding. The report reveals the same flood event can represent a temporary disruption for some households but a severe and lasting financial shock for others, with important implications for recovery, resilience, and the design of effective policy support. The following executive summary presents the key findings from the report:

Trends in Flood Risk

- Flood risk is rising and becoming more widespread, with climate change increasing the frequency and severity of river, surface-water and coastal flooding, and the number of properties in flood-risk areas projected to grow substantially by mid-century.
- Exposure is increasingly shaped by where and how people live, as housing pressures push more households into flood-prone areas. Meanwhile, a growing share of at-risk properties are occupied by renters, who often have fewer resources to absorb flood-related shocks.
- As flood risk continues to rise, it is increasingly important to understand not only the headline damages captured by insurance claims but also the overlooked hidden costs of flooding and how these impacts are distributed unevenly across households and communities.

Hidden Flood Costs

- We estimate that the average hidden cost of a flood for a household is approximately £3,280, rising to £3,700 in the case of severe flooding

- Across households of different tenure, homeowners bear the highest absolute hidden costs, which we estimate at approximately £3,662 on average, rising to £4,135 in cases of more severe flooding.
- Among renters we estimate total hidden costs of approximately £2,757 on average, rising to £3,152 in cases of severe flooding.
- Among renters, the average hidden costs are higher for social renters than private renters, largely due to longer periods of unpaid work absence and temporary relocation.

Traditional Flood Costs

- Our estimates, using evidence from major flood incidents since 2004, suggest that the average residential flood claim in 2025 is approximately £50,400.

Relative Impact

- While homeowners incur the highest absolute hidden costs, the impact of these costs, measured as a share of median household income is larger for renters. This is especially true for social renters, who face the largest relative impact of all housing tenure groups.
- The total hidden cost borne by homeowners is estimated to represent 6% of median household income.
- The total hidden costs faced by private and social renters are estimated to represent 8% and 13% of median household income, respectively.

Future Evolution of Hidden Costs

- As the frequency and severity of flooding increases, households are likely to face repeated hidden costs for cleaning, minor repairs, replacement of everyday items, and temporary displacement.
- Population growth, housing shortages, and continued concentration of households in high-risk areas, particularly renters, will increase both the number of affected households and the unequal distribution of hidden costs.
- With rising flood frequency and limited financial buffers, hidden costs are increasingly expected to arise from lost income, unpaid leave, reduced hours, and employment disruption, disproportionately affecting renters and those in insecure employment.

1. Introduction

Flooding represents one of the most significant and growing environmental risks facing the UK. In recent years, the frequency and severity of flood events have increased, driven by a combination of factors, including climate change, urbanisation, and the ageing of flood defence infrastructure. More intense rainfall, rising sea levels, and the expansion of impermeable surfaces in towns and cities have all heightened the risk of flash flooding and surface water inundation.

The latest National Flood Risk Assessment indicates that around 6.3 million properties in England, covering both homes and businesses, are currently located in areas at risk of flooding from one or more sources, including rivers, the sea, and surface water. With climate change, this figure could rise to around 8.0 million properties by mid-century, meaning that approximately one in four properties in England would be at risk.¹ Based on shares of residential properties provided in previous editions of the National Flood Risk Assessment, we estimate that of the properties currently at risk, approximately 5 million are residential.

Alongside this growing physical risk, the economic and social costs of coping with flooding are also rising. These costs are shared across society: insurers face higher payouts for property and contents damage, households bear direct and indirect financial losses, employers suffer from lost productivity when workers are displaced or businesses disrupted, and the NHS incurs additional healthcare costs associated with flood-related injuries, mental distress, and longer-term health effects.

Insurance typically provides the primary financial defence against the immediate costs of flooding, covering damage to buildings and contents as well as emergency expenses, such as temporary accommodation. However, when flooding occurs, households often face a much broader and less visible range of costs that extend beyond insurance coverage. These can include out-of-pocket spending on repairs or items not insured, loss of income or additional costs during displacement, and health-related expenses arising from stress, anxiety, or physical illness linked to the event. In this study, we aim to estimate the size of the additional financial burdens borne by affected households. We define these as the *hidden costs of flooding*: the unrecorded financial consequences that fall outside traditional insurance-based assessments of flood damage.

Exposure to the financial consequences of flooding is not uniform across households. The extent to which a household is affected depends on a range of socio-economic and demographic factors, including income level, employment status, housing tenure, and household composition. These characteristics shape both the scale of costs households face and their ability to absorb them, influencing access to insurance, paid leave, savings, and informal support. Understanding these differences is crucial, as the same flood event can represent a temporary disruption for some households but a severe and lasting financial shock for others, with important implications for recovery, resilience, and the design of effective policy support.

Exposure to flood risk in the UK is increasingly shaped by housing market pressures and patterns of tenure. Housing supply pressures and affordability constraints have contributed

¹ Environment Agency. (2024). *National assessment of flood and coastal erosion risk in England 2024*. GOV.UK. Retrieved January 22, 2025, from <https://www.gov.uk/government/publications/national-assessment-of-flood-and-coastal-erosion-risk-in-england-2024/national-assessment-of-flood-and-coastal-erosion-risk-in-england-2024>

to faster growth in housing stock in areas with some level of flood risk, leaving lower income households disproportionately exposed to the financial consequences of flooding.² Renters are more likely to have lower incomes, fewer savings, and less control over property-level adaptations, which reduces their ability to absorb, insure against, or recover from flood-related shocks. As a result, flood risk is becoming more closely intertwined with housing insecurity and wider socio-economic vulnerability, reinforcing the unequal distribution of flood impacts across households.^{3,4}

In this study, we will estimate the average hidden costs across a range of expense categories and estimate the total hidden cost when a household floods. We will assess how these costs vary by housing tenure and, crucially, how their impact differs with households' financial resources, revealing the scale of hidden costs, differential exposure by household type, and the inequalities that shape the lived experience of flooding in the UK. The study is informed by a survey conducted by YouGov, targeting members of households that experienced flooding within the past five years.

We define flooding broadly to encompass all major types, including river and coastal flooding, surface water flooding, groundwater flooding, and sewer flooding. Our analysis focuses on residential properties, excluding business premises. However, we acknowledge that significant economic losses can also arise from damage to business capital, including machinery, equipment, and buildings. These impacts, while outside the scope of this assessment, contribute substantially to the overall economic cost of flooding events and represent an area that would warrant further exploration.

2 Resolution Foundation. (2022, April 30). England's poorest families are most exposed to the financial consequences of flood events. <https://www.resolutionfoundation.org/press-releases/englands-poorest-families-are-most-exposed-to-the-financial-consequences-of-flood-event>

3 Environment Agency. (2022). *Social deprivation and the likelihood of flooding* (Version 2.1) [Report]. Environment Agency. https://assets.publishing.service.gov.uk/media/6270fe448fa8f57a3cddb9/Social_deprivation_and_the_likelihood_of_flooding_-_report_2.1.pdf

4 Walker, G., & Burningham, K. (2011). Flood risk, vulnerability and environmental justice: Evidence and evaluation of inequality in a UK context. *Critical Social Policy*, 31(2), 216–240. <https://doi.org/10.1177/0261018310396149>

2. Traditional Flooding Costs

Our analysis of the impact of flooding begins with the following section on ‘traditional’ costs. These are defined as costs that are largely insured or otherwise formally covered, including property damage borne by insurers and costs absorbed by the NHS and employers, for example through paid work absences.

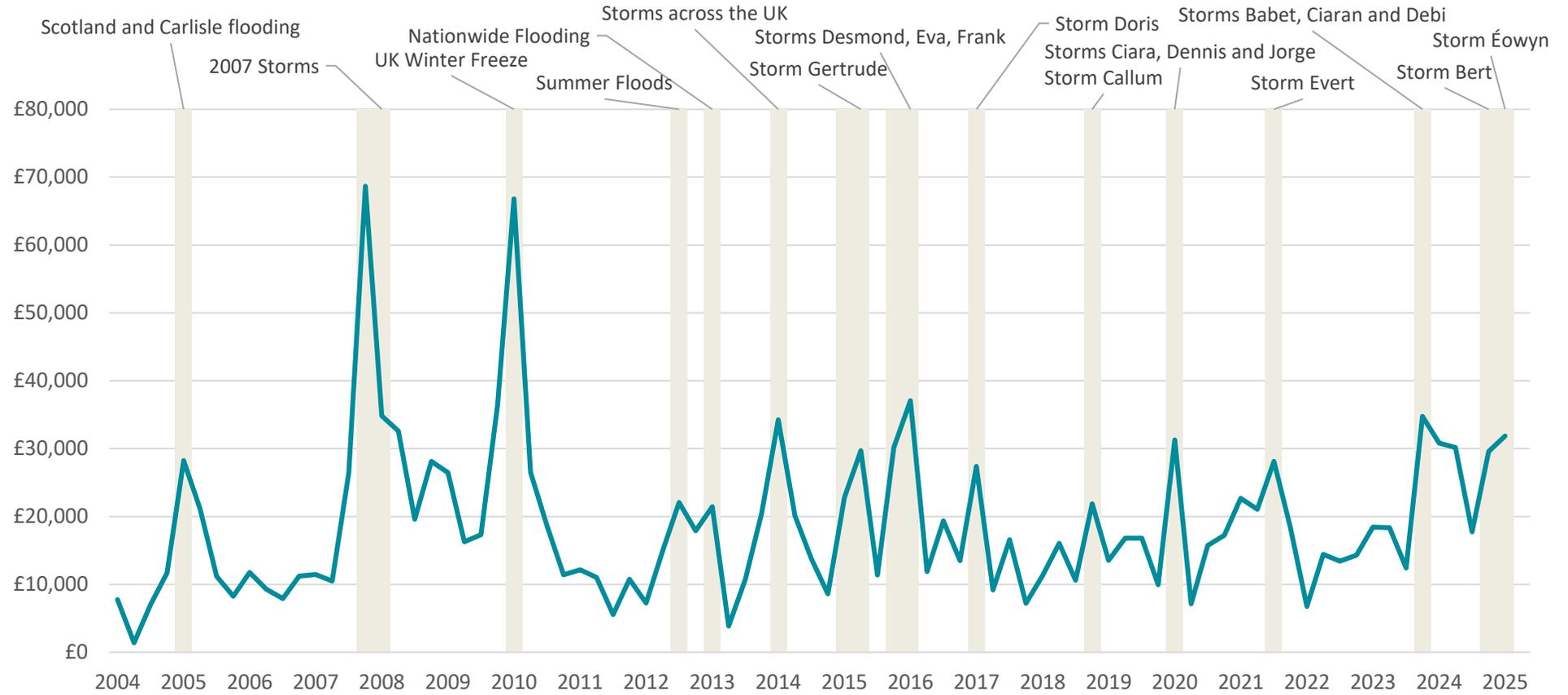
2.1 Insured property and contents damage

Household flood insurance in the UK generally covers the costs associated with repairing damage to both the structure of the home and its contents. Property or buildings insurance typically pays for repairs to the physical fabric of the property, including walls, floors, ceilings, doors, windows, electrical systems, and permanent fixtures such as fitted kitchens and bathrooms. If flooding renders a home uninhabitable, buildings insurance often also covers the cost of temporary accommodation while repairs are carried out. Contents insurance covers the replacement or repair of personal belongings and household items damaged by floodwater, such as furniture, and appliances. These costs, after accounting for any excess payments, are typically borne by insurers and constitute an important source of financial protection for households affected by flooding.

