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Financial stress by design: examining barriers to social welfare take-up

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Chapter 1

Introduction

INTRODUCTION

Financial scarcity, having less money than needed, prevents people from fulfilling basic needs[1–4], which can have far-reaching consequences for their well-being and health. Beyond its financial impact, financial scarcity may impact people psychologically, evoking financial stress and adversely influencing their cognitions, emotions, and behavior[5–7]. These psychological consequences depend not only on the financial situation per se but are also elicited by the subjective perception of the situation. Financial stress is a form of psychological stress that encompasses an appraisal of insufficient financial resources, a perceived lack of control over one's financial situation, financial rumination and worry, and a short-term focus[8]. A growing body of literature has identified a link between financial stress and mental and physical health issues[9–11].

Social welfare aims to support those who cannot (temporarily) sustain themselves financially, mitigating the negative consequences of financial scarcity and preventing or reducing financial stress. Social welfare systems redistribute income to alleviate and prevent poverty, reduce income shocks, guarantee a basic standard of living, and facilitate access to housing, healthcare, and education[12]. Many households, however, do not take up social welfare for which they are eligible. As a result, social welfare does not fully succeed in providing financial security for vulnerable households and countering financial stress. Not participating in welfare may decrease individual households' well-being and perpetuate poverty and financial stress[13].

This dissertation aims to contribute to the literature on financial stress and non-take-up of social welfare. This introduction gives an overview of the research on financial stress and non-take-up. I identify gaps in the literature and describe how the studies in this dissertation contribute to reducing those gaps.

The first part of the dissertation focuses on financial stress. I first examine how changes in financial stress coincide with changes in mental health (Chapter 2). Simultaneously, I examine economic factors associated with these shifts in financial stress. Next, I investigate the intricate relationship between five aspects of households' economic situation – income, savings, debts, income volatility, and employment – and financial stress (Chapter 3).

The second part of the dissertation extends the literature on the non-take-up of social welfare. First, I systematically review the literature and develop a new conceptual framework for non-take-up (Chapter 4). Next, I describe the lived experiences of low-

income households with participation in social welfare programs (Chapter 5). I then examine how ten potential psychological barriers predict the non-take-up of social welfare (Chapter 6). Finally, I examine the causal relationship between reclaims, one of these potential barriers, and non-take-up (Chapter 7).

PART I: FINANCIAL STRESS (CHAPTERS 2 AND 3)

Financial scarcity, defined as having fewer financial resources than needed[5], is not limited to developing countries. Even in countries with more economic prosperity, many households are in poverty or problematic debts, two severe manifestations of financial scarcity. In OECD countries, the percentages of families living below the poverty line range from 5.6% in the Czech Republic to 20.3% in Costa Rica, with percentages as high as 15.1% in the United States and 11.2% in the United Kingdom (OECD average 11.5%)[14,a]. In the Netherlands, where most of the studies in this dissertation were conducted, the poverty rate is 8.3%. In the EU, 14.1% of the households are overindebted, and 21% risk overindebtedness[15,b].

Financial scarcity can hinder one from obtaining basic needs, such as food, shelter, and healthcare, providing for family and spouse, achieving social status and security, pursuing goals and dreams, and attaining personal fulfillment. Moreover, insufficient financial resources can lead to financial stress, which, in turn, can negatively affect mental and physical well-being. To capture the subjective experience of financial stress, Van Dijk et al.[8] developed the Psychological Inventory of Financial Scarcity (PIFS), a self-rating scale of subjective perceptions of one's financial situation and affective and cognitive responses to these appraisals. The PIFS combines psychological stress and financial scarcity into one measure of financial stress. The scale comprises four components: an appraisal of insufficient financial resources, a perceived lack of control over one's finances, financial worry and rumination, and a short-term focus. This operationalization is consistent with the idea that people experience stress when they evaluate situational demands as outweighing their resources[16,17], and with models of general stress, in which stress is understood as an adaptive (physiological) response to a real or perceived threat[18–20]. This threat can lead to mental health problems, such as anxiety and depression[19].

