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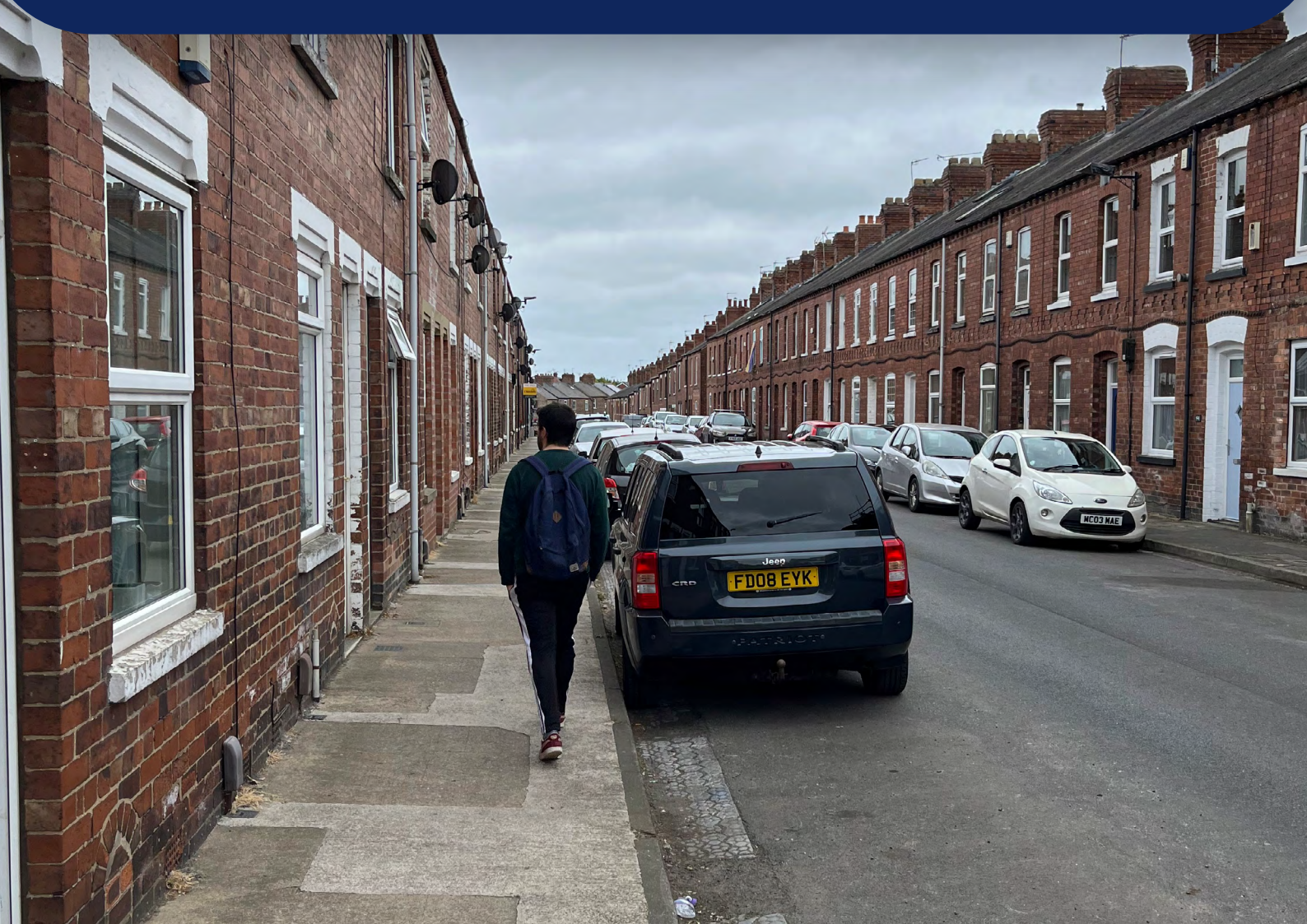


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**CODE ENCOUNTERS SUMMARY BRIEFING 1:**

# Digital tenant referencing in England's private rented sector

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## **CODE ENCOUNTERS BRIEFING 1: Digital tenant referencing in England's private rented sector**

The Code Encounters Nuffield Foundation funded project was undertaken by the University of York and the University of Bristol to examine the digital risk profiling tools that shape access to housing. These tools are increasingly adopting new sources of data and algorithmic processing and include tenant referencing tools in the private rented sector (PRS), affordability assessments in social housing and credit risk decisions in mortgage lending. The project ran from 2022 to 2024 and the findings are based on 122 in-depth interviews with people who produce, operate and are impacted by these various digital processes. This is the first UK study to gather multiple perspectives on the construction, operation and impact of digital risk profiling tools. This briefing highlights key findings from 50 interviews with technology firms, landlords, agents and tenants and a survey of 113 landlords drawn from the PRS in England.