To estimate the average insured residential cost of flooding for households, we used insurance claims data provided by the Association of British Insurers (ABI). Flood claims data exhibit a persistent baseline level of activity that arises from localised flooding events, independent of major weather storms. This background activity is driven by factors such as surface-water drainage exceedance, infrastructure failures, groundwater conditions, and property-level vulnerabilities. The data also show episodic spikes associated with extreme weather events.

To estimate a typical insured flood claim, we linked average insurance claims to major flood events over the past 20 years. We examined how the volume of claims differed during these events compared with non-flood periods. In 2025 prices, the average claim notified during major flood events was approximately £32,700, compared with just over £15,000 outside these periods. The number of claims during major flood events is roughly twice that of non-flood periods. By calculating an equally weighted average, we were able to remove background claim activity and isolate the portion attributable specifically to major floods. Using this approach, we estimate that a typical insured residential flood claim amounts to £50,400.

Figure 1 – Mapping of major UK flood events and average residential claims notified (2025 prices)



Sources ABI data, Cebr analysis

2.2 Other costs: treatment costs and work-based losses

When accounting for the economic costs due to flooding, two other key sources are often considered in traditional flood cost accounting. These include insured health costs, borne in most cases by the NHS in the UK, and the costs borne by employers due to post-flood absenteeism and reduced productivity.

2.2.1 Treatment costs

Flooding can have a wide range of health impacts, but evidence consistently shows that the mental health consequences tend to outweigh the physical impacts in both prevalence and cost.

Physical health effects, such as injuries, infections, or the exacerbation of pre-existing conditions, are typically acute and short-term, affecting a relatively small proportion of those exposed. In contrast, the mental health burden is more pervasive and enduring. Studies have shown marked increases in the prevalence of post-traumatic stress disorder (PTSD), depression, and anxiety among individuals and communities affected by flooding.⁵ These impacts often persist for months or even years after the physical damage has been repaired, particularly where households face repeated flooding or uncertainty about future risk.

The severity and duration of flooding, the degree of property damage, and the length of displacement or disruption all play key roles in shaping mental health outcomes. People whose homes are inundated, who lose possessions, or who are forced into temporary accommodation tend to experience more severe psychological distress. Social and financial vulnerability, such as from low income, inadequate insurance coverage, or limited social support, can further compound the emotional toll. Even those not directly flooded but living in affected communities can experience anxiety and reduced wellbeing due to fear of recurrence and the disruption of normal routines.

In accounting terms, the costs of these mental health impacts are primarily borne by the public health system and employers. The NHS faces higher demand for primary care, counselling, and mental health services, while businesses incur costs through lost productivity and absenteeism as affected individuals struggle with ongoing emotional and psychological strain. These costs can be significant, and while often less visible than physical repairs or insurance payouts, they represent a major component of the overall economic burden of flooding. Later in this study, we will consider additional health-related costs borne directly by households, which are typically underappreciated in formal cost assessments but nonetheless contribute to the true cost of flooding.

⁵ Kovats, S., Brisley, R., Turner, G., Jewell, C., Milojevic, A., O'Connor, L., & Duarte-Davidson, R. (2024). Chapter 3: Climate change, flooding, coastal change and public health in Health Effects of Climate Change (HECC) in the UK: 2023 report. UK Health Security Agency. Retrieved from <https://assets.publishing.service.gov.uk/media/657086ad74693000d488919/HECC-report-2023-chapter-3-flooding.pdf>

A large literature review was undertaken by the Environment Agency that synthesised evidence from around 50 studies on the impacts of flooding on mental health.⁶ The review found consistent evidence of elevated risks of conditions including anxiety, depression and post-traumatic stress disorder (PTSD) among flood-affected populations, with impacts often persisting well beyond the immediate aftermath of flooding and disproportionately affecting more socio-economically vulnerable households, while also highlighting the importance of timely support and mitigation measures in reducing long-term psychological harm.

Estimates of expected post-flood treatment costs are derived by first estimating the increase in the prevalence of mental health conditions, specifically anxiety, depression and post-traumatic stress disorder (PTSD), among individuals affected by flooding relative to non-affected individuals. These prevalence estimates are further adjusted by flood depth to reflect evidence of a positive relationship between mental health risk and the depth of flooding experienced.

The study finds that a moderate flooding event, defined as floodwater depths of 30–100 cm, is associated with annual per-adult treatment costs of £2,084 (2018 prices), equivalent to £2,700 in 2025 prices, for anxiety, depression and PTSD. These estimates assume that all affected individuals seek treatment and do not adjust for co-morbidity across conditions. Applying these costs to our household sample, which averages 1.7 adults per household, implies a total treatment cost of approximately £4,590 per household. This figure is likely to be an underestimate, as it excludes treatment costs for children living in the household.

2.2.2 Employer-borne work-based costs

As part of our main analysis, we collected survey data on workplace absenteeism in the wake of a flooding event. Respondents were asked to report the number of paid and unpaid days of work absence they and other working members of their household took following floods. Respondents were not asked to specify the reason for the workplace absence. As a result, reported absences are likely to reflect a combination of health-related challenges alongside broader disruption caused by flooding, such as damage to homes, transport disruption, or caring responsibilities.

Of the sample, 51.5% of households reported taking paid time off work. Of those households, the average period of paid absence was 8.6 days, indicating substantial disruption for employers. Including households who report no work absence, the average duration of paid leave falls to 4.4 days per household. The difference between these estimates highlights that work disruption from flooding is highly concentrated. While not all households are affected, those that are, often experienced a prolonged period of work absence.

By combining survey estimates of the all-sample average duration of paid leave with average wage data from the 2025 Annual Survey for Hours and Earnings (ASHE) published by the Office for National Statistics⁷, which reports median gross weekly earnings of £766.60, we estimate a daily wage cost of £153.32. Including employer non-wage costs of

⁶ Viavattene, C. & Priest, S. (2020). A method for monetising the mental health costs of flooding (Project SC150007). UK Environment Agency. Retrieved from <https://www.gov.uk/government/publications/a-method-for-monetising-the-mental-health-costs-of-flooding>

⁷ Office for National Statistics (ONS), released 23 October 2025, ONS website, statistical bulletin, [Employee earnings in the UK: 2025](#).

around £25.75 per day (pension contributions and employer National Insurance), this implies a total labour cost of approximately £179 per day. Based on the observed average duration of paid absence following a flood, employers can therefore expect direct wage and non-wage costs of around £788 per affected household.

A further loss accrues through reduced output. Using ONS estimates of gross value added (GVA) per hour worked of around £43, a typical full working day of paid absence (around 7.5 hours) implies lost output of approximately £320 per employee. Aggregated over 4.4 days of absence, this amounts to lost output of around £1,420, raising the total employer cost per flood event to around £2,210, more than double the direct payroll cost alone.

It is worth noting that this estimate does not account for presenteeism, where employees are physically at work but less productive due to challenges such as stress, anxiety, or other mental health impacts stemming from the flood. Including these effects would likely increase the total work-related costs borne by employers.

Table 1 – Summary of per household traditional flood costs

| Traditional flood costs components | Cost (annual per household) | Source |
|--|-----------------------------|-----------------------------------|
| Insured damages | £50,411 | ABI Data, Cebr analysis |
| Health-related costs (treatment costs) | £4,590 | Environment Agency, Cebr analysis |
| Paid work absences | £2,210 | YouGov survey data, Cebr analysis |
| Total | £57,211 | - |

3. Hidden Costs

In the following section, we present the main analysis of household flooding costs that are not typically captured in traditional flood cost accounting, hereafter referred to as 'hidden costs.' To inform this section, data were gathered via a survey of 491 households with experience of flooding over the past five years, measuring the incidence and scale of these costs.