Stress narrows an individual's momentary thought-action repertoire toward specific actions to deal with the threat[21]. Like general stress, financial stress can

a OECD defines the poverty rate as the ratio of the number of people (in a given age group) whose income falls below the poverty line, taken as half the median household income of the total population.

b According to the EU definition, households are overindebted when they "reported not being able to make scheduled payments related to rent or mortgages, consumer credit, loans from family or friends, or utility or telephone bills". Households are at risk of being overindebted when they have difficulty making ends meet.

be seen as an adaptive reaction to harmful or threatening situations. Focusing on the short term, for example, is reasonable and necessary when one lacks financial resources to meet basic needs (e.g., food or shelter). This reasoning of financial stress as an adaptive response to dire financial circumstances is corroborated by research showing that people lacking financial resources perform better on selective attention, vigilance, detecting imminent dangers and opportunities, tracking conditions that change rapidly, persisting when procuring an immediate reward, and valuing money[22,23].

Although financial stress can be regarded as an adaptive response to financial scarcity, it is often accompanied by negative socio-emotional states: it relates positively to loneliness and social exclusion and negatively to self-worth[8,24]. Financial stress may also go together with impeded cognitive functioning[6]. It is negatively related to attention, self-control, self-monitoring, planning, and taking initiative[8]. Rumination is associated with impaired problem-solving, reduced task performance, and negative affect[25]. People who experience financial stress also show behaviors that may exacerbate economic hardship, such as avoiding financial information and decision-making, impulse buying, gambling, overspending, suboptimal investing, decreased job search effectiveness, and overborrowing[5,26–30]. These findings suggest that financial stress may result in cognitions, emotions, and behavior exacerbating financial hardship. There is, in other words, a risk of *financial stress traps*.

In addition, prolonged financial stress negatively relates to overall well-being and more chronic mental health problems such as anxiety and depression[9–11,31–33]. The literature on the association between financial stress and well-being is primarily cross-sectional; there is little insight into the dynamic relationship between financial stress and well-being. Our first study, described in Chapter 2, examines the association between changes in financial stress and mental health in a broad sample of the Dutch population during the COVID-19 pandemic. This study also examines the dynamic relationship between several economic factors, namely income, savings, and debts on the one hand and financial stress on the other.

Next, I delve deeper into the intricate relationship between households' economic circumstances and financial stress. While it is well-established that low income is often associated with financial stress[34,35], it is essential to recognize that focusing solely on income as a predictor of financial stress is too simplistic. Low-income households often struggle with managing expenses while providing for their families, leading to rumination, heightened immediate concerns, and reduced

control. However, low income is unlikely to be the sole predictor of financial stress. Research on mental health and studies from economics has revealed various factors predicting well-being and stress. Income is just one piece of the puzzle; economic factors such as savings, debts, income volatility, and employment may also play a role. Studies have revealed that savings[36,37] and employment[38,39] relate positively to well-being, while debts[40–42] and income volatility[43,44] relate negatively to well-being.

While most studies have traditionally focused on one or two isolated aspects of one's economic situation when explaining or predicting financial stress, the study described in Chapter 3 takes a more integrative perspective. I examine how five facets of one's economic situation - namely, income, debts, savings, income volatility, and employment - relate to financial stress. This cross-sectional study, conducted among Dutch households, sheds light on the relative contributions of multiple economic factors to predicting financial stress.

PART II: NON-TAKE-UP OF SOCIAL WELFARE (CHAPTERS 4 THROUGH 7)

Part II addresses the pivotal role that social welfare plays in potentially elevating financial resilience, thus serving as a mechanism for preventing or reducing financial stress. Social welfare stabilizes individuals and societies by providing financial security to those who cannot sustain themselves financially. This role is particularly crucial in the face of heightened macroeconomic uncertainties and volatile labor markets[45]. The success of social welfare systems in accomplishing their goals hinges on how easily those in need of assistance can access them[46]. Policymakers grapple with a dilemma in this respect. While they establish eligibility criteria to guarantee that social welfare benefits are directed toward the households that most need them, these criteria can create hurdles that might discourage eligible households from taking up social welfare[47,48].