### **Summary**

- Tenant referencing comprises part of landlords' tenant selection processes, used to mitigate business risks arising from welfare reform, increased regulation and labour market changes. Growing digital data reserves are applied to tenant risk profiling and tenant selection aided by increased automation of administrative processes.
- These data sources help verify tenants identity and income, and in the case of Open Banking are framed as helping people overcome thin credit files and to provide fairer assessments of affordability. But, there are significant data gaps relating to former landlord references and employment contracts that limit full automation.
- Landlords and agents often still place great value in tenants' 'soft attributes' to augment formal tenant referencing and letting decisions, screening many tenants out on affordability but also, in some circumstances, other qualitative data prior to formal referencing.
- The PRS is home to a diverse range of tenants but the tools struggle with complex tenant circumstances, leading to exclusion for some or significant human involvement in interpreting data and handling exceptions. Squeezing people through fixed models prompts greater use of conditional lets, such as guarantors and rent in advance, that not all tenants are able to meet.
- These tools highlight the increased need for tenants to be aware of and manage their digital profiles to present themselves well to landlords and agents.

## What is the background to this research?

Existing literature highlights the risks of bias and opacity in digital decision making systems. Media and regulators in the USA, Australia, and the UK have raised concerns about digital tenant risk profiling regarding its transparency, the volume of data collection, its accuracy and about potential tenant exclusion.

Digital tenant referencing is a routine but obscure and little discussed hurdle to accessing the PRS. The PRS has expanded significantly, accommodating a diverse range of tenants, including more households with children than social housing. Examining the extent of digital risk profiling and decision making in the PRS matters as tenants who fail may end up in less well managed parts of the sector where poor affordability, insecurity and property conditions are concentrated.

A previous study indicated that increased policy scrutiny of the sector has spurred landlords to adopt more stringent risk management and tenant selection

processes to mitigate business risks that include these digital referencing tools.

This briefing highlights findings from the Nuffield Foundation-funded Code Encounters study that provides an in-depth qualitative analysis of digital risk-profiling tools that govern access to the housing market. It is the first UK study to appraise these systems from multiple perspectives.

*'So, it's a bit hard to say but obviously, the removal of fixed-term tenancies is going to cause a problem, because people that are on a temporary contract, for example, do you let them in or not? If they've got a contract that ends in six months' time, whereas before, you'd grant them a six-month tenancy, if I was a landlord, I would be declining them in the new world.'* (Referencing firm 4)

## How are people in the PRS using these new data technologies?

Our study shows that digital tenant risk profiling tools are drawing credit information data from credit referencing agencies, and other data into landlords' affordability assessments and tenant selection decisions. Adoption depends on target market segments but interviews suggest that landlord and agents' use of these tools has grown, reflecting a shift from analogue to algorithmically driven methods for evaluating tenants with implications for housing accessibility and exclusion.

The integration of 'proptech' and 'fintech' digital technologies is transforming all parts of the housing market, increasing data recording and algorithmic processing. Digital tenant referencing tools, which rank and classify tenants, augment landlord letting decisions but raise concerns about exclusion, particularly against people that deviate from the 'ideal tenant'. These tools, often relying on credit market data and other digital data reserves, can speed referencing and bring a greater range of assurance to landlords and agents but can also exacerbate existing inequalities.

There are significant data gaps that are hard to overcome, notably regarding former landlord references or employment contract and income security. This leads many referencing firms to adopt hybrid models mixing analogue and digital practices. Links to electronic wage slips, Companies House and

Open Banking data are emerging and can confirm incomes and rent payments but cannot identify risk relating to anti-social behaviour, property damage, the proportion of income that is guaranteed nor that the employment contract length exceeds the tenancy length. Some firms interrogate rental-insurance claims histories but these resources are incomplete.

There are problems with data gaps and fitting complex human lives into fixed models that neither reflect the complexity of many people's circumstances, nor the various risk appetites of landlords or geography of property demand and supply. These issues may undermine fully automated risk profiling models emerging in the UK, as seen in other countries. Despite growing use of digital data and automation, and integration into end-to-end platforms to support property management, in some circumstances, there remains a significant role for human intervention from pre-screening tenants' situations and demeanour prior to formal referencing and in overriding referencing firms' recommendations.