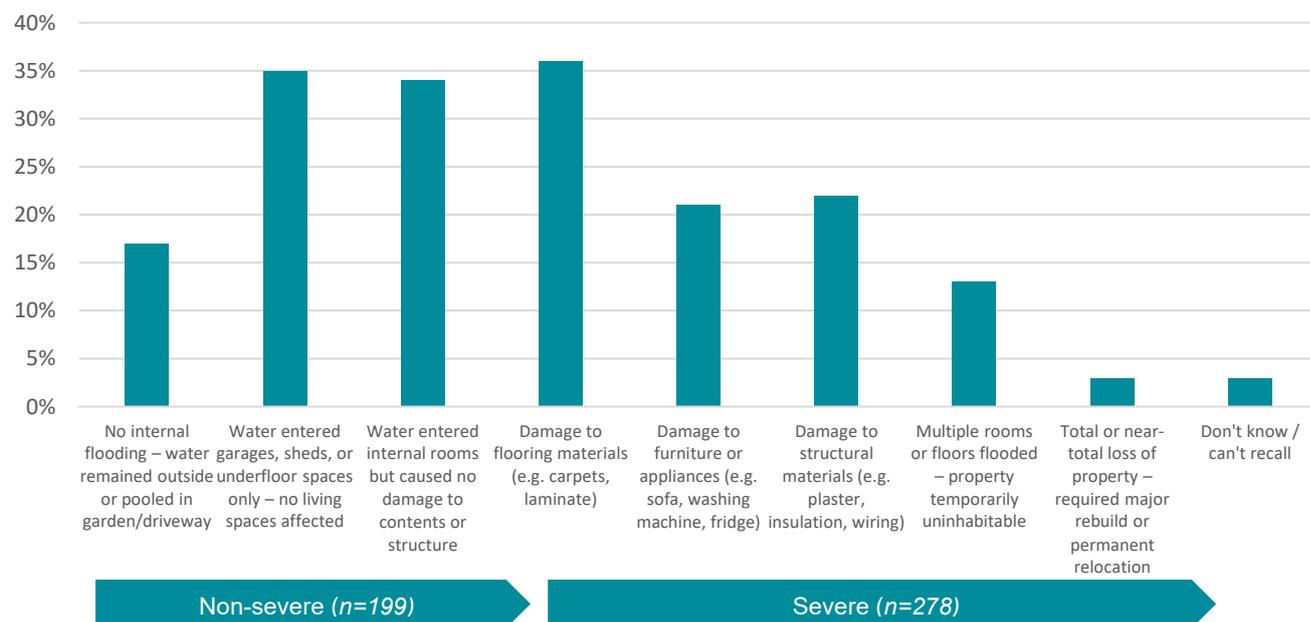
3.1 Sample statistics

3.1.1 Flooding severity

A key determinant of household-level costs is the severity of flooding, which has a pronounced effect on the extent of damage and associated recovery expenses. To capture this variation, we will use self-reported data from our survey to examine how costs change as flooding severity increases, enabling a more reliable estimation of average household impacts

Respondents were asked to report on the extent of household flooding experienced via a multiple-choice question. Using this information, households were classified as having experienced 'severe' or 'non-severe' flooding.⁸ Of the sample, 199 were classified as having experienced non-severe flooding, 278 were classified as having experienced severe flooding, while 14 respondents failed to report on the severity of flooding experienced.

Figure 2 – Reported flooding severity of survey respondents (multiple choice question)



Source: YouGov survey, Cebr analysis

⁸ See Annex for further details on flooding severity classification.

3.1.2 Housing Tenure

Respondents were asked to report on housing tenure. Based on the responses, survey units were classified as homeowners (owning outright or with a mortgage), renters, or neither. The renter group was further divided into private renters (renting from a private landlord) and social renters (renting from a local authority or housing association). A small number were grouped into a further category, including respondents living with parents or respondents who selected 'other'.

In the final sample, 304 respondents (62%) were homeowners, 97 (20%) were private renters, 51 (10%) were social renters, and 39 (8%) were classified as neither.

Figure 3 – Reported housing tenure of survey Respondents



Source: YouGov survey, Cebr analysis

3.1.3 Insurance coverage

Respondents were asked to report the type of insurance coverage they held at the time of the flooding. In total, 404 households (82%) were covered by some form of contents or buildings insurance, either held personally or provided through a landlord for rented properties. A further 64 households (13%) reported having no insurance at the time of the flooding, while 23 households (4%) were unsure of their insurance status. Respondents in rented accommodation, particularly those residing in socially rented accommodation, were much more likely to report having no insurance coverage at the time of the flood.

Figure 4 – Reported non-insurance coverage at the time of flooding, by housing tenure



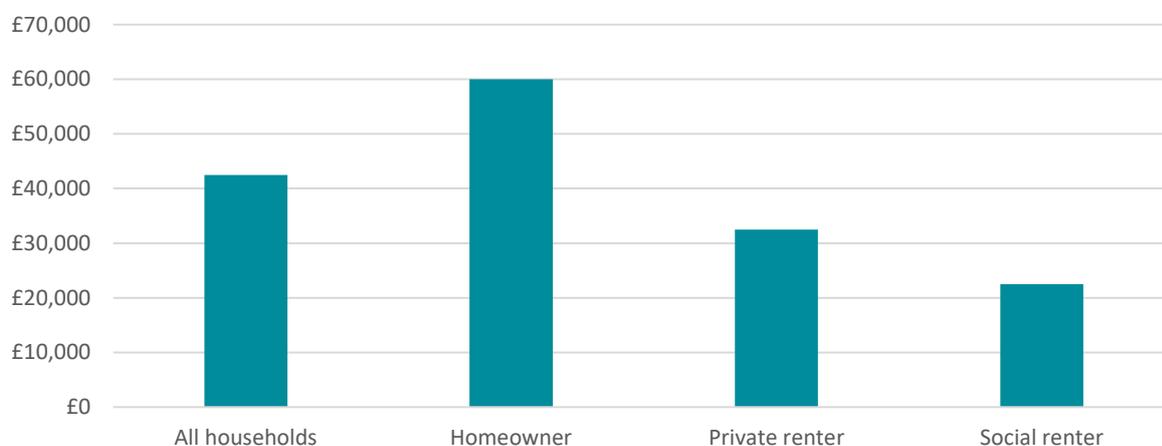
Source: YouGov survey, Cebr analysis

3.1.4 Household Income

Respondents were asked to report on gross household income, covering the combined income of all earners in the household from all sources before tax deductions. The median gross household income for the sample was £42,500. This aligns with the slightly lower median (equivalised) household income before taxes and benefits of £38,900 for the end of financial year 2024, published by the ONS.⁹ Equivalisation adjusts household income to account for differences in household size and composition, which typically lowers the median estimate by reflecting the sharing of resources across larger households rather than raw income alone.

Median gross household income varied significantly by housing tenure. Among homeowners, median income was £60,000, whereas among private and social renters the median incomes were much lower at £32,500 and £22,500, respectively.

Figure 5 – Median gross household income, by housing tenure



Source: YouGov survey, Cebr analysis

3.1.5 Working Status

Respondents were asked to report on working status. Overall, 77% of respondents reported being in work either full or part time. Students, retirees, and the unemployed accounted for 4%, 8% and 4% of the sample, respectively. A further 7% of the sample listed their working status as 'not working/other'.

3.2 Cost Estimates

Survey data were collected on the incidence of a range of costs incurred by households that are typically omitted from traditional flood cost accounting. The cost items captured in the

⁹ Office for National Statistics (ONS), released 25 September 2025, ONS website, statistical bulletin, [Effects of taxes and benefits on UK household income: financial year ending 2024](#)

survey were grouped into five categories. Through desk research, we independently estimated the size of each cost.¹⁰

3.2.1 Category 1: Property repair and replacement and post-flood services

Households affected by flooding often face a range of uninsured costs, either because they did not hold insurance at the time of the incident or for repairs and replacements that either fall below insurance excesses or are excluded from coverage. While insurers typically cover major structural damage, households can need to pay out of pocket for items such as clothing, bedding, small appliances, cleaning services, and minor repairs, with these expenses accumulating and adding to financial strain during an already disruptive period. To assess the prevalence of these hidden costs, we surveyed respondents on several out-of-pocket property repair and replacement expenses, including the following:

- Replacement of clothing
- Replacement of small appliances
- Replacement of bedding and towels
- Replacement of toiletries
- Purchase of cleaning products
- Procurement of cleaning services
- Procurement of mould remediation services
- Procurement of utility reconnection

Unsurprisingly, the incidence of these costs was higher in cases of more severe flooding. Subdividing the sample by housing tenure reveals that homeowners are more likely to experience costs in this category than renters. This reflects both tenure-specific responsibilities and differences in asset ownership: homeowners are directly responsible for funding property repairs, replacements and restoration services, whereas renters may receive support from landlords or property managers for building-level works. In addition, homeowners typically own a larger stock of household possessions and higher-value durable goods, increasing their exposure to replacement and repair costs when flooding occurs.

Table 2 – Estimated costs for property repair and replacement and post-flood services

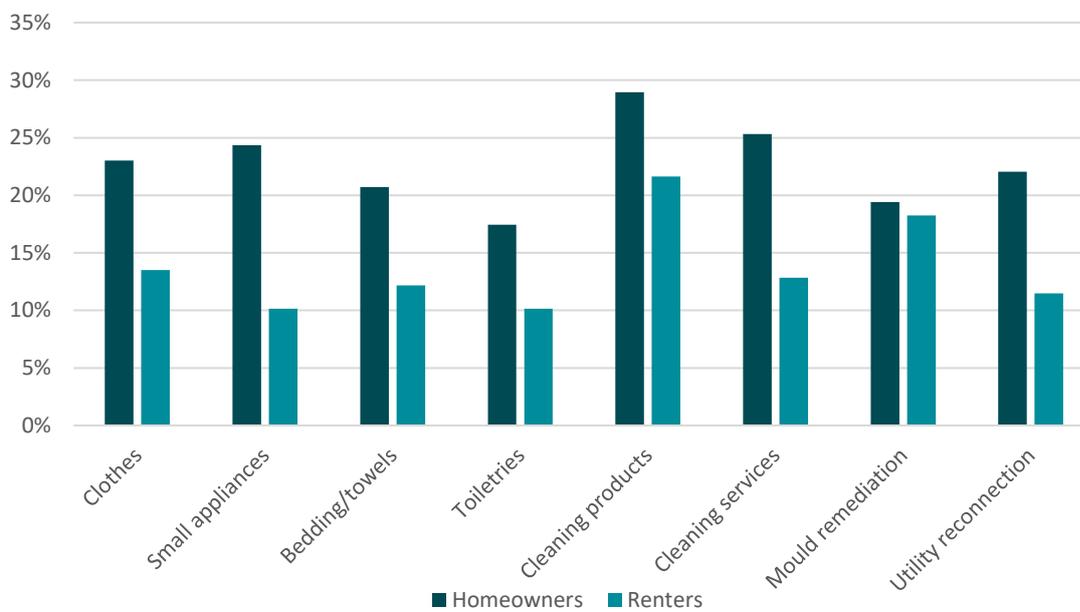
| Item | Estimated Cost |
|---|----------------|
| Replacement of clothing | £455 |
| Replacement of small appliances | £400 |
| Replacement of bedding/towels | £60 |
| Replacement of toiletries | £22 |
| Purchase of cleaning products | £30 |
| Procurement of cleaning services | £1175 |
| Procurement of mould remediation services | £1175 |