Although levels of non-take-up are not systematically measured, non-take-up is a serious issue worldwide. Hernanz et al. compiled data available in OECD countries between 1974 and 2001[49]. They found levels of non-take-up varying between 20% and 60% for means-tested social assistance programs. Non-take-up of housing benefits spanned a broader range, with typical values of around 20%. Unemployment benefits had non-take-up rates of 20% to 40%. In recent years, non-take-up still appears to be high. A study in 2022 in the UK, for example, showed that approximately 30% of the entitled individuals did not claim Pension Credit, whereas some 20% did not claim Housing Benefits for pensioners[50]. A study in six European countries showed that non-take-up of minimum income benefits varied between 38% and 90%[51].

Understanding determinants of non-take-up can help optimize social welfare systems towards achieving financial security for vulnerable households, thus preventing or reducing financial stress. A better understanding of non-take-up can help shape the future of social welfare. Research on the non-utilization of social welfare can guide policymakers in crafting more effective and informed policies for the future.

The literature on non-take-up has a long history[52–54]. The body of knowledge on welfare participation is heterogeneous in methods and disciplines. It includes reviews and theoretical and empirical contributions from economics, psychology, sociology, and public administration[55]. In the last decade, behavioral insights have proposed new inhibiting factors affecting non-take-up in the last ten years, such as administrative burden, bad experiences with welfare participation, and the fear of reclaims[56,57].

There are, however, some gaps in the non-take-up literature. First, the vast amount of literature added in the last ten years has not been reviewed systematically. The very influential model developed by Van Oorschot in the 1990's[48] still guides many of the studies on non-take-up. Both research and policy could benefit from an updated framework. Therefore, I systematically reviewed the literature on the determinants of welfare participation. I developed a new theoretical framework to guide future research, policy, and practice. Chapter 4 describes the literature review results and the resulting theoretical framework.

A second gap in the literature on the non-take-up of social welfare is that it predominantly comprises quantitative empirical studies. Few studies have qualitatively examined how financially vulnerable households experience welfare participation. Focusing exclusively on quantitative research neglects the more nuanced, subjective aspects of non-take-up in social welfare. Qualitative studies are crucial for uncovering the lived experiences and contextual factors that shape financially vulnerable households' interactions with welfare programs, offering a more comprehensive understanding. Understanding these experiences and factors may help develop more inclusive social welfare systems that better meet the needs of these households. To address this gap, I conducted a qualitative interview study among low-income households in two major cities in the Netherlands about their experiences with participating in welfare. Chapter 5 describes the results of this study.

Third, empirical evidence on non-take-up is fragmented. In the last two decades, studies from different fields have benefited from behavioral insights in examining factors that inhibit eligible households from taking up social welfare. Existing studies, however, typically included only a limited number of potential inhibitors and promotors of welfare participation. Therefore, these studies do not reveal the relative contributions of different factors in explaining non-take-up within one integrative framework. Also, in the absence of such an integrative approach, an observed relationship in these studies between non-take-up and isolated factors may partly reflect a relation with unmeasured factors. I address these issues by combining theoretical and empirical findings from economics, public administration, and psychology into one model. In this study, described in Chapter 6, I examine the combined influence of various psychological factors on the non-take-up of healthcare and child support benefits in the Netherlands, revealing the relative strengths of these different factors in explaining non-take-up.

Finally, research attention has not been evenly distributed between the various potential determinants of non-take-up. Some potential determinants of non-take-up, such as information provision[58–62], complexity[56,63–66], administrative burden[67–69], and stigma[70–73], have been extensively studied, whereas empirical evidence on other factors, such as administrative capacity[74], proximity to welfare[75–77], negative experiences with welfare[56] and fear of reclaims[78,79], is scarce. Reclaims, in particular, have become increasingly relevant in recent years. Due to changing employer-employee relations and other macroeconomic trends, many citizens have (highly) variable incomes. Policymakers have attempted to develop welfare policies that ensure better and quicker alignment with households' dynamic financial situations. Millar and Whiteford[80] observed that the challenge associated with increased responsiveness is "the risk that payments get out of step with circumstances resulting in underpayments or overpayments, and hence debts to be repaid"[80] (p. 5). They argued that increased income volatility may have resulted in a greater prevalence of reclaims. Little is known about how reclaims of social welfare affect subsequent non-take-up. My final study, described in Chapter 7, aims to experimentally study the effect of reclaims on the non-take-up of social welfare.

OUTLINE OF THIS DISSERTATION

This dissertation aims to contribute to a better understanding of the dynamic relationship between financial stress and mental well-being, the predictors of financial stress, and the determinants of the non-take-up of social welfare as a policy tool for providing financial security and decreasing financial stress.