*'We could go to a fully tech solution, but actually, what we'll do is just switch off a load of business.'* (Insurer 1)

## Who are the new winners and losers?

Welfare reforms and rising rents have worsened housing affordability, with some evidence of discriminatory practices persisting despite stronger equality legislation, disproportionately affecting minorities and vulnerable groups. Digital tools, while designed to mitigate landlord risk, may exacerbate market power imbalances, particularly in more competitive rental markets.

Affordability issues and adverse credit frequently cause reference failures, affecting younger people, migrants, precariously employed and benefit recipients. Failed references can lead to homelessness or force tenants into lower-quality housing. Landlords can override referencing recommendations, leading to conditional lets and the greater use of guarantors or advance rent. Digital referencing could be more exclusionary were it not for human intervention.

Open Banking, the insights gleaned from banking transaction data, is emerging as a significant data source and may offer accurate and fair income, expenditure and affordability assessments that help tenants with thin credit files, such as young people or migrants. This may produce new winners and losers as this may undermine more affluent tenants who manage their finances less assiduously or reinforce existing biases relating to those on low-incomes.

There are Incomplete reference datasets to test models indicating uncertain model accuracy. There is no reciprocal data sharing agreement in the PRS as in financial services and landlords rarely register rent arrears debts with credit referencing agencies. Few firms measured whether any disparate impacts existed across tenant groups, despite protected groups being overrepresented in those that participants said regularly failed referencing.

## What might tenant referencing look like in the future?

The interviews suggested that two trends posed significant transformative potential, although participants noted barriers to greater uptake.

Open Banking has the potential to reduce exclusion but the technology is immature, tenants often consider it intrusive as much can be gleaned about a person's life from their transaction data, and it represents a new way that people must represent their personal data to external agencies, an issue that lacks public awareness.

Firms were producing tenant passports that recasts tenants, rather than landlords or agents, as responsible for referencing, gathering a digital

passbook of evidence to demonstrate their credibility as a tenant. It is unclear whether this will smooth the screening process or replace formal referencing but has potential to favour more affluent tenants.

*'Pretty much all the data, yes. That's why I always thought Open Banking to be an extremely scary thing. 'Give me your 11 months of data in half-an-hour, and I will tell you exactly what sort of a person you are in half a day.'* (Referencing firm 2)

## Conclusion

It is apparent that digital tenant risk profiling is growing as increased automation and new digital data resources are brought to various property management tasks. Bringing efficiencies and greater reassurance to landlords and agents facing increased risks, the tools bring a greater range of evidence to tenant selection decisions than ever before. These new technologies are reshaping access to private rented homes, exacerbating existing inequalities and contributing to new forms of exclusion or conditionality in the housing market, forcing tenants to reframe how they present their digital selves for third party scrutiny.



## Recommendations

Across the Code Encounters project we identified universal themes that must be addressed, as well as those specific to private renting, including the following that are relevant to Government, those responsible for financial education, risk profiling technology firms, lenders, landlords and agents.

1. To make visible how data and algorithms have been used in each decision
2. To establish agreed guidelines on the appropriate use of algorithms for stakeholders within the sector and tenures
3. To produce guidance on the use of data and algorithms for tenants and borrowers
4. To retain human oversight in decision making
5. To ensure the explainability of decision making
6. To ensure the retention of flexibility and individually tailored decision-making

These recommendations are discussed in more detail in our PRS Report 2 and in our *Overarching summary report 1*. Below are additional observations for private renting.

7. To ensure defensible and fair decisions surrounding affordability for tenants in receipt of benefits, consider the use of income maximisation tools in referencing models
8. To ensure referencing models are free from unintended indirect discrimination, undertake equality impact assessments
9. To ensure the predictive capacity of the models is secure, test recommendations against tenancy outcomes

## Further information

The Code Encounters research that informed this brief was funded by the Nuffield Foundation. The findings are based on a large qualitative dataset with 50 drawn specifically from the private rented sector, offering insights from firms who make software or platform technology to support digital risk profiling, private landlords, letting agents, national stakeholders and private tenants. More information about the study and its methods is available in our report:

Wallace, A., Beer, D., Burrows, R., Ciocănel, A. and Cussens, J. (2024) *Housing and Algorithmic Risk Profiling in England- Report of overarching findings- Code Encounters Report 1*. York/Bristol, University of York/University of Bristol.

Wallace, A., Beer, D., Burrows, R., Ciocănel, A. and Cussens, J. (2024) *Digital tenant referencing in England's private rented sector - Code Encounters Report 2*. York/Bristol, University of York/University of Bristol.

Findings from this study have already been published in peer-review journals and all reports, papers and briefings are available to download from the project webpages <https://www.york.ac.uk/chp/housing-markets/code-encounters/>

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