¹⁰ See Annex for further information on cost estimation.

| | |
|-------------------------------------|-----|
| Procurement of utility reconnection | £80 |
|-------------------------------------|-----|

Source: YouGov survey, Cebr analysis

Figure 6 – Incidence of property repair, replacement and restoration service costs, by housing tenure



Source: YouGov survey, Cebr analysis

3.2.2 Category 2: Uninsured costs outside of the property

Flooding may also cause damage to exterior features or to vehicles. Garden structures, outdoor equipment, and boundary features such as fences or sheds may be only partially covered, leaving some households to fund repairs themselves. Vehicle damage is typically handled through separate motor insurance, but unless comprehensive coverage is in place, flood-related vehicle damage can result in out-of-pocket costs for affected vehicle owners. We surveyed respondents on whether they were forced to cover the following costs out-of-pocket:

- Garden clean-up
- Repair Fences/Outbuildings
- Replacement Outdoor Furniture
- Vehicle cleaning and minor repairs

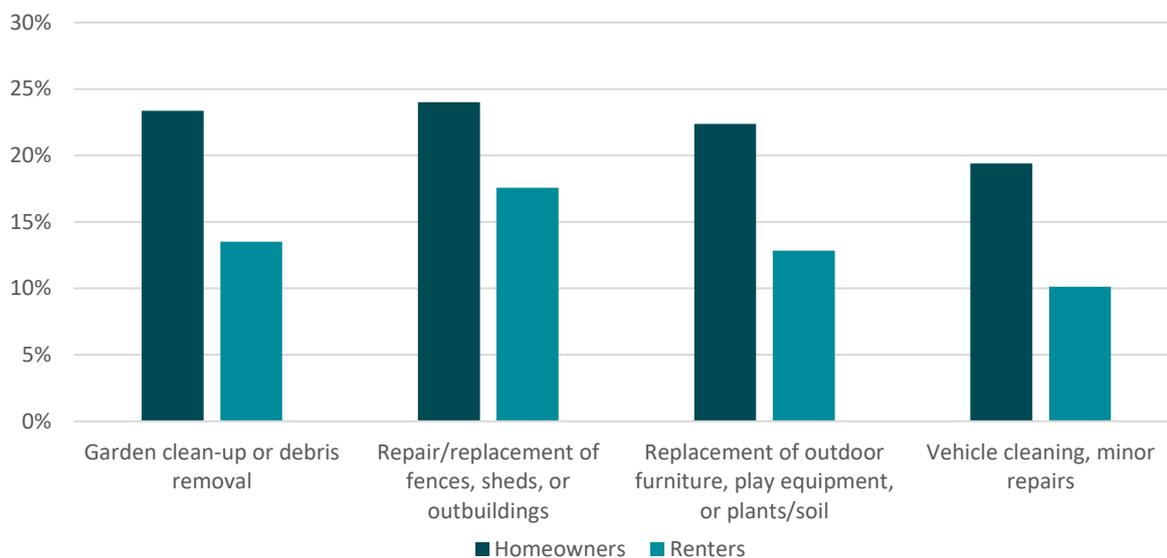
Table 3 – Estimated costs for uninsured costs outside the property

| Item | Estimated Cost |
|---|----------------|
| Garden clean-up and removal of debris | £400 |
| Repair of fences, sheds or outbuildings | £600 |

| | |
|--|------|
| Replacement of outdoor furniture, play equipment, or plants/soil | £300 |
| Vehicle cleaning and minor repair | £750 |

Source: YouGov survey, Cebr analysis

Figure 7 - Incidence of costs outside the property, by housing tenure



Source: YouGov survey, Cebr analysis

3.2.3 Category 3: Temporary relocation and disruption costs

Insurance can help with the major costs of temporary relocation after a flood, but support may not cover the full extent of disruption to daily life. Households may face additional expenses linked to longer commutes, childcare adjustments, or accessing essential services from a temporary address. Even when alternative accommodation is provided, the upheaval to routines, work patterns, and family life can create further costs and inconveniences that fall outside standard policy provisions. Respondents were surveyed on whether they experienced the following hidden costs:

- Uncovered temporary accommodation costs (e.g., hotel, rental, short-term stay)
- Alternative travel arrangements (e.g., petrol, public transport)
- Pet care services
- Childcare services
- Property storage
- Laundry services

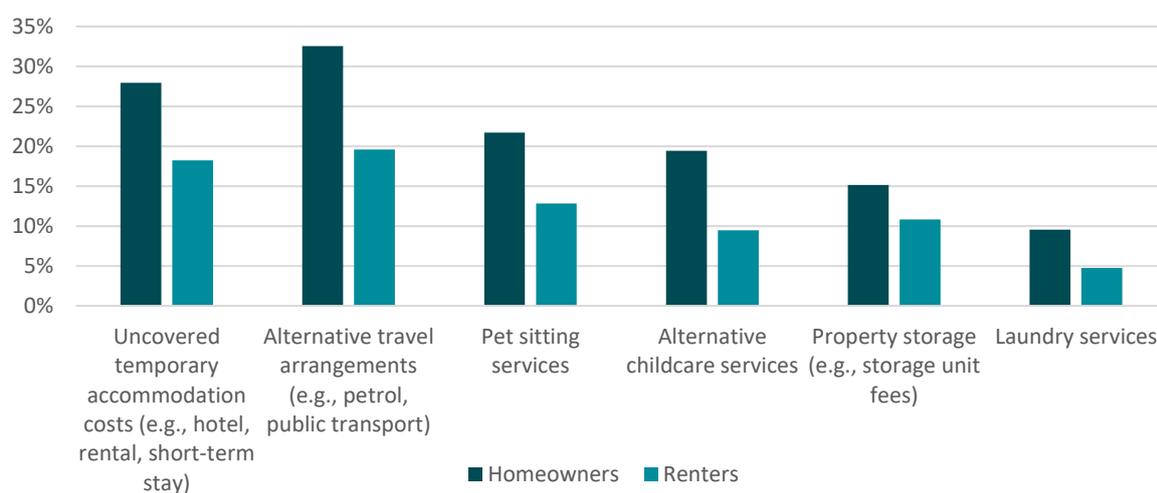
Respondents were also asked to report on the duration of temporary relocation. Although homeowners reported more frequently experiencing costs associated with uncovered temporary accommodation, the duration of temporary relocation showed a different pattern. Among homeowners forced to temporarily relocate the duration of relocation lasted on average 36.9 days compared to 29.1 days among private renters. However, the average duration of temporary relocation among affected social renters was much higher at 49.4 days.

Table 4 – Estimated costs for temporary relocation and disruption

| Item | Estimated Cost |
|--|--|
| Uncovered temporary accommodation costs (e.g., hotel, rental, short-term stay) | £20.50 per day of temporary relocation |
| Alternative travel arrangements (e.g., petrol, public transport) | £237 |
| Pet care services | £745 |
| Childcare services | £228 |
| Property storage | £330 |
| Laundry services | £50 |

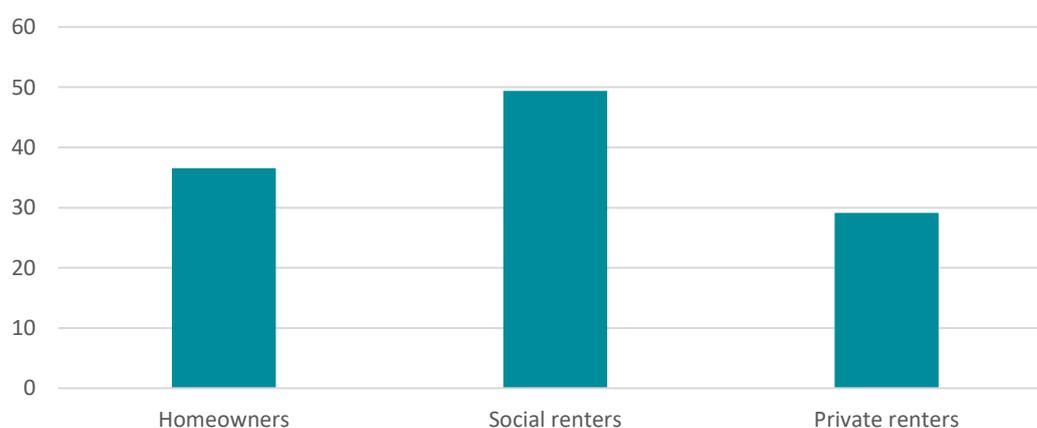
Source: YouGov survey, Cebr analysis

Figure 8 - Incidence of hidden costs related to temporary relocation and disruption, by housing tenure



Source: YouGov survey, Cebr analysis

Figure 9 – Average length of temporary relocation (days), by housing tenure



Source: YouGov survey, Cebr analysis

3.2.4 Category 4: Work-related costs

Work-related losses mainly stem from unpaid time off work after a flood. Households may be forced to take unpaid work absences due to any number of reasons, including property repair, cleaning, or disruption due to temporary relocation. While some employers may grant emergency paid leave in these circumstances, this is not guaranteed and typically depends on individual employer policies, meaning many households still face unpaid work absences.

Households living in socially rented housing in the UK are more likely to experience insecure forms of employment, such as temporary or casual contracts. Survey evidence shows that employed social tenants are disproportionately concentrated in insecure, seasonal, or casual work and low-paid jobs, limiting their ability to absorb income shocks following disruptive events such as flooding and highlighting the link between housing tenure and labour-market vulnerability.^{11,12} This lack of employment security, including limited access to paid leave or protections, constrains households' capacity to manage lost income, build savings, or take time off for recovery and repairs, leaving socially rented households especially exposed to financial loss after flood events.