For these purposes, I used a mixed-method approach. I employed quantitative methods to analyze both longitudinal data (Chapter 2) and cross-sectional data (Chapters 3 and 6), conducted a systematic literature review (Chapter 4) and qualitative interviews (Chapter 5), and performed two experimental studies (Chapter 7). The rest of this dissertation is structured as follows.

Chapter 2 presents a study that used longitudinal data gathered before and during the first six months of the COVID-19 pandemic in a probability sample of Dutch households. It examined the association of financial stress with mental health changes and households' economic situation before and during the pandemic.

Chapter 3 encompasses a cross-sectional study that examines how five aspects of one's economic situation - income, debts, savings, income volatility, and employment - independently and in conjunction predict financial stress. Also, it examined whether income moderated the association between the other four aspects and financial stress.

Chapter 4 describes a systematic literature review on the determinants of non-take-up. Using the PRISMA extension for scoping reviews[81], I reviewed the literature on non-take-up between 2012 and 2023. Based on the outcome of our analyses, I developed a new theoretical framework that can guide future research, policy, and practice.

Chapter 5 reports a qualitative study among low-income households interviewed in two major cities in the Netherlands - The Hague and Eindhoven - about their experiences with low income and welfare participation.

Chapter 6 unveils a cross-sectional study among Dutch households eligible for health care and child support benefits. I used a survey to examine how ten potential psychological barriers (executive functions, knowledge, self-efficacy, financial stress, administrative burden, social support, perceived eligibility, perceived need, fear of reclaims, and welfare stigma) predicted non-take-up. I identified the relative contributions of these factors to explaining non-take-up.

Chapter 7 describes two experimental studies. Using an experimental household paradigm, I examined if reclaims negatively affected subsequent take-up of income support in a sample of respondents from the UK.

Chapter 8 summarizes the main findings of the studies comprising this dissertation, suggests directions for further research, positions our findings in the context of trends in social welfare, and provides advice to policymakers that can help design more effective social welfare systems.

REFERENCES

1. Diener, E. & Suh, E. M. (eds.) *Culture and Subjective Well-being*. (MIT Press, 2003).
2. Dunn, E. W., Gilbert, D. T. & Wilson, T. D. If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology* **21**, 115–125 (2011).
3. Ingham, G. Further reflections on the ontology of money: responses to Lapavitsas and Dodd. *Economy and Society* **35**, 259–278 (2006).
4. Smith, A. *An Inquiry into the Nature and Causes of the Wealth of Nations*. (Harriman House Limited, 1776).
5. Mullainathan, S. & Shafir, E. *Scarcity: Why Having Too Little Means So Much*. (Times Books, Macmillan and Henry Holt, 2013).
6. Mani, A., Mullainathan, S., Shafir, E. & Zhao, J. Poverty impedes cognitive function. *Science* **341**, 976–980 (2013).
7. Bertrand, M., Mullainathan, S. & Shafir, E. A behavioral economics view of poverty. *American Economic Review* (2004).
8. Van Dijk, W. W., Van der Werf, M. M. B. & Van Dillen, L. F. The Psychological Inventory of Financial Scarcity (PIFS): a psychometric evaluation. *Journal of Behavioral and Experimental Economics* **101**, 101939 (2022).
9. Adler, N. E. & Snibbe, A. C. The role of psychosocial processes in explaining the gradient between socioeconomic status and health. *Current Directions in Psychological Science* **12**, 119–123 (2003).
10. Hamilton, R. W., Mittal, C., Shah, A., Thompson, D. V. & Griskevicius, V. How financial constraints influence consumer behavior: an integrative framework. *Journal of Consumer Psychology* **29**, 285–305 (2019).
11. Haushofer, J. & Fehr, E. On the psychology of poverty. *Science* **344**, 862–867 (2014).
12. Dubois, H. & Ludwinek, A. *Access to Social Benefits: Reducing Non-Take-Up*. (Publications Office of the European Commission, 2015).
13. Vrooman, J. C. & Asselberghs, K. T. M. *De Gemiste Bescherming. Niet-Gebruik Van Sociale Zekerheid Door Bestaansonzekere Huishoudens [The Missed Protection. Non-Take-Up of Social Security by Financially Insecure Households]*. (Ministery of Social Affairs and Employment, 1994).
14. OECD. Poverty rate (indicator). Available at: *https://data.oecd.org/inequality/poverty-rate.htm* (Accessed 4 January 2024).
15. Dubois, H. F. W. & Fóti, K. *Addressing Household Over-Indebtedness*. (Publications Office of the European Union, 2020).
16. Blascovich, J. Challenge and threat. In Elliot, A. J. (ed.), *Handbook of Approach and Avoidance Motivation*, 449–464 (Psychology Press, 2013).
17. Tomaka, J., Blascovich, J., Kelsey, R. M. & Leitten, C. L. Subjective, physiological, and behavioral effects of threat and challenge appraisal. *Journal of Personality and Social Psychology* **65**, 248–260 (1993).
18. Cannon, W. The mechanism of emotional disturbance of bodily functions. *New England Journal of Medicine* **198**, 877–884 (1928).
19. Folkman, S. & Lazarus, R. S. *Stress, Appraisal, and Coping*. (Springer Publishing Company, 1984).
20. Selye, H. *The Stress of Life*. (McGraw-Hill, 1956).