Work-related costs can also arise from having to replace damaged tools or equipment used for work, loss of income from side activities such as crafting or selling second-hand goods, as well as higher commuting expenses if travel routes are disrupted or they must travel from a temporary address. Respondents were surveyed whether they experienced the following hidden costs:

- Unpaid work absences
- Replacement or repair of tools and work-related equipment
- Loss of extra income from side activities, such as crafting or selling second-hand goods
- Additional commuting costs

Table 5 – Estimated costs for work-related costs

| Item | Estimated Cost |
|--|--|
| Unpaid work absence | Cost calculated from median household gross income as cohort-specific daily after-tax earnings. (Range £65-£113 per day) |
| Replacement or repair of tools and work-related equipment | £500 |
| Loss of extra income from side activities, such as crafting or selling second-hand goods | £350 |

¹¹ Sheffield Hallam University. (2024, April 25). *Holding on to home: Survey of social housing tenants*.

<https://www.shu.ac.uk/news/all-articles/latest-news/holding-on-to-home-april-2024>

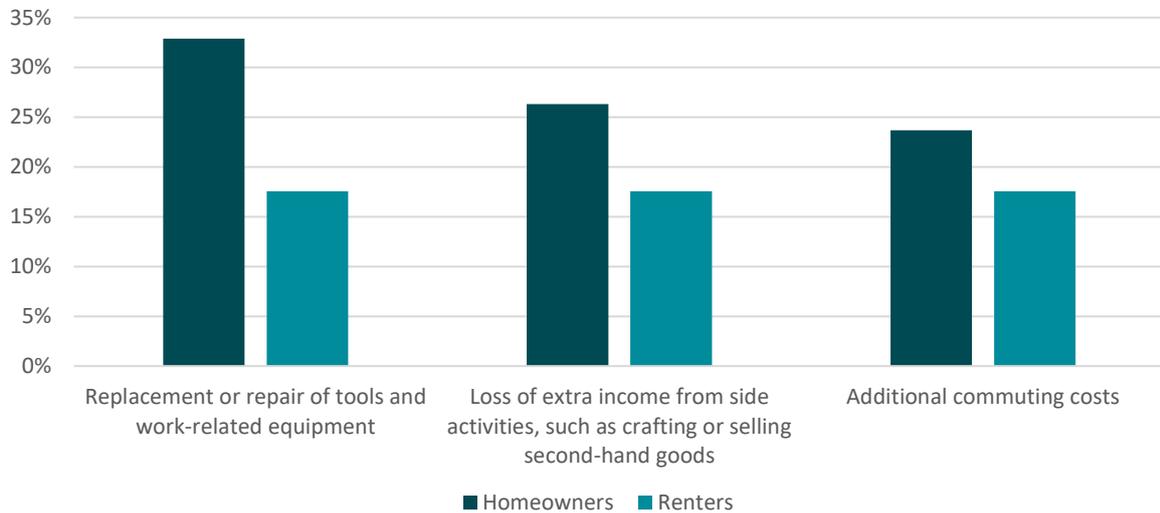
¹² Learning and Work Institute. (n.d.). *Housing and employment*. [https://learningandwork.org.uk/what-we-](https://learningandwork.org.uk/what-we-do/employment-and-social-security/employment-support/housing-and-employment/)

[do/employment-and-social-security/employment-support/housing-and-employment/](https://learningandwork.org.uk/what-we-do/employment-and-social-security/employment-support/housing-and-employment/)

| | |
|----------------------------|-----|
| Additional commuting costs | £70 |
|----------------------------|-----|

Source: YouGov survey, Cebr analysis

Figure 10 - Incidence of hidden costs due to work-related expenses

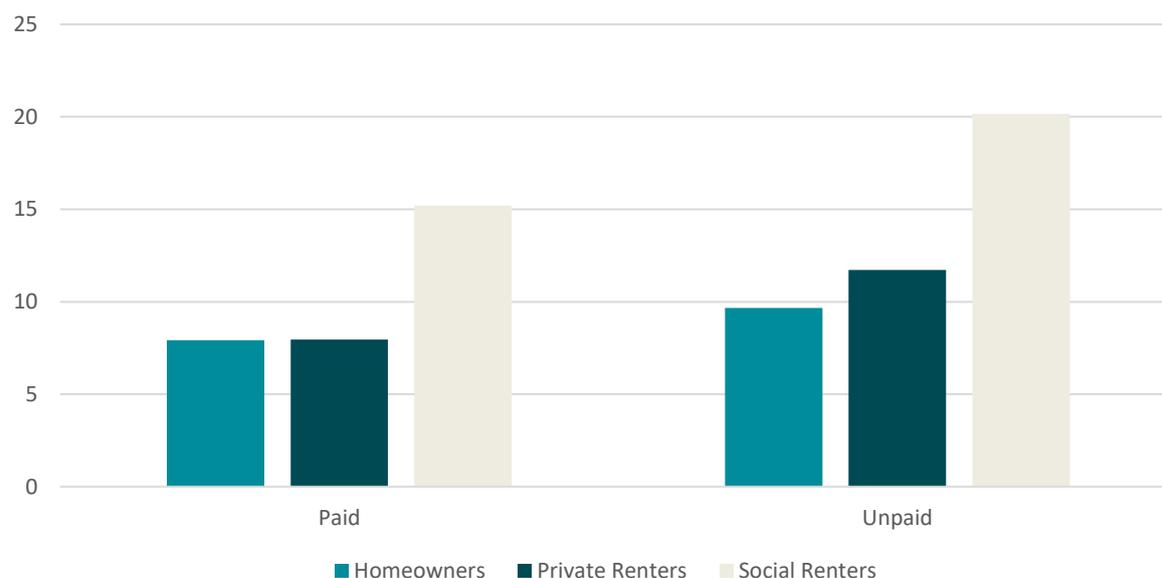


Source: YouGov survey, Cebr analysis

A total of 43% of households reported taking unpaid time off work following flooding, of these, the average duration of leave was 10.9 days. Conditional on taking time off, homeowners reported an average of 9.7 days of unpaid absence for the household, compared with 14.5 days among renters. Within the renter group, those in social housing experienced the longest length of unpaid workplace absence, averaging 20.2 days for the household, while households in privately rented accommodation reported 11.7 days for the households.

The cost of unpaid work absences was calculated using estimated daily household net earnings derived from reported gross incomes for each housing tenure group. For homeowners, who reported a median annual gross household income of £60,000, the estimated daily take-home wage is £112.86, resulting in a cost of £1,095 for 9.7 days of unpaid absence. For private renters, with a median annual gross income of £32,500, the daily take-home wage is estimated at £81.28, yielding a cost of £951 for 11.7 days of unpaid absence. For social renters, who reported a median annual gross income of £22,500, the daily take-home wage is estimated at £65.29, giving a cost of £1,319 for 20.2 days of unpaid work absence.

Figure 11 – Average reported household work absences (days)



Source: YouGov survey, Cebr analysis

3.2.5 Category 5: Out-of-pocket health-related expenses

Health-related costs can also arise after a flood, particularly for expenses not covered by the NHS. These may include charges for certain medical treatments, prescription costs, and paid-for counselling or therapy sessions to support mental health during recovery. These out-of-pocket expenses can accumulate, even when core healthcare is available on the NHS. The following expense categories were considered:

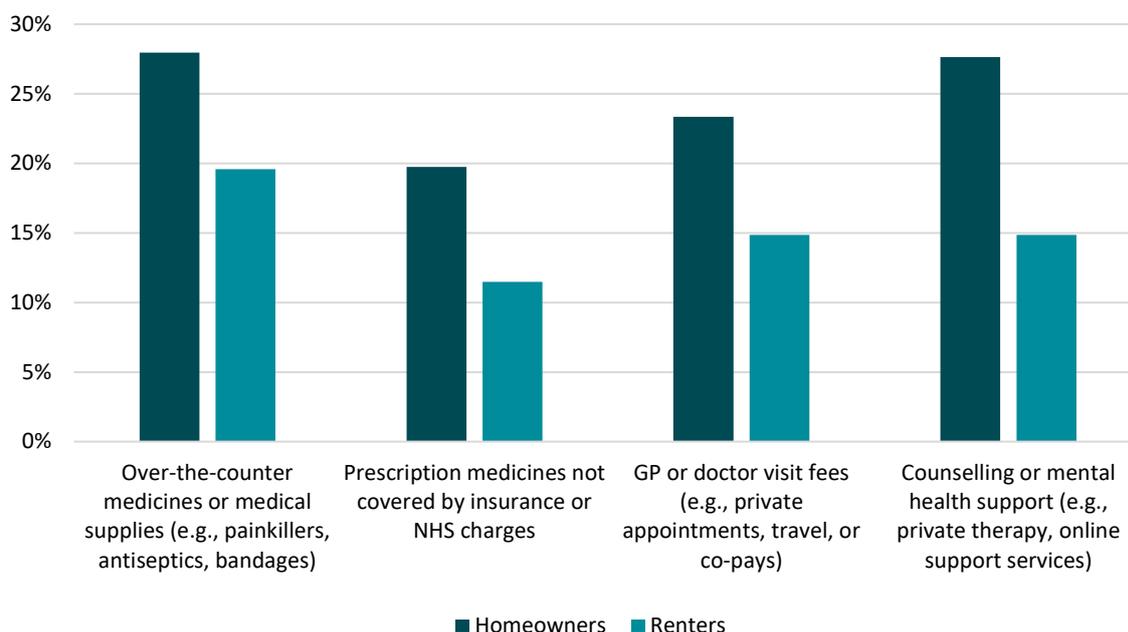
- Over-the-counter medicines or medical supplies (e.g., painkillers, antiseptics, bandages)
- Prescription medicines not covered by insurance or NHS charges
- GP or doctor visit fees (e.g., private appointments, travel, or co-pays)
- Counselling or mental health support (e.g., private therapy, online support services)

Table 6 – Estimated costs for health-related costs

| Item | Estimated Cost |
|---|----------------|
| Over-the-counter medicines or medical supplies (e.g., painkillers, antiseptics, bandages) | £60 |
| Prescription medicines not covered by insurance or NHS charges | £75 |
| GP or doctor visit fees (e.g., private appointments, travel, or co-pays) | £150 |
| Counselling or mental health support (e.g., private therapy, online support services) | £150 |

Source: YouGov survey, Cebr analysis

Figure 12 - Incidence of hidden costs due to health-related expenses



Source: YouGov survey, Cebr analysis

3.3 Average Hidden Cost Estimates by Category

We present the estimated hidden costs for each expense category. Because not all impacts for each category are felt by all households, we have estimated the typical impact of a given cost category by calculating average costs among only those households who report incurring a non-zero cost for the given category. These costs are estimated for the entire sample, based on our YouGov survey, by flooding severity and by housing tenure subdivisions.

We estimate an average hidden cost for property repair, replacement and restoration services of £1,245. This falls to £900 for non-severe flooding and rises to £1,339 in cases of severe flooding. Among homeowners, the estimated hidden costs were £1,378 compared to £998 for all renters. Among renters, the estimated hidden costs were £978 for social renters and £1,015 for private renters.

We estimate an average hidden cost for repair and replacement due to damage outside the property of £1,021. This falls to £905 for non-severe flooding and rises to £1,147 in cases of severe flooding. Among homeowners, the estimated hidden costs were £1,053 compared to £943 for all renters. Among renters, the estimated hidden costs were £847 for social renters and £1,192 for private renters.

We estimate an average hidden cost due to temporary relocation and disruption of £1,230, falling to £1,038 for non-severe flooding and rising to £1,333 in cases of severe flooding. Among homeowners, the estimated hidden costs were £1,275 compared to £1,131 for all renters. Among renters, the estimated hidden costs were £1,399 for social renters and £965 for private renters. On average, households that temporarily relocated did so for an average of 37 days. Homeowners and private renters were temporarily relocated for an average of 37 and 29 days respectively. The duration of temporary relocation for social renters was significantly higher at 49 days.

We estimate an average hidden work-related cost of £1,211, rising to £1,327 for non-severe flooding and falling to £1,133 in cases of severe flooding. A higher estimate for work-related costs for households experiencing non-severe flooding may seem counterintuitive. The underlying driver of this result is that non-severely flooded households report more unpaid work absences. In contrast paid work absences were longer in duration among households that experienced a severe flooding event. Lower-intensity events may require households to manage clean-up and repairs themselves during working hours, whereas severely flooded households may receive employer support or formal leave, reducing the need for unpaid absences. Among homeowners, the estimated hidden work-related costs were £1,255 compared to £1,159 for all renters. Among renters, the estimated hidden costs were £1,288 for social renters and £1,092 for private renters.

We estimate an average hidden health-related cost of £177, falling to £132 for non-severe flooding and rising to £201 in cases of severe flooding. Among homeowners, the estimated hidden costs were £191 compared to £150 for all renters. Among renters, the estimated hidden costs were £170 for social renters and £140 for private renters.

3.4.1 Total Hidden Costs

We present the average total hidden costs. To estimate total costs, we calculated the total cost for each household and found the mean of these costs for the whole sample and sample subsets. In this way, our estimates account for incidence, since not all households experience every type of hidden cost. The costs are estimated for the entire sample and for subdivisions according to flooding severity and housing tenure.

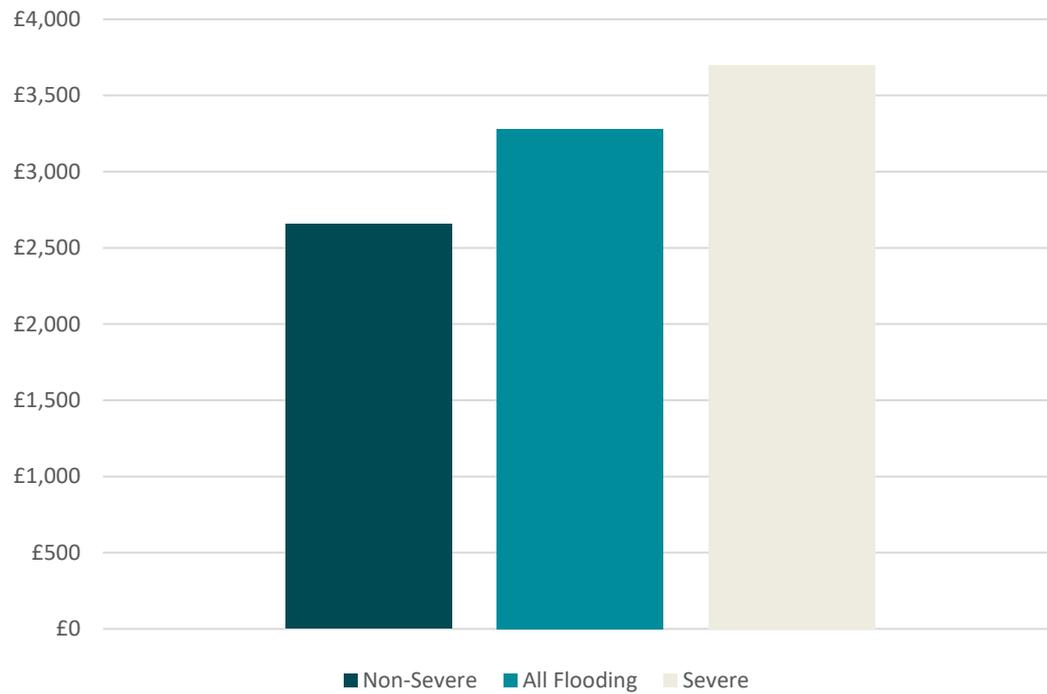
We estimate that the average total hidden cost incurred by a household following a flooding is £3,280, falling to £2,657 for non-severe flooding and rising to £3,697 in cases of severe flooding.

The total hidden costs for homeowners are estimated at £3,662 compared to £2,757 for renters. A higher hidden cost for homeowners is largely driven by higher property repair and replacement expenses. In cases of severe flooding, the total hidden costs for homeowners rises to £4,134.

Renters, by contrast, are shielded from some of these costs, which are typically borne by the landlord or managing agency. However, renters face higher disruption through longer periods of unpaid work absences and temporary relocation.

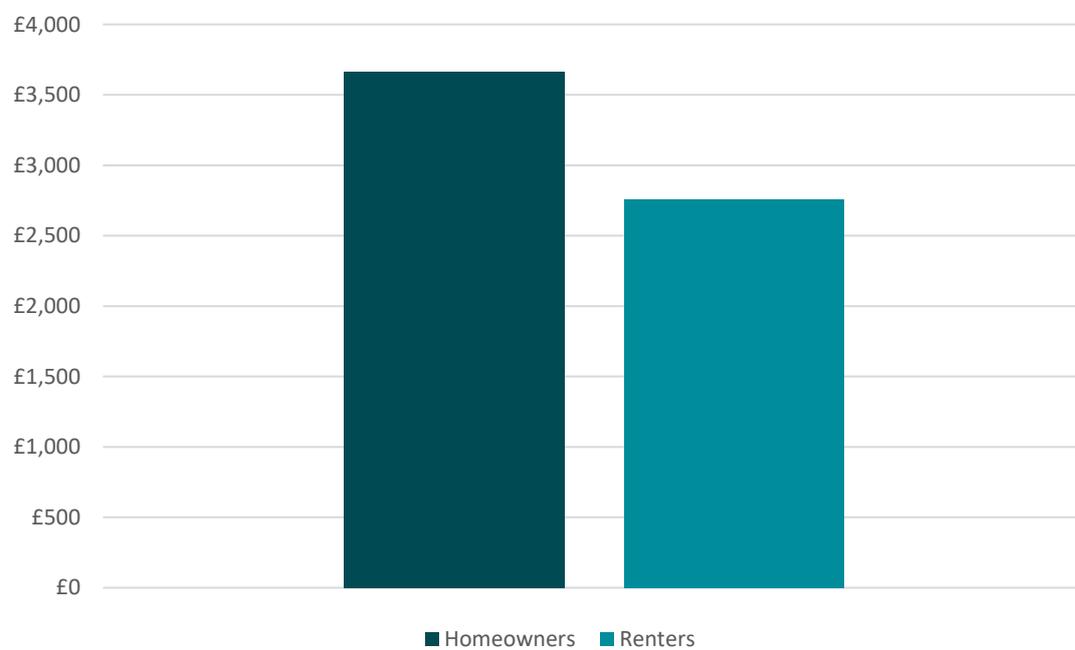
Subdividing the renter population, the total hidden costs for those in privately rented accommodation totalled £2,610. The total estimated cost for those residing in socially rented accommodation was £2,992. In the cases of severe flooding, the total costs for private and social renters rise to £2,755 and £3,677, respectively.

Figure 13 – Total hidden costs, by flooding severity



Source: YouGov survey, Cebr analysis

Figure 14 – Total hidden costs, by housing tenure



Source: YouGov survey, Cebr analysis

Table 7 – Total hidden costs, by housing tenure

| | Flooding Type | | |
|-----------------|---------------|------------|--------|
| | All Flooding | Non-Severe | Severe |
| All Households | £3,280 | £2,657 | £3,697 |
| Homeowners | £3,662 | £2,872 | £4,135 |
| Renters (All) | £2,757 | £2,308 | £3,152 |
| Private Renters | £2,610 | £2,469 | £2,755 |
| Social Renters | £2,992 | £1,985 | £3,677 |

Source: YouGov survey, Cebr analysis

3.4.2 Robustness check: reconciling category-level and total flood cost estimates

As a robustness check on the estimated total household costs of flooding, we triangulate between two conceptually distinct cost constructions: (i) total costs calculated directly from the mean of household-reported expenditures (Section 3.4.1), and (ii) total costs implied by category-level average expenditures combined with observed incidence rates.