21. Fredrickson, B. L. Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment* **3**, 1a (2000).
22. Frankenhuis, W. E. & Nettle, D. The strengths of people in poverty. *Current Directions in Psychological Science* **29**, 16–21 (2020).
23. Shah, A. K., Shafir, E. & Mullainathan, S. Scarcity frames value. *Psychological Science* **26**, 402–412 (2015).
24. Doolaard, F. T., Lelieveld, G.-J., Noordewier, M. K., van Beest, I. & van Dijk, E. Get out or stay out: How the social exclusion process affects actors, but not targets. *Journal of Experimental Social Psychology* **88**, 103946 (2020).
25. De Lissnyder, E. *et al*. Cognitive control moderates the association between stress and rumination. *Journal of Behavior Therapy and Experimental Psychiatry* **43**, 519–525 (2012).
26. Cook, L. A. & Sadeghein, R. Effects of perceived scarcity on financial decision making. *Journal of Public Policy and Marketing* **37**, 68–87 (2018).
27. Dalton, P. S., Nhung, N. & Rüschenpöhler, J. Worries of the poor: the impact of financial burden on the risk attitudes of micro-entrepreneurs. *Journal of Economic Psychology* **79**, 102198 (2020).
28. Gerards, R. & Welters, R. Job search in the presence of a stressor: Does financial hardship change the effectiveness of job search? *Journal of Economic Psychology* **90**, 102508 (2022).
29. Shah, A. K., Mullainathan, S. & Shafir, E. Some consequences of having too little. *Science* **338**, 682–685 (2012).
30. Hilbert, L. P., Noordewier, M. K. & Van Dijk, W. W. The prospective associations between financial scarcity and financial avoidance. *Journal of Economic Psychology* **88**, 102459 (2022).
31. Netemeyer, R. G., Warmath, D., Fernandes, D. & Lynch, J. G., Jr. How am I doing? Perceived financial well-being, its potential antecedents, and its relation to overall well-being. *Journal of Consumer Research* **45**, 68–89 (2017).
32. Santiago, C. D., Wadsworth, M. E. & Stump, J. Socioeconomic status, neighborhood disadvantage, and poverty-related stress: prospective effects on psychological syndromes among diverse low-income families. *Journal of Economic Psychology* **32**, 218–230 (2011).
33. Simonse, O., Van Dijk, W. W., Van Dillen, L. F. & Van Dijk, E. The role of financial stress in mental health changes during COVID-19. *npj Mental Health Research* **1**, 15 (2022).
34. Johar, G., Meng, R. & Wilcox, K. Thinking about financial deprivation: rumination and decision making among the poor. *ACR North American Advances* **43**, 208–211 (2015).
35. Sheehy-Skeffington, J. *Decision-Making Up Against the Wall: A Framework for Understanding the Behavioral Dimension of Low Socioeconomic Status*. (Oxford University Press, 2018).
36. Rothwell, D. W. & Han, C.-K. Exploring the relationship between assets and family stress among low-income families. *Family Relations* **59**, 396–407 (2010).
37. Ruberton, P. M., Gladstone, J. & Lyubomirsky, S. How your bank balance buys happiness: the importance of 'cash on hand' to life satisfaction. *Emotion* **16**, 575–580 (2016).
38. Burchell, B. A temporal comparison of the effects of unemployment and job insecurity on wellbeing. *Sociological Research Online* **16**, 66–78 (2011).