In Section 3.3, average costs were calculated for five distinct cost categories (property repair, replacement and restoration service, uninsured damage outside the property, temporary relocation and disruption, work-related costs and health-related costs), among households that reported strictly positive expenditure in the relevant category. This approach captures the typical intensity of spending conditional on a cost being incurred, while separating cost magnitude from cost incidence.

In Section 3.4.1, total flood costs were estimated directly from the data by calculating the mean total expenditure per household. Mean total costs were computed for the full sample and for key subsamples disaggregated by flooding severity and household tenure, reflecting the distribution of realised household-level costs.

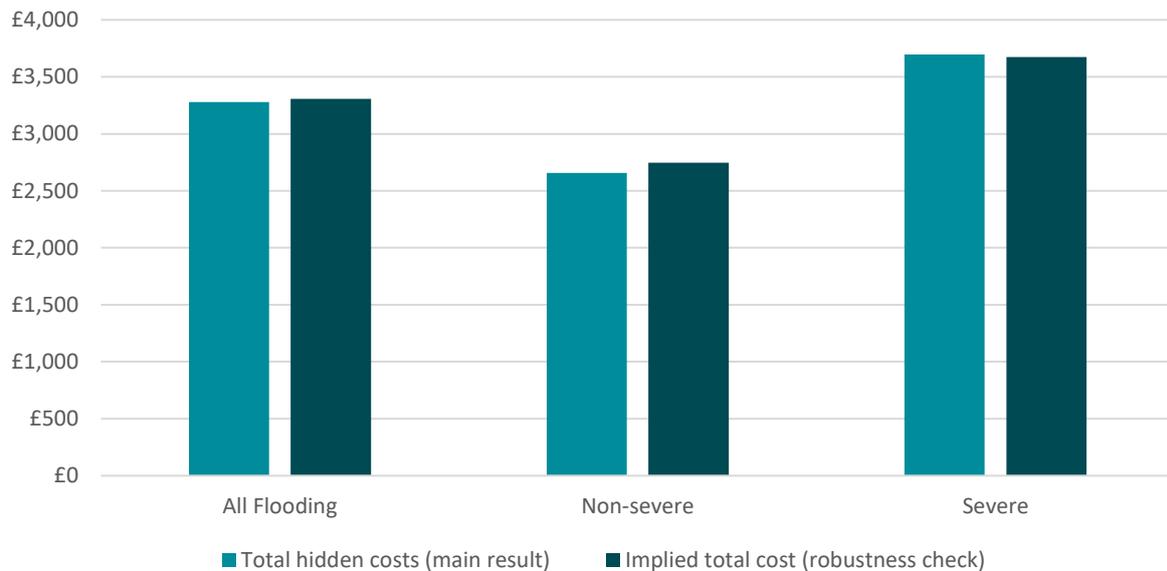
The two approaches to estimating costs are not directly comparable by construction. The category-level averages reflect spending only among households that reported incurring a cost in that category, and therefore exclude households with zero expenditure. In contrast, the median total cost captures both whether costs were incurred and how large those costs were, across all categories and at the household level.

To link these two sets of estimates and provide additional corroboration of the total cost figures, we derive an *implied total cost* for the sample and subsamples by combining the incidence rate of each cost category with the average amount spent for the category. This approach accounts for both how common each cost is and how large it tends to be when it occurs. By construction, this calculation brings together information on cost incidence and cost intensity, providing a consistent way to reconcile the category-level estimates with the household-level total costs. Importantly, this implied total cost measure is not designed to replicate the mean total cost.

Across the full sample and all subsample cuts, the implied total costs produced by this method are nevertheless very close to the independently estimated mean total costs. In all cases, the implied total cost is within 6 per cent of the main total cost estimates. This close

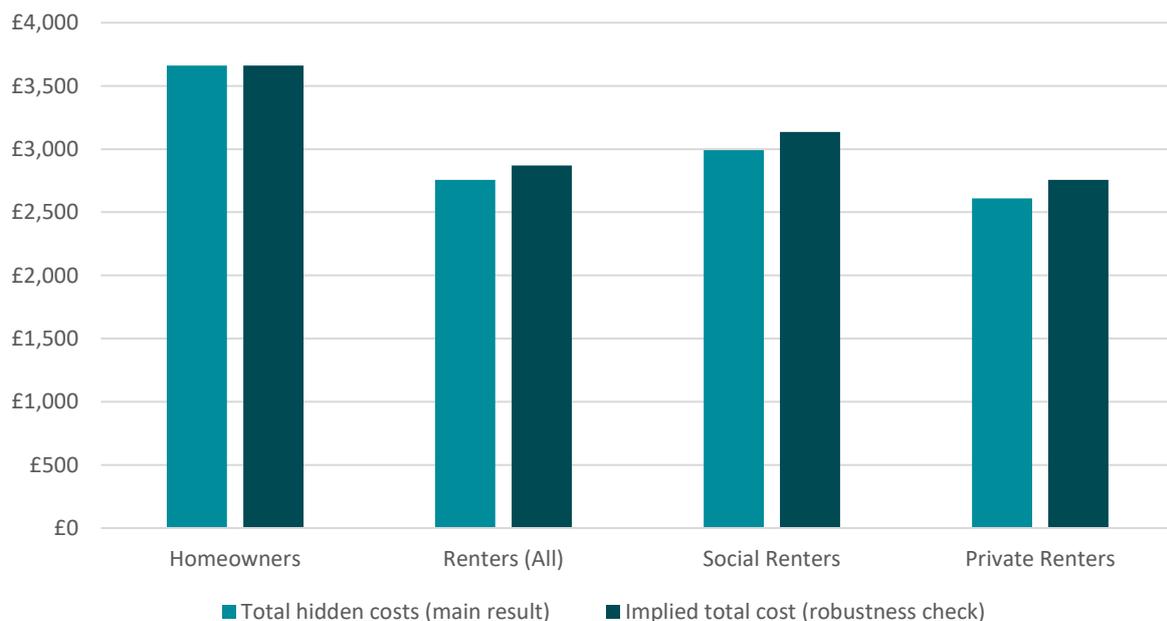
alignment provides reassurance that the total cost estimates are not driven by the specific method used to construct them. We interpret this result as evidence supporting the robustness of the estimated total costs of flooding, indicating that the category-level average costs, when weighted by observed incidence, are consistent with realised household-level expenditures, strengthening confidence in the overall scale of the hidden costs identified in this analysis.

Figure 15 – Total hidden costs and implied hidden costs, by flooding severity



Source: YouGov survey, Cebr analysis

Figure 16 – Total hidden costs and implied hidden costs, by housing tenure



Source: YouGov survey, Cebr analysis

4. Long-Term Hidden Costs

Alongside the immediate hidden costs arising from a flood, households may also incur long-term hidden costs arising from depreciation of assets, specifically property. By integrating evidence from existing research with property price data and our own forecasts, we estimated the discount associated with reduced property values in the years following a flooding event.

Existing research indicates that the scale of house price depreciation moderates over time and that prices recover to a similar level to that which would be expected in the absence of flooding within approximately seven years.

Drawing on results by Beltrán, Maddison and Elliott (2019)¹³ and Cebr's own housing price forecast, we estimated the present value wealth loss incurred due to lower property selling prices in the immediate wake of a flood and in the subsequent years.

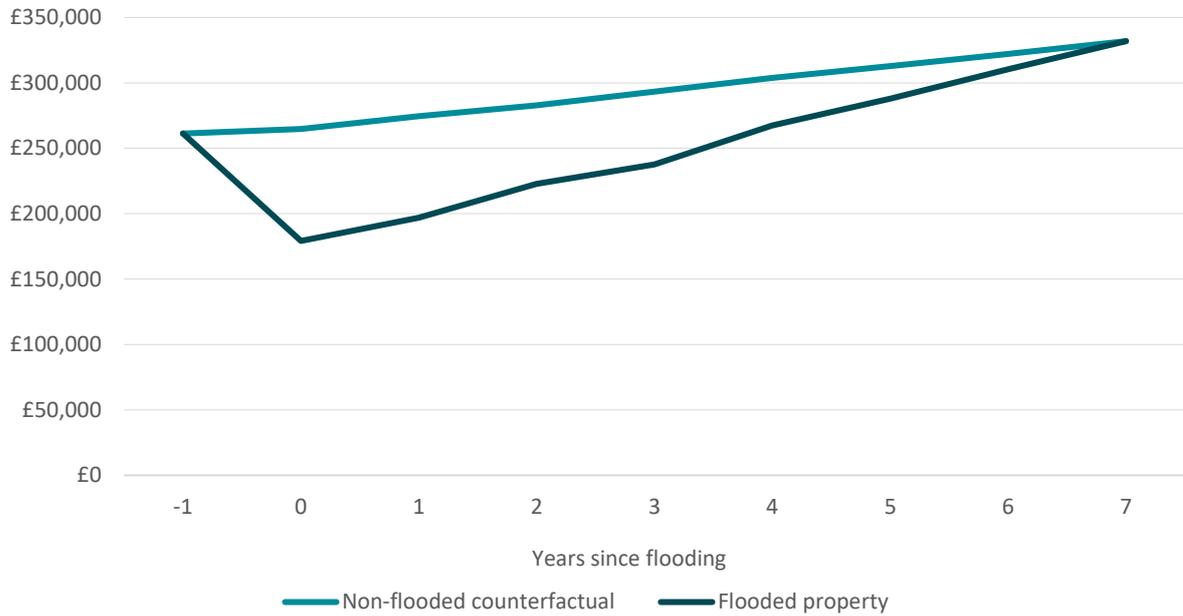
Post-flooding modelling of property prices in the study reveals that immediately after a flood event, properties in a postcode entirely inundated by flooding are on average 32% cheaper than comparable non-flooded properties.

Based on an average UK house price of just under £265,000 in 2025, a discount of 32% represents a wealth loss of roughly £85,500. Over the subsequent years this discount diminishes, in part a reflection of property restoration. Research indicates that prices recover to the level of a non-flooded counterfactual within approximately 7 years.

However, during this interim period, the average present value wealth loss is approximately £48,000. The results indicates that any homeowner seeking to sell a property within 7 years of a flood, will face a significant financial loss compared to a comparable non-flooded property.

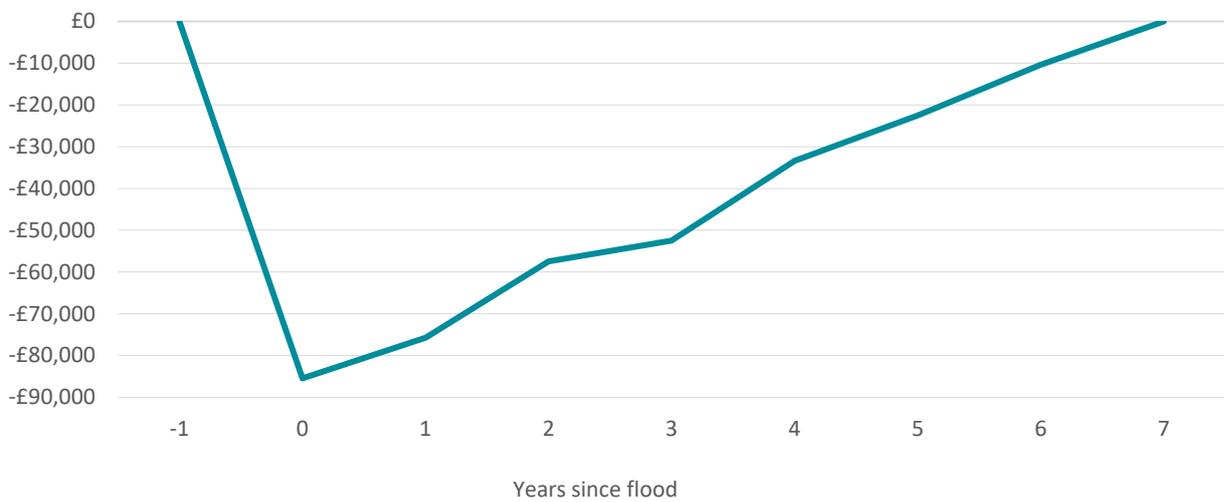
¹³ Beltrán Hernández, A., Maddison, D., & Elliott, R. (2019). *The impact of flooding on property prices: A repeat-sales approach*. *Journal of Environmental Economics and Management*, 95, 62–86. <https://doi.org/10.1016/j.jeem.2019.02.006>

Figure 17 – Forecasted home selling price simulations



Source: Cebr analysis

Figure 18 – Discount due to reduced property selling price relative to non-flooded counterfactual



Source: Cebr analysis

Table 8 – Estimated present value wealth lost due to simulated property price discount

| Years since flooding | PV wealth loss incurred by property sale |
|--------------------------------|---|
| 0 | £85,468 |
| 1 | £75,696 |
| 2 | £57,473 |
| 3 | £52,467 |
| 4 | £33,359 |
| 5 | £22,483 |
| 6 | £10,359 |
| 7 | £474 |
| Average wealth loss (£) | £48,187 |

Source: Cebr analysis

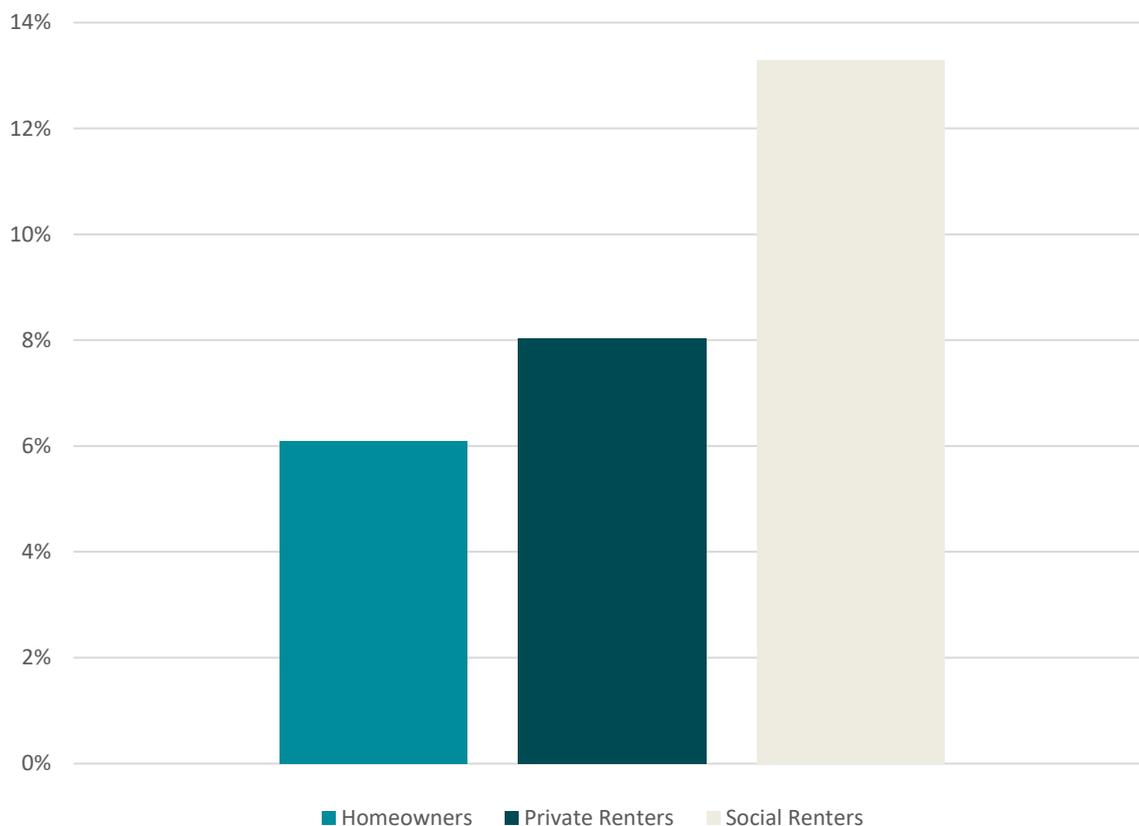
5. Relative Impact Scoring

The impact of the additional hidden costs depends on the resources available to the household. Financial resources such as savings, access to affordable credit, and comprehensive insurance determine whether households can absorb unexpected expenses without cutting back on essentials. Non-financial resources also matter, including secure employment with paid leave or flexible working, access to a car or alternative transport, and support from family, friends, or local services, all of which can reduce disruption and mitigate longer-term impacts. To assess the relative impact of the hidden costs, we construct a *relative impact score* by scaling the estimated total hidden costs by reported household income across different tenure groups.

The results show that although homeowners face higher absolute hidden costs, the burden of these costs is greater for renters, in particular social renters, once differences in income are considered.

For homeowners, the total hidden cost estimated was equivalent to 6% of average household annual income. This impact score rises to 10% for renters. Amongst those residing in socially rented housing, the estimated hidden cost is equivalent to 13% of average annual household income, representing a relative impact more than double in size to that experienced by homeowners.

Figure 19 – Relative Impact Score (hidden costs as a share of mean household income), by housing tenure



Source: Cebr analysis

Table 9 – Relative Impact Score (hidden costs as a % of median household income), by housing tenure

| | All Flooding | Non-Severe | Severe |
|-------------------|--------------|------------|--------|
| Homeowners | 6% | 5% | 7% |
| Renters | 10% | 8% | 11% |
| Renters (Social) | 13% | 9% | 16% |
| Renters (Private) | 8% | 8% | 8% |

Source: Cebr analysis

6. Discussion

The findings of this research show that, while the state and insurance cover the lion's share of flood-related losses, households still face substantial hidden costs that fall outside that core support. As expected, these costs are higher following severe flooding. However, the evidence also indicates that even less severe flood events generate meaningful hidden costs, undermining the assumption that financial impacts are limited when physical damage is relatively minor.

The burden of these hidden costs varies markedly by household type. Homeowners typically incur the highest overall hidden costs, largely reflecting expenses associated with property repair, maintenance, and the replacement of damaged belongings that are uninsured or fall below policy excesses. Flooding has significant income and employment impacts that extend beyond the immediate physical damage to homes. The results add to a wider body of literature showing that flood exposure is associated with income disruption, including unpaid work absences, reduced hours, and, in some cases, job instability or loss. These effects are particularly pronounced for renters and workers in more insecure forms of employment, who are less likely to have access to paid leave, flexible working arrangements, or employer support during periods of disruption.

Crucially, these income-related losses tend to fall outside of insurance coverage and therefore represent an important component of the hidden cost of flooding. Where households experience repeated flood events, the cumulative impact of lost earnings, employment uncertainty, and reduced productivity can compound over time, weakening financial resilience and widening existing inequalities between households with secure employment and financial buffers and those without.

For these households, unpaid time off work, disrupted commuting, reduced hours, or temporary job loss represent a more important source of hidden cost, meaning that the economic consequences of flooding are often felt more acutely through lost income rather than direct damage to the home.

Looking ahead, the hidden costs of flooding are likely to grow both in scale and scope as climatic, social, and economic trends converge. Climate change is increasing the frequency and severity of rainfall, surface-water flooding, and coastal and river events, raising the likelihood not only of catastrophic floods but also of repeated, lower-level incidents. Even when damage falls below insurance thresholds, households face ongoing costs for cleaning, minor repairs, replacing everyday items, and temporary relocation. As such events become more frequent, these costs are likely to accumulate, increasing the financial strain on households.

At the same time, population growth and housing shortages are concentrating more households in high-risk areas, including low-lying urban zones and floodplains where new development continues to occur.¹⁴ Vulnerable households, particularly renters or those with limited financial reserves, are disproportionately affected, as they have fewer resources to absorb repeated or unexpected costs. Taken together, these factors suggest that the hidden costs of flooding will not only become more widespread but also become increasingly

14 Rözer, V., & Surminski, S. (2021). *Current and future flood risk of new build homes across different socio-economic neighbourhoods in England and Wales*. *Environmental Research Letters*, 16(5), 054021.

<https://doi.org/10.1088/1748-9326/abec04>

unequal, with income disruption and lost work time playing an ever-larger role alongside physical damage in shaping household vulnerability.