39. Wilson, S. H. & Walker, G. M. Unemployment and health: a review. *Public Health* **107**, 153–162 (1993).
40. Bridges, S. & Disney, R. Debt and depression. *Journal of Health Economics* **29**, 388–403 (2010).
41. Drentea, P. & Lavrakas, P. J. Over the limit: the association among health, race and debt. *Social Science & Medicine* **50**, 517–529 (2000).
42. Sweet, E., Nandi, A., Adam, E. K. & McDade, T. W. The high price of debt: household financial debt and its impact on mental and physical health. *Social Science & Medicine* **91**, 94–100 (2013).
43. Gennetian, L. A. & Shafir, E. The persistence of poverty in the context of financial instability: a behavioral perspective. *Journal of Policy Analysis and Management* **34**, 904–936 (2015).
44. Hannagan, A. & Morduch, J. Income gains and month-to-month income volatility: household evidence from the us financial diaries. (2015). Available at SSRN: *https://ssrn.com/abstract=2659883* (Accessed 4 January 2024).
45. Hyee, R., Immervoll, H., Fernandez, R. & Lee, J. How reliable are social safety nets? *OECD Social, Employment and Migration Working Papers* **164** (2020).
46. Immervoll, H., Fernandez, R., Hyee, R., Lee, J. & Pacifico, D. De-facto gaps in social protection for standard and non-standard workers. *OECD Social, Employment and Migration Working Papers* **247** (2022).
47. Grosh, M., Leite, P., Wai-Poi, M. & Tesliuc, E. *Revisiting Targeting in Social Assistance: A New Look at Old Dilemmas*. (World Bank Publications, 2022).
48. Van Oorschot, W. J. H. *Take It or Leave It. A Study of Non-Take-Up of Social Security Benefits*. (Tilburg University Press, 1994).
49. Hernanz, V., Malherbet, F. & Pellizzari, M. Take-up of welfare benefits in OECD countries: a review of the evidence. *OECD Social, Employment and Migration Working Papers* **17** (2004).
50. Department for Work & Pensions. Income-related benefits: estimates of take-up: financial year 2019 to 2020. (2022). Available at: *https://www.gov.uk/government/statistics/income-related-benefits-estimates-of-take-up-financial-year-2019-to-2020* (Accessed 4 January 2024).
51. Portela, M. Non-take-up of minimum social benefits: quantification in Europe. A salient phenomenon still not making public policy headlines. *DREES REPORTS* 94, (2022).
52. Handler, J. F. & Hollingsworth, E. J. Stigma, privacy, and other attitudes of welfare recipients. *Stanford Law Review* **22**, 1–19 (1969).
53. Moffitt, R. An economic model of welfare stigma. *American Economic Review* **73**, 1023–1035 (1983).
54. Odum, H. W. Newer ideals of public welfare. *The ANNALS of the American Academy of Political and Social Science* **105**, 1–6 (1923).
55. Craig, P. Costs and benefits: a review of research on take-up of income-related benefits. *Journal of Social Policy* **20**, 537–565 (1991).
56. Heinrich, C. J., Camacho, S., Henderson, S. C., Hernández, M. & Joshi, E. Consequences of administrative burden for social safety nets that support the healthy development of children. *Journal of Policy Analysis and Management* **41**, 1–45 (2021).
57. Herd, P., DeLeire, T., Harvey, H. & Moynihan, D. P. Shifting administrative burden to the state: the case of Medicaid take-up. *Public Administration Review* **73**, S69–S81 (2013).

58. Bhargava, S. & Manoli, D. Psychological frictions and the incomplete take-up of social benefits: evidence from an IRS field experiment. *American Economic Review* **105**, 3489–3529 (2015).
59. Domurat, R., Menashe, I. & Yin, W. The role of behavioral frictions in health insurance marketplace enrollment and risk: evidence from a field experiment. *American Economic Review* **111**, 1549–1574 (2021).
60. Engstrom, P., Forsell, E., Hagen, J. & Stefánsson, A. Increasing the take-up of the housing allowance among Swedish pensioners: a field experiment. *International Tax and Public Finance* **26**, 1353–1382 (2019).
61. Finkelstein, A. & Notowidigdo, M. J. Take-up and targeting: experimental evidence from SNAP. *The Quarterly Journal of Economics* **134**, 1505–1556 (2019).
62. Matikka, T. & Paukkeri, T. Does sending letters increase the take-up of social benefits? Evidence from a new benefit program. *Empirical Economics* **63**, 3253–3287 (2022).
63. Cook, K. E. Social support in single parents' transition from welfare to work: analysis of qualitative findings. *International Journal of Social Welfare* **21**, 338–350 (2011).
64. Auray, S. & Fuller, D. L. Eligibility, experience rating, and unemployment insurance take-up. *Quantitative Economics* **11**, 1059–1107 (2020).
65. Fuchs, M., Gasior, K., Premrov, T., Hollan, K. & Scoppetta, A. Falling through the social safety net? Analysing non-take-up of minimum income benefit and monetary social assistance in Austria. *Social Policy & Administration* **54**, 827–843 (2020).
66. Fox, A. M., Stazyk, E. C. & Feng, W. Administrative easing: rule reduction and Medicaid enrollment. *Public Administration Review* **80**, 104–117 (2020).
67. Christensen, J., Aarøe, L., Baekgaard, M., Herd, P. & Moynihan, D. P. Human capital and administrative burden: the role of cognitive resources in citizen-state interactions. *Public Administration Review* **80**, 127–136 (2020).
68. Moynihan, D. P., Herd, P. & Harvey, H. Administrative burden: learning, psychological, and compliance costs in citizen-state interactions. *Journal of Public Administration Research and Theory* **25**, 43–69 (2015).
69. Sunstein, C. R. Sludge and ordeals. *Duke Law Journal* **68**, 1843 (2019).
70. Baumberg, B. The stigma of claiming benefits: a quantitative study. *Journal of Social Policy* **45**, 181–199 (2016).
71. Boost, D., Raeymaeckers, P., Hermans, K. & Elloukmani, S. Overcoming non-take-up of rights: a realist evaluation of Integrated Rights-Practices. *Journal of Social Work* **21**, 831–852 (2021).
72. Friedrichsen, J., König, T. & Schmacker, R. Social image concerns and welfare take-up. *Journal of Public Economics* **168**, 174–192 (2018).
73. Schweyher, M., Odden, G. & Burrell, K. Abuse or underuse? Polish migrants' narratives of (not) claiming social benefits in the UK in times of Brexit. *Central and Eastern European Migration Review* **8**, 101–122 (2019).
74. Callaghan, T. H. & Jacobs, L. R. The future of health care reform: What is driving enrollment? *Journal of Health Politics, Policy and Law* **42**, 215 (2017).
75. Chareyron, S., Gray, D. & L'Horty, Y. Raising take-up of social assistance benefits through a simple mailing: evidence from a French field experiment. *Revue d'Economie Politique* **128**, 777–805 (2018).
76. Saavedra, M. Children's health insurance, family income, and welfare enrollment. *Children and Youth Services Review* **73**, 182–186 (2017).

77. Tempelman, C. & Houkes-Hommes, A. What stops Dutch households from taking up much needed benefits? *Review of Income and Wealth* **62**, 685–705 (2016).
78. Simonse, O., Vanderveen, G., Van Dijk, W. W., Van Dijk, E. & Van Dillen, L. F. Social security or insecurity? The experience of financially vulnerable households with welfare participation. *Social Policy & Administration* **57**, 255–271 (2023).
79. Tempelman, C., Houkes-Hommes, A. & Prins, J. *Niet-Gebruik Inkomensondersteunende Maatregelen [Non-take-up Income Support Measures]* (SEO Economisch Onderzoek, 2014).
80. Millar, J. & Whiteford, P. Timing it right or timing it wrong: how should income-tested benefits deal with changes in circumstances? *Journal of Poverty and Social Justice* **28**, 3–20 (2020).
81. Tricco, A. C. *et al*. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of Internal Medicine* **169**, 467–473 (2018).